

ITEM-23 LMM //2022 - S.88 DOMESTIC WASTE MANAGEMENT SERVICE CHARGE

MOTION:

That City of Newcastle:

1. Reaffirms its support for the return of 100% of section 88 Domestic Waste Management Service Charge (the "waste levy") funds to be returned to local government for reinvestment in recycling facilities, landfill diversion, community education, technology improvements and circular economy opportunities;
2. Notes that City of Newcastle is liable for the metropolitan levy rate of \$151.60 per tonne of landfill, compared to the regional levy rate of \$87.30 per tonne, **a \$32 per tonne difference and additional cost to Newcastle ratepayers of \$2.1 million in 2022/23;**
3. Acknowledges analysis undertaken by CN officers that shows an additional \$18.7 million has been paid by Newcastle ratepayers over the past decade due our categorisation by the NSW Government.
4. Notes the waste levy consists of approximately 50-65% of the cost of waste disposal by CN, with \$37m currently being paid in levy contributions and only \$175,000 returned to CN to fund its resource recovery projects, which is the actual intention of the levy.
5. Refers to CN's detailed submission to IPART regarding waste management charges, dated 20 October 2020 and reaffirms our support of its contents.
6. Calls on both the NSW Government and Opposition to commit to the full return of 100% of the waste levy local councils to fund waste diversion from landfill initiatives such as those outlined in Our Sustainable Waste Strategy 2023.

BACKGROUND:

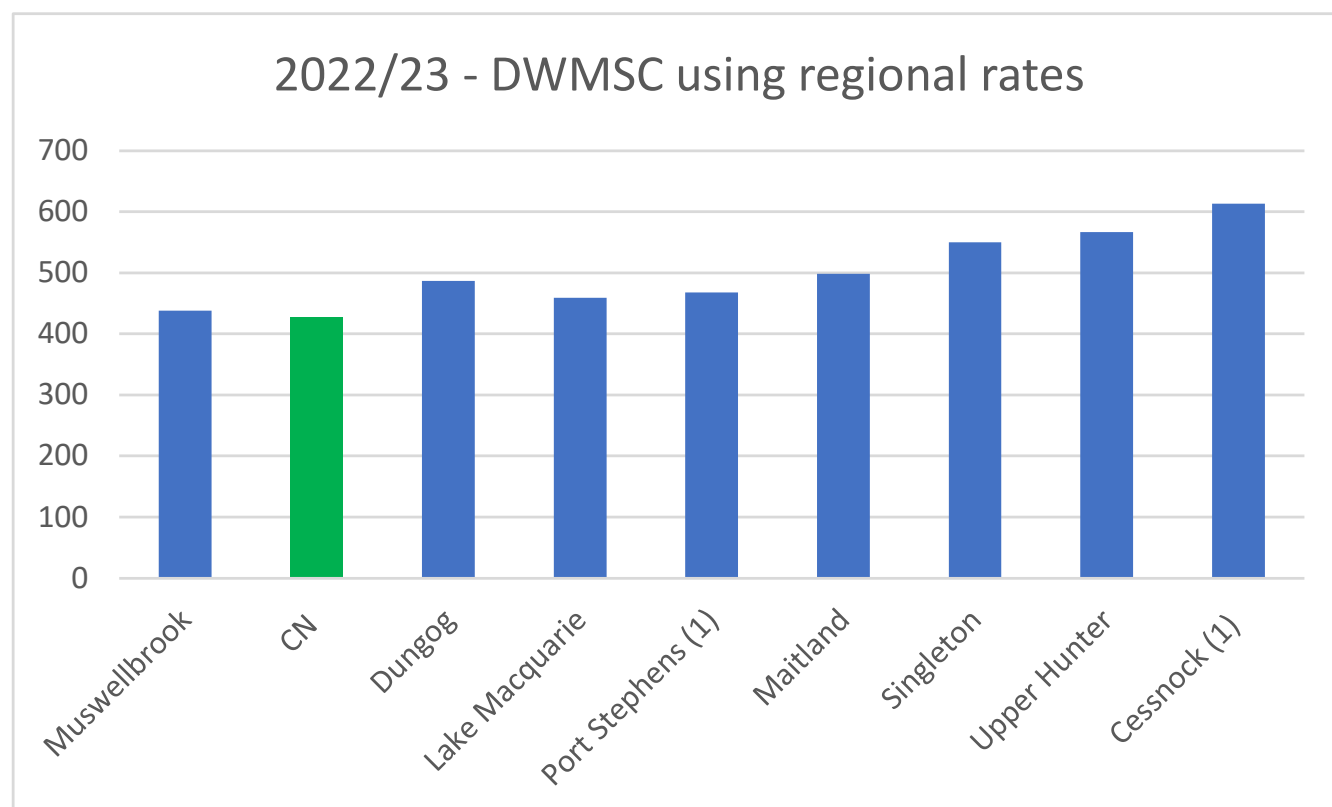
The Protection of the Environment Operations Act 1997 (POEO Act) requires certain licensed waste facilities in NSW to pay a contribution for each tonne of waste received at the facility. Referred to as the 'waste levy', the contribution aims to reduce the amount of waste being landfilled and promote recycling and resource recovery.

The NSW regulated area includes councils within the metropolitan levy area and the regional levy area who pay differing levy rates. Within the Hunter Region, CN, Lake Macquarie, Port Stephens, Maitland and Cessnock are all classified as metropolitan while Muswellbrook, Dungog, Singleton and Upper Hunter are all classified as regional.

In 2022/23 the metropolitan levy area is \$151.60 per tonne while the regional levy area pays \$87.30 per tonne. The higher metropolitan levy results in a \$32 difference in the Domestic Waste Management Service Charge (DWMSC) per household compared to what is charged in a regional levy area. This estimate assumes each rate payer generates 496kg of rubbish each year. This assumption is based on CN data.

Analysis

CN would have had the lowest DWMSC in the Hunter if all Hunter Councils paid the regional levy. CN would be a full \$10 per household less than the next cheaper. CN remains the second lowest even using the actual metropolitan rate.



The additional cost of the metropolitan levy is expected to cost the Newcastle LGA an additional \$2.1m in 2022/23. This is an additional cost \$7.7m to Hunter rate payers when Lake Macquarie, Port Stephens, Maitland and Cessnock are included.

Neither Port Stephens or Cessnock reported their forecast Domestic charge revenue in the operational plan so this was estimated based on their financial statements.

2022/23 Domestic Waste Charge							
		Actual (Metro)		Regional		Difference	
Council	Levy Type	Rate	Revenue (\$,000)	Rate	Revenue (\$,000)	Rate	Revenue (\$,000)
Muswellbrook	Regional	438		438		-	
CN	Metro	460	30,869	428	28,721	32	2,147
Dungog	Regional	487		487		-	
Lake Macquarie	Metro	492	39,337	459	36,699	33	2,638
Port Stephens (1)	Metro	500	16,493	468	15,438	32	1,056
Maitland	Metro	530	18,222	498	17,111	32	1,111
Singleton	Regional	550		550		-	
Upper Hunter	Regional	567		567		-	
Cessnock (1)	Metro	645	15,599	613	14,826	32	774
Total							7,727

Note 1 - PS and Cessnock did not advertise total revenue. Assumption based on Financial Statements

Note 2 - Analysis based on CN assumption each rate payer generates 496kg rubbish annually

Over the past 10 years the regional area levy has consistently been lower than the metropolitan levy. This has resulted in Newcastle rate payers paying an additional \$18.7 million compared to if CN was classified as regional.

Comparison of CN DWMSC - 10 Years						
	Actual (Metro)		Regional		Difference	
	Rate	Revenue (\$,000)	Rate	Revenue (\$,000)	Rate	Revenue (\$,000)
2022/23	460	30,869	428	28,775	32	2,094
2021/22	401	26,878	369	24,784	31	2,094
2020/21	375	24,827	344	22,775	31	2,052
2019/20	348	22,815	317	20,818	30	1,997
2018/19	340	22,018	310	20,079	30	1,939
2017/18	340	21,126	311	19,305	29	1,821
2016/17	340	20,765	311	19,009	29	1,756
2015/16	340	20,464	312	18,767	28	1,697
2014/15	330	19,592	302	17,944	28	1,648
2013/14	330	19,407	303	17,816	27	1,591
Total	3,603	228,761	3,307	210,074	296	18,687

ATTACHMENTS:

1. LMM 24/11/2020 - CITY OF NEWCASTLE SUBMISSION – IPART LOCAL COUNCIL DOMESTIC WASTE MANAGEMENT CHARGES DISCUSSION PAPER
2. Local Government NSW report, "*At the Crossroads: The state of waste and recycling in NSW*".
3. IPART Discussion Paper, "*Local Council Domestic Waste Management Charges*" dated August 2020.
4. NOM 24/03/2020 - THE FUTURE FOR WASTE
5. Local Government NSW Draft Submission to IPART dated April 2022.
6. NSW Auditor General Report, "*Waste levy and grants for waste infrastructure*" dated 26 November 2020.
7. NOM 26/02/2019 – LGNSW SAVE OUR RECYCLING
8. LMM 25/09/2018 - NSW WASTE LEVY FUND

Subject: LMM 24/11/2020 - CITY OF NEWCASTLE SUBMISSION – IPART LOCAL COUNCIL DOMESTIC WASTE MANAGEMENT CHARGES DISCUSSION PAPER

MOTION

That City of Newcastle:

- 1 Notes that City of Newcastle has made a detailed submission (Attachment A) to the Independent Pricing and Regulatory Tribunal (IPART) in response to the release of the Local Council Domestic Waste Management Charges (DWMC) Discussion Paper;
- 2 Notes that the NSW Government collects around \$800 million annually through its Waste Levy, which has grown by more than 250 per cent over the past decade;
- 3 Continues to raise concerns regarding the fact that while we pay around \$37 million annually in Levy contributions, only \$175,000 is returned to the Newcastle Local Government Area (LGA) to fund vital resource recovery, waste management and waste and recycling education projects for Novocastrians;
- 4 Joins LGNSW in advocating for the NSW Government to adequately re-invest Waste Levy funds into the development of local waste management planning, local procurement, education and local priority waste management infrastructure projects such as the City of Newcastle Organics Recycling Facility at Summerhill Waste Management Centre.

BACKGROUND

In August 2020, the Independent Pricing and Regulatory Tribunal advised that feedback was being sought on its Discussion Paper regarding domestic waste management charges levied by local councils.

“There is a wide variation in charges, and in some cases they may not be delivering good value for ratepayers. There may also be challenges for local councils in purchasing and pricing waste management services,” said IPART Chair Dr Paul Paterson.

He explained that previously IPART had decided not to regulate waste charges, but now needs to consider whether this is the right approach going forward.

“We intend to approach the issue with caution, recognising that prescriptive regulation may not be appropriate. There may be other ways to help councils and ratepayers get quality services at reasonable prices, such as improving transparency of costs and sharing best practice guidance” Dr Paterson said.

The Discussion Paper also asked for feedback on whether stakeholders consider that there are any issues with the prices charged for waste management services, and, if so, how IPART should respond.

“We are particularly interested in whether charges reflect the reasonable and efficient costs of providing waste services while meeting environmental and legislative requirements. We are also keen to hear what opportunities there may be for greater transparency for customers and councils” said Dr Paterson.

CITY OF NEWCASTLE RESPONSE

On 20 October 2020, City of Newcastle provided a detailed submission to IPART regarding the Discussion Paper (Attachment A) noting that IPART requires further in-depth analysis to understand the Domestic Waste Management market and current associated barriers.

The submission also notes the potential for significantly better outcomes the industry should a more considered and sophisticated response be adopted.

City of Newcastle notes that:

- The NSW Government collects around \$800 million annually through its Waste Levy, which has grown by more than 250 per cent over the past decade;
- Despite paying approximately \$37 million annually in Waste Levy contributions, only \$175,000 is returned to the Newcastle LGA.

LGNSW *Save Our Recycling* Campaign:

Prior to the recent NSW Budget, LGNSW re-launched the '*Save Our Recycling*' Campaign. Through this campaign, LGNSW have been advocating for the NSW Government to:

- Fund councils to develop regional plans for the future of waste and resource recovery in their regions
- Fund the delivery of priority infrastructure and other projects, procured by local government, that are needed to deliver the regional-scale plans, particularly where a market failure has been identified
- Increase local and state government procurement of recycled goods made with domestic content; and
- Fund and deliver a state-wide education campaign on the importance of recycling to encourage the right way to recycle, the purchase of products with recycled content, and promoting waste avoidance.

Source: <https://www.lgnsw.org.au/Public/Advocacy/SaveOurRecycling.aspx>

On 17 November 2020, LGNSW welcomed the NSW Government's extended support for the program:

Today's NSW Budget has supported local government's *Save Our Recycling* campaign with a \$96 million commitment to extend the *Waste Less Recycle More* program and finalise the long-term strategy for waste.

Local Government NSW (LGNSW) President Linda Scott said the urgent need to educate communities was a key component of the *Save Our Recycling* campaign backed by NSW councils.

"Mayors and councillors welcome the fact that the NSW Government has listened to our advocacy to save recycling and will invest \$96 million towards a better recycling system," Cr Scott said.

"LGNSW will continue to call for the Government to reinvest the annual \$800 million Waste Levy in four ways: council-developed regional waste management plans, revitalised infrastructure, increased procurement of recycled goods and a state-wide education campaign.

“The NSW Budget funding helps tackle one of those four requirements and is a welcome step forward as we face the rapidly-approaching bans on the export of recycling and waste overseas.

“Extending the *Waste Less Recycle More* program will help promote a circular economy, enabling NSW to create more reusable product, with the potential to create whole new industries and jobs along with it.”

Cr Scott urged the Government to take the next step, which required them to match Federal and industry funding to divert more than 10 million tonnes of waste from landfill and create 10,000 jobs Australia-wide.

“It’s disappointing that the State Government will not match Federal Government recycling funding in this Budget, but it is not too late to ensure NSW does not miss out,” she said.

https://www.lgnsw.org.au/Public/Public/News/Articles/2020-media-releases/1117_budget_response.aspx

2013 NOTICE OF MOTION (Attachment B)

On 14 May 2013, I submitted a Notice of Motion (NOM 28/05/13 – S88 Waste Levy) regarding Section 88 Waste Levy funds being returned to consolidated revenue by the NSW Government, and the missed opportunities this represented.

In that motion it was noted that the City of Newcastle had provided \$67.8 million over nine years back to the NSW Government via the Section 88 Waste Levy.

The figures in this Notice of Motion from 2013, compared to the current figures, demonstrates the enormous increase in this levy to the rate payers of Newcastle since 2004.

2018 LORD MAYORAL MINUTE (Attachment C)

A 2018 Lord Mayoral Minute – NSW Waste Levy Fund noted that between 2008-2018, the Waste Levy had increased by more than 300 per cent, with City of Newcastle paying \$178 million to the NSW Government in Waste Levy contribution over that decade.

RELATED PREVIOUS DECISIONS

NOM 28/05/13 - S88 Waste Levy

LMM 25/09/18 – NSW Waste Levy Fund

ATTACHMENTS

Attachment A: City of Newcastle Submission - IPART Local Council Domestic Waste Management Charges Discussion Paper

Attachment B: Notice of Motion 28/05/13 – S88 Waste Levy

Attachment C: Lord Mayoral Minute 25/09/18 - NSW Waste Levy Fund

20 October 2020

Independent Pricing and Regulatory Tribunal
PO Box K35
Haymarket Post Shop
SYDNEY NSW 1240

To Whom It May Concern

REVIEW OF DOMESTIC WASTE MANAGEMENT CHARGES

The City of Newcastle (CN) welcomes the opportunity to provide a submission in response to IPART's Local Council Domestic Waste Management Charges (DWMC) Discussion Paper.

Newcastle is a significant regional city located on the East coast of Australia, approximately 160 km north of Sydney. The Newcastle Local Government Area (LGA) has a population of approximately 160,000 persons, occupying 65,000 households. The LGA covers an area of 187 km².

CN offers a three-bin (general waste, mixed recycling, green waste) and bulk-waste service to its residents. CN outsources its mixed recycling service to a contractor and manages collection and disposal of its general waste and green waste streams. CN owns and operates the Summerhill Waste Management Centre (SWMC) with commercial arrangements extending to the Hunter Region and Sydney. CN is currently developing their Waste Strategy to 'pivot' operations at the SWMC from a predominantly landfill operation toward resource recovery by embedding circular economy into the future operational design.

CN is well placed to provide insight to IPART on this matter as CN is aware of the full life cycle of costs associated with the delivery of service being a blend of both owner/operator and outsourced of services.

CN believes the public and private sectors both have a role to play within the market, and IPART requires further in-depth analysis to understand the market and associated barriers. There is potential for significantly better outcomes within the industry should a more considered, and sophisticated approach is adopted.

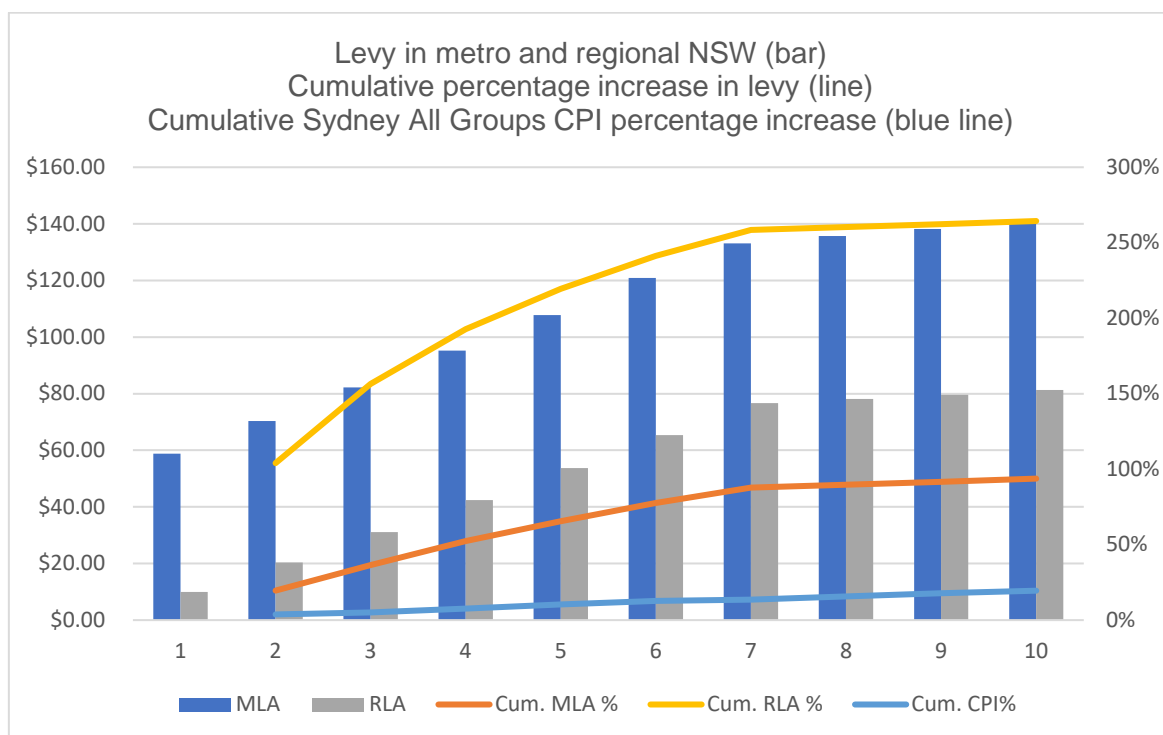
Response to list of questions in the discussion paper

1. Is it a concern that DWM charges appear to be rising faster than the rate peg? Are there particular cost-drivers that may be contributing to this?

The DWMC is rising faster than the rate peg as waste management is governed by complex market factors. To understand these complexities, IPART will require guidance by industry experts; CN is willing to work with IPART on this matter.

Factors that contribute to the DWMC include:

- The NSW EPA Waste Levy is a significant contributor to cost and typically represents approximately 50-65% of the cost of disposal. Over a similar period to which IPART has compared increasing cost, you can see, by the graph below, that the NSW waste levy has increased around 100% in the metro area, and over 250% in the regional levy area whilst the Sydney All Groups CPI has increased only 19%. If the State is concerned about price changes in the waste industry, it should also consider a review of its own waste levy. Further, if the waste levy must remain, then it must be hypothecated back to the industry. Over the last two years, only 16% of the levy collected has been injected back into the industry. CN pays approximately \$37M in levy annually and only receives \$178K back through the BWRP.



- Significant recycling market disruption limiting end markets and impacting commodity value. At a high level, the sequence of events have been as follows; China National Sword Policy comes into effect disrupting Australian recyclables export, market glut in Australia causing increased cost for reprocessing and gate rates, COAG Export Ban, facility shutdowns due to oversupply and non-viable operations due to uncertainty of end markets for commodities.
- The recent impacts on the industry related to the management of recycling have also represented a significant increase in the cost to deliver the same outcome as the erosion of commodity value has occurred. The significant cost increases relate to environmental, planning, fire, insurance and increased processing requirements.
- The introduction of a CDS has also impacted on the value of the commodity stream at the kerbside by cannibalising all high-value material from this stream. It should also be noted that when the cost per tonne of collection of CDS is considered, it far outweighs the cost of local government delivered services.

- Federal and NSW Government policy pressure to continue investing in resource recovery infrastructure and services to meet increasingly ambitious domestic waste landfill diversion and recycling targets.

Should IPART's intent be to address cost shifting, then directly addressing this issue is warranted. Further CN is concerned that any intervention measures recommended does not cause perverse outcomes to the waste industry.

2. To what extent does the variation in services and charges reflect differing service levels, and community expectations and preferences across different councils?

The variations in services and charges reflect a range of factors including service levels, logistics and contractual obligations. Some of the key influences include:

- **Logistics** - distance of depot to population, and population to disposal locations, housing density, productivity, presentation rates, bin weight, variability of kerbside systems, variability in schedules for each service, compaction ratios, etc.
- **Fleet optimisation** - typically an issue for smaller contracts where the truck cannot be fully utilised.
- **Poor planning** – increased density without adequate consideration of collection over the long term, parking and a lack of infrastructure planning all exacerbate the cost issues and result in higher long-term costs to the community for these services.
- **Capital requirements** – major infrastructure (facility, depot) and bins (including costs incurred for changes and/or replacement).
- **Contract specifics** - term, risk allocation, rise and fall requirements, commodity prices and economic conditions at time of contract execution.
- **Environmental outcomes** – diversion, increased standards and expectations set by Local, State and Federal targets.
- **Enforcement of contamination penalties** – which has been much more prominent due to change in market quality requirements for commodities.
- **Disaster waste contingencies and management**, for example free tipping of green waste for fire reduction risk and bulky goods disposal after floods.

IPART has raised some valid points regarding capital and term, however the comments in the discussion paper does not touch on some of the key issues and cost drivers in the industry. Whilst some gains might be made in fleet, greater gains are expected to arise from:

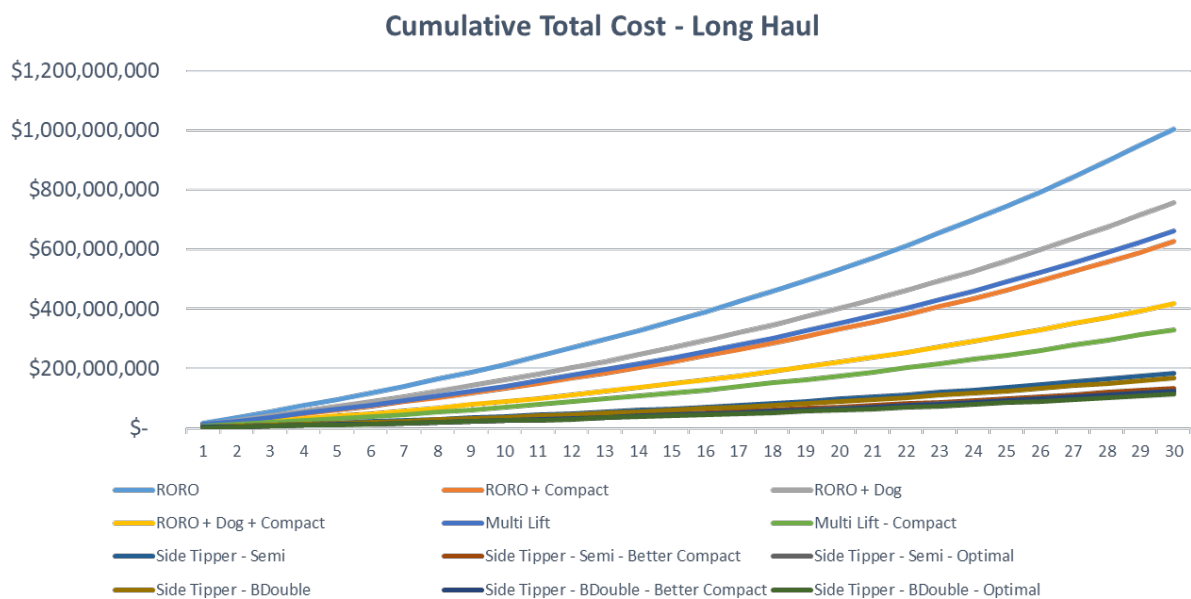
- Better **infrastructure planning**, including the development interface. Waste should be considered an essential utility service and planned for in a similar manner.
- **Government** taking on some of the roles of developing waste precinct hubs and developing some of the infrastructure, taking a much longer-term view (30+ years minimum), and financing this at much lower rates than the market can.
- Allowing the **private sector** to deliver operational services in these hubs under contract with terms more akin to the life of the assets involved (8 for collection, 10 to 15 for processing).

The urbanisation of many areas also has a potential impact on service costs. Greater levels of multi-unit development without careful consideration of collection interfaces can significantly increase costs to serve. Urbanisation and the key relationship with waste has had a negative impact on service delivery and cost in the sector in many ways including:

- Inefficient collection models.
- Traffic and parking.
- Failure to plan for infrastructure close to population and transport.
- Urban encroachment crowding out existing facilities.

Transport can have a significant impact on costs. By way of example, Roll on Roll off (RORO) is a very common form of transport in the waste industry. RORO has significant benefits, however its disbenefits are not widely understood. Its commonly results in its use being perpetuated across Australia. Yet this solution is one of the least efficient methods of bulk transport. The graph below shows the cumulative cost of a number of transport modes transporting 100ktpa about an hour. This is a real example (at conceptual level) for a real Council who were about to build 16 RORO transfer stations.

Procurement is not structured for the market to offer local government better solutions. This difference in cost amounts to almost \$1B over a 30-year period, and this example references just one medium-sized Council. There is significant opportunity within the industry by using a more efficient model, making better capital decisions, and supported by levy contributions. This can totally transform this industry with no extra cash and deliver much higher environmental and service outcomes.



3. *Is there effective competition in the market for outsourced DWM services? Are there barriers to effective procurement?*

It is best to understand this matter by breaking the service down into its two components; collection and processing/disposal.

There is effective competition, generally in the collection sector. The key impact on competitiveness in this sector relates to:

- Procurement approaches particularly understanding risk allocation and pricing structure.
- Depot ownership.

There is limited competition within the processing and disposal sector. Some of the key factors relating to this issue include:

- **Term of infrastructure and mix of infrastructure** – IPART is correct that taking a short term view to infrastructure requirements in processing have resulted in infrastructure being paid for by the public sector, only to be transferred to the private sector, and then ultimately representing a barrier to entry in new procurements.
- **Risk and pricing structures** are oversimplified and opaque (simple per tonne rates) with risk borne by parties not best placed to manage the risk.
- **Cost down and a ‘race to the bottom’** and oversimplified procurement approaches directly contributed to the concentration of the market and the dismantling of processing facilities in Australia over time.

- **Short term views and ‘letting the market decide’** has resulted in packaging up infrastructure with different economic lives and then paying for it over a 10-year period. The local government sector can finance some key infrastructure at a far lower cost than the market.

Waste services procurement requires specialist expertise in a number of disciplines due to the complexities of the industry. Some of these disciplines include:

- logistics
- heavy vehicle national law and vehicle productivity
- industrial relations and labour costs
- finance
- procurement and contract law
- the market
- capital structures
- operations
- environmental objectives and outcomes

It is very rare for a single professional to have these skill sets. In the absence of a party managing procurement without these skill sets, the procurement team may not have the full capability to understand waste service procurement complexities to ensure best service outcomes.

IPARTs focus appears to be on containing cost, yet local government is legislatively required to consider many more requirements than cost when delivering a waste service and assessing tender recommendations. Procurement processes are required to consider value for money (which is not by definition lowest cost), along with environmental, local employment and more often now social and other objectives. To focus on cost in this regard misses the challenges the industry faces and will only serve to perpetuate what has got us here in the first place. Further, local government can not legally comply with a ‘cost down’ approach. Nor does the community expect us to. In our experience, the community expect us to be much further ahead in the delivery of environmental and social outcomes than we are.

4. Are overhead expenses for DWM services appropriately ring-fenced from general residential rates overhead expenses?

CN has historically engaged a third party to audit and validate CN’s rationale behind the DWMC. CN believes that no further measures are required as long as DWMC rationale is documented, and costs can be reliably measured and reasonably associated with the DWMC. When one considers the waste levy exceeding 250% growth in regional NSW when compared to a CPI of 19%. There is no way a regional LGA can contain this cost growth and continue to deliver services without passing on the cost as is required under the act.

CN would support returning a greater proportion of the Waste Levy to Councils by increasing the payments to Councils under the Better Waste and Recycling Fund (BWRF). CN currently pays ~\$37M in levy contributions and only receives \$175,000 to fund resource recovery projects via the BWRF.

5. If IPART was to regulate or provide greater oversight of DWM charges, what approach is the most appropriate? Why?

CN would welcome oversight and guidelines however it is noted that many of the principles and pricing requirements are similar to the requirements of National Competition Policy which has been in place since the early to mid 1990s.

Additional items for consideration, noting some may be outside IPARTS control include:

- The NSW Waste Levy could be reflected transparently on the tax invoice of any rate notice to clearly define how much of the cost relates to the State waste levy.

- Guidance on the DWMC restricted reserve policy.
- Review of the relevant sections of the Local Government Act to be more reflective of the current environment, demands and expectations.

6. Are there any other approaches that IPART should consider?

Waste is an industry with long-life assets similar in many cases to other utility businesses such as water and energy. Over time, the energy industry is likely to become more fragmented and utility businesses may start to overlap creating circular economy synergies. International waste companies are already structured in this manner (i.e. Veolia, Suez).

As a minimum, waste businesses should be making decisions on full system outcomes (collection, transfer, processing and disposal in one business view), over a minimum 30 year period, incorporating capital, operating and revenue and understanding how decisions impact the price path. It would seem IPART, in part, may share this view. Local governments are prone to base key decisions, regarding waste management, with a relatively short-term view of capital, labour and materials. A long-term view is required to maximise outcomes for the industry.

The general approach to charge the DWMC as a separate line item and the restriction of revenue is supported. The revenue should be able to fund long term initiatives. It is also important that the business is funded first and foremost before revenue is removed onto other general works and services. There is industry examples where local governments have drawn down on revenues from water and waste businesses well before the legal obligations of the business are satisfied which causes concern.

CN has lodged a submission to the State and the Federal Governments related to its view of some of the opportunities that exist within the industry as a whole. See a copy attached.

Particularly with a COVID recovery, there is an opportunity to assist in an Australia wide program similar to the “school halls” program (Building Education Revolution) that was repurposed for community use. This would allow opportunity to:

- Develop regional waste hubs.
- Focus on circular economy both locally, regionally and nationally.
- Put in place transport and material handling efficient core infrastructure.
- Partner with the private and social sectors to deliver outcomes.

The State/Federal Governments could achieve the following key outcomes in this way:

- Fix a market failure and take a long-term view in waste infrastructure (solving some of the issues IPART raise regarding capital).
- Partner with the private sector to deliver what they deliver best.
- Transform existing infrastructure so that it enables much more efficient transport, which will allow markets to operate locally, regionally and nationally.
- Reduce cost to the Australian economy by investigating opportunities to replace existing infrastructure with transport efficient interfaces which will result in a lower overall cost to the economy.
- Advance investment and economic activity related to construction across all areas of Australia.
- Activate economic multipliers in social and private sector employment through construction.
- Resolve industry and environmental issues around recycling and competition.
- Lower overall cost to the economy.

State and Federal Government grant funding could require the Life Cycle Analysis to be completed as part of this approach and replicate it. If a 50% capital grant was on offer, this 50% of capital drives over 90% of the Life Cycle Cost of a waste system which is rarely

considered. The State/Federal Government could then leverage outcomes across the entire Life Cycle Cost by using a 5% of LCC incentive.

Taking such an approach can result in systems, services and infrastructure with real Life Cycle Costs that are 30% to 75% lower than traditional models. A number of these examples are the recipients of National Waste and State Project Management Awards in Australia. CN would welcome the opportunity to provide greater detail on these examples.

7. If a reporting and benchmarking approach was adopted, how could differences in services and service levels, as well as drivers of different levels of efficient cost, be accounted for?

It will be difficult to adequately benchmark waste services without a relatively sophisticated model which includes service density, services/type, outcomes achieved and common inputs. The EPA already collect a significant amount of information which could be used to combine financial and outcome data along with other population and geographical data to avoid duplication of effort.

8. Is there merit in IPART's proposed approach to developing a reporting, monitoring and benchmarking approach and pricing principles for setting DWM charges? Is it likely to be an effective approach? Why/why not?

Councils currently report waste data through the annual WARR return. Data submitted includes:

- DWMC
- Number and types of properties receiving a waste service
- Services
- Waste and recycling generation in tonnes (collected, recovered, disposed) per stream

Benchmarking could be effective in bringing recalcitrant behaviour into line but additional regulatory reporting should be fully considered to understand its value and the resourcing impact it will have to councils when compiling additional information.

It would be helpful to document a set of guidelines on pricing. These should however, include a range of principles other than 'lowest cost'. The lowest cost rarely represents the best value for money, and may encourage under handed activities in the industry. Life Cycle Costs, environmental and other objectives, full capital, operating and revenue in a single 30 year minimum whole of operation model could form the minimum requirement.

9. Would IPART's proposed approach be preferable to audits of local councils' DWM charges by OLG?

Comparisons between councils are extremely difficult due to the variabilities and complexities mentioned thus far. The industry appears to be extremely hard to compare one Council or provider against the next. It is important to note that every Council is at different phases of reaching the national landfill diversion targets. There are ample recovery solutions, and each Council will choose appropriate avenues for their area.

Complying with targeted and specific audits would be the easier option going forward, and the option City of Newcastle council strongly recommend.

If benchmarking, however, was adopted there needs to be clear criteria on how each Council is benchmarked, ensuring no council is worse off.

10. Are there any issues that should be considered with regards to developing an online centralised database for all NSW councils' DWM charges to allow councils and ratepayers to benchmark council performance against their peers?

Councils currently report waste data through the annual WARR return. This could be used as the basis for the centralised database for all NSW councils. Benchmarking of the DWMC will require significant data granularity to be truly comparable. CN does not support this due to the complexity and variability of the DWMC, however, supports improvements toward accountability and transparency.

Should IPART wish greater granularity in the contract agreements with their local council waste service providers, there will be significant issues for the market if line by line pricing is published as this information is commercial in confidence.

Waste services, as a whole, is not a commodity and as such, cannot be defined in a similar manner. It would be helpful for the industry if there were a tradeable commodity market for price finding for key commodities. For example, key value of materials within the industry such as glass, and various grades of plastic etc.

11. Do you agree with IPART's proposed pricing principles? Why/why not?

Key feedback in relation to the proposed pricing principles is as follows:

- It is noted that the National Competition Policy has required and defined Full Cost Pricing for some time and many of these principles are already covered in that approach.
- Definitions require specific approaches and examples. Example, depleting assets like liners and airspace which often financial standards have a difficulty in managing.
- Utilising the term "user pays" implies paying for services consumed. A base-level of service is provided to all residents regardless of whether they utilise the service or not. Weight-based charging has not achieved suitable maturity yet within in the industry to achieve a true "user pays" offering.

12. Are there any other pricing principles or issues that should be considered?

Additional pricing principles or issues for consideration include:

- Life Cycle Costs; 30 year view of capex, opex, revenue.
- Council operationa are already subject to National Competition Policy.
- Volatility of the current commodity industry.
- Weighted towards highest value and best outcome rather than lowest price.

13. Could a centralised database and display of key elements of all successful DWM service contracts (e.g., name of tenderer, service provided and contract amount) assist councils in procuring efficient services? If not, why not?

The Government Information (Public Access) Act 2009 already requires that contract information be made publicly available through a contract register, ensuring transparency. Aggregating data and overall contract cost in a centralised database would not provide enough detail to be used in a meaningful way. Additionally, it may complicate future tender processes for Council. The assumption might be that the outlined costs could be achieved, but the local environment may prevent that from happening.

As each tender and contract has significant differences and considerations, displaying high-level pricing in a centralised database would not benefit either party. Tenderers will consider their rates to be commercial in confidence. Unless the contract terms and individual line item costs are available and displayed in the centralised database, the data would not be useful. Each Council has specific differences, even councils in close proximity to each other will have noticeable differences, which will impact the contract cost. Seeing contract data is already available in accordance with the Local Government Act, a centralised database is not necessary.

An oversimplified publication of prices which result in a cost down approach could have a further negative impact on service providers. Forcing tenderers to drive their cost down, resulting in further monopolisation of the industry, which we are trying to avoid.

As IPART has identified, service providers in the waste collection and waste management space are extremely limited, it is important additional barriers are not created crippling the industry even further. Although cost is important, there needs to be a balance between cost, service outcome and value add.

Should you require any further information on this matter, please contact Troy Uren, Manager Waste Services on (02) 4974 6606.

Yours faithfully



Troy Uren
MANAGER WASTE SERVICES

SUBJECT: NOM 28/05/13 - S88 WASTE LEVY

COUNCILLOR: N NELMES

PURPOSE

The following Notice of Motion was received on 14 May 2013 from the abovementioned Councillor:

Précis

Over the past nine years The City of Newcastle has provided **\$67.8 million** back to the NSW State Government via the section 88 Waste Levy. This Levy was introduced to encourage landfill operators to reduce the amount of reusable waste going into landfill. The City of Newcastle's Summerhill Waste Management Facility has worked towards these goals by introducing methane capture and storage, separation of green waste and other reusable waste however this levy paid directly to the State Government continues to rise.

MOTION

PART A:

- 1 Council requests a Moratorium on payment of our Section 88 Waste Levy to the consolidated revenue of the State government for the next two financial years.
- 2 During this period the Levy would still be collected and accounted for to maintain competitive neutrality in the Waste Management Industry.
- 3 The Levy would be redirected to The City of Newcastle's Infrastructure backlog, allowing major asset renewals projects to be completed.

PART B

That Newcastle City Council participate in a combined regional submission through Hunter Councils to the State Government quantifying the impact of the imposed waste levy and seeking to:

- Reduce the impact of the levy on the residents and business of Newcastle and the Hunter Region;
- Reduce or eliminate the portion of the levy absorbed into the general operation of the State (hidden tax) rather than being returned to Local Government to improve Waste Management practices and;
- Ensure the return of the levy to Local Government is in proportion to the amount collected to reduce the cross-subsidization occurring at the expense of Newcastle and Hunter residents and businesses.

PART C:

Ask the Interim General Manager to call a special meeting of Lower Hunter Council General Managers to create a statement of common purpose on this issue as soon as possible with the goal of advocating collectively to the NSW Government.

BACKGROUND

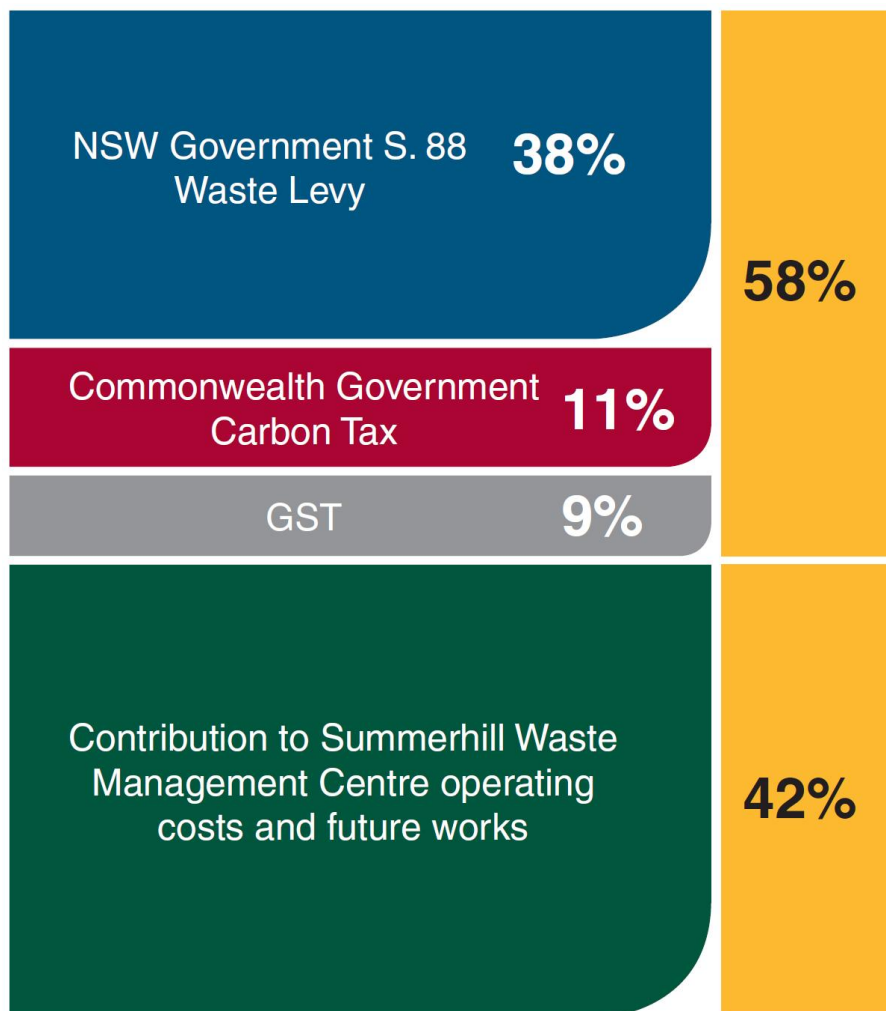
This financial year we will send \$M down the F3 into the consolidated revenue of the State Government. Council's throughout the State are facing similar long-term financial problems to Newcastle, with rate capping and costing shifting from the State Government. This option to reinvest the Levy into Local roads, parks, pools, and community buildings is the optimal use of this tax for the Citizens of Newcastle.

The table below shows the payment of the levy against tonnes during these nine years.

Financial Year	Annual Levy Payment (\$)	Annual Tonnes Subject to Levy
2003/04	\$2,148,587	205,321
2004/05	\$2,643,051	211,665
2005/06	\$3,071,271	206,639
2006/07	\$4,906,498	222,311
2007/08	\$7,660,701	250,268
2008/09	\$10,320,777	270,146
2009/10	\$11,550,926	226,093
2010/11	\$12,832,170	207,746
2011/12	\$10,772,925	150,152
Total	\$65,906,907	1,950,341
Total inc 2012/13	\$67,852,574	1,974,902

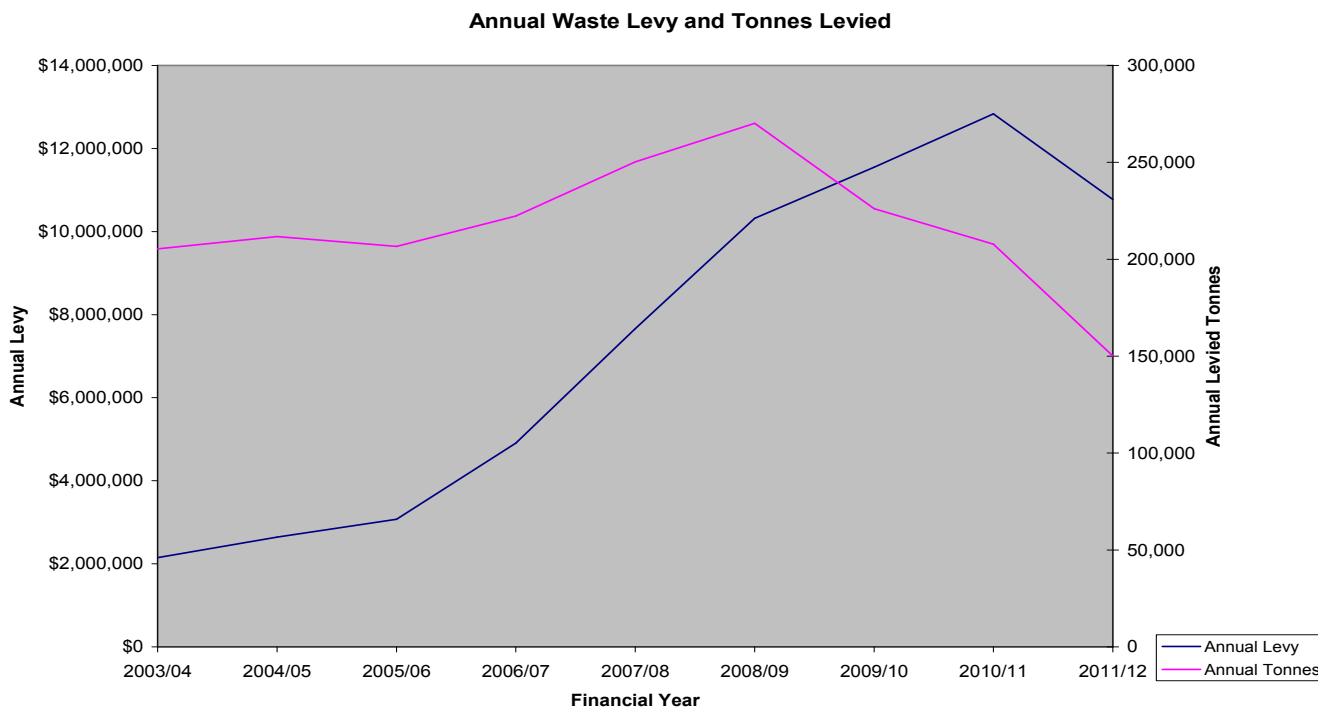
Tipping fees (27% of total NCC costs)

Whilst the SWMC is expected to collect \$24.87 million in fees during 2012/2013 the State Government charges (Section 88 Levy), Carbon Tax and GST. 38% of the tipping fee is made up of State Government levy as shown below.



Over the past nine years TCoN has provided **\$67.8 million** back to the **NSW State Government**. **Employee costs only make up 6.4%** of the total expenditure for SWMC.

The graph below shows the impact of the levy. The levy have made competition with other smaller facilities (eg Bedminster Plant and Raymond Terrace) more difficult. This has led to more aggressive pricing and a loss of tonnes throughput. This is why Council is now considering moving swiftly towards developing resource recovery capability.



ATTACHMENTS

Nil

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ACHCB`

That City of Newcastle:

- 1 Notes that City of Newcastle ratepayers will contribute at least \$23.5 million in Waste Levy contributions to the NSW Government this year, receiving a small fraction of this back in the form of grant funding to run environmental awareness campaigns;
- 2 Notes that over the past 10 years the NSW Government has increased the Waste Levy from \$45 per tonne to \$138 per tonne, an increase of over 300 per cent, and that the total Waste Levy paid by the ratepayers of the City of Newcastle over the past 10 years to the NSW Government is \$178 million;
- 3 Notes the release of the NSW Legislative Council Portfolio Committee No. 6 – Planning and Environment report ‘Energy from waste’ technology (the Report), on matters relating to the waste disposal industry in New South Wales (Attachment 1);
- 4 Notes that Recommendation 4 of the ‘Energy from Waste’ technology report states that “the NSW Government hypothecate 100 per cent of the waste levy funds contributed by local councils back to these organisations to provide waste management services, including waste reduction, avoidance and re-use programs, and environmental programs to encourage the development of innovative waste management technology.”;
- 5 Writes to the NSW Minister for the Environment, the Hon. Gabrielle Upton MP calling on the Minister to accept and implement Recommendation 4 of the Report and sends a copy of this correspondence to the NSW Shadow Minister for the Environment, the Hon. Penny Sharpe MLC.

657?; FCI B8`

On Tuesday, 18 September 2018, the NSW Legislative Council Portfolio Committee No. 6 – Planning and Environment report ‘Energy from waste’ technology (the Report), on matters relating to the waste disposal industry in New South Wales was released, following a Parliamentary inquiry into waste disposal in NSW.

The terms of reference for the inquiry were broad, including provisions to seek information regarding “the current provision of waste disposal and recycling, the impact of waste levies and the capacity (considering issues of location, scale, technology and environmental health) to address the ongoing disposal needs for commercial, industrial, household and hazardous waste.”

In the report forward, Committee Chair, the Hon. Paul Green MLC, notes that “in 2014-2015, New South Wales generated about 19 million tonnes of waste. Indeed, New South Wales is currently the second highest per capita producer of waste in the world. It is therefore essential that waste management services and infrastructure are strategically planned and delivered appropriately. However, successive NSW Governments have failed to effectively leverage waste levy funds to support the development of these much-needed services and facilities, leaving New South Wales dependent on landfill for waste disposal. The committee has made a number of

recommendations to overcome this issue, including that the NSW Government hypothecate a greater percentage of waste levy funds to local councils and the waste industry to support the provision of additional waste services, initiatives and infrastructure”.

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Recommendation four of the Report is that the NSW Government hypothecate 100 per cent of the waste levy funds contributed by local councils back to these organisations to provide waste management services, including waste reduction, avoidance and re-use programs, and environmental programs and to encourage the development of innovative waste management technology.

By supporting this recommendation, City of Newcastle may retain a significant amount of the levy currently paid to the NSW Government, so that these funds can be used exclusively to provide our own waste management services, including waste reduction, avoidance and re-use programs, and environmental programs to encourage the development of innovative waste management technology.

K UghY @/j m

For 2018/19 the NSW Government charges a levy of \$141.20 per tonne for all waste disposed of at any licensed landfill site, including Summerhill Waste Management Centre. Summerhill collects this levy within the fees and charges outlined above and passes the levy collection to the NSW EPA.

Over the past 10 years we have seen the levy paid increase from \$10.4 million in 2008/09 to \$31.2 million in 2017/18. This has been caused by higher tonnages but also by above CPI hikes in the levy itself which grew from \$45 per tonne to \$138 per tonne over the same period.

That is a 300% increase in ten years.

In total, the City of Newcastle has paid \$178 million in waste levies over the past ten years.

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On 14 May 2013, I submitted a Notice of Motion (NOM 28/05/13 – S88 Waste Levy) regarding Section 88 Waste Levy funds being returned to consolidated revenue by the NSW Government, and the missed opportunities this represented.

In that motion it was noted that the City of Newcastle had provided \$67.8 million over nine years back to the NSW Government via the Section 88 Waste Levy.

The figures in this Notice of Motion from 2013, compared to the current figures, demonstrates the enormous increase in this levy to the rate payers of Newcastle since 2004.

5 HH57 < A9 BHG

5 HLW a Ybh5 . NSW Legislative Council Portfolio Committee No. 6 – Planning and Environment report ‘Energy from waste’ technology

5 HLW a Ybh6 . Notice of Motion – S88 Waste Levy – 28 May 2013

Portfolio Committee No. 6 - Planning and Environment

‘Energy from waste’ technology

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Terms of reference

That Portfolio Committee No. 6 inquire into and report on matters relating to the waste disposal industry in New South Wales, with particular reference to ‘energy from waste’ technology, and in particular:

- a) the current provision of waste disposal and recycling, the impact of waste levies and the capacity (considering issues of location, scale, technology and environmental health) to address the ongoing disposal needs for commercial, industrial, household and hazardous waste
- b) the role of ‘energy from waste’ technology in addressing waste disposal needs and the resulting impact on the future of the recycling industry
- c) current regulatory standards, guidelines and policy statements oversighting ‘energy from waste’ technology, including reference to regulations covering:
 - i. the European Union
 - ii. United States of America
 - iii. international best practice
- d) additional factors which need to be taken into account within regulatory and other processes for approval and operation of ‘energy from waste’ plants
- e) the responsibility given to state and local government authorities in the environmental monitoring of ‘energy from waste’ facilities
- f) opportunities to incorporate future advances in technology into any operating ‘energy from waste’ facility
- g) the risks of future monopolisation in markets for waste disposal and the potential to enable a ‘circular economy’ model for the waste disposal industry
- h) the transport of all classifications of waste and recyclable materials out of New South Wales and the consequences for waste disposal, government revenue and environment programs, employment, roads and transport routes, and the environment
- i) the prevalence and scale of illegal dumping across New South Wales and the actions of the NSW Environment Protection Authority to address it, and
- j) the sustainability and impacts of the current waste and landfill regime on human and environmental health, including drinking water, soil contamination, fire hazards and emissions
- k) any other related matter.

The terms of reference were self-referred by the committee on 6 April 2017.¹ The terms of reference were extended through the House on 10 August 2017.²

¹ *Minutes*, NSW Legislative Council, 6 April 2017, p 1544.

² *Minutes*, NSW Legislative Council, 10 August 2017, pp 1852-1853.

Committee details

Committee members

The Hon Paul Green MLC	Christian Democratic Party	<i>Chair</i>
The Hon Shayne Mallard MLC	Liberal Party	<i>Deputy Chair</i>
Dr Mehreen Faruqi MLC*	The Greens	
The Hon John Graham MLC*	Australian Labor Party	
The Hon Taylor Martin MLC*	Liberal Party	
The Hon Matthew Mason-Cox MLC	Liberal Party	
The Hon Penny Sharpe MLC	Australian Labor Party	

* Dr Mehreen Faruqi MLC substituted for Mr Jeremy Buckingham MLC from 18 August 2017 for the duration of the inquiry.

* The Hon John Graham MLC substituted for the Hon Ernest Wong MLC from 23 August 2017 for the duration of the inquiry.

* The Hon Taylor Martin MLC replaced the Hon Lou Amato MLC on 30 November 2017.

Contact details

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Email	portfoliocommittee6@parliament.nsw.gov.au
Telephone	(02) 9230 2620

Chair's foreword

In 2014-2015, New South Wales generated about 19 million tonnes of waste. Indeed, New South Wales is currently the second highest per capita producer of waste in the world. It is therefore essential that waste management services and infrastructure are strategically planned and delivered appropriately. However, successive NSW Governments have failed to effectively leverage waste levy funds to support the development of these much-needed services and facilities, leaving New South Wales dependent on landfill for waste disposal. The committee has made a number of recommendations to overcome this issue, including that the NSW Government hypothecate a greater percentage of waste levy funds to local councils and the waste industry to support the provision of additional waste services, initiatives and infrastructure. The committee has also recommended that the NSW Government identify a government body responsible for leading waste infrastructure planning in New South Wales.

There was a great deal of debate during the inquiry about whether the NSW Environment Protection Authority (NSW EPA) is regulating the waste industry effectively. Stakeholders pointed to the increase in illegal dumping, including the insidious crime of dumping contaminated waste such as asbestos, the growing volume of New South Wales waste being transported to Queensland, and concerns about criminal elements targeting the waste industry, as examples of the NSW EPA failing to provide the strong, decisive, but fair regulatory approach this industry requires. The committee has made several recommendations to overcome these concerns, including that the NSW Government investigate options to restructure the NSW EPA, and undertake an independent review of the NSW EPA's performance of its various functions.

Another key concern for stakeholders was the role of energy from waste technologies in New South Wales. Inquiry participants debated whether there was a place for energy from waste facilities in managing residual waste once higher order waste management techniques have already been exhausted, and whether the *NSW Energy from Waste Policy Statement* is sufficiently robust. Ultimately, the committee supports energy from waste in some circumstances, and has made a number of recommendations aimed at strengthening the regulatory framework for such facilities, including that an expert advisory body chaired by the Chief Scientist examine and report on these issues.

However, the committee does not support the proposal by The Next Generation for an energy from waste facility at Eastern Creek. Many stakeholders, including the NSW EPA and NSW Health, expressed significant concerns about the project, particularly the uncertainty around the risks it may pose to human health and the environment. The committee has therefore recommended that, subject to the current assessment process being conducted by the NSW Department of Planning and Environment, the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek. The reason for the dichotomy in this thought is that there is a live development assessment in play and it is not for the committee to interrupt this legal process. However, we still felt compelled to put our view forward based on the evidence received by the committee.

Finally, this has been a long and complex inquiry and on behalf of the committee, I'd like to express my thanks to all those who participated in it. My thanks also go to my committee colleagues and to the secretariat.



Hon Paul Green MLC
Committee Chair

Key issues

This inquiry highlighted the many, pressing issues facing the waste industry in New South Wales, including concerns about the waste levy, illegal dumping, the interstate transportation of waste, the regulation of energy from waste projects, the regulatory role of the NSW EPA, the lack of strategic planning for waste management infrastructure, and the significant challenges facing the recycling and resource recovery sector.

The high waste levy was partially credited for the state's impressive resource recovery rate, however stakeholders expressed concerns about the waste levy's effectiveness in supporting the development of much-needed waste infrastructure, particularly recycling and resource recovery facilities and alternative waste technologies. Inquiry participants also suggested that the waste levy impacts heavily on certain councils. To overcome some of these issues, the committee has recommended that the NSW Government hypothecate additional levy funds to local councils and the waste industry, and investigate options for reforming the waste levy grant system. We have also recommended that the NSW Government urgently consider attaching the waste levy to the waste generator in New South Wales, particularly for large waste generators or operators of large sites.

The committee received concerning evidence about the problem of illegal dumping in New South Wales. The NSW EPA is attempting to address this insidious environmental crime. However, the committee believes more resources should be directed towards ending this practice. Amongst other recommendations, we have recommended the NSW Government allocate additional resources to, and increase the number of, Regional Illegal Dumping (RID) Squads, and allocate additional resources to support the enhanced use of vehicle trackers.

The committee was alarmed by the large, and growing, amounts of New South Wales waste being transported interstate, particularly to Queensland. This practice is unjustifiable and has serious consequences including significant economic, not to mention environmental, ramifications. We therefore applaud the Queensland Government's announcement, just days before the tabling of this report, that it intends to re-introduce its waste levy. The committee heard that the NSW EPA has attempted, albeit unsuccessfully, to end the interstate transportation of waste. We have recommended that the NSW EPA and its interstate counterparts consider a national approach to addressing this issue, and, more immediately, that the NSW EPA develop and implement a state-wide approach to ending the interstate transportation of waste.

There was debate, particularly during the early stages of this inquiry, about the use of energy from waste technology in New South Wales. Overall the committee believes energy from waste technologies as means of energy recovery may be appropriate in some circumstances, but only after a significant shift up the waste hierarchy to avoid, reduce and re-use waste and the issues of social licence, air pollution impacts and health risks have been addressed. In addition, we have recommended that the NSW Government establish an expert advisory body on energy from waste chaired by the Chief Scientist to examine and report on the energy from waste regulatory framework to create certainty for the market and communities.

A large proportion of submissions received in this inquiry discussed The Next Generation's proposal for an energy from waste facility at Eastern Creek. Stakeholders, including the NSW EPA and NSW Health, expressed significant concerns about the possible risks to human health and the environment posed by the project. These issues stem from concerns about the proposed feedstock for the facility, the lack of a reference facility to demonstrate how the technology will process the feedstock, and uncertainty about the possible emissions from the facility. Other concerns included the siting of the facility, its size, and the failure of the proponent to gain the community support necessary

to operate an energy from waste facility. While the proponent attempted to address these concerns, ultimately, the committee has recommended that, subject to the current assessment process being conducted by the NSW Department of Planning and Environment, the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek.

There was some concern expressed during the inquiry that the NSW EPA is not effectively regulating the waste industry. The agency's inability to stop illegal landfilling was an often-cited example of this argument. The NSW EPA responded forcefully to suggestions that its regulatory regime is inadequate, noting there are significant challenges in regulating the waste industry. In an effort to ensure the NSW EPA pursues its many varied roles more effectively, the committee has recommended that the NSW Government conduct an independent review of the NSW EPA, and investigate options to restructure the agency so it can improve its performance.

Stakeholders painted a troubling picture of the future of waste management in New South Wales, and argued that the NSW Government must take a proactive role in planning and supporting infrastructure development across the state. We acknowledge that the NSW EPA is drafting the first *Waste and Resource Recovery Infrastructure Strategy*, and have recommended that the strategy provide guidance on a range of factors impacting the development of waste infrastructure, such as identifying and zoning land, facilitating new infrastructure and supporting the circular economy. Importantly, the committee has also recommended that the NSW Government identify a lead body, either an existing department or agency or a newly-created body, responsible for leading waste management infrastructure planning in New South Wales.

The fate of the New South Wales recycling and resource recovery sector was an increasingly concerning issue during the inquiry. The ban imposed by China on the importation of plastics may lead to the collapse of the kerbside recycling system, and the committee has recommended that the NSW EPA provide additional support to local councils and resource recovery organisations to meet recycling targets and manage issues such as stream contamination, bureaucratic barriers, lack of product stewardship, and limited market opportunities. In addition, we have also recommended that the NSW EPA investigate, identify and implement alternative solutions to the ban on importation of recyclable plastics by China.

Recommendations

- Recommendation 1** 18
That the NSW Government ensure that all funds allocated to the Waste Less, Recycle More program be spent in accordance with the program.
- Recommendation 2** 18
That the NSW Environment Protection Authority undertake an audit of the Waste Less, Recycle More program to ensure that the funds are fully expended to meet the objectives of the program.
- Recommendation 3** 20
That the NSW Government reclassify Shoalhaven City Council from the Metropolitan Levy Area to either the Regional Levy Area or the unregulated area.
- Recommendation 4** 27
That NSW Government hypothecate 100 per cent of the waste levy funds contributed by local councils back to these organisations to provide waste management services, including waste reduction, avoidance and re-use programs, and environmental programs and to encourage the development of innovative waste management technology.
- Recommendation 5** 27
That the NSW Government investigate opportunities to hypothecate a proportion of waste levy funds contributed by the waste industry back to the industry to support waste management solutions and the development of innovative waste management technology.
- Recommendation 6** 27
That the NSW Government urgently consider attaching the waste levy to the waste generator in New South Wales, particularly for large waste generators or operators of large sites.
- Recommendation 7** 28
That the NSW Government investigate options for reforming the waste levy grant system, including providing greater flexibility in the grant guidelines for waste management projects.
- Recommendation 8** 36
That the NSW Government amend the Protection of the Environment Operations Legislation Amendment (Waste) Regulation 2017 to make it an offence to exhume waste from landfill sites.
- Recommendation 9** 36
That the NSW Government allocate additional resources to support the policing of illegal dumping.
- Recommendation 10** 36
That the NSW Environment Protection Authority strengthen its liaison with NSW Police when it comes to illegal activity in the waste sector, with formal protocols made public, and specifying the channels through which this liaison occurs.
- Recommendation 11** 36
That the NSW Government allocate additional resources to, and expand the number of, Regional Illegal Dumping (RID) squads.

- Recommendation 12** 37
That the NSW Environment Protection Authority immediately increase the use of vehicle trackers and other surveillance techniques, including drones, to prevent illegal dumping.
- Recommendation 13** 37
That the NSW Government allocate additional resources to support the enhanced use of vehicle trackers in the waste industry.
- Recommendation 14** 50
That the NSW Environment Protection Authority:
- develop and implement a state-wide approach to ending the interstate transportation of waste
 - pursue a national approach to addressing the interstate transportation of waste in collaboration with its counterparts in other jurisdictions.
- Recommendation 15** 66
That the NSW Environment Protection Authority provide more detailed information concerning the emissions regime for energy from waste facilities, including explicit reference to international best practice standards, in the *Energy Recovery Facility Guidelines*.
- Recommendation 16** 66
That the NSW Environment Protection Authority set licensing conditions that meet current international best practice for emissions standards, and that licensing conditions be drafted so as to incorporate any future improvements in emissions standards
- Recommendation 17** 67
That the NSW Environment Protection Authority set out the expected community engagement practices and outcomes a proponent must comply with to receive the necessary approvals and community support to operate an energy from waste facility in the *Energy Recovery Facility Guidelines*.
- Recommendation 18** 67
That the NSW Department of Planning and Environment require applicants for energy from waste facilities to provide a short, high-level summary of the Environmental Impact Statement, and that this document be published on the department's website, in addition to the full Environmental Impact Statement.
- Recommendation 19** 68
That the NSW Government establish an expert advisory body on energy from waste chaired by the Chief Scientist to examine and report on the energy from waste regulatory framework to create certainty for the market and communities, with particular reference to:
- changes required to the *Energy from Waste Recovery Guidelines* to guarantee that New South Wales uses only world's best practices in emissions, emissions monitoring and residual waste disposal
 - consent conditions required in any planning approval to guarantee that New South Wales uses only world's best practices in emissions, emissions monitoring and residual waste disposal
 - the impact of energy from waste on human health

- the impact of energy from waste on recycling targets.

- Recommendation 20** **76**
That, subject to the current assessment process being conducted by the NSW Department of Planning and Environment, the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek.
- Recommendation 21** **110**
That the NSW Government investigate options to restructure the NSW Environment Protection Authority so it can improve its performance.
- Recommendation 22** **111**
That the NSW Government conduct an independent review into the NSW Environment Protection Authority, with particular reference to:
- assessing the adequacy of funding for the performance of its compliance, enforcement and other roles
 - improving its community engagement role and the effectiveness of its enforcement and compliance roles
 - the perceived conflict of interest between its compliance and policy and education roles.
- Recommendation 23** **111**
That the NSW Government seek to amend the *Protection of the Environment Administration Act 1991* to provide for the appointment of a chairperson of the board independent of the Chief Executive Officer of the NSW Environment Protection Authority.
- Recommendation 24** **114**
That the NSW Government allocate additional resources to the NSW Environment Protection Authority to conduct investigations into large-scale illegal dumping activities.
- Recommendation 25** **114**
That the NSW Government introduce a 'fit and proper person' test for proprietors and company directors to assess whether individuals may work in the waste industry, incorporating a risk assessment based on a sliding scale.
- Recommendation 26** **114**
That the NSW Environment Protection Authority complete the draft protocol on calculating the quantum of the monetary benefit of illegal dumping and illegal landfilling as soon as practicable.
- Recommendation 27** **115**
That the NSW Government establish an independent inquiry to investigate the operation, regulation and approvals of the Mangrove Mountain Landfill site.
- Recommendation 28** **120**
That the NSW Environment Protection Authority regularly publish up-to-date waste data.

- Recommendation 29** **127**
 That the NSW Environment Protection Authority *Waste and Resource Recovery Infrastructure Strategy* provide guidance on matters including:
- identifying appropriate precincts and locations, including buffer zones, for waste facilities
 - facilitating new infrastructure, particularly alternative waste management options and energy from waste plants
 - enabling the circular economy, including waste generator education, product stewardship, waste levies, market support initiatives and avoidance, reduction and re-use support subsidies
 - creating ‘real markets’ for secondary materials from waste.
- Recommendation 30** **128**
 That the NSW Government investigate opportunities to enhance the collaborative powers of Regional Organisations of Councils to encourage investment in waste facilities, to be funded by the waste levy.
- Recommendation 31** **129**
 That the NSW Government identify a government body, either an existing department or agency or a newly-created body, responsible for leading waste management infrastructure planning in New South Wales, including:
- leading the development of a waste management infrastructure plan for metropolitan Sydney, in collaboration with local government
 - identifying and zoning land, including buffer zones, for waste management facilities, in collaboration with the NSW Department of Planning and Environment and other stakeholders such as local councils
 - leading the development of a waste management infrastructure State Environmental Planning Policy, in collaboration with the NSW Department of Planning and Environment.
- Recommendation 32** **131**
 That the NSW Environment Protection Authority develop and implement resource recovery criteria for landfills in New South Wales.
- Recommendation 33** **135**
 That the NSW Environment Protection Authority provide additional support to local councils and resource recovery organisations to meet recycling targets and manage issues such as stream contamination, bureaucratic barriers, lack of product stewardship, and limited market opportunities.
- Recommendation 34** **136**
 That the NSW Environment Protection Authority urgently investigate, identify and implement alternative solutions to the ban on the importation of recyclable plastics by China.
- Recommendation 35** **140**
 That the NSW Environment Protection Authority, in collaboration with stakeholders, investigate opportunities to embed zero waste strategies and the circular economy in New South Wales.

Recommendation 36

140

That that the NSW Government allocate additional resources to the NSW Environment Protection Authority to develop and implement Extended Producer Responsibility schemes.

Conduct of inquiry

The terms of reference for the inquiry were self-referred by the committee on 6 April 2017.

The committee received 383 submissions, four supplementary submissions and six proforma submissions.

The committee held five public hearings: four at Parliament House in Sydney and one at Rooty Hill RSL, Rooty Hill.

In August 2017, the terms of reference for the inquiry were expanded. Following the expanded terms of reference, the committee received an additional 12 submissions and ten supplementary submissions.

The committee conducted two site visits during the inquiry. The first visit was to the Veolia 'ecoprecinct' at Woodlawn, near Tarago in the Southern Tablelands of New South Wales, and the second visit was to the Genesis recycling facility at Eastern Creek in western Sydney.

Inquiry related documents are available on the committee's website, including submissions, hearing transcripts, tabled documents and answers to questions on notice.

Chapter 1 Waste management in New South Wales

This chapter describes the waste management system in New South Wales including relevant legislation and policies. It also provides an overview of energy from waste across the state, the *NSW Energy from Waste Policy Statement*, and the use of these technologies in other jurisdictions.

Increasing waste

1.1 Waste generation and its management, including collection, separation, storage, transportation, processing, treatment and disposal, present a significant challenge for government and the community. The NSW Government acknowledges that inadequate waste management can have a detrimental effect on both the community and the environment:

The community feels the impact of improperly managed waste in many different ways. It can be detrimental to public health through odour, noise, dust, vermin and toxic substances, while wastes of particular concern, like asbestos, can cause significant health problems. The same issues can impact the amenity of local communities to the detriment of public well-being. Waste can also pollute our environment and leach toxins or nutrients into groundwater and land.³

1.2 In 2014-2015 Australia produced approximately 64 million tonnes of waste.⁴ During this period, New South Wales generated about 19 million tonnes of waste.⁵ Currently, New South Wales is the second highest per capita producer of waste in the world.⁶ While the annual quantity of waste generated in Australia per capita declined slightly between 2006-2007 and 2014-2015, the national average annual growth rate of waste during this time increased about 1.2 per cent.⁷ This growth is attributed to a range of factors including increasing population and economic growth.⁸ Given that Australia, and New South Wales, are experiencing high rates of population growth and continuing economic growth, it is expected that waste production will also continue to trend upwards.⁹

1.3 In New South Wales, the resource recovery rate – proportion of waste diverted from landfill to be re-used, recycled or utilised through energy recovery – is approximately 65 per cent.¹⁰ This rate is credited to the state's waste levy, the high level of resource recovery infrastructure, and 'progressive' waste management policies and investment in infrastructure, market development and education programs.¹¹ Despite this resource recovery rate, stakeholders emphasised that a significant proportion of waste in New South Wales is not recovered or

³ NSW EPA, *NSW Waste Avoidance and Resource Recovery Strategy 2014-21*, 2014, p 4.

⁴ Tabled document, NSW EPA, *Australian National Waste Report 2016*, August 2017, p 9.

⁵ Tabled document, *Australian National Waste Report 2016*, p 40.

⁶ Evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 24 November 2017, p 7.

⁷ Tabled document, *Australian National Waste Report 2016*, p 11.

⁸ Tabled document, *Australian National Waste Report 2016*, p 5.

⁹ See, Evidence, Mr Buffier, 17 August 2017, p 60.

¹⁰ Tabled document, *Australian National Waste Report 2016*, p 40.

¹¹ Tabled document, *Australian National Waste Report 2016*, p 40. Also see, Evidence, Mr Buffier, 17 August 2017, p 60.

recycled.¹² Stakeholders also raised the issue of the growing interstate movement of waste and the impact this is also having on recycling rates.

Waste regulation

1.4 Waste includes any substance that is discarded, rejected, unwanted, surplus or abandoned, or discharged, emitted or deposited in the environment in such a way that causes the environment to be altered. Substances that have the capacity to be recycled, re-used or recovered are also considered to be waste.¹³

1.5 Waste can be categorised in the following streams:

1. municipal (from council operations or households)
2. commercial and industrial
3. construction and demolition.¹⁴

1.6 In New South Wales, municipal waste was the smallest contributor to total waste, representing approximately 28 per cent of waste generated, while waste from commercial, industrial, construction and demolition sources comprised roughly 72 per cent.¹⁵

1.7 The 'fate' or outcome of waste is also classified into three categories:

1. disposal (usually landfill)
2. recycling
3. energy recovery.¹⁶

1.8 The key sources of waste management regulation in New South Wales include:

- the *Protection of the Environment Operations Act 1997*, which provides enforcement provisions, a detailed licensing framework and other tools to protect human health and environment from the inappropriate use of waste¹⁷
- the Protection of the Environment Operations (Waste) Regulation 2014, which includes thresholds for environment protection licences, and outlines the waste levy system
- the Protection of the Environment Operations (Clean Air) Regulation 2010, which provides regulatory measures to control emissions from various sources including industry

¹² See, Evidence, Ms Gayle Sloan, Chief Executive Officer, Waste Management Association of Australia, 26 June 2017, p 22; Evidence, Dr Marc Stammbach, Managing Director, HZI Australia, 17 August 2017, p 16; Evidence, Mr Mike Ritchie, Managing Director, MRA Consulting Group, 7 August 2017, p 10.

¹³ See, *Protection of the Environment Operations Act 1997*, Dictionary.

¹⁴ Tabled document, *Australian National Waste Report 2016*, p 1.

¹⁵ Submission 215, Waste Management Association of Australia, p 2.

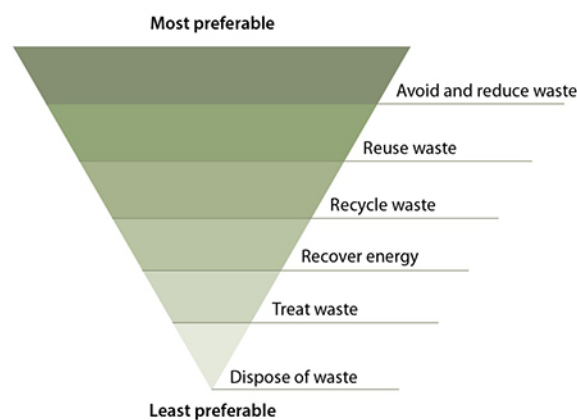
¹⁶ Tabled document, *Australian National Waste Report 2016*, p 1.

¹⁷ See, Evidence, Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery, NSW EPA, 26 June 2017, p 2.

- the *Waste Avoidance and Resource Recovery Act 2001*, which sets the waste hierarchy and the *NSW Waste Avoidance and Resource Recovery Strategy*¹⁸
- the *Environment Protection and Biodiversity Act 1999* (Cth), which provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places.

1.9 The waste hierarchy enshrines the appropriate order for resource management¹⁹ and is set out in Figure 1.

Figure 1 Waste hierarchy



NSW EPA, *The waste hierarchy*, <http://www.epa.nsw.gov.au/wastestrategy/waste-hierarchy.htm>, 14 January 2015.

1.10 The *Waste Avoidance and Resource Recovery Strategy 2014-21* is the state's strategy for reducing waste generation, improving resource recovery rates and keeping materials circulating within the economy. This strategy is supported by Waste Less, Recycle More, a government initiative funded by the waste levy to provide waste and recycling improvements across the state.²⁰ Waste Less, Recycle More and the waste levy are examined in Chapter 2.

1.11 The NSW Environment Protection Authority (NSW EPA) is primarily responsible for waste regulation in New South Wales. Mr Barry Buffier, the then Chair and Chief Executive Officer of the NSW EPA, outlined this role as follows:

... the EPA introduces policies and implements programs that reduce waste, increase recycling and improve behaviour associated with littering and waste disposal to protect the community and the environment. We regulate the transportation, collection, treatment, storage and disposal of waste and support the reduction of the use of materials by encouraging re-use and recycling and material recovery. The New South Wales EPA has the toughest waste regulation in the country and puts significant effort into regulating the waste industry, monitoring compliance and taking enforcement action.²¹

¹⁸ See, Evidence, Mr Beaman, 26 June 2017, p 2.

¹⁹ *Waste Avoidance and Resource Recovery Act 2001*, s 3(b).

²⁰ NSW EPA, *Waste Avoidance and Resource Recovery Strategy, 2014-21*, 2014, p 8.

²¹ Evidence, Mr Buffier, 17 August 2017, p 61.

- 1.12' The NSW EPA's role in regulating waste is examined in Chapter 7.
- 1.13' Local councils and regional organisations of councils also play a role in waste regulation. The NSW Department of Planning and Environment is the consent authority for waste infrastructure, in relation to State Significant Sites. In addition, NSW Health may provide advice regarding possible risks to human health and the environment posed by waste infrastructure development.

Energy from waste

- 1.14' The NSW Government describes energy from waste as a process through which energy and resources are retrieved from waste through thermal treatment. Thermal treatment is defined in Schedule 1 to the *Protection of the Environment Operations Act 1997* as 'the processing of waste by burning, incineration, thermal oxidation, gasification, pyrolysis, plasma or other thermal treatment processes'.²² There are other methods to recover energy from waste that do not rely on thermal treatment such as anaerobic digestion technologies and landfill gas capture.²³ Energy from waste technologies may result in heat, electricity or fuel.
- 1.15' Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, noted that it was critically important to use technology that was fit for the purpose:
- From a technical, economic and social standpoint it is important to understand and integrate three key elements: a comprehensive understanding of waste streams—the feed stock; the use of appropriate conversion technology—matching feedstock with technology; and understanding the end utilisation of recovered materials that makes the most economic sense—whether it be the generation of electricity, heat or fuel or to be used on site or exported to the grid.²⁴
- 1.16' There are approximately 23 bioenergy/energy from waste projects in New South Wales.²⁵ Most of these facilities are relatively small-scale and have a nameplate capacity of less than 10MW. Following on, the combined capacity of all stations is only approximately 250MW and covers bagasse, landfill methane, landfill gas and waste coal mine gas.²⁶
- 1.17' Energy from waste is examined in Chapter 5.

²² NSW EPA, *NSW Energy from Waste Policy Statement* (2015), p i. Also see, *Protection of the Environment Operations Act 1997* Sch 1 pt 3 div 2 s 50(1).

²³ Submission 198, City of Sydney, p 3.

²⁴ Evidence, Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, 7 August 2017, p 39.

²⁵ Submission 189, Clean Energy Finance Corporation, p 2.

²⁶ Submission 189, Clean Energy Finance Corporation, p 2.

NSW Energy from Waste Policy Statement

1.18⁷ In 2015, the NSW EPA published the *NSW Energy from Waste Policy Statement*. The policy sets out the requirements for facilities seeking to recover energy by thermally treating waste, or materials derived from waste. Key features of the policy include:

- the energy from waste process must not result in any increase to ‘the risk of harm to human health or the environment’²⁷
- energy from waste processing should only be used where it is considered ‘the most efficient use of the resource’,²⁸ that is the process will not undermine the higher order waste management options
- a definition of ‘eligible waste fuels’ (certain low-risk waste that can be used as fuel)²⁹
- any facility proposing to thermally treat waste or waste-derived material that is not an eligible waste fuel must meet the requirements for an energy recovery facility³⁰
- operators of energy recovery facilities are required to demonstrate they will use international best practice in relation to:
 - process design and control
 - emission control equipment design and control
 - emission monitoring with real-time feedback to the controls of the process
 - arrangements for the receipt of waste
 - management of residues from the energy recovery process³¹
- the process and air emissions from the facility must satisfy at a minimum the requirements of the Group 6 emission standards within the Protection of the Environment Operations (Clean Air) Regulation 2010³²
- proponents of energy recovery facilities must use reference facilities to demonstrate ‘technologies that are proven, well understood and capable of handling the expected variability and type of waste feedstock’³³
- energy recovery facilities must meet technical, thermal efficiency and resource recovery criteria³⁴
- the ‘good neighbour’ principle, that is a proponent must be considerate, genuinely engage and provide readily available information to stakeholders.³⁵

²⁷ NSW EPA, *NSW Energy from Waste Policy Statement* (2015), p 1. Also see, Evidence, Mr Beaman, 26 June 2017, p 3.

²⁸ NSW EPA, *NSW Energy from Waste Policy Statement* (2015), p 1.

²⁹ NSW EPA, *NSW Energy from Waste Policy Statement*, (2015), p 5.

³⁰ NSW EPA, *NSW Energy from Waste Policy Statement*, (2015), p 6.

³¹ NSW EPA, *NSW Energy from Waste Policy Statement*, (2015), p 6.

³² NSW EPA, *NSW Energy from Waste Policy Statement*, (2015), p 6.

³³ NSW EPA, *NSW Energy from Waste Policy Statement*, (2015), p 6.

³⁴ NSW EPA, *NSW Energy from Waste Policy Statement*, (2015), p 6. Also see, Evidence, Mr Beaman, NSW EPA, 26 June 2017, p 3.

³⁵ NSW EPA, *NSW Energy from Waste Policy Statement*, (2015), p 4. Also see, Evidence, Mr Beaman, 26 June 2017, p 4.

- 1.19^{*} The NSW EPA can also require a facility to meet additional emission controls.³⁶ In addition, the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* outlines the methods required to model and assess emissions of air pollutants.
- 1.20^{*} The committee heard these criteria reflect the *Industrial Emissions Directive for waste incineration and co-incineration plants (Directive 2010/75/EU)*, which is considered the international best practice standard.³⁷
- 1.21^{*} The NSW EPA anticipates publishing the *Energy Recovery Facility Guidelines*, which will set out more specific requirements for proponents of energy recovery facilities to meet, in early 2018.³⁸

Energy from waste projects in Australia

- 1.22^{*} Energy from waste projects are not widespread in Australia. Mr Tim Jordan, Head of Research at the Clean Energy Finance Corporation, explained: "The OECD average is about 2.9 per cent of total energy from waste and bioenergy. The Australian figure is significantly below that".³⁹ There is also no national framework for energy from waste.⁴⁰
- 1.23^{*} The Clean Energy Finance Corporation informed the committee that seven major energy from waste projects have been announced across Australia. It is unclear how many of these projects have been approved for development by the respective state authorities.

³⁶ Evidence, Mr Beaman, 26 June 2017, p 3.

³⁷ See, Evidence, Mr Ritchie, 7 August 2017, pp 16-17; Submission 146, Randwick City Council, p 3; Submission 145, Suez, p 3.

³⁸ NSW EPA, *Energy from waste policy* (24 August 2017) <http://www.epa.nsw.gov.au/wastestrategy/energy-from-waste.html>.

³⁹ Evidence, Mr Tim Jordan, Head of Research, Clean Energy Finance Corporation, 26 June 2017, p 38. Also see, Submission 198, City of Sydney, p 7.

⁴⁰ See, Submission 164, Alexandria Landfill, p 7.

Table 1 Announced major energy from waste projects

Project	Reported Cost (\$m)	Waste Capacity (1,000 tonnes per year)
New Energy, Port Hedland WA	150	100
New Energy, East Rockingham WA	180	225
Phoenix Energy, Kwinana WA	400	400
EMRC Resource Recovery Facility, Perth WA	NA	150
Dial-a-Dump, Eastern Creek NSW	700	1,300
Omega Energy Hunter Resource & Energy Recovery Facility, Weston NSW	NA	150
Boral, Berrima NSW	NA	100

Clean Energy Finance Corporation, Energy from waste in Australia: A state-by-state update, November 2016, p 8.

- 1.24** It is anticipated that the announced projects will use a variety of technologies. For example, the New Energy facility at Port Hedland will use gasification technology,⁴¹ while the New Energy development at East Rockingham and the proposed The Next Generation plant will use combustion technology.⁴² The Next Generation proposal is examined in Chapter 6.

European Union (including the United Kingdom)

- 1.25** In 2015, there were approximately 507 energy from waste facilities operating in Europe.⁴³ As previously noted, *Directive 2010/75/EU* is the primary policy instrument regulating emissions from waste incineration and co-incineration plants.
- 1.26** The committee heard that while most energy from waste facilities in Europe process between 250,000 and 500,000 tonnes a year,⁴⁴ there are larger-scale facilities in operation. For example, Dr Marc Stammbach, Managing Director of Hitachi Zosen Inova (HZI) Australia, noted that, at capacity, the Ferrybridge facility in the United Kingdom will process 1.2 million tonnes of

⁴¹ Evidence, Mr Jason Pugh, Chief Executive Officer, New Energy Corporation, 26 June 2017, p 17.

⁴² See, New Energy Corporation, *Perth Metro, WA*, <http://www.newenergycorp.com.au/projects/perth-metro-wa/>. Also see Evidence, Ms Jane Bremmer, Secretary, National Toxics Network, 27 June 2017, p 39, and Submission 164, Alexandria Landfill, p 31.

⁴³ Confederation of European Waste to Energy Plants, *Waste to Energy Plants in Europe 2015*, http://www.cewep.eu/information/data/studies/m_1565.

⁴⁴ Evidence, Mr Beaman, 26 June 2017, p 8.

waste per annum.⁴⁵ In addition, Dr Ali El Hanandeh, Lecturer, School of Engineering, Griffith University, noted that Germany is also moving towards larger-scale facilities.⁴⁶

- 1.27** Inquiry participants informed the committee that energy from waste facilities in Europe predominately accept municipal solid waste. Mr Henry Moore, Manager, Waste Reform at the NSW EPA, explained the types of materials used as feedstock in European facilities:

Some of them are [using residual waste] and some are not. Some of them are mass-burn waste incinerators. Waste is generated and trucked, generally straight into these facilities. They are often dealing with a more diverse range of material, and often less controlled in terms of its composition. It is the technology of these facilities that deals with the inherent risks associated with it to produce the no-impact outcome.⁴⁷

- 1.28** Mr Moore explained that urban encroachment over the last 50 years has meant that energy from waste facilities now operate in Europe within densely populated residential areas:

There have been waste incinerators in Europe for many decades. Over time, those facilities have been significantly upgraded. That speaks to the location of many of them; they were often located outside urban areas or further away. If that was 50 years ago, obviously there has been urban encroachment. As a result, they have become much better in terms of performance outcomes ... a number of these facilities now exist within central city locations around Europe and effectively have no impact on the surrounding environment and air quality.⁴⁸

- 1.29** Mr Mike Ritchie, Managing Director of MRA Consulting Group, explained that unlike in New South Wales, 'In most of Europe, it is the regional organisations of councils that purchase these facilities, provided by the private sector but contracted by the communities as an alternative to landfill'.⁴⁹

- 1.30** Stakeholders suggested that energy from waste is pursued in the European Union for various reasons including a greater need for the generation of heat,⁵⁰ the move away from nuclear technology,⁵¹ and the provision of an incentive from the European Union to divert waste from landfill.⁵² Dr Stambach commented: 'The European track record represents a formidable achievement of zero waste to landfill, dramatic reductions in carbon pollution and the sustainable generation of electricity'.⁵³

- 1.31** An alternate view offered by the National Toxics Network was that although the European Union is often held up as the world's best standard for incinerator operation, it has recently declared a major policy redirection on waste management and the waste to energy

⁴⁵ Evidence, Dr Stambach, 17 August 2017, p 12.

⁴⁶ Evidence, Dr Ali El Hanandeh, Lecturer, School of Engineering, Griffith University, 7 August 2017, p 40.

⁴⁷ Evidence, Mr Henry Moore, Manager, Waste Reform, NSW EPA, 26 June 2017, p 12.

⁴⁸ Evidence, Mr Moore, 26 June 2017, pp 11-12.

⁴⁹ Evidence, Mr Ritchie, 7 August 2017, p 17.

⁵⁰ See, Evidence, Mr Jordan, 26 June 2017, p 36.

⁵¹ Evidence, Dr El Hanandeh, 7 August 2017, p 42.

⁵² Evidence, Dr El Hanandeh, 7 August 2017, p 42.

⁵³ Evidence, Dr Stambach, 17 August 2017, p 12.

incinerator sector in line with the major commitments to a circular economy. This has resulted in a recommendation issued to members to stop the construction of new incinerators and to decommission existing facilities.⁵⁴

United States of America

- 1.32** In 2016, there were approximately 77 energy from waste facilities operating in the United States of America. However, the number of plants operating has been in decline since 2001.⁵⁵ The majority of operating plants are mass burn facilities. A much smaller proportion of plants are modular systems and refuse derived fuel facilities.⁵⁶ The committee received evidence that energy from waste facilities in the United States vary widely in size.⁵⁷
- 1.33** The committee also heard that the use of energy from waste facilities does not appear to adversely affect recycling rates across states or at a national level: the proportion of waste processed at energy from waste facilities declined from 14.3 per cent in 1990 to 12.8 per cent in 2014, whilst recycling rates have increased from 16 per cent in 1990 to 34 per cent from 2010 onwards.⁵⁸
- 1.34** There is no single piece of federal legislation that regulates the development, siting and operation of energy from waste facilities in the United States, rather there are a number of applicable pieces of federal legislation. There are also complexities in the interaction with state legislation and an onus on individual states to enforce federal regulation.⁵⁹

Committee comment

- 1.35** The committee notes that in Australia, there are currently only around seven large-scale energy from waste projects under consideration or approved by the relevant state bodies. However, given the significant proportion of waste across Australia and in New South Wales that is being sent to landfill, we believe there is an opportunity for energy from waste to play a role in diverting waste from landfill in the future.

⁵⁴ Submission 172, National Toxics Network, p 5.

⁵⁵ Energy Recovery Council, *2016 Directory of Waste-to-Energy Facilities*, (2016) p 5 <http://energyrecoverycouncil.org/wp-content/uploads/2016/06/ERC-2016-directory.pdf>

⁵⁶ Energy Recovery Council, *2016 Directory of Waste-to-Energy Facilities*, (2016) p 5 <http://energyrecoverycouncil.org/wp-content/uploads/2016/06/ERC-2016-directory.pdf>

⁵⁷ Energy Recovery Council, *2016 Directory of Waste-to-Energy Facilities*, (2016) <http://energyrecoverycouncil.org/wp-content/uploads/2016/06/ERC-2016-directory.pdf>

⁵⁸ United States Environmental Protection Agency, *Advancing Sustainable Materials Management: 2014 Fact Sheet*, (November 2016), https://www.epa.gov/sites/production/files/2016-11/documents/2014_smmfactsheet_508.pdf. Also see, Energy Recovery Council, *2016 Directory of Energy-From-Waste Facilities*, (2016) p 12.

⁵⁹ WSP Environment Ltd., *Investigation into the performance (environmental and health) of waste to energy technologies internationally State One – Review of Legislative and Regulatory Frameworks for Waste to Energy Plants*, (January 2013), pp 85-86, https://www.wasteauthority.wa.gov.au/media/files/documents/W2E_Technical_Report_Stage_One_2013.pdf.

- 1.36** The committee acknowledges that energy from waste is well-established and widely used in other jurisdictions, particularly in the European Union. Moreover, the *Industrial Emissions Directive for waste incineration and co-incineration plants (Directive 2010/75/EU)* is considered international best practice for energy from waste regulation. We note that a large number of energy from waste facilities in the European Union use municipal solid waste as feedstock and supply subsidised heat to surrounding homes and businesses.
- 1.37** Energy from waste technology is considered in more detail in Chapter 5.

Chapter 2 The waste levy

This chapter outlines the purpose of the waste levy in New South Wales and discusses issues raised by inquiry participants about how the levy operates, including the implementation of the Waste Less, Recycle More initiative, the impact of the levy on recycling rates and the development of waste infrastructure, and the suggestion that the levy unduly burdens certain councils. The chapter also considers proposals to amend the levy, including by increasing the hypothecation of funds to local councils and industry.

Overview and purpose of the waste levy

- 2.1** Section 88 of the *Protection of the Environment Operations Act 1997* requires certain licensed waste facilities in New South Wales to pay a contribution for each tonne of waste received at the facility.⁶⁰ This contribution is referred to as the ‘waste levy’.
- 2.2** The levy is applied to all waste that is received at:
- scheduled waste disposal facilities (NSW Environment Protection Authority (NSW EPA)-licensed landfills)
 - scheduled waste facilities that are not scheduled waste disposal facilities (for example, NSW EPA-licensed waste processing, resource recovery and waste storage facilities) which are in the regulated area or receive waste from the regulated area.⁶¹
- 2.3** Scheduled waste facilities required to pay the levy must also submit a Waste Contribution Monthly Report to the NSW EPA for each reporting period.⁶²
- 2.4** In accordance with 10B of the Protection of the Environment Operations (Waste) Regulation 2014 (Waste Regulation), the levy liability for scheduled waste facilities is extinguished once the waste is sent offsite for lawful recycling, re-use or disposal. The levy becomes payable for these facilities if waste is stockpiled unlawfully or if waste transported from the facility is unlawfully disposed of.⁶³
- 2.5** The ‘regulated area’ refers to councils within the metropolitan levy area (MLA) and the regional levy area (RLA). The regulated area comprises the Sydney metropolitan area, the Illawarra and Hunter regions, the central and north coast local government areas to the

⁶⁰ See, NSW EPA, *Waste levy* (22 August 2017), <http://www.epa.nsw.gov.au/wasteregulation/waste-levy.htm>.

⁶¹ NSW EPA, *Waste levy for scheduled waste facilities* (22 August 2017), <http://www.epa.nsw.gov.au/your-environment/waste/waste-levy/scheduled-waste>.

⁶² NSW EPA, *Waste levy for scheduled waste facilities* (22 August 2017), <http://www.epa.nsw.gov.au/your-environment/waste/waste-levy/scheduled-waste>. Also see, Submission 164, Alexandria Landfill, p 16.

⁶³ NSW EPA, *Waste levy for scheduled waste facilities* (22 August 2017), <http://www.epa.nsw.gov.au/your-environment/waste/waste-levy/scheduled-waste>.

Queensland border, as well as the Blue Mountains, Wingecarribee and Wollondilly local government areas.⁶⁴

- 2.6 The 2017-2018 waste levy rates are \$138.20 per tonne in the MLA, which the City of Sydney noted is the 'highest landfill levy in Australia',⁶⁵ and \$79.60 per tonne in the RLA.⁶⁶ As per usual practice, the 2018-2019 waste levy rates will increase by the Consumer Price Index.⁶⁷
- 2.7 The levy is paid to the NSW EPA, with the collected funds then being remitted to the state's Consolidated Fund.⁶⁸ Mr Barry Buffier, the then Chair and Chief Executive of the NSW EPA, explained that a share of the funds, namely around one third, are then returned to the NSW EPA, along with the NSW Office of Environment and Heritage.⁶⁹
- 2.8 The table below sets out the waste and environmental levy revenues, and expenditures on environmental programs, for the past five years.

Table 2 Waste and environmental levy revenues, and expenditures on environmental programs, for the past five years

Item/Program (\$m)	2012/13	2013/14	2014/15	2015/16	2016/17 (unaudited)
Revenue:					
Total Waste Revenues	\$483.3	\$503.6	\$568.5	\$692.1	\$659.5
Program Expenditure:					
Waste and Regulatory programs	\$61.7	\$76.9	\$111.1	\$100.0	\$91.0
Other Environmental programs	\$61.5	\$90.0	\$95.9	\$90.1	\$88.8
Total Expenditure	\$123.2	\$166.9	\$207.0	\$190.1	\$179.9

Answers to question on notice, NSW EPA, 27 July 2017, p 1.

- 2.9 The committee heard that the levy generates significant funds for the NSW Government. The NSW EPA advised that the levy receipt for 2016-2017 was more than \$630 million.⁷⁰ The committee also heard that:

⁶⁴ NSW EPA, *Waste levy* (22 August 2017), <http://www.epa.nsw.gov.au/your-environment/waste/waste-levy>.

⁶⁵ Submission 198, City of Sydney, p 2.

⁶⁶ See, NSW EPA, *Waste levy* (22 August 2017), <http://www.epa.nsw.gov.au/wasteregulation/waste-levy.htm>.

⁶⁷ See, NSW EPA, *Waste levy*, (22 August 2017), <http://www.epa.nsw.gov.au/wasteregulation/waste-levy.htm>.

⁶⁸ Evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 17 August 2017, p 69.

⁶⁹ Evidence, Mr Buffier, 17 August 2017, p 69.

⁷⁰ Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery, NSW EPA, 26 June 2017, p 4.

- the levy generated \$675 million in state revenue in 2015-2016, up \$91 million from 2014-2015⁷¹
- the government estimates the levy will raise approximately \$2.234 billion in the four-year period to 2020.⁷²

2.10 The waste levy aims to reduce the amount of waste being landfilled and to promote recycling and resource recovery.⁷³ The NSW EPA explained this concept further:

The waste levy is the key economic instrument used in NSW to discourage landfilling and stimulate resource recovery. It effectively increases the cost of landfilling, which makes the cost of recycling more competitive and ensures landfill is the least preferable waste management option – outcomes which are consistent with the waste hierarchy and good environmental practices.⁷⁴

2.11 Some stakeholders agreed that the levy meets these objectives, for example:

- the NSW EPA stated: ‘The levy has driven innovation and investment in new and upgraded recycling infrastructure, which has helped increase recycling rates in NSW from 45 per cent in 2002–03 to 63 per cent in 2014–15. By contrast, the recycling rate in Queensland, which has no waste levy, is only 35 per cent’⁷⁵
- Local Government NSW described the waste levy as an ‘economic driver for waste avoidance and resource recovery’⁷⁶
- the City of Sydney said that the levy ‘is an effective mechanism for encouraging the development of alternative and innovative solutions to landfill that can provide positive environmental and economic outcomes’⁷⁷
- the Clean Energy Finance Corporation argued that waste levies, particularly the New South Wales levy, ensure that waste with recoverable value is not sent to landfill and provide critical funding for waste infrastructure,⁷⁸ and stated: ‘It is evident that Australian states who have introduced a levy have the highest levels of recycling’⁷⁹
- the Waste Management Association of Australia stated: ‘Recycling rates are much higher in NSW, SA, Victoria, ACT (which each apply levies on landfill disposal or in the case

⁷¹ Submission 149, Wollongong City Council, p 1. Also see, Submission 217, Illawarra Pilot Joint Organisation, p 1.

⁷² Submission 217, Illawarra Pilot Joint Organisation, p 1.

⁷³ See, NSW EPA, *Waste levy* (22 August 2017), <http://www.epa.nsw.gov.au/wasteregulation/waste-levy.htm>. Also see, Submission 144, Australian Council of Recycling, p 2.

⁷⁴ Answers to questions on notice, NSW EPA, 20 November 2017, p 2. Also see, Evidence, Mr Buffier, 17 August 2017, p 70.

⁷⁵ Answers to questions on notice, NSW EPA, 20 November 2017, p 2.

⁷⁶ Submission 326, Local Government NSW, p 4. Also see, Submission 179, HZI Australia, p 2.

⁷⁷ Submission 198, City of Sydney, p 2.

⁷⁸ Submission 189, Clean Energy Finance Corporation, p 2.

⁷⁹ Submission 143, New Energy Corporation, p 2.

of ACT set the price for landfill disposal), compared with states with no or very low levies (QLD, WA, Tasmania and NT)⁸⁰

- Toxfree, which operates thermal treatment facilities in Australia, stated: 'Without the waste levy very little recycling would occur, because landfill would be so cheap that investment in recycling infrastructure would not be viable'⁸¹
- Mr Mike Ritchie, Managing Director of MRA Consulting Group, stated: 'The levy is the single most effective instrument anywhere in Australia, and particularly in New South Wales. We would be having recycling rates of 40 per cent right now if we did not have a levy'.⁸²

2.12' The effectiveness of the waste levy in encouraging infrastructure development is discussed later in this chapter.

2.13' The committee also received evidence that an unintended consequence of the waste levy is that waste is being transported interstate, particularly to Queensland, and sent to landfill.⁸³ This issue is examined in Chapter 4.

Committee comment

2.14' The committee supports the retention of the waste levy as a means of reducing the amount of waste sent to landfill, and promoting recycling and resource recovery.

2.15' The committee notes that the waste levy has raised significant funds for the NSW Government. The appropriate hypothecation of the waste levy is discussed later in the chapter, suffice to say, that the committee believes more of the revenue raised by the levy should be funding the delivery of waste services, including waste avoidance, minimisation and re-use programs, and waste recovery infrastructure throughout New South Wales.

2.16' The committee believes that having a substantial waste levy in place in New South Wales has played an important role in encouraging recycling and resource recovery, including through the Waste Less, Recycle More initiative. This is evidenced by the poor resource recovery rates for those states and territories which either have a very low levy or no levy at all.

⁸⁰ Submission 215, Waste Management Association of Australia, p 1. Also see, Tabled document, NSW EPA, *Australian National Waste Report 2016 prepared for Department of the Environment and Energy*, August 2017, p 11.

⁸¹ Submission 141, Toxfree Australia, p 2.

⁸² Evidence, Mr Mike Ritchie, Managing Director, MRA Consulting Group, 7 August 2017, p 17.

⁸³ See for example, Evidence, Ms Jane Bremmer, Secretary, National Toxics Network, 27 June 2017, p 39; Evidence, Mr Tony Khoury, Executive Director, Waste Contractors and Recyclers Association of NSW, 17 August 2017, p 2; Submission 182, Waste Contractors and Recyclers Association of NSW, p 2; Submission 215a, Waste Management Association of Australia, p 1.

Waste Less, Recycle More

- 2.17⁷ Waste Less, Recycle More is the primary initiative funded through the waste levy. It provides funding for business recycling, organics collections, market development, managing problem wastes, new waste infrastructure, local councils and programs to tackle illegal dumping and litter.⁸⁴ The NSW EPA is the lead agency for the initiative, with some grant programs being delivered by the NSW Environmental Trust.
- 2.18⁷ The NSW EPA gave evidence that the objectives of Waste Less, Recycle More programs include stimulating investment in waste and recycling facilities and infrastructure, changing community attitudes to encourage re-use and recycling, and strengthening compliance and enforcement.⁸⁵
- 2.19⁷ The initial Waste Less, Recycle More initiative (2012-2016) received approximately \$465 million in funding.⁸⁶ The initiative has since been extended with a further \$337 million over four years to 2021.⁸⁷
- 2.20⁷ As at October 2016, the government reported that the program had spent approximately \$292.3 million on 822 projects,⁸⁸ which are expected to process over 2.2 million tonnes of waste and create 845 jobs.⁸⁹ Furthermore, the NSW EPA noted that the investment in waste infrastructure, services and education provided via Waste Less, Recycle More initiatives is vital to ensuring the state meets its targets under the *NSW Waste Avoidance and Resource Recovery Strategy 2014–21*.⁹⁰

⁸⁴ NSW EPA, *Waste Less, Recycle More*, (22 September 2017), <http://www.epa.nsw.gov.au/wastestrategy/waste-less-recycle-more.htm>.

⁸⁵ Answers to questions on notice, NSW EPA, 20 November 2017, p 2. Also see, NSW EPA, *Waste Less, Recycle More*, (22 September 2017), <http://www.epa.nsw.gov.au/wastestrategy/waste-less-recycle-more.htm>.

⁸⁶ Evidence, Mr Beaman, 26 June 2017, p 5. Also see, Submission 217, Illawarra Pilot Joint Organisation, p 1.

⁸⁷ NSW EPA, *Waste Less, Recycle More*, (22 September 2017), <http://www.epa.nsw.gov.au/wastestrategy/waste-less-recycle-more.htm>.

⁸⁸ NSW Government, *Waste Less, Recycle More*, (October 2016), p 6 <http://www.epa.nsw.gov.au/publications/recyclere-use/waste-less-recycle-more-2017-21-brochure-160538>. Also see, Submission 172, National Toxic Network, p 3.

⁸⁹ NSW Government, *Waste Less, Recycle More*, (October 2016), p 6 <http://www.epa.nsw.gov.au/publications/recyclere-use/waste-less-recycle-more-2017-21-brochure-160538>.

⁹⁰ NSW Government, *Waste Less, Recycle More*, (October 2016), p 6 <http://www.epa.nsw.gov.au/publications/recyclere-use/waste-less-recycle-more-2017-21-brochure-160538>.

- 2.21^{*} Figure 2 is a breakdown of how the \$292.3 million allocated to Waste Less, Recycle More has been spent up to July 2016.

Figure 2^{*} Waste Less, Recycle More funds allocated until July 2016



NSW EPA, Waste Less, Recycle More, Scorecard 2016, file:///D:/My%20Documents/Downloads/waste-less-recycle-more-scorecard-2016.pdf

- 2.22^{*} Numerous stakeholders expressed concern about the proportion of funds collected from the waste levy that are allocated to Waste Less, Recycle More. This issue is discussed in detail later in this chapter.

Infrastructure

- 2.23^{*} There was some debate during the inquiry about the use of funds from the waste levy through Waste Less, Recycle More to build waste infrastructure. Mr Henry Anning, Sector Lead for Bioenergy at the Clean Energy Finance Corporation, explained how funding from the levy can contribute to the development of waste infrastructure:

The levy can have two impacts on an individual project. One is if there is a grant program available that can make some capital contribution to the upfront cost of the infrastructure, whether it is recycling or energy from waste as such, and also to the actual revenue stream of the project itself over the life.⁹¹

- 2.24^{*} Some stakeholders emphasised the importance of the levy in funding infrastructure development. For example, the Waste Management Association of Australia said the waste levy was a 'critical factor underpinning the development of resource recovery infrastructure' across New South Wales.⁹² Similarly, the Australian Council of Recycling 'strongly' advocated that resource recovery and recycling facilities be funded by waste levies.⁹³

⁹¹ Evidence, Mr Henry Anning, Sector Lead for Bioenergy, Clean Energy Finance Corporation, 26 June 2017, p 31.

⁹² Submission 215, Waste Management Association of Australia, pp 1-2.

⁹³ Submission 144, Australian Council of Recycling, p 7.

- 2.25** The committee heard that funds are especially useful in developing alternative waste solutions.⁹⁴ For example, Mr Tim Jordan, Head of Research at the Clean Energy Finance Corporation, observed that landfill fees directly impact the development of energy from waste infrastructure: ‘We observed through our investment activity that the economics of energy from waste projects depends heavily on landfill fees. Fees that are set at an appropriate level can help to ensure that value is captured from waste that would otherwise go to landfill’.⁹⁵ The Australian Council of Recycling suggested that opportunities to incorporate future advances in technology into energy from waste facilities will depend on landfill levies.⁹⁶
- 2.26** To illustrate this argument, the Waste Management Association of Australia noted that there are currently five mixed waste processing in operation or commissioning for municipal solid waste in New South Wales. In comparison, Victoria, where there is ‘a much lower levy’, has no mixed waste processing facilities, and Queensland – where there is no levy – has one facility. The association concluded: ‘While cheap disposal is not the only barrier to developing this sort of long-term infrastructure, it is clear that landfill levies can underpin a level of private investment that is not viable in jurisdictions where landfill is cheap’.⁹⁷
- 2.27** However, other local government inquiry participants argued that the levy has been an ineffective tool in encouraging the development of waste infrastructure. For example, Blacktown City Council stated that ‘the amount of revenue generated by the levy and the amount returned to councils and the industry has not leveraged a new alternative waste processing facility in the Sydney metropolitan area for domestic waste in the last 8 years’.⁹⁸ In fact, the council noted that by 2021 there will be a significant gap between the level of waste generated in western Sydney and viable processing facilities:
- The Western Sydney Regional Organisation of Councils Waste and Recycling Infrastructure Needs Assessment (2015) ... has identified that by 2021 there is approximately a 994,000 tonne gap in facilities available to process mixed waste treatment, garden organics processing and putrescible organics processing compared to projected waste generation figures.⁹⁹
- 2.28** Blacktown City Council continued: ‘The use of the blunt instrument of the levy has not leveraged the investment required to facilitate the alternative waste treatment processes needed to ensure that the waste streams generated can be delivered to local facilities’.¹⁰⁰ Similarly, the City of Canterbury Bankstown noted that despite \$85 million being allocated to waste infrastructure projects in the last four years, the council ‘... is still landfill dependant, as the levy funding has not yet provided additional waste processing facilities in the Sydney Metropolitan Area’.¹⁰¹

⁹⁴ Evidence, Dr Ali El Hanandeh, Lecturer, School of Engineering, Griffith University, 7 August 2017, p 44.

⁹⁵ Evidence, Mr Tim Jordan, Head of Research, Clean Energy Finance Corporation, 26 June 2017, p 31.

⁹⁶ Submission 144, Australian Council of Recycling, p 7.

⁹⁷ Submission 215, Waste Management Association of Australia, p 2.

⁹⁸ Submission 214, Blacktown City Council, p 7.

⁹⁹ Submission 214, Blacktown City Council, p 8.

¹⁰⁰ Submission 214, Blacktown City Council, p 8.

¹⁰¹ Submission 168, City of Canterbury Bankstown, p 4.

- 2.29' According to the Illawarra Pilot Joint Organisation, the effectiveness of the levy in allowing councils to develop alternative waste solutions is not always clear, particularly in regional areas. The organisation told the committee:

Despite achieving its intent of making the cost of landfilling very high, this is not always having the expected outcome of reducing waste to landfill by driving the competitiveness of expensive alternative technological solutions ... Councils in regional areas face the challenge of maintaining an adequate income stream to fund landfill operation fixed costs, as they would still be required for some waste streams not suitable for AWTs [Alternative Waste Treatment].¹⁰²

- 2.30' The waste infrastructure needs of New South Wales are discussed in detail in Chapter 8.

Committee comment

- 2.31' There can be no doubt that the waste levy has contributed to the development of waste management projects in this state. However, the committee notes that despite the levy, New South Wales remains dependent on landfill as a means of disposal. While the levy has supported significant investment in alternative waste management technologies, it is clearly insufficient to adequately deal with our overall waste management needs. This is disappointing, as the waste levy has generated significant amounts of money for the NSW Government. As discussed later in this chapter a greater proportion of levy funds should be returned to local councils and the waste industry to fund innovative waste management solutions.
- 2.32' The committee notes that as at October 2016, the Waste Less, Recycle More initiative had only spent \$292 million of its \$465 million allocation. That is, less than two thirds of the allocated funding had been spent. This is a major under-allocation for a significant initiative. This is doubly concerning given the NSW EPA has given evidence that it considers this program vital to the state meeting its waste targets. The committee recommends that the NSW Government ensure that all funds allocated to the Waste Less, Recycle More program be spent in accordance with the program. We also recommend that the NSW EPA undertake an audit of the Waste Less, Recycle More program to ensure that the funds are fully expended to meet the objectives of the program.

Recommendation 1

That the NSW Government ensure that all funds allocated to the Waste Less, Recycle More program be spent in accordance with the program.

Recommendation 2

That the NSW Environment Protection Authority undertake an audit of the Waste Less, Recycle More program to ensure that the funds are fully expended to meet the objectives of the program.

¹⁰² Submission 217, Illawarra Pilot Joint Organisation, p 1.

Levy unduly burdens certain councils

2.33 During the inquiry, the committee heard concerns from numerous local government stakeholders that the waste levy unduly burdens certain councils. For example, the Illawarra Pilot Joint Organisation suggested that councils in its area anticipate contributing over \$130 million to Waste Less, Recycle More (phase two), but noted that these funds will contribute to programs for councils that do not pay the levy:

Wollongong, Shellharbour and Shoalhaven communities alone estimate they will contribute nearly 40 per cent of the WLRM 2 (a total of over \$130 million) via the levy. Yet the WLRM 1 and 2 fund programs across the state, including many areas not subject to the Levy.¹⁰³

2.34 By way of example of how the waste levy can unduly affect some councils, the Shoalhaven local government area covers approximately 4,660 square kilometers and has about 100,000 residents. Like other councils in the region, Shoalhaven City Council is engaged in all aspects of the provision of domestic and some commercial waste disposal and recycling.¹⁰⁴ The committee heard that the size of the local government area and spread of the population cause many challenges for the provision of waste services.¹⁰⁵

2.35 However, a significant concern for Shoalhaven City Council is that the council is classified as a metropolitan area and must pay the higher waste levy rate, while other councils that are closer to Sydney including the Blue Mountains and Wollondilly pay the regional levy. In addition, Eurobodalla, Shoalhaven's nearest neighbour, is outside the regulated area and pays no levy at all.¹⁰⁶ Shoalhaven City Council argued that as a regional area with 'low socio-economic indicators and high unemployment', the classification of the Shoalhaven as a metropolitan area should be reviewed.¹⁰⁷

2.36 Mr Tony Fraser, Manager Works and Services at Shoalhaven City Council, also stated that encouraging innovation in the waste sector requires greater transparency around how the levy is allocated:

I guess the issue that we may have with the EPA levy at the moment is we are paying so much and we are not seeing a lot of returns. Whether we are paying a levy or not I guess the transparency around how those levy payments were coming back for innovation and things like that is probably really important.¹⁰⁸

2.37 The NSW EPA was unable to advise why the Shoalhaven was considered part of the MLA.¹⁰⁹

¹⁰³ Submission 217, Illawarra Pilot Joint Organisation, p 1.

¹⁰⁴ Submission 217, Illawarra Pilot Joint Organisation, p 1.

¹⁰⁵ Evidence, Mr Tony Fraser, Manager Works and Services, Shoalhaven City Council, 7 August 2017, p 32. Also see, Submission 298, Shoalhaven City Council, p 1.

¹⁰⁶ Evidence, Mr Fraser, 7 August 2017, p 32. Also see, Submission 298, Shoalhaven City Council, p 2.

¹⁰⁷ Evidence, Mr Fraser, 7 August 2017, p 32.

¹⁰⁸ Evidence, Mr Fraser, 7 August 2017, p 34.

¹⁰⁹ Evidence, Mr Buffier, 17 August 2017, p 69.

Committee comment

- 2.38'** It is clear that certain councils, such as those in the Illawarra and Shoalhaven, are currently impacted heavily by the waste levy, compared with other local government areas. This is exacerbated in the case of Shoalhaven, as the council appears to have been arbitrarily assigned to the Metropolitan Levy Area, whereas other councils closer to Sydney are in the Regional Levy Area, and Eurobodalla, the council's nearest neighbour, is in the unregulated area. The committee can see no justification for this. Accordingly, we recommend that the NSW Government reclassify Shoalhaven City Council from the Metropolitan Levy Area to either the Regional Levy Area or the unregulated area.

Recommendation 3

That the NSW Government reclassify Shoalhaven City Council from the Metropolitan Levy Area to either the Regional Levy Area or the unregulated area.

Proposals to amend the levy

- 2.39'** The following sections consider some of the proposals discussed by stakeholders to amend the waste levy to better facilitate the waste management system in New South Wales, including greater hypothecation of the levy, attaching the levy to waste rather than where it is disposed of, and the distribution of levy funds. The issue of exhumed waste and the waste levy is examined in Chapter 3.

Hypothecating the levy

- 2.40'** A number of stakeholders raised concerns about the proportion of funds generated from the waste levy that are returned to local councils and the waste industry. As previously noted, the levy is included in the state's consolidated revenue and a proportion is hypothecated back through the Waste Less, Recycle More.¹¹⁰ The Waste Management Association of Australia observed that the \$802 million the government intends to spend over the nine years of Waste Less, Recycle More 'represents a small portion of the money raised via the waste levy, which is a significant source of revenue to the NSW Government'.¹¹¹
- 2.41'** The key concern raised by councils was that the revenue generated by the waste levy is not adequately returned to councils, thus undermining waste planning and infrastructure. For example, Blacktown City Council stated:

The percentage of revenue collected from the Section 88 levy reinvested into waste planning and infrastructure has been too little to ensure there are long term solutions and competition within the sector ... there is a huge discrepancy between the revenue generated by the Section 88 levy and that provided back through this program.¹¹²

¹¹⁰ Evidence, Mr Khoury, 17 August 2017, p 3. Also see, Evidence, Cr Stephen Bali, Mayor, Blacktown City Council, 27 June 2017, p 28.

¹¹¹ Submission 215, Waste Management Association of Australia, p 2.

¹¹² Submission 214, Blacktown City Council, p 8.

- 2.42'** In terms of the amounts councils are receiving back in funding:
- Blacktown City Council stated that in 2015-2016, the council contributed about \$7,026,657 to the waste levy and received approximately \$783,834 back in tied funding from Waste Less, Recycle More¹¹³
 - Mr Mark Roebuck, Manager, City Works and Services at Wollongong City Council, anticipated receiving approximately \$430,000 from council's \$15 million waste levy contribution¹¹⁴
 - Shoalhaven City Council stated that in the previous financial year Shoalhaven paid a levy of almost \$8 million, of which only 4.2 per cent or \$340,000 was returned in grants to support the continuous improvement of its waste operations.¹¹⁵
- 2.43'** Following on from this evidence, the committee heard considerable support expressed for the idea of hypothecating additional funds from the waste levy to local councils. For example, Ms Jane Bremmer, Secretary of the National Toxics Network, said that the levy should be hypothecated to local areas to allow councils to manage its frontline waste products.¹¹⁶
- 2.44'** Wollongong City Council concurred, stating that there could more onsite waste management if additional funds are made available to local councils.¹¹⁷ Similarly, Ms Namoi Dougall, General Manager of the Southern Sydney Regional Organisation of Councils, said: 'We would like to see the allocation of more waste levy funds back to councils',¹¹⁸ arguing the additional funds could be spent on waste infrastructure.¹¹⁹
- 2.45'** However, Mr Ritchie noted that it is important to first clarify what is being hypothecated: 'One question we need to ask is: Hypothecating what? Local government only pay one-third of the levy contributions, so 100 per cent hypothecation means that for every dollar local government put in they would get back \$3'.¹²⁰ Mr Ritchie added: 'I do not think that is what local government is arguing; I think they mean 100 per cent of what they pay ...'.¹²¹ He further observed: '... there is a very strong argument for both local government hypothecation being higher, approaching 100 per cent of their money, and a higher percentage of the total pot, in my view approaching 50 per cent, back to enforcement and infrastructure'.¹²²

¹¹³ Submission 214, Blacktown City Council, p 8. Also see, Evidence, Cr Bali, 27 June 2017, p 27.

¹¹⁴ Evidence, Mr Mark Roebuck, Manager, City Works and Services, Wollongong City Council, 7 August 2017, p 27.

¹¹⁵ Evidence, Mr Fraser, 7 August 2017, p 32.

¹¹⁶ Evidence, Ms Bremmer, 27 June 2017, p 39.

¹¹⁷ Evidence, Mr Roebuck, 7 August 2017, p 27.

¹¹⁸ Evidence, Ms Namoi Dougall, General Manager, SSROC, 7 August 2017, p 26.

¹¹⁹ Evidence, Ms Dougall, 7 August 2017, p 26.

¹²⁰ Evidence, Mr Ritchie, 7 August 2017, p 18.

¹²¹ Evidence, Mr Ritchie, 7 August 2017, p 18.

¹²² Evidence, Mr Ritchie, 7 August 2017, p 18.

2.46' Other stakeholders emphasised the need for greater hypothecation of funds to industry. For example:

- Mr Tony Khoury, Executive Director of Waste Contractors and Recyclers Association of NSW, said industry would 'love' to see more funds returned from the levy to help assist with emerging issues¹²³
- HZI Australia advocated that 'all monies raised through waste levies should be fully reinvested in the waste and resource recovery sector to build resource recovery capacity and thereby reduce reliance on landfill disposal'¹²⁴
- Mr Miles Mason, Business Development Manager at New Energy Corporation, said that the revenue raised from waste levy should be hypothecated to fund waste initiatives in the areas it was received from.¹²⁵

2.47' Mr Garth Lamb, NSW Branch President of the Waste Management Association of Australia, similarly supported hypothecating more of the levy to industry.¹²⁶ However, he noted that it is necessary to ensure the levy encourages behavioural change while supporting infrastructure development:

... the tension is making sure that the levy still effects what it needs to do; it drives behaviour change. Rather than just catch and pass the money back and forth, I think if that money came back in a more substantial fashion to people who are investing in the right infrastructure, that would be very positive.¹²⁷

2.48' Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, concurred, saying: 'From a waste management point of view, it would be good to have some sort of structure around how money can be hypothecated back to the facilities so that they have employ best practices ...'.¹²⁸

2.49' The Clean Energy Finance Corporation was more circumspect about hypothecating the waste levy, with Mr Jordan telling the committee:

Economists generally do not like the idea of hypothecating levies—I am an economist by training—in part for practical reasons. It is very hard once you have designed a hypothecation measure to then unwind it if the economics of a particular project change or there is a change of policy priorities.¹²⁹

¹²³ Evidence, Mr Khoury, 17 August 2017, p 3.

¹²⁴ Submission 179, HZI Australia, p 2.

¹²⁵ Evidence, Mr Miles Mason, Business Development Manager, New Energy Corporation, 26 June 2017, p 19.

¹²⁶ Evidence, Mr Garth Lamb, NSW Branch President, Waste Management Association of Australia, 26 June 2017, p 23.

¹²⁷ Evidence, Mr Lamb, 26 June 2017, p 23.

¹²⁸ Evidence, Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, 7 August 2017, p 44.

¹²⁹ Evidence, Mr Jordan, 26 June 2017, p 32.

2.50 Mr Anning said that rather than hypothecating the levy he would like to see proceeds ‘flow back to the industry and help support the industry to achieve the energy from waste and the landfill diversion and the emissions reduction that can be achieved’.¹³⁰

2.51 In response to suggestions about hypothecating the waste levy, the NSW EPA advised that ‘The setting of the waste levy and how it is used is a matter of government policy’.¹³¹

Onus of the levy

2.52 Certain inquiry participants supported placing the levy on the waste rather than on the location where the waste is disposed of, as is currently the case. Mr Ritchie explained this proposal:

... [Y]ou attach the levy liability to the waste ... [and] the statute is built in such a way that it does not matter where the waste is disposed of. If it is disposed to landfill or the moon for that matter, then the liability arises with the person who sent it and that person cannot absolve themselves of liability.¹³²

2.53 The Waste Management Association of Australia agreed with the idea of a levy that ‘follows the waste, irrespective of where it is landfilled’.¹³³

2.54 Alexandria Landfill also concurred with attaching primary liability for the levy on the waste generator, and drafted a proposed ‘Waste Responsibility Levy’¹³⁴ involving ‘exerting a primary liability for payment of it upon the generator of the waste. In turn this liability can be passed along the chain of responsibility in a manner similar to the GST’.¹³⁵

2.55 Other stakeholders supported the idea of placing the levy on the waste generator as a means of halting the interstate transportation of waste.¹³⁶ Indeed, Mr Ron Wainberg, National Chair, Resource and Energy, Recovery Division of the Waste Management Association of Australia, said attaching liability to the waste would address not only concerns about waste New South Wales waste travelling to Queensland, but also waste moving from Victoria and the Australian Capital Territory into the non-levied areas of New South Wales.¹³⁷

2.56 In response to these suggestions, Mr Buffier said that the NSW EPA is currently considering who should have responsibility for paying the waste levy: ‘One of the ideas we are looking at is having that responsibility going back to the person who produces the waste so that the

¹³⁰ Evidence, Mr Anning, 26 June 2017, p 32.

¹³¹ Evidence, Mr Beaman, 26 June 2017, p 5

¹³² Evidence Mr Ritchie, 7 August 2017, p 14. Also see, Submission 170, MRA Consulting Group, p 1.

¹³³ Submission 215a, Waste Management Association of Australia, p 1. Also see, Evidence, Ms Gayle Sloan, Chief Executive, Waste Management Association of Australia, 26 June 2017, p 21.

¹³⁴ Submission 164, Alexandria Landfill, p 6.

¹³⁵ Submission 164, Alexandria Landfill, p 7. Also see, Evidence, Mr Ian Malouf, Managing Director, Dial A Dump Industries, 17 August 2017, pp 57-58.

¹³⁶ See, Evidence Mr Ritchie, 7 August 2017, p 14.

¹³⁷ Evidence, Mr Ron Wainberg, National Chair, Resource and Energy, Recovery Division, Waste Management Association of Australia, 26 June 2017, p 26.

transport of that waste does not carry the levy responsibility with it'.¹³⁸ Mr Buffier suggested that placing the onus of levy on the waste generator may disincentivise waste operators illegally dumping waste.¹³⁹

- 2.57'** Mr Buffier explained that placing the levy on the waste generator was particularly feasible for larger companies: 'It has some complexity about it but certainly for the larger operators, for a large site, it makes a lot of sense to do that. Where you have smaller sites, one truck et cetera, it probably becomes a bit more difficult to enforce. But there is a real opportunity to do something around that'.¹⁴⁰

Distribution of levy funds

- 2.58'** This section considers stakeholders' concerns that the grant funding model is inflexible and discusses whether the NSW EPA is the appropriate body to allocate funds to councils and industry.

- 2.59'** The NSW EPA advised that the councils are often not spending all of their available funding for waste infrastructure, particularly from the Better Waste and Recycling Fund, a program for local government funded under the Waste Less, Recycle More initiative. Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery at the NSW EPA, told the committee:

We provide \$70 million to the Better Waste and Recycling Fund. That goes to each council and levy area on a per capita basis ... We have handed out about \$70 million, and 20 per cent of that has not been spent by local councils. It is untied funding that we have allocated and they have not been able to spend it.¹⁴¹

- 2.60'** Stakeholders explained that councils may not be spending the money due to the inflexible nature of the grant program. For example, Mr Lamb suggested that the incongruity between the planning framework and the time limits placed on the grants was a significant reason why councils are not taking up grants through the Better Waste and Recycling Fund:

One of the challenges we have touched on in here is around the planning frameworks and the ability to deliver. It is one thing to identify the need for infrastructure; it is another thing to actually be able to physically deliver it through a planning framework. As I understand it, a lot of those grants were time bound, and trying to move anything through a planning framework in New South Wales can be challenging.¹⁴²

- 2.61'** Mr Lamb said he was aware of certain projects where the concept has been 'solid' but the outcomes were undeliverable within the timeframes required for the grant.¹⁴³

¹³⁸ Evidence, Mr Buffier, 17 August 2017, p 71.

¹³⁹ Evidence, Mr Buffier, 17 August 2017, p 71.

¹⁴⁰ Evidence, Mr Buffier, 17 August 2017, p 71.

¹⁴¹ Evidence, Mr Beaman, 26 June 2017, p 13.

¹⁴² Evidence, Mr Lamb, 26 June 2017, p 27.

¹⁴³ Evidence, Mr Lamb, 26 June 2017, p 27.

2.62 A related issue was exemplified by the experience of Mr Garbis Simonian, Chairman of the Australian Industrial Ecology Network, who said his company declined a grant as the administrative requirements were overly burdensome: ‘My company applied for a grant and it was awarded one, but we never took it up because the conditions attached to it were not commercial. The reporting was so onerous and the amount so small that in the end we said we did not want the money’.¹⁴⁴

2.63 Ms Gayle Sloan, Chief Executive Officer of the Waste Management Association of Australia, similarly noted that there is a lack of flexibility in the grants program, specifically the need for industry to ‘match’ funding:

From an industry perspective, I am not sure about with local government, but you do have to match funding and you do have a cap on how much funding—from memory, it is \$500,000 and you have to match it. So if you have competing priorities in council, it might be quite difficult to get those matching funds, because it is not whole, and it is unrealistic to expect that you can deliver waste and resource infrastructure for \$1 million.¹⁴⁵

2.64 Ms Sloan also noted that there is no ability within the current scheme for a one-off grant for a large amount of money.¹⁴⁶

2.65 Further, the committee heard that Waste Less, Recycle More funds cannot be used to buy land for waste infrastructure, thus hindering development. Mr Mark Wood, Group Manager of Engineering Operations at Sutherland Shire Council, explained that the grant system has been established to encourage ‘smaller, piecemeal’ activities such as community recycling centres but does not allow councils to buy land to support larger waste infrastructure.¹⁴⁷ The Sutherland Shire Council argued that the inability to access waste levy funds to purchase land inhibited a regional cooperative approach in developing shared facilities.¹⁴⁸

2.66 Ms Dougall concurred and proposed that the NSW EPA grant system be amended to facilitate the acquisition of land for waste infrastructure:

To free councils and industry to focus on innovation and to plan for smarter solutions, we would like to see the EPA Waste Infrastructure Grants allow for the acquisition of land and for the grants to run for more than three years or to be deliverable in phases. This would recognise that infrastructure takes more than three years and to get approved and built.¹⁴⁹

2.67 As for whether the NSW EPA is the appropriate body to allocate funds from the waste levy, the Australian Industrial Ecology Network suggested the NSW EPA does not have the commercial and technical expertise to manage the grants process, and proposed that an

¹⁴⁴ Evidence, Mr Garbis Simonian, Chairman, Australian Industrial Ecology Network, 17 August 2017, p 40.

¹⁴⁵ Evidence, Ms Sloan, 26 June 2017, p 27.

¹⁴⁶ Evidence, Ms Sloan, 26 June 2017, p 27.

¹⁴⁷ Evidence, Mr Mark Wood, Group Manager, Engineering Operations, Sutherland Shire Council, 7 August 2017, p 30.

¹⁴⁸ Submission 156, Sutherland Shire Council, p 2.

¹⁴⁹ Evidence, Ms Dougall, 7 August 2017, p 26.

innovation-focused agency such the Department of Industry would be better suited to handling this role:

The people managing the grants are not commercial and business minded; they are not practical. As we said, it would be better if grants were taken over by the Department of Industry or someone involved in innovation. There is a lot of innovation involved and technical knowledge is very important. They would be much better equipped to handle that role.¹⁵⁰

2.68' Mr Mark Glover, Director of the Australian Industrial Ecology Network, stated that the NSW EPA is 'hopelessly conflicted' in its multiple roles as the regulator and enforcer, policy developer and 'sponsor and provider of significant amounts of grant funding', thus undermining the grant system.¹⁵¹ Likewise, Mr Simonian said the NSW EPA has a 'very strong bias' towards giving money to local government for infrastructure despite local government not having 'the skills to be able to judge and manage this infrastructure'.¹⁵² To illustrate this argument, Mr Glover said that the NSW EPA's support for developing low-grade composting materials despite there being a limited market for the product, has led to an oversupply of this material.¹⁵³

2.69' The Australian Industrial Ecology Network was further concerned that the NSW EPA does not have an 'exit strategy' once infrastructure needs have been met:

When the EPA makes an intrusion into a marketplace by making a decision that they want people to use tunnel composting or community recycling centres [CRC], it does not have an exit strategy. Are they designed to be there forever as the funders of these exercises? Or are they there to provide initial stimulation to show that it can work? At no point is there an exit strategy for when they decide that enough is enough, it has been proved to work or not, and now we want to find a way to interface with private enterprise to deliver this in the long term.¹⁵⁴

Committee comment

2.70' The first step in an effective allocation of the money from the waste levy is for the NSW EPA to fully expend the money that is allocated to the Waste Less, Recycle More initiative.

2.71' The committee agrees with stakeholders that there must be greater hypothecation of levy funds to local councils and the waste industry. We acknowledge the frustration of local councils who contribute significant sums of money to the waste levy only to receive a small proportion back in grants and other funding. We believe this situation effectively forces local councils to 'double dip' – essentially requiring ratepayers to pay the levy, and then, due to a lack of council funds, requiring those same ratepayers to pay again to support the development of waste infrastructure in their local area.

¹⁵⁰ Evidence, Mr Simonian, 17 August 2017, p 40. Also see, Evidence, Mr Mark Glover, Director, Australian Industrial Ecology Network, 17 August 2017, p 38.

¹⁵¹ Evidence, Mr Glover, 17 August 2017, p 38.

¹⁵² Evidence, Mr Simonian, 17 August 2017, p 40.

¹⁵³ Evidence, Mr Glover, 17 August 2017, p 39.

¹⁵⁴ Evidence, Mr Glover, 17 August 2017, p 40.

- 2.72 We support inquiry participants' suggestion that the waste levies paid by local councils should be returned in the form of waste funding grants to ensure that councils can take care of the waste generated in their area. The committee therefore recommends that the NSW Government hypothecate 100 per cent of the waste levy funds contributed by local councils back to these organisations to provide waste management services, including waste reduction, avoidance and re-use programs, and environmental programs and to encourage the development of innovative waste management technology.
- 2.73 In addition, the committee recommends that the NSW Government investigate opportunities to hypothecate a proportion of waste levy funds contributed by the waste industry back to the industry to support waste management solutions and the development of innovative waste management technology.

Recommendation 4

That NSW Government hypothecate 100 per cent of the waste levy funds contributed by local councils back to these organisations to provide waste management services, including waste reduction, avoidance and re-use programs, and environmental programs and to encourage the development of innovative waste management technology.

Recommendation 5

That the NSW Government investigate opportunities to hypothecate a proportion of waste levy funds contributed by the waste industry back to the industry to support waste management solutions and the development of innovative waste management technology.

- 2.74 The committee acknowledges that the current waste levy system is failing to address the interstate transportation of waste. While this issue is examined in Chapter 4, we take this opportunity to note the proposal to place the onus of the levy on the waste generator. At first glance this proposal appears sound – instead of paying the levy at landfills, the waste generator will be responsible for payment, thus discouraging waste companies from transporting waste outside of the levy area. However, there may be practical implications to such a proposal.
- 2.75 The committee is alarmed that the NSW EPA has failed to address this critical issue for a number of years, thereby exacerbating, and even encouraging, the transportation of waste to Queensland, and undermining New South Wales revenue by hundreds of millions of dollars. The committee recommends that the NSW Government urgently consider attaching the waste levy to the waste generator in New South Wales, particularly for large waste generators or operators of large sites.

Recommendation 6

That the NSW Government urgently consider attaching the waste levy to the waste generator in New South Wales, particularly for large waste generators or operators of large sites.

- 2.76** The committee understands the frustration expressed by both local councils and industry at the seemingly inflexible and overly restrictive grant guidelines which appear to be stifling rather than encouraging innovation in the sector. The committee believes the grant process, particularly restrictions on buying land with grant money, is undermining the development of waste management solutions. We recommend that the NSW Government investigate options for reforming the waste levy grant system, including providing greater flexibility in the grant guidelines for waste management projects, to ensure that local councils and industry groups can efficiently and effectively fund waste infrastructure.

Recommendation 7

That the NSW Government investigate options for reforming the waste levy grant system, including providing greater flexibility in the grant guidelines for waste management projects.

Chapter 3 Illegal dumping

This chapter examines concerns raised about illegal dumping in New South Wales, including the nature and prevalence of these issues and efforts by the NSW Government, including the NSW Environment Protection Authority (NSW EPA) to reduce these behaviours.

Illegal dumping

- 3.1** The NSW EPA describes illegal dumping as the disposal of waste larger than litter on land or in water without the appropriate environment protection licence or planning approvals.¹⁵⁵ Sections 143 and 144 of the *Protection of the Environment Operation Act 1997* deal with the unlawful transportation, acceptance and depositing of waste, and state that the owner, transporter and person receiving the waste or allowing their waste to be received are committing a crime.
- 3.2** The expression ‘illegal landfilling’ colloquially refers to the practice of large-scale illegal dumping. In addition, there are occasions when a property owner requires ‘fill’ for their land; that is, they may require waste to smooth or contour their land. While this practice is lawful, it is unlawful to use illegal ‘fill’ which may contain harmful contaminants such as asbestos or chemicals.¹⁵⁶
- 3.3** The Act provides for a tiered range of on-the-spot fines and penalties for illegal dumping offences. On-the-spot fines for illegal dumping can range from \$7,500 for individuals to \$15,000 for corporations if issued by the NSW EPA.¹⁵⁷ For strict liability waste dumping offences, the penalties include a fine and an additional daily penalty:
- maximum penalty for an individual: \$250,000 and, in the case of a continuing offence, a further daily penalty of \$60,000
 - maximum penalty for a corporation: \$1,000,000 and in the case of a continuing offence, a further daily penalty of \$120,000.¹⁵⁸
- 3.4** Additional penalties for illegal dumping include:
- vehicles used in repeat illegal dumping offences can be seized, and if the offender is convicted, may be forfeited
 - repeat offenders can receive prison sentences of up to two years

¹⁵⁵ NSW EPA, *About illegal dumping and dumpers* (17 November 2017), <http://www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/illegal-dumping-dumpers>.

¹⁵⁶ NSW EPA, *Don't illegally fill your land* (10 December 2017), <http://www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/prevent-illegal-dumping/accepting-fill>.

¹⁵⁷ Note, on-the-spot fines for illegal dumping can range from \$4,000 for individuals to \$8,000 for corporations if issued by an authority that is not the NSW EPA. NSW EPA, *Illegal dumping laws and penalties* (7 October 2017), <http://www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/illegal-dumping-laws-penalties>.

¹⁵⁸ NSW EPA, *Illegal dumping laws and penalties* (7 October 2017), <http://www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/illegal-dumping-laws-penalties>.

- the NSW EPA can require waste transporters to install GPS devices in their vehicles
- a person knowingly supplying false and misleading information regarding an illegal dumping matter can receive a fine of up to \$500,000 for a corporation, or \$240,000 and an 18-month prison sentence for an individual
- an offender can be required to repay any monetary benefit obtained as a result of the offence as an additional penalty.¹⁵⁹

3.5 It is a separate offence for illegally dumped waste to cause land or water pollution.¹⁶⁰

3.6 In 2016–2017, the NSW EPA completed 11 waste prosecutions amounting to \$411,000 in financial penalties. The NSW EPA also issued 78 clean up notices and 53 penalty notices associated with illegal dumping investigations during this period.¹⁶¹ In fact, since 2012, the NSW EPA has completed nearly 70 waste-related prosecutions.¹⁶² The regulatory and compliance regime pursued by the NSW EPA is discussed in detail in Chapter 7.

3.7 Illegal dumping can cause harm to human health and the environment, undermines legitimate businesses and costs millions of dollars per year to clean up.¹⁶³ There was discussion during the inquiry about the nature and prevalence of illegal dumping and the actions of the regulator to address the issue.

Nature and prevalence of illegal dumping

3.8 The NSW EPA expressed significant concern about illegal dumping. For example, Mr Stephen Beaman, the then Executive Director of Waste and Resource Recovery at the NSW EPA, described illegal dumping as an 'insidious environmental crime', and an 'abhorrent behaviour', adding that there is no justification for the practice.¹⁶⁴

3.9 The committee heard that due to the nature of illegal dumping, it is difficult to gain a full understanding of the number of incidents that occur, with the NSW EPA commenting: 'Illegal dumping is difficult to measure as it often happens out of sight and in remote areas'.¹⁶⁵

3.10 Mr Tony Khoury, Executive Director of the Waste Contractors and Recyclers Association of NSW, said that he was unsure of the scale of illegal dumping in New South Wales. However, he observed: 'The talk on the street is that there is more illegal activity now than ever'.¹⁶⁶

¹⁵⁹ NSW EPA, *Illegal dumping laws and penalties* (7 October 2017), <http://www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/illegal-dumping-laws-penalties>.

¹⁶⁰ NSW EPA, *Illegal dumping laws and penalties* (7 October 2017), <http://www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/illegal-dumping-laws-penalties>.

¹⁶¹ Answers to questions on notice, NSW EPA, 20 November 2017, p 5.

¹⁶² Answers to questions on notice, NSW EPA, 20 November 2017, p 5.

¹⁶³ NSW EPA, *About illegal dumping and dumpers* (7 October 2017), <http://www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/illegal-dumping-dumpers>.

¹⁶⁴ Evidence, Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery, NSW EPA, 26 June 2017, p 5.

¹⁶⁵ NSW EPA, *NSW Government Illegal Dumping Strategy 2017-21*, 2017, p 7. Also see, Evidence, Mr Mark Gifford, Chief Environmental Regulator, NSW EPA, 24 November 2017, p 4.

- 3.11'** The NSW EPA explained that due to the undercover nature of illegal dumping, pursuing prosecutions for waste offences is extremely challenging:
- Illegal dumping matters are complex, and it is often not possible for EPA Authorised Officers, complainants, and our regulatory partner agencies, to gather sufficient evidence to warrant further action. For example, if a complainant is unable to provide details that could be used to identify the alleged dumper, there is very little action the EPA or councils can take. Where we are able to identify the alleged offender, the EPA pursues the most appropriate regulatory action.¹⁶⁷
- 3.12'** As noted earlier, the NSW EPA's regulatory role is examined in Chapter 7.
- 3.13'** The NSW Government reported that household waste comprises approximately 47 per cent of all illegally dumped waste in the state, followed by green waste, construction and demolition waste, and tyres.¹⁶⁸
- 3.14'** Research conducted by the NSW EPA in 2015 found that more than half of the responding local government areas had noticed an increase in the illegal dumping of household waste and asbestos in the past five years.¹⁶⁹ The same research indicated: 'The prevailing view in industry was that the extent of illegal dumping is fairly limited, with only a small minority of businesses adopting the behaviour'.¹⁷⁰
- 3.15'** The research also found that for land managers, the primary problem caused by illegal dumping is the cost of dealing with dumped waste, with 11 per cent of local government areas each spending more than half a million dollars a year on activities relating to the prevention, monitoring and management of illegal dumping.¹⁷¹
- 3.16'** Since the NSW EPA's establishment of RIDonline, an illegal dumping database and reporting tool, in 2015, approximately 32,000 incidents of illegal dumping have been recorded.¹⁷² In addition, the NSW EPA advised: 'Over the past five years, the EPA received and actioned 1,507 reports relating to illegal dumping. This included conducting 641 investigations into reports of major (>200 tonnes) illegal dumping incidents'.¹⁷³
- 3.17'** There was some debate during the inquiry as to the causes of illegal dumping. As noted in Chapter 2, it was suggested that the state's high waste levy is a contributing factor, with Mr Khoury commenting: 'Having a high waste levy will encourage avoidance, stockpiling and illegal activities. That is an unintended consequence of having a high waste levy'.¹⁷⁴ The association listed other potential reasons for illegal dumping:

¹⁶⁶ Evidence, Mr Tony Khoury, Executive Director, Waste Contractors and Recyclers Association of NSW, 17 August 2017, p 6.

¹⁶⁷ Answers to questions on notice, NSW EPA, 20 November 2017, pp 4-5.

¹⁶⁸ NSW EPA, *NSW Government Illegal Dumping Strategy 2017-21*, 2017, p 6.

¹⁶⁹ NSW EPA, *Illegal Dumping Research Report - Summary report*, July 2015, p 3.

¹⁷⁰ NSW EPA, *Illegal Dumping Research Report - Summary report*, July 2015, p 1.

¹⁷¹ NSW EPA, *Illegal Dumping Research Report - Summary report*, July 2015, p 1.

¹⁷² Answers to supplementary questions on notice, NSW EPA, 19 October 2017, p 2.

¹⁷³ Answers to questions on notice, NSW EPA, 20 November 2017, p 4.

¹⁷⁴ Evidence, Mr Khoury, 17 August 2017, p 5.

- the high cost of operating and using NSW EPA regulated landfills and transfer stations
- the low cost of tipping at southeast Queensland landfills
- the potential to claim a waste levy refund on exhumed waste, which acts as an incentive to dump and stockpile waste and then exhume it
- the potential for certain landfills to operate as de-facto transfer stations and claim a waste levy refund
- inadequate enforcement
- the state's regulations and laws have not kept pace with the higher value of waste in New South Wales
- there is a rogue element in the waste industry that has little regard for laws, regulations and waste management objectives.¹⁷⁵

3.18 Mr Beaman disputed any causal connection between the waste levy and illegal dumping.¹⁷⁶ Mr Beaman said: 'There is an underlying antisocial behaviour that people might have and you see this where the levy does not apply there is illegal dumping. They have access to good facilities but they still illegally dump'.¹⁷⁷ Indeed, research conducted by the NSW EPA found that the cost of legal dumping and lack of concern for the community were two of the main drivers of illegal dumping behaviour.¹⁷⁸

3.19 The NSW EPA also noted that community expectations and awareness concerning illegal dumping has led to an increase in reports of this type of behaviour.¹⁷⁹

3.20 In response to concerns about exhumed waste attracting a waste levy refund and the incentive this creates to illegally dump and then exhume waste, the NSW EPA advised that it has proposed reforms in the Protection of the Environment Operations Legislation Amendment (Waste) Regulation 2017 to close this loophole: 'The proposal would make it an offence to exhume waste from a landfill site regardless of whether the landfill is licenced. The public consultation period on the regulatory amendment closed on 12 December 2017'.¹⁸⁰

Actions to reduce illegal dumping

3.21 The committee heard that the NSW EPA has taken a three-pronged approach to waste regulation: changing community attitudes, improving infrastructure and providing a strong compliance regime.¹⁸¹ In accordance with the *Illegal Dumping Strategy 2017-21*, the NSW Government has committed to reducing illegal dumping by 30 per cent by 2020.¹⁸²

¹⁷⁵ Submission 182b, Waste Contractors and Recyclers Association of NSW, p 3.

¹⁷⁶ Evidence, Mr Beaman, 26 June 2017, p 5.

¹⁷⁷ Evidence, Mr Beaman, 26 June 2017, p 5.

¹⁷⁸ NSW EPA, *Illegal Dumping Research Report - Summary report*, July 2015, p 2.

¹⁷⁹ *In camera* evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 24 November 2017, p 13, published by resolution of the committee.

¹⁸⁰ Answers to questions taken on notice, NSW EPA, 21 December 2017, p 2.

¹⁸¹ Evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 17 August 2017, p 61.

¹⁸² NSW EPA, *NSW Government Illegal Dumping Strategy 2017-21*, 2017, p 1.

The strategy sets out how the NSW EPA and other relevant agencies will work with stakeholders to deliver key actions and programs.

- 3.22'** The strategy focuses on reducing the illegal dumping of household waste, construction and demolition waste, discarded tyres and asbestos.¹⁸³
- 3.23'** The Waste Less, Recycle More initiative discussed in Chapter 2 has also funded programs to reduce illegal dumping. The NSW EPA advised: 'Since the commencement of Waste Less, Recycle More initiative, \$123 million has been provided to combat and prevent dumping; \$58 million in 2012-16 and a further \$65 million in 2017-21'.¹⁸⁴ Funds have been provided to local councils, community groups, Local Aboriginal Land Care Services, and other public land managers to clean up dumped waste, install prevention infrastructure such as gates, signage and cameras, and to fund education campaigns.¹⁸⁵ Additionally, \$7.1 million from Waste Less, Recycle More has been allocated to 133 projects under the Combating Illegal Dumping initiative.¹⁸⁶
- 3.24'** The NSW EPA emphasised its close working relationship with local councils to address illegal dumping. In addition to providing financial support through Waste Less, Recycle More, the NSW EPA is a co-regulator on certain 'smaller end' waste matters along with local councils, regulates council-operated licensed waste facilities, and provides training and support for councils and their officers.¹⁸⁷
- 3.25'** The NSW EPA also provides funding and oversight of Regional Illegal Dumping (RID) squads to local councils. The committee was told that since 2012, \$8.5 million has been invested in five RID squads to combat illegal dumping.¹⁸⁸ The NSW EPA said: 'The squads are primarily made up of ex-police who have strong investigation skills and are proficient in the use of surveillance approaches and devices'.¹⁸⁹ The NSW EPA explained the activities undertaken by the squads:

To ensure an effective regional approach to combatting dumping, the squads have cross-border delegations across council areas. They are also involved in education and awareness programs and conduct joint operations with EPA and other land managers dealing with illegal dumping (including the NSW National Parks and Wildlife Service).¹⁹⁰

- 3.26'** The NSW EPA advised: 'In 2015-16 RID squads collectively investigated 11,000 cases (\$47,000t of waste), issued 794 regulatory notices with total fines and prosecutions equalling \$720,200'.¹⁹¹

¹⁸³ NSW EPA, *NSW Government Illegal Dumping Strategy 2017-21*, 2017, p 6.

¹⁸⁴ Answers to supplementary questions on notice, NSW EPA, 19 October 2017, p 1.

¹⁸⁵ Answers to supplementary questions on notice, NSW EPA, 19 October 2017, p 1.

¹⁸⁶ Answers to supplementary questions on notice, NSW EPA, 19 October 2017, pp 1-2.

¹⁸⁷ See for example, Evidence, Mr Buffier, 24 November 2017, p 3 and Evidence, Mr Gifford, 24 November 2017, p 4.

¹⁸⁸ Answers to supplementary questions on notice, NSW EPA, 19 October 2017, p 2.

¹⁸⁹ Answers to questions on notice, NSW EPA, 20 November 2017, p 8.

¹⁹⁰ Answers to questions on notice, NSW EPA, 20 November 2017, p 8.

¹⁹¹ Answers to supplementary questions on notice, NSW EPA, 19 October 2017, p 2.

- 3.27'** In addition to these actions, the NSW EPA advised that it has directed the following resources to address illegal dumping:
- a newly established Waste Crime Taskforce, staffed by four investigators and two waste operations specialists, with dedicated legal and intelligence support to investigate and disrupt waste crime
 - a Special Investigations Unit, comprising three specialist investigators, which focuses on complex and high-profile breaches of environmental legislation, including illegal dumping
 - a stand-alone Illegal Dumping Team, comprising seven staff, responsible for implementing the illegal dumping strategy, and operating programs targeting large scale illegal dumping activities
 - over 60 waste compliance staff who spend a substantial proportion of their time focused on illegal dumping investigations.¹⁹²
- 3.28'** The NSW EPA is also using technology to manage this issue. Mr Barry Buffier, the then Chair and Chief Executive at the NSW EPA, stated: 'We are putting a lot of effort into technology, into tracking waste, into using tracking systems and data collection systems that will give us a much better understanding of where waste is going and who is trying to avoid the system'.¹⁹³
- 3.29'** As part of the effort, as mentioned earlier, the NSW EPA has established RIDonline, a state-wide illegal dumping database and reporting tool. The NSW EPA informed the committee that this program allows for incidents and prevention infrastructures to be mapped to support the development of targeted prevention strategies.¹⁹⁴ The program also has a component that allows local councils and the NSW EPA to communicate directly about incidents. Mr Mark Gifford, Chief Environmental Regulator at the NSW EPA, stated that this mechanism allows for quick response and notification of incidents.¹⁹⁵
- 3.30'** The NSW EPA also uses a waste tracking system to collect, manage and monitor the compliance activity of waste organisations. The committee heard that currently this system only tracks the trucks of businesses under investigation, not all trucks transporting waste.¹⁹⁶ Mr Greg Sheehy, Director of Waste Compliance at the NSW EPA, said that, as at August 2017, the NSW EPA had seven trackers operating on vehicles around Sydney that are allegedly involved in illegal landfilling activity.¹⁹⁷ Mr Buffier observed that tracking every truck in New South Wales '... might be a nice position to get to'.¹⁹⁸

¹⁹² Answers to questions on notice, NSW EPA, 20 November 2017, pp 7-8. Also see, Evidence, Mr Gifford, NSW EPA, 24 November 2017, p 11.

¹⁹³ Evidence, Mr Buffier, 17 August 2017, p 61.

¹⁹⁴ Answers to supplementary questions on notice, NSW EPA, 19 October 2017, p 2.

¹⁹⁵ Evidence, Mr Gifford, 24 November 2017, p 4.

¹⁹⁶ Evidence, Mr Buffier, 17 August 2017, p 61.

¹⁹⁷ Evidence, Mr Greg Sheehy, Director, Waste Compliance, NSW EPA, 17 August 2017, p 61.

¹⁹⁸ Evidence, Mr Buffier, 17 August 2017, p 61.

3.31' The NSW EPA also uses WasteLocate to track the 'cradle to grave' movement of certain problematic waste including tyres and asbestos.¹⁹⁹ Mr Beaman explained how the system operates using QR codes:

WasteLocate is smart phone technology, so it uses a QR code ... You can use your smart phone and scan it in and out. Waste facilities have those scanning plates at the weighbridge. An asbestos removal operator can scan it in on their phone and when it arrives at the tip it scans out and it sort of lays out the transaction. We are using that technology. Really, waste is reverse logistics so it is akin to a parcel tracking system.²⁰⁰

3.32' It was noted that the NSW EPA has real-time oversight over the WasteLocate data,²⁰¹ and is considering expanding this program to other problematic waste streams.²⁰²

3.33' The illegal dumping strategy acknowledges that while increased surveillance and patrolling are effective deterrents, they are only part of the solution.²⁰³ Nevertheless, in November 2017 the NSW EPA announced it has developed *Interim guidelines on EPA use of unmanned aircraft*, which it can use to monitor illegal dumping.²⁰⁴

Committee comment

3.34' The committee acknowledges that there are substantial penalties for illegal dumping in New South Wales. Having said this, while the NSW EPA is actively pursuing investigations and prosecutions targeting illegal dumping, the agency's efforts are being hampered by the inherent difficulty of gathering suitable evidence to pursue legal action, amongst other issues. This issue is examined in Chapter 7.

3.35' While it is difficult to precisely measure the extent of illegal dumping in New South Wales, evidence received during the inquiry highlighted that the practice is prevalent in the community and is costing land managers, particularly local councils, substantial funds to address.

3.36' The committee believes that there is no one specific cause of illegal dumping. Rather, a confluence of social and economic factors emboldens individuals and organisations to pursue this type of unlawful activity. The committee acknowledges that as the levy has increased over time, so have the incentives to dump illegally. As discussed in Chapter 2, we support the waste levy being in place and therefore encourage the NSW EPA to identify and close any 'loopholes' in waste management regulations that may inadvertently encourage illegal dumping. Specifically, we recommend that the NSW Government amend the Protection of the Environment Operations Legislation Amendment (Waste) Regulation 2017 to make it an offence to exhume waste from landfill sites.

¹⁹⁹ Evidence, Mr Beaman, 26 June 2017, p 11; Evidence, Mr Buffier, 17 August 2017, p 62.

²⁰⁰ Evidence, Mr Beaman, 26 June 2017, p 11.

²⁰¹ Evidence, Mr Henry Moore, Manager, Waste Reform, NSW EPA, 26 June 2017, p 11.

²⁰² Evidence, Mr Moore, 26 June 2017, p 11.

²⁰³ NSW EPA, *NSW Government Illegal Dumping Strategy 2017-21*, 2017, p 2.

²⁰⁴ NSW EPA, *Policies and guidelines* (17 November 2017), <http://www.epa.nsw.gov.au/licensing-and-regulation/legislation-and-compliance/policies-and-guidelines>.

- 3.37'** The committee notes the reports from local government that this behaviour has increased. We note that of the funds allocated to the Waste Less, Recycle More initiative to July 2016, only \$8.7 million were spent on illegal dumping. The committee also notes that in 2016-2017, the average fine following the 11 successful waste prosecutions was less than \$40,000. The NSW EPA also gave evidence that the costs of illegal dumping run to millions of dollars per year. The committee therefore recommends that the NSW Government allocate additional resources to support the policing of illegal dumping.
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Recommendation 8

That the NSW Government amend the Protection of the Environment Operations Legislation Amendment (Waste) Regulation 2017 to make it an offence to exhume waste from landfill sites.

Recommendation 9

That the NSW Government allocate additional resources to support the policing of illegal dumping.

- 3.38'** Concerns about a criminal or rogue element operating within the waste industry are examined in Chapter 7. The committee recommends that the NSW EPA strengthen its liaison with NSW Police when it comes to illegal activity in the waste sector, with formal protocols made public, and specifying the channels through which this liaison occurs.
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Recommendation 10

That the NSW Environment Protection Authority strengthen its liaison with NSW Police when it comes to illegal activity in the waste sector, with formal protocols made public, and specifying the channels through which this liaison occurs.

- 3.39'** We acknowledge that the NSW EPA has directed various resources to tackling illegal dumping, including funds from the Waste Less, Recycle More initiative, and the establishment specialist waste teams which, we are told, are staffed by appropriately trained investigative officers. The committee is particularly impressed by the work of the RID squads, which are an excellent example of a regionally-based solution to illegal dumping. The committee appreciates that the RID officers' local knowledge and investigative skills are making a significant contribution to addressing this insidious issue. The committee recommends that the NSW Government allocate additional resources to, and expand the number of, Regional Illegal Dumping (RID) squads.
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Recommendation 11

That the NSW Government allocate additional resources to, and expand the number of, Regional Illegal Dumping (RID) squads.

3.40 The committee also acknowledges the NSW Government's significant investment in technology to address illegal dumping, including RIDonline and WasteLocate to track certain problematic waste streams. We understand that tracking devices are currently only used on vehicles suspected of engaging in unlawful activity. While placing trackers on every truck transporting waste may be unnecessary and expensive, based on the extensive evidence discussed in this chapter and the next regarding illegal dumping and the transfer of waste interstate, it is unacceptable that only seven vehicles were being tracked in August 2017. We believe that more can be done in this area, and recommend that the NSW EPA immediately increase the use of vehicle trackers and other surveillance techniques, including drones, to prevent illegal dumping. Furthermore, we recommend that the NSW Government allocate additional resources to support the enhanced use of vehicle trackers in the waste industry.

Recommendation 12

That the NSW Environment Protection Authority immediately increase the use of vehicle trackers and other surveillance techniques, including drones, to prevent illegal dumping.

Recommendation 13

That the NSW Government allocate additional resources to support the enhanced use of vehicle trackers in the waste industry.

Chapter 4 Transferring waste interstate

This chapter considers stakeholders' concerns about the transfer of waste interstate, particularly the transportation of New South Wales waste to Queensland. It also examines the failure of the proximity principle to address this issue and other proposals to end the practice.

The transfer of waste interstate

4.1 During the inquiry, it became apparent that large amounts of New South Wales waste are being transported interstate, most frequently to Queensland. The NSW Environment Protection Authority (NSW EPA) informed the committee that during 2016-2017, 830,000 tonnes of waste was transported to Queensland from New South Wales, and that 430,000 tonnes of waste was transported in 2015-2016.²⁰⁵ In addition, Mr Barry Buffier, the then Chair and Chief Executive of the NSW EPA, observed that it is 'largely' construction and demolition waste being sent to Queensland.²⁰⁶

4.2 As for the reasons behind this transfer of waste, numerous stakeholders pointed to the fact that Queensland has no waste levy, making it significantly cheaper to landfill waste in Queensland than in the regulated area of New South Wales. For example:

- Mr Buffier advised: 'Waste has always moved between States and Territories and that was not too big a problem, but in 2012 Queensland removed their levy. That has created a situation where we have seen more waste going to Queensland'²⁰⁷
- MRA Consulting Group stated: 'Waste ... flows downhill until it finds the cheapest price to be disposed of. In this case it is Queensland, so it is worth shipping waste 1,000 kilometres to find a cheaper disposal price'²⁰⁸
- Veolia stated: 'QLD, which has an abundance of landfill, therefore a low landfill cost and no landfill levy, will remain the lowest cost option for disposal of non-putrescible waste in Sydney ...'²⁰⁹

4.3 Mr Tony Khoury, Executive Director of the Waste Contractors and Recyclers Association of NSW, explained that waste organisations can save approximately \$70 per tonne of waste by transporting waste to Queensland rather than disposing of it at a western Sydney landfill:

The cost of landfill at a Western Sydney facility for general non-putrescible waste is \$220 per tonne inclusive of the waste levy and GST. By comparison, the general cost of loading ex-Sydney from a waste facility, transport and disposal to a south-east Queensland landfill, along with the cost of an empty return truck is approximately

²⁰⁵ Evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 24 November 2017, p 2.

²⁰⁶ Evidence, Mr Buffier, 17 August 2017, p 67.

²⁰⁷ Evidence, Mr Buffier, 17 August 2017, p 60.

²⁰⁸ Evidence, Mr Mike Ritchie, Managing Director, MRA Consulting Group, 7 August 2017, p 17.

²⁰⁹ Submission 148, Veolia Australia and New Zealand, p 6.

\$150 per tonne inclusive of GST. A gap of \$70 per tonne is encouraging the long-distance transport of waste.²¹⁰

- 4.4 As mentioned in Chapter 2, according to certain stakeholders the comparatively high New South Wales waste levy has contributed to the problem,²¹¹ with Mr Ian Malouf, Managing Director of Dial A Dump Industries, commenting:

The levy brings with it the good and the bad. It brings with it a drive not to landfill material, for the positive ... The downside is that to avoid a load of rubbish going somewhere it should go, because it is an expensive business, there is a financial incentive to lose the load.²¹²

- 4.5 The NSW EPA responded directly to this view, arguing that rather than proving the New South Wales levy is too high, the interstate transportation of waste indicates that Queensland, where waste can be landfilled for approximately \$10 per tonne, 'does not have the right policy settings'²¹³ in place in terms of environmental standards:

If they had the same environmental controls that are in place in New South Wales, and they had to keep money for long-term liabilities and so on, typically the cost would be about \$40 dollars a tonne. There is clearly a differential between the environmental standards.²¹⁴

Committee comment

- 4.6 The committee acknowledges that there is a significant amount of waste travelling from New South Wales to Queensland, contrary to established waste management practices. While we accept that the comparatively high New South Wales waste levy may play a part in contributing to the practice, primary responsibility clearly rests with the Queensland Government for removing its waste levy altogether. We therefore applaud the Queensland Government's announcement, just days before the tabling of this report, that it intends to re-introduce its waste levy. We encourage the NSW EPA, in cooperation with the Queensland Government, to carefully monitor the impact of the re-introduction of Queensland's waste levy and its effect upon the interstate movement of waste.

²¹⁰ Evidence, Mr Tony Khoury, Executive Director, Waste Contractors and Recyclers Association of NSW, 17 August 2017, p 2.

²¹¹ See for example, Evidence, Ms Jane Bremmer, Secretary, National Toxics Network, 27 June 2017, p 39; Evidence, Mr Khoury, 17 August 2017, p 2; Submission 182, Waste Contractors and Recyclers Association of NSW, p 2; Submission 215a, Waste Management Association of Australia, p 1.

²¹² Evidence, Mr Ian Malouf, Managing Director, Dial A Dump Industries, 17 August 2017, p 57.

²¹³ Evidence, Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery, NSW EPA, 26 June 2017, p 12.

²¹⁴ Evidence, Mr Beaman, 26 June 2017, p 12.

Impact of the practice

- 4.7 While transporting waste interstate is not unlawful in most instances,²¹⁵ it was increasingly apparent during the inquiry that the practice is of significant concern. Mr Ron Wainberg, National Chair, Resource and Energy, Recovery Division of the Waste Management Association of Australia, captured many inquiry participants' concerns about the practice:

To be frank, it is absurd that waste is being transported such a long distance for cheap disposal with the environmental impacts of that transport, the road impacts of that transport and the undermining of an industry that has been developed in New South Wales to handle that material as well as the loss of government revenue ...²¹⁶

Economic and financial impact

- 4.8 Stakeholders informed the committee that there are serious economic ramifications stemming from the interstate transportation of waste. Alexandria Landfill noted that the practice has resulted in the 'large and increasing haemorrhage of revenue from NSW EPA as the payment of levy is avoided ...'.²¹⁷ Likewise, the Waste Contractors and Recyclers Association of NSW remarked: '... these long-distance movements to interstate facilities are costing NSW Treasury an estimated \$115 million pa'.²¹⁸
- 4.9 The NSW EPA concurred that there are significant financial implications resulting from the transportation of waste to Queensland. As indicated in the table below, which was provided by the NSW EPA and sets out the waste tonnages transported to Queensland from the Metropolitan Levy Area [MLA], the total potential 'lost' revenue from waste transported outside New South Wales for disposal is at least \$83.5 million over two years.²¹⁹

²¹⁵ Submission 215a, Waste Management Association of Australia, p 1.

²¹⁶ Evidence, Mr Ron Wainberg, National Chair, Resource and Energy, Recovery Division, Waste Management Association of Australia, 26 June 2017, p 25.

²¹⁷ Submission 164, Alexandria Landfill, p 20.

²¹⁸ Submission 182, Waste Contractors and Recyclers Association of NSW, p 2. Also see Submission 145a, Suez, p 1.

²¹⁹ Answers to questions on notice, NSW EPA, received 27 July 2017, p 2. Note, in August 2017 the NSW EPA advised that in 2016-2017, 690,000 tonnes of waste was transported to Queensland from New South Wales, and in 2015-2016, 410,000 tonnes of waste was transported to Queensland from New South Wales. As discussed at the beginning of this chapter, in November 2017, the NSW EPA revised these estimates advising that in 2016-2017, 830,000 tonnes of waste was transported to Queensland from New South Wales, and in 2015-2016, 430,000 tonnes of waste was transported to Queensland from New South Wales (See, Tabled document, NSW EPA, *MLA Waste Tracking System*, 24 November 2017, p 1.) The calculation of lost revenue is therefore provided on the initial estimate.

Table 3 Tonnages transported to Queensland from the Metropolitan Levy Area (MLA) and the potential lost revenue

Financial Year	Waste Treatment	Tonnes	Levy rate	Potential lost revenue
2015-16	Landfill and Other	240,000	\$133.10	\$31,900,000
2015-16	Recycling	170,000		
2016-17	Landfill and Other	380,000	\$135.70	\$51,600,000
2016-17	Recycling	310,000		

Answers to questions on notice, NSW EPA, received 27 July 2017, p 2.

4.10 The NSW EPA advised that the 'real shame' of transporting waste to Queensland is that New South Wales loses resources that could be recycled, which also undermines the generation of jobs. Indeed, Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery at the NSW EPA, noted: 'For every 10,000 tonnes you recycle you generate nine jobs and for landfill it is two'.²²⁰ In addition, the NSW EPA said there are 'very few people, for example, some transporters and some landfill operators' that are benefiting from transferring waste to Queensland, coming 'at the expense of the general community and of society'.²²¹

4.11 The committee also heard that the loss of these waste levy funds is undermining the development of waste infrastructure in New South Wales, with stakeholders commenting:

- 'This activity undermines the NSW waste sector, and especially the ability for NSW operators to invest in new resource recovery capacity'.²²²
- 'Any proposal for establishing infrastructure in New South Wales is currently being heavily undermined by the movement of waste to Queensland'.²²³
- '... cheap landfill disposal discourages further investment in NSW processing & recycling infrastructure'.²²⁴
- 'The current situation provides no long term regulatory certainty and insufficient levels of revenue for waste in Sydney to generate the required financial returns on any potential investment in recycling'.²²⁵

²²⁰ Evidence, Mr Beaman, 26 June 2017, p 7. Also see, Submission 215a, Waste Management Association of Australia, p 1.

²²¹ Evidence, Mr Beaman, 26 June 2017, p 7.

²²² Submission 215, Waste Management Association of Australia, p 3. Also see Evidence, Ms Gayle Sloan, Chief Executive, Waste Management Association of Australia, 26 June 2017, p 21.

²²³ Evidence, Mr Ritchie, 7 August 2017, p 10.

²²⁴ Submission 182, Waste Contractors and Recyclers Association of NSW, p 2.

²²⁵ Submission 148, Veolia Australia and New Zealand, p 6.

- ‘The unnecessary transport of waste undermines any potential investment in resource recovery infrastructure such as Energy from Waste technologies and the associated economic benefits and employment generation such an investment brings’.²²⁶

Impact on recycling

- 4.12*** Inquiry participants also noted that transporting waste hinders recycling efforts in New South Wales. For example, the Waste Management Association of Australia said of the practice: ‘NSW recyclers have lost the opportunity to recover materials from that stream’.²²⁷ A similar argument was raised by Alexandria Landfill, which commented that the practice results in ‘effective avoidance of all recycling strategies pursued by the NSW EPA for the past 20 years’.²²⁸
- 4.13*** Stakeholders noted that without a waste levy, Queensland has a recycling rate of approximately 35 per cent,²²⁹ leading Mr Wainberg to observe: ‘... [Queensland] had a levy for a short period of time and then he got rid of it. When you look at the recycling in Queensland it had a blip. It went up when the levy was introduced; he [former Premier Campbell Newman] took it away and it went down’.²³⁰
- 4.14*** From the NSW EPA’s perspective, Mr Beaman said of the practice: ‘Queensland is simply losing the opportunity to recycle according to the hierarchy. I do not think that is what anyone wants’.²³¹

Impact on road safety

- 4.15*** Another concern raised about the interstate transportation of waste is that it increases traffic movements and the likelihood of road accidents. For example, the Waste Contractors and Recyclers Association of NSW said:

The practice ... results in 20,000 additional truck movements each way onto the Pacific Highway, creating increased heavy vehicle traffic and congestion, along with additional fuel consumption and increased carbon emissions. It also creates an increased risk of accidents, waste spillages, contamination and environmental damage ...²³²

- 4.16*** Mr Khoury remarked the additional traffic movements are ‘What drives me to keep raising this matter ... I do not want to wake up to the headline one day that a family has been wiped out by one of these unnecessary truck movements heading north’.²³³ He noted that there had

²²⁶ Submission 145, Suez, p 5.

²²⁷ Submission 215a, Waste Management Association of Australia, p 1. Also see, Evidence Mr Ritchie, 7 August 2017, pp 13-14.

²²⁸ Submission 164, Alexandria Landfill Pty Ltd, p 20.

²²⁹ Evidence, Mr Buffier, 17 August 2017, p 60.

²³⁰ Evidence, Mr Wainberg, 26 June 2017, p 26.

²³¹ Evidence, Mr Beaman, 26 June 2017, p 12.

²³² Submission 215a, Waste Management Association of Australia, p 1.

²³³ Evidence, Mr Khoury, 17 August 2017, p 6.

been a 'regrettable' incident where a defective truck carrying waste to Queensland crashed on the Hexham Bridge on the state's north coast.²³⁴

4.17' The Waste Contractors and Recyclers Association of NSW also remarked that 'the grapevine is abuzz with concerns about poorly remunerated drivers, fatigue management breaches & chain of responsibility concerns. Consequently, this activity poses a very serious danger to all road users'.²³⁵

4.18' Suez similarly noted the traffic congestion and unnecessary emissions caused by the practice: 'The carbon footprint of waste disposal from the extra diesel trucks travelling up to Queensland means more heavy goods vehicles on already congested and dangerous major highways every day, putting added pressure on the transport channel between the two states'.²³⁶

4.19' The Waste Contractors and Recyclers Association of NSW acknowledged that Queensland is trying to address the issue by stopping trucks at the border, but argued that this was a less than satisfactory solution:

The Queenslanders have in the last couple of days [August 2017] jumped on the bandwagon. They are now stopping all trucks that are entering Queensland with waste out of New South Wales. I say those trucks by that stage have probably travelled 700 or 800 kilometres too many. Why are we not doing the same at an earlier point?²³⁷

Commercial considerations

4.20' According to the Waste Management Association of Australia, the interstate transportation of waste imposes an unfair burden on the communities receiving the waste.²³⁸ However, the association contended that operators will continue to transport waste for as long as it remains commercially viable to do so, especially if there is minimal chance of regulatory intervention:

The practical reality is that while there remains a major price differential between different disposal points, and while it remains possible to access cheaper disposal points with little risk of regulatory intervention, there will remain a commercial incentive for the large-scale transport of waste. Most waste operators would much prefer to "do the right thing" but they need to remain competitive and viable.²³⁹

4.21' The association attempted to address the issue by asking members to commit to its 'Waste of Origin' pledge. Amongst other commitments, signatories pledge not to transport waste long distances unnecessarily.²⁴⁰

²³⁴ Evidence, Mr Khoury, 17 August 2017, p 6.

²³⁵ Submission 182, Waste Contractors and Recyclers Association of NSW, p 2.

²³⁶ Submission 145a, Suez, p 2.

²³⁷ Evidence, Mr Khoury, 17 August 2017, p 6.

²³⁸ Submission 215a, Waste Management Association of Australia, p 1.

²³⁹ Submission 215a, Waste Management Association of Australia, p 1.

²⁴⁰ Media release, Waste Management Association of Australia, 'Waste industry calls on members and stakeholders to sign "Waste of Origin" pledge', 15 September 2017, https://www.wmaa.asn.au/Public/Media_hub/Newsroom/Media_Releases/Public/Media_hub/Media_Releases.aspx?hkey=409c3920-212c-40d6-97a2-28724a396888.

- 4.22* The impact of commercial considerations was exemplified during the inquiry by the behaviour of Dial A Dump Industries. Mr Malouf said that his company did not transport waste to Queensland for years to its disadvantage: ‘We have been seriously commercially disadvantaged by this practice. Our prices have been consistently undercut and our business damaged’.²⁴¹ However, Mr Malouf acknowledged that the company had recently started sending residual waste via rail to Queensland: ‘... our business was just getting ... smashed by this practice. So to protect our business—really to protect the airspace of our own landfill—we took that option on what I would call a relatively small scale, and we have been doing it for in the order of six months’.²⁴²
- 4.23* Mr Christopher Biggs, Chief Executive Officer of Dial A Dump Industries, confirmed that all waste consignments are tracked using the NSW EPA longline waste tracking system.²⁴³
- 4.24* On 17 August 2017 Dial A Dump Industries called on industry to stop transferring waste to Queensland and to work with regulators to address the issue.²⁴⁴ However, in September 2017 the company informed the committee that the industry had failed to follow this directive and thus it would resume transporting waste to Queensland:
- Unfortunately, this call to the industry has not met with any success. Our competitors actions have intensified to our further commercial detriment.
- In view of no evidence of impending and effective action being taken by the regulators we advise you we will be resuming transportation of waste to Queensland.²⁴⁵
- 4.25* Ultimately, Alexandria Landfill cautioned: ‘... the inescapable conclusion must be that unless the interstate transportation of waste is urgently addressed, recycling of construction and demolition waste in the Sydney area has no future’.²⁴⁶

Committee comment

- 4.26* The overwhelming evidence presented during this inquiry demonstrates that dumping waste interstate, particularly from New South Wales to Queensland, is utterly unjustifiable, both from a community and an environmental perspective, and undermines the waste management policies of both states, especially in relation to resource recovery and the development of waste infrastructure.
- 4.27* We note that the interstate transportation of waste also represents a significant amount of ‘lost’ revenue for the NSW Government, with stakeholders estimating that the loss could be upwards of \$100 million per year, money which could be used to fund waste infrastructure, or

²⁴¹ Evidence, Mr Malouf, 17 August 2017, p 44.

²⁴² Evidence, Mr Malouf, 17 August 2017, p 47.

²⁴³ Evidence, Mr Christopher Biggs, Chief Executive Officer, Dial A Dump Industries, 17 August 2017, p 47.

²⁴⁴ Evidence, Mr Malouf, 17 August 2017, p 44.

²⁴⁵ Correspondence, Mr Ian Malouf, Managing Director, Dial A Dump Industries, to Chair, 20 September 2017, p 1.

²⁴⁶ Submission 164, Alexandria Landfill, p 20.

indeed to fund additional hospitals, schools and transport services. The committee is also very concerned that the unnecessary traffic movements caused by the interstate transportation of waste increases the likelihood of road accidents, particularly if unsafe trucks are being driven by tired drivers.

- 4.28^{*} While we note industry efforts to stop the interstate transportation of waste, the evidence suggests these actions are undercut without proper regulation. Operators will continue to transport waste wherever disposal is cheapest, particularly if there is little or no risk of regulatory intervention. We strongly encourage the NSW Government and its interstate counterparts to consider how the appropriate regulatory agencies, including the environment protection authorities, police, and roads and traffic authorities, can work together to address this issue. Ending the interstate transportation of waste is the subject of a recommendation later in this chapter.

Current regulatory efforts

- 4.29^{*} The NSW EPA has at various times attempted to regulate the interstate transportation of waste through the application of the proximity principle, a tracking system for waste from the MLA, and licences for operators sending waste interstate by rail. These are discussed below.

Proximity principle

- 4.30^{*} The NSW Government attempted to address the interstate transportation of waste and encourage a regional approach to waste management by developing the Protection of the Environment Operations (Waste) Regulation 2014, known as the 'proximity principle'. The regulation makes it an offence to transport waste more than 150 kilometers in certain circumstances:

The Protection of the Environment Operations (Waste) Regulation 2014 ... makes it an offence to transport waste generated in NSW by motor vehicle for disposal more than 150 kilometres from the place of generation, unless the waste is transported to one of the two nearest lawful disposal facilities to the place of generation (even if that facility is located more than 150 kilometres from its place of generation).²⁴⁷

- 4.31^{*} Mr Buffier advised that the NSW EPA looked to overseas jurisdictions when developing the proximity principle and sought to encourage the management of waste closer to the place of generation: '... the proximity principle works well overseas. We were attracted to that in New South Wales. It reduces that carbon footprint but it also sends a signal about communities being responsible for the waste that they create'.²⁴⁸
- 4.32^{*} Fines for a penalty notice for this offence amount to \$15,000 for corporations and \$7,500 for individuals, and penalties of up to \$44,000 may be imposed by a court on conviction for this offence.²⁴⁹

²⁴⁷ NSW EPA, *Proximity Principle: Offence for transport of waste*, <http://www.epa.nsw.gov.au/wasteregulation/proximity-principle.htm>, 14 January 2015.

²⁴⁸ Evidence, Mr Buffier, 17 August 2017, p 62.

²⁴⁹ NSW EPA, *Proximity Principle: Offence for transport of waste*, <http://www.epa.nsw.gov.au/wasteregulation/proximity-principle.htm>, 14 January 2015.

- 4.33'** However, Mr Buffier informed the committee that the proximity principle has been challenged by an affiliate of the Bingo Group, leading the NSW EPA to seek advice about the legality of the regulation.²⁵⁰ The advice suggested that the proximity principle may offend s 92 of the Commonwealth Constitution, which provides that all trade amongst the states must be free. Accordingly, Mr Buffier advised that the principle is not currently being enforced: 'We formed the view that it offended section 92 of the Constitution and that it could not be enforced. We relayed that information that we would not be enforcing it to the industry'.²⁵¹
- 4.34'** Certain inquiry participants expressed frustration with the NSW EPA's decision not to enforce the regulation. For example, Suez described not enforcing the proximity principle as a 'backwards step', and noted that 'The proximity principle is written into the European Commission's Waste Framework Directive and has also been a central value in municipal solid waste management in Japan for over 35 years'.²⁵²
- 4.35'** In addition, Mr Mike Ritchie, Managing Director of MRA Consulting Group, said that the decision has led to confusion in the waste industry:
- We now have a strange situation where the proximity rule is on the statute books but the agents within the EPA have said that it is not being enforced. We are trying to advise clients as to whether it is actually a statute or it is not and where to make their commercial decisions. That is a very difficult situation. We need to resolve that urgently.²⁵³
- 4.36'** The NSW EPA told the committee that it understands stakeholders' frustrations and has a working party to devise '... possibilities with which we might more effectively manage waste so it does not get transported huge distances'.²⁵⁴

Tracking system and licences

- 4.37'** In accordance with the Protection of the Environment Operations (Waste) Regulation 2014, when 10 tonnes or more of waste generated in the MLA is transported outside of New South Wales, the shipment must be tracked.²⁵⁵ The waste consignor has the legal obligation to ensure the transported waste transported is properly tracked. However, Mr Khoury expressed concern that the tracking system was not being used:

I am not confident that transporters are using that system. The reason I am not confident of that is because if they used that system and they reported each and every

²⁵⁰ Evidence, Mr Buffier, 17 August 2017, p 74.

²⁵¹ Evidence, Mr Buffier, 17 August 2017, p 63.

²⁵² Submission 145, Suez, p 4.

²⁵³ Evidence, Mr Ritchie, 7 August 2017, p 13.

²⁵⁴ Evidence, Mr Buffier, 17 August 2017, p 72.

²⁵⁵ Protection of the Environment Operations (Waste) Regulation 2014, section 65. Also see, NSW EPA, *Tracking waste from the Metropolitan Levy Area*, (4 October 2017) <http://www.epa.nsw.gov.au/your-environment/waste/tracking-waste-mla>. Exclusions for this requirement are legislated under the Protection of the Environment Operations (Waste) Regulation 2014.

transaction that they were transporting interstate they would be dobbing themselves in in contravention of the proximity principle.²⁵⁶

4.38' Despite these concerns, the Waste Management Association of Australia supported a national waste tracking system: 'At a minimum, all States and Territories should have a common waste tracking system in order that these issues can be better tracked and understood'.²⁵⁷

4.39' As for whether rail operators require an environment protection licence to send waste to Queensland, the committee received conflicting evidence. Mr Khoury explained that the NSW EPA has said that a licence is required, however certain operators dispute this assertion and are operating without a licence:

Rail operators who are currently loading containers of waste and sending them north dispute the fact that they need to be licensed by the EPA. On the other hand, the EPA say that those waste rail facilities need to be licensed by the EPA ... In respect of a level playing field, other legitimate waste operators operating from Clyde and Banksmeadow are expected to hold an EPA facility licence to comply with their operating conditions to transfer waste by rail.²⁵⁸

4.40' Mr Khoury added: 'The industry simply does not understand why the regulator has not moved to swiftly enforce the law that requires a rail operator to hold a waste facility licence. It allows waste movements by rail to go north without a waste facility licence'.²⁵⁹ The association said that while it has not discussed this issue with the Hon Gabrielle Upton MP, Minister for the Environment, this concern has been raised with other environment ministers.²⁶⁰

4.41' The NSW EPA advised that it was aware of these concerns and is investigating the matter: 'There is an active investigation into what we believe is a facility operating without a licence. We are finalising that investigation. That facility has a different view to us, so we are working through that, and I am hoping to resolve that and commence proceedings shortly'.²⁶¹

Committee comment

4.42' The committee acknowledges that the NSW EPA has attempted to regulate the interstate transportation of waste, albeit with no success. Figures show that the amount of waste being transferred interstate is growing.

4.43' We also note that there is confusion within the waste industry as to whether operators require an environment protection licence to send waste interstate via rail. We believe the NSW EPA should have acted quickly and decisively to resolve this issue. As discussed throughout this report, the NSW EPA must provide a level regulatory playing field to ensure legitimate waste operators are not disadvantaged by operators who act unlawfully.

²⁵⁶ Evidence, Mr Khoury, 17 August 2017, p 4.

²⁵⁷ Submission 215a, Waste Management Association of Australia, p 1.

²⁵⁸ Evidence, Mr Khoury, 17 August 2017, p 10.

²⁵⁹ Evidence, Mr Khoury, 17 August 2017, p 10.

²⁶⁰ Evidence, Mr Khoury, 17 August 2017, p 11.

²⁶¹ Evidence, Mr Buffier, 17 August 2017, p 67.

4.44 We accept that the NSW EPA looked to overseas jurisdictions to replicate other successful policies in introducing the proximity principle as a means of addressing the interstate transportation of waste. However, it is unclear why the NSW EPA did not initially consider whether the principle contravenes s 92 of the Commonwealth Constitution. Moreover, the committee is confounded by the apparent lack of urgency the agency has displayed in finding an alternative to the proximity principle, which we believe has contributed to the growth in the interstate transportation of waste.

Need for nationally consistent framework

4.45 The committee heard that there are two primary options for addressing the interstate transportation of waste: Queensland could re-introduce a waste levy²⁶² or, there could be a nationally consistent framework of levies.²⁶³ Mr Buffier observed that ‘a levy in Queensland would certainly solve the problem overnight’,²⁶⁴ however, he also commented: ‘A national system is preferable when you are talking about market instruments and where they apply, and constitutional issues’.²⁶⁵

4.46 Stakeholders agreed that a national approach to the waste levy is essential.²⁶⁶ Indeed, the Waste Management Association of Australia said a national levy should ‘follow the lead of NSW and provide strong market based instruments to encourage investment in resource recovery’,²⁶⁷ noting that ‘The actual amount of the levy does not necessarily need to be consistent in every state or region’.²⁶⁸ HZI Australia, on the other hand, supported a harmonised levy set at the New South Wales level or even higher.²⁶⁹

4.47 The NSW EPA advised that the Heads of the EPA, a collection of leaders from the various authorities across Australia, have initiated a waste subcommittee to consider a national solution to the problem of interstate dumping of waste.²⁷⁰ However, Mr Buffier acknowledged the ‘glacial pace’ of national solutions.²⁷¹

²⁶² See, Evidence Mr Ritchie, 7 August 2017, p 10; Evidence, Mr Malouf, 17 August 2017, p 44.

²⁶³ See, Evidence, Ms Bremmer, 27 June 2017, p 39; Submission 170, MRA Consulting Group, p 1; Submission 179, HZI Australia, p 2; Submission 215a, Waste Management Association of Australia, p 1.

²⁶⁴ Evidence, Mr Buffier, 17 August 2017, p 63.

²⁶⁵ Evidence, Mr Buffier, 17 August 2017, p 71.

²⁶⁶ See, Submission 215, Waste Management Association of Australia, p 3. Also see, Evidence, Ms Sloan, 26 June 2017, p 21, Submission 144, The Australian Council of Recycling, p 3.

²⁶⁷ Submission 215, Waste Management Association of Australia, p 3. Also see, Evidence, Ms Sloan, 26 June 2017, p 21.

²⁶⁸ Submission 215a, Waste Management Association of Australia, p 1. Also see, Evidence, Ms Sloan, 26 June 2017, p 21.

²⁶⁹ Submission 179, HZI Australia, p 2.

²⁷⁰ Evidence, Mr Beaman, 26 June 2017, p 7.

²⁷¹ Evidence, Mr Buffier, 24 November 2017, p 9.

Committee comment

- 4.48'** The committee notes that the re-introduction of a waste levy in Queensland would immediately address the interstate transportation of waste from New South Wales. We note the Queensland Government's intention to take this action.
- 4.49'** However, more broadly we also believe that a national approach to waste levies would be preferable, acknowledging that such a solution would take some time to develop and implement. Accordingly, pursuing this approach to the exclusion of all others is undesirable. We note that stakeholders supported pursuing a relatively high, but not necessarily consistent, national waste levy and recommend that the NSW EPA and its interstate counterparts consider this proposal as part of a national approach to addressing this issue. More immediately, we recommend that the NSW EPA develop and implement a state-wide approach to ending the interstate transportation of waste.

Recommendation 14

That the NSW Environment Protection Authority:

- develop and implement a state-wide approach to ending the interstate transportation of waste
 - pursue a national approach to addressing the interstate transportation of waste in collaboration with its counterparts in other jurisdictions.
-

Chapter 5 Energy from waste

This chapter details the debate about employing energy from waste technologies and the regulation of this technology in New South Wales, specifically with regard to feedstock, emissions, the need for a reference facility and gaining a social licence to operate. It also considers siting considerations and the need for greater certainty in the planning process.

Debate about energy from waste technology

5.1 As noted in Chapter 1, energy from waste is an umbrella term that captures certain technologies. Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, broadly explained the concept: ‘The energy recovery from waste is the conversion of non-recyclable waste materials into useable heat, electricity or fuel through a variety of processes, including combustion, gasification, pyrolysis, anaerobic digestion and landfill gas recovery’.²⁷²

5.2 There was a great deal of debate during the inquiry about using energy from waste technologies.²⁷³ Various inquiry participants, including some environmental organisations, certain local councils, and residents’ groups in western Sydney, presented arguments opposing energy from waste. In summary, these arguments were that:

- the technologies are not environmentally sound, for example combustion technologies were referred to as ‘dinosaurs’,²⁷⁴ ‘a mediaeval approach of putting rubbish on a fire’,²⁷⁵ and ‘landfills in the sky instead of landfills in the ground’²⁷⁶
- energy from waste presents an unreasonable risk to human health and the environment²⁷⁷
- these technologies are only marginally more efficient than landfill²⁷⁸
- the focus on diversion from landfill rates is ‘greenwashing’, as energy from waste may result in the stockpiling of waste²⁷⁹
- these technologies will undermine resource recovery as recyclables will be ‘cannibalised’ and included in the feedstock for energy from waste projects²⁸⁰

²⁷² Evidence, Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, 7 August 2017, p 38. Also see, Submission 145, Suez, pp 1-2.

²⁷³ As noted above, while there are various energy from waste technologies, a great deal of evidence focused on the thermal treatment of waste.

²⁷⁴ Submission 172, National Toxics Network, p 6.

²⁷⁵ Evidence, Cr Stephen Bali, Mayor, Blacktown City Council, 27 June 2017, p 26.

²⁷⁶ Evidence, Ms Jo Immig, Coordinator, National Toxics Network, 27 June 2017, p 38. Also see, Submission 54, Mr Rodney Lane, p 1.

²⁷⁷ See, Evidence, Ms Immig, 27 June 2017, p 35; Submission 4, Total Environment Centre, p 1; Submission 173, Jacfin, p 2; Submission 173a, Jacfin, p 3.

²⁷⁸ Submission 173a, Jacfin, p 3.

²⁷⁹ Submission 4, Total Environment Centre, p 1 and 6.

- the use of combustion technologies discourages waste organisations from employing effective source separation²⁸¹
- these technologies discourage the circular economy²⁸²
- energy from waste technologies are not a form of renewable energy²⁸³
- there is a limited market in Australia for the use of residual energy to heat homes²⁸⁴
- it can be challenging to update technology,²⁸⁵ for example, retrofitting emissions control technology places a significant financial burden on energy from waste projects²⁸⁶
- projects demand long-term contracts for the supply of waste, thus posing a significant financial risk, and have caused some cities to face bankruptcy²⁸⁷
- thermal treatment facilities are an expensive form of waste disposal and 'renewable energy' production²⁸⁸
- it is irresponsible to spend significant funds on managing residual waste.²⁸⁹

5.3 On the other hand, other stakeholders, including the NSW Environment Protection Authority (NSW EPA), waste management organisations and some local councils advocated the use of energy from waste. The following statement from the NSW EPA summarised many of the arguments in favour of energy from waste:

We believe that energy recovery from waste is a genuine part of a modern, integrated waste management strategy. The thermal treatment of waste is an opportunity to recover the embodied energy, offset the use of non-renewable energy sources, reduce disposal of waste to landfill and avoid long-term methane emissions from landfilled waste. Many of the leading waste management jurisdictions around the world include some level of energy recovery in their policy mix.²⁹⁰

5.4 The key arguments presented to the committee supporting energy from waste included that:

- energy from waste is a means of energy recovery and not waste disposal²⁹¹

²⁸⁰ See, Evidence, Cr Bali, 27 June 2017, p 25; Submission 4, Total Environment Centre, p 2.

²⁸¹ Submission 172, National Toxics Network, p 4.

²⁸² Submission 214, Blacktown City Council, p 7.

²⁸³ Submission 172, National Toxics Network, p 4.

²⁸⁴ Submission 214, Blacktown City Council, p 18.

²⁸⁵ See, Submission 167, NSROC, p 3; Submission 214, Blacktown City Council, p 18.

²⁸⁶ Submission 172, National Toxics Network, p 13.

²⁸⁷ Evidence, Ms Immig, 27 June 2017, p 35.

²⁸⁸ Submission 172, National Toxics Network, p 5.

²⁸⁹ Evidence, Ms Bremmer, 27 June 2017, p 41.

²⁹⁰ Evidence, Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery, NSW EPA, 26 June 2017, p 3.

²⁹¹ See, Submission 145, Suez, pp 1-2; Submission 146, Randwick City Council, p 2; Submission 215, Waste Management Association of Australia, p 4.

- the waste hierarchy dictates that it is preferable to recover energy from a residual material rather than disposing of it, as is current practice²⁹²
- when using best practice technologies, energy from waste produces less harmful emissions than landfill and can assist in reaching renewable energy goals²⁹³
- these technologies can be a viable alternative to landfill²⁹⁴
- energy from waste can be used to manage waste closer to where it is generated²⁹⁵
- using this technology will not unduly impact resource recovery as evidenced by countries with high resource recovery rates that also employ energy from waste²⁹⁶
- the *NSW Energy from Waste Policy Statement* – specifically the resource recovery criteria – supports the waste hierarchy and promotes recycling prior to using energy from waste²⁹⁷
- modern energy from waste facilities can adapt to upstream changes in waste recycling and will not discourage advances in recycling²⁹⁸
- these technologies are used extensively overseas²⁹⁹
- energy from waste technologies can assist councils to achieve the waste diversion targets set out in the *NSW Waste Avoidance and Resource Recovery Strategy*³⁰⁰

²⁹² See, Evidence, Mr Beaman, 26 June 2017, p 10; Evidence, Ms Gayle Sloan, Chief Executive Officer, Waste Management Association of Australia, 26 June 2017, p 29; Submission 141, Toxfree Australia, p 2; Submission 143, New Energy Corporation, p 3; Submission 146, Randwick City Council, p 2; Submission 154, Hunter Joint Organisation of Councils, p 5; Submission 156, Sutherland Shire Council, p 2; Submission 158, Hunters Hill Council, p 2; Submission 170, MRA Consulting Group, p 2; Submission 190, National Waste and Recycling Industry Council, p 2; Submission 198, City of Sydney, p 1; Submission 291, Outotec, p 2; Submission 326, Local Government NSW, p 5.

²⁹³ See, Submission 189, Clean Energy Finance Corporation, pp 1-2; Evidence, Mr Mike Ritchie, Managing Director, MRA Consulting Group, 7 August 2017, p 11.

²⁹⁴ See, Evidence, Mr Grant Musgrove, Chief Executive Officer, Australian Council of Recycling, 26 June 2017, p 40; Evidence Mr Ritchie, 7 August 2017, p 11; Submission 145, Suez, pp 1-2; Submission 164, Alexandria Landfill, p 28; Submission 215, Waste Management Association of Australia, p 3; Submission 216, Re.Group, p 6.

²⁹⁵ Submission 176, SSROC, p 2.

²⁹⁶ See, Evidence, Mr Henry Anning, Sector Lead for Bioenergy, Clean Energy Finance Corporation, 26 June 2017, p 34; Evidence, Associate Professor McCabe, 7 August 2017, p 40; Submission 143, New Energy Corporation, p 3; Submission 149, Wollongong City Council, p 2; Submission 154, Hunter Joint Organisation of Councils, p 5.

²⁹⁷ See, Submission 141, Toxfree Australia, p 3; Submission 146, Randwick Council, p 2; Submission 154, Joint Hunter Organisation of Councils, p 6; Submission 170, MRA Consulting Group, p 2; Submission 215, Waste Management Association of Australia, p 7; Submission 216, Re.Group, p 4; Submission 326, Local Government NSW, p 5.

²⁹⁸ Submission 215, Waste Management Association of Australia, p 9. Also see, Submission 179, HZI Australia, p 6.

²⁹⁹ Evidence, Mr Roger Bligh, Sales Director, Metal, Energy and Water, Outotec South-East Asia Pacific, 7 August 2017, p 45; Submission 47, Mrs Cheryle Brack, p 1; Submission 115, Cleanaway, p 4; Submission 170, MRA Consulting Group, p 3.

- this technology may provide cheaper power to communities³⁰¹
- energy from waste is a 'renewable energy source' that can be used across all three energy sectors—namely, through the production of bioelectricity, heat and liquid biofuels³⁰²
- energy from waste can provide 'firm' electricity and can complement 'variable' energy sources such as solar and wind³⁰³
- residual energy can be used to heat homes, as is common in Europe³⁰⁴
- this technology makes it possible to exploit cogeneration opportunities,³⁰⁵ for example, the use of residual heat energy to develop agriculture³⁰⁶
- the energy from waste market in New South Wales is 'ripe for further investment',³⁰⁷ as evidenced by the large and increasing population and associated growth in waste production, population density, high cost and lack of land, and high landfill gate fees³⁰⁸
- upgrading energy from waste technology is reasonably easy due to the modular nature of facilities³⁰⁹
- energy from waste facilities licensed under the *Industrial Emissions Directive for waste incineration and co-incineration plants (Directive 2010/75/EU)* must adhere to Best Available Technology requirements which are regularly reviewed and updated as appropriate³¹⁰
- energy from waste projects create employment opportunities.³¹¹

³⁰⁰ See, Submission 326, Local Government NSW, p 3; Evidence, Mr Mark Roebuck, Manager, City Works and Services, Wollongong City Council, 7 August 2017, p 27; Evidence, Mr Chris Derksema, Sustainability Director, City of Sydney, 7 August 2017, p 19; Submission 146, Randwick City Council, p 1; Submission 150, WSROC, pp 4-5; Submission 154, Hunter Joint Organisation of Councils, p 5; Submission 167, NSROC, p 1.

³⁰¹ Submission 141, Toxfree Australia, p 3.

³⁰² Evidence, Associate Professor McCabe, 7 August 2017, p 38.

³⁰³ Evidence, Mr Tim Jordan, Head of Research, Clean Energy Finance Corporation, 26 June 2017, p 36. Also see, Submission 164, Alexandria Landfill, p 27; Submission 215, Waste Management Association of Australia, p 9; Submission 141, Toxfree Australia, p 2.

³⁰⁴ Evidence, Mr Bligh, 7 August 2017, p 46.

³⁰⁵ Evidence, Associate Professor McCabe, 7 August 2017, p 39.

³⁰⁶ See, Evidence, Mr Stephen Sasse, Chief Executive Officer, Nectar Farms, 17 August 2017, pp 12-13.

³⁰⁷ Submission 189, Clean Energy Finance Corporation, p 2.

³⁰⁸ Submission 189, Clean Energy Finance Corporation, p 2. Also see, Submission 115, Cleanaway Waste Management, p 3.

³⁰⁹ See, Submission 146, Randwick City Council, p 3; Submission 170, MRA Consulting Group, p 3; Submission 179, HZI Australia, p 6; Submission 215, Waste Management Association of Australia, p 9.

³¹⁰ Submission 215, Waste Management Association of Australia, p 9. Also see, Submission 141, Toxfree Australia, p 4.

³¹¹ Submission 189, Clean Energy Finance Corporation, p 2.

Committee comment

- 5.5'** The committee acknowledges that there is significant concern amongst some stakeholders about energy from waste, particularly around whether these technologies, specifically combustion technology, pose an undue risk to human health and the environment.
- 5.6'** Having said this, the committee also recognises the importance of managing waste in accordance with the waste hierarchy and the *NSW Waste Avoidance and Resource Recovery Act 2001*, which dictate that energy recovery is preferable to disposal. It is clear that in New South Wales, the current dependence on landfill is unsustainable, and that local councils and the NSW Government must work collaboratively to deliver suitable alternatives for waste management. Ultimately, energy from waste technologies will be one component of this solution, only after a significant shift up the waste hierarchy to avoid, reduce and re-use waste and the issues of social license, air pollution impacts and health risks have been addressed.
- 5.7'** We also believe it is important to emphasise that the *NSW Energy from Waste Policy Statement* only allows residual waste to be used as feedstock in energy from waste projects, and that the policy includes resource recovery criteria to ensure recyclables are not included in the fuel mix.

Regulation of energy from waste

- 5.8'** As noted in Chapter 1, energy from waste technology is primarily regulated by the *NSW Energy from Waste Policy Statement*. The policy is administered by the NSW EPA. While many stakeholders supported the NSW EPA in this role,³¹² others stated that they had little 'faith' the agency can adequately regulate energy from waste.³¹³ The NSW EPA's regulatory role is examined in Chapter 7. In addition, the approval process for state significant sites is the responsibility of the NSW Department of Planning and Environment and is discussed in Chapter 6.
- 5.9'** There was some debate during the inquiry about the *NSW Energy from Waste Policy Statement*, with some inquiry participants supporting the policy,³¹⁴ and others critical of it.³¹⁵ One significant concern raised about the policy was that it lacked sufficient supporting information to provide a clear understanding of expected standards and outcomes.

³¹² See, Submission 170, MRA Consulting Group, p 3; Submission 179, HZI Australia, p 6; Submission 143, New Energy Corporation, p 5; Submission 198, City of Sydney, p 6; Submission 146, Randwick City Council, p 3; Submission 156, Sutherland Shire Council, p 3; Evidence, Ms Sloan, 26 June 2017, p 23; Submission 149, Wollongong City Council, p 2.

³¹³ See, Evidence, Ms Melinda Wilson, No Incinerator for Western Sydney, 27 June 2017, p 44; Evidence, Mr Antony Lewis, Secretary, Blacktown and District Environment Group, 27 June 2017, p 44.

³¹⁴ See, Evidence, Mr Ritchie, 7 August 2017, p 10; Submission 215, Waste Management Association of Australia, p 9; Evidence, Mr Jordan, 26 June 2017, p 31; Submission 216, Re.Group, p 6; Submission 182, Waste Contractors and Recyclers Association of NSW, p 2; Evidence, Mr Derksema, 7 August 2017, p 19.

³¹⁵ See, Evidence, Ms Immig, 27 June 2017, p 35; Submission 172, National Toxics Network, pp 6 and 8; Submission 173a, Jacfin, p 2; Tabled document, Dr James Whelan, Researcher and Community Organiser, Environmental Justice Australia, *A checklist for responsible air pollution management*, August 2017, p 3.

The National Toxics Network expressed concern about the emergence of the New South Wales *Energy from Waste Policy Statement* as it seemed to appear out of nowhere and without a robust community debate. They considered it a flawed policy with internal inconsistencies including a lack of key guidance material and inadequate provisions for managing air pollution and toxic ash produced by waste incinerators.³¹⁶ This concern is explored throughout this chapter and in Chapter 6.

Protecting human health and the environment

- 5.10'** Inquiry participants highlighted that any energy from waste project, and the associated policy, should effectively manage risks to human health and the environment.³¹⁷ Indeed, the NSW EPA described this imperative as 'paramount'.³¹⁸
- 5.11'** NSW Health advised that determining the potential human health risks posed by a project requires an understanding of the possible emissions. Moreover, the characteristics of emissions are determined by:
- the amount and type of feedstock
 - the combustion processes used
 - the efficiency of air pollution control technologies employed.³¹⁹
- 5.12'** Dr Ben Scalley, Director of Environmental Health Branch at NSW Health, noted that it is also important to consider the extent to which the population is exposed to emissions and the susceptibility of the population in the surrounding area. Dr Scalley added: 'Exposure and susceptibility will depend on the location of that facility and the demographic and health characteristics of the population around that area, especially socio-economic disadvantage'.³²⁰
- 5.13'** NSW Health emphasised the need to consider the potential health risks posed by an energy from waste facility on a case-by-case basis:
- As health risks associated with any energy from waste facility will be specific to the facility, any assessment of the overall benefit of a facility needs to be done on a case-by-case basis, especially when the feedstock can differ so broadly. Broad statements are really difficult in this area.³²¹
- 5.14'** The committee's attention was also drawn to the need to manage and negotiate risks. Dr Scalley noted that many activities, including emissions from coal-powered energy facilities

³¹⁶ Evidence, Ms Immig, 27 June 2017, p 35.

³¹⁷ See, Submission 170, MRA Consulting Group, p 2; Submission 179, HZI Australia, p 2; Submission 215, Waste Management Association of Australia, p 4.

³¹⁸ Evidence, Mr Beaman, 26 June 2017, p 3.

³¹⁹ Evidence, Dr Ben Scalley, Director, Environmental Health Branch, NSW Health, 7 August 2017, p 2.

³²⁰ Evidence, Dr Scalley, 7 August 2017, p 2.

³²¹ Evidence, Dr Scalley, 7 August 2017, pp 2-3.

and transport, increase risks to human health and the environment.³²² However, he said it is important to balance risks against potential positive outcomes.³²³

- 5.15^{*} To mitigate possible risks to human health and the environment, the *NSW Energy from Waste Policy Statement* requires that projects meet international best practice techniques in relation to process design and control, emission control equipment design and control, emission monitoring, arrangements for receipt of waste, and management of residues from the energy recovery process.³²⁴ *Directive 2010/75/EU* is the primary instrument used to regulate energy from waste facilities in the European Union and was considered the international best practice benchmark by many inquiry participants.³²⁵
- 5.16^{*} In addition to referencing international best practice techniques, the *NSW Energy from Waste Policy Statement* articulates other safeguards to minimise risks to human health and the environment, including identifying eligible waste fuels, technical criteria, thermal efficiency criteria, resource recovery criteria, the need for a reference facility, and that the facility, at a minimum, comply with the requirements of the Group 6 emission standards within the Protection of the Environment Operations (Clean Air) Regulation 2010.³²⁶

Feedstock

- 5.17^{*} As noted earlier, the fuel mix, in other words the amount and type of feedstock being fed into an energy from waste facility, affects emissions. As Dr Scalley put it, ‘... it is important that we know what is being burnt in the energy from waste process in order to properly assess the potential health risks from the air pollution coming out of the facility’.³²⁷
- 5.18^{*} Inquiry participants debated whether the *NSW Energy from Waste Policy Statement* adequately regulates feedstock for facilities. This was a key concern regarding the proposed facility at Eastern Creek and is examined Chapter 6.
- 5.19^{*} In New South Wales, only residual waste can be used in an energy from waste facility. The National Toxics Network was concerned that residual waste streams often contain hazardous materials, including plastics, and said: ‘Burning residual waste is known to generate toxic and hazardous air pollutants’.³²⁸ Likewise, the Total Environment Centre stated: ‘Mixed waste has high levels of contamination ... The thermal treatment of waste that is

³²² Evidence, Dr Scalley, 7 August 2017, p 2. Also see, Evidence, Mr Bligh, 7 August 2017, p 48; Evidence, Dr Marc Stammach, Managing Director, HZI Australia, 17 August 2017, p 12.

³²³ Evidence, Dr Scalley, 7 August 2017, p 2.

³²⁴ NSW EPA, *NSW Energy from Waste Policy Statement* (2015), p 6.

³²⁵ See, Evidence, Mr Ritchie, 7 August 2017, pp 16-17; Submission 145, Suez, p 3; Submission 146, Randwick City Council, p 2.

Note, the Director-General’s Environment Assessment Requirements for the proposed energy from waste facility at Eastern Creek refers to the European Union’s *Waste Incineration Directive 2000* (see, http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6236); this directive was replaced by the *Industrial Emissions Directive for waste incineration and co-incineration plants (Directive 2010/75)* from January 2014.

³²⁶ NSW EPA, *NSW Energy from Waste Policy Statement* (2015), pp 5-7.

³²⁷ Evidence, Dr Scalley, 7 August 2017, p 2.

³²⁸ Submission 172, National Toxics Network, p 4.

unsorted will result in the release of dangerous pollution no matter what technology or management regimes are in place'.³²⁹

- 5.20'** Other stakeholders argued that the *NSW Energy from Waste Policy Statement* – via the technology requirements and the resource recovery criteria – goes some way to addressing concerns about how a facility manages its feedstock. For example, Mr Mike Ritchie, Managing Director of MRA Consulting Group, remarked that the NSW EPA has 'rightly' erred on the side of caution by requiring a proponent to have technology that is robust enough to manage any waste stream, ensuring there is less reliance on whether the feedstock has been appropriately sorted.³³⁰
- 5.21'** The resource recovery criteria in the policy detail the type of waste that may be used as feedstock, depending on factors such as waste stream and source separation. As previously mentioned, certain stakeholders suggested that these criteria, when appropriately policed, are sufficient to ensure recyclables are not included in the waste streams servicing facilities.
- 5.22'** Inquiry participants proposed that the policy should include additional guidance, such as:
- requiring energy from waste proposals to demonstrate how inappropriate objects will be excluded from the waste stream³³¹
 - requiring all commercial and industrial waste to be either pre-sorted and shredded or sorted and shredded at the facility prior to the combustion process³³²
 - requiring all waste entering the facility to be validated through a pre-treatment off-site process transfer station³³³
 - providing a definition of a 'processing facility' in relation to the resource recovery criteria³³⁴
 - encouraging a greater focus on emissions standards rather than detailed regulation of inputs.³³⁵
- 5.23'** As noted in Chapter 1, the NSW EPA anticipates releasing the *Energy Recovery Facility Guidelines* in early 2018.³³⁶

³²⁹ Submission 4, Total Environment Centre, p 4.

³³⁰ Evidence, Mr Ritchie, 7 August 2017, pp 12-13.

³³¹ Submission 214, Blacktown City Council, p 17.

³³² Submission 214, Blacktown City Council, p 17.

³³³ Evidence, Cr Bali, 27 June 2017, p 25.

³³⁴ Evidence, Mr Ritchie, 7 August 2017, p 12.

³³⁵ See, Evidence, Mr Ritchie, 7 August 2017, p 12; Submission 144, Australian Council of Recycling, p 3.

³³⁶ NSW EPA, *Energy Recovery Facility* (25 August 2017), <https://www.epa.nsw.gov.au/your-environment/waste/waste-facilities/energy-recovery>.

Emissions

- 5.24¹ The committee heard that it is ‘non-negotiable’ for a proposed energy from waste facility to meet emissions standards.³³⁷ The Clean Energy Finance Corporation emphasised the need for a strong regulatory system for air quality and emissions: ‘Air quality and management of emissions is critically important for human health and community acceptance of energy from waste facilities, particularly in populated areas’.³³⁸
- 5.25¹ The Australian Government has carriage of the *National Environment Protection Council Act 1994* (Cth) which provides for the National Environment Council to set National Environment Protection Measures to protect and manage aspects of the environment, including ambient air emissions.³³⁹ In addition, NSW Health advised that certain state agencies, and in some cases industry, have a role in regulating and monitoring emissions:
- ... the Environmental Protection Agency is the regulator for air quality in New South Wales. The person who monitors in New South Wales the non-ambient air quality impacts is the Office of Environment and Heritage. Some monitoring is also done by the industry in different areas.³⁴⁰
- 5.26¹ Key standards and monitoring requirements for energy from waste facilities in New South Wales include:
- the National Environment Protection (Ambient Air Quality) Measure, which provides a nationally consistent framework for monitoring and reporting (on a 24 hour and annual basis) on common ambient air pollutants including carbon monoxide, lead, nitrogen dioxide, photochemical oxidants (ozone), sulfur dioxide and particulate matter, such as PM10 and PM2.5³⁴¹
 - the *NSW Energy from Waste Policy Statement*, which as noted above includes provisions for emissions standards and monitoring (including continuous and non-continuous monitoring of certain emissions) that reflect the European Union’s *Directive 2010/75/EU* and the Group 6 emission standards within the Protection of the Environment Operations (Clean Air) Regulation 2010
 - licensing conditions set by the NSW EPA.
- 5.27¹ In addition, in 2016, the NSW EPA released *Approved methods for the modelling and assessment of air pollutants in NSW*, which details the statutory methods to be used for modelling and assessing emissions of air pollutants. The NSW EPA refers to these methods when assessing air quality

³³⁷ Evidence, Mr Ron Wainberg, National Chair, Resource and Energy, Recovery Division, Waste Management Association of Australia, 26 June 2017, p 28.

³³⁸ Submission 189, Clean Energy Finance Corporation, p 3.

³³⁹ National Environment Protection Council, *National Environment Protection Measures*, <http://www.nepc.gov.au/nepms>.

³⁴⁰ Evidence, Dr Scalley, 7 August 2017, p 6.

³⁴¹ Australian Government, Department of Environment and Energy, *Air quality standards*, <http://www.environment.gov.au/protection/air-quality/air-quality-standards>. Also see, SLR Consulting, *National Environment Protection (Ambient Air Quality) Measure Update 2016* (19 June 2016), <https://slrconsulting.com/au/news/2016/national-environment-protection-ambient-air-quality-measure-update-2016>.

impact assessments submitted as part of a planning application, and may also refer to them in licences and notices issued under the *Protection of the Environment Operations Act 1997*.³⁴²

5.28' While certain stakeholders supported the emissions regime,³⁴³ other inquiry participants raised concerns about the possible emissions from energy from waste plants, including:

- difficulty in determining emissions, and consequently assessing potential health risks, when feedstock is not clearly articulated and/or is sourced from a variety of locations³⁴⁴ (this issue is examined in Chapter 6)
- emissions of particulate matter and gases, and particles from specific chemicals, will impact air quality and are associated with health risks³⁴⁵
- combusting residual waste will lead to emissions of persistent organic pollutants (POPs) such as dioxins and furans³⁴⁶
- New South Wales emission limits do not meet international best practice standards³⁴⁷
- reliance on international best practice standards will not control the release POPs and other hazardous pollutants³⁴⁸
- New South Wales regulatory controls are outdated and have not been written to properly consider energy from waste technology³⁴⁹
- the NSW EPA's licensing conditions do not adequately reflect emissions standards³⁵⁰
- emissions monitoring at energy from waste facilities is post incineration (testing releases from the smoke stack) and is 'nothing more than closing the gate after the horse has bolted'³⁵¹
- the use of 'grab samples' – that is the non-continuous emissions monitoring – is a 'significant flaw'.³⁵²

³⁴² NSW EPA, *Modelling and assessing air emissions* (29 September 2017), <https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/modelling-assessing-air-emissions>.

³⁴³ See, Evidence, Mr Ritchie, 7 August 2017, pp 16-17; Submission 145 Suez, p 4; Submission 164, Alexandria Landfill, p 47.

³⁴⁴ Evidence, Dr Scalley, 7 August 2017, p 2.

³⁴⁵ Evidence, Dr Scalley, 7 August 2017, p 2.

³⁴⁶ Evidence, Ms Immig, 27 June 2017, p 35; Evidence, Ms Bremmer, 27 June 2017, p 38.

³⁴⁷ See, Evidence, Ms Bremmer, 27 June 2017, p 36; Evidence Ms Immig, 27 June 2017, p 36; Submission 214, Blacktown City Council, p 15.

³⁴⁸ Submission 172, National Toxics Network, p 11. Also see, Evidence, Ms Bremmer, 27 June 2017, p 38.

³⁴⁹ See, Evidence, Cr Bali, 27 June 2017, p 25; Evidence, Mr Gerald Barr, 27 June 2017, p 50.

³⁵⁰ Evidence, Dr James Whelan, Researcher and Community Organiser, Environmental Justice Australia, 17 August 2017, p 27.

³⁵¹ Submission 4, Total Environment Centre, p 4.

³⁵² Submission 172, National Toxics Network, p 11.

- 5.29** The National Toxics Network and The Total Environment Centre were also concerned about the toxicity of the residual ash created by energy from waste plants, arguing that dioxins and other POPs may leach into the food chain and groundwater if not securely landfilled.³⁵³
- 5.30** Dr James Whelan, Researcher and Community Organiser at Environmental Justice Australia, provided evidence that there are no enforceable national standards for criteria pollutants, which include fine particle pollution PM2.5 or coarse particles PM10.³⁵⁴
- 5.31** The committee received numerous proposals to improve the emissions regime, including:
- emissions standards should be continually updated to reflect improvements in technology, and licensing conditions should be revised accordingly³⁵⁵
 - mandating the use of biomonitoring in environments surrounding energy from waste facilities, and testing eggs, meat and vegetation in these areas³⁵⁶
 - support for continuous emissions monitoring and the suggestion that significant penalties should apply for non-compliance³⁵⁷
 - compulsory online broadcasting of real time emission testing data online³⁵⁸
 - mandatory monthly testing of heavy metals, polycyclic aromatic hydrocarbons, and chlorinated dioxins and furans³⁵⁹
 - requiring a proponent to obtain accurate baseline data to determine whether the plant is adversely impacting on the air quality once operations commence³⁶⁰
 - setting up monitoring stations in residential areas to ensure there is no impact on local communities³⁶¹
 - local councils and the NSW EPA should work together to monitor energy from waste plants, and the cost of these resources could be levied through a licensing fee on the facility.³⁶²

³⁵³ Submission 172, National Toxics Network, p 4 and Submission 4, Total Environment Centre, p 1. Also see Evidence, Ms Immig, 27 June 2017, p 35.

³⁵⁴ Evidence, Dr Whelan, 17 August 2017, p 27.

³⁵⁵ See, Evidence, Dr Whelan, 17 August 2017, p 21; Evidence, Cr Bali, 27 June 2017, p 25; Submission 214, Blacktown City Council, p 20.

³⁵⁶ Submission 172, National Toxics Network, p 12.

³⁵⁷ Submission 174, Blacktown and District Environment Group, p 2.

³⁵⁸ Evidence, Cr Bali, 27 June 2017, pp 25-26; Submission 214, Blacktown City Council, p 17.

³⁵⁹ Evidence, Cr Bali, 27 June 2017, pp 25-26; Submission 214, Blacktown City Council, p 17.

³⁶⁰ Evidence, Cr Bali, 27 June 2017, pp 25-26; Submission 214, Blacktown City Council, p 17.

³⁶¹ Evidence, Cr Bali, 27 June 2017, pp 25-26; Submission 214, Blacktown City Council, p 17.

³⁶² Evidence, Cr Bali, 27 June 2017, pp 25-26; Submission 214, Blacktown City Council, p 17.

- 5.32'** In addition, to assist proponents, Alexandria Landfill proposed that the NSW EPA should provide more comprehensive 'up front' requirements for emissions modelling, including:

Specifying requirements for air quality modelling based on stack concentrations, dispersion rate and areas and specifying operating values or the values proposed as licence limits as the case may be.

Specifying the amount of information required about volatile organic compounds (both chemicals included and the contribution they make); and persistent and bio accumulative chemicals.

Specifying the appropriate toxicity reference values and screening guidelines, health standards and assessment methodology. Specifying the specific scenarios which are required to be assessed to consider the potential human health risks these include including emissions at the IED limit; emissions at the project specific limits and emissions at upset.³⁶³

Reference facility

- 5.33'** As previously noted, the technology used in energy from waste facilities must be proven, well understood and capable of handling the expected variability of the feedstock. The NSW EPA advised that this can be best achieved by referencing fully operational plants using the same technologies, known as 'reference facilities'. Referring to the *NSW Energy from Waste Policy Statement*, the NSW EPA explained the concept of a reference facility:

In the colloquial sense our view is you should be able to go and kick the tyres of it [an energy from waste facility]. We designed the policy to be conservative to make sure that anyone that comes forward we are able to assess another facility elsewhere around the world to make sure it delivers.³⁶⁴

- 5.34'** The application of this provision to the proposal put forward by The Next Generation is examined in Chapter 6. However, more generally, certain stakeholders suggested this provision is restrictive and stifles innovation. For example, Toxfree, which currently operates several thermal treatment facilities in Australia, said the 'strict interpretation' of the reference facility provision 'suffocates innovation and investment and has already driven companies, investment and employment out of the state'.³⁶⁵

- 5.35'** Likewise, New Energy Corporation, the company responsible for developing largescale thermal treatment facilities in Western Australia, said: 'The NSW EfW [energy from waste] policy is currently restrictive with regards to emerging or innovative EfW technologies as they may not be able to demonstrate fully operational reference plants on like waste types'.³⁶⁶ New Energy Corporation continued: 'The requirement for facilities to have reference plants of similar waste and size internationally is effectively preventing newer technologies like

³⁶³ Submission 164, Alexandria Landfill, p 61.

³⁶⁴ Evidence, Mr Beaman, 26 June 2017, p 7.

³⁶⁵ Submission 141, Toxfree Australia, pp 3-4.

³⁶⁶ Submission 143, New Energy Corporation, p 4. Also see Evidence, Mr Jason Pugh, Chief Executive Officer, New Energy Corporation, 26 June 2017, p 16.

gasification that have less developed track record from proceeding with any commercial facilities'.³⁶⁷

- 5.36' Stakeholders proposed various amendments to the reference facility provision, including that:
- the NSW EPA should promote innovative technologies that operate effectively in other jurisdictions³⁶⁸
 - novel facilities be given conditional licences subject to the facility/technology meeting milestones that prove performance and compliance³⁶⁹
 - the NSW EPA develop a mechanism for approving emerging or innovative energy from waste technologies which do not present risk of harm to the environment or health.³⁷⁰

Social licence

- 5.37' The *NSW Energy from Waste Policy Statement* requires operators to be 'good neighbours' and supports effective consultation and communication with the community. There was a consensus from stakeholders that this 'social licence' to operate a facility is of vital importance. For example, Mr Grant Musgrove, Chief Executive Officer of the Australian Council of Recycling, remarked: 'Getting the social licence to operate is everything'.³⁷¹
- 5.38' According to the Australian Industrial Ecology Network, the persistent barrier to obtaining a social licence is the lack of adequate community consultation, which undermines community confidence in energy from waste projects.³⁷² Other inquiry participants similarly expressed concern that the community is often inadequately informed about new or novel technologies.³⁷³
- 5.39' This argument was further supported by the Southern Sydney Regional Organisation of Councils (SSROC) report *Community attitudes towards, and understanding of, Resource Recovery in the SSROC Region, with a focus on Recovering Energy from Waste* (2015), which concluded the SSROC community supported energy from waste, and that concerns about this technology could be overcome with good stakeholder engagement and communication.³⁷⁴

³⁶⁷ Submission 143, New Energy Corporation, p 4.

³⁶⁸ See, Submission 143, New Energy Corporation, p 5; Submission 149, Wollongong City Council, p 3.

³⁶⁹ Submission 141, Toxfree Australia, pp 3-4.

³⁷⁰ Submission 215, Waste Management Association of Australia, p 9.

³⁷¹ Evidence, Mr Musgrove, 26 June 2017, p 41. Also see, Submission 198, City of Sydney, p 5; Submission 175, Australian Industrial Ecology Network, p 9.

³⁷² Waste Management Association of Australia, *Sustainability Guide for Energy from Waste (EfW) Projects and Proposals*, (24 January 2005), <http://www.ecowaste.com.au/content/EfW%20Sustainability%20Guide.pdf>, referred to in Submission 175, Australian Industrial Ecology Network Pty Ltd, p 5.

³⁷³ See, Submission 146, Randwick City Council, p 3; Submission 217, Illawarra Pilot Joint Organisation, p 2.

³⁷⁴ Submission 176, SSROC, Attachment 1, Elton Consulting, *Community attitudes towards, and understanding of, Resource Recovery in the SSROC Region, with a focus on Recovering Energy from Waste: Social*

5.40 Inquiry participants acknowledged that gaining a social licence involves ongoing stakeholder engagement with active participation from government agencies and the proponent of the project.³⁷⁵ Mr Jason Pugh, Chief Executive Officer of New Energy Corporation, emphasised the need to actively engage with the community and address their concerns:

The community is the number one stakeholder in these projects. That is not a throwaway line. They are—it is as simple as that. We really worked hard to make the issues local and relatable. Just saying that energy from waste is done successfully around the world is not good enough for your local community. Effective listening was certainly a priority.³⁷⁶

5.41 Mr Pugh continued: ‘The main point of that is you need to face up to the hard issues. If they are real to the community then they are real. Perceived issues are real and they need to be addressed correctly’.³⁷⁷

5.42 As to the best way to obtain a social licence, the NSW Government has released *NSW Energy from Waste Compliance Table*, which lists activities that are considered when evaluating social licence for a NSW Environmental Trust Grant Application, such as having a consultation and engagement plan, and logging issues raised and responses provided.³⁷⁸ However, there was no consensus amongst inquiry participants as to what constitutes effective community engagement in respect to energy from waste projects. This was particularly evident in the context of the proposed facility at Eastern Creek, examined in Chapter 6.

5.43 The Waste Management Association of Australia published the *Sustainability Guide for Energy from Waste (EfW) Projects and Proposals*, which sets out three elements to facilitate an appropriate level of engagement with the community:

- providing information that is topical, of an appropriate quality and readily accessible
- intimately involving stakeholders in the decision-making process
- maintaining a transparent and accountable process.³⁷⁹

5.44 Likewise, Blacktown City Council observed that proponents should provide accurate, reliable information, particularly around emissions and resource recovery, on a regular basis through a variety of forums to build trust and confidence between themselves and the community.³⁸⁰

Research Study Report, December 2015, p 6. Also see, Evidence, Ms Hazel Storey, Strategic Coordinator, Resource Recovery and Waste, SSROC, 7 August 2017, p 28.

³⁷⁵ See, Submission 167, NSROC, p 2; Submission 145, Suez, p 3.

³⁷⁶ Evidence, Mr Pugh, 26 June 2017, p 15.

³⁷⁷ Evidence, Mr Pugh, 26 June 2017, p 15.

³⁷⁸ NSW EPA, *NSW Energy from Waste Compliance Table*, p 5, <http://www.environment.nsw.gov.au/resources/grants/160208-energy-compliance-PPW.pdf>

³⁷⁹ Waste Management Association of Australia, *Sustainability Guide for Energy from Waste (EfW) Projects and Proposals*, (24 January 2005), <http://www.ecowaste.com.au/content/EfW%20Sustainability%20Guide.pdf>, pp 21-22, referred to in Submission 175, Australian Industrial Ecology Network Pty Ltd, p 5.

³⁸⁰ Submission 214, Blacktown City Council, p 23.

5.45 Another option, presented by Mr Pugh, was to enhance the accessibility of environmental impact assessments: 'These documents are generally 700 pages long and they are highly complex. We believe a more high-level summary document would be far more appropriate for the digestion of community members'.³⁸¹

Siting

5.46 There are no requirements in the *NSW Energy from Waste Policy Statement* dictating specific locations for energy from waste facilities. This led to debate during the inquiry about the appropriate siting of energy from waste facilities. Another related concern was the size of such facilities. These concerns were pertinent to debate regarding The Next Generation proposal and are examined in Chapter 6.

5.47 Key concerns about the siting of energy from waste facilities included:

- the NSW Government has failed to actively plan and locate areas for such facilities³⁸²
- availability of waste tonnage³⁸³ and surety of waste stock³⁸⁴
- access to transport³⁸⁵
- air sheds³⁸⁶
- the cost of land and urban encroachment on industrial land.³⁸⁷

5.48 These issues are examined in relation to all waste infrastructure development in Chapter 8.

Committee comment

5.49 The NSW EPA has an important role in setting the standards for energy from waste facilities. The committee notes that the agency has appropriately erred on the side of caution by requiring energy from waste projects to meet stringent criteria under the *NSW Energy from Waste Policy Statement*, including by referencing international best practice standards. However, we believe that all stakeholders, including proponents and the wider community, would benefit from additional and more specific guidance about energy from waste project requirements, and note that the NSW EPA anticipates publishing *Energy Recovery Facility*

³⁸¹ Evidence, Mr Pugh, 26 June 2017, p 15.

³⁸² See, Submission 182, Waste Contractors and Recyclers Association of NSW, p 2.

³⁸³ Evidence, Mr Bligh, 7 August 2017, p 48; Evidence, Mr Anning, 26 June 2017, p 37; Submission 148, Veolia Australia and New Zealand, p 13; Submission 215, Waste Management Association of Australia, p 10.

³⁸⁴ Evidence, Mr Emmanuel Vivant, Executive Director-Development, Performance and Innovation, Suez Australia, 26 June 2017, p 47; Also see, Submission 145, Suez, pp 3-4; Submission 148, Veolia Australia and New Zealand, p 13.

³⁸⁵ See, Evidence, Mr Wainberg, p 24; Evidence, Mr Mark Taylor, General Manager, NSW Resource Recovery, Veolia, 26 June 2017, p 65; Submission 215, Waste Management Association of Australia, p 10.

³⁸⁶ Submission 215, Waste Management Association of Australia, p 3.

³⁸⁷ Evidence, Mr Musgrove, 26 June 2017, p 41.

Guidelines in early 2018. The committee urges the NSW EPA to release these guidelines as soon as practicable to provide greater certainty in the market and in communities.

- 5.50' We acknowledge concerns among inquiry participants about feedstock provisions in the *NSW Energy from Waste Policy Statement* and note that the NSW EPA has included resource recovery criteria in the policy to ensure waste is appropriately sorted. While the committee supports the use of residual waste for energy from waste facilities in some circumstances, these provisions will need to be rigorously enforced to ensure recyclables are not included in the feedstock.
- 5.51' The committee also recognises that stakeholders are particularly concerned about possible emissions from energy from waste facilities. As noted earlier, and examined in Chapter 6, the *NSW Energy from Waste Policy Statement* requires a proponent to provide a clear and accurate explanation of how their plant will operate to ensure the possible emissions from the facility can be determined. If a proponent is unable to satisfy this requirement the potential risks to human health and the environment cannot be sufficiently determined and the project will not be approved.
- 5.52' We also believe that the emissions regime as reflected in the *NSW Energy from Waste Policy Statement* must be clearly articulated to ensure that proponents and the community have a better understanding of how emissions are regulated and monitored. The committee recommends that the NSW EPA provide more detailed information concerning the emissions regime for energy from waste facilities, including explicit reference to international best practice standards, in the *Energy Recovery Facility Guidelines*.
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Recommendation 15

That the NSW Environment Protection Authority provide more detailed information concerning the emissions regime for energy from waste facilities, including explicit reference to international best practice standards, in the *Energy Recovery Facility Guidelines*.

- 5.53' We note concerns that the NSW EPA may not impose sufficiently stringent licensing conditions on the proposed facility. To overcome these concerns, we recommend that the NSW EPA set licensing conditions that meet current international best practice for emissions standards, and that licensing conditions be drafted so as to incorporate any future improvements in emissions standards.
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Recommendation 16

That the NSW Environment Protection Authority set licensing conditions that meet current international best practice for emissions standards, and that licensing conditions be drafted so as to incorporate any future improvements in emissions standards

- 5.54' The committee understands that reference facilities provide a level of assurance that an energy from waste facility using the same feedstock and technology can operate successfully.
-

Given that this is a relatively new technology in Australia, we support the requirement that proponents of such projects provide reference facilities. Indeed, we believe it is likely that once there are large-scale energy from waste facilities operating in other states, these technologies will be brought to New South Wales for development.

- 5.55' The committee also believes that gaining community support is essential for any proponent seeking to operate an energy from waste facility in New South Wales. For this to occur, the NSW EPA must provide more detailed information on the expected community engagement practices and outcomes a proponent must comply with. While we acknowledge the need for some flexibility in these documents, it is necessary to provide clearly articulated standards to encourage certainty for both the proponent and the community. We therefore recommend that the NSW EPA set out the expected community engagement practices and outcomes a proponent must comply with to receive the necessary approvals and community support to operate an energy from waste facility in the *Energy Recovery Facility Guidelines*.

Recommendation 17

That the NSW Environment Protection Authority set out the expected community engagement practices and outcomes a proponent must comply with to receive the necessary approvals and community support to operate an energy from waste facility in the *Energy Recovery Facility Guidelines*.

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- 5.56' We agree that the environmental impact statements used to support development applications for large-scale energy from waste facilities are not user-friendly from a community perspective. The committee therefore recommends that the NSW Department of Planning and Environment require applicants for energy from waste facilities to provide a short, high-level summary of the Environmental Impact Statement, and that this document be published on the department's website, in addition to the full Environmental Impact Statement.

Recommendation 18

That the NSW Department of Planning and Environment require applicants for energy from waste facilities to provide a short, high-level summary of the Environmental Impact Statement, and that this document be published on the department's website, in addition to the full Environmental Impact Statement.

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- 5.57' Given the significant concerns in relation to energy from waste technology and the impact of emissions on air quality, there needs to be a much more detailed assessment of the issues surrounding this technology and its use in New South Wales. The committee recommends that the NSW Government establish an expert advisory body on energy from waste chaired by the Chief Scientist to examine and report on the energy from waste regulatory framework, to create certainty for the market and communities.

Recommendation 19

That the NSW Government establish an expert advisory body on energy from waste chaired by the Chief Scientist to examine and report on the energy from waste regulatory framework to create certainty for the market and communities, with particular reference to:

- changes required to the *Energy from Waste Recovery Guidelines* to guarantee that New South Wales uses only world's best practices in emissions, emissions monitoring and residual waste disposal
 - consent conditions required in any planning approval to guarantee that New South Wales uses only world's best practices in emissions, emissions monitoring and residual waste disposal
 - the impact of energy from waste on human health
 - the impact of energy from waste on recycling targets.
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5.58' Given the particular topography of the Sydney Basin and the trapping of air pollution within the basin, the committee believes that the pressure on air quality should be considered when assessing energy from waste incinerator proposals.

Chapter 6 The Next Generation energy from waste project

This chapter examines the proposal by The Next Generation to build an energy from waste facility at Eastern Creek. The chapter discusses many of the issues raised by inquiry participants in relation to the proposed facility including the proponent's social licence to operate, the siting of the project, the lack of reference facilities and the proposed feedstock for the project. The chapter also considers issues with regard to emissions standards and monitoring, and considers whether the proponent is a 'fit and proper person' to operate an energy from waste facility.

The proposal

- 6.1** The Next Generation NSW Pty Ltd has applied to the NSW Department of Planning and Environment (the department) to build a large-scale energy from waste facility at Honeycomb Drive at Eastern Creek, New South Wales. The site currently houses the Genesis Xero Waste Recycling Facility, a Material Processing Centre for construction and demolition waste and commercial and industrial waste, and has waste disposal facilities and landfill capacity.³⁸⁸
- 6.2** The proponent proposes that the facility will source feedstock from the residual chute waste at the Genesis MPC, and will accept suitable and eligible waste fuels from authorised third parties.³⁸⁹ The fuel, or feedstock, will be mixed before the feed hopper pushes it onto the continually moving grate furnace where it will be combusted.³⁹⁰ A proportion of the electricity generated at the facility will be exported to the national grid, and the remainder will be used onsite.³⁹¹
- 6.3** The following waste outputs will be generated by the facility: bottom ash, boiler ash, air pollution control ash (also known as flue gas treatment residue), ferrous material residue, and liquid effluent.³⁹² Urbis, consultants engaged by The Next Generation to provide the amended Environmental Impact Statement (EIS), reported that the following air emissions are expected:
- Particulate matter, assumed to be emitted as PM10 and PM2.5a
 - Hydrogen Chloride
 - Hydrogen Fluoride

³⁸⁸ Submission 164, Alexandria Landfill, p 30.

³⁸⁹ Submission 164, Alexandria Landfill, pp 10 and 30.

³⁹⁰ See, Submission 164, Alexandria Landfill, p 33; Urbis, *Environmental Impact Statement: The Next Generation NSW Energy from Waste Facility, Eastern Creek*, April 2015, p 29, <https://majorprojects.accelo.com/public/7a4f50ec1958c641911d137a62c1a147/01.%202015-04-28%20Environmental%20Impact%20Statement.pdf>.

³⁹¹ Submission 164, Alexandria Landfill, p 52.

³⁹² Urbis, *Environmental Impact Statement: The Next Generation NSW Energy from Waste Facility, Eastern Creek*, April 2015, pp 39-40, <https://majorprojects.accelo.com/public/7a4f50ec1958c641911d137a62c1a147/01.%202015-04-28%20Environmental%20Impact%20Statement.pdf>.

- Carbon Monoxide
- Sulfur Dioxide
- Oxides of nitrogen (expressed as Nitrogen Dioxide)
- Heavy metals (including Mercury, Cadmium, Arsenic and Chromium)
- Gaseous and vaporous organic substances (expressed as total organic carbon)
- Dioxins and Furans
- Hydrogen Sulfide
- Chlorine
- Ammonia
- Polycyclic-Aromatic Hydrocarbons.³⁹³

6.4 Urbis reported that the emissions, except for PM10 (particulate matter less than 10 microns in diameter), are not projected to exceed emissions standards. Urbis concluded that when combined with maximum background levels, the PM10 emissions from the plant result in a cumulative concentration of 50.9 µg/m³, which is 'marginally' over the 24-hour PM10 criteria of 50 µg/m³.³⁹⁴

6.5 The Next Generation is a wholly owned subsidiary of the Alexandria Landfill Corporate Group and is part of the Dial A Dump Industries Group.³⁹⁵ Alexandria Landfill listed in its submission to this inquiry some of the justifications and benefits of the project:

- will deliver a net positive greenhouse gas effect
- will complement the existing waste disposal and recycling facility adjacent to the proposed facility
- is permissible within the zone and complies with relevant state and local policies
- uses best practice technology to minimise the discharge of emissions
- the feedstock is residual waste fuel that cannot feasibly be re-used or recycled
- will not lead to any adverse health effects from dioxins and furans, and will not have any non-carcinogenic or carcinogenic effects.³⁹⁶

³⁹³ Urbis, *Environmental Impact Statement: The Next Generation NSW Energy from Waste Facility, Eastern Creek*, April 2015, p 126, <https://majorprojects.accelo.com/public/7a4f50ec1958c641911d137a62c1a147/01.%202015-04-28%20Environmental%20Impact%20Statement.pdf>.

³⁹⁴ Urbis, *Environmental Impact Statement: The Next Generation NSW Energy from Waste Facility, Eastern Creek*, April 2015, p 126, <https://majorprojects.accelo.com/public/7a4f50ec1958c641911d137a62c1a147/01.%202015-04-28%20Environmental%20Impact%20Statement.pdf>.

³⁹⁵ See, The Next Generation, <http://www.tngnsw.com.au/>.

³⁹⁶ Submission 164, Alexandria Landfill, p 51.

6.6 Alexandria Landfill suggested that other benefits of the project will include:

- energy security and diversity
- maximising energy recovery from waste in accordance with the *NSW Energy from Waste Policy Statement*
- saving landfill space for more contaminated wastes that cannot be thermally treated
- reducing greenhouse gas emissions that would otherwise have been generated from the breakdown of the waste material had it gone to landfill
- breaking reliance on landfilling
- creating employment opportunities.³⁹⁷

The planning process

6.7 The proposed development will have a capital investment exceeding \$30 million and is being assessed as a State Significant Development.³⁹⁸

6.8 The department informed the committee that it received preliminary information about the proposal in 2013. The department subsequently instructed the proponent to consider the following environmental assessment requirements as part of the official application: air quality emissions and human health impacts, source volume and composition of waste material to be used, noise impacts, traffic, visual impacts and biodiversity.³⁹⁹

6.9 Due to the novel nature of the proposal, in 2014, before the development application was received or exhibited, the department and the NSW Environment Protection Authority (NSW EPA) engaged two independent experts to provide technical advice for the proposed development.⁴⁰⁰ These experts were Environmental Risk Sciences Pty Ltd (EnRiskS), an Australian-based risk assessment consultant with experience in human health risk assessment, and Arup, an international engineering consultancy with experience dealing with

³⁹⁷ Submission 164, Alexandria Landfill, pp 51-52. Also see Evidence, Mr Ian Malouf, Managing Director, Dial A Dump Industries, 17 August 2017, p 43.

³⁹⁸ NSW Department of Environment and Planning, *Eastern Creek Energy from Waste - Key Features and FAQs* (15 December 2017), <http://www.planning.nsw.gov.au/Assess-and-Regulate/Projects/Eastern-Creek-Energy-from-Waste/Key-Features-and-FAQs>.

³⁹⁹ Evidence, Ms Anthea Sargeant, Executive Director, Key Sites and Industry Assessments, NSW Department of Planning and Environment, 27 June 2017, p 2.

⁴⁰⁰ Evidence, Ms Sargeant, 27 June 2017, p 2. Also see, NSW Department of Planning and Environment, *Eastern Creek Energy from Waste - Key Features and FAQs* (15 December 2017), <http://www.planning.nsw.gov.au/Assess-and-Regulate/Projects/Eastern-Creek-Energy-from-Waste/Key-Features-and-FAQs>.

energy from waste facilities in Europe.⁴⁰¹ The independent experts have been working closely with the department, the NSW EPA and NSW Health throughout the assessment process.⁴⁰²

- 6.10'** In 2015, The Next Generation submitted the initial application, including an EIS, to the department for a 1.35 million tonne energy from waste facility. This proposal was exhibited in May to July 2015. The application was made publicly available and stakeholders were invited to make a submission in response to the proposal. The department stated: 'A total of 44 submissions were received, including 34 public submissions. Of these 29 objected to the proposal. Blacktown City Council, the Environment Protection Agency and NSW Health also objected to the proposal'.⁴⁰³ In addition, as required under the *Environmental Planning and Assessment Act 1979*, the department published, and regularly updated, information in relation to the proposal on its website.⁴⁰⁴
- 6.11'** Following this process, the department requested The Next Generation provide an amended EIS and a response to the submissions made by stakeholders, particularly regarding concerns about the project's potential impact on air emissions and human health.⁴⁰⁵
- 6.12'** The amended EIS and associated documents were submitted to the department and placed on public display from December 2016 to March 2017. The amended EIS sought approval to thermally treat up to 1.105 million tonnes per annum (tpa) of residual waste fuel in two stages, with Stage 1 and Stage 2 each having a maximum capacity of 552,500 tpa.⁴⁰⁶
- 6.13'** As part of the amended EIS, the Next Generation engaged AECOM to conduct a human health risk assessment. The AECOM assessment concluded that the project presented a 'low and acceptable' risk to human health from odour, noise, ozone, hazards, soil and water.⁴⁰⁷ Pacific Environment was contracted by the proponent to determine possible emissions from the plant.⁴⁰⁸

⁴⁰¹ NSW Department of Planning and Environment, *Eastern Creek Energy from Waste - Key Features and FAQs* (15 December 2017), <http://www.planning.nsw.gov.au/Assess-and-Regulate/Projects/Eastern-Creek-Energy-from-Waste/Key-Features-and-FAQs>.

⁴⁰² See, Evidence, Ms Sargeant, 27 June 2017, p 3. Also see, Evidence, Portfolio Committee No. 6 – Planning and Environment, Budget Estimates 2017-18, Mr Marcus Ray, Deputy Secretary, Planning Services, NSW Department of Planning and Environment, 8 September 2017, p 7.

⁴⁰³ Evidence, Ms Sargeant, 27 June 2017, p 2.

⁴⁰⁴ Evidence, Ms Sargeant, 27 June 2017, p 3.

⁴⁰⁵ Evidence, Mr Chris Ritchie, Director Industry Assessments, NSW Department of Planning and Environment, 27 June 2017, p 10.

⁴⁰⁶ Answers to supplementary questions on notice, NSW Department of Planning and Environment, 25 July 2017, p 1.

⁴⁰⁷ Urbis, *Energy from waste amended EIS final*, p 258 https://majorprojects.accelo.com/public/319eab3ee366048fa411ca967d58bb8c/Amended%20EIS_%20%20Eastern%20Creek%20Energy%20from%20Waste_%20Volume%201B.pdf. Fichtner were engaged by the proponent to conduct the initial Human Health Risk Assessment. Also see, Evidence, Ms Amanda Lee, Technical Director Environment, AECOM Technology Corporation, 27 June 2017, p 22.

⁴⁰⁸ Urbis, *Energy from waste amended EIS final*, p 258 https://majorprojects.accelo.com/public/319eab3ee366048fa411ca967d58bb8c/Amended%20EIS_%20%20Eastern%20Creek%20Energy%20from%20Waste_%20Volume%201B.pdf.

- 6.14** The department conducted the same community engagement process for the amended EIS as it had for the initial application.⁴⁰⁹ In addition, the committee heard that the department met with concerned stakeholders including the council and a local school, and visited the proposed development site.⁴¹⁰
- 6.15** The department received 990 submissions in response to the amended EIS. Ms Anthea Sargeant, Executive Director, Key Sites and Industry Assessments at the NSW Department of Planning and Environment, advised: ‘Of these, 949 objected to the proposal, 14 provided comment and two expressed support for the proposal’.⁴¹¹ The department advised that the key issues raised by submission authors in the planning process were the size and location of the project, the proposed technology and feedstock, and concerns the plant would adversely affect the air quality and, in turn, the health of residents in western Sydney and the environment.⁴¹²
- 6.16** Following advice from EnRiskS, the NSW EPA’s response to the EIS stated that the proponent’s human health risk assessment was unable to accurately assess the health risks posed by the project due to a number of assumptions and variables:
- The EPA notes the human health risk assessment and supporting assessments use a range of information, assumptions and data to derive estimates to qualitatively and quantitatively characterise and define critical facility operations, parameters and emissions. In general there are numerous assumptions and variables relating to the waste/fuel, plant and project operations and performance, and emissions. These have not been clearly identified, well characterised or comprehensively evaluated in the human health risk assessment. This brings into question the thoroughness and veracity of the assessment.⁴¹³
- 6.17** Mr Stephen Beaman, the then Executive Director Waste and Resource Recovery at the NSW EPA, similarly told the committee that ‘... there are too many gaps, there is too much uncertainty in the assessment to reach a robust or preferable solution’.⁴¹⁴ Mr Beaman concluded ‘... [we] are unable with confidence to say that the human health and environment is going to be protected and therefore we cannot support it’.⁴¹⁵

⁴⁰⁹ Evidence, Ms Sargeant, 27 June 2017, p 7.

⁴¹⁰ Evidence, Ms Sargeant, 27 June 2017, p 7.

⁴¹¹ Evidence, Ms Sargeant, 27 June 2017, p 2.

⁴¹² Evidence, Mr Ritchie, 27 June 2017, p 7; Evidence, Ms Sargeant, 27 June 2017, p 9.

⁴¹³ Answers to questions on notice, NSW Department of Planning and Environment, 25 July 2017 – Appendix A, NSW EPA, Response to EPA, Attachment D, NSW EPA – Human Health Risk Assessment, p 1. Also see, EnRiskS, *Energy from Waste Facility, Eastern Creek, NSW – Review of Health Risk Related Matters Covered in the EIS*, 8 March 2017, pp 2 and 5-8.
https://majorprojects.accelo.com/public/80af9922e944bbe722605d8198d3dbe6/Attachment%20E_%20Review%20of%20Health%20Risk,%20Attachment%20F_%20Air%20Quality%20Ozone%20Assessment%20and%20Attachment%20G_%20Soil%20and%20Water%20Assessment.pdf.

⁴¹⁴ Evidence, Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery, NSW EPA, 26 June 2017, p 9.

⁴¹⁵ Evidence, Mr Beaman, 26 June 2017, p 6.

- 6.18'** Dr Ben Scalley, Director of the Environmental Health Branch at NSW Health, agreed that the amended EIS did not provide sufficient information to characterise the health risks of the energy from waste facility.⁴¹⁶
- 6.19'** In March 2017, the department requested that the applicant provide further information to respond to these submissions and the technical reviews undertaken by EnRiskS and Arup.⁴¹⁷ The proponent's response was received in late September 2017 and sought approval only for Stage 1 of the development:
- On 29 September 2017, the Applicant lodged a Response to Submissions (RTS) report with the Department seeking approval for only Stage 1 of the development to treat a maximum of 552,500 tpa of residual waste fuel and requesting the Minister's agreement to amend the development application under clause 55 of the Environmental Planning and Assessment Regulation 2000.⁴¹⁸
- 6.20'** The response also sought to address emissions modelling concerns raised following the amended EIS. Urbis noted that the updated air quality assessment and human health risk assessment demonstrated that the project posed a low and acceptable risk to human health.⁴¹⁹
- 6.21'** In December 2017, the department agreed to the proponent's request to amend the application, referred the proponent's response to submissions report to the relevant authorities and independent experts for final comment, and made the report available on its website.⁴²⁰ Submissions to the applicant's response to submissions report were due in February 2018.

Next steps

- 6.22'** Following the conclusion of the consultation period, the department will prepare an assessment report with a recommendation for determination of the application. Mr Chris Ritchie, Director Industry Assessments at the NSW Department of Planning and Environment, explained that the report will consider the evidence received, and considerable weight will be given to the opinion of the NSW EPA:

⁴¹⁶ Evidence, Dr Ben Scalley, Director, Environmental Health Branch, NSW Health, 7 August 2017, p 4.

⁴¹⁷ Evidence, Ms Sargeant, 27 June 2017, p 2. Also see, Answers to further questions on notice, NSW Department of Planning and Environment, 13 November 2017, p 1.

⁴¹⁸ Answers to further questions on notice, NSW Department of Planning and Environment, 13 November 2017, p 1. Also see, Urbis, *Response to submissions report, SSD6236: Energy from Waste, Eastern Creek*, December 2017, p 1, <https://majorprojects.accelo.com/public/a0d99df811d1bda71ee654fe51c8987e/A%20Response%20to%20Submissions%20on%20the%20Amended%20EIS%20-%20Eastern%20Creek%20Energy%20from%20Waste%20Proposal>.

⁴¹⁹ Urbis, *Response to submissions report, SSD6236: Energy from Waste, Eastern Creek, December 2017*, p 2, <https://majorprojects.accelo.com/public/a0d99df811d1bda71ee654fe51c8987e/A%20Response%20to%20Submissions%20on%20the%20Amended%20EIS%20-%20Eastern%20Creek%20Energy%20from%20Waste%20Proposal>.

⁴²⁰ NSW Department of Planning and Environment, *Eastern Creek - Energy from Waste* (15 December 2017), <http://www.planning.nsw.gov.au/Assess-and-Regulate/Projects/Eastern-Creek-Energy-from-Waste>.

The department is tasked to write an assessment report and to make a recommendation so all advice received from EPA and from our experts will form part of that. It is EPA's policy so we will consider very carefully if the EPA is adamant that this is not meeting its policy. That will then form part of our assessment which will then form part of our recommendation to the commission.⁴²¹

- 6.23'** The assessment report will be provided to the independent Planning and Assessment Commission (the commission) and will be publicly available on the department's website.⁴²² Ms Sargeant advised: 'The commission has a delegation from the Minister for Planning to determine the application. The commission will hold a public meeting and will invite submitters to present their views on the proposal. It will then prepare its report and determine the application'.⁴²³
- 6.24'** Following the determination by the commission, the department will notify the applicant, councils and submitters of the decision, place a notice of determination in local papers and make the decision and the commission's report publicly available on its website.⁴²⁴

Concerns about the planning process

- 6.25'** Certain inquiry participants expressed the view that the planning process for state significant developments is inadequate. Examples of concerns raised about this process included:
- the process is time consuming and expensive particularly for novel projects⁴²⁵
 - the existing regulatory framework does not adequately identify the impacts and other factors against which such a proposal should be assessed (for example, which regulatory standards, guidelines and policy statements 'energy from waste' technology assessed against)⁴²⁶
 - applicants are provided with too many opportunities to amend their proposals⁴²⁷
 - the commission has 'only ever rejected a handful of projects and normally for extraordinary political reasons, not on their merits'.⁴²⁸

⁴²¹ Evidence, Mr Ritchie, 27 June 2017, p 6. Also see, Evidence, Portfolio Committee No. 6 – Planning and Environment, Budget Estimates 2017-18, Mr Ray, 8 September 2017, p 7.

⁴²² Evidence, Ms Sargeant, 27 June 2017, p 3.

⁴²³ Evidence, Ms Sargeant, 27 June 2017, p 3. Also see, Evidence, Portfolio Committee No. 6 – Planning and Environment, Budget Estimates 2017-18, Hon Anthony Roberts, Minister for Planning, 8 September 2017, pp 6-7.

⁴²⁴ Evidence, Ms Sargeant, 27 June 2017, p 3.

⁴²⁵ Submission 164, Alexandria Landfill, pp 54-55.

⁴²⁶ Submission 173, Jacfin, pp 1-2. Also see, Evidence, Mr Christopher Biggs, Chief Executive Officer, Dial A Dump Industries, 27 June 2017, pp 20-21.

⁴²⁷ Evidence, Ms Kim Vernon, No Incinerator for Western Sydney, 27 June 2017, p 44.

⁴²⁸ Evidence, Dr James Whelan, Researcher and Community Organiser, Environmental Research Australia, 17 August 2017, p 22.

- 6.26^{*} The department contended that there have been no failures in the planning processes for The Next Generation proposal, stating: ‘... our process is very well-documented, and we followed that process. It is the same process that we follow for every project’.⁴²⁹

Committee comment

- 6.27^{*} The committee notes that the NSW Department of Planning and Environment and the NSW EPA have been aware of The Next Generation energy from waste proposal since 2013, and that two independent consultants, Arup and EnRiskS were engaged early on to analyse the technology and potential human health impacts. We also note that in 2015, The Next Generation submitted an initial application that many, including the relevant government agencies, considered inadequate, leading to the submission of an amended proposal in 2016.
- 6.28^{*} The committee acknowledges that the amended proposal drew a great deal of community interest with more than 900 submissions received, the vast majority of which did not support the project. Importantly, the NSW EPA and NSW Health found further shortcomings in this proposal, particularly the lack of clarity around feedstock and emissions, and were therefore unable to accurately determine the risks to human health and the environment. The department is now considering the proponent’s response to these concerns.
- 6.29^{*} Inquiry participants’ specific concerns about the project are outlined throughout this chapter, as is the proponent’s response. Based on this evidence, as things currently stand, the committee does not support the development of this project. The proponent has not provided an adequate reference facility to demonstrate that the technology can adequately process the proposed fuel. Additionally, the proponent has provided inconsistent evidence about the project, particularly around key concerns including size, feedstock and emissions, and has failed to gain the community support for the project to proceed. These issues are discussed in detail below.
- 6.30^{*} The committee recommends that, subject to the current assessment process being conducted by the NSW Department of Planning and Environment, the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek.

Recommendation 20

That, subject to the current assessment process being conducted by the NSW Department of Planning and Environment, the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek.

⁴²⁹ Evidence, Ms Sargeant, 27 June 2017, p 3.

Community support

- 6.31'** As discussed in Chapter 5, the *NSW Energy from Waste Policy Statement* requires operators of prospective facilities garner a 'social licence' through meaningful engagement and being a good neighbour.⁴³⁰ Moreover, in assessing The Next Generation's application, the department will consider whether it has gained a 'social licence' to operate the Eastern Creek project.⁴³¹
- 6.32'** The Next Generation assured the committee that it had conducted extensive community engagement activities in relation to its proposed energy from waste development: "There have been three community forums ... three presentations to councils and officers, two public exhibitions, 8,000 DVDs delivered door-to-door to houses in the area, website videos which are updated regularly, and information pamphlets delivered door-to-door".⁴³² In addition, the company has pursued public relations efforts on radio, news and television programs and social media.
- 6.33'** The Next Generation also noted the department had conducted its own community engagement about the proposal, and said that this inquiry had invited community attention to the project.⁴³³ Mr Ian Malouf, Managing Director of Dial A Dump Industries, commented: "There has not been a private infrastructure proposal which has had such extensive community consultation".⁴³⁴
- 6.34'** The proponent acknowledged that the community has concerns about the project.⁴³⁵ However, Mr Christopher Biggs, Chief Executive Officer of Dial A Dump Industries, questioned whether the concerns are 'rationally based or reasonably based'.⁴³⁶ In his evidence to the committee, Mr Biggs remarked: "... there are members of the community who do not want to listen or do not want to understand, and that is simply on the basis of saying, "Not in my backyard,"...".⁴³⁷ Likewise, Mr Malouf played down suggestions that a large proportion of the community do not support the proposal: "There has been significant criticism, if that is the way you want to put it, from a small minority of people. The greater community, I believe, is definitely in favour of this project".⁴³⁸
- 6.35'** However, many inquiry participants expressed frustration with The Next Generation's community engagement strategy. Dr James Whelan, Researcher and Community Organiser, Environmental Research Australia, observed: "Best practice community engagement is not

⁴³⁰ NSW EPA, *NSW Energy from Waste Policy Statement* (2015), p 4. Also see, Evidence, Dr Whelan, 17 August 2017, p 24.

⁴³¹ Evidence, Ms Sargeant, 27 June 2017, p 9.

⁴³² Evidence, Mr Malouf, 17 August 2017, p 45.

⁴³³ Evidence, Mr Malouf, 17 August 2017, p 45.

⁴³⁴ Evidence, Mr Malouf, 17 August 2017, p 43.

⁴³⁵ Evidence, Mr Biggs, 27 June 2017, p 20.

⁴³⁶ Evidence, Mr Biggs, 27 June 2017, p 20.

⁴³⁷ Evidence, Mr Biggs, 27 June 2017, p 19.

⁴³⁸ Evidence, Mr Malouf, 17 August 2017, p 45.

within a bull's roar of what has been going on ... around the project; it is pretty close to worse practice really. There has been no meaningful engagement'.⁴³⁹

6.36' Likewise, when asked whether The Next Generation met the 'good neighbour' test, Ms Melinda Wilson from No Incinerator for Western Sydney responded: 'No, not at all'.⁴⁴⁰

6.37' Dr Marc Stambach, Managing Director of Hitachi Zosen Inova (HZI) Australia, the technology supplier for the project, acknowledged: 'Our client could have maybe done a better community engagement right in the beginning'.⁴⁴¹

6.38' Stakeholders provided instances where they felt the proponent had not conducted meaningful or wide-ranging consultation, including:

- poorly conducted letterbox drops that did not reach potentially affected residents⁴⁴²
- the Blacktown and District Environment Group, which has operated for about 20 years, did not receive documentation nor was it consulted about the project⁴⁴³
- the proponent and its consultants provided insufficient responses to community concerns raised during at their public forums, for example:
 - residents were told to 'read the EIS' when they about air quality concerns⁴⁴⁴
 - in response to potential health risks arising from the project, the proponent said '... two in three people get cancer anyway'⁴⁴⁵
 - in response to concerns about emissions modelling, the proponent's consultant said 'All models are wrong but some are useful'.⁴⁴⁶

6.39' Members of the No Incinerator for Western Sydney action group voiced dissatisfaction with the public relation efforts undertaken by The Next Generation. For example, Ms Wilson expressed frustration with the 'paid advertisements and newspaper interviews' which included quotes from the proponent about the community 'running a scare campaign about the potential impacts of the facility and making inaccurate claims'.⁴⁴⁷ She told the committee: 'The proponent's public relations person has even been on our No Incinerator for Western Sydney Facebook page and stated there would be "No ill effects on the local population, don't be swayed by wild inaccurate claims"'.⁴⁴⁸

⁴³⁹ Evidence, Dr Whelan, 17 August 2017, p 24. Also see, Evidence, Ms Melinda Wilson, No Incinerator for Western Sydney, 27 June 2017, p 48; Submission 385, Ms Michelle McCallum, p 1.

⁴⁴⁰ Evidence, Ms Wilson, 27 June 2017, p 48.

⁴⁴¹ Evidence, Dr Marc Stambach, Managing Director, HZI Australia, 17 August 2017, p 18.

⁴⁴² See, Evidence, Mr Antony Lewis, Secretary, Blacktown and District Environment Group, 27 June 2017, p 48; Evidence, Ms Vernon, 27 June 2017, p 45.

⁴⁴³ Evidence, Mr Lewis, 27 June 2017, p 46.

⁴⁴⁴ Evidence, Ms Wilson, 27 June 2017, pp 43 and 45.

⁴⁴⁵ Evidence, Ms Vernon, 27 June 2017, p 46.

⁴⁴⁶ Evidence, Cr Stephen Bali, Mayor, Blacktown City Council, 27 June 2017, p 30.

⁴⁴⁷ Evidence, Ms Wilson, 27 June 2017, p 43.

⁴⁴⁸ Evidence, Ms Wilson, 27 June 2017, p 43.

- 6.40* There were also claims by the action group that The Next Generation was inaccurately portraying the environmental and health impacts of the project to the community. Ms Wilson told the committee:

The proponent is making public claims such as waste to energy incineration is “cleaner than composting” when in reality for every four tonnes of waste incinerated, it makes one tonne of toxic contaminated ash that needs to be sent to a hazardous waste landfill. The proponent also claimed that “Greenpeace are all for incineration”. Greenpeace have confirmed to us they have always been opposed to all forms of incineration in Australia.⁴⁴⁹

- 6.41* It was suggested that these actions had led to the proponent being viewed as untrustworthy. For example, Ms Ilmiye Uluc from No Incinerator for Western Sydney said that there are ‘a lot of gaps’ in the proponent’s evidence, leading her to doubt the information they provide.⁴⁵⁰
- 6.42* Ms Kim Vernon from No Incinerator for Western Sydney also said that she was ‘terribly upset’ at the proponent’s suggestion that the ‘community do not want to understand’ the project, telling the committee that she had spent a significant amount of time over the past two years trying to comprehend details of the proposal.⁴⁵¹ Cr Stephen Bali, Mayor of Blacktown City Council, similarly argued that the community wants to understand the proposal.⁴⁵²

Committee comment

- 6.43* The committee believes that The Next Generation has failed to adequately engage with the local community regarding its proposed energy from waste facility. Indeed, the company appears intent on antagonising some members of the community and ultimately, this has led to widespread distrust and undermined any semblance of a ‘social licence’ to operate.
- 6.44* It appears that the behaviour and statements of representatives from The Next Generation and its consultants at public forums have done little to help the situation. It also appears that stakeholders had significant and genuinely held concerns, and that acting in what seems to have been interpreted as a dismissive fashion has worked to undermine the proponent’s reputation in the community.
- 6.45* Overall, we concur with the comment that the community engagement for this project did not come within ‘a bull’s roar’ of best practice. As discussed in Chapter 5, we have recommended that the *Energy Recovery Facility Guidelines* to be published by the NSW EPA in 2018 provide guidance on effective community engagement.

⁴⁴⁹ Evidence, Ms Wilson, 27 June 2017, p 43.

⁴⁵⁰ Evidence, Ms Ilmiye Uluc, No Incinerator for Western Sydney, 27 June 2017, p 46.

⁴⁵¹ Evidence, Ms Vernon, 27 June 2017, p 47.

⁴⁵² Evidence, Cr Bali, Mayor, 27 June 2017, p 30.

Siting

- 6.46'** As noted in Chapter 5, there are no requirements in the *NSW Energy from Waste Policy Statement* dictating appropriate locations for energy from waste facilities. The pressing need to identify and zone land for waste infrastructure is examined in Chapter 8.
- 6.47'** Alexandria Landfill intends for the proposed energy from waste facility to be part of a 'broader and integrated waste management operation' at the Eastern Creek site.⁴⁵³ The committee heard that the site was chosen for numerous reasons including:
- the company already owns land in the area
 - it is close to the existing landfill
 - the site is located 1.2 kilometres from the grid
 - the project aligns with NSW Government policies for infrastructure and employment in western Sydney such as *NSW 2021* and the *Western Sydney Employment Area Draft Structure Plan*.⁴⁵⁴
- 6.48'** Mr Malouf, and others, also noted that energy from waste plants exist in major cities overseas.⁴⁵⁵
- 6.49'** The map below provides the regional context of the site.

⁴⁵³ Submission 164, Alexandria Landfill, p 30.

⁴⁵⁴ See, Submission 164, Alexandria Landfill, p 23; Evidence, Mr Malouf, 17 August 2017, pp 43 and 54.

⁴⁵⁵ Evidence, Mr Mike Ritchie, Managing Director, MRA Consulting Group, 7 August 2017, p 17; Evidence, Mr Roger Bligh, Sales Director, Metal, Energy and Water, Outotec South-East Asia Pacific, 7 August 2017, p 45; Evidence, Mr Malouf, 17 August 2017, p 54; Submission 47, Ms Cheryle Brack, p 1; Submission 115, Cleanaway Waste Management, p 4.

Figure 3 Map demonstrating regional context of proposed site



Urbis, *Energy from waste amended EIS*, p 25,

https://majorprojects.accelo.com/public/37ce9bc9707ea35fd5137bdab2f7667a/Amended%20EIS_%20%20Eastern%20Creek%20Energy%20from%20Waste_%20Volume%201.A.pdf

6.50 While certain stakeholders supported the project, and believed it would benefit western Sydney,⁴⁵⁶ many inquiry participants expressed considerable concern about the location of the proposed energy from waste facility, including:

- that it would be located near residential areas; the closest homes are approximately 800 metres from the site, and there are nearby schools, sporting facilities, and other amenities⁴⁵⁷
- the air quality in western Sydney is already poor due to the emissions, including odour emissions, from other industrial sites in the area⁴⁵⁸

⁴⁵⁶ See, Evidence, Dr Stambach, 17 August 2017, p 12; Submission 44, Mr Hugh Williams, p 1; Submission 51, Mr Matthew Lamens, p 1.

⁴⁵⁷ See, Evidence, Ms Wilson, 27 June 2017, pp 43 and 47; Submission 20, Ms Catherine Hosking, p 1; Submission 26, Name suppressed, p 1; Submission 60, Mr Ron Rose, p 1; Submission 94, Mr Steven Taylor, p 1; Submission 95, Mrs Emma Powney, p 1; Submission 194, Ms Lisa McKinnon, p 1; Submission 205, Mr Jason Edwards, p 1; Submission 209, Mr Glen Clark, p 1.

⁴⁵⁸ See, Submission 24, Mr Gavin Wilson, p 1; Submission 40, Ms Alicia Schloeffel, p 1; Submission 126, Mrs Annalissa Ozdemir, p 1; Submission 127, Mrs Safiye Ozdemir, p 1; Submission 131, Mr Stephen Richards, p 1; Submission 160, Name suppressed, p 1; Submission 204, Mr Michael Donohue, p 1.

- the topography of the Sydney Basin, that is the single air shed in Sydney, exacerbates certain air quality impacts in the area around the project⁴⁵⁹
- residents of western Sydney experience poorer health outcomes, particularly in relation to cardiovascular disease and respiratory disease, that may be exacerbated by further emissions.⁴⁶⁰

6.51 A large number of individual inquiry participants expressed the view that this confluence of factors means the project will cause undue harm to human health and the environment. A stakeholder captured many of the health concerns related to the proposal:

This proposed incinerator is just to[o] close to Minchinbury and neighbouring communities ... I am deeply concerned that my family and our community will get sick from all the air pollution coming from the plant and all the trucks supplying the incinerator. What about the effects to the wildlife in the area and possible effects if something goes wrong ... I am really concerned if something goes wrong at the plant ... Accidents can happen even with the best technology ...⁴⁶¹

6.52 Typical comments from other stakeholders included:

- the proposal is '... a great health risk to everyone and will cause long term health issues in the western Sydney'⁴⁶²
- 'This incinerator is not in the best interest of our community. Health is going to be at risk'⁴⁶³
- 'The health issues this is going to cause are enormous. We already have a waste disposal facility which caused horrible fumes around homes and people breathing them I can just imagine what the incinerator will cause'⁴⁶⁴
- 'I am very concerned about the long-term health of the community especially the children in the area'⁴⁶⁵
- 'I URGE YOU NOT TO ALLOW THIS ENVIRONMENTAL HORROR TO BE BUILT. The dangers to the population and to the environment far outweigh any perceived short term benefits'.⁴⁶⁶

⁴⁵⁹ Evidence, Dr Scalley, 7 August 2017, p 3. Also see, Evidence, Mr Beaman, 26 June 2017, p 9; Evidence, Dr Whelan, 17 August 2017, p 25; Submission 39, Mr Phil Upton, p 1; Submission 377, Mr Phil Bradley, p 1.

⁴⁶⁰ Evidence, Dr Scalley, 7 August 2017, p 2. Also see, Evidence, Dr Whelan, 17 August 2017, p 25; Submission 5, Ms Gabrielle Maston, p 2.

⁴⁶¹ Submission 38, Name suppressed, p 1.

⁴⁶² Submission 162, Mrs Carolyn Ahmet, p 1.

⁴⁶³ Submission 186, Mrs Judith Ridgley, p 1. Also see, Submission 364, Ms Cemile Can, p 1; Submission 365, Mrs Rosann Kirk, p 1; Submission 366, Mr David Kirk, p 1.

⁴⁶⁴ Submission 136, Mrs Anna Kosovich, p 1. Also see, Submission 128, Name suppressed, p 1.

⁴⁶⁵ Submission 113, Mrs Margaret McCarthy, p 1. Also see, Submission 61, Mr Mohammad Sami, p 1; Submission 135, Mr Bedir Solbudak, p 1; Submission 162, Mrs Carolyn Ahmet, p 1.

⁴⁶⁶ Submission 55, Mr Timothy Williams, p 1 [emphasis as per original].

- 6.53** Mr Antony Lewis Secretary of the Blacktown and District Environment Group also encouraged the committee to consider the impact of the project on the health of native flora and fauna.⁴⁶⁷
- 6.54** Other concerns expressed about the siting of the proposal include:
- home prices may decrease⁴⁶⁸
 - the project may place significant pressure on surrounding infrastructure such as roads and hospitals⁴⁶⁹
 - the project does not meet operational requirements for the Western Sydney Employment Area,⁴⁷⁰ and compromises other strategic planning objectives for the Greater Sydney region⁴⁷¹
 - allowing the facility will create uncertainty around the planning processes in western Sydney and undermine further development.⁴⁷²

Committee comment

- 6.55** The committee notes that The Next Generation's proposed energy from waste facility would be built on land that currently includes waste management facilities. As discussed in Chapter 5 and Chapter 8, urban encroachment has seen homes increasingly built near industrial sites. The proposed site is no different. Residents of western Sydney live less than one kilometre from the site and we understand the concerns of many individuals about the potential health and other impacts of a facility like this being built right on their doorstep.
- 6.56** The committee notes the concerns of the stakeholders that raised issues associated with the topographic structure of the Sydney Basin and the challenges of trapped air pollution within it. The Next Generation proposal could add substantially to the challenges of managing air pollution across Sydney.

Reference facility

- 6.57** As discussed in Chapter 5, a key criterion of the *NSW Energy from Waste Policy Statement* is the need for a reference facility; that is, the proponent must demonstrate the technology being used is proven, well understood and capable of handling the expected variability and type of feedstock.
- 6.58** Alexandria Landfill put forward that that the energy from waste facilities identified in Table 4, which was prepared by Ramboll (consultants engaged by The Next Generation), as suitable

⁴⁶⁷ Evidence, Mr Lewis, 27 June 2017, p 42.

⁴⁶⁸ See, Submission 82, Mrs Lee-Anne Williams, p 2; Submission 91, Mr Matthew Cini, p 1.

⁴⁶⁹ See, Submission 74, Mr Norm Warren, p 1; Submission 100, Mrs Elizabeth Gibbeson, p 1; Submission 171, Mrs Kerry Loveday, p 1; Submission 180, Mrs Kerry Tosswill, p 1.

⁴⁷⁰ See, Submission 173, Jacfin, p 1. Also see, Submission 173a, Jacfin, p 4.

⁴⁷¹ Submission 173, Jacfin, p 2.

⁴⁷² Submission 173a, Jacfin, p 6.

reference facilities for the Eastern Creek project. The table sets out the capacity, fuel mix, technology and supplier used for the proposed reference facilities.

Table 4 Reference facilities - Key parameters

Facility/Location	Country	Commission year	Capacity t/a	Fuel mix	Furnace/Boiler	Supplier Furnace/Boiler	APC	Supplier APC
TNG	AU	-	4 x 276'250	C&I, C&D	Grate	HZI	Semi dry (lime)	-
Grossräschen	DE	2008	1 x 246'000	C&I, C&D	Grate	AEE*	Semi dry (lime)	LAB
Heringen	DE	2009	2 x 148'500	C&I, C&D, some MSW	Grate	AEE*	Semi dry (lime)	LAB
Premnitz	DE	2008	1 x 150'000	C&I, C&D	Grate	AEE*	Semi dry (lime)	Lühr
Hannover	DE	2005	2 x 140'000	C&I, C&D, some MSW	Grate	AEE*	Semi dry (lime)	LAB
Knapsack	DE	2009	2 x 150'000	C&I, C&D	Grate	AEE*	Semi dry (lime)	Lühr
Ferrybridge	UK	2015	2 x 256'500	C&I, C&D, some MSW, waste wood	Grate	HZI	Semi dry (lime)	HZI
Riverside	UK	2011	3 x 195'000	MSW, C&I	Grate	HZI	Semi dry (lime)	HZI

Ramboll, Memo, 26 October 2016, (Appendix DD.1 of amended EIS)

<https://majorprojects.accelo.com/public/78f3b5307775e59a7587a2fa31c6afbb/Appendix%20DD.1%20Reference%20Facilities.pdf>

6.59 As previously noted, the NSW EPA concluded that these reference facilities are inadequate.⁴⁷³ The following sections detail issues raised about the use of the reference facilities, specifically the proposed technology and feedstock for the project.

Technology

6.60 The proponent was adamant that the moving grate incinerator technology proposed for the Eastern Creek facility could process the feedstock, used best available technology, and is used extensively overseas (as per the reference facilities above, all of which use grate technology).⁴⁷⁴ Alexandria Landfill also explained the emissions control technology to be used, which is also consistent with that used in the reference facilities:

The semi-dry flue gas cleaning process is designed to remove acidic gaseous contaminants by chemical absorption with hydrated lime. Heavy metals and organic contaminant compounds (i.e. dioxins and furans) are reduced by adsorption on activated carbon.⁴⁷⁵

6.61 The proponent told the committee that a selective non-catalytic reduction system (SNCR) will be used to remove nitrogen oxide from the energy from waste facility.⁴⁷⁶

6.62 Mr Damon Roddis, National Practice Leader Air Quality and Noise at Pacific Environment, who was contracted by the proponent to undertake the technical air quality assessment for

⁴⁷³ See, Answers to questions on notice, NSW Department of Planning and Environment, 25 July 2017, Appendix A, NSW EPA, Response to EIS, p 4. Also see, Evidence, Mr Beaman, 26 June 2017, p 10.

⁴⁷⁴ See, Evidence, Mr Damon Roddis, National Practice Leader Air Quality and Noise, Pacific Environment, 27 June 2017, p 12; Evidence, Mr Malouf, 17 August 2017, p 44; Evidence, Dr Stambach, 17 August 2017, p 12; Submission 164, Alexandria Landfill, pp 31-33..

⁴⁷⁵ Submission 164, Alexandria Landfill, p 36. Also see, Evidence, Mr Roddis, 27 June 2017, p 18.

⁴⁷⁶ Submission 164, Alexandria Landfill, p 37.

The Next Generation project, noted that pollution control equipment accounts for ‘approximately two-thirds of the capital cost of an energy from waste facility’.⁴⁷⁷ Mr Roddis contended that the large scale of the project will not cause ‘... any challenges or uncertainties ... because the pollution control technology on the back of the energy-from-waste facility is tried and tested’.⁴⁷⁸

- 6.63** This argument was supported by Mr Biggs, Chief Executive Officer of Dial A Dump Industries, proponents of the Next Generation Project, who stated that the emissions control technology is sufficient to ensure that contaminated materials ‘... will not be released to the atmosphere’ and therefore not ‘... cause a health concern for the surrounding community’.⁴⁷⁹
- 6.64** The committee also heard that there are procedures in place should the plant need to be shut down for maintenance or unplanned events.⁴⁸⁰
- 6.65** However, as noted earlier in the chapter, inquiry participants raised concerns about how the proposed technology interacted with feedstock and the need to match the feedstock and emissions control technology. Other issues raised in this regard included:
- discussion as to whether the project meets best practice standards, particularly in relation to emissions control⁴⁸¹
 - whether it was appropriate to use SNCR for emissions control⁴⁸²
 - emissions monitoring systems do not encompass areas outside of the stack where the ‘worst pollutants’ form⁴⁸³
 - inadequate consideration has been given to necessary safety practices such as maintaining the emissions filtering system.⁴⁸⁴

Feedstock issues

- 6.66** Stakeholders identified three main issues regarding the proposed fuel mix or feedstock for The Next Generation project: the characterisation of the feedstock, the dependence on construction and demolition waste and the screening processes to be employed at the plant. The issues are outlined below.

⁴⁷⁷ Evidence, Mr Roddis, 27 June 2017, p 17.

⁴⁷⁸ Evidence, Mr Roddis, 27 June 2017, p 14.

⁴⁷⁹ Evidence, Mr Biggs, Chief, 27 June 2017, p 17.

⁴⁸⁰ See, Evidence, Dr Stambach, 17 August 2017, p 18.

⁴⁸¹ See, Answers to questions on notice, NSW Department of Planning and Environment, received 25 July 2017, - Appendix A, NSW EPA, Response to EIS, Attachment F, Review of the Air Quality and Ozone Impact Assessment, p 1; Evidence, Ms Bremmer, 27 June 2017, p 38; Evidence, Cr Bali, 27 June 2017, p 30.

⁴⁸² Submission 214, Blacktown City Council, p 15.

⁴⁸³ Evidence, Ms Bremmer, 27 June 2017, p 37.

⁴⁸⁴ Evidence, Mr Lewis, 27 June 2017, p 42.

Characterisation of the feedstock

- 6.67'** One key concern regarding the characterisation of feedstock for the project, was around the fact that 20 per cent of the feedstock was identified as 'other' – that is, unidentified – in the amended EIS. It was brought to the committee's attention that the 20 per cent of 'other' feedstock equated to about 110,000 tonnes of waste (for the then proposed 1.105 million tpa facility), which is the size of some energy from waste facilities.⁴⁸⁵
- 6.68'** As noted earlier, the NSW EPA and NSW Health expressed significant concern that without a clear understanding of the proposed feedstock, it is not possible to accurately determine emissions from The Next Generation plant.⁴⁸⁶ Consequently, the potential risks to human health and the environment posed by the project cannot be 'properly and robustly' determined.⁴⁸⁷
- 6.69'** The NSW EPA and NSW Health emphasised this issue during the inquiry and explained it was a primary reason why both organisations did not support the project.⁴⁸⁸ In fact, Mr Henry Moore, Manager of Waste Reform at the NSW EPA, advised that the proposed facility, as at June 2017, did not satisfy the eligible waste fuel requirements in the *NSW Energy from Waste Policy Statement*.⁴⁸⁹
- 6.70'** Acknowledging concerns about the insufficient characterisation of the feedstock, Dr Scalley from NSW Health advised that '... there are ways that we can make an adequate characterisation of the health risk assessment with some uncertainty'.⁴⁹⁰ For example, a sensitivity analysis could be used to model worst case scenarios.⁴⁹¹ However, he noted that not all uncertainties could be subject to this type of analysis,⁴⁹² and observed: '... I think there is a lot of additional uncertainty ... related to this [project]'.⁴⁹³
- 6.71'** Some inquiry participants supported the position taken by NSW EPA and NSW Health in relation to the feedstock. For example, Dr Ali El Hanandeh, Lecturer, School of Engineering at Griffith University, stated feedstock will 'definitely' affect emissions and explained that it is essential for energy from waste facilities to use the correct technology to clean emissions.⁴⁹⁴ Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture at the University of Southern

⁴⁸⁵ Evidence, Cr Bali, Mayor, 27 June 2017, p 30.

⁴⁸⁶ See, Answers to questions on notice, NSW Department of Planning and Environment, Attachment A, 25 July 2017 - Appendix A NSW EPA, Attachment A, 2017, p 1; Evidence, Dr Scalley, 7 August 2017, pp 5 and 9.

⁴⁸⁷ Answers to questions on notice, NSW Department of Planning and Environment, received 25 July 2017 - Appendix A, NSW EPA, Attachment A, 2017, p 1. Also see, Evidence, Dr Scalley, 7 August 2017, pp 3 and 4. Also see, Evidence, Mr Gerald Barr, 27 June 2017, p 50.

⁴⁸⁸ See, Evidence, Mr Beaman, 26 June 2017, p 6; Evidence, Dr Scalley, 7 August 2017, p 4.

⁴⁸⁹ Evidence, Mr Henry Moore, Manager, Waste Reform, NSW EPA, 26 June 2017, p 9.

⁴⁹⁰ Evidence, Dr Scalley, 7 August 2017, p 7.

⁴⁹¹ Evidence, Dr Scalley, 7 August 2017, p 7.

⁴⁹² Evidence, Dr Scalley, 7 August 2017, p 7.

⁴⁹³ Evidence, Dr Scalley, 7 August 2017, p 7.

⁴⁹⁴ Evidence, Dr Ali El Hanandeh, Lecturer, School of Engineering, Griffith University, 7 August 2017, p 40.

Queensland, agreed with Dr El Hanandeh and said the committee should ‘absolutely’ be sceptical about claims that the feedstock does not matter.⁴⁹⁵

- 6.72** Supporters of the proposal were more circumspect about the need to characterise feedstock. Indeed, when questioned about the lack of clarity around the feedstock, Mr Roddis from Pacific Environment stated: ‘... the content of the waste is not important’.⁴⁹⁶ Mr Roddis continued: ‘It is almost immaterial as to the volume or the waste composition that goes into the facility compared to what comes out at the end of the facility’.⁴⁹⁷
- 6.73** Similarly, Mr Mike Ritchie, Managing Director of MRA Consulting Group, was adamant that it is not possible to identify all the feedstock in a large-scale facility, nor is it expected in overseas plants.⁴⁹⁸
- 6.74** For its part, the proponent insisted that the waste streams providing feedstock to the Eastern Creek proposal will be of the appropriate quality and standard and noted that, following the submission of the amended EIS, The Next Generation had commissioned three separate waste audits of the potential feedstock for the facility.⁴⁹⁹ Mr Biggs explained that the audits included ‘a full disclosure there of quantities, proportions and chemical composition of the materials’ included in the waste streams.⁵⁰⁰
- 6.75** These audits were compiled in the MRA Consulting Group report *Feedstock Review in Accordance with the Resource Recovery Criteria of the New South Wales EfW Policy Statement*.⁵⁰¹ Table 5 is a breakdown of the material composition of the proposed feedstock.

⁴⁹⁵ Evidence, Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, 7 August 2017, p 40.

⁴⁹⁶ Evidence, Mr Roddis, 27 June 2017, p 14.

⁴⁹⁷ Evidence, Mr Roddis, 27 June 2017, p 14. Also see p 23.

⁴⁹⁸ Evidence, Mr Ritchie, 7 August 2017, p 13.

⁴⁹⁹ Submission 164, Alexandria Landfill, p 74. Also see, Evidence, Mr Biggs, 27 June 2017, p 14.

⁵⁰⁰ Evidence, Mr Biggs, 27 June 2017, p 14.

⁵⁰¹ Evidence, Mr Biggs, 17 August 2017, p 55.

Table 5 Material composition of proposed feedstock – arising from existing and planned facilities

Category	Sub-category	Sources (current or planned)					TOTAL (t)	%
		Genesis MPC and Genesis Alexandria (t) ⁷	Genesis EC Landfill MRF residual (t) ⁹	Shredder Flocc (t) ¹⁰	C&I Dirty MRF (t) ⁸	Genesis EC (excl. MPC) Waste wood (t) Textiles (t)		
Paper	Recyclable paper	865	4,543					
	Disposable contaminated (soft) paper	687	4,197					
	Cardboard	2,560	4,696	317	46,187	-	-	65,300 11.82%
	Liquid paperboard	11	242					
	Nappies	11	983					
Wood or timber	Untreated wood - MDF board	5,132	346					
	Untreated wood - All other	60,508	1,531			58,557		
	Treated wood - CCA treated	5,343	180	2,425	38,161			172,182 31.16%
	Treated wood - lead painted	-	-					
Plastic	Recyclable plastic containers excl. EPS	111	1,489					
	Other rigid plastics excl. EPS	2,948	4,370					
	EPS	89	388	17,428	37,742	-	-	82,641 14.96%
	Soft (films) plastics	3,458	10,340					
Metal (Ferrous and non-ferrous)	Composite plastics	1,507	2,770					
	Recyclable metal containers	44	464					
	Composite	366	990	1,147	7,554	-	-	13,863 2.51%
	Other metals	1,663	1,634					
	Food/kitchen - vegetable	11	1,461	-	24,062	-	-	

Category	Sub-category	Sources (current or planned)					TOTAL (t)	%
		Genesis MPC and Genesis Alexandria (t) ⁷	Genesis EC Landfill MRF residual (t) ⁹	Shredder Flocc (t) ¹⁰	C&I Dirty MRF (t) ⁸	Genesis EC (excl. MPC) Waste wood (t) Textiles (t)		
Organic (not wood or timber)	Food/kitchen - meat	-	125	-	-	-	-	
	Garden/vegetables	1,441	713	-	12,746	-	-	109,492 19.82%
	Textiles/rags	10,907	18,041	8,877	13,738	-	9,812	
	Rubber	488	603	3,905	1,925	-	-	
	Leather	111	526					
WEE	e-waste	-	-					
	Mobiles	-	-					- 0.00%
	Toners	-	-					
Hazardous	Medical	-	-					
	Chemicals	-	-					
	Paint	-	-					
	Asbestos	-	-					- 0.00%
	Batteries car	-	-					
	Batteries other	-	-					
Glass	Other hazardous	-	-					
	Glass containers		55		3,844			6,850 1.24%
Other (including earth and building materials)	Glass other	111	2,840					
	Insulation	67	-					
	Carpet/underlay	887	-		11,361			
	Compounds (excl. plastic and metal)	1,053	1,378					102,172 18.49%
	Asphalt	1,330	-					
	Inert incl. non-hazardous building waste	8,247	1,745	47,263	28,842			
TOTAL (t)		109,954	66,653	81,361	226,162	43,537	9,812	552,727 100.00%

Tabled document, Dial A Dump Industries, 17 August 2017, MRA Consulting Group, Feedstock review in accordance with the Resource Recovery Criteria of the NSW EfW Policy Statement, July 2017, PP 6-7.

6.76 The proponent was confident that the audits would provide the necessary information to ensure the application complied with the NSW Energy from Waste Policy Statement.⁵⁰²

⁵⁰² Evidence, Mr Biggs, 27 June 2017, pp 18-19.

6.77 Dial A Dump Industries gave evidence that identifying 20 per cent of the feedstock in the amended EIS as ‘other’ was a ‘regrettable error’ that has ‘caused no end of difficulty’.⁵⁰³ Mr Biggs explained the proportion of feedstock described as ‘other’ should have been labelled ‘fines’:

There is a quantity of mixed residual waste, which may be paper, cardboard, timber, plastic and so on. Then you have a quantity of grit and dirt and particles so fine that you cannot individually identify whether one is plastic, metal or dirt. So the 20 per cent of other should have been labelled “fines”.⁵⁰⁴

6.78 The committee heard that the issue has been addressed in the subsequent waste stream audits.⁵⁰⁵

Dependence on construction and demolition waste

6.79 As previously noted, the amended EIS provided by The Next Generation (with a maximum capacity of 1.105 million tpa) stated that the design fuel mix (the feedstock) for the facility comprises 28.69 per cent construction and demolition waste (C&D) waste and 23.27 per cent chute waste (i.e. approximately 50 per cent of C&D waste in total).⁵⁰⁶

6.80 Stakeholders contended this could be problematic for the following reasons:

- there are no reference facilities as heavy dependent on C&D waste⁵⁰⁷
- the anticipated quantities of stock are unavailable and will be increasingly difficult to secure in the future⁵⁰⁸
- approving this proposal may lead to a monopoly.⁵⁰⁹

⁵⁰³ Evidence, Mr Biggs, 27 June 2017, p 14.

⁵⁰⁴ Evidence, Mr Biggs, 27 June 2017, p 14.

⁵⁰⁵ Evidence, Mr Biggs, 27 June 2017, p 17.

⁵⁰⁶ Submission 164, Alexandria Landfill, p 32.

⁵⁰⁷ See, EnRiskS, *Energy from Waste Facility, Eastern Creek, NSW – Review of Health Risk Related, Matters Covered in the EIS*, March 2017, p 3

https://majorprojects.accelo.com/public/80af9922e944bbe722605d8198d3dbe6/Attachment%20E_%20Review%20of%20Health%20Risk,%20Attachment%20F_%20Air%20Quality%20Ozone%20Assessment%20and%20Attachment%20G_%20Soil%20and%20Water%20Assessment.pdf;

Evidence, Mr Antony Lewis, Secretary, Blacktown and District Environment Group, 27 June 2017, p 42; Arup, *Technical Note*, 16 March 2017, p 2,

<https://majorprojects.accelo.com/public/25d138603e0c2e0a262e30f56812006f/Key%20queries%20regarding%20amended%20EIS%20160317.pdf>; Submission 182, Waste Contractors and Recyclers Association of NSW, p 3, Submission 173a, Jacfin, p 2.

⁵⁰⁸ See, Submission 182, Waste Contractors and Recyclers Association of NSW, p 3; Arup, *Technical Note*, 16 March 2017, p 4,

<https://majorprojects.accelo.com/public/25d138603e0c2e0a262e30f56812006f/Key%20queries%20regarding%20amended%20EIS%20160317.pdf>; Submission 176a, National Toxics Network, p 3; Answers to questions on notice, NSW Department of Planning and Environment, 25 July 2017, Attachment A, NSW EPA, Response to amended EIS, 24 March 2017, p 1.

⁵⁰⁹ Answers to questions on notice, NSW Department of Planning and Environment, 25 July 2017, Attachment A, NSW EPA, Response to amended EIS, Attachment B, 24 March 2017, p 1.

- 6.81** The amended EIS acknowledged that there are no reference facilities accepting a similar percentage of C&D waste.⁵¹⁰ However, Alexandria Landfill suggested that it is 'inaccurate and unhelpful' to compare The Next Generation waste streams and feedstock to European facilities, as fuel for these plants is often sorted prior to arrival at the facility thus information regarding its waste declaration/identification is 'lost'.⁵¹¹
- 6.82** Alexandria Landfill proposed that it is preferable to rely on the physical and chemical characteristics of the proposed fuel.⁵¹² In addition, the proponent suggested that the moving grate technology to be used in the proposed facility is robust enough to handle a wide range of residual waste from C&D, C&I and certain municipal solid waste.⁵¹³
- 6.83** The proponent refuted concerns about the availability of feedstock,⁵¹⁴ and provided the committee with the MRA Consulting Group report of the complied feedstock audits which discusses the availability and composition of feedstock for the proposed facility.⁵¹⁵

Screening processes at Genesis Xero Recycling

- 6.84** Alexandria Landfill informed the committee that Genesis (landfill and recycling) is licensed to receive up to two million tonnes of C&D waste and general solid waste per annum, and that this waste is subject to regular independent audits and monitoring.⁵¹⁶ Genesis also manages asbestos waste and floc waste.⁵¹⁷
- 6.85** Alexandria Landfill stated that the screening and processing of waste at the Genesis facility are best practice, align with legislative requirements,⁵¹⁸ and will not be altered should The Next Generation proposal be approved.⁵¹⁹ In addition, Mr Biggs assured the committee that any waste received from third parties will go through the Genesis processes prior to the being sent to the proposed energy from waste facility.⁵²⁰

⁵¹⁰ Appendix DD.1, *Ramboll, Memorandum 26 October 2016*, p 1, <https://majorprojects.accelo.com/public/78f3b5307775e59a7587a2fa31c6afbb/Appendix%20DD.1%20Reference%20Facilities.pdf>.

⁵¹¹ Submission 164, Alexandria Landfill, p 38.

⁵¹² Submission 164, Alexandria Landfill, p 38.

⁵¹³ Submission 164, Alexandria Landfill, p 38.

⁵¹⁴ See for example, Submission 164, Alexandria Landfill, p 13; Evidence, Mr Biggs, 27 June 2017, p 20; Tabled document, Dial A Dump Industries, *Feedstock review in accordance with the Resource Recovery Criteria of the NSW EfW Policy Statement*, July 2017, p 2. Also see, Urbis, *Response to submissions report, SSD6236: Energy from Waste, Eastern Creek*, December 2017, pp 24-25, <https://majorprojects.accelo.com/public/a0d99df811d1bda71ee654fe51c8987e/A%20Response%20to%20Submissions%20on%20the%20Amended%20EIS%20-%20Eastern%20Creek%20Energy%20from%20Waste%20Proposal>.

⁵¹⁵ Tabled document, *Feedstock review in accordance with the Resource Recovery Criteria of the NSW EfW Policy Statement*, July 2017.

⁵¹⁶ Submission 164, Alexandria Landfill, p 65.

⁵¹⁷ Submission 164, Alexandria Landfill, p 73. Floc waste is the residue from the stripping, shredding and crushing of motor vehicles.

⁵¹⁸ Submission 164, Alexandria Landfill, p 67.

⁵¹⁹ Submission 164, Alexandria Landfill, p 67.

⁵²⁰ See, Evidence, Mr Biggs, 17 August 2017, p 55; Evidence, Mr Biggs, 27 June 2017, pp 16 and 17. Also see, Evidence, Dr Stambach, 17 August 2017, p 14.

6.86* As previously noted, The Next Generation stated that only eligible residual waste will be used to fuel the energy from waste facility. For the avoidance of doubt, Mr Malouf told the committee: ‘Fuel for the plant will be the residual combustible waste that is left over after materials have been separated and sorted for recycling or for disposal in licensed landfill facilities’.⁵²¹

6.87* Alexandria Landfill provided the table below, in its amended EIS and in its submission the inquiry, detailing the composition of the proposed feedstock for the facility.⁵²²

Table 6 The Next Generation - Proposed fuel mix (Source: Ramboll, PDB; 2016)

	Units	CRW	C&D	C&I	Floc waste	Paper Pulp	Glass Recovery	GO Residual	AWT Residual	MRF Residual	Design Fuel Mix
Fuel Mix	%	23.37%	28.69%	16.84%	14.43%	4.81%	1.72%	2.06%	6.87%	1.20%	100
Compositional Analysis											
Paper/Card	%	4.30	14.05	22.44	3.93	78.40	62.00	30.00	21.05	38.54	16.75
Plastic Film	%	10.20	6.37	10.90	10.90	21.60	3.80	2.50	20.00	26.94	10.47
Dense Plastic	%	0.00	6.37	10.90	10.90	0.00	34.20	2.50	21.05	0.00	7.32
Textiles	%	5.30	0.00	12.89	0.18	0.00	0.00	0.00	10.53	0.00	4.16
Glass	%	0.00	0.00	1.81	0.00	0.00	0.00	4.00	0.00	8.50	0.49
Vegetation	%	8.30	0.00	1.70	0.00	0.00	0.00	35.00	3.16	0.00	3.16
Other combustibles	%	0.00	0.00	0.00	70.40	0.00	0.00	0.00	0.00	0.00	10.16
Metal	%	1.80	1.12	0.37	0.00	0.00	0.00	5.00	0.00	7.59	1.00
Fines	%	0.00	0.94	0.18	0.00	0.00	0.00	0.00	11.58	0.00	1.10
Wood	%	58.20	43.90	21.53	0.85	0.00	0.00	0.00	4.21	0.00	30.24
Combustibles	%	0.00	0.00	2.84	2.84	0.00	0.00	0.00	2.11	0.00	1.03
Non-Combustibles	%	4.50	0.00	0.00	0.00	0.00	0.00	21.00	1.05	0.03	1.56
Hazardous	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gyprock	%	2.40	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.42
Other	%	5.00	20.75	14.44	0.00	0.00	0.00	0.00	5.26	18.40	10.14
Total	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Submission 164, Alexandria Landfill, p 32. Also see, Urbis, *Environmental Impact Statement The Next Generation NSW Energy from Waste Facility, Eastern Creek, April 2015*, pp 32-33.

<https://majorprojects.accelo.com/public/7a4f50ec1958c641911d137a62c1a147/01.%202015-04-28%20Environmental%20Impact%20Statement.pdf>.

6.88* Stakeholders raised significant concerns about the screening processes to be employed at The Next Generation plant. These issues are set out below, as are the proponent’s responses.

Issues concerning the screening process for The Next Generation project

Issue: Recyclables will be included in the feedstock.⁵²³

Response: Best practice procedures ensure recyclables are not included in the feedstock; recyclables are commercially valuable thus it does not make sense to include this type of material the waste stream;

⁵²¹ Evidence, Mr Malouf, 17 August 2017, p 44.

⁵²² Submission 164, Alexandria Landfill, p 32. Also see, Urbis, *Environmental Impact Statement: The Next Generation NSW Energy from Waste Facility, Eastern Creek, April 2015*, pp 32-33. <https://majorprojects.accelo.com/public/7a4f50ec1958c641911d137a62c1a147/01.%202015-04-28%20Environmental%20Impact%20Statement.pdf>. Also see, Submission 164, Alexandria Landfill, pp 10 and 30.

⁵²³ Answers to questions on notice, NSW Department of Planning and Environment, 25 July 2017, Appendix A, NSW EPA, Response to amended EIS, Attachment B, 24 March 2017, p 3. Also see, Evidence, Cr Bali, 27 June 2017, p 29; Submission 355, The Hon Richard Jones, p 1.

a large proportion of C&D waste is recycled before potentially becoming feedstock for an energy from waste facility.⁵²⁴

Issue: Insufficient screening processes will be employed for third party waste, which comprises approximately 45 per cent of the feedstock.⁵²⁵

Response: All third-party waste will be processed on site.⁵²⁶

Issue: Lax screening processes used at overseas sites will be replicated at the Eastern Creek facility.⁵²⁷

Response: Genesis employs best practice separating and sorting processes.⁵²⁸

Issue: Hazardous materials including asbestos, plastics, chemicals, paints, treated wood, and shredder folc, will be included in the feedstock.⁵²⁹

Response: As indicated in the feedstock audit prepared by MRA Consulting Group, *Feedstock review in accordance with the Resource Recovery Criteria of the NSW EfW Policy Statement*, hazardous material, including asbestos, will not be included in the feedstock.⁵³⁰ Asbestos would not make it through the separation and sorting process.⁵³¹ Moreover, asbestos does not burn.⁵³² However, should hazardous material be incinerated, the filtration systems could adequately 'scrub' emissions.⁵³³

Issue: Municipal waste may be included in the feedstock.⁵³⁴

Response: There is no proposal to accept municipal solid waste as feedstock.⁵³⁵

⁵²⁴ See for example, Evidence, Dr Stambach, 17 August 2017, p 14.

⁵²⁵ Submission 214, Blacktown City Council, p 10. Also see, Evidence, Ms Vanessa Parkes, Waste Manager, Blacktown City Council, 27 June 2017, p 29.

⁵²⁶ Evidence, Mr Biggs, 17 August 2017 2017, p 55; Evidence, Mr Biggs, 27 June 2017, p 16.

⁵²⁷ Evidence, Cr Bali, Mayor 27 June 2017, p 29.

⁵²⁸ Submission 164, Alexandria Landfill, p 72.

⁵²⁹ See, Submission 172a, National Toxics Network, p 3; Submission 182, Waste Contractors and Recyclers Association of NSW, p 3; Submission 214, Blacktown City Council, p 10; Submission 324, Mr Erkan Mentesh, p 1; Submission 378, Name suppressed, p 1; Submission 385, Ms Michelle McCallum, p 1; Arup, *Technical Note*, 16 March 2017, pp 5-6, <https://majorprojects.accelo.com/public/25d138603e0c2e0a262e30f56812006f/Key%20queries%20regarding%20amended%20EIS%20160317.pdf>.

⁵³⁰ See, Evidence, Mr Biggs, 27 June 2017, p 22; Submission 164, Alexandria Landfill, p 75.

⁵³¹ See, Evidence, Mr, Malouf, 17 August 2017, pp 44, 49 and 56; Evidence, Mr Biggs, 27 June 2017, p 22.

⁵³² See, Evidence, Mr Malouf, 17 August 2017, p 44.

⁵³³ Evidence, Mr Roddis, 27 June 2017, p 18. Also see, Urbis, *Response to submissions report, SSD6236: Energy from Waste, Eastern Creek*, December 2017, p 23, <https://majorprojects.accelo.com/public/a0d99df811d1bda71ee654fe51c8987e/A%20Response%20to%20Submissions%20on%20the%20Amended%20EIS%20-%20Eastern%20Creek%20Energy%20from%20Waste%20Proposal>.

⁵³⁴ Evidence, Cr Bali, Mayor, 27 June 2017, p 29.

⁵³⁵ Evidence, Mr Biggs, 27 June 2017, p 20.

Size of reference facilities

- 6.89*** During the early stages of the inquiry, when The Next Generation sought approval for a facility with a maximum capacity of 1.105 million tpa, the committee received a substantial volume of evidence objecting to such a large development.⁵³⁶
- 6.90*** Many stakeholders informed the committee that most overseas facilities are smaller than the initially proposed project. Indeed, the NSW EPA advised that, at capacity [i.e. 1.105 million tpa], the project would be one of the largest energy from waste plants in the world, with most other facilities operating in the range of between 250,000 and 500,000 tpa.⁵³⁷
- 6.91*** In addition to earlier issues raised about the availability of feedstock, Associate Professor McCabe explained that concerns with such large-scale facilities include whether appropriate source separation has occurred within the waste stream, the cost and distance feedstock needs to travel, and whether the project is palatable to the community.⁵³⁸
- 6.92*** In relation to the reference facilities identified in Table 4 (page 86), the proponent argued that the table demonstrated that there are comparable large-scale energy from waste facilities overseas, emphasising the Ferrybridge plant in the United Kingdom.⁵³⁹ The committee also received evidence of other large-scale projects, including a 1.6 million tpa development in Mexico, and a 1.8 million tpa project in China.⁵⁴⁰
- 6.93*** Another argument put forward by Dr Stambach from HZI Australia is that, unlike in Europe, smaller energy from waste projects are not viable in Sydney.⁵⁴¹
- 6.94*** As previously noted, later in the inquiry the proponent amended the development application for the energy from waste facility, and is currently only seeking approval for Stage 1 of the development, that is to treat a maximum of 552,500 tpa of residual waste fuel.⁵⁴²

Committee comment

- 6.95*** The committee acknowledges that the moving grate technology to be used at The Next Generation facility has been employed extensively overseas. However, as examined throughout this chapter, the proponent has been unable to sufficiently explain how this technology will interact with the proposed fuel or feedstock for the facility.

⁵³⁶ See, Submission 9, Name Suppressed, p 1; Submission 10, Name suppressed, p 1; Submission 15, Ms Mariza Harris, p 1; Submission 253, Name suppressed, p 1; Submission 301, Mr Frank Brenner, p 1; Submission 306, Name suppressed, p 1; Submission 351, Name suppressed, p 1; Submission 373, Mr Stefano Olivieri, p 1.

⁵³⁷ Evidence, Mr Beaman, 26 June 2017, p 7. Also see, Evidence, Associate Professor McCabe, 7 August 2017, p 41; Evidence, Dr El Hanandeh, 7 August 2017, p 41.

⁵³⁸ Evidence, Associate Professor McCabe, 7 August 2017, p 41.

⁵³⁹ See, Evidence, Mr Biggs, 27 June 2017, p 14; Evidence, Dr Stambach, 17 August 2017, p 16.

⁵⁴⁰ Evidence, Dr Stambach, 17 August 2017, p 16.

⁵⁴¹ See, Evidence, Dr Stambach, 17 August 2017, pp 16-17.

⁵⁴² Answers to further questions on notice, NSW Department of Planning and Environment, 13 November 2017, p 1.

- 6.96'** We are also of the opinion, along with the NSW EPA and NSW Health, that it is neither practicable nor safe to leave 20 per cent of the feedstock for such a large facility unidentified. The committee, like the community, is unconvinced by the proponent and its supporters' argument that the feedstock is unimportant to determining the emissions and therefore the health risks associated with this project.
- 6.97'** The proponent should have conducted a more thorough examination of the feedstock before submitting the amended EIS. This document gave rise to lingering doubts about the potential risks associated with the facility, and while the independent audits may identify the previously unidentified material as 'fines', in this instance we believe the evidence is too little, too late.
- 6.98'** Importantly, we also remain unconvinced that hazardous material will not be included in the feedstock for the proposed facility. In coming to this view, we have taken into consideration the past actions of the proponent, discussed later in this chapter, which demonstrate a clear disregard for the appropriate handling of asbestos waste. We also note concerns about the inclusion of treated timber in the waste stream.
- 6.99'** The committee also notes that there are no energy from waste facilities as heavily dependent on C&D waste as the plant proposed by The Next Generation. The proposal has therefore failed to address a key criterion of the *NSW Energy from Waste Policy Statement*, in that it has not provided a reference facility that is comparable to the proposed project.
- 6.100'** The committee acknowledges concerns about the size of The Next Generation proposal. The committee believes these concerns have arisen largely because the proponent has not provided clear and consistent information to the community about the anticipated tonnage of the project.

Emissions standards and monitoring

- 6.101'** As discussed in Chapter 5, the Commonwealth has primary responsibility for emissions standards. However, the NSW Government has a role in setting and monitoring standards.
- 6.102'** Alexandria Landfill proposed that 'Best practice accountable, real time emissions monitoring technology' will be installed in the project.⁵⁴³ Moreover, Mr Roddis from Pacific Environment noted that 'ongoing monitoring' of emissions, including continuous stack testing or periodic testing, would be a standard consent condition across all energy from waste facilities.⁵⁴⁴ Indeed, HZI Australia assured the committee that the technology proposed for the facility will meet European emissions standards.⁵⁴⁵
- 6.103'** As noted in Chapter 5, the *NSW Energy from Waste Policy Statement* requires facilities to adhere to the emissions standards and monitoring for the Group 6 emission standards within the Protection of the Environment Operations (Clean Air) Regulation 2010 which reflect the European Union's *Directive 2010/75/EU*.⁵⁴⁶ The project would also need to meet licence limits

⁵⁴³ Submission 164, Alexandria Landfill, p 51.

⁵⁴⁴ Evidence, Mr Roddis, 27 June 2017, p 13.

⁵⁴⁵ Evidence, Dr Stammach, 17 August 2017, p 18.

⁵⁴⁶ EnRiskS, *Energy from Waste Facility, Eastern Creek, NSW – Review of Health Risk Related Matters Covered in the EIS*, 8 March 2017, p 5,

set by the NSW EPA and National Environment Protection (Ambient Air Quality) Measure.⁵⁴⁷

6.104 However, as discussed in Chapter 5, some stakeholders argued that the regulatory controls in New South Wales are not sufficient to monitor energy from waste technology. Concerns raised in this regard included:

- the NSW EPA does not have the capacity to adequately monitor and regulate The Next Generation project⁵⁴⁸
- the NSW EPA is unlikely to set licensing conditions, including emissions standards, at the highest possible standard⁵⁴⁹
- if approved, the project will contribute to fine particle pollution,⁵⁵⁰ and compound air quality concerns in western Sydney.⁵⁵¹

Air emissions modelling

6.105 There was discussion during the inquiry about the air emissions modelling provided by the proponent in the amended EIS. Mr Roddis informed the committee that detailed investigations have been undertaken to determine the potential emissions from the proposed development:

I have conducted numerous investigations involving atmospheric dispersion modelling based on real-world measurements taken at equivalent facilities in Europe and have investigated multiple scenarios ranging from the expected operation through to upset conditions, and use of the emergency diesel generators that are proposed, to regulatory scenarios, one based on the New South Wales Protection of the Environment Operations (Clean Air) Regulation 2010 and one based on what are largely more stringent emission limits that the proposed facility is designed to operate under, namely the European Union's Industrial Emissions Directive.⁵⁵²

6.106 Mr Roddis said that these investigations demonstrated that the proposed facility will not compromise human health or the environment as per the NSW EPA requirements:

Under all of those scenarios the conclusions of our technical report are that the air quality impacts of the proposed facility are well within ground level concentration limits as mandated by the New South Wales EPA. And based on the technology that is being proposed, which is proven technology essentially tried and tested in the

https://majorprojects.accelo.com/public/80af9922e944bbe722605d8198d3dbe6/Attachment%20E_%20Review%20of%20Health%20Risk,%20Attachment%20F_%20Air%20Quality%20Ozone%20Assessment%20and%20Attachment%20G_%20Soil%20and%20Water%20Assessment.pdf.

⁵⁴⁷ Evidence, Dr Whelan, 17 August 2017, p 20.

⁵⁴⁸ Submission 182, Waste Contractors and Recyclers Association of NSW, p 3.

⁵⁴⁹ Evidence, Dr Whelan, 17 August 2017, p 21.

⁵⁵⁰ Evidence, Dr Whelan, 17 August 2017, p 20.

⁵⁵¹ Tabled document, Dr James Whelan, Researcher and Community Organiser, Environmental Justice Australia, *A checklist for responsible air pollution management*, August 2017, p 1.

⁵⁵² Evidence, Mr Roddis, 27 June 2017, p 12. Also see, Submission 164, Alexandria Landfill, p 55.

European Union, I believe that the facility can be operated without compromising the health of the local or regional community.⁵⁵³

6.107 As previously discussed, many stakeholders, including the NSW EPA and NSW Health, were unconvinced that the proponent could effectively model emissions without a clearer understanding of the feedstock for the project. Indeed, the NSW EPA had an extensive list of concerns relating to the projected air pollutant emissions in the amended EIS.⁵⁵⁴

6.108 According to inquiry participants, additional concerns with the modelling included:

- whether it is appropriate to allow a proponent to conduct emissions modelling⁵⁵⁵
- a suggestion that the ‘... modelled deposition rates (from stack emissions) appear to have been underestimated by Next Gen’s consultants by a factor of 365’.⁵⁵⁶
- that the first EIS had an unacceptable level of emissions but the amended EIS, with apparently the same inputs, came up with a figure that is 10 times lower, and therefore within the current standards.⁵⁵⁷

6.109 In response to concerns about the difference in emissions modelling between the first and second EIS, Mr Roddis explained that the assessments considered different stack parameters and emissions assumptions thus the level of emissions varied significantly:

It is very clear within the comparison of the two EISs that we are talking about different stack parameters and different emissions assumptions. The EIS provided an example that was the design specification of the facility—in other words, the industrial emissions directive—as the best-case scenario. That was the upper-limit conservative estimate of facility emissions. The second EIS—which was done at the request of the EPA after the first EIS—was to provide some real-world emissions. That is what we now call our “expected case”, and it is based on actual stack testing data from existing facilities across Europe.⁵⁵⁸

6.110 Mr Roddis elaborated further:

We believe that we have been conservative in our real-world scenario, or what we call our expected case. However, the reason for there being a ten-fold difference in some parameters is that one was based on a regulatory case—that is, a regulatory upper limit—and one was based on an expected case.⁵⁵⁹

⁵⁵³ Evidence, Mr Roddis, 27 June 2017, p 12.

⁵⁵⁴ See, Answers to questions on notice, NSW Department of Planning and Environment, 25 July 2017, Appendix A, NSW EPA, Response to EIS, Attachment D, pp 4-9.

⁵⁵⁵ Evidence, Dr Whelan, 17 August 2017, pp 22-23.

⁵⁵⁶ Submission 173a, Jacfin, p 7.

⁵⁵⁷ See, Evidence, Cr Bali, 27 June 2017, p 30; Evidence, Mr Lewis, 27 June 2017, p 48.

⁵⁵⁸ Evidence, Mr Roddis, 27 June 2017, p 15.

⁵⁵⁹ Evidence, Mr Roddis, 27 June 2017, p 15. Also see, Urbis, *Response to submissions report, SSD6236: Energy from Waste, Eastern Creek*, December 2017, p 31, <https://majorprojects.accelo.com/public/a0d99df811d1bda71ee654fe51c8987e/A%20Response%20to%20Submissions%20on%20the%20Amended%20EIS%20-%20Eastern%20Creek%20Energy%20from%20Waste%20Proposal>.

- 6.111' Mr Roddis acknowledged that the NSW EPA had 'extensive comments' concerning the project's technical air quality assessment, and said that The Next Generation would respond to these concerns in its response to submissions to the amended EIS.⁵⁶⁰

Committee comment

- 6.112' We share inquiry participants' concerns about the emissions modelling provided by the proponent in the amended EIS and note that The Next Generation intends to respond to these issues in its response to submissions. As discussed in Chapter 5, the committee also acknowledges and supports the proponent's suggestion that the NSW EPA provide more 'up front' requirements for emissions modelling. This is why we recommend that the NSW EPA include in its *Energy Recovery Facility Guidelines*, comprehensive information concerning emissions modelling requirements for energy from waste proposals.

Fit and proper person test

- 6.113' Section 83 of the *Protection of the Environment Operations Act 1997* sets out requirements, including an operator's compliance history, to determine whether an individual or company is a 'fit and proper person' to operate an environment protection licence.
- 6.114' The NSW EPA advised that since 2005, companies associated with the proponent have received three written warnings, nine penalty notices, five official cautions, and been convicted of one prosecution.⁵⁶¹ In addition, the EPA informed the committee that between 2012 and July 2017, there have been 581 complaints associated with the proponent and his companies.⁵⁶² The information provided by the NSW EPA is in Appendix A.
- 6.115' The NSW Department of Planning and Environment also advised that between 2010 and 2016, six actions for non-compliance had been taken against companies associated with the proponent.⁵⁶³
- 6.116' In light of these compliance issues, certain stakeholders contended that Mr Malouf is not a fit and proper person to operate the proposed energy from waste facility. For example, Ms Michelle McCallum, member of the Demolition Contractors Association (NSW) and the Asbestos Removal Contractors Association (NSW), stated:

I have huge concerns with deeming the applicant a 'fit and proper person' under various legislation, including the POE Act. The large number of penalty notices,

⁵⁶⁰ Evidence, Mr Roddis, 27 June 2017, p 12. Also see, Urbis, *Response to submissions report, SSD6236: Energy from Waste, Eastern Creek*, December 2017, pp 26-27, <https://majorprojects.accelo.com/public/a0d99df811d1bda71ee654fe51c8987e/A%20Response%20to%20Submissions%20on%20the%20Amended%20EIS%20-%20Eastern%20Creek%20Energy%20from%20Waste%20Proposal>.

⁵⁶¹ Answers to supplementary questions on notice, NSW EPA, 27 July 2017, Attachment 1, p 1.

⁵⁶² Answers to supplementary questions on notice, NSW EPA, 27 July 2017, Attachment 1, p 2.

⁵⁶³ Answers to questions on notice, NSW Department of Planning and Environment, 27 July 2017, p 2.

improvement notices, clean up notices etc (all on public record) that this operator has received from NSW EPA is a huge concern.⁵⁶⁴

- 6.117'** Similarly, Dr Whelan from Environmental Justice Australia stated: 'The proponent for Eastern Creek has not built or operated plants of this nature previously. The company has been fined for non-compliance (mishandling asbestos)'.⁵⁶⁵
- 6.118'** Ms Wilson from No Incinerator for Western Sydney told the committee the proponent was involved in an incident where asbestos-contaminated soil was illegally dumped,⁵⁶⁶ stating: 'Why would we trust someone that has a history of doing the wrong thing?'⁵⁶⁷
- 6.119'** The committee also heard concerns that members of the Dial A Dump Industries leadership team do not take responsibility for their actions. For example, Cr Stephen Bali, Mayor of Blacktown City Council, said that the company has previously blamed an individual employee or customer for non-compliant activity rather than taking responsibility itself.⁵⁶⁸ Mr Lewis from Blacktown and District Environment Group concurred, and said that the culture at the company did not encourage the leadership team to show responsibility.⁵⁶⁹
- 6.120'** Mr Malouf responded forcefully to the suggestion that he was not a 'fit and proper' person to operate and energy from waste facility, arguing he has '... 33 years in business and a very, very good track record'⁵⁷⁰ with 'no deliberate or intended environmental breaches'.⁵⁷¹ Moreover, while he agreed that his companies have 18 breaches for non-compliant activity from the NSW EPA on the public record,⁵⁷² he does not believe the compliance breaches will affect his standing:

Section 225 of the *Protection of the Environment Operations Act* indicates that payment of a penalty infringement notice is not an admission of the facts upon which the notice is based. So you will find that, on that record that you are referring to, most of the breaches are penalty infringement notices.⁵⁷³

- 6.121'** In relation to the 581 community complaints against Dial A Dump Industries recorded since 2001, Mr Malouf suggested that many of these related to odour issues from the Alexandria Landfill site.⁵⁷⁴

⁵⁶⁴ Submission 385, Ms Michelle McCallum, p 1. Also see, Tabled document, *A checklist for responsible air pollution management*, August 2017, p 3; Evidence, Ms Wilson, 27 June 2017, p 44.

⁵⁶⁵ Tabled document, *A checklist for responsible air pollution management*, August 2017, p 3.

⁵⁶⁶ Evidence, Ms Wilson, 27 June 2017, p 44.

⁵⁶⁷ Evidence, Ms Wilson, 27 June 2017, p 46.

⁵⁶⁸ Evidence, Cr Bali, 27 June 2017, p 32.

⁵⁶⁹ Evidence, Mr Lewis, 27 June 2017, p 46.

⁵⁷⁰ Evidence, Mr Malouf, 17 August 2017, p 47.

⁵⁷¹ Evidence, Mr Malouf, 17 August 2017, p 43.

⁵⁷² Evidence, Mr Malouf, 17 August 2017, p 45.

⁵⁷³ Evidence, Mr Malouf, 17 August 2017, p 47.

⁵⁷⁴ Evidence, Mr Malouf, 17 August 2017, p 46.

Committee comment

- 6.122** The committee acknowledges concerns from some stakeholders that the proponent is not a 'fit and proper person' to operate an energy from waste facility. There is a significant history of non-compliance in the company's 33-year history, including the mishandling of asbestos. The committee is also concerned about suggestions that the proponent and his leadership team appear unwilling to accept responsibility for past mistakes, given the size, scope and novelty of the facility proposed to be built and operated.

Chapter 7 NSW EPA

This chapter discusses the role of the NSW Environment Protection Authority (NSW EPA) in regulating the waste industry. The chapter outlines concerns raised during the inquiry about whether the NSW EPA is performing this role effectively, including suggestions that the agency's compliance model is inadequate and allows criminal elements within the industry to flourish. The chapter also discusses concerns that NSW EPA staff are ill-equipped to investigate and prosecute offences.

Regulating the waste industry

7.1 As the regulatory authority responsible for the *Protection of the Environment Operations Act 1997*, the NSW EPA investigates and reports on alleged non-compliance with environment protection legislation for the purposes of regulatory action, including prosecution.⁵⁷⁵ The NSW EPA explained its 'responsive and risk-based approach'⁵⁷⁶ to its regulatory functions:

To encourage voluntary compliance, the EPA works hard to maintain contemporary legislative and policy frameworks that provide regulatory certainty to industry. We develop guidelines and deliver a range of education and support campaigns to build understanding of regulatory requirements and provide assistance to the regulated community. We also use licensing to regulate high-risk activities.⁵⁷⁷

7.2 While the NSW EPA noted that the 'vast majority' of stakeholders are law-abiding and committed to ensuring the waste industry is innovative and sustainable,⁵⁷⁸ the agency observed: 'The opportunity for profiting from unlawful activities means that there is a persistent criminal element in the waste industry that is both agile and difficult to neutralise'.⁵⁷⁹

7.3 The NSW EPA acknowledged the challenges of regulating the waste industry, specifically the difficulties of effectively managing the wide variety of operators and the need to discourage unlawful behaviours:

Waste is a multi-billion-dollar industry in NSW that is made up of operators across the entire business spectrum, from large multinational corporations through to sole traders.

This diversity makes the EPA's role as a regulator of the waste industry both complex and challenging. Effective regulation requires ongoing regulatory reform to keep pace with highly innovative and agile industry stakeholders and discourage unlawful activities such as illegal dumping and waste levy avoidance.⁵⁸⁰

⁵⁷⁵ Answers to questions on notice, NSW EPA, 20 November 2017, p 3. In accordance with Section 6 of the *Protection of the Environment Operations Act 1997* the NSW EPA is the regulatory authority for the Act unless otherwise stated.

⁵⁷⁶ Answers to questions on notice, NSW EPA, 20 November 2017, p 3.

⁵⁷⁷ Answers to questions on notice, NSW EPA, 20 November 2017, p 3.

⁵⁷⁸ Answers to questions on notice, NSW EPA, 20 November 2017, p 2.

⁵⁷⁹ Answers to questions on notice, NSW EPA, 20 November 2017, p 2.

⁵⁸⁰ Answers to questions on notice, NSW EPA, 20 November 2017, p 2.

- 7.4 The NSW EPA relies on several channels to identify potential non-compliance, including the Environment Line (a one-stop pollution and environmental incident reporting service), RIDonline, analysis of data received through the Waste and Resource Reporting Portal, and engagement with local councils and other regulatory agencies.⁵⁸¹ The NSW EPA also collaborates with interstate environmental regulators.⁵⁸²
- 7.5 In addition, where appropriate, the NSW EPA works with the NSW Police Force to investigate possible non-compliance with waste legislation.⁵⁸³ A Memorandum of Understanding, updated in April 2017, between the NSW Police Force and the NSW EPA/Office of Environment and Heritage sets out how the agencies partner and collaborate on matters, including provisions for exchange of information, joint operations and operational assistance.⁵⁸⁴
- 7.6 The NSW EPA advised that the nature and scope of an investigation is determined by the circumstances of the matter, the significance of any actual or potential environmental harm or impact on human health, and the prospects of identifying potential offenders. Each matter is then prioritised for further action as appropriate.⁵⁸⁵
- 7.7 Where non-compliance is detected, the NSW EPA said it takes enforcement action that is 'proportional, drives behavioural change, and delivers maximum benefit to the NSW community' as required by its *Regulatory Position Statement* and *Compliance Policy*.⁵⁸⁶ Additionally, the NSW EPA observed: 'Any action taken by the EPA aims to ensure that environmental impacts are contained, minimised or made good, and the sanction applied reflects the seriousness of the incident and acts as a deterrent to re-offending'.⁵⁸⁷
- 7.8 The *EPA Prosecution Guidelines* set out the factors to be considered prior to pursuing a prosecution. As with all criminal offences, the evidence threshold is 'beyond reasonable doubt'.⁵⁸⁸ The NSW EPA informed the committee that since being re-established in 2012, the agency has completed over 405 prosecutions (as of 4 November 2017) with a success rate of over 95 per cent, which has resulted in the court imposing over \$7.7 million in financial penalties.⁵⁸⁹

Concerns about the regulation of the waste industry

- 7.9 During the inquiry, the committee heard from certain stakeholders who suggested that the NSW EPA is not adequately fulfilling its regulatory role in relation to the waste industry. For example, the Waste Contractors and Recyclers Association of NSW stated:

⁵⁸¹ Answers to questions on notice, NSW EPA, 20 November 2017, p 3.

⁵⁸² Answers to questions on notice, NSW EPA, 20 November 2017, p 10.

⁵⁸³ Answers to questions on notice, NSW EPA, 20 November 2017, p 10.

⁵⁸⁴ Answers to questions on notice, NSW EPA, 20 November 2017, p 9.

⁵⁸⁵ Answers to questions on notice, NSW EPA, 19 October 2017, p 2.

⁵⁸⁶ Answers to questions on notice, NSW EPA, 20 November 2017, p 3.

⁵⁸⁷ Answers to questions on notice, NSW EPA, 20 November 2017, p 3.

⁵⁸⁸ Answers to questions on notice, NSW EPA, 20 November 2017, p 4.

⁵⁸⁹ Answers to questions on notice, NSW EPA, 20 November 2017, p 5

There is a widely held perception within the NSW waste management industry that the EPA (& the NSW Government) is failing to support legitimate business operators across the sector by strongly regulating and enforcing compliance from the “illegitimate” rogue operators.⁵⁹⁰

- 7.10** The association also referred to ‘a strongly held perception by many legitimate operators in the waste and recycling industry that the EPA prefers a confrontational approach to dealing with industry – rather than trying to work collaboratively towards common goals’.⁵⁹¹ In addition, the association suggested that the EPA is not ‘... adequately and suitably resourced to enable a fair and proper regulation of waste activities across New South Wales’.⁵⁹²
- 7.11** Similarly, the Australian Organics Recycling Association argued that the NSW EPA is ‘not open’ to working with it to understand the commercial and practical realities of the industry.⁵⁹³
- 7.12** Inquiry participants also raised concerns about how and when the NSW EPA chooses to pursue regulatory responses. For example, Dr James Whelan, Researcher and Community Organiser at Environmental Justice Australia, said that it appears that the NSW EPA contains its responses to the ‘very lowest end of the spectrum’.⁵⁹⁴ Dr Whelan noted that this perceived inaction is particularly concerning as communities living in the ‘most air polluted environments’ ‘have little faith in either the system or the environmental watchdog, the EPA ...’.⁵⁹⁵
- 7.13** Along similar lines, the committee also received evidence criticising the NSW EPA’s supposed reluctance to pursue criminal prosecutions. A stakeholder told the committee: ‘... [waste] organisations continue to take advantage of a waste compliance enforcement regime that is not being policed at the appropriate level. There is little or no fear of being caught, exposed or prosecuted, nor are they being held accountable for their actions’.⁵⁹⁶ The stakeholder remarked that the EPA’s self-reporting regulatory model ‘does not capture’ unlawful activity.⁵⁹⁷
- 7.14** The stakeholder was also concerned about the training and qualifications of NSW EPA staff. They contended that the NSW EPA is ‘ill-equipped to enforce environmental matters that are closely aligned with criminal matters’ and is ‘out of its depth when trying to manage, enforce and prosecute high-profile entities within the waste industry’.⁵⁹⁸ Indeed, the stakeholder suggested Operation Trojan, an extensive investigation into the potential non-payment of waste levies by certain waste companies conducted by the NSW EPA in 2011-2014, was

⁵⁹⁰ Submission 182b, Waste Contractors and Recyclers Association of NSW, p 2.

⁵⁹¹ Submission 182b, Waste Contractors and Recyclers Association of NSW, p 1.

⁵⁹² Evidence, Mr Tony Khoury, Executive Director, Waste Contractors and Recyclers Association of NSW, 17 August 2017, p 2.

⁵⁹³ Submission 395, Australian Organics Recycling Association, p 2.

⁵⁹⁴ Evidence, Dr James Whelan, Researcher and Community Organiser, Environmental Justice Australia, 17 August 2017, p 26.

⁵⁹⁵ Evidence, Dr Whelan, 17 August 2017, p 27.

⁵⁹⁶ *In camera* evidence, Witness C, 23 October 2017, p 13, published by resolution of the committee.

⁵⁹⁷ *In camera* evidence, Witness C, 23 October 2017, p 17, published by resolution of the committee.

⁵⁹⁸ *In camera* evidence, Witness C, 23 October 2017, p 13, published by resolution of the committee.

undermined by the investigatory and prosecutorial skills of NSW EPA officers and a potential leak of information by the NSW EPA to the waste industry.⁵⁹⁹

7.15⁶⁰⁰ Moreover, the stakeholder suggested that ‘... there is too much interference from public servants trying to direct investigations, with no investigating experience, and making decisions in an untimely manner’.⁶⁰⁰ To clarify, the stakeholder stated that they did not believe this behaviour was intentional, rather that officers and managers are ‘out of their depth’.⁶⁰¹

7.16⁶⁰² Meanwhile, Dr Stephen Goodwin, President of the Mountain Districts Association, suggested that the NSW EPA can, inappropriately, take a heavy-handed approach to responding to certain incidents.⁶⁰² Likewise, the Australian Organics Recycling Association said that its members are being ‘unfairly targeted’ in compliance action and with regulatory barriers.⁶⁰³

7.17⁶⁰⁴ Other concerns raised specific to the regulation of the waste industry included:

- failure to regulate large-scale dumping and waste levy avoidance, examined later in this chapter
- ineffective oversight of environment protection licensing conditions, thereby allowing legitimate waste operators to pursue unlawful activities such as stockpiling waste⁶⁰⁴
- investigations not being conducted in a timely manner⁶⁰⁵
- unwillingness to address odour issues from waste facilities in western Sydney⁶⁰⁶
- frustration that urban tree waste is excluded as an ‘eligible waste fuel’ in the *NSW Energy from Waste Policy Statement*⁶⁰⁷
- ineffectiveness of a ‘one-size fits all’ approach to regulation and the ‘dysfunction’⁶⁰⁸ of the *Protection of the Environment Operations Act 1997* to address compliance concerns, which unduly burdens certain industry participants⁶⁰⁹
- frustration that the NSW EPA ‘... move goal posts, set rules and take time over their aspect of regulating the industry, whereas those operating within the industry do not have that same power or latitude’⁶¹⁰

⁵⁹⁹ *In camera* evidence, Witness C, 23 October 2017, p 18, published by resolution of the committee.

⁶⁰⁰ *In camera* evidence, Witness C, 23 October 2017, p 14, published by resolution of the committee.

⁶⁰¹ *In camera* evidence, Witness C, 23 October 2017, p 17, published by resolution of the committee.

⁶⁰² Evidence, Dr Stephen Goodwin, President, Mountain Districts Association, 17 August 2017, p 32.

⁶⁰³ Submission 395, Australian Organics Recycling Association, p 2.

⁶⁰⁴ Submission 182b, Waste Contractors and Recyclers Association of NSW, p 2.

⁶⁰⁵ *In camera* evidence, Witness C, 23 October 2017, p 15, published by resolution of the committee.

⁶⁰⁶ See for example, Submission 211, Mr Joseph Incorvil, p 1; Submission 281, Name suppressed, p 1; Submission 376, Mrs Kerri Bradbury, p 1.

⁶⁰⁷ Submission 177, Active Tree Services, p 2. Also see, Evidence, Mr Mark Willcocks, Director, Active Tree Services, 7 August 2017, p 52.

⁶⁰⁸ Submission 395, Australian Organics Recycling Association, p 5.

⁶⁰⁹ Submission 395, Australian Organics Recycling Association, p 2.

⁶¹⁰ *In camera* evidence, Witness G, 13 February 2018, p 2, published by resolution of the committee.

- suggestion that the NSW EPA currently prioritise regulation over providing advice and support to industry participants⁶¹¹
- concerns that the definition of ‘waste’ is too restrictive and limits opportunities to market certain products⁶¹²
- waste projects being held up and ‘stymied’ by the NSW EPA’s application of the precautionary principle⁶¹³
- concerns about phoenix companies⁶¹⁴
- the high level of subcontracting in the waste industry.⁶¹⁵

7.18 In addition, a stakeholder contended that organised criminal elements are operating in the waste industry.⁶¹⁶ In response, the NSW EPA acknowledged that ‘There are certainly some very bad elements in the waste industry, and some of them tend to be one-off individuals who are particularly bad’.⁶¹⁷ This assessment was corroborated by the NSW Police Force, which advised that there is ‘very little’ evidence of links between organised crime, outlaw motorcycle gangs and the waste industry.⁶¹⁸ Moreover, the police said that certain unscrupulous waste industry participants ‘... might be people with criminal links as opposed to using the waste industry as a means to further their organisation or organised crime’.⁶¹⁹

7.19 Another key concern raised by many inquiry participants was around licensing conditions set by the NSW EPA. For example, Dr Whelan stated that, in anticipation of ‘pushback’, the NSW EPA does not pursue tough licensing conditions for major polluting industries such as mines.⁶²⁰ Dr Whelan suggested that this lax approach may be reflected in how the NSW EPA sets licensing conditions for large-scale energy from waste facilities in the future.⁶²¹ Furthermore, Dr Whelan expressed concern about the willingness of the NSW EPA to amend licensing conditions when industries appear unable to meet these requirements.⁶²²

7.20 The committee also heard that the lax regulatory environment, including in relation to licensing, has led to the inappropriate establishment and inadequate monitoring of the landfill site at Mangrove Mountain. The case study below outlines these issues.

⁶¹¹ *In camera* evidence, Witness G, 13 February 2018, p 2, published by resolution of the committee.

⁶¹² *In camera* evidence, Witness G, 13 February 2018, pp 2-3, published by resolution of the committee.

⁶¹³ *In camera* evidence, Witness G, 13 February 2018, p 3, published by resolution of the committee.

⁶¹⁴ Evidence, Mr Mark Gifford, Chief Environmental Regulator, NSW EPA, 24 November 2017, p 3.

⁶¹⁵ Evidence, Mr Gifford, 24 November 2017, p 8.

⁶¹⁶ *In camera* evidence, Witness C, 23 October 2017, p 13, published by resolution of the committee.

⁶¹⁷ *In camera* evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 24 November 2017, p 16, published by resolution of the committee.

⁶¹⁸ *In camera* evidence, Detective Superintendent Deborah Wallace, NSW Police Force, 24 November 2017, p 3 and p 4, published by resolution of the committee.

⁶¹⁹ *In camera* evidence, Detective Superintendent Deborah Wallace, NSW Police Force, 24 November 2017, p 6, published by resolution of the committee.

⁶²⁰ Evidence, Dr Whelan, 17 August 2017, p 27.

⁶²¹ Evidence, Dr Whelan, 17 August 2017, p 27

⁶²² Evidence, Dr Whelan, 17 August 2017, p 24.

Case study: Mangrove Mountain landfill site

The Mangrove Mountain landfill site is located on the New South Wales Central Coast, and is operated by Verde Terra Pty Ltd, an affiliate of the waste company Bingo.⁶²³ Landfilling at the site began in 1998 when Gosford City Council (now part of Central Coast Council) issued a development consent for a minor redevelopment of the Mangrove Mountain Memorial Golf Course.⁶²⁴

In 2001, the NSW EPA issued the site with an environmental protection licence. The licence has since been varied on at least 13 occasions,⁶²⁵ despite the Mountain Districts Association suggestion that the site conflicts with the requirements of the NSW EPA *Environment Environmental Guidelines: Solid Waste Landfills*.⁶²⁶ The site operated as a regional waste facility licensed to accept general solid waste (non-putrescible) until May 2014.⁶²⁷ Verde Terra is currently refining plans to alter the site.⁶²⁸

The site sits in the catchment of the Ourimbah Creek system which supplies water into Mardi Dam and Mangrove Creek Dam.⁶²⁹ The local community is concerned that the landfill will contaminate the water supply of the Central Coast region.⁶³⁰

The Mountain Districts Association said the NSW EPA have taken 'zero' action in response to compliance concerns regarding the site.⁶³¹ For example, in one instance in 2015, the NSW EPA did not act promptly when an uncontrolled discharge in Ourimbah Creek was traced to the Mangrove Mountain site.⁶³²

In February 2016, the NSW EPA began regular meetings with the Mountain Districts Association to discuss the site.⁶³³ In September 2016, following consultation with the Mountain Districts Association, SLR Consulting was contracted by the NSW EPA to conduct an independent environmental review of the site.⁶³⁴ The NSW EPA reported that the consultant concluded that there was no evidence of the landfill contaminating the water supply.⁶³⁵

⁶²³ NSW EPA, *Mangrove Mountain Landfill* (26 September 2017), <http://www.epa.nsw.gov.au/working-together/community-engagement/community-news/mangrove-mountain-landfill>.

⁶²⁴ Submission 169, Mountain Districts Association, pp 2-3.

⁶²⁵ Submission 169, Mountain Districts Association, p 3.

⁶²⁶ See Evidence, Dr Goodwin, 17 August 2017, p 30 and NSW EPA, *Environmental Guidelines: Solid Waste Landfills*, Second edition 2016, <http://www.epa.nsw.gov.au/resources/waste/solid-waste-landfill-guidelines-160259.pdf>

⁶²⁷ Submission 169, Mountain Districts Association, p 3; NSW EPA, *Mangrove Mountain Landfill* (7 July 2017), <http://www.epa.nsw.gov.au/working-together/community-engagement/community-news/mangrove-mountain-landfill>.

⁶²⁸ NSW EPA, *Mangrove Mountain Landfill* (7 July 2017), <http://www.epa.nsw.gov.au/working-together/community-engagement/community-news/mangrove-mountain-landfill>.

⁶²⁹ Submission 169, Mountain Districts Association, p 3.

⁶³⁰ Evidence, Dr Goodwin, 17 August 2017, p 33.

⁶³¹ Evidence, Dr Goodwin, 17 August 2017, pp 29-30.

⁶³² Evidence, Dr Goodwin, 17 August 2017, p 31.

⁶³³ Evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 17 August 2017, p 66.

⁶³⁴ SLR Consulting, *Technical, Environmental and Operational Review Mangrove Mountain Landfill Wisemans Ferry Road, Mangrove Mountain NSW*, May 2017, <http://www.epa.nsw.gov.au/working-together/community-engagement/community-news/mangrove-mountain-landfill>.

However, the Mountain Districts Association contended that the NSW EPA has misconstrued the report's findings.⁶³⁶ The association also conducted its own groundwater investigation and said it had found 'serious concerns' about the data supplied by the operator and used in the consultant's report.⁶³⁷

7.21 Another key issue was around the NSW EPA's multiple roles. As noted in Chapter 2, the Australian Industrial Ecology Network suggested that the NSW EPA is 'hopelessly conflicted' as it exercises its roles as 'regulator and enforcer', 'developer of policy', and 'and sponsor and provider of significant amounts of grant funding'.⁶³⁸ Following on, the committee received evidence that the NSW EPA should be restructured to enhance the regulation of the waste industry. The Australian Organics Recycling Association stated:

Government is urged to implement the type of reform and cultural change that was so effective in shifting the priorities of WorkCover NSW to SafeWork NSW to achieve regulation and compliance together with support and education as equal priorities.

This may require restructuring the EPA to achieve a better balance between regulating illegal activities and working with, and supporting, the organics recycling industry which is operating in good faith for sustainable environmental outcomes.⁶³⁹

7.22 It was also brought to the committee's attention that this is not the first investigation into the NSW EPA.⁶⁴⁰ Indeed, the NSW Legislative Council's General Purpose Standing Committee No. 5 conducted an inquiry into the management and performance of the NSW EPA in 2014-2015. The committee concluded that 'overall the EPA is performing the majority of its functions in keeping with its objectives',⁶⁴¹ and made 17 recommendations to address specific concerns regarding the agency's governance structures and engagement with stakeholders.⁶⁴² While the government response to the report noted the recommendations regarding the governance of the agency, and supported those that sought to enhance communication with stakeholders,⁶⁴³ during this inquiry the committee was encouraged to strengthen the NSW EPA by reiterating the recommendations of the 2015 report.⁶⁴⁴

together/community-engagement/community-news/mangrove-mountain-landfill. Also see, Evidence, Mr Buffier, 17 August 2017, p 66.

⁶³⁵ NSW EPA, *Mangrove Mountain Landfill* (7 July 2017), <http://www.epa.nsw.gov.au/working-together/community-engagement/community-news/mangrove-mountain-landfill>.

⁶³⁶ Evidence, Dr Goodwin, 17 August 2017, p 31.

⁶³⁷ Evidence, Dr Goodwin, 17 August 2017, p 31.

⁶³⁸ Evidence, Mr Mark Glover, Director, Australian Industrial Ecology Network, 17 August 2017, p 38.

⁶³⁹ Submission 395, Australian Organics Recycling Association, p 3.

⁶⁴⁰ Answers to questions on notice, NSW EPA, 20 November 2017, p 1.

⁶⁴¹ General Purpose Standing Committee No. 5, The performance of the NSW Environment Protection Authority (February 2015), p xi.

⁶⁴² General Purpose Standing Committee No. 5, The performance of the NSW Environment Protection Authority (February 2015), p xi.

⁶⁴³ Government response, Hon Mark Speakman, Minister for the Environment, 13 August 2015.

⁶⁴⁴ Evidence, Dr Whelan, 17 August 2017, pp 20-21.

NSW EPA response to concerns

7.23* The NSW EPA responded forcefully to suggestions that the regulatory regime is inadequate, describing itself as ‘Australia’s leading environmental regulator’⁶⁴⁵ and stating the agency is ‘very strong’ on its compliance and enforcement activities.⁶⁴⁶

7.24* In response to suggestions that the agency is reluctant to pursue criminal prosecutions, the NSW EPA argued: ‘In many cases issuing penalty notices represents greater public benefit than pursuing prosecutions as it delivers a prompter regulatory response, reduces pressure on the judicial system and the cost imposed on Government, and is transparently reported on the NSW EPA’s public register’.⁶⁴⁷ In addition, the NSW EPA noted that prosecuting unlawful activity is ‘highly resource-intensive’, and that the agency therefore focuses on ‘individuals who are intentionally engaging in illegal activities which pose a high risk of harm to the NSW community and the environment’.⁶⁴⁸

7.25* The NSW EPA also noted:

- the challenges of obtaining sufficient evidence to pursue a prosecution and prove the offence beyond reasonable doubt⁶⁴⁹
- the inherent difficulty of waste investigations given the dispersed and disaggregated nature of the activity and the sophistication of many of the players involved in unlawful waste activities⁶⁵⁰
- the challenge of proving that material is in fact waste, and determining whether environmental harm has occurred due to the illegal activity.⁶⁵¹

7.26* Despite these challenges, the NSW EPA pointed out its relatively high prosecution rate, compared with that of Victoria:

In 2016–17, we completed 103 prosecutions, resulting in over \$2.4 million in financial penalties being imposed by courts. In contrast, it has been reported that over the same period the Victorian EPA completed 11 prosecutions for \$175,000 in financial penalties.⁶⁵²

7.27* In response to criticism about the timeliness of investigations, the NSW EPA advised that: ‘All waste investigations conducted by the EPA are completed within statutory timeframes’.⁶⁵³ The NSW EPA also noted that the *EPA Guideline on Timely Investigations with a view to Prosecution* details ‘strict timelines for deciding which matters should be investigated with a view to prosecution’, and that all decisions about whether a prosecution should proceed are finalised

⁶⁴⁵ Answers to questions on notice, NSW EPA, 20 November 2017, p 3.

⁶⁴⁶ Evidence, Mr Buffier, 17 August 2017, p 61.

⁶⁴⁷ Answers to questions on notice, NSW EPA, 20 November 2017, p 3.

⁶⁴⁸ Answers to questions on notice, NSW EPA, 20 November 2017, p 4.

⁶⁴⁹ Answers to questions on notice, NSW EPA, 20 November 2017, p 4.

⁶⁵⁰ Answers to questions on notice, NSW EPA, 20 November 2017, p 8.

⁶⁵¹ Answers to questions on notice, NSW EPA, 20 November 2017, p 8.

⁶⁵² Answers to questions on notice, NSW EPA, 20 November 2017, p 4.

⁶⁵³ Answers to questions on notice, NSW EPA, 20 November 2017, p 8.

before the three-year limitation period for such offences expires.⁶⁵⁴ In addition, the agency noted that investigations resulting in clean-up notices and penalty notices are usually completed in less than 12 months.⁶⁵⁵

7.28' The NSW EPA strongly disputed suggestions that its staff are incapable or apathetic towards regulating the waste industry,⁶⁵⁶ pointing to:

- its 'rigorous' recruitment and selection processes⁶⁵⁷
- employment of 'highly credentialed and experienced' investigative officers and managers, many of whom have a tertiary education⁶⁵⁸
- high staff retention rates⁶⁵⁹
- results of the *2016 People Matter NSW Public Sector Employee Survey* indicating a positive workplace environment with an engaged workforce⁶⁶⁰
- extensive in-house and external training opportunities⁶⁶¹
- an in-house legal branch and access to many barristers who are available to provide legal advice to the NSW EPA and its Board.⁶⁶²

7.29' The committee also heard that in 2016, the NSW EPA established the Intelligence and Analysis Unit which is responsible for strategic, operational and tactical intelligence functions for operational staff and the senior management team, and is the contact point between the NSW EPA and other New South Wales, interstate and federal agency intelligence agencies.⁶⁶³

7.30' In relation to phoenix companies, the NSW EPA noted the 'challenge' of investigating and prosecuting companies for non-compliance once a business is deregistered.⁶⁶⁴ The NSW EPA said it is therefore focusing a 'great deal' of attention on understanding how and why these corporate structures are created.⁶⁶⁵

7.31' The NSW EPA also acknowledged the challenges of regulating the large number of subcontractors operating in the waste industry, noting that this issue poses significant challenges when attempting to establish evidence of accountability for illegal waste dumping.⁶⁶⁶ Mr Gifford proposed one possible solution to this issue, namely, making the

⁶⁵⁴ Answers to questions on notice, NSW EPA, 20 November 2017, p 8.

⁶⁵⁵ Answers to questions on notice, NSW EPA, 20 November 2017, p 9.

⁶⁵⁶ Answers to questions on notice, NSW EPA, 20 November 2017, p 4.

⁶⁵⁷ Answers to questions on notice, NSW EPA, 20 November 2017, p 5.

⁶⁵⁸ Answers to questions on notice, NSW EPA, 20 November 2017, p 5.

⁶⁵⁹ Answers to questions on notice, NSW EPA, 20 November 2017, p 5.

⁶⁶⁰ Answers to questions on notice, NSW EPA, 20 November 2017, pp 4 and 9.

⁶⁶¹ Answers to questions on notice, NSW EPA, 20 November 2017, p 6.

⁶⁶² Answers to questions on notice, NSW EPA, 20 November 2017, p 11.

⁶⁶³ Answers to questions on notice, NSW EPA, 20 November 2017, p 10.

⁶⁶⁴ Evidence, Mr Gifford, 24 November 2017, p 3.

⁶⁶⁵ Evidence, Mr Gifford, 24 November 2017, p 3.

⁶⁶⁶ Evidence, Mr Gifford, 24 November 2017, p 8.

owner of the vehicle and the trailer associated with the vehicle that transports waste responsible for the transport, 'so you would have someone to come back to'.⁶⁶⁷

Committee comment

- 7.32'** The committee appreciates the challenges involved in regulating the waste industry. While it is apparent that most waste operators comply with the regulatory system, a small proportion of industry participants appear insistent on operating outside of the law.
- 7.33'** A strong regulatory regime is undoubtedly dependent on a clear and consistent approach to the enforcement of sanctions, particularly when pursuing prosecutions. We note that the NSW EPA has protocols in place to ensure that investigations are conducted in a timely manner, and that prosecution is pursued as a final resort should other deterrents prove ineffective or inappropriate.
- 7.34'** Having said this, it is clear there is a perception amongst stakeholders that the NSW EPA is not effectively performing its regulatory role in relation to the waste industry. The NSW EPA responded by emphasising the many, valid reasons the agency pursues a responsive and risk-based approach to regulation. However, we believe the NSW EPA must engage more effectively with stakeholders to promote its regulatory role and activities.
- 7.35'** In addition, while we accept that NSW EPA staff appear to be adequately qualified and receive appropriate training, we believe the agency must make greater efforts to take a consistent and genuine approach to interactions with industry participants, particularly in relation to compliance issues. In addition, the agency should make a concerted effort across the board to engage more effectively with industry participants, particularly industry groups, to facilitate better working relationships.
- 7.36'** The committee notes the proposal to restructure the NSW EPA. The committee has not received sufficient evidence to recommend this action. Rather, we recommend the NSW Government investigate options to restructure the NSW EPA so it can improve its performance.

Recommendation 21

That the NSW Government investigate options to restructure the NSW Environment Protection Authority so it can improve its performance.

- 7.37'** Further, we believe that the NSW Government should conduct an independent review into the NSW EPA, with particular reference to:
- assessing the adequacy of funding for the performance of its compliance, enforcement and other roles
 - improving its community engagement role and the effectiveness of its enforcement and compliance roles

⁶⁶⁷ Evidence, Mr Gifford, 24 November 2017, p 8.

- the perceived conflict of interest between its compliance and policy and education roles.

Recommendation 22

That the NSW Government conduct an independent review into the NSW Environment Protection Authority, with particular reference to:

- assessing the adequacy of funding for the performance of its compliance, enforcement and other roles
- improving its community engagement role and the effectiveness of its enforcement and compliance roles
- the perceived conflict of interest between its compliance and policy and education roles.

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- 7.38*** The committee notes that the NSW Government has failed to follow the recommendation of the previous inquiry by then General Purpose Standing Committee No. 5 into the performance of the NSW EPA that recommended that the NSW Government amend the *Protection of the Environment Administration Act 1991* to provide for the appointment of a chairperson of the board independent of the Chief Executive Officer of the NSW EPA. The committee believes that this action would assist to improve the performance of the NSW EPA and notes that with the retirement of Mr Buffier, there is the opportunity for the government to make this change prior to the appointment of a new CEO.

Recommendation 23

That the NSW Government seek to amend the *Protection of the Environment Administration Act 1991* to provide for the appointment of a chairperson of the board independent of the Chief Executive Officer of the NSW Environment Protection Authority.

Regulating illegal landfilling

- 7.39*** During the inquiry it was suggested that the current regulatory regime does not provide a 'level playing field' and is undermining the ability of legitimate waste businesses to compete against rogue operators who engage in illegal landfilling.
- 7.40*** Mr Tony Khoury, Executive Director of the Waste Contractors and Recyclers Association of NSW, explained the practical implications of this problem, saying that while a 'decent operator' is required to meet strict regulatory and licencing standards, a rogue operator starts-up by 'just by having a block of land or having a shed'.⁶⁶⁸ He continued: 'Our laws are structured in such a way that the really good people comply. The really good people are then penalised when they do something wrong. But the rogue operators just go about their business'.⁶⁶⁹

⁶⁶⁸ Evidence, Mr Khoury, 17 August 2017, p 5.

⁶⁶⁹ Evidence, Mr Khoury, 17 August 2017, p 5.

- 7.41** Mr Khoury suggested that there are examples of these types of unlawful operations are currently operating in western Sydney.⁶⁷⁰ The Waste Contractors and Recyclers Association of NSW pointed to the case of a company accused of illegally dumping waste, as demonstrating this inconsistent regulatory approach. The association asserted: 'In the 15 months it has taken (from 7th June 2016 until 4th September 2017) for the EPA to issue a Notice of Clean-Up Action, the operator of this site has continued to undercut the legitimate law-abiding industry'.⁶⁷¹
- 7.42** The Waste Management Association of Australia agreed that the NSW EPA is inconsistent in its approach to legitimate landfill businesses and rogue operators: 'A common complaint by industry is that it often appears easier for NSW regulators to "crack down" on visible and legitimate operators, than it is to pursue and prosecute the illegitimate operators'.⁶⁷²
- 7.43** Moreover, there was some concern expressed during the inquiry that the NSW EPA was under-resourced and ill-equipped to regulate landfill. For example, the Waste Management Association of Australia argued that monitoring landfill conformance 'strains the resources of an already extended EPA',⁶⁷³ and said that it is 'critical' that the NSW EPA be appropriately resourced and focused on regulating 'all operators, and especially the rogue operators that undermine the efforts of the sector as a whole'.⁶⁷⁴ The association proposed providing additional resources to the NSW EPA and/or requiring landfill operators to submit regular compliance reports, submitted on their behalf by an independent certifier, attesting that landfill standards are being met.⁶⁷⁵
- 7.44** Likewise, Mr Khoury questioned whether the penalties associated with illegal dumping are enough deter rogue operators from operating sizable unlawful facilities.⁶⁷⁶ Indeed, the association proposed raising the current penalties for illegal dumping: 'An obvious disincentive is in making the fine for each incidence of illegal dumping significantly greater than the cost of lawful disposal'.⁶⁷⁷
- 7.45** The NSW Police Force suggested that the introduction of a 'fit and proper person' test, similar to the system used in the tattoo industry, could deter individuals from pursuing unlawful activities such as illegal dumping.⁶⁷⁸ It was noted that this type of 'front end' regulation ensures that authorities are 'on the front foot right at the beginning' and are 'not playing catch up'.⁶⁷⁹ The committee heard that the test could be performed on all waste

⁶⁷⁰ Evidence, Mr Khoury, 17 August 2017, p 8.

⁶⁷¹ Submission 182b, Waste Contractors and Recyclers Association of NSW, p 2.

⁶⁷² Submission 215a, Waste Management Association of Australia, p 2.

⁶⁷³ Submission 215a, Waste Management Association of Australia, p 2.

⁶⁷⁴ Submission 215a, Waste Management Association of Australia, p 2.

⁶⁷⁵ Submission 215a, Waste Management Association of Australia, p 2.

⁶⁷⁶ Evidence, Mr Khoury, 17 August 2017, p 2.

⁶⁷⁷ Submission 215a, Waste Management Association of Australia, p 1.

⁶⁷⁸ *In camera* evidence, Detective Superintendent Deborah Wallace, NSW Police Force, 24 November 2017, p 3 and p 8, published by resolution of the committee.

⁶⁷⁹ *In camera* evidence, Detective Superintendent Deborah Wallace, NSW Police Force, 24 November 2017, p 3, published by resolution of the committee.

industry participants including subcontractors, and could be a risk-based assessment that considers different criteria for industry participants.⁶⁸⁰

7.46' Mr Barry Buffier, the then Chair and Chief Executive of the NSW EPA, agreed with the need to create a level playing field to ensure legitimate waste operators are not undercut:

... when you are regulating an industry you are aiming to provide a level playing field for all the operators in that industry. If there is an opportunity for people to avoid a regulation or avoid a levy or avoid a cost, that provides them with a competitive advantage which they should not have over the genuine operators.⁶⁸¹

7.47' The NSW EPA advised that illegal dumping cannot be easily resolved by compliance or licensing requirements, and that the challenges are compounded by a confluence of other factors:

This is an issue that neither specific regulatory requirements nor licencing can easily fix, as the low barrier to entry will continue to attract those who have no regard for the laws put in place to protect the environment. The problem is exacerbated by the high level of sub-contracting in the industry leading to difficulties in establishing evidence of accountability for illegal waste dumping.⁶⁸²

7.48' The committee heard that these difficulties were exemplified during the investigation of the alleged illegal landfill site at Spencer on the New South Wales Central Coast. Mr Buffier explained the case was complicated by the fact that the NSW EPA was initially not the appropriate regulatory authority and that once the agency took on this role, approximately 18 months ago, 'We have undertaken a long, complicated and exhaustive monitoring and investigation. These are not simple matters to prosecute'.⁶⁸³

7.49' The NSW EPA acknowledged that the regulatory regime could be enhanced by additional resourcing and increased penalties, particularly monetary penalties for offences relating to illegal dumping and illegal landfilling.⁶⁸⁴ The NSW EPA advised that it is drafting a protocol on how to calculate the quantum of the monetary benefit for such activities.⁶⁸⁵ In addition, the NSW EPA said it could consider a 'fit and proper person' test for waste industry participants, including sub-contractors.⁶⁸⁶

⁶⁸⁰ *In camera* evidence, Detective Superintendent Deborah Wallace, NSW Police Force, 24 November 2017, pp 3-4, published by resolution of the committee.

⁶⁸¹ Evidence, Mr Buffier, 17 August 2017, pp 60-61.

⁶⁸² Answers to questions on notice, NSW EPA, 20 November 2017, p 2.

⁶⁸³ Evidence, Mr Buffier, 17 August 2017, p 64.

⁶⁸⁴ *In camera* evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW Environment Protection Authority, 24 November 2017, p 14, published by resolution of the committee.

⁶⁸⁵ *In camera* evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW Environment Protection Authority, 24 November 2017, p 14, published by resolution of the committee and *In camera* evidence, Mr Mark Gifford, Chief Environmental Regulator, NSW EPA, 24 November 2017, p 15, published by resolution of the committee.

⁶⁸⁶ Evidence, Mr Gifford, 24 November 2017, p 11.

Committee comment

- 7.50** As already touched on in Chapter 3, the committee notes that monitoring and regulating illegal landfill is being hampered by a range of factors including the covert nature of activities, the availability of land to dispose of waste, high levels of sub-contracting in the industry, and the difficulties associated with establishing the necessary evidentiary threshold for illegal dumping. The committee believes that greater resources should be directed at investigating illegal landfilling to disrupt, and eventually end the practice altogether. We recommend the NSW Government allocate additional resources to the NSW EPA to conduct investigations into large-scale illegal dumping activities.
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Recommendation 24

That the NSW Government allocate additional resources to the NSW Environment Protection Authority to conduct investigations into large-scale illegal dumping activities.

- 7.51** The committee considers that there appears to be significant merit in introducing a 'fit and proper person' test, based on a sliding scale, to overcome concerns about criminal elements targeting the waste industry. We note the evidence provided by the NSW Police Force that this type of upfront regulation provides a significant advantage to regulators, in that it may deter unscrupulous individuals from participating in the waste industry in the first place. We recommend that the NSW Government introduce a 'fit and proper person' test for proprietors and company directors to assess whether individuals may work in the waste industry, incorporating a risk assessment based on a sliding scale.
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Recommendation 25

That the NSW Government introduce a 'fit and proper person' test for proprietors and company directors to assess whether individuals may work in the waste industry, incorporating a risk assessment based on a sliding scale.

- 7.52** The committee acknowledges stakeholders' concerns about the penalties associated with illegal dumping offences. As discussed in Chapter 3, there are significant financial penalties imposed for waste crimes. However, it is the responsibility of the court to impose these penalties. We note that the NSW EPA is currently preparing a draft protocol to better calculate the quantum of the monetary benefit of illegal dumping. This will assist the NSW Government in considering whether, and by how much, to increase monetary penalties for such behaviour. The committee recommends that the NSW EPA complete the draft protocol on calculating the quantum of the monetary benefit of illegal dumping and illegal landfilling as soon as practicable.
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Recommendation 26

That the NSW Environment Protection Authority complete the draft protocol on calculating the quantum of the monetary benefit of illegal dumping and illegal landfilling as soon as practicable.

- 7.53** The committee appreciates the concerns raised by the Mountain Districts Association about the Mangrove Mountain landfill site. It is understandable that the presence of a fully operational landfill site that sits on top of the Ourimbah Creek system is a matter of alarm for the local community, even though the site stopped receiving waste in 2014. We also note that the NSW EPA, the NSW Department of Planning and Environment and independent consultants have determined that the site has not contaminated the water supply.
- 7.54** The committee recognises that the former Gosford City Council was the consent authority for the initial site redevelopment. However, once the NSW EPA was given this responsibility, the agency should have conducted better stakeholder engagement to prior to issuing and amending the environment protection licence. We believe this may have gone some way to reassuring the local community about the safety of the project. It is also disappointing to receive evidence that it can take weeks for NSW EPA officers to investigate complaints, given that during this time crucial evidence may be lost. We strongly encourage the NSW EPA to take more prompt action to investigate potential breaches of environment protection licence conditions.
- 7.55** The committee believes that there are significant unresolved issues regarding the Mangrove Mountain landfill site, including licence variations and the role of the then Gosford City Council in issuing development consent. The committee therefore recommends that the NSW Government establish an independent inquiry to investigate the operation, regulation and approvals of the Mangrove Mountain Landfill site.

Recommendation 27

That the NSW Government establish an independent inquiry to investigate the operation, regulation and approvals of the Mangrove Mountain Landfill site.

Chapter 8 The future of waste management

This chapter examines the future of waste management in New South Wales, starting with concerns about the shortfall in waste infrastructure. It outlines the need for greater strategic planning in this area, including support for an infrastructure plan and a lead agency to oversee its implementation. The chapter also considers the urgent need to identify and zone land for waste facilities. Finally, the chapter discusses strengthening landfill regulation, addresses concerns about the recycling industry and considers how to enable the circular economy.

Need for more waste infrastructure

8.1 Evidence presented during the inquiry, particularly from local councils, suggested that New South Wales currently has insufficient waste infrastructure to meet demand. While Local Government NSW noted that many regional areas have limited access to adequate recycling facilities,⁶⁸⁷ a great deal of focus was the lack of waste services in the Sydney Metropolitan Area, including:

- limited recycling and resource recovery facilities for all types of waste and technologies
- insufficient access to putrescible landfill (this issue being twofold; the Suez facility at Lucas Heights is the only active putrescible landfill in Sydney, and access to Veolia's Woodlawn facility is limited due to a lack of conveniently located transfer stations and the limited capacity of existing transfer stations)
- the two Alternative Waste Treatment facilities in metropolitan Sydney, SAWT at Camps Creek and UR-3R at Eastern Creek, appear to have limited capacity to service metropolitan councils.⁶⁸⁸

8.2 Moreover, inquiry participants expressed significant concern that New South Wales is not adequately equipped to manage increasing amounts of waste into the future. For example, the Southern Sydney Regional Organisation of Councils (SSROC) stated:

It is generally understood by State and Local Government and the waste and resource recovery industry that NSW is facing the challenge of insufficient infrastructure (from processing plants to transfer stations, to organics and recycling facilities) being available to treat not just the existing waste but the projected growth in waste generation in the short-term future.⁶⁸⁹

8.3 This argument was supported by research conducted by SSROC and the Western Sydney Regional Organisation of Councils (WSROC) about their respective local areas, which concluded that urban destiny and population growth will pose significant challenges for the provision of waste management services in Sydney into the future.⁶⁹⁰

⁶⁸⁷ Submission 326, Local Government NSW, p 3.

⁶⁸⁸ See, Submission 146, Randwick Council, p 1; Submission 156, Sutherland Shire Council, pp 1-2; Submission 176, SSROC, pp 2-3; Submission 168, City of Canterbury Bankstown, p 1.

⁶⁸⁹ Submission 176, SSROC, pp 2-3.

⁶⁹⁰ See, Evidence, Ms Namoi Dougall, General Manager, SSROC, 7 August 2017, p 26; Submission 150, WSROC, p 2.

- 8.4 The issue crystallised in September 2017, following the release of the NSW Environment Protection Authority (NSW EPA) *Waste and Resource Recovery Infrastructure Strategy 2017-2021 Consultation Draft*. The consultation draft was informed by an infrastructure needs analysis.⁶⁹¹ The NSW EPA provided the table below, detailing the known expected capacity and projected throughput for waste facilities across the state in 2021. The numbers shown in red indicate the shortfall of available capacity projected by 2021.

Table 7 Known expected capacity and projected throughput for waste facilities across New South Wales in 2021.

	Putre- scible Landfill	Non- putre- scible Landfill	Mixed Waste Treatment	Energy Recovery Facility	Non- putre- scible Waste MRF	C&D Waste Process	Packaging MRF	Garden Organics Process	Putre- scible Organics Process
2021 Known capacity ('000 tpa)	3180	2924	763	143	3765	5242	1299	1133	972
2021 Projected throughput ('000 tpa)	2438	2165	1768	478	2669	4342	1583	1520	984
2021 Gap ('000 tpa)	742	759	-1005	-336	1096	900	-284	-387	-12

Tabled document, NSW EPA, Waste and Resource Recovery Infrastructure Strategy 2017-2021 Consultation Draft (2017), p 7.

- 8.5 The NSW EPA acknowledged that there needs to be 'significant investment' to build infrastructure that can process the anticipated 20 million tonnes of waste New South Wales will generate by 2021, particularly if the state is to meet its 'ambitious target to divert 75 per cent of waste from landfill'.⁶⁹² Mr Barry Buffier, the then Chair and Chief Executive of the NSW EPA, advised: 'Even if we are successful in increasing the recycling rates above where they are now and we drive down the total amount going to landfill, there is a finite amount of infrastructure available for landfill and we will require more as we go forward'.⁶⁹³

Stakeholder concerns about waste infrastructure

- 8.6 Inquiry participants contended that infrastructure development is hampered by a range of factors, including:
- a failure to hypothecate enough of the waste levy to infrastructure development, rather than it going to consolidated revenue, as discussed in Chapter 2
 - the government has had a limited role in planning waste infrastructure⁶⁹⁴ and left industry responsible for determining services,⁶⁹⁵ leading to 'ad hoc'⁶⁹⁶ infrastructure that considers commercial imperatives before community benefit⁶⁹⁷

⁶⁹¹ Tabled document, NSW EPA, *Waste and Resource Recovery Infrastructure Strategy 2017-2021 Consultation Draft* (2017), p 1.

⁶⁹² Evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 17 August 2017, p 60.

⁶⁹³ Evidence, Mr Buffier, Chair 17 August 2017, p 60.

⁶⁹⁴ Submission 168, City of Canterbury Bankstown, p 2.

⁶⁹⁵ See, Submission 326, Local Government NSW, p 4; Evidence, Mr Mike Ritchie, Managing Director, MRA Consulting Group, 7 August 2017, p 11.

- where government bodies, including the Greater Sydney Commission, have been involved in infrastructure planning, their efforts have been inadequate⁶⁹⁸
- lack of up-to-date waste data undermines the ability of government and industry to assess the current demand for waste services and to systematically and pre-emptively identify and address any gaps in infrastructure⁶⁹⁹
- there is lack of certainty in the planning process, as discussed later in this chapter.

8.7 Inquiry participants also cautioned of the significant consequences if waste management is not planned and delivered appropriately.⁷⁰⁰ Mr Charles Casuscelli, Chief Executive Officer of WSROC, said: ‘Waste has the ability ... to bring a city to its knees. If we do not manage waste properly, the effects on our urban lifestyle will be as dramatic as running out of electricity or gas, or running out of water’.⁷⁰¹ Similarly, Ms Namoi Dougall, General Manager of SSROC, observed: ‘We risk future public health issues if we do not plan now for adequate waste infrastructure for our growing population ...’.⁷⁰²

8.8 According to stakeholders, other implications arising from a lack of adequate waste infrastructure would include imposing additional collection costs on councils and ratepayers,⁷⁰³ more truck movements,⁷⁰⁴ and exacerbating the lack of competition in the market.⁷⁰⁵

Committee comment

8.9 Waste management is clearly an essential service that has wide-ranging implications for the wellbeing of individuals, the environment and the community as a whole, particularly in relation to public health. It appears that successive NSW Governments have taken a backseat in waste infrastructure planning and delivery, which has led to a projected shortfall of services across the state.

8.10 As discussed in Chapter 2, it is frustrating to receive evidence that despite large sums of money being raised by the waste levy, waste infrastructure is not being planned and delivered in a comprehensive manner to meet the needs of the community. The following section examines possible solutions to addressing this issue such as enhanced strategic planning, and improved recycling efforts and infrastructure.

⁶⁹⁶ Submission 326, Local Government NSW, p 4.

⁶⁹⁷ See, Submission 198, City of Sydney, p 3; Submission 167, NSROC, p 2.

⁶⁹⁸ See, Evidence, Ms Gayle Sloan, Chief Executive Officer, Waste Management Association of Australia, 26 June 2017, p 24; Evidence, Mr Charles Casuscelli, Chief Executive Officer, WSROC, 27 June 2017, p 26; Evidence, Ms Amanda Bombaci, Regional Waste Coordinator, WSROC, 27 June 2017, p 33; Submission 158, Hunters Hill Council, p 1.

⁶⁹⁹ See, Submission 170, MRA Consulting Group, p 4; Submission 198, City of Sydney, p 2.

⁷⁰⁰ See, Evidence, Ms Jo Immig, Coordinator, National Toxics Network, 27 June 2017, p 35.

⁷⁰¹ Evidence, Mr Casuscelli, 27 June 2017, p 26.

⁷⁰² Evidence, Ms Dougall, 7 August 2017, p 26.

⁷⁰³ Submission 168, City of Canterbury Bankstown, p 2.

⁷⁰⁴ See, Submission 168, City of Canterbury Bankstown, p 2; Evidence, Mr Mark Wood, Group Manager, Engineering Operations, Sutherland Shire Council, 7 August 2017, p 28.

⁷⁰⁵ Submission 156, Sutherland Shire Council, pp 1-2.

- 8.11⁷⁰⁶ The committee understands stakeholders' frustration about access to up-to-date waste data. Failing to publish this data undermines the development of waste management infrastructure and in the current climate, where the state is facing an impending shortfall in services, this is unacceptable. We recommend that the NSW EPA regularly publish up-to-date waste data.

Recommendation 28

That the NSW Environment Protection Authority regularly publish up-to-date waste data.

Strategic planning for waste management

- 8.12⁷⁰⁶ Many stakeholders argued there is a clear and pressing need for waste management planning at a strategic level if the state's long-term waste disposal and infrastructure needs are to be met. Mr Casuscelli encapsulated many inquiry participants' concerns when he stated: '... there seems to be a lack of coordination at a very strategic level for building waste processing capability ...'.⁷⁰⁶ Mr Casuscelli noted that while there have been 'lots of attempts at defining targets and recycling', '... we do not have a strategic view of waste management—that is, where do we locate the next generation of waste processing facilities?'⁷⁰⁷ Moreover, he suggested this lack of coordination is hindering innovation as investors find it too difficult to pursue projects.⁷⁰⁸
- 8.13⁷⁰⁹ According to Mr Mark Taylor, General Manager, NSW Resource Recovery at Veolia, there is a need for government to 'drive the agenda' in this area.⁷⁰⁹ Likewise, the Waste Management Association of Australia and SSROC argued that while industry is best-suited to planning and delivering infrastructure, government should provide certainty and guidance in this area.⁷¹⁰
- 8.14⁷¹¹ Early in the inquiry, the committee heard that unlike other Australian jurisdictions, New South Wales does not have a waste infrastructure plan.⁷¹¹ Inquiry participants called on the NSW Government to rectify this situation.⁷¹² Amongst other proposals, stakeholders suggested that the strategic plan:
- identify appropriate precincts and locations, including buffer zones, for waste services⁷¹³
 - facilitate 'at least \$2 billion' in new infrastructure⁷¹⁴

⁷⁰⁶ Evidence, Mr Casuscelli, 27 June 2017, p 26.

⁷⁰⁷ Evidence, Mr Casuscelli, 27 June 2017, p 26.

⁷⁰⁸ Evidence, Mr Casuscelli, 27 June 2017, p 34.

⁷⁰⁹ Evidence, Mr Mark Taylor, General Manager, NSW Resource Recovery, Veolia, 26 June 2017, p 61. Also see, Evidence, Ms Immig, 27 June 2017, p 40.

⁷¹⁰ See, Evidence, Ms Sloan, 26 June 2017, p 22; Evidence, Ms Dougall, 7 August 2017, p 26.

⁷¹¹ See, Submission 215, Waste Management Association of Australia, p 2 and p 3; Submission 168, City of Canterbury Bankstown, p 2.

⁷¹² See, Evidence, Ms Sloan, 26 June 2017, p 22; Evidence, Mr Garth Lamb, NSW Branch President, Waste Management Association of Australia, 26 June 2017, pp 23-24; Submission 326, Local Government NSW, p 4; Evidence, Ms Bombaci, 27 June 2017, p 33.; Submission 190, National Waste and Recycling Industry Group, p 3.

⁷¹³ See, Evidence, Ms Sloan, 26 June 2017, p 22.

- support energy from waste, the circular economy and creating ‘real markets’ for secondary materials from waste⁷¹⁵
- consider waste generator education, product stewardship, waste levies, market support initiatives and re-use support subsidies.⁷¹⁶

8.15 In addition, the committee heard that the strategic plan should be supported by a waste management infrastructure State Environment Planning Policy (SEPP) to provide clear development pathways.⁷¹⁷ Ms Gayle Sloan, Chief Executive Officer of the Waste Management Association of Australia, cautioned that if this action is not taken ‘New South Wales can continue to see facilities closing and no real planning or discussion with industry as to what is required into the future’.⁷¹⁸ Land and planning processes are examined later in this chapter.

8.16 As previously mentioned, in August 2017, the NSW EPA announced it had developed a *Waste and Resource Recovery Infrastructure Strategy Consultation Draft*.⁷¹⁹ The EPA explained the strategy as follows:

It is anticipated that this strategy will aid ongoing development of regional waste and resource recovery implementation plans. Local governments and waste industry participants lead planning and investment in NSW’s waste and resource recovery systems. This draft strategy has been developed to guide decision making to ensure NSW gets the correct mix of infrastructure to meet future needs.⁷²⁰

8.17 The consultation period for the draft strategy closed in late November 2017. The NSW EPA received over 25 submissions, representing over 150 organisations, and is currently reviewing these submissions with a view to publishing the finalised strategy in early 2018.⁷²¹

8.18 Many stakeholders advocated identifying waste as an ‘essential service’ to ensure that the industry can be managed, legislated and planned for accordingly.⁷²² In fact, s 4 of the *NSW Essential Services Act 1988* defines ‘the provision of garbage, sanitary cleaning or sewerage services’ as an ‘essential service’.⁷²³

⁷¹⁴ Evidence, Mr Ritchie, 7 August 2017, p 11.

⁷¹⁵ Evidence, Ms Sloan, 26 June 2017, p 23. Also see, Submission 190, National Waste and Recycling Industry Council, p 3.

⁷¹⁶ Submission 190, National Waste and Recycling Industry Council, p 1.

⁷¹⁷ See, Evidence, Ms Sloan, 26 June 2017, p 22; Submission 170, MRA Consulting Group, p 4.

⁷¹⁸ Evidence, Ms Sloan, 26 June 2017, p 22.

⁷¹⁹ Evidence, Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery, NSW EPA, 26 June 2017, p 2.

⁷²⁰ Tabled document, *Waste and Resource Recovery Infrastructure Strategy 2017-2021 Consultation Draft* (2017), p 1.

⁷²¹ NSW EPA, *Draft Waste and Resource Recovery Infrastructure Strategy 2017-2021*, 27 November 2017, <http://www.epa.nsw.gov.au/your-environment/recycling-and-re-use/warr-strategy/draft-nsw-warr-infrastructure-strategy-2017-2021>.

⁷²² See, Submission 176, SSROC, p 3, Evidence, Ms Dougall, 7 August 2017, p 26, Submission 168, City of Canterbury Bankstown, p 2, Evidence, Mr Casuscelli, 27 June 2017, p 26, Evidence, Mr Chris Derksema, Sustainability Director, City of Sydney, 7 August 2017, p 19.

⁷²³ Submission 326, Local Government NSW, p 4.

- 8.19'** The following sections examine opportunities to enhance strategic planning for waste services across the state, including current regional waste management plans and support for a lead agency to oversee waste infrastructure. There is also discussion about the pressing need for land to site waste facilities.

Regional waste management

- 8.20'** The committee heard that the government has attempted to enhance waste infrastructure planning through the development of regional waste management plans. According to Mr Stephen Beaman, the then Executive Director of Waste and Resource Recovery at the NSW EPA, regional waste plans have been agreed to or developed by most local councils across New South Wales.⁷²⁴ Mr Beaman advised that the NSW EPA has funded local government to develop and implement these plans, marking a 'significant step forward in waste and recycling planning' by local councils for their local communities.⁷²⁵ He explained the long-term impact and integration of these plans:

The integration of these regional waste plans and the new infrastructure strategy will provide local councils with a long-term game plan. In addition, the EPA has been working with the Department of Planning and Environment and the Greater Sydney Commission to further develop and integrate these strategies into long-term planning.⁷²⁶

- 8.21'** Local councils and regional organisations of councils (ROCs) spoke positively about regional planning for waste infrastructure. The committee heard that the advantages of regional planning included:

- encouraging commitment to improving regional cooperation and identifying opportunities to improving recycling and resource recovery practices across the region⁷²⁷
- securing long-term sustainability and investment in waste infrastructure, this being vital given the growing need for individual councils to aggregate the waste generated across their local government areas to secure the necessary funds to develop a viable waste facility.⁷²⁸

- 8.22'** ROCs can also work together under the umbrella of RENEW NSW, an initiative supported by the Waste Less, Recycle More initiative. RENEW NSW monitors and facilitates improvements in waste management and resource recovery practices and serves as an advisory body on matters such as infrastructure sharing, resource recovery systems, regional procurement, drop-off centres and other activities.⁷²⁹

⁷²⁴ Evidence, Mr Beaman, 26 June 2017, p 3.

⁷²⁵ Evidence, Mr Beaman, 26 June 2017, p 3.

⁷²⁶ Evidence, Mr Beaman, 26 June 2017, p 3.

⁷²⁷ Submission 150, WSROC, p 1. Also see, Evidence, Mr Mark Roebuck, Manager, City Works and Services, Wollongong City Council, 7 August 2017, p 31.

⁷²⁸ See, Evidence, Ms Sloan, 26 June 2017, p 26; Evidence, Mr Henry Anning, Sector Lead for Bioenergy, Clean Energy Finance Corporation, 26 June 2017, p 34.

⁷²⁹ RENEW NSW, *About RENEW NSW*, <http://renewnsw.com.au/about-renew-nsw/>.

8.23 Despite supporting a regional approach to waste infrastructure management, stakeholders noted that its effectiveness is hampered without appropriate mechanisms or sufficient support in place. For example, the committee heard that ROCs face legal and financial limitations that hinder their ability to develop waste infrastructure. The City of Canterbury Bankstown explained:

Individual councils have limited power and resources to secure suitable sites and address these issues. Even regional groupings are somewhat limited in their power and capability to drive the procurement and protection of appropriate sites for sensitive waste infrastructure including new landfills and large-scale processing facilities that will ultimately service the Greater Sydney population.⁷³⁰

8.24 Likewise, Ms Sloan stated ‘The ROCs do not have any power. They do share services, but they cannot join in and resolve to do things and override a council, because you cannot bind a council’.⁷³¹ Ms Sloan suggested this may undermine the ability of ROCs to aggregate waste and enter into long-term contracts for waste facilities.⁷³²

8.25 Ms Amanda Bombaci, Regional Waste Coordinator at WSROC, drew attention to the importance of long-term planning for waste infrastructure, arguing that regional plans are currently limited to short-term targets to meet corresponding funding cycles.⁷³³

8.26 Meanwhile, Mr David Hojem, Manager of Waste Services at Shoalhaven City Council, argued that the current approach does not adequately acknowledge the challenges faced by regional councils, stating: ‘Most of [the NSW Government plans] are designed around the metropolitan area and they do not give any thought to the different challenges we face in the regional areas’.⁷³⁴

8.27 MRA Consulting Group suggested that there is role for government to guide and provide authority to local councils over waste infrastructure, as is the case in some international jurisdictions:

In Asia and Europe, EfW facilities are often procured by councils or groups of councils. Councils and ROCs (Regional Organisation of Councils) should be provided with greater guidance from government on the procurement of regional infrastructure, and given the authority to lead in the consolidation of residual wastes to ensure the long term financial viability of all waste processing infrastructure.⁷³⁵

⁷³⁰ Submission 168, City of Canterbury Bankstown, p 2. Also see, Evidence, Ms Bombaci, 27 June 2017, p 34.

⁷³¹ Evidence, Ms Sloan, 26 June 2017, p 26.

⁷³² Evidence, Ms Sloan, 26 June 2017, p 26.

⁷³³ Evidence, Ms Bombaci, 27 June 2017, p 33.

⁷³⁴ Evidence, Mr David Hojem, Manager, Waste Services, Shoalhaven City Council, 7 August 2017, p 35.

⁷³⁵ Submission 170, MRA Consulting Group, p 4.

A plan for metropolitan Sydney

- 8.28'** A key issue raised by the City of Sydney was that, unlike other utilities such as water, there is no overarching strategic plan for waste management in metropolitan Sydney.⁷³⁶ While regional plans have been developed, the city argued that a metropolitan plan is needed to meet the unique challenges of managing waste in Sydney, such as 'the concentration of waste generation, the need to manage resources at the point of generation to facilitate a more circular based economy, and ... to address some of the governance issues that inhibit optimal waste outcomes ...'.⁷³⁷
- 8.29'** Moreover, it was argued that managing waste in this way would provide for strategic planning that 'identifies and secures land for our existing and future waste treatment capacity requirements'.⁷³⁸ The city emphasised the importance of such an approach given that metropolitan waste is rarely managed within the local government area it is generated in.⁷³⁹
- 8.30'** Mr Chris Derksema, Sustainability Director at the City of Sydney, suggested there be 'a single lead organisation' responsible for the development and delivery of the metropolitan waste plan with support from other agencies and stakeholders.⁷⁴⁰ He suggested that this role could be played, at least in part, by the EPA, stating: '... the EPA would be seen to be the starting agency, at least, or it could be a consortium of agencies between the Department of the Environment and Energy as well as EPA to start with'.⁷⁴¹
- 8.31'** There was also support from other inquiry participants to develop and implement a metropolitan plan for waste management in Sydney.⁷⁴²

Need for a lead agency

- 8.32'** A number of local government stakeholders expressed concern that there was no lead agency in relation to waste infrastructure management. Indeed, the City of Sydney noted that the NSW EPA has little control over the strategic direction of waste infrastructure despite being responsible for waste:

In NSW, the Environmental Protection Authority (EPA) is responsible for waste as the environmental regulator and promotion of increased resource recovery, but it has limited ability to influence the strategic development and placement of waste or resource recovery treatment facilities.⁷⁴³

- 8.33'** Others noted the limited role played by the NSW Department of Planning and Environment. Blacktown City Council told the committee: 'The Department of Planning and Environment

⁷³⁶ Submission 198, City of Sydney, pp 1-2.

⁷³⁷ Evidence, Mr Derksema, 7 August 2017, p 19.

⁷³⁸ Submission 198, City of Sydney, p 3.

⁷³⁹ Submission 198, City of Sydney, p 1. Also see, Submission 150, WSROC, p 2.

⁷⁴⁰ Evidence, Mr Derksema, 7 August 2017, p 19. Also see, Submission 198, City of Sydney, p 8.

⁷⁴¹ Evidence, Mr Derksema, 7 August 2017, p 21.

⁷⁴² See, Submission 150, WSROC, p 2; Submission 214, Blacktown City Council, p 7; Submission 167, NSROC, p 2.

⁷⁴³ Submission 198, City of Sydney, p 3.

appears to be taking no role in planning for such infrastructure particularly identifying appropriate locations'.⁷⁴⁴ WSROC concurred, stating: 'There appears to be no role taken by Department of Planning and Environment to plan for such infrastructure, which is concerning given waste disposal and processing is an essential household and commercial service'.⁷⁴⁵

- 8.34'** Stakeholders agreed that both the NSW Department of Planning and Environment and the NSW EPA should have roles in infrastructure planning,⁷⁴⁶ with the City of Sydney suggesting that increased collaboration between the two bodies is required to achieve waste management objectives.⁷⁴⁷
- 8.35'** Ultimately, the City of Sydney proposed that the NSW Government 'identify a lead organisation as responsible for delivery of adequate waste and resource recovery capacity with support from other agencies and stakeholders'.⁷⁴⁸ Ms Bombaci suggested a lead agency would overcome the 'fragmented'⁷⁴⁹ nature of waste management infrastructure development, and would reflect the fact that waste management is a collective responsibility.⁷⁵⁰
- 8.36'** The City of Canterbury Bankstown pointed out that the Commonwealth Productivity Commission's 2006 report *Waste Management* states: 'the State and Territory should consider ... passing the responsibilities for waste disposal to appropriately-constituted regional waste authorities'.⁷⁵¹ The report reasoned that such authorities were important 'particularly in those larger urban centres where the majority of local governments do not have the scale or resources to efficiently and effectively handle such roles'.⁷⁵²

Land and planning processes

- 8.37'** Throughout the inquiry, stakeholders emphasised the need to identify and set aside land for future waste infrastructure development. Indeed, SSROC observed that the 'most pressing issue' for the provision of waste infrastructure is ensuring that suitable land is available to site these projects.⁷⁵³ The key concerns for stakeholders included:

⁷⁴⁴ Submission 214, Blacktown City Council, p 8.

⁷⁴⁵ Submission 150, WSROC, p 2.

⁷⁴⁶ Evidence, Ms Bombaci, 27 June 2017, p 33.

⁷⁴⁷ Submission 198, City of Sydney, p 8.

⁷⁴⁸ Submission 198, City of Sydney, p 8.

⁷⁴⁹ Evidence, Ms Bombaci, 27 June 2017, p 33.

⁷⁵⁰ Evidence, Ms Bombaci, 27 June 2017, p 34.

⁷⁵¹ Submission 168, City of Canterbury Bankstown, p 2, quoting Productivity Commission, *Waste Management* (2006), p XXXVIII.

⁷⁵² Submission 168, City of Canterbury Bankstown, p 2, quoting Productivity Commission, *Waste Management* (2006), p XXXVIII.

⁷⁵³ Submission, 176, SSROC, p 2.

- it is increasingly difficult to secure land, particularly in western Sydney, for waste facilities due to urban encroachment and competition for commercial and industrial land⁷⁵⁴
- there is a great deal of opposition to waste facilities in urban areas⁷⁵⁵
- the cost of land is so high, especially in Sydney, that it is not viable to build waste infrastructure,⁷⁵⁶ which leads to more truck movements as waste is managed increasingly further away from where it is generated⁷⁵⁷
- finding land within appropriately zoned precincts and air sheds, particularly for energy from waste facilities⁷⁵⁸
- transportation challenges for greenfield sites, such as poor road networks and long travel times, and lack of convenient aggregation points (i.e. transfer stations)⁷⁵⁹
- once a waste facility, such as the Eastern Creek landfill, closes, the site may not be used for similar services again, particularly as planning authorities must manage residents' expectations, waste needs and environmental considerations.⁷⁶⁰

8.38' In addition, stakeholders suggested that the lack of legislative certainty exacerbated the inherent difficulties of developing waste management infrastructure, specifically the need for market certainty and appropriate risk allocation.⁷⁶¹ The Hunter Joint Organisation of Councils explained some of these complexities and emphasised the need for a consistent regulatory environment:

The timeline for the development of any new EfW facilities is at least 3-5 years given the range of required financing, planning and approval processes. The waste industry requires clear and consistent policy to allow certainty for investment decisions and to source the capital to develop new facilities.⁷⁶²

8.39' It was also suggested that improving planning processes will increase competition, and prevent the development of a potential monopoly or duopoly.⁷⁶³

⁷⁵⁴ Submission 150, WSROC, pp 1-2. Also see, Submission 198, City of Sydney, p 3; Submission 149, Wollongong City Council, pp 1-2.

⁷⁵⁵ Evidence, Ms Gemma Dawson, Manager Waste Strategy, City of Sydney, 7 August 2017, p 21.

⁷⁵⁶ Submission 326, Local Government NSW, p 4

⁷⁵⁷ See, Evidence, Ms Dawson, 7 August 2017, p 21.

⁷⁵⁸ Submission 215, Waste Management Association of Australia, p 3. Also see, Evidence, Ms Sloan, 26 June 2017, p 29.

⁷⁵⁹ Submission 215, Waste Management Association of Australia, p 3.

⁷⁶⁰ See, Submission 150, WSROC, p 3; Submission 214, Blacktown City Council, p 8; Submission 215, Waste Management Association of Australia, p 3.

⁷⁶¹ See, Submission 145, Suez, p 2; Submission 215, Waste Management Association of Australia, p 10; Submission 146, Randwick City Council, p 3; Evidence, Mr Roger Bligh, Sales Director, Metals, Energy and Water, Outotec South-East Asia Pacific, 7 August 2017, p 50.

⁷⁶² Submission 154, Hunter Joint Organisation of Councils, p 3.

⁷⁶³ See, Submission 143, New Energy Corporation, p 6; Submission 215, Waste Management Association of Australia, p 10.

- 8.40^{*} Inquiry participants encouraged the NSW Government to implement a stable planning and regulatory environment which includes clear processes for siting and permitting of waste management facilities,⁷⁶⁴ and supported the development of a waste management infrastructure SEPP.⁷⁶⁵
- 8.41^{*} Stakeholders argued both courses of action would provide certainty in the planning process, such as decreasing approval timeframes, while maintaining the commercial competitiveness of the industry and addressing community concerns.⁷⁶⁶
- 8.42^{*} The need for a consistent planning process for all waste management facilities is examined in Chapter 8.

Committee comment

- 8.43^{*} While industry is clearly best-placed to deliver waste management solutions, the committee expects the NSW Government to take a lead role in strategically planning waste infrastructure across the state. We note that the NSW EPA has released the consultation draft of the *Waste and Resource Recovery Infrastructure Strategy* and expects the final strategy to be released in early 2018. We recommend that the strategy consider many of the proposals raised by stakeholders in this inquiry.

Recommendation 29

That the NSW Environment Protection Authority *Waste and Resource Recovery Infrastructure Strategy* provide guidance on matters including:

- identifying appropriate precincts and locations, including buffer zones, for waste facilities
- facilitating new infrastructure, particularly alternative waste management options and energy from waste plants
- enabling the circular economy, including waste generator education, product stewardship, waste levies, market support initiatives and avoidance, reduction and re-use support subsidies
- creating ‘real markets’ for secondary materials from waste.

- 8.44^{*} Evidence presented during the inquiry clearly demonstrates that regional collaboration is essential for the long-term sustainability of the state’s waste infrastructure, particularly as we

⁷⁶⁴ See, Evidence, Ms Dougall, 7 August 2017, p 26; Evidence, Mr Derksema, 7 August 2017, p 19; Evidence, Mr Bligh, 7 August 2017, pp 50–51; Mr Tony Khoury, Executive Director, Waste Contractors and Recyclers Association of NSW, 17 August 2017, p 9; Submission 144, Australian Council of Recycling, p 7; Submission 145, Suez, p 2; Submission 150, WSROC, p 3; Submission 158, Hunters Hill Council, p 1; Submission 173a, Jacfin, p 1; Submission 215, Waste Management Association of Australia, pp 9-10.

⁷⁶⁵ See, Evidence, Mr Ritchie, 7 August 2017, p 11; Evidence, Ms Sloan, 26 June 2017, p 29; Evidence, Mr Derksema, 7 August 2017, p 19; Submission 148, Veolia Australia and New Zealand, p 14.

⁷⁶⁶ See, Evidence, Ms Sloan, 26 June 2017, p 29. Also see, Submission 215, Waste Management Association of Australia, p 4; Submission 148, Veolia Australia and New Zealand, p 14.

move towards alternate waste management options which require significant investment. As discussed in Chapter 2, we note that councils, and therefore ratepayers, have contributed significant funds to consolidated revenue through payment of the waste levy. The committee believes more of these funds should be invested in regional waste management solutions. This is why the committee has supported greater hypothecation of levy funds to support the development of waste infrastructure.

- 8.45' While regional waste management plans and Regional Organisations of Councils are good starting points, the committee recognises the need to enhance the powers of these organisations to procure and site waste infrastructure. While we did not receive sufficient evidence to make a specific recommendation for legislative change, we recommend that the NSW Government investigate opportunities to enhance the collaborative powers of Regional Organisations of Councils to encourage investment in waste facilities, to be funded by the waste levy.

Recommendation 30

That the NSW Government investigate opportunities to enhance the collaborative powers of Regional Organisations of Councils to encourage investment in waste facilities, to be funded by the waste levy.

- 8.46' We also note concerns that there is no lead agency for waste infrastructure. While the NSW EPA is responsible for waste, the planning approval process is the responsibility of the NSW Department of Planning and Environment. Given the challenges facing the state in terms of waste infrastructure in the future, we believe it is vital that one government body is identified who can take lead responsibility and play that critical strategic coordination role. We therefore recommend that the NSW Government identify a government body – either an existing department or agency or a newly-created body, such as an expert panel comprising of representatives from relevant authorities – responsible for waste management infrastructure planning in New South Wales.
- 8.47' Further, the committee is persuaded by the need for a metropolitan Sydney waste management plan. The regional plans have not adequately addressed concerns specific to metropolitan Sydney, including the need for land to site facilities and the movement of waste around the city. We recommend that the body charged with responsibility for leading waste infrastructure planning develop a waste management infrastructure plan for metropolitan Sydney, in collaboration with local government.
- 8.48' The committee notes with concern the pressing need to identify suitable land to site waste infrastructure in New South Wales, particularly in Sydney. In short, it appears that establishing industrial zones for waste infrastructure is becoming increasingly difficult due to the increasing geographic spread, especially of Sydney residential areas, and the need to balance a potential exclusion zone for the comfort and safety of residents with having waste infrastructure in proximity to the areas producing waste.
- 8.49' We therefore believe that a significant component of the waste infrastructure planning body's role should be to collaborate with stakeholders, including the NSW Department of Planning and Environment and local councils, to identify and zone land, including buffer zones, for waste management infrastructure. The committee also recognises the need to encourage

greater certainty in the planning process and therefore recommends that a waste management infrastructure SEPP be developed.

Recommendation 31

That the NSW Government identify a government body, either an existing department or agency or a newly-created body, responsible for leading waste management infrastructure planning in New South Wales, including:

- leading the development of a waste management infrastructure plan for metropolitan Sydney, in collaboration with local government
 - identifying and zoning land, including buffer zones, for waste management facilities, in collaboration with the NSW Department of Planning and Environment and other stakeholders such as local councils
 - leading the development of a waste management infrastructure State Environmental Planning Policy, in collaboration with the NSW Department of Planning and Environment.
-

Landfill

- 8.50'** Landfill is currently the only option for managing residual waste in New South Wales. There are main two types of landfill: the first receives putrescible waste, and the second receives non-putrescible waste.
- 8.51'** The Australian Landfill Owners Association described landfills as 'an essential element in today's integrated waste management infrastructure'.⁷⁶⁷ However, other inquiry participants expressed significant concerns about the impact of landfills, including emissions of greenhouse gases, the ineffectiveness of landfill gas capture techniques, lack of amenity, and loss of renewable resources.⁷⁶⁸
- 8.52'** As discussed in Chapter 5, inquiry participants noted that disposal is the last step of the waste hierarchy and promoted the use of higher order waste management procedures.⁷⁶⁹
- 8.53'** As noted earlier, landfill capacity in New South Wales may be insufficient to meet future demand. The committee heard that following the closure, or imminent closure of smaller landfills around Sydney, the city's capacity for putrescible waste landfill is increasingly limited to the Suez facility at Lucas Heights and the Veolia's Woodlawn facility, which is 250 kilometres to the south of Sydney.⁷⁷⁰

⁷⁶⁷ Submission 394, Australian Landfill Owners Association, p 1.

⁷⁶⁸ See, Submission 326, Local Government NSW, p 5; Submission 198, City of Sydney, p 4; Submission 164, Alexandria Landfill, p 26.

⁷⁶⁹ Submission 215a, Waste Management Association of Australia, p 3. Also see, Submission 216, Re.Group, p 5.

⁷⁷⁰ Evidence, Ms Sloan, 26 June 2017, p 21. Also see Submission 148, Veolia Australia and New Zealand, p 2.

- 8.54** While there was some concern about the capacity of non-putrescible landfill,⁷⁷¹ a great deal of discussion focussed on the capacity of putrescible landfill.⁷⁷² For example, Veolia suggested that while the current landfill capacity for putrescible waste is sufficient, there is a need for long-term strategic consideration of future landfill needs:

... existing and proposed facilities, in combination, provide sufficient capacity at about 2.5 m[illion] tonnes annually, at current levels of putrescible residual waste generation, to serve the immediate waste disposal requirements for putrescible waste in Sydney. However, a long term strategic view of waste management in Sydney needs to recognise that as the population continues to increase and the city expands, it will be essential to have the infrastructure in place to manage the projected waste and recovered material streams.⁷⁷³

- 8.55** Likewise, Ms Sloan contended that Sydney will eventually need a new landfill unless more resource recovery facilities are developed:

Waste generation rates continue to increase—on average, 2.2 per cent per annum compared with a population increase of 1.5 per cent per annum—and unless additional resource recovery capacity is developed, New South Wales will eventually need to develop a new landfill or landfills to service the Sydney population.⁷⁷⁴

Landfill regulation

- 8.56** Stakeholders expressed significant concerns with regard to the regulation, or lack thereof, of landfill. The committee received evidence that under the current planning system it is easier to receive approval for a landfill than for alternativewaste treatment projects. The City of Sydney stated: 'Despite landfill being recognised as the least preferable method of managing resources and waste in the waste strategy, development approvals for the expansion of additional landfill capacity continue to be awarded at a greater volume than resource recovery'.⁷⁷⁵
- 8.57** Inquiry participants noted that, unlike energy from waste facilities, New South Wales has no resource recovery limits for landfills.⁷⁷⁶ The Waste Management Association of Australia contended that this is inconsistent with the waste management hierarchy: 'The current NSW EfW [energy from waste] Policy has established resource recovery hurdles for the use of waste in EfW, but without limits for landfills in its regulatory framework. This means that the recognised higher order use of waste faces more hurdles than landfilling'.⁷⁷⁷
- 8.58** HZI Australia concurred and concluded: 'By logic of the waste hierarchy, this should be overcome by either stricter hurdles for landfilling or the introduction of landfill bans for all

⁷⁷¹ Submission 148, Veolia Australia and New Zealand, p 5.

⁷⁷² See, Evidence, Mr Ritchie, 7 August 2017, p 10; Submission 167, NSROC, p 1.

⁷⁷³ Submission 148, Veolia Australia and New Zealand, p 3.

⁷⁷⁴ Evidence, Ms Sloan, 26 June 2017, p 21.

⁷⁷⁵ Submission 198, City of Sydney, p 4. Also see, Submission 156, Sutherland Shire Council, p 2.

⁷⁷⁶ See, Submission 198, City of Sydney, p 4; Evidence, Mr Ritchie, 7 August 2017, pp 15-16; Submission 141, Toxfree Australia, p 1.

⁷⁷⁷ Submission 215, Waste Management Association of Australia, p 8. Also see, Submission 143, New Energy Corporation, p 3.

non-treated waste or waste with biological potential and any plastics'.⁷⁷⁸ Other proposals for strengthening landfill regulation included:

- establishing clear standards for landfill sites that incorporate agreed industry best performance indicators, particularly around leachate treatment and the rectification of legacy landfills⁷⁷⁹
- establishing clearly mandated buffer zones around landfills, and enabling multiple waste uses on site⁷⁸⁰
- ensuring landfill is a 'final sink' for residual materials only, as is the case in certain European countries⁷⁸¹

Committee comment

- 8.59'** The committee notes with concern the apparent subversion of the waste management hierarchy which sees extensive resource recovery criteria established for energy from waste facilities, while there is no similar policy for landfill. Obviously, the waste levy has successfully deterred recyclable materials from being sent from landfill. However, the committee believes that resource recovery criteria for landfill would complement the levy and encourage further recycling. We therefore recommend that the NSW EPA develop and implement resource recovery criteria for landfills in New South Wales.

Recommendation 32

That the NSW Environment Protection Authority develop and implement resource recovery criteria for landfills in New South Wales.

Recycling

- 8.60'** During the inquiry the committee heard that New South Wales has the 'largest recycling sector in Australia'⁷⁸², with Mr Mike Ritchie, Managing Director of MRA Consulting Group, stating that 'New South Wales is one of the best recycling States in the country'⁷⁸³.
- 8.61'** However, Mr Buffier from the NSW EPA, advised that New South Wales is also 'the second highest per capita producers of waste in the world' and stressed the importance of achieving the 75 per cent landfill diversion target, stating:

We are on about 63 per cent recycling rates now—up from 45 per cent. We are aiming to get to 75 per cent recycling rates by 2021. If we do not get to 75 per cent recycling

⁷⁷⁸ Submission 179, HZI Australia, p 5.

⁷⁷⁹ Submission 215a, Waste Management Association of Australia, p 2.

⁷⁸⁰ Submission 215a, Waste Management Association of Australia, p 2.

⁷⁸¹ Evidence, Dr Marc Stammbach, Managing Director, HZI Australia, 17 August 2017, p 15. Also see, Submission 164, Alexandria Landfill, p 12.

⁷⁸² Evidence, Mr Ritchie, 7 August 2017, p 10.

⁷⁸³ Evidence, Mr Ritchie, 7 August 2017, p 10.

rates we will be drowning in our own waste. The reality is we will be exhausting landfill in Sydney if we do not get to 75 per cent. The total volume of waste produced in New South Wales is at about—we are the second highest per capita producers of waste in the world—17 million tonnes.⁷⁸⁴

- 8.62** The committee heard that it is also critical to consider resource recovery and waste generation rates in light of the fact that since 2012, there has only been a 'slight reduction' in per capita waste reduction in New South Wales.⁷⁸⁵
- 8.63** It was unclear how many recyclables are currently landfilled. Mr Buffier contended that a very low percentage of recyclables end up in landfill in New South Wales '... because if a recyclable ends up in landfill, you pay the levy on it'.⁷⁸⁶ In addition, the committee heard that while there is agreement about how to measure waste and recycling levels, the NSW EPA intends to take some issues raised in relation to these definitions 'to a national level for discussion'.⁷⁸⁷
- 8.64** Many councils said that they are working towards achieving the *NSW Waste and Resource Recovery Strategy* target of 75 per cent diversion of all waste by 2021.⁷⁸⁸ However, the committee heard that recycling rates in local government areas vary.⁷⁸⁹ For example, within Shoalhaven City Council the recycling rate 'varies between 47 per cent and 67 per cent, ... [while] West Nowra is 14.1 per cent'.⁷⁹⁰ Cr Stephen Bali, Mayor of Blacktown City Council, argued councils 'should be learning from each other how to divert waste' from landfill, to improve municipal recycling rates.⁷⁹¹

Barriers to recycling

- 8.65** Inquiry participants told the committee the recycling industry is adversely affected by a range of factors including:
- a lack of local resource recovery capacity⁷⁹²
 - changes in the international market⁷⁹³
 - lack of end markets⁷⁹⁴
 - cost-efficiency limits.⁷⁹⁵

⁷⁸⁴ Evidence, Mr Buffier, 24 November 2017, p 7.

⁷⁸⁵ Evidence, Mr Buffier, 17 August 2017, p 66.

⁷⁸⁶ Evidence, Mr Buffier, 17 August 2017, p 67.

⁷⁸⁷ Evidence, Mr Buffier, 17 August 2017, pp 63-64.

⁷⁸⁸ See, Submission 150, WSROC, p 4; Submission 154, Joint Hunter Organisation of Councils, p 5, Submission 146, Randwick City Council, p 1.

⁷⁸⁹ See, Submission 146, Randwick City Council, p 1; Submission 149, Wollongong City Council, p 1; Submission 298, Shoalhaven City Council, p 2.

⁷⁹⁰ Submission 298, Shoalhaven City Council, p 2.

⁷⁹¹ Evidence, Cr Stephen Bali, Mayor, Blacktown City Council, 27 June 2017, p 31.

⁷⁹² Submission 156, Sutherland Shire Council, p 2.

⁷⁹³ Evidence, Mr Khoury, 17 August 2017, p 2.

⁷⁹⁴ Submission 115, Cleanaway, p 3.

- 8.66** While these issues are concerning, the committee also heard that these barriers have driven stakeholders to consider alternative waste technologies.⁷⁹⁶ For example, as discussed in Chapter 5, certain councils and ROCs are considering energy from waste due to constraints around existing resource recovery and waste processing options.⁷⁹⁷
- 8.67** In addition, during the inquiry the committee heard that China had announced new standards for the importation of plastics for recycling, effectively closing the Chinese market for processing baled up plastics from yellow household bins from Australia.⁷⁹⁸ It was suggested that this import ban stemmed from the high level of contamination in the baled-up recyclables.⁷⁹⁹
- 8.68** Mr Harry Wilson, President of the Waste Contractors and Recyclers Association of NSW, expressed concern about the impact of the closure of the Chinese market. Mr Wilson noted that the industry is looking for alternative international markets,⁸⁰⁰ and pointed to the lack of local markets as one of the reasons that the plastics were initially shipped to China, stating ‘it has been hard to create markets in Australia for products made from recycled plastics.’
- 8.69** In response to questioning about the closure of the Chinese market and the potential for baled up plastics to be stockpiled and exceed licenced limits, Mr Buffier informed the committee that as at November 2017, ‘I do not have the precise answer to that at this stage. It is a problem’.⁸⁰¹
- 8.70** Inquiry participants also raised specific concerns regarding the challenges faced by the local glass recycling industry and the difficulty in producing products to suit the marketplace⁸⁰² within the current regulatory system. Indeed, Mr Mark Glover, Director of the Australian Industrial Ecology Network, said the existing recycling market for glass had failed and that industry required support to develop a viable solution, such as using glass as a ‘secondary resource’.⁸⁰³
- 8.71** Mr Tony Khoury, Executive Director of the Waste Contractors and Recyclers Association of NSW explained that glass waste could be used for drainage mediums and road base, but that the market was constrained by the procurement decisions of government, stating, the ‘big missing link ... is the purchasing decisions of government both at a State and local level who

⁷⁹⁵ See, Submission 149, Wollongong City Council, p 2; Submission 179, HZI Australia, p 2; Submission 215, Waste Management Association of Australia, p 4.

⁷⁹⁶ Submission 149, Wollongong City Council, p 3.

⁷⁹⁷ Submission 150, WSROC, p 3.

⁷⁹⁸ Evidence, Mr Khoury, 17 August 2017, p 7; Evidence, Dr Stambach, 17 August 2017, p 14; Also see, Phil Lasker, Jenya Goloubeva, Bill Birtles, *China's ban on foreign waste leaves Australian recycling industry eyeing opportunities* (11 December 2017), ABC News, <http://www.abc.net.au/news/2017-12-10/china-ban-on-foreign-rubbish-leaves-recycling-industry-in-a-mess/9243184>.

⁷⁹⁹ Evidence, Mr Harry Wilson, President, Waste Contractors and Recyclers Association of NSW, 17 August 2017, p 7.

⁸⁰⁰ Evidence, Mr Wilson, P17 August 2017, p 7.

⁸⁰¹ Evidence, Mr Buffier, 24 November 2017, p 10.

⁸⁰² Evidence, Mr Wilson, 17 August 2017, p 3.

⁸⁰³ Evidence, Mr Mark Glover, Director, Australian Industrial Ecology Network, 17 August 2017, p 39.

should be encouraged more to buy the product back that they are generating through the kerbside system'.⁸⁰⁴

8.72' According to stakeholders, government regulation prevents the waste glass market from expanding, including:

- the exemption process is slow, for example, in New South Wales an individual exemption is required each time a product containing waste glass is used in road base whereas in Europe a generic approval can be sought and approved⁸⁰⁵
- there are definitional issues around what constitutes 'waste glass'⁸⁰⁶
- suggestion that there is a conflict in having a regulator who is also empowered to define waste.⁸⁰⁷

Proposed government and industry responses

8.73' Stakeholders discussed potential responses from government and industry to improve the recycling industry, including a review of the waste levy system and product stewardship.

8.74' Mr Grant Musgrove, Chief Executive Officer of the Australian Council of Recycling, called for a review of the waste levy system to better reflect what is recyclable and to reduce the waste levy for 'residuals of recycling' which are 'non-viable'. Mr Musgrove explained:

We have residuals of recycling—cardboard, cars, anything. They are technologically and commercially non-viable. They are too materially complex. Government has listened to us and given us a 50 per cent reduction in the landfill levy applied to shredder floc, which is what is left over after you shred a car ... There is the potential for that to be applied, theoretically, across other material streams, but that involves a root-and-branch review of the levy system.⁸⁰⁸

8.75' The Waste Contractors and Recyclers Association of NSW and the Australian Industrial Ecology Network similarly advocated for changes to the waste levy, arguing that subsidies and incentives drawn from the levy could be used by recyclers to develop facilities, 'produce a cleaner product' and assist recyclers compete 'with the producers of virgin quarry products'.⁸⁰⁹

8.76' Mr Glover strongly advocated for industry-led, whole-of-life product stewardship at a national level to improve recycling outcomes and minimise residual waste. Mr Glover argued that currently manufacturers, users and recyclers are not engaged in designing a system within which products are managed to maximise their 'highest net resource value' or follow

⁸⁰⁴ Evidence, Mr Khoury, 17 August 2017, p 3.

⁸⁰⁵ Evidence, Mr Garbis Simonian, Chairman, Australian Industrial Ecology Network, 17 August 2017, p 39.

⁸⁰⁶ See, Evidence, Mr Wilson, 17 August 2017, p 3; Evidence, Mr Simonian, 17 August 2017, p 42.

⁸⁰⁷ Evidence, Mr Simonian, 17 August 2017, p 42.

⁸⁰⁸ Evidence, Mr Grant Musgrove, Chief Executive Officer, Australian Council of Recycling, 26 June 2017, p 42.

⁸⁰⁹ Evidence, Mr Wilson, 17 August 2017, p 3; Evidence, Mr Khoury, 17 August 2017, p 3; Evidence, Mr Simonian, 17 August 2017, p 41.

‘streaming or cascading’ principles where products can be directed to their ‘next best use’ and avoid becoming a ‘stranded asset’.⁸¹⁰ Mr Glover further stated:

Given half a chance, using [Australian Industrial Ecology Network] AIEN principles we could sit down with the right people and come up with a solution, but they are not in the room at the moment. Those are the areas where governments can struggle because they simply do not have the tools to be able to deliver it.

... it is very important to get the original manufacturers or the brands that put this stuff in the market to be at the table to understand the complexities and help come up with solutions. They are very often just let completely off the hook and allowed to produce wine bottles because we love the product but at the end of the day they are not there to help us solve the other problem. That is where you do have Federal legislation which can start to bring this together if we get a bit of national cohesion.⁸¹¹

- 8.77’ Dr Stambach similarly advocated for more local recycling solutions which better adhered to the principles of sustainability.⁸¹²
- 8.78’ The circular economy is examined in the following section.

Committee comment

- 8.79’ While the committee acknowledges that resource recovery rates are relatively high in New South Wales, recycling is not without its challenges and costs. The committee is particularly concerned about the lack of local recycling capacity. As discussed throughout this report, waste management issues could be addressed more thoroughly should additional waste levy funds be released from consolidated revenue for this purpose. We note our earlier recommendation to hypothecate more waste levy funds, and further recommend that the NSW EPA provide additional support to local councils and resource recovery organisations to meet recycling targets and manage issues such as stream contamination, bureaucratic barriers, lack of product stewardship, and limited market opportunities.

Recommendation 33

That the NSW Environment Protection Authority provide additional support to local councils and resource recovery organisations to meet recycling targets and manage issues such as stream contamination, bureaucratic barriers, lack of product stewardship, and limited market opportunities.

- 8.80’ We are disappointed with the NSW EPA’s response to the recent import ban of recycled plastics in China. We note that unless an alternate market is located, which seems unlikely, recyclable plastics will be stockpiled, leading to potential breaches of environmental protection licences and risks to human health and the environment, not to mention the potential collapse of the state’s kerbside recycling system. We recommend that the NSW EPA urgently

⁸¹⁰ Evidence, Mr Glover, 17 August 2017, pp 38-39. Also see, Evidence, Mr Simonian, 17 August 2017, p 41.

⁸¹¹ Evidence, Mr Glover, Director, 17 August 2017, p 42.

⁸¹² Evidence, Dr Stambach, 17 August 2017, p pp 14-16.

investigate, identify and implement alternative solutions to the ban on the importation of recyclable plastics by China, to ensure that waste is not stockpiled.

Recommendation 34

That the NSW Environment Protection Authority urgently investigate, identify and implement alternative solutions to the ban on the importation of recyclable plastics by China.

Enabling the circular economy

8.81⁸¹³ According to the Australian National Waste Report, unlike the traditional 'take, make and dispose' economic model, the circular economy 'envisages keeping products, components, and materials at their highest utility and value at all times'.⁸¹⁵ Veolia reported that Australia is set to garner approximately \$26 billion in value from the circular economy by 2025.⁸¹⁴ Green Industries SA developed the infographic below to demonstrate the circular economy.

Table 8⁸¹⁴ The circular economy



Green Industries SA, What is the circular economy, <http://www.greenindustries.sa.gov.au/circular-economy>

8.82⁸¹⁵ There was consensus amongst stakeholders about the need to promote the circular economy.⁸¹⁵ However, inquiry participants explained that it is challenging to take action for various reasons, including:

⁸¹³ Tabled document, NSW EPA, *Australian National Waste Report 2016*, received 17 August 2017, p 32.

⁸¹⁴ Veolia, *Circular economy and the city* (5 February 2016), <https://www.veolia.com/anz/circular-economy-and-the-city>.

⁸¹⁵ See, Evidence, Ms Sloan, 26 June 2017, p 23; Evidence, Ms Dougall, 7 August 2017, p 26; Evidence, Mr Derksema, 7 August 2017, p 20.

- there is no money from Waste Less, Recycle More dedicated to waste re-use infrastructure, often leaving social enterprise and charities to promote these activities⁸¹⁶
- as discussed earlier, there is a lack of government support for ‘sustainable procurement methodologies’ such as using road base that includes recycled glass⁸¹⁷
- it is difficult to define a successful circular economy, thus making it challenging to allocate grant funding, and develop policy and legislation⁸¹⁸
- as discussed in Chapter 5, there is debate about whether energy from waste technologies can be used to support the circular economy.

8.83 To address issues surrounding the circular economy, Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, suggested that ‘... the Committee start some conversations about a circular economy and what it means for New South Wales and, indeed, the nation. Legislative guidelines would also help to drive waste management because they are key to a circular economy’.⁸¹⁹ Ms Sloan noted South Australian Government is investigating opportunities to embed the circular economy in markets.⁸²⁰

Extended Producer Responsibility

8.84 The concept of ‘Extended Producer Responsibility’ (EPR) was discussed by several stakeholders during the inquiry. The Waste Management Association of Australia explained what is meant by the term:

Extended Producer Responsibility (EPR) commonly forms part of an integrated waste management strategy, and is defined in the 2001 OECD Guidance as “an environmental policy approach in which a producer’s responsibility for a product is extended to the post-consumer stage of a product’s life cycle”.

It adopts the Polluter Pays Principle (PPP), an environmental policy principle which requires that the costs of pollution be borne by those who cause it.

And the circular economy concept, aiming to close materials loops and extend the lifespan of materials through longer use and the increased use of secondary raw materials, improving resource security.⁸²¹

8.85 The Waste Management Association of Australia said benefits of EPR schemes include increasing recycling rates, reducing public expenditure on waste management and encouraging

⁸¹⁶ Evidence, Ms Bombaci, 27 June 2017, p 31. Also see Evidence, Mr Antony Lewis, Secretary Blacktown and District Environment Group, 27 June 2017, p 48.

⁸¹⁷ Evidence, Ms Sloan, 26 June 2017, p 23.

⁸¹⁸ Evidence, Mr Glover, 17 August 2017, p 38.

⁸¹⁹ Evidence, Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, 7 August 2017, p 44.

⁸²⁰ Evidence, Ms Sloan, 26 June 2017, p 23.

⁸²¹ Submission 215, Waste Management Association of Australia, p 12. Also see, Submission 144, Australian Council of Recycling, p 4.

the maximum use from products.⁸²² Ms Sloan told the committee that EPR also offers an opportunity to consider how a product comes to market and encourages early engagement with waste generators.⁸²³

- 8.86'** Types of products that attract EPR include small consumer electronics, large appliances, packaging (including plastics, beverage containers), tyres, end of life vehicles and batteries, waste oil, paint, chemicals and fluorescent light bulbs.⁸²⁴ Mr Garth Lamb, NSW Branch President of the Waste Management Association of Australia, said EPR is particularly beneficial when addressing problematic wastes.⁸²⁵
- 8.87'** A national approach has been taken to EPR schemes,⁸²⁶ with EPR principally governed by the *Product Stewardship Act 2011* (Cth). The NSW EPA explained: 'Each year all jurisdictions provide a product list of problematic wastes for attention under the *Product Stewardship Act*. Management at a national level can provide consistent action to achieve the product stewardship goals'.⁸²⁷ Examples of national EPR schemes include the National Television and Computer Recycling Scheme, and the Australian Packaging Covenant.⁸²⁸ The Australian Government commenced a review of the *Product Stewardship Act* in March 2017.⁸²⁹
- 8.88'** However, Mr Grant Musgrove, Chief Executive Officer of the Australian Council of Recycling, noted that most Commonwealth schemes are voluntary and argued this undermined their effectiveness: 'All of those schemes, other than e-waste, are voluntary. To put it mildly ... none of the schemes are working because of their voluntary nature'.⁸³⁰ Mr Musgrove added: 'Quite frankly, the Commonwealth is asleep at the wheel'.⁸³¹ Moreover, the Australian Council of Recycling stated that Australia 'falls way behind' other comparable countries in respect to EPR programs.⁸³²
- 8.89'** The *Waste Avoidance and Resource Recovery Act 2001* provides for the introduction of EPR schemes in New South Wales. The container deposit scheme, which commenced operation in December 2017, is an example of an EPR initiative. Mr Musgrove suggested that

⁸²² Submission 215, Waste Management Association of Australia, p 12 quoting OECD, 'The State of Play on Extended Producer Responsibility (EPR): Opportunities and Challenges - Global Forum on Environment: Promoting Sustainable Materials Management' (2014), p 3.

⁸²³ Evidence, Ms Sloan, 26 June 2017, p 25.

⁸²⁴ Submission 144, Australian Council of Recycling, p 5.

⁸²⁵ Evidence, Mr Lamb, 26 June 2017, p 25.

⁸²⁶ NSW EPA, *Product stewardship schemes* (22 September 2017), <http://www.epa.nsw.gov.au/your-environment/recycling-and-re-use/warr-strategy/product-stewardship-schemes>; Submission 144, Australian Council of Recycling, p 5.

⁸²⁷ NSW EPA, *Product stewardship schemes* (22 September 2017), <http://www.epa.nsw.gov.au/your-environment/recycling-and-re-use/warr-strategy/product-stewardship-schemes>.

⁸²⁸ NSW EPA, *Product stewardship schemes* (22 September 2017), <http://www.epa.nsw.gov.au/your-environment/recycling-and-re-use/warr-strategy/product-stewardship-schemes>.

⁸²⁹ Media Release, Hon Josh Frydenberg MP, Minister for Environment and Energy, 'Review of product stewardship act 2011', 10 March 2017, <http://www.environment.gov.au/minister/frydenberg/media-releases/pubs/mr20170310.pdf>.

⁸³⁰ Evidence, Mr Musgrove, 26 June 2017, p 40.

⁸³¹ Evidence, Mr Musgrove, 26 June 2017, p 40.

⁸³² Submission 144, Australian Council of Recycling, p 4.

once the container deposit scheme is established, the necessary infrastructure will be in place to develop other EPR schemes such as a more effective recycling system for e-waste:

When the CDS [container deposit scheme] is introduced, over time that will have an entire level of infrastructure built around it and that maybe very useful in subjecting other materials to EPR—think something like e-waste. Why should you not pay a few dollars extra for a laptop or something and be able to get a refund when you take it back to the store? We can then process it. A lot more could be done at the Commonwealth level and in time—but I would say the time is not quite ready yet in terms of the infrastructure—post CDS, a couple of years down the road we can look at other material streams.⁸³³

- 8.90'** Stakeholders encouraged the development of more EPR initiatives. For example, Ms Jane Bremmer, Secretary of the National Toxics Network, said that EPR is a 'very important' component of the 'Zero Waste programs' and would 'definitely' work in Australia.⁸³⁴ Similarly, Ms Gabrielle Maston said that the government must look outside of 'band-aid' solutions to waste and 'create a culture of recycling', including by taking actions such as: '... ban plastic bags, education on reducing food packing waste in households, education programs for big food to reduce food packaging in stores, tax industrial companies who produce waste, create compost exchange centres'.⁸³⁵
- 8.91'** Mr Antony Lewis Secretary of the Blacktown and District Environment Group, expressed the view that industry, that is the waste generator, is best positioned to manage waste re-use and reduction,⁸³⁶ and argued that the government needs to ensure the domestic market is not undercut by poorly manufactured imported products.⁸³⁷
- 8.92'** The Australian Council of Recycling cautioned that the introduction of energy from waste facilities prior to the introduction of EPR legislation may create certain challenges including the potential loss of recyclable and recoverable material back into a circular material economy, and the incineration of wastes which have no energy value or that are hazardous.⁸³⁸ The council further noted that when EPR has been introduced in countries where energy from waste is well-established, such as Japan, there has been a reduction in waste available to incinerate, '... leading Councils to adjust their recycling systems, collecting less, to ensure sufficient waste is available to feed the EfW plants'.⁸³⁹

Committee comment

- 8.93'** It is clear from the evidence received to this inquiry that the traditional 'take, make and dispose' model of waste management is unsustainable and we note that countries across the world, including Australia, are embracing more environmentally-sound policies.

⁸³³ Evidence, Mr Musgrove, 26 June 2017, p 40.

⁸³⁴ Evidence, Ms Jane Bremmer, Secretary, National Toxics Network, 27 June 2017, p 40.

⁸³⁵ Submission 5, Ms Gabrielle Maston, pp 3- 4.

⁸³⁶ Submission 174, Blacktown and District Environment Group, p 2.

⁸³⁷ Evidence, Mr Antony Lewis, Secretary, Blacktown and District Environment Group, 27 June 2017, p 48.

⁸³⁸ Submission 144, Australian Council of Recycling, pp 4-5.

⁸³⁹ Submission 144, Australian Council of Recycling, p 5.

The committee supports efforts to promote the waste hierarchy including enabling the circular economy, promoting zero-waste initiatives, and using disposal as a method of 'last resort'.

- 8.94'** We note that there are significant challenges to promoting the circular economy, and believe that industry, waste generators and policy makers must work collaboratively to address these challenges. Indeed, without a clear and concise definition of what the concept entails it is difficult to develop policies to support the circular economy. We therefore recommend that the NSW EPA, in collaboration with stakeholders, investigate opportunities to embed zero waste strategies and the circular economy in New South Wales.

Recommendation 35

That the NSW Environment Protection Authority, in collaboration with stakeholders, investigate opportunities to embed zero waste strategies and the circular economy in New South Wales.

- 8.95'** The committee supports the use of Extended Producer Responsibility schemes. We believe that such schemes have great potential to increase resource recovery rates, reduce public expenditure on waste management and encourage the maximum use from products. While the Commonwealth is primarily responsible for these schemes, the NSW Government can pursue these programs as well, as evidenced by the Container Deposit Scheme. We therefore recommend that the NSW Government allocate additional resources to the NSW EPA to develop and implement Extended Producer Responsibility schemes.

Recommendation 36

That that the NSW Government allocate additional resources to the NSW Environment Protection Authority to develop and implement Extended Producer Responsibility schemes.

Appendix 1⁸⁴⁰ Tables of compliance breaches and complaints associated with the proponent of The Next Generation and his companies⁸⁴⁰

Compliance breaches associated with proponent and his companies

Year	Company name	Breach	Penalty
2005	Alexandria Landfill Pty Ltd	Breach of cl.80 of POEO Waste	Written warning
2005	Alexandria Landfill Pty Ltd	Breach of licence condition	Penalty notice
2007	Alexandria Landfill Pty Ltd	Breach of licence condition	Penalty notice
2007	Alexandria Landfill Pty Ltd	Breach of licence condition	Penalty notice
2009	Alexandria Landfill Pty Ltd	Breach of cl.14 of the POEO Waste Regulation	Written warning
2011	Alexandria Landfill Pty Ltd	Breach of licence condition	Penalty notice
2012	Alexandria Landfill Pty Ltd	Breach of licence condition	Prosecution - convicted

Year	Company name	Breach	Penalty
2009	Boiling Pty Ltd	Breach of licence condition	Penalty notice
2009	Boiling Pty Ltd	Breach of licence condition	Written warning
2011	Boiling Pty Ltd	Breach of licence condition	Official Caution
2012	Boiling Pty Ltd	Breach of licence condition	Official Caution
2012	Boiling Pty Ltd	Breach of licence condition	Penalty notice
2013	Boiling Pty Ltd	Breach of licence condition	Official Caution

Year	Company name	Breach	Penalty
2012	Dial-A-Dump (EC) Pty Ltd	Breach of licence condition	Penalty notice
2012	Dial-A-Dump (EC) Pty Ltd	Breach of licence condition	Penalty notice
2015	Dial-A-Dump (EC) Pty Ltd	Breach of licence condition	Official Caution
2016	Dial-A-Dump (EC) Pty Ltd	Breach of licence condition	Official Caution
2017	Dial-A-Dump (EC) Pty Ltd	Breach of licence condition	Penalty notice

⁸⁴⁰ Answers to questions on notice, NSW EPA, 25 July 2017, Attachments 1 and 2.

Complaints associated with the proponent and his companies

Year	Company name	Number of complaints
2001	Alexandria Landfill Pty Ltd	1
2002	Alexandria Landfill Pty Ltd	295
2003	Alexandria Landfill Pty Ltd	49
2004	Alexandria Landfill Pty Ltd	50
2005	Alexandria Landfill Pty Ltd	23
2006	Alexandria Landfill Pty Ltd	15
2007	Alexandria Landfill Pty Ltd	10
2008	Alexandria Landfill Pty Ltd	6
2009	Alexandria Landfill Pty Ltd	20
2010	Alexandria Landfill Pty Ltd	35
2011	Alexandria Landfill Pty Ltd	57
2012	Alexandria Landfill Pty Ltd	9

Year	Company name	Number of complaints
2012	Dial-A-Dump (EC) Pty Ltd	4
2013	Dial-A-Dump (EC) Pty Ltd	1
2014	Dial-A-Dump (EC) Pty Ltd	2
2015	Dial-A-Dump (EC) Pty Ltd	1
2016	Dial-A-Dump (EC) Pty Ltd	1
2017	Dial-A-Dump (EC) Pty Ltd	2

Appendix 2' Submissions

No	Author
1	Ms Lesley Watson
2	Mr Patrick Phelan
3	Mr David Campbell
4	Total Environment Centre
5	Ms Gabrielle Maston
6	Name suppressed
7	Confidential
8	Confidential
9	Name suppressed
10	Name suppressed
11	Confidential
12	Confidential
13	Name suppressed
14	Name suppressed
15	Ms Mariza Harris
16	Name suppressed
17	Name suppressed
18	Name suppressed
19	Name suppressed
20	Mrs Catherine Hosking
21	Name suppressed
22	Name suppressed
23	Name suppressed
24	Mr Gavin Wilson
25	Name suppressed
26	Name suppressed
27	Name suppressed (Partially confidential)
28	Name suppressed
29	Name suppressed
29a	Name suppressed
30	Mr Cameron Haywood (Partially confidential)
31	Name suppressed

No	Author
32	Confidential
33	Mrs Karina Micallef
34	Mr Kemal Ozdemir
35	Confidential
36	Mr David Green
37	Name suppressed
38	Name suppressed
39	Mr Phil Upton
40	Ms Alicia Schloeffel
41	Name suppressed
42	Name suppressed
43	Name suppressed
44	Mr Hugh Williams
45	Mrs Carmel Bartkiewicz
46	Name suppressed
47	Mrs Cheryle Brack
48	Name suppressed
49	Confidential
50	Name suppressed
51	Mr Matthew Lamens
52	Name suppressed
53	Name suppressed (Partially confidential)
54	Mr Rodney Lane
55	Mr Timothy Williams
56	Confidential
57	Mr Fotos Melaisis
58	Confidential
59	Mr Leanne Flood
60	Mr Ron Rose
61	Mr Mohammad Sami
62	Name suppressed
63	Name suppressed
64	Name suppressed
65	Confidential
66	Name suppressed

No	Author
67	Confidential
68	Name suppressed
69	Name suppressed
70	Name suppressed
71	Name suppressed
72	Name suppressed
73	Confidential
74	Mr Norm Warren
75	Name suppressed
76	Name suppressed
77	Confidential
78	Name suppressed
79	Name suppressed
80	Confidential
81	Mr Dermot Staunton
82	Mrs Lee-Anne Williams (Partially confidential)
83	Name suppressed (Partially confidential)
84	Name suppressed (Partially confidential)
85	Name suppressed (Partially confidential)
86	Confidential
87	Name suppressed
88	Mr Gerald Barr
89	Confidential
90	Ms Margaret Flynn
91	Mr Mathew Cini
92	Name suppressed
93	Name suppressed
94	Mr Steven Taylor
95	Mrs Emma Powney
96	Name suppressed
97	Name suppressed
98	Name suppressed
99	Mr Xavier David
100	Mrs Elizabeth Gibbeson
101	Name suppressed

No	Author
102	Name suppressed
103	Name suppressed
104	Confidential
105	Name suppressed
106	Name suppressed
107	Mr Timogen Chung
108	Confidential
109	Confidential
110	Confidential
111	Mr Arpan Patel
112	Confidential
113	Mrs Margaret McCarthy
114	Name suppressed
115	Cleanaway Waste Management
116	Name suppressed
117	Name suppressed
118	Name suppressed
119	Name suppressed
120	Mr Krishna Govender
121	Name suppressed
122	Confidential
123	Confidential
124	Name suppressed
125	Name suppressed
126	Mrs Annalissa Ozdemir
127	Mrs Safiye Ozdemir
128	Name suppressed
129	Name suppressed
130	Name suppressed
131	Mr Stephen Richards
132	Name suppressed
133	Mrs Ann Phelan
134	Name suppressed
135	Mr Bedir Solbudak
136	Mrs Anna Kosovich

No	Author
137	Confidential
138	Name suppressed
139	Confidential
140	Name suppressed
141	Toxfree
142	Name suppressed
143	New Energy Corporation
144	Australian Council of Recycling
145	Suez
145a	Suez
146	Randwick City Council
147	Name suppressed
148	Veolia
149	Wollongong City Council
150	Western Sydney Regional Organisation of Councils (WSROC)
150a	Western Sydney Regional Organisation of Councils (WSROC)
151	Confidential
152	Confidential
153	Name suppressed
154	Hunter Joint Organisation of Councils
155	Name suppressed
156	Sutherland Shire Council
157	Name suppressed
158	Hunters Hill Council
159	Name suppressed
160	Name suppressed
161	Name suppressed
162	Mrs Carolyn Ahmet
163	Mr Carlos Ormazabal
164	Alexandria Landfill
165	Australian Pork Limited
166	Name suppressed
167	Northern Sydney Regional Organisation of Councils (NSROC)
168	City of Canterbury Bankstown
169	Mountain Districts Association

No	Author
170	MRA Consulting Group
171	Mrs Kerry Loveday
172	National Toxics Network
172a	National Toxics Network
173	Jacfin
173a	Jacfin
174	Blacktown and District Environment Group
174a	Blacktown and District Environment Group
174b	Blacktown and District Environment Group
175	Australian Industrial Ecology Network
176	Southern Sydney Regional Organisation of Councils (SSROC)
177	Active Tree Services
177a	Active Tree Services
178	Mr Brian Graham
179	Hitachi Zosen Inova (HZI) Australia
180	Mrs Kerry Tosswill
181	Name suppressed
181a	Name suppressed
182	Waste Contractors and Recyclers Association of NSW
182a	Confidential
182b	Waste Contractors and Recyclers Association of NSW
183	Mr Derek Ridgley
184	Confidential
185	Name suppressed
186	Mrs Judith Ridgley
187	Name suppressed
188	Mr Wojciech Wieckowski
189	Clean Energy Finance Corporation
190	National Waste and Recycling Industry Council
191	Mrs Barbara Wieckowski
192	Name suppressed
193	Name suppressed
194	Ms Lisa McKinnon
195	Mr Mark Russell
196	Mr Alpeshkumar Patel

No	Author
197	Mr Hong Kyung Ji
198	City of Sydney
199	Confidential
200	Mr Michael Zammit
201	Mr Peter Robertson
202	Name suppressed
203	Mrs Feray Arnout
204	Mr Michael Donohue
205	Mr Json Edwards
206	Mrs Cindy Clarke
207	Ms Sonia Bennett
207a	Ms Sonia Bennett
208	Confidential
209	Mr Glen Clark
210	Name suppressed (Partially confidential)
211	Mr Joseph Incorvil
212	Mr Richard Caruana
213	Name suppressed
214	Blacktown City Council
215	Waste Management Association Australia
215a	Waste Management Association Australia
216	Re.Group
217	Illawarra Pilot Joint Organisation
218	Mr Barry Turner
219	Confidential
220	Mr Robert Lewis
221	Name suppressed
222	Mrs Jennifer Sullivan
223	Mr John Azzopardi
224	Confidential
225	Name suppressed
226	Name suppressed
227	Name suppressed
228	Confidential
229	Mr Mario Bellantoni

No	Author
230	Name suppressed
231	Miss Alexandra Bellantoni
232	Name suppressed
233	Mr David Clarke
234	Name suppressed
235	Confidential
236	Mr Stephen Borg
237	Mr Paul Barrett
238	Mr Ramez Bishara
239	Mrs Sherry Melika
240	Confidential
241	Name suppressed
242	Name suppressed
243	Name suppressed
244	Name suppressed
245	Mr Aloysius Dion Van Gramberg
246	Mr Rafael Aducayen
247	Mr Mark Farrant
248	Mr Rob Vail
249	Mrs Julie Harris
250	Name suppressed
251	Name suppressed
252	Mr Domenic and Mrs Domenica Sergi
253	Name suppressed
254	Mrs Patricia Papatotiriou
255	Mrs Megan Malek
256	Confidential
257	Name suppressed
258	Name suppressed
259	Name suppressed
260	Confidential
261	Mrs Joy Welshman
262	Mrs Helen Fone
263	Name suppressed
264	Name suppressed

No	Author
265	Confidential
266	Name suppressed
267	Name suppressed
268	Name suppressed
269	Confidential
270	Name suppressed
271	Ms Thorunn Ingvarsdottir
272	Mr Peter Gilbert
273	Name suppressed
274	Name suppressed
275	Name suppressed
276	Ms Patricia Kahler
277	Mrs Sharon Bellette
278	Name suppressed
279	Name suppressed
280	Mr Mick Collins
281	Name suppressed
282	Mrs Bianca Dowsett
283	Ms Chulin Liu
284	Mr Pravin Rai
285	Name suppressed
286	Mr Arthur Bozikas
287	Name suppressed
288	Name suppressed
289	Mr John Ackland
290	Name suppressed
291	Outotec
292	Mrs Anita Lazaro
293	Name suppressed
294	Confidential
295	Name suppressed
296	Name suppressed
297	Mr Robert Hammer
298	Shoalhaven City Council
299	Ms Susan Wilson

No	Author
300	Confidential
301	Mr Frank Brenner
302	Confidential
303	Name suppressed
304	Mr Michael Rynn
305	Confidential
306	Name suppressed
307	Mrs Raquel Blemith
308	Name suppressed
309	Confidential
310	Name suppressed
311	Name suppressed
312	Mr Antony Lewis
313	Mr Csaba Molnar
314	Name suppressed (Partially confidential)
315	Name suppressed
316	Name suppressed
317	Name suppressed
318	Name suppressed
319	Confidential
320	Mr Wayne Olling
321	Name suppressed
322	Mr Joseph Granic
323	Confidential
324	Mr Erkan Mentesh
325	Mr Filiz Mentesh
326	Local Government NSW
327	Mr Pinar Arnoute
328	Name suppressed
329	Mr Kemal Arnout
330	Ms Maria Yang
331	Name suppressed
332	Name suppressed
333	Name suppressed
334	Name suppressed

No	Author
335	Name suppressed
336	Name suppressed
337	Name suppressed
338	Name suppressed
339	Mr Daniel Hatcher
340	Name suppressed
341	Name suppressed
342	Name suppressed
343	Name suppressed
344	Name suppressed (Partially confidential)
345	Name suppressed
346	Name suppressed
347	Confidential
348	Confidential
349	Mrs Karyne Opdam
350	Name suppressed
351	Name suppressed
352	Name suppressed
353	Name suppressed
354	Confidential
355	The Hon Richard Jones
356	Confidential
357	Name suppressed
358	Name suppressed
359	Name suppressed
360	Name suppressed
361	M Zohre Can
362	Name suppressed
363	Name suppressed
364	Ms Cemile Can
365	Mrs Rosann Kirk
366	Mr David Kirk
367	Name suppressed
368	Name suppressed
369	Name suppressed

No	Author
370	Confidential
371	Name suppressed
372	Name suppressed
373	Mr Stefano Olivieri
374	Mr Fawad Sami
375	Mr Phillip Roffey
376	Mrs Kerri Bradbury
377	Mr Phil Bradley
378	Name suppressed
379	Confidential
380	Confidential
381	Mr Peter Ferns
382	Mr Robert Fung
383	Mrs Ilmiye Uluc
384	Mr Gerry Gillespie
385	Ms Michelle McCallum
386	Confidential
386a	Confidential
387	Glenwood Community Association
388	Name suppressed
389	Name suppressed
390	Name suppressed
391	Name suppressed
392	Name suppressed
393	No Incinerator for Western Sydney
393a	No Incinerator for Western Sydney
394	Australian Landfill Owners Association
395	Australian Organics Recycling Association

Appendix 3' Witnesses at hearings

Date	Name	Position and Organisation
Monday 26 June 2017		
Macquarie Room, Parliament House, Sydney	Mr Stephen Beaman	The then Executive Director, Waste and Resource Recovery, NSW EPA
	Mr Henry Moore	Manager, Waste Reform, NSW EPA
	Mr Miles Mason	Business Development Manager, New Energy Corporation
	Mr Jason Pugh	Chief Executive Officer, New Energy Corporation
	Mr Garth Lamb	NSW Branch President, Waste Management Association of Australia
	Ms Gayle Sloan	Chief Executive Officer, Waste Management Association of Australia
	Mr Ron Wainberg	National Chair, Resource and Energy, Recovery Division, Waste Management Association of Australia
	Mr Tim Jordan	Head of Research, Clean Energy Finance Corporation
	Mr Henry Anning	Sector Lead for Bioenergy, Clean Energy Finance Corporation
	Mr Grant Musgrove	Chief Executive Officer, Australian Council of Recycling
	Mr Emmanuel Vivant	Executive Director – Development, Performance and Innovation, Suez Australia
	Ms Donna Rygate	Chief Executive, Local Government NSW
	Ms Susy Cenedese	Strategy Manager Environment, Local Government NSW
	Ms Leisha Deguara	Senior Policy Officer - Waste, Local Government NSW
	Mr Mark Taylor	General Manager, NSW Resource Recovery, Veolia

Date	Name	Position and Organisation
Tuesday 27 June 2017		
Boomerang Room, Rooty Hill RSL, Rooty Hill	Mr Chris Ritchie	Director, Industry Assessments, NSW Department of Planning and Environment
	Ms Anthea Sargeant	Executive Director, Key Sites and Industry Assessments, NSW Department of Planning and Environment
	Mr Christopher Biggs	Chief Executive Officer, Dial A Dump Industries
	Ms Clare Brown	Director Planning, Urbis
	Ms Amanda Lee	Technical Director - Environment, AECOM
	Mr Damon Roddis	National Practice Leader - Air Quality and Noise, Pacific Environment
	Mr Charles Casuscelli	Chief Executive Officer, WSROC
	Ms Amanda Bombaci	Regional Waste Coordinator, WROC
	Cr Stephen Bali	Mayor, Blacktown City Council
	Ms Vanessa Parkes	Environment Manager, Blacktown City Council
	Ms Jo Immig	Coordinator, National Toxics Network
	Ms Jane Bremmer	Secretary, National Toxics Network
	Mr Antony Lewis	Secretary, Blacktown and District Environment Group
	Ms Melinda Wilson	Member, No Incinerator for Western Sydney
	Mrs Ilmiye Uluc	Member, No Incinerator for Western Sydney
	Ms Kim Vernon	Member, No Incinerator for Western Sydney

Date	Name	Position and Organisation
Monday 7 August 2017		
Macquarie Room, Parliament House, Sydney	Dr Ben Scalley	Director, Environmental Health Branch, NSW Health
	Mr Adi Prasad	Environmental Consultant, MRA Consulting Group
	Mr Mike Ritchie	Managing Director, MRA Consulting Group
	Mr Chris Derksema	Sustainability Director, City of Sydney
	Ms Gemma Dawson	Manager Waste Strategy, City of Sydney
	Mr Mark Roebuck	Manager, City Works and Services, Wollongong City Council
	Mr Mark Wood	Group Manager, Engineering Operations, Sutherland Shire Council
	Ms Namoi Dougall	General Manager, SSROC
	Ms Hazel Storey	Strategic Coordinator, Resource Recovery and Waste, SSROC
	Mr Tony Fraser	Manager, Works and Services, Shoalhaven City Council
	Mr David Hojem	Manager, Waste Services, Shoalhaven City Council
	A/Prof Bernadette McCabe	Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland
	Dr Ali El Hanandeh	Lecturer, School of Engineering, Griffith University
	Mr Roger Bligh	Sales Director, Metals, Energy and Water, Outotec South-East Asia Pacific
	Mr Mark Willcocks	Director, Active Tree Services

Date	Name	Position and Organisation
Thursday 17 August 2017		
Macquarie Room, Parliament House, Sydney	Mr Tony Khoury	Executive Director, Waste Contractors and Recyclers Association of NSW
	Mr Harry Wilson	President, Waste Contractors and Recyclers Association of NSW
	Mr Stephen Sasse	Chief Executive Officer, Nectar Farms
	Dr Marc Stambach	Managing Director, HZI Australia
	Dr James Whelan	Researcher and Community Organiser, Environmental Justice Australia
	Dr Stephen Goodwin	President, Mountain Districts Association
	Ms Marilyn Steiner	Member, Mountain Districts Association
	Mr Garbis Simonian	Chairman, Australian Industrial Ecology Network
	Mr Mark Glover	Director, Australian Industrial Ecology Network
	Mr Ian Malouf	Managing Director, Dial A Dump Industries
	Mr Christopher Biggs	Chief Executive Officer, Dial A Dump Industries
	Mr Damon Roddis	National Practice Leader – Air Quality and Noise, Pacific Environment
	Ms Clare Brown	Director Planning, Urbis
	Mr Barry Buffier	The then Chair and Chief Executive, NSW EPA
	Mr Greg Sheehy	Director, Waste Compliance, NSW EPA
	Mr Henry Moore	Manager, Waste Reform, NSW Environment Protection Authority
Monday 23 October 2017		
Macquarie Room, Parliament House, Sydney	Witness A	<i>In camera</i>
	Witness B	<i>In camera</i>
	Witness C	<i>In camera</i>
Friday 24 November 2017		
Macquarie Room, Parliament House, Sydney	Detective Superintendent Deborah Wallace	NSW Police Force
	Mr Barry Buffier	The then Chair and Chief Executive, NSW EPA

Date	Name	Position and Organisation
	Mr Mark Gifford	Chief Environmental Regulator, NSW EPA
Tuesday 13 February 2018		
Macquarie Room, Parliament House, Sydney	Witness E	<i>In camera</i>
	Witness F	<i>In camera</i>
	Witness G	<i>In camera</i>

Appendix 4 Minutes

Minutes No. 41

Thursday 6 April 2017

Portfolio Committee No. 6 – Planning and Environment

Members Lounge, Parliament House, Sydney, at 1.00 pm

1. Members present

Mr Green, *Chair*

Mr Amato, *Deputy Chair*

Ms Buckingham

Mr Mallard

Mr Mason-Cox

Ms Sharpe (substituting for Mr Mookhey)

Mr Wong

2. Previous minutes

Resolved, on the motion of Mr Wong: That draft minutes no. 40 be confirmed.

3. Correspondence

The committee noted the following items of correspondence:

Received:

- 28 March 2017 – Letter from Mr Green, Mr Mookhey and Mr Buckingham requesting a meeting of Portfolio Committee No. 6 to consider a proposed self-reference into 'energy from waste' technology.

4. Changes in committee membership

The committee noted the following changes in committee membership:

- Ms Cusack replaced by Mr Mason-Cox
- Ms Taylor replaced by Mr Mallard.

5. Consideration of terms of reference – 'Energy from waste' technology

The Chair tabled the following terms of reference received from Mr Green, Mr Mookhey and Mr Buckingham, on 28 March 2017:

That Portfolio Committee No.6 inquire into and report on matters relating to the waste disposal industry in New South Wales, with particular reference to 'energy from waste' technology, and in particular:

- a) the current provision of waste disposal and recycling, the impact of waste levies and the capacity (considering issues of location, scale, technology and environmental health) to address the ongoing disposal needs for commercial, industrial, household and hazardous waste
- b) the role of 'energy from waste' technology in addressing waste disposal needs and the resulting impact on the future of the recycling industry
- c) current regulatory standards, guidelines and policy statements oversighting 'energy from waste' technology, including reference to regulations covering:
 - i. the European Union
 - ii. United States of America
 - iii. international best practice
- d) additional factors which need to be taken into account within regulatory and other processes for approval and operation of 'energy from waste' plants

- e) the responsibility given to state and local government authorities in the environmental monitoring of 'energy from waste' facilities
- f) opportunities to incorporate future advances in technology into any operating 'energy from waste' facility
- g) the risks of future monopolisation in markets for waste disposal and the potential to enable a 'circular economy' model for the waste disposal industry, and
- h) any other related matter.

Resolved, on the motion of Ms Sharpe: That the committee adopt the terms of reference.

Mr Amato and Mr Mallard joined the meeting.

6. Conduct of the inquiry into 'energy from waste' technology

6.1 Proposed timeline

Resolved, on the motion of Mr Buckingham: That the committee adopt the following timeline for the administration of the inquiry:

- Sunday 28 May 2017 – submission closing date
- June and July 2017 – commence public hearings and site visits
- December 2017 – report deliberative and table report.

6.2 Closing date for submissions

Resolved, on the motion of Ms Sharpe: That the closing date for submissions be Sunday 28 May 2017.

6.3 Stakeholder list

Resolved, on the motion of Mr Mallard: That the secretariat circulate to members the Chair's proposed list of stakeholders to provide them with the opportunity to amend the list or nominate additional stakeholders, and that the committee agree to the stakeholder list by email, unless a meeting of the committee is required to resolve any disagreement.

6.4 Advertising

The committee noted that all inquiries are advertised via twitter, stakeholder letters and a media release distributed to all media outlets in New South Wales.

7. Adjournment

The committee adjourned at 1.03 pm *sine die*.

Tina Higgins
Committee Clerk

Minutes No. 42

Monday 26 June 2017

Portfolio Committee No. 6 – Planning and Environment

Macquarie Room, Parliament House, Sydney, at 9.03 am

1. Members presentMr Green, *Chair*Mr Amato, *Deputy Chair* (until 12.45 pm)

Dr Faruqi (substituting for Mr Buckingham)

Mr Graham (substituting for Mr Wong) (from 9.58 am)

Mr Mallard

Ms Sharpe (substituting for Mr Mookhey) (from 9.08 am)

2. Apologies

Mr Mason-Cox

3. Previous minutes

Resolved, on the motion of Mr Amato: That draft minutes no. 41 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received:

- 11 April 2017 – Email from the Hon Shaoquett Moselmane MLC, Opposition Whip, to secretariat, advising that the Hon Penny Sharpe MLC will be substituting for the Hon Daniel Mookhey MLC for the duration of the inquiry
- 6 April 2017 – Email from the Hon Catherine Cusack MLC to Chair, requesting to participate in the inquiry
- 12 April 2017 - Email from the Hon Catherine Cusack MLC to Chair, stating that she no longer wishes to participate in the inquiry
- 18 April 2017 – Note from Dr John Byrnes regarding access to records on landfill sites
- 19 April 2017 – Email from the Climate Council to committee, advising that they are not in a position to submit an application at present
- 9 May 2017 – Email from Dr John Byrnes to secretariat, regarding waste industry
- 16 May 2017 – Email from Mr Tim Allerton, City PR to Chair, suggesting a committee briefing and attaching documents
- 1 June 2017 – Letter from James Higgins, Allens, to Chair, requesting the committee consider inviting Jacfin Pty Ltd to appear at a hearing
- 5 June 2017 - Letter from the Hon Rob Stokes, Member for Pittwater, to Chair, attaching information from Active Tree Services and requesting it be considered by the committee
- 19 June 2017 – Letter from Mr Barry Buffier, Chair and CEO, NSW EPA to Secretariat, advising of NSW EPA representatives to appear at the public hearing on 26 June 2017
- 19 June 2017 – Email from Ms Louise Higgins, Executive Assistant to Secretary, NSW Department of Planning and Environment to Secretariat, advising of Department of Planning Environment representatives to appear at the public hearing on 27 June 2017
- 21 June 2017 – Email from Shaoquett Moselmane, Opposition Whip, to secretariat, advising Hon John Graham will substitute for Hon Ernest Wong at hearings on June 26 and 27
- 21 June 2017 - Email from Ms Louise Higgins, Executive Assistant to Secretary, NSW Department of Planning and Environment, to Secretariat, advising that the department will not be making a submission to the inquiry
- 22 June 2017 - Email from Mr Jeremy Buckingham, to secretariat, advising Dr Mehreen Faruqi will substitute for Mr Buckingham at the hearings on 26 and 27 June.

Sent:

- 8 May 2017 – Letter from Chair to Dr John Byrnes, regarding access to records on landfill sites
- 8 June 2017 – Letter from Chair to Mr Ian Malouf, regarding concerns raised in his submission
- 15 June 2017 – Letter from Chair to Mr Barry Buffier, NSW EPA, inviting NSW EPA to appear at the public hearing on 26 June 2017
- 15 June 2017 – Letter from Chair to Ms Carolyn McNally, Department of Planning and Environment, inviting the Department to appear at the public hearing on 27 June 2017 =
- 20 June 2017 – Letter from Chair to Mr Edmond Atalla MP, Member for Mount Druitt, advising of public hearing at Rooty Hill RSL on 27 June 2017.

5. Inquiry into ‘energy from waste’ technology**5.1 Pro forma submissions**

Resolved, on the motion of Mr Mallard: That the committee publish one copy of Proforma A-F on its website, noting the number of copies that have been received.

5.2 Public submissions

The committee noted that the following submissions were published by the committee clerk under the authorisation of the resolution appointing the committee: submission nos. 1-5, 15, 20, 24, 33-34, 36, 39-40, 44-45, 47, 51, 54-57, 59-61, 74, 81, 88, 90-91, 94, 95, 99-100, 107, 111, 113, 115, 120, 126-127, 131, 133, 135-136, 141, 143-146, 148-150, 154, 158, 162-165, 167-168, 170-174, 174a, 175-180, 182-183, 186, 188-191, 194-198, 200, 201, 203-207a, 209, 211-212, 214-218, 220, 222-223, 229, 231, 233, 236-239, 245-249, 252, 254-255, 261-262, 271-272, 276-277, 280, 282-284, 286, 289, 291-292, 297, 299, 301, 304, 307, 312-313, 320, 322, 324-327, 329-330, 339, 349, 355, 361, 364-366, 373-377 and 381-383.

5.3 Partially confidential submissions

Resolved, on the motion of Mr Amato: That the committee keep the following information confidential, as per the request of the authors: submission authors’ names in submissions nos. 6, 9, 10, 13, 14, 16, 17, 18, 19, 21, 22, 23, 25, 26, 29, 31, 37, 38, 41-43, 46, 48, 50, 52, 62, 63-64, 66, 68-72, 75-76, 78-79, 87, 92-93, 96-98, 101-103, 105-106, 114, 116-119, 121, 124-125, 128-130, 132, 134, 138, 140, 142, 147, 153, 155, 157, 159-161, 166, 181, 181a, 185, 187, 192, 193, 202, 213, 221, 225-227, 230, 232, 234, 241-244, 250-251, 253, 257-259, 263-264, 266-268, 270, 273-275, 278-279, 281, 285, 287-288, 290, 293, 295-296, 303, 306, 308, 310-311, 315-318, 321, 328, 331-338, 340-343, 345-346, 350-353, 357-360, 362-363, 367-369, 371-372 and 378.

Resolved, on the motion of Mr Amato: That the committee keep names and/or identifying and sensitive information, and potential adverse mention, confidential, as per the recommendation of the secretariat, in submission nos. 27, 30, 53, 82-85, 210 and 314.

5.4 Confidential submissions

Resolved, on the motion of Mr Mallard: That the committee keep submission nos. 7, 8, 11, 12, 32, 35, 49, 56, 58, 65, 67, 73, 77, 80, 86, 89, 104, 108-110, 112, 122-123, 137, 139, 151-152, 169, 184, 199, 208, 219, 224, 228, 235, 240, 256, 260, 265, 269, 294, 300, 302, 305, 309, 319, 323, 347-348, 354, 356, 370 and 379-380 confidential, as per the recommendation of the secretariat, as they contain identifying and/or sensitive information.

5.5 Future hearings

Resolved, on the motion of Mr Amato: That a further hearing be held on 17 August 2017 in Sydney, with the following witnesses, subject to availability, invited to that hearing: Waste Contractors and Recyclers Association of NSW, HZI Australia, Active Tree Services, Australian Industrial Ecology Network Pty Ltd, Australian Council of Recycling, Outotec, Visy, Shoalhaven City Council, NSW Health and the Environmental Justice Australia.

5.6 Site visit

The committee noted that it will not be conducting regional site visits.

5.7 Arrangements for Western Sydney hearing

The secretariat briefed the committee on arrangements for the Western Sydney hearing on Tuesday 27 June.

5.8' Allocation of question time

Resolved, on the motion of Ms Sharpe: That the allocation of time for questions be managed by the Chair.

5.9' Public hearing

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Mr Stephen Beaman, Executive Director, Waste and Resource Recovery, NSW Environment Protection Authority
- Mr Henry Moore, Manager, Waste Reform, NSW Environment Protection Authority.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Miles Mason, Business Development Manager, New Energy Corporation
- Mr Jason Pugh, Chief Executive Officer, New Energy Corporation.

Mr Mason tendered the following documents:

- Presentation – 'Parliamentary Inquiry into EfW technologies'
- Hon Albert Jacob MLA, Minister for Environment; Heritage – 'Statement that a proposal may be implemented' regarding the Boodarie Waste-to-Energy and materials recovery facility, Port Hedland
- New Energy Company Profile document 'Our vision is a world with zero landfill; where waste fuels a sustainable future.'

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Ms Gayle Sloan, Chief Executive Officer, Waste Management Association of Australia
- Mr Ron Wainberg, National Chair, Resource and Energy, Recovery Division, Waste Management Association of Australia
- Mr Garth Lamb, NSW Branch President, Waste Management Association of Australia.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Tim Jordan, Head of Research, Clean Energy Finance Corporation
- Mr Henry Anning, Sector Lead for Bioenergy, Clean Energy Finance Corporation.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- Mr Grant Musgrove, Chief Executive Officer, Australian Council of Recycling.

The evidence concluded and the witness withdrew.

The following witness was sworn and examined:

- Mr Emmanuel Vivant, Executive Director – Development, Performance and Innovation, Suez.

The evidence concluded and the witness withdrew.

The following witnesses were sworn and examined:

- Ms Donna Rygate, Chief Executive, Local Government NSW
- Ms Susy Cenedese, Strategy Manager, Environment, Local Government NSW
- Ms Leisha Deguara, Senior Policy Officer – Waste, Local Government NSW.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- Mr Mark Taylor, General Manager, NSW Resource Recovery, Veolia.

The evidence concluded and the witness withdrew.

The public and media withdrew.

5.10 Tendered documents

Resolved, on the motion of Mr Mallard: That the committee accept and publish the following documents tendered by Mr Mason during the public hearing:

- Presentation – ‘Parliamentary Inquiry into EfW technologies’
- Hon Albert Jacob MLA, Minister for Environment; Heritage – ‘Statement that a proposal may be implemented’ regarding the Boodarie Waste-to-Energy and materials recovery facility, Port Hedland
- New Energy Company Profile document ‘Our vision is a world with zero landfill; where waste fuels a sustainable future.’

6. Travel of Mr Mallard’s SRA to offsite hearing

Resolved, on the motion of Mr Mallard: That Mr Mallard’s SRA, Shani Murphy, be authorised to travel with the committee on the bus on Tuesday 27 June 2017.

7. Media at hearing on 27 June 2017

The committee noted the secretariat’s advice that media is expected at the offsite hearing on Tuesday 27 June 2017.

8. Adjournment

The committee adjourned at 4.45 pm, until Tuesday 27 June 2017, Boomerang Room, Rooty Hill RSL, Rooty Hill (public hearing for inquiry into ‘energy from waste’ technology).

Kate Mihaljek

Committee Clerk

Minutes No. 43

Tuesday 27 June 2017

Portfolio Committee No. 6 – Planning and Environment

Boomerang Room, Rooty Hill RSL, Rooty Hill Sydney, at 10.00 am

1. Members present

Mr Green, *Chair*

Mr Amato, *Deputy Chair*

Dr Faruqi (substituting for Mr Buckingham)

Mr Graham (substituting for Mr Wong)

Mr Mallard

Ms Sharpe (substituting for Mr Mookhey)

2. Apologies

Mr Mason-Cox

3. Public hearing

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Ms Anthea Sargeant, Executive Director, Key Sites and Industry Assessment, Department of Planning and Environment
- Mr Chris Ritchie, Director, Industry Assessments, Department of Planning and Environment.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Christopher Biggs, Chief Executive Officer, DADI Group
- Mr Damon Roddis, National Practice Leader – Air Quality and Noise, Pacific Environment
- Ms Amanda Lee, Technical Director – Environment, AECOM
- Ms Clare Brown, Director Planning, Urbis.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Charles Casuscelli, Chief Executive Officer, Western Sydney Regional Organisation of Councils
- Ms Amanda Bombaci, Regional Waste Coordinator, Western Sydney Regional Organisation of Councils
- Cr Stephen Bali, Mayor, Blacktown City Council
- Ms Vanessa Parkes, Environment Manager, Blacktown City Council.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Ms Jo Immig, Coordinator, National Toxics Network
- Ms Jane Bremmer, Secretary, National Toxics Network.

Ms Immig tendered the following document:

- 'Statement to the NSW Parliamentary Inquiry into Waste to Energy'

Ms Bremmer tendered the following documents:

- Zero Waste Europe, 'Air Pollution from Waste Disposal: Not for Public Breath'
- Alliance for a Clean Environment, 'Public health impacts associated with incinerators – a compilation of studies'
- GAIA, 'Waste Gasification & Pyrolysis: High Risk, Low Yield Processes for Waste Management'
- Dr Jeffery Morris et al, 'What is the best disposal option for the "Leftovers" on the way to Zero Waste?'
- 'Incinerator accidents'

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Antony Lewis, Blacktown and District Environment Group
- Ms Melinda Wilson, No Incinerator for Western Sydney
- Ms Ilmiye Uluc, No Incinerator for Western Sydney
- Ms Kim Vernon, No Incinerator for Western Sydney.

The evidence concluded and the witnesses withdrew.

Ms Wilson tendered the following document:

The following inquiry participant did not need to be sworn and provided a short statement:

- Mr Gerald Barr, community member.

The evidence concluded and the witness withdrew.

The public and media withdrew.

4. **Tendered documents**

Resolved, on the motion of Mr Mallard: That the committee accept and publish the following documents tendered during the public hearing:

- ‘Statement to the NSW Parliamentary Inquiry into Waste to Energy’
- Zero Waste Europe, ‘Air Pollution from Waste Disposal: Not for Public Breath’
- Alliance for a Clean Environment, ‘Public health impacts associated with incinerators – a compilation of studies’
- GAIA, ‘Waste Gasification & Pyrolysis: High Risk, Low Yield Processes for Waste Management’
- Dr Jeffery Morris et al, ‘What is the best disposal option for the “Leftovers” on the way to Zero Waste?’
- ‘Incinerator accidents’

5. **Site visit**

Resolved, on the motion of Mr Mallard: That, the committee conduct a site visit to the Woodlawn waste facility operator by Veolia in Tarago.

6. **Witnesses at future**

Resolved, on the motion of Ms Sharpe: That, the following witnesses, subject to availability, be recalled/invited to the hearing on 17 August 2017:

- NSW EPA
- Dial A Dump Industries/The New Generation/Alexandria Landfill - Mr Ian Malouf
- an expert on public health.

7. **Submissions**

7.1 **Public submissions**

The committee noted that the following submissions were published by the committee clerk under the authorisation of the resolution appointing the committee: submission nos. 322, 324-327, 329-330, 339, 349, 355, 361, 364-366, 373-377 and 381-383.

7.2 **Partially confidential submissions**

Resolved, on the motion of Mr Amato:

- That the committee keep names and/or identifying and sensitive information, and potential adverse mention, confidential, as per the request of the author and/or the recommendation of the secretariat, in submission nos. 321, 328, 331-338, 340-343, 345-346, 350-353, 357-360, 362-363, 367-369, 371-372 and 378.
- That the committee keep names and/or identifying and sensitive information, and potential adverse mention, confidential, as per the recommendation of the secretariat, in submission no 344.

7.3 **Confidential submissions**

Resolved on the motion of Mr Graham: That the committee keep submission nos. 323, 347-348, 354, 356, 370 and 379-380 confidential, as per the request of the author.

8. **Adjournment**

The committee adjourned at 3.15 pm.

Tina Higgins
Committee Clerk

Minutes No. 44

Monday 7 August 2017

Portfolio Committee No. 6 – Planning and Environment

Macquarie Room, Parliament House at 9.52 am

1. Members presentMr Green, *Chair*Mr Amato, *Deputy Chair*

Mr Buckingham (from 9.55 am)

Mr Graham (substituting for Mr Wong)

Mr Mallard

Mr Mason-Cox (from 10.38 am)

2. Apologies

Ms Sharpe

3. Draft minutes

Resolved, on the motion of Mr Amato: That draft minutes nos. 42 and 43 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received:

- 28 June 2017 – Email from the Hon Shaoquett Moselmane MLC, Opposition Whip, to Secretariat, advising that the Hon John Graham MLC will be substituting for the Hon Ernest Wong MLC for the energy from waste technology hearings on 7 and 17 August 2017
- 29 June 2017 – Letter from Mr Christopher Biggs, Dial A Dump Industries, to Chair, providing additional information on proposed Pigouvian Tax, a brochure entitled Fix the waste levy to fix illegal dumping and a memorandum of advice entitled Alexandria Landfill Pty Ltd and A Waste Responsibility Tax Proposal
- 4 July 2017 – Email from Mr Peter Maganov, Manager Sustainability & Strategic Waste, Randwick City Council, to Secretariat, declining the invitation to appear at the energy from waste technology hearing on 7 August 2017
- 5 July 2017 – Email from Mark Taylor, Veolia, to Secretariat, confirming 22 August 2017 as the date for the committee's site visit to the Woodlawn facility operated by Veolia and suggesting activities
- 11 July 2017 – Email from Dr Nick Florin, UTS, to Secretariat, declining the invitation to appear at the energy from waste technology hearing on 7 August 2017
- 11 July 2017 – Email from Ms Hazel Storey, Strategic Coordinator Resource Recovery and Waste, Southern Sydney Regional Organisation of Councils (SSROC), to Secretariat advising that Attachment A to Submission 176 can be made public
- 13 July 2017 – Email from Mr Mark Taylor, Veolia, to Secretariat, agreeing to document outlining answers to questions on notice and additional information
- 13 July 2017 – Transcript correction from Mr Antony Lewis, Blacktown and District Environment Group, to Secretariat, informing the committee that the Blacktown and District Environment Group visited the Genesis facility on 10 December 2016
- 20 July 2017 – Email from Mr Ben Madden, UTS, to Secretariat, declining the invitation to appear at the energy from waste technology hearing on 7 August 2017
- 20 July 2017 – Email Ms Bronte Walker, Dial A Dump Industries, to Committee providing additional information to the inquiry:
 - 'Additional information provided by the proponent on community consultations undertaken regarding the proposed energy from waste facility at Eastern Creek'
 - United Kingdom, Department for Environment, Food and Rural Affairs, 'Energy from Waste: A guide to the debate'

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/284612/pb14130-energy-waste-201402.pdf

- Paul Chrostowski and Sarah Foster, 'Resolution of a controversy - Do waste to energy plants cause public health impacts?'
<http://www.cpfassociates.com/ChrostowskiFoster2014CausationandWTE.pdf>
- WSP Environmental for the Government of Western Australia Department of Environment and Conservation, 'An investigation into the performance (environmental and health) of waste to energy technologies internationally, Summary Report – Waste to Energy - A review of legislative and regulatory frameworks, state of the art technologies and research on health and environmental impact'
http://www.wtert.com.br/home2010/arquivo/noticias_eventos/W2E_Summary_Report_20123.pdf
- WSP Environmental for the Government of Western Australia Department of Environment and Conservation, 'An investigation into the performance (environmental and health) of waste to energy technologies internationally, Stage Three - A Review of recent research on the health and environmental impacts of Waste to Energy Plants'
https://www.wasteauthority.wa.gov.au/media/files/documents/W2E_Technical_Report_Stage_Three_2013.pdf
- 31 July 2017 – Email from Mr Royce DeSousa, Visy, to Secretariat, declining the invitation to appear at the energy from waste technology hearing on 17 August 2017
- 31 July 2017 – Email from Ms Kristina Chown, NSW EPA, to Secretariat, regarding publication status of Attachments A and B to answers to questions on notice
- 1 August 2017 – Email from Mr James Higgins, Allens, to Secretariat, requesting that Mr Richard Lancaster SC represent Jacfin at the energy from waste technology hearing on 17 August 2017.

Sent

- 30 June 2017 – Letter from Chair, to Ms Tania Buxton, Event Sales Executive, Concept 33, thanking Ms Buxton for the services provided at the hearing at Rooty Hill RSL on 27 June 2017.

5. Committee membership

The committee noted that the Hon Penny Sharpe MLC has replaced the Hon Daniel Mookhey MLC as a substantive member of the committee.

6. Inquiry into 'energy from waste' technology

6.1 Public submissions

Resolved, on the motion of Mr Amato: That the committee accept and publish submission nos 298, 150a and 177a.

6.2 Attachment A to submission no. 176

Resolved, on the motion of Mr Amato: That the committee accept and publish Attachment A to submission no. 176, Executive summary of 'Community attitudes towards, and understanding of, Resource Recovery in the SSROC Region, with a focus on recovering energy from waste'.

6.3 Answers to questions on notice and supplementary questions on notice

Resolved, on the motion of Mr Graham: That the committee publish answers to questions on notice from:

- Mr Miles Mason, New Energy Corporation (including attachments 1-6), received 7 July 2017
- Mr Mark Taylor, Veolia, received 10 July 2017
- Ms Bronte Walker, Dial A Dump Industries, received 20 July 2017
- Ms Jo Immig, National Toxics Network, received 24 July 2017
- Mr Tim Jordan, Clean Energy Finance Corporation, received 24 July 2017
- Ms Susy Cenedese, Local Government NSW, received 25 July 2017
- Ms Lennie Le, Australian Council of Recycling, received 25 July 2017

- Ms Gayle Sloan, Waste Management Association of Australia, received 25 July 2017.

Resolved, on the motion of Mr Graham: That the:

- committee publish answers to questions on notice from Ms Anthea Sargeant, NSW Department of Planning and Environment, received 25 July 2017, with the exception of the response to question 8, which is to remain confidential, as per the request of the author
- secretariat clarify with Ms Kristina Chown, NSW EPA, the publication status of answers to questions on notice, received 27 July 2017, specifically relating to Attachment A and Attachment B, and that the publication of these documents be considered at the next meeting.

6.4’ Tendered documents from hearing on 27 June 2017

Resolved, on the motion of Mr Amato: That the committee accept and publish the following documents tendered during the public hearing on 27 June 2017:

- Jane Bremmer, ‘Zero Waste Solutions not dirty energy incinerators’
- Blacktown and District Environment Group, ‘Opening Statement’
- Jindrich Petrlik and Peter Behnisch, ‘Persistent Organic Pollutants (POPs) in Free Range Chicken Eggs from Western Balkan Countries: Bosnia and Herzegovina’
- Hsiu-Ling Chen et al, ‘Associations between dietary intake and serum polychlorinated dibenzo-p-dioxin and dibenzofuran (PCDD/F) levels in Taiwanese’
- ‘High levels of dioxins found in chicken eggs sampled near waste incinerators and metallurgical plant in China’
- Environmental Protection Agency, ‘Final Draft BAT Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery’
- ‘Plume plot Western Sydney’ video
- ‘Plume Plotter Images for Last 3 Days’
- ‘Plume Plotter for proposed Western Sydney incinerator’
- Australian Investment and Securities Commission, ‘Current & Historical Company Extract’
- ‘Asphalt Site Plan Proposed Plant’
- Blacktown City Council, ‘Notice of Proposed Development’
- Greenpeace, ‘Statement regarding incineration’
- ‘Emissions from Incinerators’
- Resource, ‘Suez fined £220k after worker suffers incinerator burns’
- Greenpeace, ‘Pollution and health impacts of waste incinerators’
- The Washington Post, ‘Trash fire inside Montgomery County incinerator plant disrupts wastes deliveries’
- Chase, ‘End of the charade of safety – 11 hospitalised in Poolbeg incinerator accident’
- National Toxics Network, ‘Mega incinerator proposal for Eastern Creek will stigmatise Western Sydney and cause toxic pollution’
- Natalie O’Brien and Heath Aston, ‘Pollution trail to megadump’

Resolved, on the motion of Mr Amato: That the committee keep confidential, as per the recommendation of the secretariat, the following tendered documents:

- ‘Petition To the President and Members of the Legislative Council’
- ‘Petition To the President and Members of the Legislative Council’
- ‘Petition To the President and Members of the Legislative Council’
- No Incinerator WS Community Statement’

6.5’ Jacfin - legal representation at hearing

The committee noted that Jacfin have requested that Mr Richard Lancaster SC appear on their behalf at the hearing, without a company representative giving evidence.

Resolved, on the motion of Mr Mallard: That Jacfin be advised that a company representative should attend the hearing, with the option of being accompanied by a legal representative if they wish, subject to the legal representative sitting behind the witness and not taking an active role during proceedings.

6.6' Site visit to Woodlawn Bioreactor

The committee noted that it is compulsory for members to wear steel capped boots during the site visit to the Woodlawn Bioreactor on 22 August, and that members are encouraged to bring their own boots as there are only a limited number of boots available at the facility.

6.7' Public hearing

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witness was sworn and examined:

- Dr Ben Scalley, Director, Environmental Health Branch, NSW Health.
- The evidence concluded and the witness withdrew.

The following witnesses were sworn and examined:

- Mr Mike Ritchie, Director, MRA Consulting Group
- Mr Adi Prasad, Environmental Consultant, MRA Consulting Group.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Chris Derksema, Sustainability Director, City of Sydney
- Ms Gemma Dawson, Manager Waste Strategy, City of Sydney.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Mark Wood, Group Manager – Engineering Operations, Sutherland Shire Council
- Mr Mark Roebuck, Manager City Works and Services, Wollongong City Council
- Ms Namoi Dougall, General Manager, Southern Sydney Regional Organisation of Councils
- Ms Hazel Storey, Strategic Coordinator Resource Recovery and Waste, Southern Sydney Regional Organisation of Councils

The evidence concluded and the witnesses withdrew.

The public and the media withdrew.

6.8' Deliberative meeting

The committee noted correspondence received from Mr Michael Zissis, Senior Associate, Allens, received 7 August 2017, regarding a legal representative appearing on behalf of Jacfin at the hearing.

Resolved, on the motion of Mr Mason-Cox: That Mr Zissis (representing Jacfin) be advised that:

- Mr Lancaster to accompany a director or other company representative of Jacfin to the hearing this afternoon (or alternatively at the next hearing scheduled for August). Questions would be directed to the representative of Jacfin, who could confer with Mr Lancaster and/or take the questions on notice
- Jacfin could request to give their evidence in camera, but under the same conditions as outlined above
- Instead of appearing at the hearing, Jacfin could ask the committee to rely on the submission already made to the inquiry and/or provide a supplementary submission.

6.9' Public hearing continued

Witnesses, the public and the media were admitted.

The following witnesses were sworn and examined:

- Mr Tony Fraser, Manager Works and Services, Shoalhaven City Council
- Mr David Hojem, Manager, Waste Services, Shoalhaven City Council.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- A/Prof Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland

The following witness was examined via teleconference:

- Dr Ali El Hanandeh, Lecturer, Griffith School of Engineering

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- Mr Roger Bligh, Sales Director, Metals, Energy and Water, S.E. Asia Pacific, Outotec.

Mr Bligh tendered the following documents:

- Outotec's UK Energy Projects
- Google map, Hedderheim, identifying Municipal waste to energy plant, Nordweststadt, Frankfurt and 5 km radius from Efw plant
- Google map, Hedderheim, identifying Municipal waste to energy plant, Nordweststadt, Frankfurt
- Image of energy from waste plant
- Outotec – Waste to energy sample references
- Outotec Sewage Sludge Thermal Processing Plant, Zurich Switzerland.
- Outotec, 'Working for Resource Efficiency, Sustainability Report 2015'.

The evidence concluded and the witness withdrew.

The following witness was sworn and examined:

- Mr Mark Willcocks, Executive Chairman, Active Tree Services.

The evidence concluded and the witness withdrew.

The public and media withdrew.

6.10' Jacfin - legal representation at hearing

The committee noted that Jacfin advised that they will not be attending the hearing on 7 August but have requested to reserve their right to appear at the hearing on 17 August.

6.11' Tendered documents

Resolved, on the motion of Mr Mallard: That the committee accept and publish the following documents tendered during the public hearing:

- Outotec's UK Energy Projects
- Google map, Hedderheim, identifying Municipal waste to energy plant, Nordweststadt, Frankfurt and 5 km radius from Efw plant
- Google map, Hedderheim, identifying Municipal waste to energy plant, Nordweststadt, Frankfurt
- Image of energy from waste plant
- Outotec – Waste to energy sample references
- Outotec Sewage Sludge Thermal Processing Plant, Zurich Switzerland.
- Outotec, 'Working for Resource Efficiency, Sustainability Report 2015'.

7.' Adjournment

The committee adjourned at 3.46 pm.

Tina Higgins
Committee Clerk

Minutes no. 46

Thursday 17 August 2017

Portfolio Committee No. 6 – Planning and Environment

Macquarie Room, Parliament House at 9.22 am

1. Members presentMr Green, *Chair*Mr Amato, *Deputy Chair*

Mr Buckingham (from 9.30 am – 12.00 pm and 1.30 pm – 3.30 pm)

Dr Faruqi (from 12.00 pm – 12.45 pm and 3.30 pm – 4.30 pm)

Mr Graham (substituting for Mr Wong)

Mr Mallard

Mr Mason-Cox (from 10.30 am)

Ms Sharpe

2. Draft minutes

Resolved, on the motion of Ms Sharpe: That draft minutes nos. 44 and 45 be confirmed.

3. Correspondence

The committee noted the following items of correspondence:

Received:

- 8 August 2017 – Email from Ms Kristina Chown, NSW EPA, to Secretariat, clarifying that the information in Attachments A and B to answers to questions on notice is factual and not confidential
- 8 August 2017 – Email from Dr Stephen Goodwin, Mountain Districts Association, to secretariat requesting its submission (sub no. 169) be made public and to appear as witnesses at the hearing on Thursday 17 August 2017
- 9 August 2017 – Email from Mr Chris Ritchie, Department of Planning and Environment, to Secretariat, clarifying the department has no objection to the committee publishing all of the information provided in response to Question 8 to answers to questions on notice
- 12 August 2017 – Email from Dr John Byrne to committee, outlining alleged incidents of illegal dumping of waste.
- 15 August 2017 – Email from Mr Jeremy Buckingham MLC, to Secretariat, advising that Dr Mehreen Faruqi MLC will replace him as a substantive member of the committee for the remainder of the energy from waste inquiry following the hearing on 17 August 2017
- 16 August 2017 – Email from Mr Jeremy Buckingham MLC, to Secretariat, advising that Dr Mehreen Faruqi MLC will substitute for him during the hearing on 17 August 2017 for the Mountain Districts Association and EPA sessions.

4. Inquiry into ‘energy from waste’ technology**4.1 Substitution of Dr Mehreen Faruqi**

The committee noted that Dr Mehreen Faruqi will be substituting for Mr Jeremy Buckingham for two sessions at the public hearing on 17 August 2017 and for the duration of the inquiry from 18 August 2017.

4.2 Parliamentary Library research paper

The committee noted receipt of a confidential research paper from the NSW Parliamentary Library entitled ‘International energy from waste facilities’ and requested the secretariat to ask the library if the research paper could be published.

4.3 Answers to questions on notice

Resolved, on the motion of Ms Sharpe:

- that the committee publish response 8 in answers to questions on notice, Ms Anthea Sargeant, Department of Planning and Environment, received on 25 July 2017

- that the committee publish answers to questions on notice, including Attachments A and B, from Ms Kristina Chown, NSW EPA, received 27 July 2017.

4.4 Attendance of Jacfin legal advice

Resolved, on the motion of Ms Sharpe: That Jacfin be invited to appear at a future hearing for the inquiry into energy from waste technology and that a legal representative be permitted to sit beside them to assist them in an advisory capacity.

4.5 Closing date for further submissions

The committee noted that the closing date for submissions is Sunday 10 September 2017.

Mr Buckingham arrived at 9.30 am

4.6 Public hearing

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Mr Tony Khoury, Executive Director, Waste Contractors and Recyclers Association of NSW
- Mr Harry Wilson, President, Waste Contractors and Recyclers Association of NSW.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Dr Marc Stambach, Managing Director, HZI Australia
- Mr Stephen Sasse, Executive Director, Nectar Farms.

Dr Stambach tendered the following documents:

- Hitachi Zosen Inova, 'Waste is our Energy' – Hitachi Zosen Inova company profile
- Hitachi Zosen Inova, 'Ferrybridge Multifuel Plant/UK Energy-from-Waste Plant' brochure
- Hitachi Zosen Inova, 'Energy from Waste Reference Projects since 2000 in chronological order'
- Hitachi Zosen Inova, 'Energy from Waste Plants & Hi-Tech Glasshouses, The benefits of co-location.'

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined

- Dr James Whelan, Researcher and Community Organiser, Environmental Justice Authority.

Dr Whelan tendered the following document:

- Environmental Justice Australia, 'A checklist for responsible air pollution management.'

The evidence concluded and the witness withdrew.

The following witnesses were sworn and examined:

- Dr Stephen Goodwin, President, Mountain Districts Association
- Ms Marilyn Steiner, Mountain Districts Association

Dr Goodwin tendered the following documents:

- Mountain Districts Association, 'Documentary Evidence of the Statutory Failures of both the Environment Protection Authority and the former Gosford City Council's Management of the Remodelling of Mangrove Mountain Memorial Golf Course' August 2017
- Mountain Districts Association, 'Additional notes on Mangrove Mountain Landfill to the Portfolio Committee No. 6 – Environment and Planning Parliamentary Enquiry into Energy from Waste Technology.'

The evidence concluded and the witnesses withdrew.

The public and the media withdrew.

Mr Green left the meeting.

4.7' Deliberative meeting

Mr Amato assumed the role of Chair in Mr Green's absence.

Resolved, on the motion of Mr Graham: That the committee authorise the recording of proceedings by Mr Antony Lewis, Blacktown & District Environment Group, with the consent of the witnesses.

Mr Green re-joined the meeting.

4.8' Public hearing continued

Witnesses, the public and the media were admitted.

The following witnesses were sworn and examined:

- Mr Garbis Simonian, Chairman, Australian Industrial Ecology Network
- Mr Mark Glover, Director, Australian Industrial Ecology Network.

Mr Simonian tendered the following documents:

- Australian Industrial Ecology Network, 'EfW Parliamentary Committee #6'
- 'And Biomass is so much more than firewood!'
- 'How material recovered from Wastes ACTUALLY make it Back into the Productive Economy'.

The evidence concluded and the witnesses withdrew.

The following witness were sworn and examined:

- Mr Ian Malouf, Managing Director, Dial A Dump Industries

The Chair noted that Mr Christopher Biggs, Chief Executive Officer, Dial A Dump Industries Group, Mr Damon Roddis, National Practice Leader – Air Quality and Noise, Pacific Environment, and Ms Clare Brown, Director Planning, Urbis, did not need to be sworn as they had already sworn an oath at an earlier hearing for this inquiry.

Mr Biggs tendered the following documents:

- MRA Consulting Group, 'Feedstock review in accordance with the Resource Recovery Criteria of the NSW EfW Policy Statement: A submission to Dial a Dump Industries' 24 July 2017
- Eco Sustainable, 'Chute Residual Waste: Composition Audit: Report produced for Dial a Dump Industries' April 2017
- APC Waste Consultants, 'Report: Audit of potential feedstock for The Next Generation energy-from-waste facility for Dial A Dump Industries' September 2016.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Barry Buffier, Chair and Chief Executive, NSW Environment Protection Authority
- Mr Greg Sheehy, Director Waste Compliance, NSW Environment Protection Authority

The Chair noted that Mr Henry Moore, Manager, Waste Reform, NSW Environment Protection Authority, did not need to be sworn as he had already sworn an oath at an earlier hearing for this inquiry.

Mr Buffier tendered the following documents:

- Environment Protection Authority, Bar graph 'NSW – Generation and Disposed Trend'
- NSW EPA, 'Waste and Resource Recovery Infrastructure Strategy 2017-2021, Draft for consultation'
- NSW Government, 'Waste Less, Recycle More'
- Blue Environment, 'Australian National Waste Report 2016.'

The evidence concluded and the witnesses withdrew.

The public and media withdrew.

4.9' Tendered documents

Resolved, on the motion of Ms Sharpe: That the committee accept and publish the following documents tendered during the public hearing:

- Hitachi Zosen Inova, 'Waste is our Energy' – Hitachi Zosen Inova company profile
- Hitachi Zosen Inova, 'Ferrybridge Multifuel Plant/UK Energy-from-Waste Plant' brochure
- Hitachi Zosen Inova, 'Energy from Waste Reference Projects since 2000 in chronological order'
- Hitachi Zosen Inova, 'Energy from Waste Plants & Hi-Tech Glasshouses, The benefits of co-location.'
- Environmental Justice Australia, 'A checklist for responsible air pollution management.'
- Mountain Districts Association, 'Documentary Evidence of the Statutory Failures of both the Environment Protection Authority and the former Gosford City Council's Management of the Remodelling of Mangrove Mountain Memorial Golf Course' August 2017
- Mountain Districts Association, 'Additional notes on Mangrove Mountain Landfill to the Portfolio Committee No. 6 – Environment and Planning Parliamentary Enquiry into Energy from Waste Technology'
- Australian Industrial Ecology Network, 'EfW Parliamentary Committee #6'
- 'And Biomass is so much more than firewood!'
- 'How material recovered from Wastes ACTUALLY make it Back into the Productive Economy'.
- MRA Consulting Group – 'Feedstock review in accordance with the Resource Recovery Criteria of the NSW EfW Policy Statement: A submission to Dial a Dump Industries' 24 July 2017
- Eco Sustainable, 'Chute Residual Waste: Composition Audit: Report produced for Dial a Dump Industries' April 2017
- APC Waste Consultants, 'Report: Audit of potential feedstock for The Next Generation energy-from-waste facility for Dial A Dump Industries' September 2016.
- Environment Protection Authority, Bar graph 'NSW, Generation and Disposed Trend'
- NSW EPA, 'Waste and Resource Recovery Infrastructure Strategy 2017-2021, Draft for consultation'
- NSW Government, 'Waste Less, Recycle More'
- Blue Environment, 'Australian National Waste Report 2016'.

4.10 Site visit to Genesis waste facility at Eastern Creek

Resolved, on the motion of Mr Mason-Cox: That the committee conduct a site visit to the Genesis waste facility at Eastern Creek.

5. Adjournment

The committee adjourned at 4.35 pm. until Tuesday 22 August 2017, Tarago (site visit to Woodlawn Bioreactor).

Teresa McMichael
Committee Clerk

Minutes no. 47

Tuesday 22 August 2017

Portfolio Committee No. 6 – Planning and Environment

Veolia Woodlawn facility, Tarago, at 10.30 am

1. Members presentMr Green, *Chair*Mr Amato, *Deputy Chair*

Mr Mallard

Mr Mason-Cox

Ms Sharpe

2. Apologies

Dr Faruqi

Mr Wong

3. Inquiry into ‘energy from waste’ technology**3.1 Site visit**

The committee conducted a site visit to the Woodlawn facility and met with the following representatives from Veolia:

- Mr Mark Taylor, General Manager, NSW Resource Recovery
- Mr Henry Gundry, Woodlawn Facilities Manager
- Mr Chris O’Farrell, Woodlawn MBT Manager
- Ms Vanessa Seaton, Municipal Contracts Manager
- Ms Vanessa Toparis, Community Liaison Officer

3.2 Recording of proceedings to Dial A Dump Industries

Resolved, on the motion of Ms Sharpe: That Dial A Dump Industries be provided with a copy of the in-house video recording of their appearance before the committee on 17 August 2017.

4. Adjournment

The committee adjourned at 2.12 pm *sine die*.

Teresa McMichael

Committee Clerk

Minutes no. 52

Friday 20 October 2017

Portfolio Committee No. 6 – Planning and Environment

Hospital Road, Parliament House, Sydney, at 10.30 am

1. Members present

Mr Green, *Chair*

Mr Amato, *Deputy Chair*

Mr Faruqi

2. Apologies

Mr Graham

Mr Mallard

Mr Mason-Cox

Ms Sharpe

3. Site briefing on bus

The committee received a site briefing while travelling to Eastern Creek from the following Dial A Dump Industries representatives:

- Mr Christopher Biggs, Chief Executive Officer
- Ms Anthea Gilmore, In House Counsel
- Ms Katie McCallum, In House Counsel

4. Tour of Genesis Xero Recycling Facility, Eastern Creek

The committee toured the Genesis Xero Recycling Facility. In addition to Ms Gilmore and Ms McCallum, the following Dial A Dump Industries representatives joined the committee:

- Mr Rodney Johnson, Group Operations
- Mr Darin Marks, Chief Financial Officer
- Mr Paul Foster, Site Operations Manager

5. Adjournment

The committee adjourned at 1.05 pm, until Monday 23 October 2017 (energy from waste hearing).

Kate Mihaljek

Committee Clerk

Minutes no. 53

Monday 23 October 2017

Portfolio Committee No. 6 – Planning and Environment

Macquarie Room, Parliament House, Sydney, at 12.01 pm

1. Members presentMr Green, *Chair*

Dr Faruqi

Mr Graham

Mr Mallard

Ms Sharpe

2. Apologies

Mr Amato

Mr Mason-Cox

3. Draft minutes

Resolved, on the motion of Ms Sharpe: That minutes no.s 46, 47 and 51 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received:

- 23 August 2017 – Email from the Hon Shaoquett Moselmane MLC, Opposition Whip, to the secretariat, advising that the Hon John Graham MLC will substitute for the Hon Ernest Wong MLC for the remainder of the inquiry
- 23 August 2017 – Email from Ms Bronte Walker, Dial A Dump Industries, to the secretariat providing a signed copy of media guidelines and agreeing to the committee's request to visit the Genesis facility
- 24 August 2017 – Letter from Mr Christopher Biggs, Dial A Dump Industries, to the Chair, clarifying issues raised during the hearing on 17 August 2017
- 6 September 2017 – Email from Mr Christopher Biggs, Dial A Dump Industries, to secretariat, attaching correspondence between Dial A Dump Industries and the Hon Gabrielle Upton, Minister for the Environment
- 6 September 2017 – Anonymous letter and attachments, to secretariat, regarding NSW EPA investigation into certain waste companies
- 7 September 2017 – Anonymous letter and attachments, to secretariat, regarding NSW EPA investigation into practices at a certain company
- 18 September 2017 – Anonymous letter and attachments, to secretariat, regarding NSW EPA investigation into practices at a certain waste company
- 20 September 2017 – Letter from Mr Christopher Biggs, Dial A Dump Industries, to Chair advising that Dial A Dump Industries have recommenced transporting waste to Queensland
- 3 October 2017 – Email from Mr James Higgins, Allens Lawyer, to Chair, advising that Jacfin have declined the invitation to appear at the hearing on 23 October
- 3 October 2017 – Letter from the Office of the Chief Scientist of Australia, to the Chair, declining the invitation to appear at the hearing on 23 October.

Sent:

- 16 August 2017 – Email from the secretariat to Ms Kristina Chown, NSW EPA, in response to Ms Chown's telephone enquiry, advising of the committee's power to order the production of documents at a hearing
- 23 August 2017 – Email from the secretariat to Ms Bronte Walker, Dial A Dump Industries, providing a link to the recording of the Dial A Dump witnesses on 17 August 2017

- 24 August 2017 – Letter from the Chair, to Mr Mark Taylor, Veolia, thanking him for hosting the committee at the Woodlawn facility
- 21 September – Letter from the Chair to Dr Alan Finkel, Chief Scientist of Australia, inviting Dr Finkel to appear at the hearing on 23 October
- 5 October 2017 – Email from the Chair to Ms Anthea Sargeant, Department of Planning and Environment, requesting an answer to an additional question on notice
- 5 October 2017 – Email from the Chair to Mr Buffier, NSW EPA, requesting answers to additional questions on notice
- 13 October 2017 - Letter from the Chair to Mr Buffier, NSW EPA, requesting an update on the recommendations from the 2015 General Purpose Standing Committee No. 5 Report into the performance of the NSW EPA.

Resolved, on the motion of Ms Sharpe: That the committee keep confidential the following correspondence:

- 6 September 2017 – Anonymous letter and attachments, to secretariat, regarding NSW EPA investigation into certain waste companies
- 7 September 2017 – Anonymous letter and attachments, to secretariat, regarding NSW EPA investigation into a certain company
- 18 September 2017 - Anonymous letter and attachments, to secretariat, regarding NSW EPA investigation into practices at a certain waste company.

5. Inquiry into 'energy from waste' technology

5.1 Public submissions

The committee noted the following submissions were published by the committee clerk under the authorisation of the resolution appointing the committee: submission nos. 145a, 172a, 173a, 174b, 215a, 384, 385, 387, 393, 394, 395.

5.2 Public attachments

Resolved, on the motion of Ms Faruqi: That the committee publish, but not make available on the committee's website due to their size:

- Attachment 4 to Submission 214
- Attachments A, B, C to Submission 173a.

5.3 Confidential submission

Resolved, on the motion of Ms Sharpe: That the committee keep submission nos. 386, 386a and 182a confidential, as per the request of the authors.

5.4 Submission No. 393a

Resolved, on the motion of Mr Graham: That the committee publish submission 393a and that the Chair write to Dial A Dump Industries inviting a right of reply.

5.5 Answers to questions on notice

Resolved, on the motion of Dr Faruqi: That the committee publish answers to questions on notice from:

- Mr Tony Khoury, Waste Contractors & Recyclers Association of NSW, received on 23 August 2017
- Dr James Whelan, Environmental Justice Australia, received on 24 August 2017
- Dr Ali El Hanandeh, received on 1 September 2017
- Associate Professor Bernadette McCabe, received on 1 September 2017
- Mr Mark Roebuck, Wollongong City Council, received on 5 September 2017
- Ms Bronte Walker, Dial A Dump Industries, received on 7 September 2017
- Dr Marc Stammbach, Hitachi Zosen Inova Australia, received 13 September 2017
- Mr Mark Gifford, NSW EPA, received 13 September 2017

- Mr Mark Gifford, NSW EPA, received 14 September 2017
- Mr Roger Bligh, Outotec, received 19 September 2017
- Mr Barry Buffier, NSW EPA, received 19 October 2017.

5.6' NSW Parliamentary Library Research Paper

The committee noted that the NSW Parliamentary Library Research Paper will remain confidential

5.7' Site visit report from Veolia Woodlawn Facility

Committee noted the site visit report from Veolia Woodlawn Facility.

5.8' Report deliberative date

Resolved, on the motion of Dr Faruqi: That the report deliberative meeting be conducted on Friday 8 December 2017.

5.9' *In camera* hearing

The committee previously agreed to take in camera evidence from individual submission authors.

The committee proceeded to take in camera evidence.

Persons present other than the committee: Ms Beverly Duffy, Ms Kate Mihaljek, Ms Alyce Umback, Ms Monica Loftus, and Hansard reporters.

The following witness was sworn and examined:

- Witness B.

The Chair noted that Witness A did not need to be sworn as they had already sworn an oath at an earlier hearing for this inquiry.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- Witness C.

Witness C tendered the following documents:

- Document 1, financial information
- Document 2, diagram
- Document 3, dated September 2013
- Document 4, dated October 2013

The evidence concluded and the witness withdrew.

5.10' Tendered documents

Resolved, on the motion of Dr Faruqi: That the committee accept and keep confidential the following documents tendered by Witness C during the hearing:

- Document 1, financial information
- Document 2, diagram
- Document 3, dated September 2013
- Document 4, dated October 2013.

5.11' NSW EPA right of reply and appearance at a further hearing

Resolved, on the motion of Ms Sharpe:

- That the secretariat draft correspondence to the NSW EPA identifying issues about the waste industry during the inquiry, and request a detailed written response
- That following receipt of the response, the NSW EPA appear at a hearing, to be conducted part in camera and in public, to discuss the issues raised.

6.' Adjournment

The committee adjourned at 2.13 pm, sine die

Kate Mihaljek
Committee Clerk

Minutes no. 54

Friday 24 November 2017

Portfolio Committee No. 6 – Planning and Environment

Macquarie Room, Parliament House, Sydney, at 9.00 am

1. Members present

Mr Green, *Chair*

Mr Amato, *Deputy Chair*

Dr Faruqi

Mr Graham

Mr Mallard

Ms Sharpe

2. Apologies

Mr Mason-Cox

3. Previous minutes

Resolved, on the motion of Dr Faruqi: That minutes no.s 52 and 53 be confirmed.

4. Correspondence

The Committee noted the following items of correspondence:

Received

- 24 October 2017 – Email from Mr Tony Khoury, Waste Contractors & Recyclers Association of NSW, to secretariat providing information about an incident involving a truck carrying exhumed waste
- 26 October 2017 – Email from Ms Anthea Sargeant, Department of Planning and Environment, to secretariat, requesting a two extension for answers to questions on notice
- 26 October 2017 – Document from Witness C entitled 'reasons for no action'
- 27 October 2017 – Email from Witness C providing additional information regarding tendered document
- 31 October 2017 – Email from Mr Barry Buffier, NSW EPA, regarding appearance at hearing on 24 November 2017
- 1 November 2017 – Correspondence from Mr Christopher Biggs, The Next Generation, to Chair, responding to right of reply
- 6 November 2017 – Email from Mr Tony Khoury, Waste Contractors & Recyclers Association of NSW, to secretariat providing information about the NSW EPA consultation concerning proposed changes to NSW environment protection legislation introducing minimum standards for managing construction waste and other improvements to waste management practices in NSW
- 22 November 2017 – Email from NSW Police Force, to secretariat, requesting that the police answers to questions on notice received on 22 November 2017 be kept confidential
- 23 November 2017 – Email from Mr Andrew O'Sullivan, to secretariat, advising that Mr Mason-Cox will not be attending the hearing on 24 November 2017.

Sent

- 24 October 2017 – Letter from the Chair to Mr Ian Malouf, Dial A Dump Industries, inviting a right to reply to submission no 393a
 - 25 October 2017 – Letter from the Chair to Mr Ian Malouf, Dial A Dump Industries, thanking him for hosting the committee at the Genesis Xero Recycling Centre
 - 30 October 2017 – Letter from the Chair to Mr Barry Buffier, NSW EPA, regarding invitation to appear at hearing on 24 November 2017, and pre-hearing questions
 - 7 November 2017 – Letter from the Chair to Commissioner Michael Fuller, NSW Police Force, regarding invitation to appear in camera at hearing on 24 November 2017, and pre-hearing questions.
- Resolved, on the motion of Mr Mallard: That the committee keep confidential the following correspondence:

- 24 October 2017 – Email from Mr Tony Khoury, Waste Contractors & Recyclers Association of NSW, to secretariat providing information about an incident involving a truck carrying exhumed waste
- 26 October 2017 – Document from Witness C entitled ‘reasons for no action’
- 27 October 2017 – Email from Witness C providing additional information regarding tendered document
- 22 November 2017 - Email from NSW Police, to secretariat, requesting that the police answers to questions on notice received on 22 November 2017 be kept confidential.

5. Inquiry into ‘energy from waste’ technology

5.1 Right of reply – The Next Generation

Resolved, on the motion of Ms Sharpe: That the committee publish correspondence from Mr Christopher Biggs, The Next Generation, to Chair, except identified excerpts due to confidentiality concerns.

5.2 *In camera* transcript

Resolved, on the motion of Mr Amato: That the in camera transcript from 23 October 2017 be kept confidential.

5.3 Partially confidential submission

Resolved, on the motion of Mr Mallard: That the committee authorise the publication of submission no.182b with the exception of sensitive information identified, which is to remain confidential, as per the request of the secretariat, and agreement of the author.

5.4 Report deliberative date

Resolved, on the motion of Dr Faruqi: That the committee extend the reporting date to the end of March 2018.

5.5 Answers to questions on notice

Committee noted the following answers to questions on notice were published by the committee clerk under authorisation of the resolution appointing the committee:

- Mr Barry Buffier, NSW EPA, received 1 November 2017.

Resolved, on the motion of Mr Amato: That the committee publish answers to questions on notice from:

- Ms Anthea Sargeant, Department of Planning and Environment, received 13 November 2017
- Mr Barry Buffier, NSW EPA, received 20 November 2017.

Resolved, on the motion of Mr Amato: That the committee keep confidential answers to questions on notice from:

- NSW Police Force, received 22 November 2017.

5.6 *In camera* hearing

The committee previously agreed to take in camera evidence from certain organisations.

The committee proceeded to take in camera evidence.

Persons present other than the committee: Ms Teresa McMichael, Ms Kate Mihaljek, Ms Monica Loftus, and Hansard reporters.

The following witness was sworn and examined:

- Witness D

Resolved on the motion of Mr Graham: That Witness D be shown confidential 'Document 2, diagram' tendered by Witness C at the in camera hearing on 23 October 2017.

The evidence concluded and the witnesses withdrew.

Resolved, on the motion of Ms Sharpe: That a representative from the Waste Strategy Unit at the NSW EPA, be allowed to attend the next in camera session of the hearing.

The Chair noted that Mr Buffier did not need to be sworn as he had already sworn an oath at an earlier hearing for this inquiry

The following witness was sworn:

- Mr Mark Gifford, Chief Environmental Regulator, NSW Environment Protection Authority. Mr Buffier and Mr Gifford were examined.

Mr Buffier tendered the following document:

- Document A

The evidence concluded and the witnesses withdrew.

5.7 Public hearing

Witnesses, the public and the media were admitted.

The Chair noted that Mr Buffier and Mr Gifford did not need to be sworn as they had already sworn an oath at an earlier hearing for this inquiry.

Mr Buffier tendered the following document:

- MLA Waste Tracking System.

The evidence concluded and the witnesses withdrew.

The public and the media withdrew.

5.8 Tendered documents

Resolved, on the motion of Mr Mallard: That the committee accept and publish the following documents tendered during by Mr Buffier during the public hearing:

- MLA Waste Tracking System.

6. Inquiry into Budget Estimates 2017-2018

6.1 Report deliberative

Resolved, on the motion of Mr Mallard: That:

The draft report be the report of the committee and that the committee present the report to the House;

The transcripts of evidence, tabled documents, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry be tabled in the House with the report;

Upon tabling, all unpublished transcripts of evidence, tabled documents, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry, be published by the committee, except for those documents kept confidential by resolution of the committee;

The committee secretariat correct any typographical, grammatical and formatting errors prior to tabling;

That the report be tabled on Wednesday 29 November 2017.

7. Inquiry into the music and arts economy in New South Wales

7.1 Terms of reference

The committee to note the following terms of reference referred by the House on 23 November 2017:

That Portfolio Committee No. 6 - Planning and Environment inquire into and report on the music and arts economy in New South Wales, including regional New South Wales, and in particular:

- (a) progress on the implementation of the Government response to the New South Wales Night-Time Economy Roundtable Action Plan,
- (b) policies that could support a diverse and vibrant music and arts culture across New South Wales,
- (c) policies that could support the establishment and sustainability of permanent and temporary venue spaces for music and for the arts,
- (d) policy and legislation in other jurisdictions, and options for New South Wales including red tape reduction and funding options, and
- (e) any other related matter.

7.2 Closing date for submissions

Resolved, on the motion of Ms Sharpe: That the closing date for submissions be 28 February 2018.

7.3 Stakeholder list

Resolved, on the motion of Ms Sharpe: That the secretariat circulate to members the Chair's proposed list of stakeholders to provide them with the opportunity to amend the list or nominate additional stakeholders, and that the committee agree to the stakeholder list by email, unless a meeting of the committee is required to resolve any disagreement.

7.4 Advertising

The committee noted that it is standard practice is to advertise all inquiries via twitter, stakeholder letters and a media release distributed to all media outlets in New South Wales.

It is no longer standard practice to advertise in the print media.

Resolved, on the motion of Mr Mallard: That the inquiry be advertised on a live music website.

7.5 Hearing dates

Resolved, on the motion of Ms Sharpe: That hearing dates be determined by the Chair after consultation with members regarding their availability.

8. Adjournment

The committee adjourned at 12.12 pm, *sine die*

Kate Mihaljek
Committee Clerk

Minutes no. 55

Tuesday 13 February 2018

Portfolio Committee No. 6 – Planning and Environment

Macquarie Room, Parliament House, Sydney, at 12.52 pm

1. Members presentMr Green, *Chair*Mr Mallard, *Deputy Chair*

Dr Faruqi

Mr Graham (from 12.58 pm)

Mr Martin

Mr Mason-Cox

Ms Sharpe

2. Election of the Deputy Chair

The Chair called for nominations for Deputy Chair.

Mr Martin moved: That Mr Mallard be elected Deputy Chair of the Committee.

There being no further nominations, the Chair declared Mr Mallard elected Deputy Chair.

3. Previous minutes

Resolved, on the motion of Ms Sharpe: That minutes no. 54 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received

- 24 November 2017 – Email from Ms Sheena Graham, on behalf of Mr Barry Buffier, NSW EPA advising of a correction to response to Question 3 of the NSW EPA answers to questions on notice received on 20 November 2017
- 27 November 2017 – Email from Mr Tony Khoury, Waste Contractors and Recyclers Association of NSW, to secretariat, notifying the committee of an accident involving a truck transporting waste, and indicating that Mr Khoury could speak to the committee about this issue
- 28 November 2017 – Email from NSW Police, to secretariat, advising that they would like the in camera transcript sent via email
- 28 November 2017 – Email from Ms Sheena Graham, NSW EPA, on behalf of, Mr Barry Buffier, NSW EPA, advising that he would like the in camera transcript sent via email
- 29 November 2017 – Email from Witness C, to secretariat, regarding phone conversation on 28 November 2017
- 29 November 2017 – Email from Witness C, to secretariat, regarding information concerning a speech from former Minister for the Environment Robyn Parker
- 30 November 2017 – Letter from the Hon Don Harwin MLC, Minister for Resources, Minister for Energy and Utilities, Minister for the Arts, Vice-President of the Executive Council, to the Clerk of the Parliaments, advising of appointments to Government positions on Legislative Council committees
- 1 December 2017 – Email from Witness C, to secretariat, suggesting additional questions on notice to NSW EPA
- 6 December 2017 – Email from Witness C, to secretariat, providing response to NSW EPA answers to questions on notice received on 20 November 2017
- 6 December 2017 – Email from Witness C, to secretariat, forwarding a third party's response to NSW EPA answers to questions on notice received on 20 November 2017
- 20 December 2017 – Email from Witness C, to secretariat, advising that NSW EPA staff may be aware of his identity

- 6 February 2018 – Email from Witness C, to secretariat, forwarding information from a third party from within the EPA, about the EPA’s answers to questions on notice, including in relation to the waste levy.

Resolved, on the motion of Dr Faruqi: That the committee keep confidential the following correspondence:

- 29 November 2017 – Email from Witness C, to secretariat, regarding phone conversation on 28 November 2017
- 29 November 2017 – Email from Witness C, to secretariat, regarding information concerning a speech from former Minister for the Environment Robyn Parker
- 1 December 2017 – Email from Witness C, to secretariat, suggesting addition questions on notice to NSW EPA
- 6 December 2017 – Email from Witness C, to secretariat, providing response to NSW EPA answers to questions on notice received on 20 November 2017
- 6 December 2017 – Email from Witness C, to secretariat, forwarding a third party’s response to NSW EPA answers to questions on notice received on 20 November 2017
- 20 December 2017 – Email from Witness C, to secretariat, advising that NSW EPA staff may be aware of his identity
- 6 February 2018 – Email from Witness C, to secretariat, forwarding information from a third party from within the EPA, about the EPA’s answers to questions on notice, including in relation to the waste levy.

5. Inquiry into ‘energy from waste’ technology

5.1 Confidential tendered document

Resolved, on the motion of Mr Mason-Cox: That the committee keep confidential Document A received from the NSW EPA on 24 November 2017.

5.2 Answers to questions on notice

The committee noted that the following answers to questions on notice had been published:

- answers to questions on notice from Mr Mark Gifford, NSW EPA, received 21 December 2017.
- Resolved, on the motion of Mr Mallard: That the committee keep confidential the following answers to questions on notice:
- answers to questions on notice from Mr Mark Gifford, NSW EPA, received 21 December 2017
- answer to supplementary question on notice from Mr Mark Gifford, NSW EPA, received 21 December 2017.

5.3 Return of answers to questions on notice and supplementary questions

Resolved, on the motion of Mr Mallard: That any answers to questions on notice and supplementary questions arising from the in camera hearing on 13 February 2018 be requested to be provided by Wednesday 28 February 2018.

5.4 *In camera* hearing

Resolved, on the motion of Mr Mallard: That the committee proceed to take evidence from Witnesses E, F and G in camera.

The committee proceeded to take in camera evidence.

Persons present other than the committee: Ms Sharon Ohnesorge, Ms Kate Mihaljek, Ms Monica Loftus, Ms Jenelle Moore, and Hansard reporters.

The following witnesses were sworn and examined:

- Witness E
- Witness F
- Witness G

Witness G tendered the following document:

- Document A – Regulation of industry by the EPA
- Document B – Information from a third party
- Document C – Information from a third party
- Document D – Information from a third party
- Document E – Information from a third party.

The evidence concluded and the witnesses withdrew.

5.5* Tendered documents

Resolved, on the motion of Mr Mason-Cox: That the committee accept and keep confidential the following documents tendered during the in camera hearing:

- Document A – Regulation of industry by the EPA
- Document B – Information from a third party
- Document C – Information from a third party
- Document D – Information from a third party
- Document E – Information from a third party.

6.* Music and arts economy

Resolved, on the motion of Mr Graham: The secretariat draft a proposed schedule of activities for the inquiry, and circulate this to members.

7.* Adjournment

The committee adjourned at 1.38 pm, until Monday 19 March 2018, Room 1254 (report deliberative meeting for inquiry into 'energy from waste' technology).

Kate Mihaljek
Committee Clerk

Minutes no. 56

Monday 19 March 2018

Portfolio Committee No. 6 – Planning and Environment

Room 1254, Parliament House, Sydney, at 9.36 am

1. Members present

Mr Green, *Chair*

Mr Mallard, *Deputy Chair*

Dr Faruqi

Mr Graham

Mr Martin

Mr Mason-Cox

Ms Sharpe

2.* Minutes

Resolved, on the motion of Mr Mallard: That draft minutes no. 55 be confirmed.

3.* Correspondence

The committee noted the following items of correspondence:

Received:

- 12 February 2018 – Email from NSW Police, to secretariat, regarding in camera evidence that may be included in the energy from waste technology report
- 13 February 2018 – Email from Witness E, to secretariat, providing a document from a third party
- 13 February 2018 – Email from Witness E, to secretariat, advising that they would like the in camera transcript sent via email
- 14 February 2018 – Email from NSW Police, to secretariat, regarding in camera evidence that may be included in the energy from waste technology report
- 15 February 2018 – Email from Ms Genelle Watkins, Create NSW, to secretariat, regarding the agency's submission to the inquiry into the music and arts economy
- 19 February 2018 – Email from Witness C, to secretariat, regarding in camera evidence that may be included in the energy from waste technology report
- 20 February 2018 – Email from Witness G, to secretariat, regarding in camera evidence that may be included in the energy from waste technology report, and reiterating request to remain unidentified
- 20 February 2018 – Email from Ms Genelle Watkins, Create NSW, to secretariat, advising that the Create NSW submission to the inquiry into the music and arts economy will be submitted on 7 March 2018
- 20 February 2018 – Email from Witness C, to secretariat, regarding in camera evidence that may be included in the energy from waste technology report
- 21 February 2018 – Email from Witness C, to secretariat, advising that a waste company is buying certain facilities
- 21 February 2018 – Email from Ms Genelle Watkins, Create NSW, to committee, requesting a further extension for its preliminary submission to the inquiry into the music and arts economy
- 22 February 2018 – Mr Justin Field MLC, The Greens, to secretariat, advising that Ms Dawn Walker MLC is substituting for Mr Jeremy Buckingham MLC for the duration of the inquiry into the music and arts economy
- 27 February 2018 – Email Mr Mark Gifford, NSW EPA, to secretariat, regarding in camera evidence that may be included in the energy from waste technology report
- 27 February 2018 – Email Mr Tony Khoury, Waste Contractors and Recyclers Association of New South Wales, to secretariat, providing clip of radio interview concerning media article about the transfer of waste interstate
- 9 March 2018 – The Hon Natasha Maclaren-Jones MLC, Government Whip, to secretariat, advising that the Hon Catherine Cusack MLC is substituting for the Hon Matthew Mason-Cox MLC for the duration of the inquiry into the music and arts economy.

Sent

- 12 February 2018 – Email from secretariat to NSW EPA, identifying possible in camera evidence that may be included the energy from waste technology report
- 12 February 2018 – Email from secretariat to NSW Police Force, identifying possible in camera evidence that may be included the energy from waste technology report
- 12 February 2018 – Email from secretariat to Witness C, identifying possible in camera evidence that may be included the energy from waste technology report
- 15 February 2018 – Email from secretariat to Witness E, identifying possible in camera evidence from Witness G that may be included the energy from waste technology report
- 20 February 2018 – Email from secretariat, to Witness C, regarding in camera evidence that may be included the energy from waste technology report
- 20 February 2018 – Email from secretariat, to Witness G, Witness E and Witness F, regarding in camera evidence that may be included the energy from waste technology report
- 21 February 2018 – Email from secretariat to Ms Genelle Watkins, Create NSW, noting that the agency's preliminary submission to the inquiry into the music and arts economy should be provided as close as possible to 7 March 2018

- 12 March 2018 – Email from secretariat to Ms Genelle Watkins, Create NSW confirming advice regarding the agency's final submission to the inquiry into the music and arts economy.

Resolved, on the motion of Mr Mallard: That the committee keep confidential the following correspondence:

- 12 February 2018 – Email from secretariat to NSW EPA, identifying possible in camera evidence that may be included the energy from waste technology report
- 12 February 2018 – Email from secretariat to NSW Police Force, identifying possible in camera evidence that may be included the energy from waste technology report
- 12 February 2018 – Email from secretariat to Witness C, identifying possible in camera evidence that may be included the energy from waste technology report
- 12 February 2018 – Email from NSW Police, to secretariat, regarding in camera evidence that may be included the energy from waste technology report
- 13 February 2018 – Email from Witness E, to secretariat, providing a document from a third party
- 13 February 2018 – Email from Witness E, to secretariat, advising that they would like the in camera transcript sent via email
- 14 February 2018 – Email from NSW Police, to secretariat, regarding in camera evidence that may be included the energy from waste technology report
- 15 February 2018 – Email from secretariat to Witness E, identifying possible in camera evidence from Witness G that may be included the energy from waste technology report
- 19 February 2018 – Email from Witness C, to secretariat, regarding in camera evidence that may be included the energy from waste technology report
- 20 February 2018 – Email from secretariat, to Witness C, regarding in camera evidence that may be included the energy from waste technology report
- 20 February 2018 – Email from Witness G, to secretariat, regarding in camera evidence that may be included the energy from waste technology report, and reiterating request to remain unidentified
- 20 February 2018 – Email from secretariat, to Witness G, Witness E and Witness F, regarding in camera evidence that may be included the energy from waste technology report
- 20 February 2018 – Email from Witness C, to secretariat, regarding in camera evidence that may be included the energy from waste technology report
- 21 February 2018 – Email from Witness C, to secretariat, advising that a waste company is buying certain facilities
- 27 February 2018 – Email Mr Mark Gifford, NSW EPA, to secretariat, regarding in camera evidence that may be included the energy from waste technology report.

4. Inquiry into 'energy from waste' technology

4.1 Partially confidential submissions

Resolved, on the motion of Mr Mason-Cox: That the committee keep names and/or identifying and sensitive information, and potential adverse mention, confidential, as per the request of the author and/or the recommendation of the secretariat, in submission nos. 388-392.

4.2 Answers to questions on notice

Resolved, on the motion of Mr Mason-Cox: That the committee keep confidential the following answers to questions on notice:

- answers to questions on notice from Witnesses E, F and G, received 26 February 2018.

4.3 Consideration of Chair's draft report

The Chair submitted his draft report entitled 'Energy from waste technology' which, having been previously circulated, was taken as being read.

Key issues

Resolved, on the motion of Dr Faruqi: That paragraph 5 be amended by omitting ‘Overall, the committee supports the use of energy from waste technologies as a means of energy recovery and as an alternative to waste disposal. We have made a number of recommendations to enhance the regulation of energy from waste in New South Wales, including ensuring the NSW EPA’s *Energy Recovery Facility Guidelines* are appropriately robust, particularly with regard to the emissions regime and social licence requirements for proposed facilities’ and the following new sentences be inserted instead:

‘Overall the committee believes some energy from waste technologies as means of energy recovery may be appropriate in some circumstances, but only after a significant shift up the waste hierarchy to avoid, reduce and re-use waste and the issues of social licence, air pollution impacts and health risks have been addressed’.

Chapter 1

Resolved, on the motion of Dr Faruqi: That paragraph 1.2 be amended by inserting ‘Currently, New South Wales is the second highest per capita producer of waste in the world’. [FOOTNOTE: Evidence, Mr Barry Buffier, Chair and Chief Executive, NSW EPA, 24 November 2017, p 7] after ‘During this period, New South Wales generated about 19 million tonnes of waste.’

Resolved, on the motion of Ms Sharpe: That paragraph 1.3 be amended by inserting at the end: ‘Stakeholders also raised the issue of the growing interstate movement of waste and the impact this is also having on recycling rates’.

Resolved, on the motion of Dr Faruqi: That the following new paragraph be inserted after paragraph 1.30:

‘An alternate view offered by the National Toxics Network was that although the European Union is often held up as the world’s best standard for incinerator operation, it has recently declared a major policy redirection on waste management and the waste to energy incinerator sector in line with the major commitments to a circular economy. This has resulted in a recommendation issued to members to stop the construction of new incinerators and to decommission existing facilities’. [FOOTNOTE: Submission 172, National Toxics Network, p 5]

Dr Faruqi moved: That paragraph 1.34 be amended by omitting ‘there is an opportunity for energy from waste to play a role in diverting waste from landfill in the future’ and inserting instead ‘there may be a role for energy from waste after higher order waste reduction methods have been fully implemented’.

Question put.

The committee divided.

Ayes: Dr Faruqi, Mr Graham, Ms Sharpe.

Noes: Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox.

Question resolved in the negative.

Resolved, on the motion of Dr Faruqi: That paragraph 1.35 be amended by omitting:

‘We also recognise that many plants are within heavily urbanised areas, making it unlikely that siting requirements such as a buffer or exclusionary zone are in place in those jurisdictions, as is the case in New South Wales’.

Chapter 2

Resolved, on the motion of Ms Sharpe: That the following sentence and table be inserted after paragraph 2.7: ‘The table below sets out the waste and environmental levy revenues, and expenditures on environmental programs, for the past five years’.

Table 1: Waste and environmental levy revenues, and expenditures on environmental programs, for the past five years

Item/Program (\$m)	2012/13	2013/14	2014/15	2015/16	2016/17 (unaudited)
Revenue:					
Total Waste Revenues	\$483.3	\$503.6	\$568.5	\$692.1	\$659.5
Program Expenditure:					
Waste and Regulatory programs	\$61.7	\$76.9	\$111.1	\$100.0	\$91.0
Other Environmental programs	\$61.5	\$90.0	\$95.9	\$90.1	\$88.8
Total Expenditure	\$123.2	\$166.9	\$207.0	\$190.1	\$179.9

[FOOTNOTE: Answers to question on notice, NSW EPA, 27 July 2017, p 1.]

Resolved, on the motion of Ms Sharpe: That paragraph 2.13 be amended by omitting 'Overall' before 'the committee supports the retention of the waste levy.'

Resolved, on the motion of Dr Faruqi: That paragraph 2.14 be amended by inserting 'including waste avoidance, minimisation and re-use programs' before 'and waste recovery infrastructure in New South Wales'.

Resolved, on the motion of Mr Graham: That the following new committee comment and recommendations be inserted after paragraph 2.30:

'Committee comment

The committee notes that as at October 2016, the Waste Less, Recycle More initiative had only spent \$292 million of its \$465 million allocation. That is, less than two thirds of the allocated funding had been spent. This is a major under-allocation for a significant initiative. This is doubly concerning given the NSW EPA has given evidence that it considers this program vital to the state meeting its waste targets. The committee recommends that the NSW Government ensure all funds allocated to the Waste Less, Recycle More program be spent in accordance with the program. We also recommend that the NSW EPA undertake an audit of the Waste Less, Recycle More initiative to ensure that the funds are fully expended to meet the objectives of the program.

Recommendation X

That the NSW Government ensure that all funds allocated to the Waste Less, Recycle More program be fully expended in accordance with the program.

Recommendation X

That the New South Wales Environment Protection Authority undertake an audit of the Waste Less, Recycle More program to ensure that the funds are fully expended to meet the objectives of the program?

Resolved, on the motion of Ms Sharpe: That paragraph 2.36 be amended by omitting 'unduly burdened' and inserting instead 'impacted heavily'.

Resolved, on the motion of Mr Graham: That the following new committee comment be inserted before paragraph 2.68:

'Committee comment

The first step in an effective allocation of the money from the waste levy is for the NSW EPA to fully expend the money that is allocated to the Waste Less, Recycle More initiative'.

Ms Sharpe moved: That paragraph 2.69 and Recommendation 2 be amended by omitting 'hypothecate 100 per cent of' and inserting instead 'substantially increase'.

Question put.

The committee divided.

Ayes: Dr Faruqi, Mr Graham, Ms Sharpe.

Noes: Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox.

Question resolved in the negative.

Resolved, on the motion of Dr Faruqi: That paragraph 2.69 and Recommendation 2 be amended by inserting 'and environmental programs' after 'to provide waste management services'.

Resolved, on the motion of Dr Faruqi: That paragraph 2.69 and Recommendation 2 be amended by inserting 'including waste reduction, avoidance and re-use programs' after 'waste management services'.

Resolved, on the motion of Ms Sharpe: That the following new committee comment be inserted after paragraph 2.71:

'Committee comment

The committee is alarmed that the NSW EPA has failed to address this critical issue for a number of years, thereby exacerbating, and even encouraging, the transportation of waste to Queensland, and undermining New South Wales revenue by hundreds of millions of dollars'.

Resolved, on the motion of Ms Shape: That recommendation 4 be omitted: 'That the NSW Environment Protection Authority investigate whether attaching the waste levy to the waste generator is a viable option in New South Wales', and the following new recommendation be inserted instead:

'That the NSW Government urgently consider attaching the waste levy to the waste generator in New South Wales, particularly for large waste generators or operators of large sites.'

Chapter 3

Resolved, on the motion of Mr Graham: That paragraph 3.15 be amended by inserting 'each' after 'local government areas'

Resolved, on the motion of Dr Faruqi: That paragraph 3.17 be amended by omitting 'illegally' before 'dump' and inserting 'and stockpile' before 'waste' in dot point 3.

Resolved, on the motion of Mr Graham: That paragraph 3.34 be amended by inserting 'amongst other issues' after 'the agency's efforts are being hampered by the inherent difficulty of gathering suitable evidence to pursue legal action'.

Resolved, on the motion of Mr Graham: That paragraph 3.36 be amended by inserting 'The committee acknowledges that as the levy has increased over time, so have the incentives to dump illegally' after 'Rather, a confluence of social and economic factors emboldens individuals and organisations to pursue this type of unlawful activity'.

Resolved on the motion of Mr Mason-Cox: That paragraph 3.36 and Recommendation 6 be amended by omitting 'as soon as practicable' after 'that the NSW Government amend'.

Resolved, on the motion of Mr Graham: That the following new committee comment be inserted after paragraph 3.36:

'Committee comment

The committee notes the reports from local government that this behaviour has increased. We note that of the funds allocated to the Waste Less, Recycle More initiative to July 2016, only \$8.7 million were spent on illegal dumping. The committee also notes that in 2016-2017, the average fine following the 11 successful waste prosecutions was less than \$40,000. The NSW EPA also gave evidence that the costs of illegal dumping run to millions of dollars per year. The committee therefore recommends that the NSW Government allocate additional resources to support the policing of illegal dumping'.

Resolved, on the motion of Mr Graham: That the following new recommendation be inserted after Recommendation 6:

'Recommendation X

That the NSW Government allocate additional resources to support the policing of illegal dumping'.

Resolved on the motion of Mr Graham: That paragraph 3.37 be amended by inserting at the end: 'The committee recommends that the NSW EPA strengthen its liaison with NSW Police when it comes to illegal activity in the waste sector, with formal protocols made public, and specifying the channels through which this liaison occurs.

Resolved, on the motion of Mr Graham: That the following new recommendation be inserted after paragraph 3.37:

'Recommendation X

That the NSW Environment Protection Authority strengthen its liaison with NSW Police when it comes to illegal activity in the waste sector, with formal protocols made public, and specifying the channels through which this liaison occurs.

Resolved, on the motion of Dr Faruqi: That paragraph 3.38 and Recommendation 7 be amended by inserting 'and expand the number of' after 'The committee recommends that the NSW Government allocate additional resources to'.

Resolved, on the motion of Mr Mason-Cox: That paragraph 3.39 be amended to omit 'it is surprising' and inserting instead 'it is unacceptable'.

Resolved, on the motion of Mr Mason-Cox: That paragraph 3.39 and Recommendation 8 be amended by:

- a) omitting 'investigate how' and inserting instead 'immediately increase the use of' after 'that the NSW Environment Protection Authority'
- b) omitting 'can be used' before 'to prevent illegal dumping'.

Chapter 4

Resolved, on the motion of Ms Sharpe: That paragraph 4.27 be amended by inserting 'with stakeholders estimating that the loss could be upwards of \$100 million per year' after 'for the NSW Government'.

Resolved, on the motion of Ms Sharpe: That paragraph 4.33 be amended by omitting 'There was a court challenge on that issue' before 'We formed the view'.

Resolved, on the motion of Ms Sharpe: That paragraph 4.42 be amended by:

- a) omitting 'with very limited' and inserting instead 'with no'
- b) inserting at the end: 'Figures show that the amount of waste being transferred interstate is growing'.

Chapter 5

Resolved, on the motion of Dr Faruqi: That paragraph 5.4 be amended by omitting 'recycling and' before 'waste diversion targets' in dot point 10.

Resolved, on the motion of Dr Faruqi: That paragraph 5.6 be amended by inserting 'only after a significant shift up the waste hierarchy to avoid, reduce and re-use waste and the issues of social license, air pollution impacts and health risks have been addressed' after 'one component of this solution'.

Resolved, on the motion of Dr Faruqi: That paragraph 5.9 be amended by inserting after 'standards and outcomes':

'The National Toxics Network expressed concern about the emergence of the New South Wales Energy from Waste Policy Statement as it seemed to appear out of nowhere and without a robust community debate. They considered it a flawed policy with internal inconsistencies including a lack of key guidance material and inadequate provisions for managing air pollution and toxic ash produced by waste incinerators'.

[FOOTNOTE: Evidence, Ms Jo Immig, Coordinator, National Toxics Network, 27 June 2017, p 35]

Resolved, on the motion of Dr Faruqi: That paragraph 5.10 be amended by:

- a) omitting 'There was consensus among' before 'inquiry participants'
- b) inserting 'highlighted' after 'inquiry participants'.

Resolved, on the motion of Dr Faruqi: That the following new paragraph be inserted after paragraph 5.29:

'Dr James Whelan from Environmental Justice Australia provided evidence that there are no enforceable national standards for criteria pollutants, which include fine particle pollution PM2.5 or coarse particles PM10.'

[FOOTNOTE: Evidence, Dr James Whelan, Researcher and Community Organiser, Environmental Justice Australia, 17 August 2017, p 27]

Resolved, on the motion of Ms Sharpe: That paragraph 5.48 be amended by inserting at the end: 'and in communities'.

Resolved, on the motion of Dr Faruqi: That paragraph 5.49 be amended by inserting 'in some circumstances' after 'While the committee supports the use of residual waste for energy from waste facilities'.

Resolved, on the motion of Mr Mason-Cox: That paragraph 5.54 be amended by:

- a) omitting 'gaining a social licence' and inserting instead 'gaining community support' before 'is essential for any proponent'
- b) omitting 'receive the social licence necessary' and inserting instead 'receive the necessary approvals and community support'.

Resolved, on the motion of Mr Mason-Cox: That Recommendation 14 be amended by omitting 'receive the social licence necessary' and inserting instead 'receive the necessary approvals and community support'.

Resolved, on the motion of Dr Faruqi: That paragraph 5.55 and Recommendation 15 be amended by inserting 'in addition to the full Environmental Impact Statement' after 'department's website'.

Resolved, on the motion of Ms Sharpe: That the following new committee comment be inserted after paragraph 5.55:

'Committee comment

Given the significant concerns in relation to energy from waste technology and the impact of emissions on air quality there needs to be a much more detailed assessment of the issues surrounding this technology and its use in New South Wales. The committee recommends NSW Government establish an expert advisory body on energy from waste chaired by the Chief Scientist to examine and report on the energy from waste regulatory framework, to create certainty for the market and communities'.

Resolved, on the motion of Ms Sharpe: That the following new recommendation be inserted after the new committee comment inserted after paragraph 5.55:

'Recommendation X

That the NSW Government establish an expert advisory body on energy from waste chaired by the Chief Scientist to examine and report on the energy from waste regulatory framework to create certainty for the market and communities, with particular reference to:

- changes required to the *Energy from Waste Recovery Guidelines* to guarantee that New South Wales uses only world's best practices in emissions, emissions monitoring and residual waste disposal
- consent conditions required in any planning approval to guarantee that New South Wales uses only world's best practices in emissions, emissions monitoring and residual waste disposal
- the impact of energy from waste on human health

- the impact of energy from waste on recycling targets'.

Dr Faruqi moved: That the following new recommendation be inserted after Recommendation 15:

'Recommendation X

That the NSW Government enact legislation that bans energy from waste incinerators within at least 15 kilometres from areas zoned for residential use'.

Question put.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Graham, Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox, Ms Sharpe.

Question resolved in the negative.

Dr Faruqi moved: That the following new recommendation be inserted after Recommendation 15:

'Recommendation X

That in recognition of opportunities to avoid, minimise and reduce waste through measures higher in the waste hierarchy, that a moratorium be enacted on new energy from waste incinerator proposals.'

Question put.

The committee divided.

Ayes: Dr Faruqi, Mr Graham, Ms Sharpe.

Noes: Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox.

Question resolved in the negative.

Resolved, on the motion of Ms Sharpe: That the following new committee comment be inserted after Recommendation 15:

'Committee comment

Given the particular topography of the Sydney Basin and the trapping of air pollution within the basin, the committee believes that the pressure on air quality should be considered when assessing energy from waste incinerator proposals.'

Ms Sharpe moved: that the following new recommendation be inserted after the new committee comment inserted after Recommendation 15:

'Recommendation X

That the government enact legislation to ban energy from waste incinerators within the Sydney basin and impose a moratorium on any new incinerator proposal until a more detailed examination is done by an expert advisory body chaired by the Chief Scientist.'

Question put.

The committee divided.

Ayes: Dr Faruqi, Mr Graham, Ms Sharpe.

Noes: Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox.

Question resolved in the negative.

Chapter 6

Resolved, on the motion of Ms Sharpe: That paragraph 6.5 be amended by inserting ‘and is part of the Dial A Dump Industries Group’ after ‘The Next Generation is a wholly owned subsidiary of the Alexandria Landfill Corporate Group’.

Resolved, on the motion of Dr Faruqi: That paragraph 6.29 be amended by omitting:

‘In summary, we believe the technology – that is moving grate combustion – is sound, and agree that thermal waste disposal options should be included in the policy mix. However, the committee is left short of being convinced that this the right technology in the right place, even just for Stage 1 of the project’ after ‘Based on this evidence, as things currently stand, the committee does not support the development of this project’.

Mr Mason-Cox moved: That paragraph 6.29 be omitted: Inquiry participants’ specific concerns about the project are outlined throughout this chapter, as is the proponent’s response. Based on this evidence, as things currently stand, the committee does not support the development of this project. The proponent has not provided an adequate reference facility to demonstrate that the technology can adequately process the proposed fuel. Additionally, the proponent has provided inconsistent evidence about the project, particularly around key concerns including size, feedstock and emissions, and has failed to gain the social licence for the project to proceed. These issues are discussed in detail below’, and that the following new paragraph be inserted instead:

‘The committee acknowledges that The Next Generation proposal is currently undergoing a rigorous and comprehensive approval process prior to a decision being made to refer the project to the Planning Assessment Commission for an independent determination. The committee does not wish to pre-empt this process but acknowledges the overwhelming public opposition to this project proceeding as currently proposed.’

Question put.

The committee divided.

Ayes: Mr Martin, Mr Mason-Cox.

Noes: Dr Faruqi, Mr Graham, Mr Green, Mr Mallard, Ms Sharpe.

Question resolved in the negative.

Dr Faruqi moved: That Recommendation 16 be amended by:

- a) omitting ‘subject to further investigations’ before ‘the NSW Government not approve the energy from waste facility proposed’
- b) omitting ‘at this time’ after ‘the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek’.

Question put.

The committee divided.

Ayes: Dr Faruqi, Mr Graham, Ms Sharpe.

Noes: Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox.

Question resolved in the negative.

Resolved, on the motion of Mr Mallard: That Recommendation 16 be amended by:

- a) omitting ‘That, subject to further investigations, the NSW Government’ and inserting instead ‘That, subject to the current assessment process being conducted by the NSW Department of Planning and Environment, the NSW Government’
- b) omitting ‘at this time’ after ‘The Next Generation at Eastern Creek’.

Mr Mason-Cox moved: That paragraph 6.30 and Recommendation 16, as amended, be omitted: 'The committee recommends that, subject to further investigations, the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek at this time.

Recommendation 16

That, subject to the current assessment process being conducted by the NSW Department of Planning and Environment, the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek'.

Question put.

The committee divided.

Ayes: Mr Mason-Cox.

Noes: Dr Faruqi, Mr Graham, Mr Green, Mr Mallard, Mr Martin, Ms Sharpe.

Question resolved in the negative.

Mr Mason-Cox moved: That paragraph 6.29 be amended by omitting 'and has failed to gain the social licence' and inserting instead 'and has failed to gain the community support' before 'for the project to proceed'.

Question put.

The committee divided.

Ayes: Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox.

Noes: Dr Faruqi, Mr Graham, Ms Sharpe.

Question resolved in the affirmative.

Mr Mason-Cox moved: That:

- a) the level 1 heading before paragraph 6.31 be amended by omitting 'Social licence' and inserting instead 'Community support'
- b) the term 'social licence' be put in inverted commas where it appears in paragraphs 6.31 to 6.45.

Question put.

The committee divided.

Ayes: Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox.

Noes: Ms Sharpe, Dr Faruqi, Mr Graham.

Question resolved in the affirmative.

Resolved, on the motion of Dr Faruqi: That paragraph 6.43 be amended by:

- a) omitting 'The Next Generation may have done itself a disservice by failing to adequately engage' and inserting instead 'The Next Generation has failed to adequately engage' before 'with the local community'
- b) omitting 'as noted by Dr Marc Stambach' after 'the local community regarding its proposed energy from waste facility'
- c) omitting 'Perhaps the company's assertion that there has not been a private infrastructure proposal which has had such extensive community consultation is true. However, because stakeholders have not felt that this engagement is genuine, these efforts have been ineffective, to say the least' at the end.

Resolved on the motion of Ms Sharpe: That paragraph 6.56 be omitted: 'In hindsight, it may have been in the proponent's best interest to have conducted more thorough community engagement and to have

initially applied for a smaller facility to garner the social licence to operate the facility in that particular location’, and the following new paragraph be inserted instead:

‘The committee notes the concerns of the stakeholders that raised issues associated with the topographic structure of the Sydney Basin and the challenges of trapped air pollution within it. The Next Generation proposal could add substantially to the challenges of managing air pollution across Sydney.’

Resolved, on the motion of Dr Faruqi: That:

- a) paragraph 6.62 be amended by inserting ‘who was contracted by the proponent to undertake the technical air quality assessment for The Next Generation project’ after ‘Mr Damon Roddis, National Practice Leader Air Quality and Noise, Pacific Environment’
- b) paragraph 6.63 be amended by inserting ‘Chief Executive Officer, Dial A Dump Industries Group, proponents of the Next Generation Project’ after ‘This argument was supported by Mr Biggs’.

Resolved, on the motion of Dr Faruqi: That paragraph 6.97 be amended by omitting ‘In hindsight’ before ‘the proponent should have conducted a more thorough examination’.

Resolved, on the motion of Ms Sharpe: That paragraph 6.100 be amended by omitting at the end: ‘While a large-scale project may be needed to meet future waste needs in Sydney, it would appear logical, at least in the first instance, to start with smaller plants that are more palatable to the community’.

Resolved, on the motion of Dr Faruqi: That paragraph 6.112 be amended by omitting ‘The Next Generation intends to address these issues’ and inserting instead ‘The Next Generation intends to respond to these issues’.

Chapter 7

Resolved, on the motion of Ms Sharpe: That paragraph 7.36 be amended by:

- a) omitting ‘While we can see the potential benefit of breaking up the functions of the agency’ before ‘the committee has not received sufficient evidence to recommend this action’
- b) inserting ‘so it can improve its performance’ after ‘the NSW Government investigate options to restructure the NSW EPA’.

Resolved, on the motion of Ms Sharpe: That Recommendation 17 be amended by inserting at the end: ‘so it can improve its performance’.

Resolved, on the motion of Mr Mason-Cox: That the following new committee comment and recommendation be inserted after Recommendation 17:

‘Committee comment

Further, we believe that the NSW Government should conduct an independent review into the NSW EPA, with particular reference to:

- assessing the adequacy of funding for the performance of its compliance, enforcement and other roles
- improving its community engagement role and the effectiveness of its enforcement and compliance roles
- the perceived conflict of interest between its compliance and policy and education roles.

Recommendation X

That the NSW Government conduct an independent review into the NSW Environment Protection Authority, with particular reference to:

- assessing the adequacy of funding for the performance of its compliance, enforcement and other roles

- improving its community engagement role and the effectiveness of its enforcement and compliance roles
- the perceived conflict of interest between its compliance and policy and education roles.’

Resolved, on the motion of Ms Sharpe: That the following new committee comment be inserted after the new recommendation:

‘Committee comment

The committee notes that the NSW Government has failed to follow the recommendation of the previous inquiry by then General Purpose Standing Committee No. 5 into the performance of the EPA that recommended that the NSW Government amend the *Protection of the Environment Administration Act 1991* to provide for the appointment of a chairperson of the board independent of the Chief Executive Officer of the NSW EPA. The committee believes that this action would assist to improve the performance of the EPA and notes that with the retirement of Mr Buffier, there is the opportunity for the government to make this change prior to the appointment of a new CEO’.

Resolved, on the motion of Ms Sharpe: That the following new recommendation be inserted after the new committee comment:

‘Recommendation X

‘That the NSW Government seek to amend the *Protection of the Environment Administration Act 1991* to provide for the appointment of a chairperson of the board independent of the Chief Executive Officer of the NSW Environment Protection Authority’.

Resolved, on the motion of Mr Mallard: That paragraph 7.49 and Recommendation 19 be amended by inserting ‘for proprietors and company directors’ after ‘That the NSW Government introduce a fit and proper person test’.

Resolved, on the motion of Dr Faruqi: That the following new committee comment be inserted after paragraph 7.52:

‘Committee comment

‘The committee believes that there are significant unresolved issues regarding the Mangrove Mountain landfill site, including licence variations and the role of the then Gosford City Council in issuing development consent’.

Resolved, on the motion of Ms Sharpe: That the following new recommendation be inserted after the new committee comment after paragraph 7.52:

‘Recommendation X

That the NSW Government establish an independent inquiry to investigate the operation, regulation and approvals of the Mangrove Mountain Landfill site’.

Chapter 8

Resolved, on the motion of Dr Faruqi: That Recommendation 22 be amended by inserting ‘and avoidance, reduction’ after ‘enabling the circular economy, including waste generator education, product stewardship, waste levies, market support initiatives’.

Resolved, on the motion of Ms Sharpe: That paragraph 8.80 and Recommendation 27 be amended to by omitting ‘an alternative solution’ and inserting instead ‘alternative solutions’.

Resolved, on the motion of Dr Faruqi: That paragraph 8.94 and Recommendation 28 be amended by:

- a) inserting ‘zero waste strategies and’ after ‘that the NSW Environment Protection Authority, in collaboration with stakeholders, investigate opportunities to embed’
- b) omitting ‘markets’ after ‘the circular economy in New South Wales’.

Dr Faruqi moved: That Recommendation 29 be amended by inserting ‘mandatory’ before ‘Extended Producer Responsibility Schemes’.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Graham, Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox, Ms Sharpe.

Question resolved in the negative.

Resolved, on the motion of Mr Graham: That:

The draft report as amended be the report of the committee and that the committee present the report to the House;

The transcripts of evidence, submissions, tabled documents, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry be tabled in the House with the report;

Upon tabling, all unpublished attachments to submissions be kept confidential by the committee;

Upon tabling, all unpublished transcripts of evidence, submissions, tabled documents, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry be published by the committee, except for those documents kept confidential by resolution of the committee;

The committee secretariat correct any typographical, grammatical and formatting errors prior to tabling;

The committee secretariat be authorised to update any committee comments and the key issues section where necessary to reflect changes to recommendations or new recommendations resolved by the committee;

Dissenting statements be provided to the secretariat within 24 hours after receipt of the draft minutes of the meeting;

That the report be tabled on Monday 26 March 2018.

Resolved, on the motion of Mr Mallard: That the committee note its appreciation for the hard work and diligence of the secretariat this inquiry.

4.4 Publication of *in camera* evidence

Resolved, on the motion of Dr Faruqi: That the committee authorise the partial publication of:

- the *in camera* transcript from 23 October 2017, as agreed to by Witness C
- the *in camera* transcript from 24 November 2017, as agreed to by the NSW EPA
- the *in camera* transcript from 24 November 2017, as agreed to by the NSW Police Force
- the *in camera* transcript from 13 February 2018, as agreed to by Witness G.

5. Music and the arts economy

5.1 Public submissions

The committee noted that:

- the following submissions were published by the committee clerk under the authorisation of the resolution appointing the committee: submission nos. 1-3, 5-10, 13, 14, 16-18, 21-23, 25-27, 31-37, 43, 46, 47, 49, 50, 52-55, 57, 59, 61, 62 63-66, 71, 73, 75, 77, 78, 81, 83-88, 90, 91, 95-100, 106-110, 111, 112, 123-131, 133-147, 154-160, 165, 168-180, 185, 186, 189-190, 193-195, 197, 199, 200, 203, 205-209, 211-220, 222-258, 260, 261, 263-269, 269a, 27-276, 280-288, 291-293, 295, 296, 298, 299
- submissions 49, 62, 195 are from a persons under 18 years of age who wish to have their submissions made public, and in accordance with standard practice, the secretariat has confirmed the authors would like their submission to be published, together with their name.

5.2 Partially confidential submissions

Resolved, on the motion of Mr Martin: That the committee authorise the publication of submission nos. 15, 19-20, 24, 28-30, 38-42, 44, 48, 56, 60, 67, 68, 70, 72, 74, 79, 80, 82, 92, 93, 101-105, 113-122, 14-153, 163-164, 166, 167, 181, 187, 191, 192, 198, 201, 202, 204, 210, 221, 259, 262, 277-279, 290, 294 and 300, with the exception of identifying and/or sensitive information, which is to remain confidential, as per the request of the author.

5.3 Confidential submissions

Resolved, on the motion of Mr Martin: That the committee keep submission nos. 11, 12, 45, 51, 58, 69, 76, 89, 94, 132, 161,162, 182, 183, 188, 196, 289 and 297 confidential, as per the request of the author.

5.4 Submissions 4, 4a and 4b

Resolved, on the motion of Dr Faruqi:

- That the committee authorise the publication of submission nos. 4 and 4a, with the exception of identifying and/or sensitive information, and/or adverse mention, which is to remain confidential, as per the recommendation of the secretariat.
- That the committee keep submission no. 4b confidential, as per the recommendation of the secretariat.

5.5 Public hearing

Resolved, on the motion of Ms Sharpe: That the amended hearing schedule for the public hearing on 26 March 2018 in the Jubilee Room/McKell Room, Parliament House be adopted.

6. Adjournment

The committee adjourned at 1.05 pm, until Monday 26 March 2018, 9.00 am, Jubilee Room/McKell Room (public hearing).

Kate Mihaljek
Committee Clerk

Draft minutes no. 57

Monday 26 March 2018

Portfolio Committee No. 6 – Planning and Environment

Jubilee Room, Parliament House, Sydney, at 8.50 am

1. Members

Mr Green, *Chair*

Mr Mallard, *Deputy Chair* (from 11.15 am)

Ms Cusack

Mr Graham

Mr Martin

2. Apologies

Ms Sharpe

Ms Walker

3. Minutes

Resolved, on the motion of Mr Martin: That draft minutes no. 56 be confirmed.

4. Correspondence

Received:

- 22 March 2018 – Email from Ms Dawn Walker MLC to secretariat advising that she will be an apology to the hearing on 26 March 2018
- 26 March 2018 – Email from Lliam Caulfied, on behalf of Ms Sharpe MLC, advising that Ms Sharpe will be an apology to the hearing on 26 March 2018.

5. Inquiry into ‘energy from waste’ technology

5.1 Rescission of motion to adopt and table report

Resolved, by leave, on the motion of Mr Martin: That the committee rescind its decision of 19 March 2018 that:

- The draft report as amended be the report of the committee and that the committee present the report to the House
- The report be tabled on 26 March 2018.

5.2 Recommittal of report

The committee recommitted the report.

Resolved, on the motion of Mr Martin:

- That paragraph 4.6 be amended by omitting at the end: ‘We therefore recommend that the NSW Government lobby the Queensland Government to re-introduce its waste levy’ and inserting instead:

‘We therefore applaud the Queensland Government’s announcement, just days before the tabling of this report, that it intends to re-introduce its waste levy. We encourage the NSW EPA, in cooperation with the Queensland Government, to carefully monitor the impact of the re-introduction of Queensland’s waste levy and its effect upon the interstate movement of waste.’
- That Recommendation 10 be omitted: ‘That the NSW Government lobby the Queensland Government to re-introduce its waste levy.’
- That paragraph 4.48 be amended by omitting at the end: ‘This is why we have already recommended that the NSW Government lobby the Queensland Government to achieve this outcome’ and inserting instead:

‘We note the Queensland Government’s intention to take this action.’
- That the ‘Key issues’ section be amended to reflect points 1-3.

Resolved on the motion of Mr Graham:

- That the report, as amended, be the report of the committee and that the committee present the report to the House
- That the report be tabled on 28 March 2018.

6. The music and arts economy in New South Wales

7. Adjournment

The committee adjourned at 5.05 pm, until Monday 28 May 2018 (music and arts site visit to Newcastle).

Kate Mihaljek
Committee Clerk

Appendix 5^{*} Dissenting statements

The Hon Matthew Mason-Cox MLC, Liberal Party

The proposal by The Next Generation NSW Pty Ltd to build a 1.35 million tonne energy from waste facility at Eastern Creek was lodged with the Department of Planning and Environment in 2015. The proposed development will have a capital investment exceeding \$30 million and is being assessed by the Government as a State Significant Development. This application is currently undergoing a rigorous and comprehensive assessment process prior to an independent determination being made by the Planning and Assessment Commission on whether the project will proceed.

Impacts of this project on air quality, emissions and human impacts, source volume and composition of waste material to be used, noise impacts, traffic, visual impacts and biodiversity impacts have been addressed by expert reports. A community engagement process has been conducted with over 990 submissions in response to the amended EIS raising issues concerning the size and location of the project, the proposed technology and feedstock and concerns the plant would adversely affect the air quality and, in turn, the health of residents in western Sydney and the environment. The overwhelming number of submissions were against the project proceeding.

In March 2017 the Department requested the proponent to provide further information to respond to these submissions and technical reviews conducted by independent experts appointed by the Department and the NSW EPA. The proponent's response was received in September 2017 and sought approval for only Stage 1 of the development. In December 2017 the Department agreed to this request and published the report on its website. Submissions to the proponent's response were due in February 2018.

The Department is now preparing an assessment report with a recommendation for determination of the proponent's application. This report will consider the mountain of evidence received and will give considerable weight to the opinion of the NSW EPA and advice from independent experts. The assessment report will be provided to the independent Planning and Assessment Commission. The Commission will hold a public meeting and will invite submitters to present their views on the proposal. It will then prepare its report and determine the application. The Commission's determination is expected later this year.

The Commission may well determine on the basis of the evidence before it that this project should not proceed.

It is not appropriate for a Committee of this Parliament to pre-empt or second guess the final outcome of this exhaustive and independent assessment process without having access to the weight of all the evidence that has been assembled. Accordingly, the majority decision of the Committee to recommend that the Government not approve this project is respectively premature and ill founded. It is a political decision. It undermines a proper, independent and comprehensive assessment process. In my opinion, this is not a desirable outcome.

Dr Mehreen Faruqi MLC, The Greens

This inquiry was a very timely opportunity to investigate the systemic issues of the way NSW deals with an ever-increasing amount of waste. I am heartened that the committee recognised this issue, and in particular the importance of reducing and avoiding waste production in the first place, including moving towards zero waste and a circular economy.

The Committee has made some strong recommendations that will go some way to addressing the significant issues of waste, including a recommendation to further investigate the Mangrove Mountain Landfill site. However, I am concerned that the committee did not unambiguously oppose the contentious proposal from ‘The Next Generation’ for an energy from waste incinerator at Eastern Creek and more broadly, did not recommend a moratorium on energy from waste facilities or an exclusion zone to ensure such facilities should they be built are more than 15km from residential areas.

Energy from Waste Facilities in General

Energy from waste is towards the bottom of the waste hierarchy, just above treating and disposing waste. The priority should not be approving ‘end of pipe’ solutions, but rather focusing on waste avoidance, reuse and recycling.

If there is a place for energy from waste, it should only be considered once other opportunities to reduce waste, including mandatory extended producer responsibility and product stewardship programs, have been exhausted; and only if there is community support and the air pollution impacts and health risks have been addressed. We are also deeply concerned that the development of such a facility would impact on recycling rates and perhaps provide a disincentive to reduce waste, as such a facility would essentially create a new market for waste disposal.

Given NSW is so far away from a zero waste or circular economy future, the Greens believe there should be a moratorium on new energy from waste facilities while waste avoidance, reuse and recycling programs are expanded. We heard significant evidence that energy from waste facilities are in decline in Europe and the United States. Europe especially is phasing out these facilities as it realises the significant environmental, health and economic benefits of zero waste policies.

The Greens are also deeply concerned about the health and air pollution effects of waste from energy facilities on local communities, which is why we recommended that the NSW Government enact legislation to establish a 15 km buffer zone to protect residential areas from such facilities, should they be approved. Exclusion zones should apply not just in the Sydney Basin but for residents across the rest of the state.

Next Generation energy from waste facility at Eastern Creek

With regards to ‘The Next Generation’ energy from waste incinerator proposal at Eastern Creek, it is clear that this facility lacks a social license and could have significant impacts on the health and well-being of people living in Western Sydney. The committee heard significant evidence from the community about how such a facility could impact their health, including emissions of small particulates (PM 2.5 and PM 10), hydrogen chloride, hydrogen fluoride and heavy metals.

Given this evidence, the committee’s recommendation that the facility not proceed, “subject to the current assessment process being conducted by the NSW Department of Planning and Environment” is inadequate. In my view, the ‘The Next Generation’ energy from waste incinerator at Eastern Creek should not be allowed to proceed.

SUBJECT: NOM 28/05/13 - S88 WASTE LEVY

COUNCILLOR: N NELMES

PURPOSE

The following Notice of Motion was received on 14 May 2013 from the abovementioned Councillor:

Précis

Over the past nine years The City of Newcastle has provided **\$67.8 million** back to the NSW State Government via the section 88 Waste Levy. This Levy was introduced to encourage landfill operators to reduce the amount of reusable waste going into landfill. The City of Newcastle's Summerhill Waste Management Facility has worked towards these goals by introducing methane capture and storage, separation of green waste and other reusable waste however this levy paid directly to the State Government continues to rise.

MOTION

PART A:

- 1 Council requests a Moratorium on payment of our Section 88 Waste Levy to the consolidated revenue of the State government for the next two financial years.
- 2 During this period the Levy would still be collected and accounted for to maintain competitive neutrality in the Waste Management Industry.
- 3 The Levy would be redirected to The City of Newcastle's Infrastructure backlog, allowing major asset renewals projects to be completed.

PART B

That Newcastle City Council participate in a combined regional submission through Hunter Councils to the State Government quantifying the impact of the imposed waste levy and seeking to:

- Reduce the impact of the levy on the residents and business of Newcastle and the Hunter Region;
- Reduce or eliminate the portion of the levy absorbed into the general operation of the State (hidden tax) rather than being returned to Local Government to improve Waste Management practices and;
- Ensure the return of the levy to Local Government is in proportion to the amount collected to reduce the cross-subsidization occurring at the expense of Newcastle and Hunter residents and businesses.

PART C:

Ask the Interim General Manager to call a special meeting of Lower Hunter Council General Managers to create a statement of common purpose on this issue as soon as possible with the goal of advocating collectively to the NSW Government.

BACKGROUND

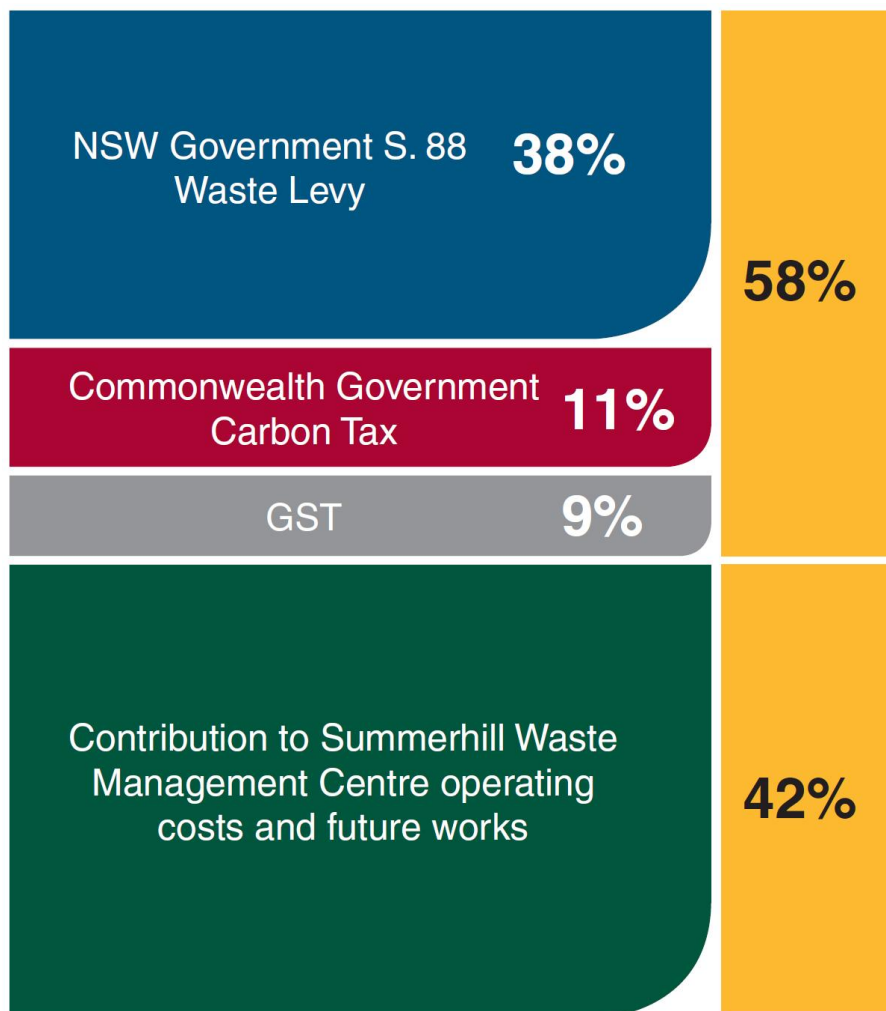
This financial year we will send \$M down the F3 into the consolidated revenue of the State Government. Council's throughout the State are facing similar long-term financial problems to Newcastle, with rate capping and costing shifting from the State Government. This option to reinvest the Levy into Local roads, parks, pools, and community buildings is the optimal use of this tax for the Citizens of Newcastle.

The table below shows the payment of the levy against tonnes during these nine years.

Financial Year	Annual Levy Payment (\$)	Annual Tonnes Subject to Levy
2003/04	\$2,148,587	205,321
2004/05	\$2,643,051	211,665
2005/06	\$3,071,271	206,639
2006/07	\$4,906,498	222,311
2007/08	\$7,660,701	250,268
2008/09	\$10,320,777	270,146
2009/10	\$11,550,926	226,093
2010/11	\$12,832,170	207,746
2011/12	\$10,772,925	150,152
Total	\$65,906,907	1,950,341
Total inc 2012/13	\$67,852,574	1,974,902

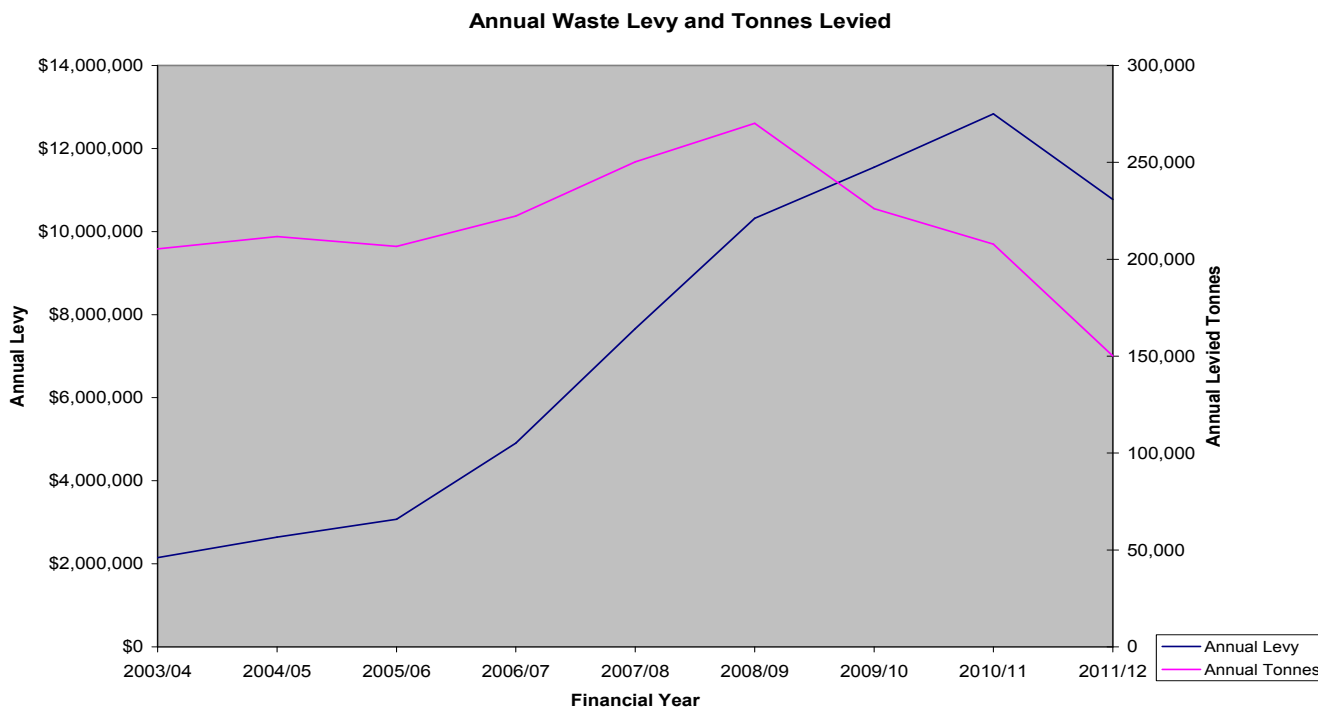
Tipping fees (27% of total NCC costs)

Whilst the SWMC is expected to collect \$24.87 million in fees during 2012/2013 the State Government charges (Section 88 Levy), Carbon Tax and GST. 38% of the tipping fee is made up of State Government levy as shown below.



Over the past nine years TCoN has provided **\$67.8 million** back to the **NSW State Government**. **Employee costs only make up 6.4%** of the total expenditure for SWMC.

The graph below shows the impact of the levy. The levy have made competition with other smaller facilities (eg Bedminster Plant and Raymond Terrace) more difficult. This has led to more aggressive pricing and a loss of tonnes throughput. This is why Council is now considering moving swiftly towards developing resource recovery capability.



ATTACHMENTS

Nil



At the crossroads

The state of waste and
recycling in NSW

**SAVE
OUR
RECYCLING**
Make waste a product
not a problem

Introduction

This paper has been produced by Local Government NSW (LGNSW) to shed light on the state of waste and recycling services across the state. It outlines the steps the NSW Government needs to take to raise awareness on recycling, create new markets for recycled products, and invest in better waste and recycling services.

It is a blueprint for the NSW Government to invest the money it collects from the Waste Levy to help support local government to strengthen our recycling and build a circular economy in NSW.

About Us

LGNSW is the peak body representing councils in New South Wales.

Our role is to support, promote, advocate for and represent the local government sector so members are in the best possible position to serve their communities, for the public good.



Recycling at the crossroads

Executive summary

Australia will soon mark 10 years since the publication of its first National Waste Policy: Less Waste, More Resources. It was intended to set the nation on a new course where, together, we generated less waste and recovered more of it for productive re-use.

It envisaged an economy where waste became a product not a problem.

A decade on and the latest national and state progress reports show that NSW is failing when it comes to managing waste.

- The amount of waste being generated is increasing.
- Recycling and waste diversion rates are stagnating and are expected to decrease.
- Our waste infrastructure is barely keeping up with demand.
- We can no longer ship our recycling off shore for someone else to manage.

Recycling in NSW is now at the crossroads.

Local councils are working with their communities to collect our waste and recycling so that more can be re-used and diverted from landfill. But it's not enough.

Today, local communities are shouldering the burden and opportunities to create a circular economy are being wasted.

This makes it difficult to develop new products and industries that re-use waste in innovative and productive ways.

And, when we do break through and bring recycled content to market, rules and regulation often hamper its use in areas such as roads, footpaths or rail infrastructure.

The buying power of governments could be helping to create markets for recycled content in NSW. Councils are working hard to do this, and we're urging the NSW Government to pull that lever.

We have real opportunities to create jobs and sustainable industries that drive economic development, particularly in regional NSW.

We need real and coordinated regional planning to deliver the recycling and waste infrastructure the state needs now and into the future. We need our State Government to lead.

We are calling on the NSW Government to:

- Fund councils to develop regional plans for the future of waste and resource recovery in their regions
- Fund the delivery of priority infrastructure and other projects, procured by local government, that are needed to deliver the regional-scale plans, particularly where a market failure has been identified
- Increase local and state government procurement of recycled goods made with domestic content; and
- Fund and deliver a state-wide education campaign on the importance of recycling to encourage the right way to recycle, the purchase of products with recycled content, and promoting waste avoidance.

The good news is that none of this requires extra funding. The NSW Government already collects hundreds of millions of dollars each year via a Waste Levy. It just requires the will.

On behalf of NSW councils, Local Government NSW – is calling on the NSW Government to work with us to properly develop, fund and deliver this plan before it is too late.



Linda Scott
LGNSW President

Plan to Save Our Recycling in NSW

The NSW Government must:

Educate

Fund a large-scale, state-wide education campaign to support recycling and markets for recycled products in NSW. It must fund and work with councils to activate this campaign, community by community.

Innovate

Governments should lead and use more recycled content to help create scale and then new markets, jobs and investment will follow.

Invest

Reinvest the Waste Levy in council-led regional waste-and-recycling strategies and fund councils to deliver the infrastructure and services our cities and regions need.

The time to act is now.

The government collects the Waste Levy and now it must spend it in local communities to Save our Recycling.

Waste and Recycling in NSW

Waste is generated from industry and large businesses: the construction and manufacturing sector, energy and water services, small businesses and households.

A June 2019 NSW Government progress report found that in NSW about 42 percent of household waste is processed for recycling. The remainder of the domestic waste – 2,446,000 tonnes a year – is sent to landfill sites where it is buried.

Residents have embraced recycling on the promise that their efforts lead to waste being sustainably managed. The NSW Government is responsible for setting the rules and regulations so waste is managed in a way that protects our local environment.

It sets targets to reduce the amount of waste we generate, increase diversion rates from landfill and achieve higher rates of recycling.

Across Australia, only about 12 percent of the total plastic waste we generate is recycled, compared to 60 percent of paper and 57 percent of glass. About 70 percent of the plastic and 43 percent of paper collected for recycling is sent overseas for processing. According to Sydney University, Australia is producing waste at six times our population growth.

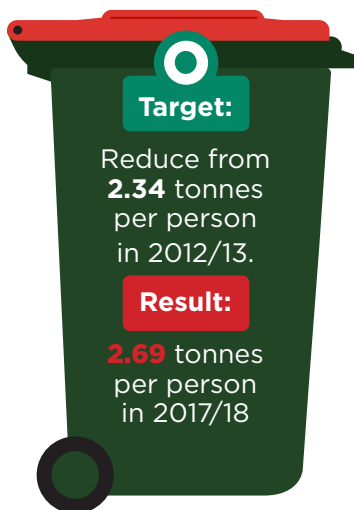
The NSW Government predicts the amount of waste generated over the next two decades will continue to increase by about 40 percent.

Since 2015, the amount of per capita waste being generated in NSW increased by 11 percent but at a household level our recycling rates remain flat. The latest Progress Report predicts household recycling rates will decrease as less mixed solid waste is recycled.

NSW is failing, and major changes are needed to turn the ship around.

Is NSW on track to meet its waste reduction targets?

1. Reduce waste generation



2. Increase recycling



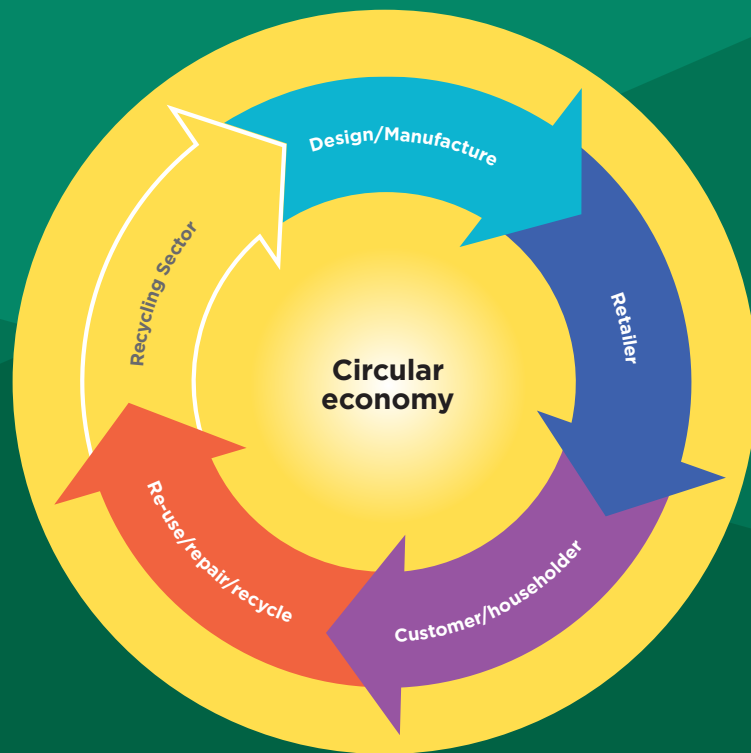
3. Divert more waste from landfill



Circular economy

The concept of a circular economy has broken into our mainstream vernacular. Simply put, it seeks to replace our old ways of production where we make, use and then dispose of items without much thought of the impact on our waste stream or the environment. A circular economy challenges us to first avoid or reduce unnecessary production, packaging or consumption, and to find ways to re-use or recycle as much as possible – closing the loop.

It saves inefficient production, reduces the need for more costly waste infrastructure and promotes both economic and environmental sustainability. Single use plastics don't fit in a circular economy. NSW is the only state in Australia that has not banned or phased out single use plastic bags.



Port Macquarie businesses join the circular economy

A Port Macquarie coffee company has joined forces with cafes and a local manufacturer to clean and sort used milk containers and coffee bags, so they can be turned into new products.

DONE Coffee got together with 15 local cafes to kick off the initiative, with the help of Port Plastics and Tooling. Used plastic materials are taken to their factory where they are processed and turned into new products such as whipper snipper heads, coasters and bottle openers. Over six cubic metres of material is being diverted from the waste stream each month, converting positive local action into locally manufactured recycled products.

Councils and communities leading the way

Research shows that more than 90 percent of people in NSW recycle to reduce the amount of rubbish going to landfill and because of concern for plastics entering our oceans. They see it as a way to do their bit for the environment.

Councils in NSW are generally ahead of the pack when it comes to providing services that encourage the collection and sorting of household waste.

They use different bin systems depending on the nature of the region and the communities that live there.

About 86 percent of councils offer a combination of red, yellow, blue and green bin services so waste can be separated at the source, helping to reduce contamination, which can lead to higher rates of landfill disposal. Many councils collect paper, glass and plastic in one yellow bin.

About one quarter of all councils use Alternative Waste Treatment services that separate and process mixed solid waste so that it can be diverted from the waste stream and re-used to improve degraded land, for fuel or biogas. This process also recovers other material, such as plastics, glass and metals, and diverts them from landfill.

However, last year the NSW Government removed a special exemption on the use of this material, which means most of it is again being landfilled.

Save Our Recycling 2019 Waste Survey - key findings

- The majority of residents in NSW separate recycling and green waste all of the time: 78 per cent of residents separate recyclables from general rubbish and 63 per cent of residents separate green waste for composting or council collection
- 73 per cent of the population use reusable shopping bags all the time
- Almost half of NSW residents take more than 15 minutes per week to manage household rubbish
- 88 per cent of those who are aware of the waste levy either strongly agree or somewhat agree with the NSW Government using it to develop recycling in NSW



Fish waste and FOGO reduce waste and boost recycling in Bega Valley Shire

Bega Valley Shire Council is reducing waste-to-landfill and dealing with an unsightly litter problem by turning unwanted fish waste into organic garden compost.

Eden-based business Ocean2Earth is managing the project, which involves collecting fish waste from specially-marked bins at six popular boat ramps throughout the shire. The project also ties in with the council's 'choose the right bin' campaign, which is trialling public place landfill and recycling bins before introducing them across the shire.

The fish-waste-to-compost is one of several innovative waste reduction and re-use projects that has come out of council's 10-year waste management strategy.

That strategy also confirmed that the life expectancy of its five-year-old landfill facility had been cut in half because of increasing demand.

Last October the council embarked on its most ambitious change since introducing recycling bins when it added a food and garden organics (FOGO) kerbside collection service to the shire's 13,000 urban households.

FOGO reduces waste-to-landfill and provides a cleaner source of organic matter to turn into high-quality compost. In its first year FOGO has cut



Bega Valley Shire Council is taking steps to slow the rate of waste to landfill, but more is needed to increase rates of recycling and reuse of resources from the yellow bin.

waste-to-landfill by about one-third and has achieved a contamination rate of less than 0.4%, among the lowest rates in Australia.

The council is now trialling the disposal of compostable nappies in its new organics collection, a trial that can be introduced by other councils if successful, to further reduce what goes into Bega Valley landfill.

Waste reduction and recycling taken to new heights at local public school

Canteen staff, students and teachers at Wheeler Heights Public School, in Sydney's Northern Beaches, have taken the lead on recycling and waste reduction, and they have been sharing their success with schools throughout the region.



The canteen recently introduced different recycling bins, while the school introduced composting, worm farms and a vegetable garden.

The school's canteen also went plastic free, while student sustainability leaders were chosen to help champion the waste-reduction initiatives.

The school used to send an average of 51 kg of waste to landfill each day. That was cut to a meagre 11 kg per day after the school introduced its waste reduction initiatives.

The school's canteen manager, Sherene LaGasse, spoke to other schools about the program and a number have followed suit with their own initiatives.

Several non-government schools are set to adopt waste reduction programs, while Bilgola Public School has gone completely waste free.

"We knew we had to act a few years ago, when we found out our recycling was being sent to landfill. Most schools aren't recycling at all. It seems like such a good place to start tackling our waste problems," Sherene said.

Return the Waste Levy to fix recycling in NSW

The NSW Government charges a special levy for every tonne of rubbish taken to landfill across Sydney and parts of regional NSW. It's an incentive to avoid sending waste to landfill.

In 2012/13 it collected \$483 million via the levy from councils, business and the community. The NSW Government expects that by 2022/23 this number will have grown by almost 70 percent to just over \$800 million a year.

That's about \$100 for every woman, man and child in NSW. It's difficult to determine exactly how much of this money is reinvested in waste management and resource recovery.

The NSW Government set up its Waste Less, Recycle More program to help manage and reduce waste and encourage recycling in NSW. It allocated \$802 million over nine years to the program, funded from the Waste Levy.

Some goes to local government, some to grants for industry and research, and some to education campaigns.

According to a NSW Parliamentary Inquiry in March 2018, about 13 percent of the Waste Levy revenue was reinvested in waste and regulatory programs, while a further 13 percent went to environmental programs. LGNSW modelling suggests that less than 18 percent of total Waste Levy revenue is returned to local government.

The NSW Government is pocketing between \$500 million and \$600 million each year from the Waste Levy. While more waste is sent to landfill, more revenue will be collected.

If we are going to solve our waste and recycling problems in NSW, it starts with more investment. Extra funding must be re-invested from the Waste Levy into better managing our waste as a resource. The era of under-investment must end, or our waste problems will get worse.



NSW the hard nut to crack

“NSW has always been a bloody hard market to crack”, according to Mark Yates from recycled plastics manufacturer Replas.

“Procurement policy is the key. We need accountable procurement policy that helps develop scale and markets,” Mark said.

Mark points to schools in NSW. While some schools have taken the initiative to incorporate recycled plastic products into their infrastructure, there is no policy to mandate the use of products made with recycled content, such as seats or benches.

“You have to be at the right school at the right time to get them to consider your product. But if we get recycled products in schools, the connection is a living example to help teach students about the value of recycling and the circular economy. It’s a no brainer.”



Young students show how easy it is to reduce, reuse and recycle

Year 5 students from St Aloysius Primary School near Maitland are setting up their own plastic recycling centre, to help reduce plastic pollution in their community and turn the waste into new products.

An old demountable building will be used to house the collection service, which the school hopes to kit out with locally designed tools and other equipment to shred and re-cast the plastic into new items they can use in the classroom.

“We’ve asked students from the University of Newcastle to help us design tools, molds and equipment that is safe for 10-year-olds to use,” teacher Bek Stokes said.

“There are so many items the school buys to help the students learn – like dice for maths. We want to make those ourselves from the plastic waste the students collect.

“It was our students’ idea to turn the waste into products we can use ourselves. Even 10-year-olds could see that it’s better to re-use the plastic at the school, instead of buying new materials.”

These young recyclers are a practical demonstration of the circular economy in action.



Year 5 students from St Aloysius Primary School near Maitland get working on their plans to set up their own plastic recycling centre to turn plastic waste into useful products to use in the classroom.

Deliver a state-wide recycling education campaign

The NSW Government's Waste Less, Recycle More program includes \$9.5 million over four years for small-scale contestable grants for council-led waste education programs. Education and awareness campaigns are also funded from a range of other programs.

The focus of the government's public awareness programs has been on litter reduction and food waste reduction campaigns. They have been met with some success.

In 2015, the NSW Government promised a state-wide education campaign to help boost support for kerbside recycling. Councils were waiting for the campaign in 2016 and now, three years later, it has not been delivered.

Rates of recycling are now flatlining and it's time for the NSW Government to act.

Significant additional investment for a state-wide education campaign is required to drive change and help improve the quality of materials going into the yellow bin.

Contamination rates in the yellow bin can be as high as 40 percent. If we can reduce contamination rates, it becomes easier for councils to recover more waste for re-use. It helps industry turn waste into products.

If we can raise awareness about the benefits of buying recycled products, we help drive demand and create new sustainable markets.

The NSW Government needs to partner with local councils on strategic large scale and long-term campaigns targeting better recycling practices. We need a state-wide campaign, backed up at the local and regional level. Each council knows its own community well. They will play a key role in making this education campaign a success.



Missed opportunities for recycled glass in NSW

Each year, Hunter Resource Recovery recycles about 30,000 tonnes of recycled material from the yellow bins at more than 148,000 homes across Maitland, Cessnock, Lake Macquarie and Singleton councils.

This includes glass, paper and hard plastics. The recovered glass is cleaned and processed so it can be re-used. However, about 85 percent of the recycled glass is shipped to Victoria, where most of it is stock-piled. Some is reused in areas such as road construction, insulation, filtration or other glass products.

“The glass can be cleaned and refined and ready for use like any other product,” CEO Roger Lewis said.

“But in NSW it is still classified as waste. There is no flexibility, it will always be a waste not a resource. This means we can’t stockpile it for local markets. It also attracts the Waste Levy, because the NSW Government classifies us as a waste facility, not a recycling facility. It’s cheaper for us to transport the material to Victoria.”

IQ Renew takes glass and other recyclables from Sydney’s Northern Beaches and the Central Coast. It also runs a facility in NSW that cleans and re-processes glass into sand that can be reused for a

range of building and construction purposes.

It’s in the process of finalising an agreement with a NSW council to provide a large amount of its recycled glass product. However, this alone will not solve the glass recycling problem in NSW, according to its Chief Operations Manager Graham Knowles.

“It’s still classified as a waste, even though its washed, cleaned and turned back into sand,” Graham said.

“When you put water through, it comes out clean. There’s no leachate.

“To get an exemption to use it in NSW can take four to five years. In Victoria, it might take you about 18 months to two years and in Queensland it might take 12 months.”

Graham believes we could find a market to use almost all our recycled glass, if the NSW Roads and Maritime Services started using washed glass for 10 percent of the compacted layers in its road base.

“It’s not processed like the refined glass sand product, but it is completely sealed under the road. It’s the perfect recycled content for this use, but the opportunity is not being taken.”



Glass collected from homes and businesses in Sydney’s northern beaches and the Central Coast is turned into sand - ready for re-use in road construction throughout NSW. However, more needs to be done to create markets for it in NSW.

NSW Government must lead on procurement and regulation

Under the *NSW Protection of the Environment Operations Act 1997* waste is still considered a waste even if it can be processed, recycled, reused or recovered. It is treated as a problem that needs to be disposed of.

Resource recovery orders and exemptions in NSW for commonly recovered and reused wastes that enable these 'wastes' to be used again. However, to use the waste in a way not covered by the orders and exemptions, you need to apply to the EPA. These exemptions can be expensive and take years to be granted.

It's important that materials are recycled safely. However, it is also clear our current approach is a handbrake on new ways to solve our waste problems.

Waste is classified as an essential service in NSW. However, it is not treated this way, like other utility services. Strategic land use planning should be coordinated with councils.

“ The NSW Education Department is one of the largest education bureaucracies in the world. Schools can access a state-wide recycling contract, but there is no mandate to recycle or use recycled products in schools.



Railway sleepers made from recycled plastic are being trialled in Melbourne and Queensland, but not NSW. In the Hunter, 85 percent of recycled glass is sent to Victoria, rather than reused for projects such as road construction.

State-wide guidelines and regulations for multi-unit developments don't encourage adequate space for bins or recycling systems. As a result, recycling rates are generally lower in apartments or unit developments and contamination rates are higher.

The buying power of government is a significant factor in creating the scale and markets to encourage a recycling industry in NSW. However, it too is not being leveraged to solve our recycling mess.

The NSW Government reported in its latest Waste Avoidance and Resource Recovery Strategy Progress Report that it was working with the RMS and other departments to 'reinvigorate' the use of crushed glass in government construction projects. It is unclear if any progress has been made.

Recycled plastic railway sleepers slip past NSW

Recycled plastic railway sleepers are being trialled on mainline tracks in Victoria and Queensland to help prove the technology and reduce maintenance costs.

The Duratrack® sleepers have three to four times the design life of traditional timber sleepers and about 64 tonnes of recycled plastic waste is used for every kilometre of track laid.

“We live in the circular economy,” Integrated Recycling General Manager Stephen Webster said.

“We reuse plastics, including polystyrene, that have served their primary use.”

Integrated Recycling developed the recycled plastic sleeper over the past five years. However, there hasn't been the same level of interest yet in NSW as in Queensland and Victoria.

“There is a great opportunity to create local markets for recycled content in products made in Australia,” Stephen said.

“Sustainability needs innovation and collaboration through procurement, the linking of the supply chain, the creation of standards and the valuing of renewed products through whole-of-life costing.”



Plastic waste is used to create railway sleepers being trialled in Victoria and Queensland, but NSW is missing out.



Invest in regional scale plans to save recycling in NSW

Most councils in NSW are part of regional waste groups. They get limited financial assistance from the NSW Government to produce regional waste plans and can apply for education grants and coordinate procurement for waste and recycling services for their communities.

To be eligible for funding, the regional plans must align to the NSW Waste Avoidance and Resource Recovery Strategy. The contestable grants are mostly small and time consuming to apply for, administer and report on. The funding helps make small one-off improvements, but not enough to repair our ailing waste and recycling systems.

In 2017, the NSW Government released a Draft Waste Infrastructure Strategy to 2021. It outlined the infrastructure required to deliver its Waste Avoidance and Resource Recovery Strategy, identifying that an additional 16 major facilities were needed in Sydney alone. The strategy has not been finalised.

In 2018, work started on the development of a 20-year Waste Strategy for NSW. It was put on hold in the lead up to the NSW election earlier this year. Work has now re-started on the strategy with an expected release date sometime next year.

Recycling and waste management in NSW is in a parlous state. We cannot afford these delays. We urgently require regional-scale planning for waste and recycling in NSW. These plans need to outline the infrastructure and services required to lift recycling and recovery rates and reduce waste going landfill.

Recycling a jobs generator

The waste sector is worth about \$14.2 billion a year across Australia. Recycling and re-use is also a big generator of jobs and investment.

Recycling creates three times as many jobs as waste sent to landfill and modelling from the Centre for International Economics suggests that a 5 per cent increase in recycling rates could add \$1 billion to Australia's gross domestic product.

To succeed, they need to be matched with adequate funding.

Local councils are the level of government closest to the people. Councils best understand their communities and the waste and recycling services required in the cities and the regions. The NSW Government needs to partner with councils to improve waste and recycling services.

This will not cost the government or communities extra money. It is already being collected by the NSW Government via the Waste Levy. It is time the levy is returned to its original purpose - to improve waste and recycling services in NSW.

Our recycling services are at a crossroads. However, we still have the chance to act now to change direction and Save our Recycling.



Recycling for the cities and regions

Domestic waste collection services are delivered in NSW by local councils. But what's required is vastly different depending on the region.

In metropolitan areas like the City of Sydney, up to 70 percent of housing is made up of apartments or multi-unit dwellings. They require space for collection and facilities to process recycling for re-use.

In regions like western NSW, kerbside recycling services cannot always be supported because of cost and distance to services. They have the will to recycle but lack the resources.

In some regions like Dubbo or Inverell, councils are interested in becoming recycling hubs or in the potential for waste-to-energy plants.

Regionally led waste planning, matched with ambitious targets and funding from the Waste Levy, are the key to unlocking solutions and better services to help improve recycling in NSW.



Time to act

Over the past year local councils in NSW have stood together to unanimously call for action on this pressing issue. Communities have also come forward to ask for change.

The NSW Government has the money to help solve this issue.

And now it has a plan.

There has never been a better time to act.



Plan to Save our Recycling in NSW

The NSW Government must:

Educate

Fund a large-scale, state-wide education campaign to support recycling and markets for recycled products in NSW. It must fund and work with councils to activate this campaign, community by community.

Innovate

Governments should lead and use recycled content to help create scale and then new markets, jobs and investment will follow.

Invest

Reinvest the Waste Levy in council-led regional waste-and-recycling strategies and fund councils to deliver the infrastructure and services our cities and regions need.

References

Bega Valley Shire Council: [Bega Valley Shire Council Waste Management and Resource Recovery Strategy 2018-18](#), October 2018

W de Wit, N Bigaud: [No Plastic in Nature: Assessing Plastic Ingestion from Nature to People](#), World Wide Fund for Nature, June 2019

Environment Protection and Heritage Council: [National Waste Policy: Less Waste, More Resources](#) Environment Protection and Heritage Council, November 2009

NSW Environment Protection Authority: [NSW Waste Avoidance and Resource Recovery Strategy 2014-21](#), EPA, 2014

NSW Environment Protection Authority: [Waste Less, Recycle More A \\$337 million grants and funding initiative 2017-2021 extension](#), EPA, 2016

NSW Environment and Protection Authority: [Waste Avoidance and Resource Recovery Strategy Progress Report 2017-18](#), Environment Protection Authority, June 2019

NSW Environment Protection Authority: [Waste and Resource Recovery Infrastructure Strategy 2017-2021 Draft for consultation](#), Environment Protection Authority Nov 2017

NSW Environment Protection Authority [Changing Behaviour Together NSW Waste Less, Recycle More education strategy 2016-21](#), Environment Protection Authority, April 2017

NSW Regional Waste Strategies as published by Joint or Regional Organisation of Councils on [RENEW NSW Website](#)

Office of Green Industries SA: [South Australia's Waste Strategy 2015-2020](#), Office of Green Industries SA, 2015

J Pickin, P Randell, J Trinh, B Grant: [National Waste Report 2018](#), Department of the Environment and Energy & Blue Environment, Nov 2018

B Weir: [What Sydney is really throwing in the rubbish](#) Sydney Morning Herald, Sept 10 2019

NSW Government Budget Papers 2019-20, NSW Treasury, June 2019

NSW Legislative Council Portfolio Number 6 Planning and Environment: [Parliamentary Enquiry Energy from Waste Technology](#), NSW Parliament, March 2018

Local Government NSW: Save our Recycling Research Report February 2019

[Protection of the Environment Operations Act 1997 No. 156](#), The NSW Government

[Parliament of NSW Legislative Assembly Questions and Answers Paper 137 School Recycling Alex Greenwich to the Minister for Education](#), 29 June 2017



FACT

According to research from the University of Newcastle, there is so much plastic in our ecosystem, Australians are ingesting a **credit card's worth of plastic every week**

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LOCAL COUNCIL
**DOMESTIC WASTE
MANAGEMENT CHARGES**



Discussion Paper

August 2020

Local Government

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Tribunal Members

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Invitation for submissions

IPART invites written comment on this document and encourages all interested parties to provide submissions addressing the matters discussed.

Submissions are due by 6 October 2020.

We would prefer to receive them electronically via our online submission form <www.ipart.nsw.gov.au/Home/Consumer_Information/Lodge_a_submission>.

You can also send comments by mail to:

Review of domestic waste management charges
Independent Pricing and Regulatory Tribunal
PO Box K35
Haymarket Post Shop, Sydney NSW 1240

Late submissions may not be accepted at the discretion of the Tribunal. Our normal practice is to make submissions publicly available on our website <www.ipart.nsw.gov.au> as soon as possible after the closing date for submissions. If you wish to view copies of submissions but do not have access to the website, you can make alternative arrangements by telephoning one of the staff members listed above.

We may choose not to publish a submission - for example, if it contains confidential or commercially sensitive information. If your submission contains information that you do not wish to be publicly disclosed, please indicate this clearly at the time of making the submission. However, it could be disclosed under the *Government Information (Public Access) Act 2009* (NSW) or the *Independent Pricing and Regulatory Tribunal Act 1992* (NSW), or where otherwise required by law.

If you would like further information on making a submission, IPART's submission policy is available on our website <https://www.ipart.nsw.gov.au/Home/Contact-Us/Make-a-Submission/Submissions-Policy>.

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1. IPART is reviewing domestic waste management charges

The Independent Pricing and Regulatory Tribunal of NSW (IPART or ‘we’) is currently reviewing domestic waste management (DWM) charges levied by NSW local councils.

Our preliminary analysis indicates that DWM charges may not be delivering good value for ratepayers and there may be challenges for local councils in purchasing and pricing these services.

In the past we have decided not to regulate changes in DWM charges. Going forward, we need to consider whether this approach remains appropriate.

At this stage, we consider that caution is needed and prescriptive regulation may not be appropriate. But, there may be other ways to improve transparency and share best practice guidance to help local councils and ratepayers get good quality services at cost-reflective prices.

Our Discussion Paper explains these preliminary views and asks for feedback on whether stakeholders consider that there are issues with the prices charged for DWM services, and, if so, how we should respond.

1.1 IPART has a role in limiting DWM charge variations

NSW local councils provide a range of DWM services to their residents, such as kerbside collection, drop-off facilities and periodic clean-up services. To recover the cost of these services, local councils levy DWM charges (separate to ordinary rates) on their residential ratepayers.¹

What is IPART's role?



In 2010 the Minister for Local Government delegated to IPART the function of approving special rate variations and minimum rates, and the function of varying annual council charges for domestic waste management services.

¹ Local councils cannot fund DWM services through ordinary rates revenue, but must instead fund them through levying separate DWM charges (see *Local Government Act 1993 (NSW) (Local Government Act) section 504(1) and (2)*). Councils are required to set DWM charges that do not exceed the reasonable cost of providing DWM services and revenue collected through DWM charges may only be used for DWM purposes (see sections 504(3) and 409(3)(a), Local Government Act). The NSW Office of Local Government's *Council Rating and Revenue Raising Manual* requires that revenue from the DWM charge must be kept separate from general rating income, and only used for expenditure related to DWM (see p 56 of the manual).

IPART may specify the maximum percentage by which DWM charges may be varied in a given year.² We may also impose conditions with respect to the variation of these charges.

IPART has not limited DWM charges in the past

To date, IPART has opted **not** to limit the maximum percentage by which DWM charges may be varied. In our consideration of DWM charges in previous years, we have noted that:

- ▼ Councils are required to set charges that do not exceed the reasonable cost³ of providing DWM services
- ▼ DWM costs have been independently audited as required by the NSW Office of Local Government (OLG) each year
- ▼ Many councils outsource DWM services through a competitive tender process.

IPART has therefore been satisfied that DWM charges were likely to be both reasonable and efficient, and that the cost of additional regulation would likely outweigh the benefit.

DWM charges have not been audited since 2016-17

In June 2019, OLG informed IPART that it had ceased conducting audits of the reasonable cost basis of DWM charges in 2016-17. OLG intends to enter into a wider audit arrangement with the Auditor General, and DWM charges may be included, but there is no definite plan or timeframe for this.⁴

Since being informed of this, we have undertaken some initial research and analysis of DWM charges in NSW to help inform our future decisions on DWM charges. We also asked councils to report on their DWM expenses and services for the 2017-18 and 2018-19 financial years as part of our 2019-20 Local Government Cost Index (LGCI) survey.⁵ The results from the LGCI survey questions on DWM charges are presented in Appendix B.

² IPART has been delegated authority to specify the percentage by which DWM charges may be increased under section 507, 508 and 508A of the Local Government Act.

³ The concept of reasonable cost in the context of charging for DWM services is in keeping with the principle that all costs, which can be reliably measured and reasonably associated with providing a DWM service, should be included in determining the charge for the service (OLG, *Council Rating and Revenue Raising Manual* p 56). This differs from efficient costs which refer to costs that represent the least cost way of providing services.

⁴ Advice provided at OLG-IPART Quarterly meeting, 12 June 2019.

⁵ We note that the response rate for the LGCI survey questions on DWM charges was relatively low. We received a response from 67 (ie, 52%) of councils. Of councils that responded, 42% were 'metropolitan', 30% 'regional' and 28% were 'rural'.

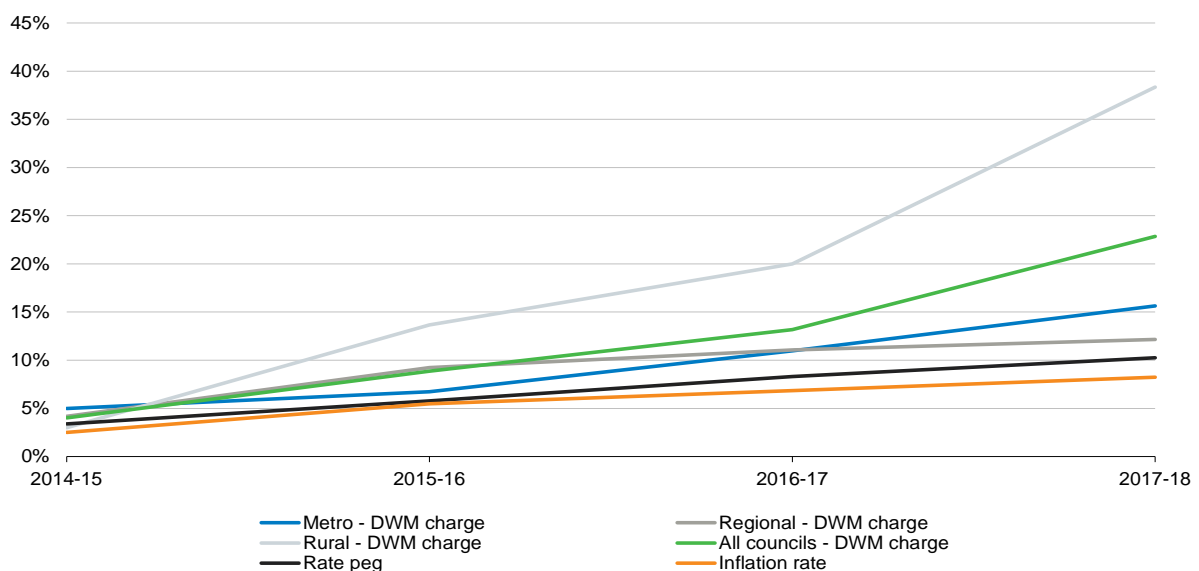
1.2 We have identified some potential issues with DWM charges

Our initial analysis suggests DWM charges may not reflect reasonable and efficient costs

We have identified several potential issues with DWM charges levied by local councils, which are usually monopoly providers of DWM services. These issues suggest that, in some cases, DWM charges may not reflect the reasonable and efficient costs of providing DWM services.

Our preliminary analysis indicates that, in general, DWM charges appear to be increasing faster than the rate peg and inflation (see Figure 1.1 and Table 1.1).

Figure 1.1 Cumulative percentage increase in DWM charges, inflation rate and rate peg from 2014-15 to 2017-18



Note: Average DWM charges and average residential rates presented do not include inflation.

Data source: OLG time series data (<https://www.olg.nsw.gov.au/public/about-councils/comparative-council-information/your-council-report/>), and IPART analysis.

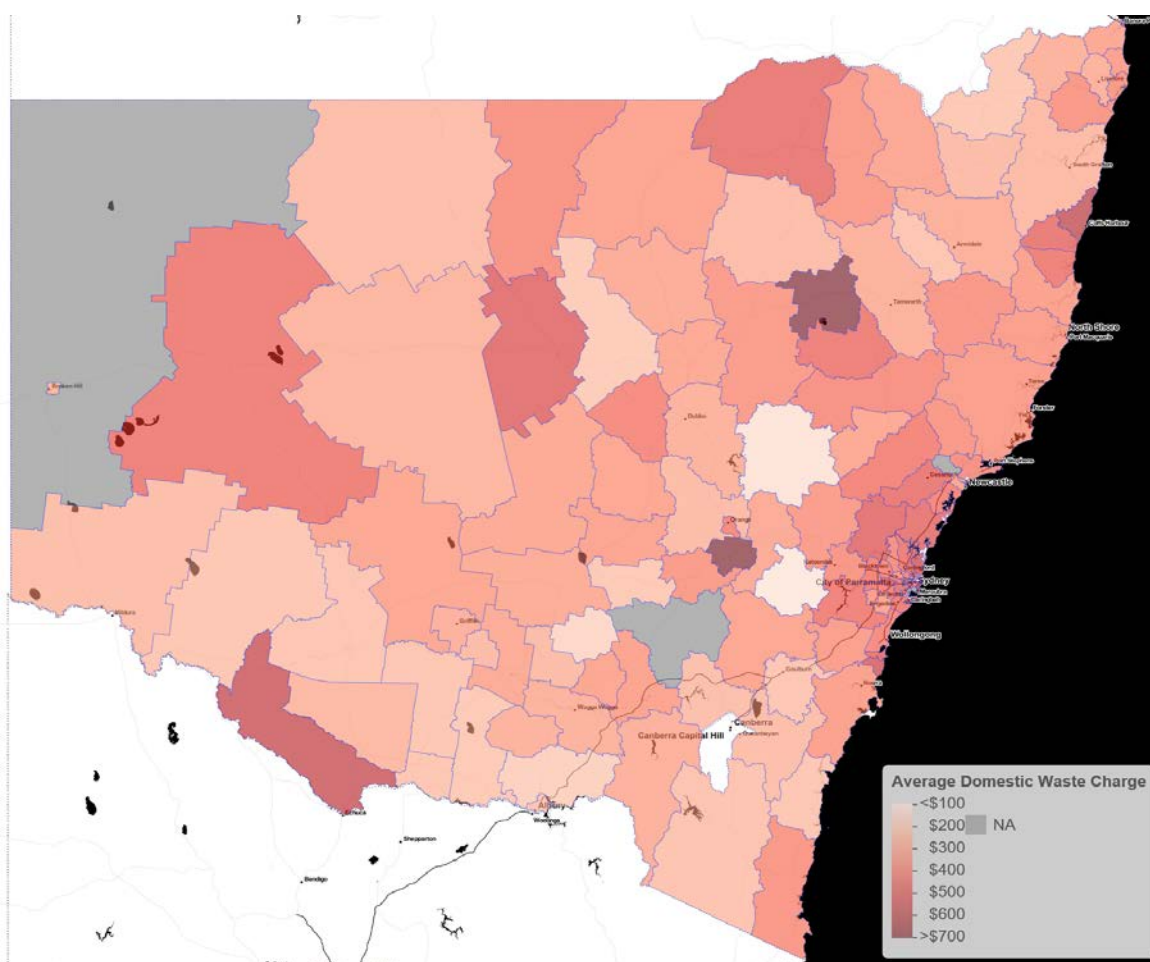
Table 1.1 Cumulative percentage increase in DWM charges, inflation rate and rate peg from 2014-15 to 2017-18

	Metropolitan	Regional	Rural	All councils
Average DWM charge	15.6%	12.2%	38.3%	22.9%
Average residential rate	12.4%	16.6%	18.5%	16.8%
Rate peg	-	-	-	10.3%
Inflation	-	-	-	8.2%

Note: Average DWM charges and average residential rates presented do not include inflation. Whilst average residential rates have increased above the rate peg much of this is likely due to special variations for specific projects or an overall increase in the level of service.

Source: OLG time series data (<https://www.olg.nsw.gov.au/public/about-councils/comparative-council-information/your-council-report/>), and IPART analysis.

Figure 1.2 Average DWM charge by NSW local council area (2017-18)



Note: Average DWM charges and average residential rates presented do not include inflation.

Data source: OLG time series data (<https://www.olg.nsw.gov.au/public/about-councils/comparative-council-information/your-council-report/>), and IPART analysis.

We have also observed that:

- ▼ There is wide variation in the number and type of DWM services provided across councils – some councils provide regular kerbside collection of general waste, recycling and organics, whilst in other areas residents deliver their waste directly to a DWM facility
- ▼ There is wide variation in DWM charges across councils (see Figure 1.2)
- ▼ Some councils appear to be in surplus for DWM services, as annual revenue from the DWM charge exceeds expenditure on providing the services (noting that in some circumstances, there may be reasonable justification for surpluses/reserves)
- ▼ Many councils either fully or partially outsource the provision of DWM services, though it is not clear that there is effective competition in the market for procuring such services, and there may be barriers to effective procurement
- ▼ Some councils appear to be allocating ‘overhead expenses’ that contribute more than half of total DWM costs.

1.3 We seek feedback on DWM charges and potential options moving forward

Based on our preliminary analysis, we consider that further investigation into how DWM charges are set is warranted.

Our next step is to engage with stakeholders, including councils, ratepayers and contractors, through this Discussion Paper. Stakeholders can respond to this Discussion Paper using our [website feedback form](#) or by [submitting a formal submission](#).

We are seeking feedback on:

- ▼ Whether stakeholders consider that there are issues with the prices charged for DWM services, and, if so, how we should respond, eg, whether any regulatory (or other) action is required.
- ▼ Potential options if regulatory action is required, noting that we would favour a less prescriptive approach. A proposed regulatory approach may include developing, in consultation with stakeholders:
 - A reporting, monitoring and benchmarking regime to develop a publicly available comparison tool comparing DWM charges for equivalent services across comparable councils
 - A publicly available centralised, comprehensive register of successful tender contract values for DWM services across councils
 - Pricing principles for DWM charges, to provide guidance to councils in setting DWM charges.
- ▼ The proposed pricing principles presented in Chapter 3.

After receiving and considering stakeholder submissions to this Discussion Paper, IPART may conduct a public hearing or workshop.

We will publish our decision on DWM charges for 2021-22 on the IPART website in September 2020, as part of our rate peg decision for local council general rates rather than as part of this review.

Our decisions arising from this review will likely inform our approach to DWM charges for 2022-23 and beyond.

1.4 Structure of this Discussion Paper

The remainder of this Discussion Paper is structured as follows:

- ▼ Chapter 2 outlines the potential key issues with DWM charges we have observed, and potential regulatory options, including a proposed regulatory approach for DWM charges if regulatory action is required.
- ▼ Chapter 3 sets out our proposed Pricing Principles for DWM charges.
- ▼ Appendix A provides an overview of the current state of play of DWM in NSW. This appendix was prepared for IPART by our consultant, Marsden Jacob Associates.
- ▼ Appendix B presents the results from the 2019-20 LGCI survey relating to DWM charges.

1.5 List of questions in this Discussion Paper

We are seeking general feedback from stakeholders in response to this Discussion Paper, as well as responses to specific questions including:

- 1 Is it a concern that DWM charges appear to be rising faster than the rate peg? Are there particular cost-drivers that may be contributing to this?
- 2 To what extent does the variation in services and charges reflect differing service levels, and community expectations and preferences across different councils?
- 3 Is there effective competition in the market for outsourced DWM services? Are there barriers to effective procurement?
- 4 Are overhead expenses for DWM services appropriately ring-fenced from general residential rates overhead expenses?
- 5 If IPART was to regulate or provide greater oversight of DWM charges, what approach is the most appropriate? Why?
- 6 Are there any other approaches that IPART should consider?
- 7 If a reporting and benchmarking approach was adopted, how could differences in services and service levels, as well as drivers of different levels of efficient cost, be accounted for?
- 8 Is there merit in IPART's proposed approach to developing a reporting, monitoring and benchmarking approach and pricing principles for setting DWM charges? Is it likely to be an effective approach? Why/why not?
- 9 Would IPART's proposed approach be preferable to audits of local councils' DWM charges by OLG?
- 10 Are there any issues that should be considered with regards to developing an online centralised database for all NSW councils' DWM charges to allow councils and ratepayers to benchmark council performance against their peers?

-
- 11 Do you agree with IPART's proposed pricing principles? Why/why not?
 - 12 Are there any other pricing principles or issues that should be considered?
 - 13 Could a centralised database and display of key elements of all successful DWM service contracts (eg, name of tenderer, service provided and contract amount) assist councils in procuring efficient services? If not, why not?

2. We seek feedback on DWM charges and potential options moving forward

This chapter seeks feedback on whether stakeholders consider that there are issues with the prices charged for DWM services and, if so, how we should respond.

It considers potential key issues with DWM charges that we have observed and presents potential oversight or regulatory options, including our proposed approach if, after consulting with stakeholders, we consider that action is required.

2.1 DWM charges may not reflect reasonable costs

We have undertaken some initial research and analysis of DWM charges in NSW, including asking councils to report on their DWM expenses and services as part of our 2019-20 LGCI survey. We have identified several key issues (outlined below) with DWM charges that indicate they may not reflect reasonable and efficient costs. In some cases they potentially undermine the general rate pegging process, and there may be a need to consider whether regulatory intervention is warranted.

Local councils are monopoly providers of DWM services

Through independent economic regulation, IPART aims to simulate the pressures of competition by setting maximum charges that reflect the efficient costs of providing services to consumers. In doing so, we aim to:

- ▼ Protect consumers by limiting the ability of monopolies to exercise market power
- ▼ Enable financial sustainability, whilst creating incentives for monopolies to invest prudently and efficiently, minimise costs and innovate
- ▼ Encourage consumers to use services efficiently.

Local councils, as the sole providers of DWM services in their local government areas, are essentially monopoly suppliers of these services. The vast majority of DWM service customers (ie, local council residential ratepayers), particularly in metropolitan local councils, are required to pay for DWM services and cannot opt out.⁶ That is, there is little or no competition in the market for the provision of DWM services to local council residents.

Councils are required to ensure that their DWM charges are calculated so as not to exceed the reasonable cost to the council of providing DWM services.⁷ However, particularly since 2016, there has been little oversight of this requirement. To date, IPART has not imposed any percentage limit on DWM charge increases.⁸

⁶ Section 496(1), Local Government Act.

⁷ Section 504(3), Local Government Act.

⁸ Though we note that IPART's ability to set maximum percentage variations for DWM charges likely acts as a deterrent.

DWM charges appear to be rising faster than the rate peg

Our preliminary analysis of OLG data indicates that in the four years of available data from 2014-15 to 2017-18, the weighted average of DWM charges across NSW has risen by:

- ▼ more than double (123%) the rise in the rate peg
- ▼ 178% more than inflation (see Figure 1.1 and Table 1.1).

There is wide variation in DWM charges across councils

We have also observed that there is wide variation in the number and type of DWM services and charges across councils, even across similar councils (see Figure 1.2).

In 2017-18, across all councils, the average annual DWM charge was about \$388. This represents about 40% (about \$1.2 billion) of the total revenue collected by councils from residential ratepayers.⁹

We recognise that variability in charges across councils may reflect a number of factors, such as differing service levels/types and community expectations and preferences across councils. For example, in some councils residents deliver their own waste to a DWM facility, whilst in others it is collected at the kerbside. However, we note there may be scope for greater transparency in DWM charges and services across councils.

Some councils appear to be in surplus for DWM services

Some councils appear to have over-recovered the costs of DWM services and are in surplus – at least for a period of time. Of councils responding to the LGCI survey, 75% reported a surplus for DWM services, averaging \$1.6 million (about \$81 million in aggregate) for 2018-19. The 25% of councils that reported a deficit had an average deficit of about \$0.4 million (about \$7 million in aggregate).¹⁰

We note that most councils reporting a surplus (94%) indicated they have plans to use it for capital replacements/works, site remediation and/or as a 'precautionary reserve'.

Outsourcing is common – effective competition and procurement may not be

The LGCI survey results indicate that contractor and consultancy costs are one of the largest cost categories in providing DWM services (accounting for 46% of DWM costs on average).¹¹

⁹ OLG times series data and IPART analysis.

¹⁰ IPART 2019-20 LGCI survey results and IPART analysis.

¹¹ IPART 2019-20 LGCI survey results and IPART analysis.

Many councils either fully or partially outsource the provision of DWM services (including 87% of councils surveyed), with a higher proportion of metropolitan councils appearing to outsource compared to rural councils.¹² However, it is not clear that there is effective competition in the market for such services, and there are a number of potential sources of market inefficiency in the domestic waste market, as well as barriers to effective procurement. These include the existence of a relatively concentrated market,¹³ barriers to entry for new entrants (such as high start-up and capital costs), information asymmetries and varying procurement capabilities and practices (see Appendix A, section A.4 and A.5). It is therefore not clear that contractor and consultancy costs reflect the reasonable and efficient cost of out-sourced DWM services.

Some councils seem to be allocating a high proportion of overheads

In addition to recovering contract costs for outsourced DWM services, some councils appear to be allocating overhead expenses that contribute more than half of total DWM costs, and the basis of these cost allocations is not necessarily apparent.

For councils responding to the LGCI survey, overhead expenses (on average) represent about 59% of DWM costs, whereas for residential rates expenses, overheads represent only 41% of expenses. For metropolitan councils, the proportion of overhead expenses appears comparatively higher at about 65% for DWM costs and 43% for residential rates expenses.¹⁴ There is a risk this could indicate cost-shifting from residential rates to DWM charges. That is, councils may be allocating overheads related to general residential services to DWM services (and hence charges), potentially undermining the rate pegging process.

Questions for stakeholders

- 1 Is it a concern that DWM charges appear to be rising faster than the rate peg? Are there particular cost-drivers that may be contributing to this?
- 2 To what extent does the variation in services and charges reflect differing service levels, and community expectations and preferences across different councils?
- 3 Is there effective competition in the market for outsourced DWM services? Are there barriers to effective procurement?
- 4 Are overhead expenses for DWM services appropriately ring-fenced from general residential rates overhead expenses?

¹² IPART 2019-20 LGCI survey results and IPART analysis.

¹³ For example, it is estimated that about 70% of waste collection services, 69% of MRF services and 98% of landfill services in Sydney are provided by the 3 largest service providers, respectively (Marsden Jacob analysis).

¹⁴ IPART 2019-20 LGCI survey results and IPART analysis.

2.2 If more oversight is appropriate, there is a range of potential options

IPART continuing to not limit percentage variations for DWM charges is an option¹⁵ but if greater oversight or regulatory intervention is necessary for DWM charges, there are a number of other potential options, which may include:

- ▼ Less intrusive regulation, such as:
 - Developing a set of pricing principles for setting DWM charges, as guidance for councils
 - Reporting enabling comparison of like services across similar councils
 - Detailed further investigation and regulation only applied to outlier councils
- ▼ IPART regulating price increases through setting maximum percentage variations for some or all DWM charges
- ▼ Other stakeholder suggestions.

We note that some of these options could be used in combination and that less intrusive regulation could be used to inform future IPART decisions on whether or not to set maximum percentage variations for DWM charges.

For example, a less intrusive approach such as reporting, monitoring and benchmarking and/or developing pricing principles could be used to support councils in pricing DWM services appropriately, by promoting greater transparency and public reporting of DWM charges.

Whilst there is no competition across councils for DWM services, there are 128 local councils in NSW. A large number of these councils, particularly in Sydney, Wollongong and Newcastle, are likely to face similar costs for common DWM services such as kerbside collection of general waste, recycling and organics.

DWM charge reporting could allow comparison of DWM charges across comparable councils for equivalent services (eg, kerbside collection) via a comparison table, made available on a NSW Government website and/or each council's website.

Such reporting would enhance transparency and could provide incentives to councils to ensure their DWM charges reflect reasonable and efficient costs, and are defensible. Under such a reporting regime, IPART's more detailed assessment and consideration of whether setting maximum percentage variations is appropriate may only be needed for outliers.

Questions for stakeholders

- 5 If IPART was to regulate or provide greater oversight of DWM charges, what approach is the most appropriate? Why?
- 6 Are there any other approaches that IPART should consider?
- 7 If a reporting and benchmarking approach was adopted, how could differences in services and service levels, as well as drivers of different levels of efficient cost, be accounted for?

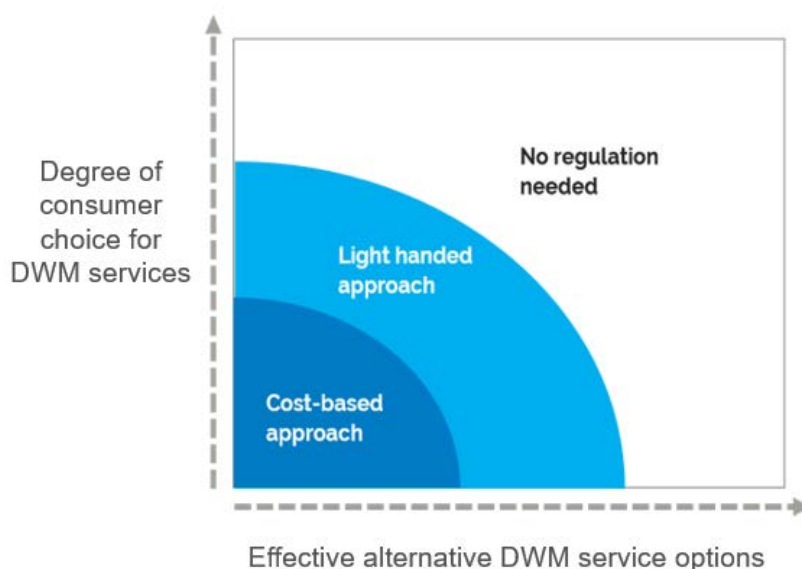
¹⁵ Noting that we cannot bind a future Tribunal.

2.3 We prefer a less prescriptive, more targeted approach if regulation is required

If regulatory intervention and/or oversight of DWM charges is required, our preliminary position is to favour a relatively less prescriptive, more targeted approach that focuses on information and guidance. This would minimise unnecessary regulatory cost and burden, such as the need for OLG to audit the basis for each council's DWM charges.

There is likely to be more need for regulation in markets that are not competitive. Figure 2.1 provides a framework for considering the appropriate approach for regulating DWM charges in NSW. The degree of regulation indicated depends on the extent of market power. Low consumer choice and a lack of effective alternative service options indicate greater regulatory intervention is likely to be required.

Figure 2.1 Assessing the degree of regulation required



As local councils are the sole provider of DWM services to residents, DWM customers have little choice of who provides DWM services and there is a lack of effective alternative DWM service options. Under the framework presented in Figure 2.1, a more intrusive approach to regulation (such as a detailed cost-based/building block approach) with IPART setting maximum percentage variations (DWM charge pegs) for councils may be appropriate.

However, we recognise that regulation itself comes at a cost and that the benefits of regulation should outweigh its costs. It is important to consider the costs of implementation, administration, compliance and enforcement of any regulatory approach.

We consider that the costs involved in setting annual maximum percentage variations (DWM charge pegs) for all councils would likely outweigh the benefits of doing so and our preliminary position is to favour a less prescriptive, more targeted approach if greater oversight or regulation is required.

We also note that the democratic process, which allows rate payers to vote councils in and out based on their levels of satisfaction with services and charges (amongst other factors), provides some check on councils' DWM charges.

2.4 If regulation is required, we propose a reporting regime and pricing principles

If regulation is required, we propose to develop, in consultation with stakeholders, a reporting, monitoring and benchmarking regime and pricing principles for setting DWM charges to:

- ▼ Improve transparency and council accountability in the setting of DWM charges
- ▼ Inform future regulatory decisions on DWM charges.

We consider this likely to be a more effective and less costly approach with lower regulatory burden than annual individual audits of all councils by OLG or the Audit Office, given informal stakeholder feedback indicating this audit process is a costly process. There may be scope to use targeted auditing of some councils' DWM charges as a complement to our proposed approach.

If, after considering stakeholder feedback, we consider that oversight or regulation of DWM charges is required, our proposed approach would be for councils to report high-level data on DWM charges for common services – eg, kerbside collection of general waste (red bin), recycling (yellow bin) and organics (green bin), council clean-up services and tip vouchers. This would allow a table to be developed that compares DWM charges for equivalent services across comparable councils. This would enhance transparency and council accountability, strengthening incentives for councils to ensure their DWM charges reflect reasonable and efficient costs and are justifiable, while also allowing us to identify outlier councils (eg, councils with noticeably higher DWM charges than comparable councils for equivalent services) for further investigation and potentially regulation. We propose that this comparison table be made publicly available on a NSW Government website and/or each council's website.

If we proceed with this approach, following feedback on the Discussion Paper, we would then consult and collaborate with OLG, local councils and other stakeholders to determine:

- ▼ Reporting requirements for local councils on DWM charges
- ▼ The most effective method, indicators and comparators for benchmarking and comparing local council DWM charges under a reporting regime.
- ▼ Appropriate pricing principles for setting DWM charges and how these would be applied.

We have drafted a proposed set of key pricing principles, which are outlined and discussed in Chapter 3. Such principles could be used to provide guidance to councils in setting DWM charges.

Under our proposed approach, local councils could be given a period of time (eg, two years) to ensure that DWM charges are reasonable when compared with similar councils/services.¹⁶

After this period, an assessment could be made as to whether all, a selected few outliers, or no councils would require further investigation and potentially maximum percentage variations to be set for those councils. As part of this assessment, we propose to assess outlier councils against our pricing principles on an 'exception' basis – eg, when councils

¹⁶ Discussed in detail in Chapter 3

which are outliers against comparable councils are unable to provide an adequate explanation as to factors that may contribute to them being outliers.

We consider this approach would enhance openness and transparency and enable outliers to either improve performance to a level that would prevent the need for IPART to specify the maximum percentage increase in DWM charges; or to justify why there is a case for their DWM charges to be materially different to other, comparable councils for similar services.

Questions for stakeholders

- 8 Is there merit in IPART's proposed approach to developing a reporting, monitoring and benchmarking approach and pricing principles for setting DWM charges? Is it likely to be an effective approach? Why/why not?
- 9 Would IPART's proposed approach be preferable to audits of local councils' DWM charges by OLG?
- 10 Are there any issues that should be considered with regards to developing an online centralised database for all NSW councils' DWM charges to allow councils and ratepayers to benchmark council performance against their peers?

3. We seek feedback on our proposed pricing principles for setting DWM charges

As part of IPART's function of determining whether or not to specify a percentage variation for DWM charges for some or all councils, we consider that IPART should apply a regulatory framework that promotes:

- ▼ Efficient cost-based pricing based on clear pricing principles
- ▼ Consideration of affordability.

In setting DWM charges, councils should ensure that DWM services match community needs and legislative requirements. DWM services should also be subject to clear quality and reliability standards.

The key objectives of pricing principles are to:

- ▼ Establish which categories of costs, including allocation of shared operational and capital costs, it is reasonable to recover in DWM charges from customers
- ▼ Promote practices that drive the quantum of those reasonable costs down to the efficient (least) cost for the given level of service
- ▼ Ensure that a council can generate revenue that is sufficient to meet its efficient costs, so that it can continue to supply DWM services to required standards over time
- ▼ Promote cost-reflective charges that send appropriate price signals to customers.

We consider that the implementation of sound pricing principles by local councils is a critical indicator of the need, or otherwise, for regulation.

Our preliminary view is that the proposed pricing principles outlined in Box 3.1 below should be applied to DWM charges set by local councils.

These pricing principles would provide guidance to local councils in setting their DWM charges. We would not audit councils' compliance with these principles. However, councils' consistent application of these principles would be important in supporting our proposed reporting and benchmarking approach. That is, to facilitate comparison, and avoid the potential need for IPART to determine the maximum percentage by which DWM charges can be varied, it would be important for councils to apply these principles.

We seek stakeholder feedback on our proposed pricing principles.

Box 3.1 IPART's proposed key pricing principles for DWM charges set by councils

- 1. DWM charges should reflect a 'user pays' approach**
 - ▼ DWM charges should recover the costs of providing DWM services, not the councils' other functions and services
 - ▼ Incremental cost allocation should be applied
 - ▼ Social programs should be funded from general rates revenue
- 2. Only reasonable cost categories should be reflected in DWM charges**
- 3. DWM charges should reflect efficient costs**
- 4. DWM charges should be transparent**
 - ▼ To assist local councils
 - ▼ To assist customers
- 5. DWM charges should seek to ensure price stability**

To give effect to these pricing principles, local councils need to be able to answer the following questions:

- ▼ Which costs should be recovered?
- ▼ How should DWM charges be structured?
- ▼ Are cost recovery charges based on efficient costs?

We further explain our proposed pricing principles in the sections below.

3.1 DWM charges should reflect a 'user pays' approach

Customers should pay for the full reasonable costs of the DWM services they receive. This is important for ensuring that:

- ▼ Councils' recover their costs, and hence are able to continue to provide appropriate levels of service
- ▼ Customers face appropriate price signals, which means they are more likely to efficiently use DWM services over time (although this also largely depends on how DWM charges are structured).

The 'full cost' represents the value of all the resources used in the provision of a service – including the costs of complying with any environmental or other regulatory requirements in the supply of the service. In addition to the costs directly associated with the service, the full cost includes an appropriate allocation of indirect costs and capital costs.

Cost reflectivity of DWM charges

The Local Government Act specifically prohibits applying income from ordinary rates to DWM services and requires that income obtained from DWM charges must not exceed the reasonable cost to the council of providing those services.¹⁷

This means that there should be no cross-funding from the DWM function to general council activities and vice versa. This may occur when the allocation of common costs between the DWM function and a council's general activities is not appropriate – ie, when the level of costs allocated to DWM services results in DWM charges that exceed the reasonable and efficient costs of providing DWM services.

It is also important that individual DWM services charges (eg, for general waste, recycling and organic waste bin collection) reflect the cost of providing those individual services.

Incremental (additional)¹⁸ cost allocation for DWM services

We consider that councils' core business is the functions it funds through general rates and that the costs assigned to DWM services should only be the incremental cost of providing that service over and above councils' core functions. The incremental cost approach can also be described in the reverse as the cost that would disappear (or be avoided) for councils if they did not provide DWM services.

The incremental cost approach is important in councils' consideration of whether to outsource DWM services (see Box 3.2 below). A consistent approach across councils to setting prices for DWM services is also important under our proposed reporting and benchmarking regime. Therefore, we consider councils should set their DWM charges on an incremental cost basis.

¹⁷ Section 504 Local Government Act.

¹⁸ In this discussion paper we are using the term incremental cost to mean the same as marginal cost or "additional" cost. A convenient way to consider the difference between average and incremental is batting scores. Before his last test innings Don Bradman had 6,996 runs. He had been dismissed 69 times. The Don was bowled for a duck in his last innings. His batting **average** was therefore 99.94. But the incremental score in the last innings (the addition to his total) was zero.

Box 3.2 Incremental cost approach and testing the market

A significant number of local councils provide in-house DWM services. The NSW Audit Office noted in its performance audit of Campbelltown and Fairfield councils that Fairfield council provided in-house DWM services, its charges were 7% above the NSW metropolitan average and it had not tested the market by way of open tender.^a

If a council is comparing the cost of contracting out DWM services to providing these services itself, it needs to ensure that it considers the council's incremental cost of providing DWM services as opposed to the average cost. This is because it is only the incremental costs that disappear if the council contracts out. If a council contracts out based on a competitive tender that is lower than the council's average cost of providing the service but not lower than its incremental cost, then the total cost of all council functions would increase and ratepayers' total bills would rise, not fall.

Example: Assume a council had 1,000 employees: 800 in general functions, 200 solely in DWM services, and 40 in HR and IT. The combined cost of HR and IT is \$4,000,000. An average cost approach would see \$800,000 ($\$4,000,000 \times (200/1000)$) of overhead costs allocated to DWM services.

However, there is generally always a fixed component of overhead expenses in any organisation. In the event that DWM services were outsourced, it is unlikely that the HR or IT managers' salaries would be cut by 20% and a number of other positions would still be necessary whether DWM services are carried out in-house or not. It might be that only 4 FTE positions can be reduced from HR and IT if DWM services were contracted out. In this case, the incremental cost approach would yield a value of \$400,000 of overheads allocated to DWM services.

^a Audit Office of NSW, Domestic waste management in Campbelltown City Council and Fairfield City Council, 5 June 2019, pp 16.

If a council has been over-allocating costs to DWM services using an alternative method (rather than an incremental cost approach) then this could be remedied, all other things being equal, by lowering the DWM charges to the efficient cost-reflective level and seeking a special variation to increase general rates by the equivalent amount.

Pensioner and hardship subsidies

If local councils provide discounts to disadvantaged customers then this subsidy should be funded from general revenue and not from DWM customers. To increase DWM charges or to use DWM reserves to fund subsidies would not reflect a user pays approach, as DWM charges would no longer reflect the proportion of costs customers impose on the system. Subsidies should be funded through general rates revenue rather than DWM charges.

3.2 Only reasonable cost categories should be reflected in DWM charges

Having established that the incremental cost approach should be used in allocating common costs to DWM service costs, we consider that councils should include the following as reasonable costs of providing DWM services in setting DWM charges:

Operating Expenditure

- ▼ Direct contract costs (if DWM services are outsourced)
- ▼ Direct labour costs
 - Salaries
 - Labour on-costs (eg, superannuation, long service leave)
- ▼ The incremental cost of indirect/joint costs, such as corporate overhead costs
 - This would only be the cost removed or avoided if providing DWM services was no longer a local council function, eg, the reduction in *actual* HR/IT staff numbers and office space lease payments
- ▼ Direct lease costs
- ▼ Direct material costs
- ▼ Vehicle allowance (if DWM services are outsourced)
 - If vehicles are shared amongst other local council functions, then a mileage allowance per kilometre should be applied rather than capital costs.

Capital Costs

Councils should establish a separate DWM services asset base/register for this purpose. DWM charges should recover allowances for a return on assets and return of assets.

- ▼ Return on assets:
 - This is a rate of return based on the depreciated value of direct assets for DWM services that the council has purchased including land (eg, for landfill)¹⁹, garbage trucks, equipment and bins.
 - The rate of return should be based on the council's discount rate as published by IPART every February and August. Currently, the rate of return is 3.6%.²⁰
- ▼ Return of assets (regulatory depreciation):
 - This is the cost of consumption or wearing out of fixed assets in a year. It should be based on straight line depreciation. For example, if a general waste bin has an average life of five years and costs \$100, then the return of assets charge will be \$20 per year for five years.

¹⁹ Remediation costs, particularly for land-fill sites can be substantial. The estimate of these costs should be capitalised (ie, added to the cost base) and recovered over the life of the land-fill.

²⁰ IPART, <https://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/local-government-contribution-plans-research-net-present-value-modelling-2015-onwards/fact-sheet-local-government-discount-rate-february-2020.pdf>, accessed 12 August 2020.

DWM service costs that are not included in reasonable costs

The NSW State Government currently imposes a waste levy on all waste that is disposed of in landfill. This is currently set at \$146.00 per tonne in metropolitan areas.²¹ This funds the *Waste Less, Recycle More* initiative. The initiative provides grants and funding for activities such as improving recycling behaviour.²² Where funding is received by councils from the scheme for education, inspection and enforcement, then the cost of providing the services funded by the scheme should be deducted from the reasonable cost of providing DWM services. This is to ensure there is no double counting and over-recovery by councils.

3.3 DWM charges should reflect efficient costs

Having established the categories of costs that it is reasonable to charge customers for, we consider that an equally important task is to ensure that these costs are the minimum or efficient cost achievable by the council.

Benchmarking costs of DWM service provision across local councils could enable assessment of whether costs may be efficient.

Given that many councils either fully or partially outsource DWM service provision, and contractor and consultancy costs represent a large portion of DWM costs, it is important to ensure contractor and consultancy costs are efficient. Where a council has outsourced some or all of their DWM service provision in a competitive and contested tender using best practice procurement approaches and processes, the result of this tender could be considered as the efficient cost of providing the DWM service(s).

However, there may be aspects of contracting and procurement that act as a barrier to effective competition and reduce the ability of councils to achieve efficient costs (see Appendix A, section A.4 and A.5). For example, the length of contracts and contract provisions may in some cases prevent councils from achieving efficient costs. An inability to benchmark contractor costs due to confidentiality clauses in contracts, limited negotiating power of councils and a potential lack of guidance and/or experience in best practice procurement approaches and processes may also contribute to this.

Length of contracts/time between market testing

While market testing and benchmarking will help establish efficient costs, there is a question as to how long contracts should be written for and/or how long councils should continue with in-house provision of the DWM service before they retest the market.

²¹ NSW EPA, <https://www.epa.nsw.gov.au/your-environment/waste/waste-levy/levy-regulated-area-and-levy-rates>, accessed 12 August 2020. The waste levy is \$84.10 per tonne in regional areas.

²² <https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/waste-less-recycle-more>. accessed 12 August 2020

Current contract provisions may be a barrier to entry

In establishing efficient costs, councils may need to consider what contract provisions will deliver the lowest costs to ratepayers. For example:

- ▼ If contracts were written for the average expected life of the major capital assets, would this reduce the risk to contractors and elicit lower tender bids?
- ▼ Would overall costs be minimised if councils bought the capital equipment and contractors submitted tenders to supply only the operational component of DWM, including maintenance of equipment?

3.4 DWM charges should be transparent

We consider that DWM charges, how they are set and the costs they are based on should be simple and transparent.

Enhancing competition and transparency for councils

Benchmarking of DWM contracts across NSW would likely increase transparency for local councils and potentially assist in minimising the cost of DWM services to local councils that outsource these services.

We note that:

- ▼ Councils must undertake open tenders for contracts over \$250,000²³
- ▼ An alphabetical list of tenderers must be prepared and publicly displayed²⁴
- ▼ Where a tender is successful, the name of the tenderer and the contract amount must be made public.²⁵

Given the above, it would appear that a centralised, comprehensive register of successful tenders across councils could be developed and made public. We consider that this could help address information asymmetries in the DWM service market where there are currently a small number of suppliers and a large number of councils.

Enhancing transparency for customers

The DWM charge customers face for each service should be simple and transparent. There should ideally be a separately identified charge for each service: general waste (red bin), recycling (yellow bin) and organics (green bin) and kerbside pickup and/or tip vouchers. Where councils offer different size bins, the costs should be separately displayed. Under our proposed approach, this would enable councils to compare themselves against other councils, helping them to find potential opportunities for efficiencies. It would also empower ratepayers/customers to scrutinise their own council's charges and compare DWM charges and service provision with other councils.

²³ *Local Government Act 1993* (NSW) s. 55

²⁴ *Local Government (General) Regulation 2005* Cl 175 (3).

²⁵ *Local Government (General) Regulation 2005* Cl 179 (b).

3.5 DWM charges should seek to ensure price stability

We consider that DWM charges should seek to ensure price stability to reduce bill impacts on customers.

Councils may wish to transition DWM service charges and surpluses/deficits in the DWM service reserve over a small number of years to prevent large fluctuations in prices. Spreading capital costs over the life of the assets as discussed earlier, rather than charging them in the year of purchase, also helps to stabilise charges. The special variation process could also be used by councils wishing to introduce changes in rates or charges over a number of years, to avoid price shocks.

Questions for stakeholders

- 11 Do you agree with IPART's proposed pricing principles? Why/why not?
- 12 Are there any other pricing principles or issues that should be considered?
- 13 Could a centralised database and display of key elements of all successful DWM service contracts (eg, name of tenderer, service provided and contract amount) assist councils in procuring efficient services? If not, why not?

Appendices

A. Overview of DWM in NSW

To undertake analysis and provide input to this review, it is important to understand the context in which NSW local councils operate their DWM services. The sections below have been prepared by our consultants, Marsden Jacob Associates, and provide more information on the following:

- ▼ The role of local councils in DWM
- ▼ The way in which local councils provide DWM services
- ▼ The structure of the DWM market, and market concentration
- ▼ Barriers to entry to the DWM market.

A.1 The role of local councils in DWM

In 2017-18, more than 21.4 million tonnes of waste was generated in NSW. Of this, NSW councils collectively were responsible for the management of 4.25 million tonnes of municipal solid waste (MSW),²⁶ of which 3.5 million tonnes is domestic waste.²⁷

Domestic waste collection, recycling and disposal management is a major responsibility for local councils, and is a significant function socially, environmentally and economically. In recent years, the waste sector has undergone significant change due to shifts in domestic and global markets, government policies (such as import and export bans, and recycling targets), as well as community expectations about what happens to their waste.²⁸

²⁶ MSW is solid waste from households and local government operations, including waste placed at the kerbside for local council collection and waste collected by councils from municipal parks and gardens, street sweepings and public council bins.

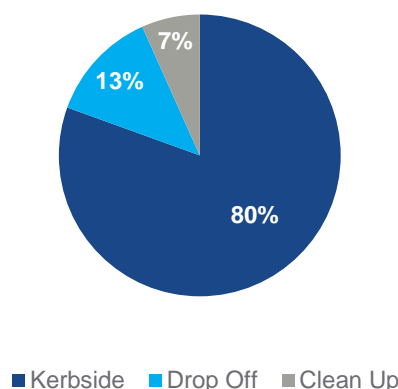
²⁷ NSW Environment Protection Authority (EPA), *NSW Local Government Waste and Resource Recovery (LG WARR) Data Report, 2017-18, Excel Appendix*.

²⁸ NSW Department of Planning, Industry and Environment, *Cleaning Up Our Act: The Future for Waste and Resource Recovery in NSW – Issues Paper*, March 2020, pp 4, 23.

A.1.1 DWM services being provided by NSW local councils

NSW local councils provide a range of DWM services to their residents, including kerbside collection, drop-off facilities and periodic clean-up services, with the vast majority of waste coming from kerbside collection (see Figure A.1).

Figure A.1 DWM services, proportion of waste by source (by weight)



Data source: NSW EPA, *LG WARR Data Report, 2017-18, Excel Appendix*.

Because NSW local councils determine the suite of DWM services to be provided to their area, there is considerable variation in the services being provided to residents, particularly where organic and dry recycling services are concerned.

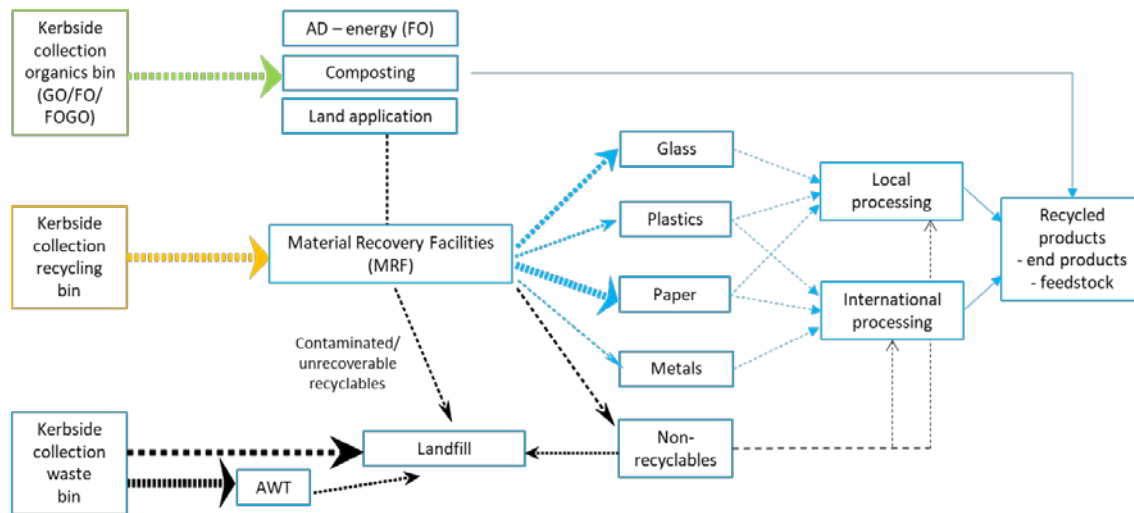
In 2017-18, NSW councils provided the following kerbside collection services to residents:

- ▼ All NSW councils provided a residual waste collection service
- ▼ 87.5% of NSW councils provided a dry recyclables collection service
- ▼ 39% of NSW councils provided an organics collection service
- ▼ Some councils also provided a number of drop-off services (81%) and clean-up services (62%).²⁹

As Figure A.2 illustrates, waste that is collected through the kerbside system either becomes recycled products (end products or feedstock), energy or is landfilled.

²⁹ NSW EPA, *LG WARR Data Report, 2017-18, Excel Appendix*.

Figure A.2 DWM services value chain



Note: “FO” refers to “food organics”, “GO” refers to “garden organics”, “AD” refers to “anaerobic digestion”, “AWT” refers to “alternative waste treatment”.

Data source: Marsden Jacob Associates analysis.

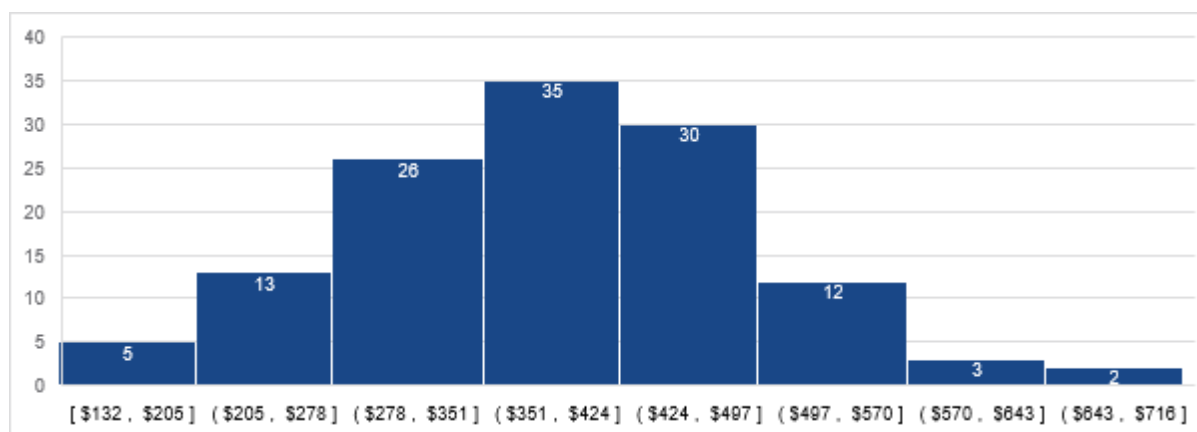
Key parts of the DWM service value chain include:

- ▼ Materials recovery facilities (MRF) – these handle a range of recyclables. At the MRF, materials are sorted into individual material streams before being sent for recycling.
- ▼ Composting facilities – where organic waste is converted into compost.
- ▼ Anaerobic digestion (AD) – a process where organic materials are decomposed by naturally occurring micro-organisms in the absence of oxygen to produce energy.
- ▼ Alternative waste treatment (AWT) – mechanical, biological and (sometimes) thermal processes to separate materials from a mixed residual waste stream (household waste).

A.1.2 DWM charges

To recover the cost of DWM services, local councils levy a DWM charge which is separate to ordinary rates.³⁰ There is considerable variation in councils' DWM charges. In 2017-18 the average annual DWM charge ranged from \$132 to \$710.³¹

Figure A.3 DWM charges, average by local government area, 2017-18



Data source: NSW EPA, *LG WARR Data Report, 2017-18*, Excel Appendix.

On average, local councils in waste levy³² paying areas have higher DWM charges than rural councils. However, there is considerable variability in the DWM charges being levied by different councils. This variability, in part, is likely a result of differences in local council characteristics (eg, density may affect average costs), underlying costs, and services provided. However, it cannot be wholly explained by the waste levy (see Figure A.4) and/or differences between councils. As discussed below, other possible explanations for this variability include:

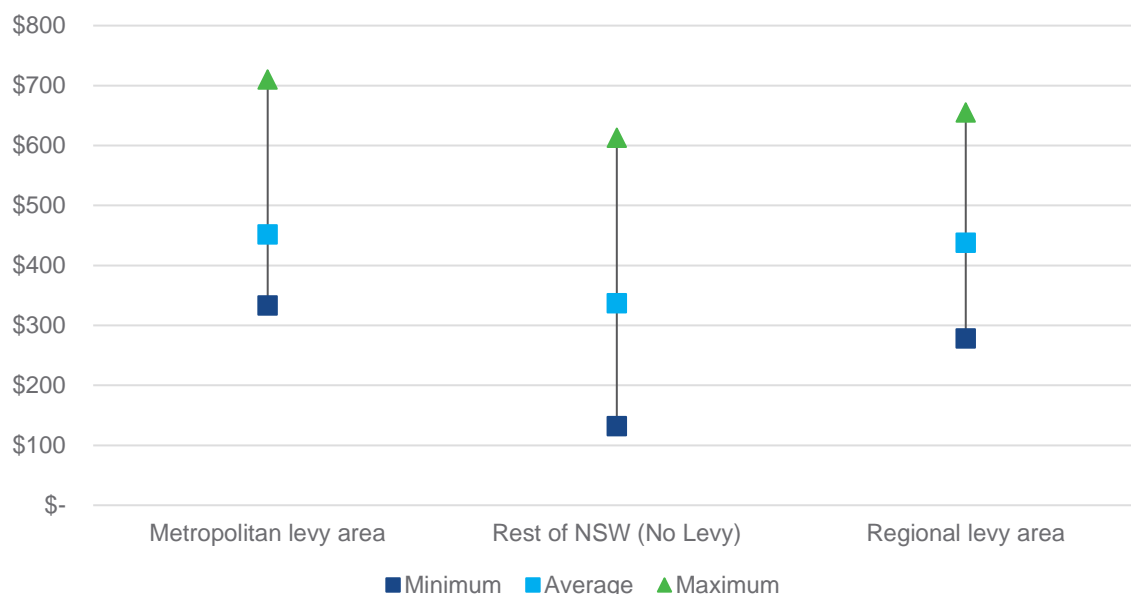
- ▼ The presence of barriers to entry to the domestic waste collection and management market, reducing competitiveness in the market
- ▼ Potential cost-shifting across council business units
- ▼ Procurement challenges, resulting from:
 - Information asymmetries, eg, with regards to contract costs
 - Regulatory hurdles, such as ACCC approval requirements for joint tendering by councils.

³⁰ Councils must not apply income from ordinary rates towards the cost of providing DWM services. Income to be applied towards the cost of DWM services must be obtained from annual charges and/or charges for services (s. 504, Local Government Act).

³¹ NSW EPA, *LG WARR Data Report 2017–18*, Excel Appendix.

³² The *Protection of the Environment Operations Act 1997* (NSW) requires certain licensed waste facilities in NSW to pay the EPA a contribution for each tonne of waste received at the facility. Referred to as the 'waste levy', the contribution aims to reduce the amount of waste being landfilled and promote recycling and resource recovery. The waste levy applies in the regulated area of NSW, which comprises the Sydney metropolitan area, the Illawarra and Hunter regions, the central and north coast local government areas to the Queensland border, as well as the Blue Mountains, Wingecarribee and Wollondilly local government areas.

Figure A.4 DWM charge, by waste levy zone, 2017-18



Data source: NSW EPA, *LG WARR Data Report, 2017-18*, Excel Appendix.

A.2 Local council DWM service delivery models

Three broad delivery models are used by local councils in the provision of their DWM services:

- ▼ **In-sourced:** Local council service provision using their own resources
- ▼ **Outsourced:** Waste service contractors are engaged to provide the services on the council's behalf.
- ▼ **Combination:** Some councils have a combination of service models, for instance collection might be undertaken by a waste service contractor while the council manages the local landfill or material recovery facility.

Preliminary analysis undertaken for this paper suggests that most local councils now outsource their DWM functions, including collection, transfer/recycling and disposal services. An estimated 95% of councils outsource at least one of these DWM functions and a significant majority of metropolitan councils contract out all functions (Table A.1).

This has been the case for quite some time, with the Productivity Commission observing in 2006 that most local council DWM functions were outsourced.³³ To facilitate this, councils are increasingly entering into partnerships with other councils to share waste disposal and resource recovery facilities, and to access more favourable waste management contracts. A number of local councils, predominantly in non-metropolitan areas, still provide some or all of their own DWM functions.

³³ Productivity Commission, *Waste Management Productivity Commission Inquiry Report*, 20 October 2006, p 56.

Table A.1 DWM services contracted out by local councils

Service contracted	Number of councils	%	Households serviced	%	Tonnage	%
All councils						
	128		3,087,985		3,582,551	
Contract out collection	80	63%	2,434,951	79%	2,799,968	78%
Contract out MRF	82	64%	1,657,663	54%	407,056	52%
Contract out organics	117	91%	2,723,398	88%	569,351	82%
Contract out Landfill	97	76%	2,282,886	74%	1,531,182	73%
Metropolitan councils^a						
	33		1,741,388		1,878,186	
Contract out collection	30	91%	1,567,249	90%	1,690,367	90%
Contract out MRF	26	79%	1,281,752	74%	308,347	77%
Contract out organics	31	94%	1,581,446	91%	258,660	87%
Contract out Landfill	31	94%	1,682,666	97%	1,136,053	96%

^a Does not include Newcastle, central coast or Wollongong councils.

Source: NSW EPA, *LG WARR Data Report, 2017-18*, Excel Appendix; IPART 2019-20 LGCI survey results and MJA analysis.

A.3 Costs of DWM services

Costs to local councils of providing DWM services can vary considerably, both between service type and between metropolitan and regional/rural areas. This variability, in part, is likely attributed to differences in local council characteristics (eg, density may affect average costs), underlying costs, and services provided.

Figure A.5 provides estimates of indicative charges to metropolitan councils of the different DWM services, showing estimates of the cost components of those charges.

Figure A.5 Indicative charges to metropolitan councils of waste services (\$/tonne)

Service/bin type	Bin size	Input costs								Total costs		
		Collection costs		Bin costs (capital costs)		Processing / disposal costs**		Waste levy		\$/lift	\$/tonne collected	\$/bin/year
		\$/lift	\$/tonne collected	\$/lift	\$/tonne collected	\$/lift	\$/tonne collected	\$/lift	\$/tonne collected			
Red Bin	80ltr	\$1.04	\$118.77	\$0.07	\$8.42	\$0.66	\$75.45	\$1.18	\$135.21	\$2.96	\$337.85	\$154.26
	140ltr	\$1.08	\$97.84	\$0.09	\$8.06	\$0.77	\$69.76	\$1.42	\$128.25	\$3.35	\$303.92	\$165.67
	240ltr	\$1.20	\$85.81	\$0.11	\$8.17	\$0.93	\$66.59	\$1.58	\$112.67	\$3.82	\$273.24	\$183.54
	All*	\$1.12	\$94.01	\$0.10	\$8.12	\$0.82	\$68.76	\$1.45	\$122.21	\$3.49	\$293.09	\$171.29
Yellow	240ltr	\$1.53	\$196.38	\$0.18	\$23.70	\$0.47	\$60.82			\$2.18	\$280.90	\$65.06
Green	240ltr	\$1.34	\$154.82	\$0.17	\$20.15	\$0.52	\$60.00			\$2.03	\$234.97	\$81.03
Average 3 bins*		\$1.28	\$128.40	\$0.14	\$13.87	\$0.65	\$65.34			\$2.08	\$279.53	\$104.96
Total 3 bins		\$3.98	\$445.21	\$0.46	\$51.97	\$1.81	\$189.58			\$7.70	\$808.97	\$317.39

Notes: Weighted averages across metropolitan and regional councils. Excludes AWD costs covering red bin services for some metro councils. These figures are approximations only.

* Weighted averages across bin sizes and types.

** Either landfill costs or processing costs.

Data source: NSW EPA, *LG WARR Data Report, 2017-18*, Excel Appendix; IPART 2019 Local Government Cost Index Survey; Marsden Jacob Associates analysis.

Costs and charges to regional and rural councils for these services are generally 20-50% higher than for metropolitan councils. This generally reflects lower throughput and higher unit operating costs.

A.4 Barriers to entry and sources of inefficiency in DWM markets

We have identified a number of characteristics of the DWM market that could potentially undermine its efficiency – including high market concentration³⁴ in particular segments and/or regions, high cost of market entry, market and price risk, and weak incentives to households – with different issues presenting at different points in the value chain, as summarised in Table A.2.

³⁴ Market concentration refers to the extent to which market shares are concentrated between a small number of firms and reflects the level of competition within the market.

Table A.2 DWM market issues

Issue	Collection	MRF	Post MRF processing
Market concentration	It is estimated that about 70% of waste collection services, 69% of MRF services and 98% of landfill services in Sydney are provided by the 3 largest service providers.	The largest providers of MRF services are in metropolitan areas. There is considerable geographic segmentation of industry operations, which can increase market concentration in specific areas, with many operators focusing on particular regions.	There are relatively few domestic recyclers with significant scale, but the number and scale of operations is increasing through infrastructure grant support from the NSW Government.
Market incentives/disincentives	There is no incentive for consumers to avoid putting contaminants in recycling bins. There are limited incentives for collectors to avoid breakages and cross-contamination. There is limited incentive for councils to ensure no contamination.	There is limited incentive for councils to monitor outputs of MRFs. The landfill levy provides an incentive to maximise recovery.	The landfill levy provides an incentive to maximise recovery.
Barriers to entry and competition	Capital intensive – sufficient fleet scale is needed for viable operations. Larger operators also have greater opportunity to optimise vehicle usage. Because solid waste collection is an essential basic service, consistency of supply is important. This means that established firms, with a good reputation and extensive operations, have a greater ability to reassure councils that services will be maintained without interruption. New firms therefore find it difficult to break into the market.	Capital intensive (advanced sorting technologies required). Declining prices for some materials, even when sorted (glass, paper). A lack of competition is evident, with MRF numbers limited in both metropolitan and regional areas. This, combined with high transport costs, restricts council access.	Capital intensive. Lack of guaranteed supply of quality feedstock. There is falling demand for some products/materials (especially glass containers).
Barriers to efficient markets	Significant fixed costs mean existing suppliers and entrants seek long term contracts for investment certainty. This limits flexibility in the face of changing markets. Geographic boundaries can also be present, as service providers need to have a physical presence in the locations where they provide services.	Contaminated/unsorted waste at source and breakages increase costs and greatly reduce the value of outputs. High transport costs to processors, especially from regional/rural areas. Asset ownership can be a source of flexibility (if assets are owned by councils) or a barrier to new entrants if key assets are privately owned.	High transport costs to recyclers, especially from regional/rural areas.
Information asymmetries (procurement, data collection, reporting and monitoring)	There is consumer uncertainty about what can be recycled and where recyclables go once they leave the kerbside. There is imperfect data on the quantity and quality of materials leaving the kerbside/entering MRFs – bin audit processes are inconsistent.	There is limited data on outputs from MRFs – quantity, quality and destination of materials. No agency is charged with this task. Councils have limited capacity. The timing of service procurement can have an important influence on cost to councils, particularly as the price of recyclable output can be volatile.	There is limited data on what material is being reprocessed and where. The timing of service procurement can have an important influence on cost to councils, particularly as the price of recyclable output can be volatile.

Source: IBISWorld, *Solid Waste Collection Services in Australia – Industry Report D2911*, March 2019, pp 18-21; Marsden Jacob Associates analysis.

Barriers to entry to the market for DWM services are highlighted by the high concentration of DWM service provision. For example, it is estimated that about 70% of waste collection services, 69% of MRF services and 98% of landfill services in Sydney are provided by the 3 largest service providers, respectively.

A.5 Procurement

Procurement of waste services by the private sector, and in some cases not-for-profits, is a significant function for local councils across NSW. Contracts are extensively used by local councils to procure these services. These contracts are usually adapted to suit the requirements of the local council area, however, there are many features of the contracts that are common. Contracted services include:

- ▼ Waste collections from residential premises (general waste/recycling/organics/bulky clean-up)
- ▼ Processing and resource recovery from general waste
- ▼ Processing of recyclables
- ▼ Processing of organics (garden organics and/or food waste)
- ▼ Processing/management of bulky clean-up waste
- ▼ Management of facilities (eg, landfills, recovery facilities, transfer stations, depots)
- ▼ Bulk haulage of waste
- ▼ Special services (eg, distribution of bins/food waste caddies, repairs and maintenance)
- ▼ Waste call centre services
- ▼ Development and/or delivery of community education.

Notwithstanding these common features, councils face a number of challenges and potential barriers to efficient procurement of waste services.

A.5.1 Lack of procurement experience

Local councils only procure major waste services every few years, unlike the waste service providers, who are routinely tendering and negotiating contracts. Lack of experience in procurement strategy, market analysis and contracts – experience required for effective contract negotiation – can present as a key challenge for council officers. Councils are reliant on there being a highly competitive marketplace to ensure they are achieving cost-efficient service outcomes.

However, as discussed in section A.4, there can be significant barriers to entry to the waste services market, which can limit competition and local councils' ability to minimise the cost of DWM service provision. For instance, in regional locations, if the incumbent service provider owns key infrastructure that does not revert to the council when the contract expires, this can be a material barrier to potential new entrants.

A.5.2 Legislated requirements

When local councils procure DWM services they must adhere to the Local Government Act. Two key principles govern the exercise of functions by councils under section 8A of the Local Government Act:

- ▼ Councils should carry out their functions in a way that represents the best possible value for residents and ratepayers, and
- ▼ Councils should work co-operatively with other councils to achieve desired outcomes for their communities.

Section 55 (Requirements for tendering) of the Local Government Act requires councils to invite tenders before entering into contracts, such as contracts for the supply of waste collection and processing services and the provision of waste processing facilities.

The *Local Government (General) Regulation 2005* stipulates a number of further requirements for proposed contracts for domestic or other waste management services. The requirement to invite tenders also applies to joint organisations of councils pursuant to section 400ZH (3)(c) of the Local Government Act.

A.5.3 Joint procurement by councils

Local councils may jointly procure DWM services. However, council groups routinely obtain ACCC authorisation to remove any risk of breach of the *Competition and Consumer Act 2010* (Cth) (CCA).

By conducting aspects of the procurement process jointly, councils risk breaching competition laws, as councils may be considered competitors when seeking to procure DWM services. In particular, there may be a risk of breaching the prohibitions against cartel conduct³⁵ and arrangements which have the purpose or effect of substantially lessening competition.³⁶

Council groups proposing to jointly procure DWM services often seek authorisation from the ACCC, which gives legal protection for the proposed conduct.

This requirement may be perceived as a barrier to joint procurement. However, the ACCC has approved joint procurement arrangements for more than 30 council groups, often for lengthy periods, in recognition of the public benefits of such arrangements. For instance, in 2018 the ACCC granted authorisation to Camden Council, Campbelltown City Council, Liverpool City Council, Wingecarribee Shire Council and Wollondilly Shire Council (the Applicants) to collectively tender and contract for waste processing services until 1 July 2044.³⁷

³⁵ Division 1 of Part IV of the CCA.

³⁶ Section 45 of the CCA.

³⁷ <https://www.accc.gov.au/update/accc-authorises-collective-waste-tendering-by-five-nsw-councils>.

A.5.4 Misalignment between length of contracts and the external operating environment

A number of issues arise with DWM service procurement because waste services are typically procured over the medium to long term (several years), but contracting arrangements need to be agile enough to react to a wide variety of influences, such as changing market and policy circumstances. This means that each contract is different to the last as the operating environment is continually changing.

Issues with DWM service contracts can arise from exogenous factors, such as:

- ▼ International market impacts (such as the impact of import and export bans)
- ▼ Regulatory changes regarding such matters as mixed waste organics outputs (in NSW)
- ▼ Introduction of the container deposit scheme
- ▼ Changes to insurance/liability requirements.

In addition to these external effects on waste management contracts, councils face challenges when negotiating contracts. Most particularly, capturing an agreement which all parties understand, and which supports an improved and innovative allocation of largely public monies, is challenging particularly when there can be many years between procurement actions by councils.

B. Results of 2019-20 LGCI survey relating to DWM

As part of IPART's 2019-20 LGCI survey, we asked councils about their DWM services, procurement and costs.

We asked councils:

- ▼ To describe the DWM services provided by the council
- ▼ What the council's policy on setting DWM charges is
- ▼ Whether the council outsources the processing and disposal of waste and if so, what procurement processes are in place
- ▼ The basis for cost allocation between the council's domestic waste and general operations
- ▼ What has been the financial performance of the council's domestic waste operation over the last two years.

This appendix presents results of the 2019-20 LGCI survey, as well as the results of further desktop research and analysis.

Notable limitations of the survey include that:

- ▼ Only about 52% of councils returned a response
- ▼ The majority of question responses were free text, resulting in responses that were not necessarily uniform in nature
- ▼ Not all responding councils provided a response to each question
- ▼ Given that councils self-reported, response bias is possible.

B.1 Survey results: Response rate

Table B.1 Survey responses by area classification

	Metropolitan	Regional	Rural	All councils
Number of councils	34	37	57	128
Number of councils that responded	28	20	19	67
Response rate (%)	82%	54%	33%	52%
% of councils that responded	42%	30%	28%	100%

Source: IPART 2019-20 LGCI survey results and IPART analysis.

B.2 Number of and average DWM charges

Table B.2 Number of different DWM charges for councils responding to LGCI survey

	Minimum	Maximum	Median	Average
Base DWM charges	1	13	3	4
Additional DWM charges	0	24	5	6
Total	2	34	9	10

Source: IPART 2019-20 LGCI survey results, individual council websites and IPART analysis.

Table B.3 DWM charges over time 2011-12 to 2017-18 (average DWM charge (\$/year))

Average DWM charge (\$/year)	2011-12	2017-18	% change from 2011-12 to 2017-18	Average annual % change	% of bill (ie, residential rate & DWM charge)
Metropolitan councils					
Number of councils	43	33			
Average annual DWM charge	348	469	35%	6%	29%
Average annual residential rate	881	1121	27%	5%	
Regional councils					
Number of councils	38	36			
Average annual DWM charge	268	349	30%	5%	25%
Average annual residential rate	854	1,100	29%	5%	
Rural councils					
Number of councils	71	56			
Average annual DWM charge	230	367	59%	9%	33%
Average annual residential rate	470	616	31%	6%	
All councils					
Number of councils	152	125			
Average annual DWM charge	273	388	42%	6%	29%
Average annual residential rate	682	889	30%	5%	

Source: OLG time series data, and IPART analysis (not including inflation).

B.3 Survey results: Outsourcing

Table B.4 Percentage of councils that report outsourcing DWM services

	Metropolitan	Regional	Rural	All councils
Fully outsource	64%	30%	21%	42%
Partially outsource	29%	65%	47%	45%
No outsourcing	7%	5%	32%	13%
Total	100%	100%	100%	100%

Source: IPART 2019-20 LGCI survey results and IPART analysis.

Table B.5 DWM service type outsourced by outsourcing councils, by area classification

Outsourced DWM service	Metropolitan	Regional	Rural	All reporting councils
Collection/transportation	69%	58%	77%	67%
Recycling processing	73%	89%	62%	76%
Organics processing	62%	63%	0%	48%
Landfill/waste disposal	77%	26%	38%	52%

Note: Not all councils provided responses to this question.

Source: IPART 2019-20 LGCI survey results and IPART analysis.

Table B.6 Procurement approach used by outsourcing councils, by area classification

	Metropolitan	Regional	Rural	All councils
Mixed model	25%	80%	58%	51%
Open tender only	39%	5%	0%	18%
Select tender only	4%	0%	0%	1%
Regional-based tendering arrangement only	0%	5%	5%	3%
Unknown tender arrangement	25%	5%	5%	13%
Not applicable	7%	5%	32%	13%
Total	100%	100%	100%	100%

Note: Mixed model procurement involves more than one type of procurement approach. "Open tender" refers to a competitive procurement approach open to all. "Select tender" refers to a procurement approach where tenders are sought from a selection of providers. Some regional councils undertake procurement in groups using a "regional-based tendering arrangement".

Source: IPART 2019-20 LGCI survey results and IPART analysis.

B.4 Survey results: basis for cost allocation

Table B.7 Basis used for cost allocation between the council's DWM and general operations

All reporting councils	
Historical % allocation	33%
Corporate overhead model	53%
Cost recovery basis	13%
Total	100%

Note: Not all councils provided responses to this question. A "historical % allocation" means that costs are allocated based on a set percentage. Under a "corporate overhead model" costs are allocated based on a measurable unit, eg, the number of staff and/or ICT costs. A "cost-recovery basis" recovers specific costs involved.

Source: IPART 2019-20 LGCI survey results and IPART analysis.

B.5 Survey results: reported surplus/deficit

Table B.8 Survey respondents reporting surplus/deficit for DWM services (\$2018-19)

	2017-18				2018-19			
	Metro	Regional	Rural	All reporting councils	Metro	Regional	Rural	All reporting councils
Surplus								
Number reporting surplus	23	14	16	53	25	12	13	50
% reporting surplus	82%	70%	84%	79%	89%	60%	68%	75%
Sum of surplus ('000)	79,154	15,212	5,055	99,421	56,569	17,141	7,144	80,854
Average surplus ('000)	3,441	1,087	316	1,876	2,263	1,428	550	1,617
Average surplus per household	55	37	95	52	40	48	134	44
Deficit								
Number reporting deficit	5	6	3	14	3	8	6	17
% reporting deficit	18%	30%	16%	21%	11%	40%	32%	25%
Sum of deficit ('000)	-10,616	-5,310	-270	-16,196	-1,086	-5,482	-432	-7,000
Average deficit ('000)	-2,123	-885	-90	-1,157	-362	-685	-72	-412
Average deficit per household	-54	-26	-17	-39	-5	-21	-28	-15

Source: IPART 2019-20 LGCI survey results and IPART analysis.

Table B.9 Use of reserves held in DWM fund by councils in surplus, by area classification

	Metropolitan	Regional	Rural	All councils
Replace capital eg, DWM plant, trucks	40%	17%	31%	32%
Capital works eg, expansion/upgrade of facilities	40%	50%	69%	50%
Site remediation	20%	58%	31%	32%
Precautionary reserve	24%	33%	0%	20%

Note: Not all councils provided responses to this question.

Source: IPART 2019-20 LGCI survey results and IPART analysis.

B.6 Survey results: DWM operational costs

Table B.10 Council operational costs for DWM services (2017-18 and 2018-19)

	% of costs			
	Metropolitan	Regional	Rural	All councils
Expenses from continuing operations	95%	95%	91%	95%
▼ Employee benefits and on-costs	12%	12%	24%	13%
▼ Materials and contracts	63%	55%	55%	60%
– Raw materials and contracts	5%	15%	21%	9%
– Contractor and consultancy costs	53%	35%	21%	46%
– Remuneration of auditors and legal fees	0%	0%	0%	0%
– Operating leases	0%	0%	0%	0%
– Other	5%	5%	13%	5%
▼ Other expenses	20%	27%	12%	22%
– Electricity (including street lighting)	0%	0%	0%	0%
– Emergency services levy	10%	19%	4%	13%
– Other	10%	8%	8%	9%
Infrastructure, property, plant and equipment	5%	5%	9%	5%
▼ Buildings	0%	0%	2%	0%
▼ Infrastructure – roads, bridges and footpaths	2%	4%	4%	2%
▼ Plant and equipment – machinery	3%	1%	4%	3%
▼ Furniture and fittings	0%	0%	0%	0%
▼ Office equipment	0%	0%	0%	0%
Total	95%	95%	91%	95%

Source: OLG data, 2017-18 and 2018-19, IPART 2019-20 LGCI survey results and IPART analysis.

Table B.11 Reporting councils' overheads as a percentage of expenses by area classification (2017-18 and 2018-19)

	Metropolitan	Regional	Rural	All reporting councils
Overheads as % of reported DWM expenses	65%	47%	45%	59%
Overheads as % of reported residential rates expenses	43%	37%	33%	41%

Note: We considered "overhead expenses" to include "Employee benefits and on-costs", "Contractor and consultancy costs", "Remuneration of auditors and legal fees", "Operating leases" and "Electricity".

Source: IPART 2019-20 LGCI survey results and IPART analysis.

ITEM-5 NOM 24/03/20 - THE FUTURE FOR WASTE

**COUNCILLORS: D CLAUSEN, M BYRNE, C DUNCAN, N NELMES, E WHITE
 AND P WINNEY-BAARTZ**

PURPOSE

The following Notice of Motion was received on Tuesday 10 March 2020 from the abovenamed Councillors.

MOTION

That City of Newcastle:

- 1 Notes the long-awaited release of two Issues Papers (Cleaning Up Our Act – The Future for Waste and Resource Recovery in NSW & Redirecting the Future of Plastic in NSW) by the NSW Government on 8 March 2020 (Attached)
- 2 Notes that City of Newcastle paid \$32.7 million in the s88 waste levy in the last financial year, and received \$176,290 in NSW Waste Less, Recycle More grants (equal to just 0.6% of waste levy paid).
- 3 That Council makes a submission to both Issues Papers, consistent with its previously adopted positions, encouraging:
 - a. State funding to support waste avoidance and recovery, including grants to support councils with major capital investments (including by reinvesting the \$800 million S88 Waste Levy into recycling);
 - b. The development of a local circular economy, and support for local manufacturing using recycled product;
 - c. Deliver consistent education campaigns to promote waste avoidance and recycling;
 - d. Introduce producer responsibility schemes for problematic materials.

BACKGROUND

Nil.

ATTACHMENTS

NOM Item 5 Attachment A: Cleaning Up Our Act: Redirecting the Future of Plastic in NSW:

<https://s3.ap-southeast-2.amazonaws.com/hdp.au.prod.app.nswdpie-yoursay.files/6115/8338/7047/19p2034-nsw-plastics-plan.pdf>

NOM Item 5 Attachment B: Cleaning Up Our Act: The Future for Waste and Resource Recovery in NSW:

<https://s3.ap-southeast-2.amazonaws.com/hdp.au.prod.app.nswdpie-yoursay.files/7515/8338/8082/19p2036-cleaning-up-our-act-20yr-waste-strategy.pdf>



LOCAL
GOVERNMENT
NSW



APR
2022

SUBMISSION

IPART Draft Report - Review of Domestic Waste Management Charges



LOCAL GOVERNMENT NSW
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OPENING

Local Government NSW (LGNSW) is the peak body for local government in NSW, representing NSW general purpose councils and associated entities. LGNSW facilitates the development of an effective community-based system of local government in the State.

LGNSW welcomes the opportunity to make a submission on the Draft Report - Review of Domestic Waste Management Charges (Draft Report) as this is a matter of significance to all NSW councils as well as a range of other stakeholders within the local government sector.

LGNSW has consulted with a wide range of councils and other stakeholders to help inform the content of this submission.

This submission was endorsed by the LGNSW Board in July 2022.

BACKGROUND

In May 2020, IPART initiated a review of the local government Domestic Waste Management (DWM) Charge after being informed that the Office of Local Government (OLG) had ceased auditing the reasonable cost basis of these charges in 2016-17. After surveying councils on DWM expenses and services for the 2017-18 and 2018-19 financial years as part of the 2019-20 Local Government Cost Index (LGCI), IPART found that DWM charges had risen significantly in recent years and that they vary significantly across councils and between similar councils as defined by OLG groupings. IPART has therefore proposed an approach to reduce variation in DWM charges.

WHAT HAS IPART RECOMMENDED?

IPART's [Draft Report](#) (2021) states that in order to protect ratepayers and to assist councils in setting DWM charges IPART proposes to:

1. Release an annual 'benchmark' waste peg.
2. Publish an annual report that highlights councils whose DWM charges have increased by more than the benchmark waste peg and include the councils' explanations for the increases.
3. Recommend OLG provide guidance to councils through pricing principles in their Council Rating and Revenue Raising Manual on how to set charges to reflect reasonable costs.

The Draft Report superseded the approach proposed in IPART's 2020 [Discussion Paper](#), which recommended adoption of pricing principles by councils and instead of a proposed DWM peg recommended setting a monitoring, reporting and benchmarking regime.

IPART's pricing principles would be applied via the Council Rating and Revenue Raising Manual to 'rebalance' costs attributed between the DWM charge and general rates, with a one-off variation to councils' general rate base allowed in 2022/23 or 23/24. IPART would monitor 'like for like'

councils against their benchmarks and report on outlier councils each year, with outliers triggering a requirement to justify the variation or face potential regulatory response.

Following discussions with IPART the local government sector understands that ‘doing nothing’ or maintaining ‘business as usual’ (BAU) is not an option, and that local government needs to indicate a preference for the proposal in the Draft Report or propose an alternative approach. Consultation with councils has determined that utilising the existing mechanisms for setting DWM charges is potentially an option and that if this is not likely to be considered by IPART then councils have a strong preference to not adopt the proposed peg and accompanying measures.

LGNSW POLICY PLATFORM

LGNSW’s Policy Platform consolidates the voices of councils across NSW, reflecting the collective positions of local government on issues of importance and guiding LGNSW in its advocacy on behalf of the local government sector. The following provisions of the [Policy Platform](#) are relevant to this review of DWM charges.

- A) Local government is a partner in the economic stewardship of NSW and responsible for the provision of a wide range of essential infrastructure and services. However, the financial sustainability of councils has been undermined by rate pegging for over 40 years, which has resulted in the under-provision of community infrastructure and services and the deferral of infrastructure maintenance and renewal expenditure resulting in significant infrastructure backlog.

LGNSW advocates for:

- Greater autonomy in determining fees and charges.

- B) Councils provide waste, recycling and resource recovery services to the community, provide and operate recycling and disposal infrastructure and work tirelessly to reduce the amount of waste ending up in landfill by educating residents, businesses and schools about waste avoidance and recycling. Councils continue to face significant challenges from increasing waste generation and lack of markets for Australian recycled content.

All levels of government, as well as business and the community need to work together as we move to a more circular economy where materials and products remain within the economy for longer and waste is reduced.

LGNSW advocates for:

- Clear policy direction with regulatory certainty, achievable targets and implementation and funding pathways for delivery through e.g. the NSW Waste Strategy, National Waste Policy, COAG targets.

RESPONSE

There are significant challenges and changes afoot for local government in preparing and transitioning their communities to a new waste paradigm as envisaged by the NSW Government's Waste and Sustainable Materials Strategy 2041 (WaSM). This will require many councils to introduce new or enhanced waste services to deliver against the Strategy's objectives and targets.

Add to this the challenges of new waste export bans, significant fuel price increases and transport costs. Coupled with the lasting impacts of bushfire, flood and pandemic and it is clear that now is not the time to further complicate and hamstring councils as they service their communities.

IPART has identified concerns around a lack of transparency for residents on pricing, inconsistency of charges across councils for similar services and inconsistent cost allocations between the DWM charge and general rates. LGNSW is of the strong view that the solution should therefore focus on supporting councils to address the fundamental source of any concerns rather than introducing further regulatory measures such as a benchmarking or a peg.

Updated and clearer guidance on what should be included (or excluded) from the DWM charge is the simplest and most efficient way to provide transparency to residents and consistent allocation of costs. The current definitions and guidance on what should be included in the DWM charge are outdated and do not reflect modern waste management activities, nor provide for the future waste services which are likely to be required in line with the transition to a circular economy as per the NSW Government's vision outlined in the WaSM.

The first step should therefore be to update definitions (such as 'domestic waste management service') in the *Local Government Act 1993* and in the associated *Council Rating and Revenue Raising Manual*.

Consistency of costs for similar services across councils will also be supported by the above updates. However, it must be noted that service costs are influenced by factors that are both variable and fixed, the latter including proximity of councils to markets and waste infrastructure and subsequent transport costs. The lack of competition in the waste sector is also a factor over which councils have little control. Support for market development, innovation and increased competition is required, and these sit beyond the realm of IPART.

LGNSW also considers that some of IPART's Draft Report recommendations go beyond IPART's remit. For example, the Minister's delegation under the Local Government Act does not provide for councils to report to IPART on their waste charges or other activities. We note IPART has acknowledged this in its Draft Report through the statement "Our delegated powers cannot respond to many of the issues raised. We can only set an annual limit on the extent to which councils' DWM charges may be varied" (pp18).

With regards to transparency for residents, there are existing mechanisms for engaging and reporting to the community on DWM charges and waste services which are outlined in the section below. These include the Integrated Planning & Reporting (IP&R) process as well as the publication of council fees and charges, and auditing by the Office of Local Government or the

NSW Audit Office. Again, the focus should be on ensuring the appropriate use of these mechanisms rather than introducing blunt instruments such as a peg or one-off adjustments.



Recommendation 1: LGNSW strongly recommends that IPART not introduce a DWM charge peg or any other benchmark given the significant threat this would pose to delivery of the NSW Government’s waste strategy, and because a peg in and of itself does little to address IPART’s concerns around consistency and transparency.



Recommendation 2: LGNSW recommends that IPART and the Office of Local Government work with local government to update the definitions and guidance relating to the DWM charge in light of current reforms to the Rating Manual and the Resource Recovery framework.

RATIONALE FOR POSITION

In 2010 the Minister for Local Government delegated to IPART the function of determining the rate peg and minimum rates, approving special rate variations, and the function of varying annual domestic waste management charges. LGNSW understands that IPART’s powers with respect to varying the DWM charge are limited by the constraints of the delegation from the Minister of Local Government under s507(2) of the Local Government Act. The delegation currently only allows for IPART to set an annual limit on the extent to which councils’ DWM charges may be varied. IPART acknowledges this constraint within the Draft Report.

As such LGNSW is of the view that IPART’s remit is limited to the implementation of a ‘peg’ and could in fact, not mandate councils to undertake any additional reporting as proposed within the Draft Report. Imposing a reporting condition would be introducing a regulatory measure into a fund-raising mechanism. Any requirement for reporting would require a regulatory change.

The Minister for Local Government has not requested this current review of the DWM charge, and IPART identifies in the Draft Report that it commenced the review in response to notification in 2019 that OLG had ceased conducting audits of the reasonable cost basis of DWM charges in 2016–17. Therefore, IPART deemed it necessary to investigate the level of DWM charges across NSW and asked councils to report on their DWM expenses and services for the 2017–18 and 2018–19 financial years as part of the 2019–20 Local Government Cost Index (LGCI) survey to inform this process.

LGNSW calls upon IPART to acknowledge the significant challenges facing local government and the existing avenues for community transparency (including IP&R reporting) and suspend the proposed reforms. We support a focus from IPART to identify and work with councils that are not complying with the Pricing Principles and to leave compliant councils to continue delivering quality services that meet the needs and service preferences of individual communities.

EFFECTIVE MECHANISMS EXIST

IPART has made the assertion that BAU when setting future DWM charges is not an option. However, councils already have a toolbox of measures available to them to ensure that they meet or exceed community expectations whilst achieving State and Federal waste targets. Indeed,

there are many examples where councils' efficient use of the DWM charge has delivered an increasing range of domestic waste programs – demonstrating innovation, circular economy principles, improved resource recovery and of course improved environmental outcomes. As such to suggest that BAU is an ineffective method of determining the DMW charge is disingenuous.

Some of the measures currently used successfully by councils include:

- The Integrated Planning & Reporting (IP&R) process which sets up the mechanisms for councils to engage with their community on appropriate DWM costs. Through this process local communities have full visibility across all waste fees and charges and can provide detailed feedback for councils' consideration. This mechanism also supports the need for councils to have flexibility when determining service standards and associated costs. The IP&R process also requires councils' financial statements to be independently audited ensuring probity and transparency.
- All NSW councils are networked via membership of Regional Organisation of Councils (ROC), Joint Organisations (JO) and voluntary waste organisations which not only facilitate joint contract negotiations, but these networks also create opportunities to limit costs and facilitate consistency in regional waste delivery. Such networks enable councils to compare services with neighbouring councils often resulting in additional efficiencies.

Local government procurement policies set out guidelines for purchasing and tendering to ensure communities receive best value for money. OLG has also foreshadowed a review of the Local Government tendering guidelines in 2022. The new procurement guidelines will provide guidance on how councils can use procurement to further the community goals identified through the IP&R process and as a social and economic development tool.

Revisiting the definition of 'best value' could further improve procurement outcomes however this is considered a separate matter.

There are existing reporting mechanisms which ensure the transparency of reporting the DMW charge and the details of services which are funded:

- A comparison of council services including DWM costs are already included in the Your Council website <https://www.yourcouncil.nsw.gov.au>.
- Annual Operational Plan public exhibition period and council deliberations.
- Fees and charges made publicly available on individual council websites.
- The OLG has the power to monitor DWM charges to ensure that they reflect reasonable costs.

FACTORS INFLUENCING COSTS

There needs to be recognition of the extraordinary factors that will continue to influence the delivery of waste services and councils' ability to meet community expectations. These include but are not limited to:

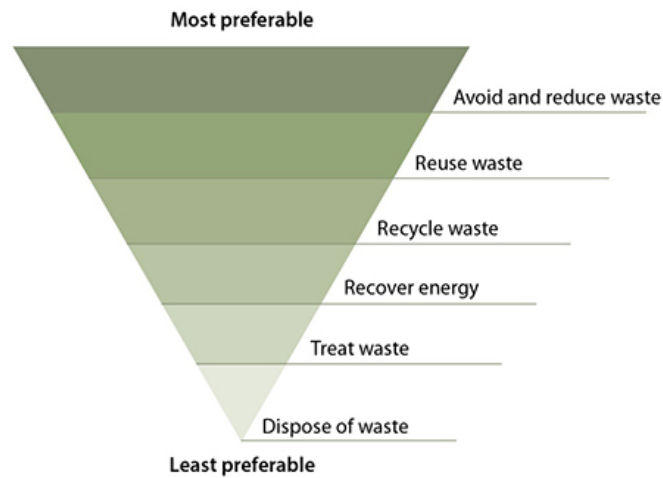
- The rollout of the Waste and Sustainable Materials Strategy (WaSM) which includes the inclusion of a mandated food and garden organics collection service for all NSW councils by 2030 alongside substantial changes to the funding model for future projects.
- The lasting effects of the China Sword policy, the Basel Convention and current/future bans on the export of other waste materials.

- The NSW Government's current review of the NSW resource recovery framework which will likely see definitions of key terms (such as 'waste') altered amongst other changes to the framework. There is concern that this review could result in changed service costs for councils.
- Increasing costs and overheads for councils including fuel and electricity. This is coupled with uncertainty around future increases because of COVID-19, disruption to global supply chains and compounding local economic pressures.
- Increasing staff wages which will increase by 2% in accordance with the Local Government Award on 1 July 2022. In addition, the 0.5% superannuation increase taking effect from 1 July will also add to councils' overheads.
- The impact of the 0.7% baseline rate peg handed down by IPART for this year which is likely to result in a significant shortfall sector-wide over the next financial year – estimated at up to \$100 million before an Additional Special Variation process was made available to councils.
- Increasing concern around climate change impacts which continue to influence community sentiment towards sound environmental management including waste and resource recovery.
- Circular economy policy direction to minimise resource loss whilst driving innovation and opportunity.
- The increasing cost of managing waste resulting from climate change driven natural disasters.
- The role and influence of existing monopolies within the waste industry which limit councils' capacity to negotiate contract costs, despite endeavours to undertake joint procurement.
- Increases in the superannuation guarantee levy which can lead to increasing contract costs.
- Anticipated high costs and extended lead times for the approval and construction of new disposal facilities.

In addition, IPART's approach to the DWM charge reflects a linear waste model and does not reflect the innovation and different way of thinking that is necessary for transitioning to a circular economy. Transitioning to a circular economy underpins the WaSM and is the NSW Government's stated policy direction for better managing our resources and minimising waste. It will potentially require councils to undertake activities beyond what IPART (and the definitions in the Local Government Act and Rating Manual) currently considers are included as part of 'domestic waste management'.

The waste hierarchy sets out the priorities for waste disposal in Australia and demonstrates the preferred methods of waste disposal. It is a commonly utilised tool to enable the prioritisation of waste services. Waste avoidance and reduction are the preferred mechanisms to efficiently manage waste and for councils this means increasing the community education and programs that are designed to drive down waste generation. Such programmes are not currently included in the list of those that could be funded under the DWM charge which is a cause for concern for many councils.

Figure: The Waste Hierarchy



Source: <https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/warr-strategy/the-waste-hierarchy> (accessed 26 April 2022)

PROPOSED DOMESTIC WASTE PEG

In its Draft Report IPART proposed undertaking the following actions to protect ratepayers and to assist councils in setting DWM charges:

1. Release an annual 'benchmark' waste peg.
2. Publish an annual report that highlights councils whose DWM charges have increased by more than the benchmark waste peg and include the councils' explanations for the increases.
3. Recommend OLG provide guidance to councils through pricing principles in their Council Rating and Revenue Raising Manual on how to set charges to reflect reasonable costs.

LGNSW understands the proposed peg approach to involve:

- Publishing annually a DWM charge peg (1.1% for 2022-23) that gives guidance on how much the reasonable costs of providing DWM services have changed over the previous year.
- The peg to be calculated based on a Waste Cost Index (WCI) considering a basket of 26 items taken from DWM expenditures in 2017-18 and 2018-19, IPART's Local Government Cost Index (LGCI) which determines the weight of each expenditure item to the total value of the basket, and ABS price indexes to measure changes in wage costs, producer and consumer indexes.
- Publishing an annual report on councils that have increased their DWM charges beyond the annual peg, and those councils' justifications for doing so.
- The Office of Local Government (OLG) publishing pricing principles in their *Council Rating and Revenue Raising Manual* on how to set DWM charges to ensure they reflect the costs of providing the service and best value for ratepayers.

LGNSW and the local government sector have significant concerns about this approach and what it will mean for local councils in the future. The primary, overarching concern being that the non-binding 'benchmark' peg for 2022-23 may become a fixed or hard peg in future as there has been no guarantee that this will not occur. The proposed peg approach has the following negative implications:

- a) It will incentivise councils to restrict domestic waste services to minimum requirements and to prioritise cost over innovation and delivering best-practice services.
- b) It poses a significant barrier to delivery of council targets and the WaSM targets, and the services required to achieve those.
- c) The peg of 1.1% may be calculated based upon flawed data. The calculation also uses historical data rather than forward projections to reflect future needs. We note that the peg of 1.1% is not based on an agreed Waste Cost Index, furthermore, there has been no consultation on the development of an index.
- d) It increases risk to the successful roll-out of new services such as food organics and garden organics (FOGO), which the EPA has mandated by 2030. The South Sydney Region of Councils (SSROC) 2021 regional Food Organics, Garden Organics (FOGO/FO) feasibility study indicates that introducing FOGO will cost on average \$15.54 million per council in year 1, or an 8% increase in the cost of providing red-lidded and green-lidded bin services. The EPA's Organics Collection Grant program offers on average \$0.76 million per council if we assume the total \$65 million available is divided equally between all councils that have not yet adopted FOGO. Therefore, introducing FOGO will require councils without a sufficient waste reserve to raise DWM charges well above 1.1%.
- e) As the peg uses historical data, it does not reflect the real costs being faced by councils in the coming year. For example, the 1.1% waste peg proposed for 2022-23 does not reflect an increasing CPI currently at around 4%.

Some councils have reported that the proposed peg has already created internal pressure to reduce costs while continuing to deliver a high-quality service, thus creating an unsustainable situation. Many councils have consulted their communities as part of their strategic planning and identified a strong community expectation for higher resource recovery and, in many cases, a willingness to pay for additional services.

- a) The peg further entrenches the gap between councils with relatively low DWM charges and councils with relatively high DWM charges, allowing the latter to continue levying relatively higher charges and increasing these at a higher annual increment than councils with lower DWM charges.
- b) As more councils inevitably exceed the voluntary peg, pressure will build on IPART to make the voluntary peg mandatory.
- c) There are concerns around increased reporting which will require resourcing, taking up valuable staff time.

CASE STUDIES

There are unique challenges facing councils that are likely to be different across metropolitan, regional or rural council areas. Whilst many of the challenges being faced across the local government sector are common to all councils it is equally clear that depending on the model of waste service provision in place, that councils will be impacted by factors such as rising wage and transport costs to varying degrees.

Without oversimplifying the challenges, a metropolitan council may face significant difficulties in acquiring land for waste facilities, managing waste transportation on busy urban roads, be faced with rising contract costs and increasing community expectations to deliver resource recovery outcomes. In a regional area the greatest challenges a council can face may come from covering wage costs to retain employment and delivering waste services to remote villages. In remote areas small rate bases will often dictate the level of service provision which can be delivered.

The LGNSW position is that the proposed domestic waste peg is not considered suitable for all councils, however the reasons why this is the case may differ between councils. The following brief case studies seek to highlight the diversity of waste services across urban and regional communities.

Case Study – Regional Councils

Regional councils across NSW will typically deliver waste services to communities comprising an urban centre, a rural fringe, villages and rural outlying areas. However not all residents will contribute to the DWM charges and this alone creates additional challenges for such councils under the proposed peg approach.

Many regional councils were early adopters of food and garden organic collections and will deliver a kerbside collection service which covers weekly waste, weekly food and garden organics and a fortnightly recycling collection. Waste services are commonly delivered through a combination of council staff and contractors.

Council staff can be employed in waste collection roles as well as to deliver administrative and community education functions in addition to providing management support. Council staff also undertake litter management functions, illegal dumping campaigns, service rural transfer stations, manage public place waste and undertake/support waste avoidance and reduction programs covering e-waste, soft plastics and hazardous wastes.

In terms of council staff wages, in the 2022/23 financial year alone costs are expected to increase by 2% under the Local Government Award, staff on KPI performance programs could receive a further 2.5% wage increase, and councils must also fund the 0.5% superannuation increase. These increases already exceed the proposed 1.1% peg rate, without considering any additional on-costs due to rising costs of fuel and electricity.

Regional populations increasingly expect more from council, in part due to ‘tree-change’ population movements where communities begin to expect that services will match those available in large urban centres. Community concern around climate change on the back of recent droughts, floods and bushfires also influences expectations. However, the COVID-19 pandemic and economic impacts of drought and other natural disasters have affected councils' income and may place limitations on the desire to increase general rates. These factors are likely to combine over the coming financial year and beyond to place increased pressure on council budgets and potentially negatively impact the range of services that councils can provide, putting downward pressure on service standards.

At the same time regional councils face the limitations of contractor availability to manage kerbside collections and offer other services such as e-waste collections. Costs are increasing as co-mingled kerbside recycling is transported to Sydney for processing and councils often do not have the large waste volumes required to negotiate favourable variations.

Regional councils typically will need reserves to cover remediation of existing landfill sites, reserves for future landfills and potentially additional rural transfer stations. Reserves could and recently have been impacted by the need to manage an increase in disaster waste at short notice or to co-fund a grant application covering critical waste infrastructure.

The range of complexities faced by regional councils when delivering waste services have been summarised below:

- The size of rate base from which councils can levy DWM charges against the area which they must deliver waste services.
- Landfill charges and fee structures – these can differ widely outside the levy paying area and are often attuned to communities' capacity to pay and illegal dumping challenges.
- Contracted kerbside services and processing charges including transportation costs.
- The length and terms of waste contracts which are typically long, and rural and regional councils are often obliged to enter joint contracts to maximise waste volumes to engage a contractor.
- The need to introduce new services or new and upgraded waste facilities because of regulatory changes and new legislation.
- The purchase of new or large fleet items, and the time to budget for them.
- Council population, size, and the service activities it provides.
- Geographical location, remoteness, and socio economics.
- Suitable fund reserves and future works.

Regional councils are committed to implementing or delivering the necessary core waste services whilst also delivering fit for purpose localised services. This commitment to delivering high quality waste services coupled with the many factors influencing council's capacity to deliver these services highlights why the proposed peg is not considered a suitable option for regional councils.

Case Study – Metropolitan Councils

Metropolitan councils are likely to have a different set of factors impacting their capacity to deliver waste services whilst also managing some of the challenges which are consistent across all NSW councils. Rising waste contract costs are going to have a significant impact on many councils as will the costs of commencing new services, primarily food or food and garden waste collections as per the WaSM mandate.

A snapshot of costs from the 2019/20 financial year, detailed below, are indicative of several councils and highlight the significant cost pressures on metropolitan councils.

These cost increases are projected based upon a 'business as usual' model and don't factor in any significant changes to services such as the mandated FOGO services. Such increases are likely linked to a reliance on contracted services and the issues often due to a heavy reliance on contracted labour and services.

- Actual costs for waste services increased on average 5.76% per year over the last three years.
- Council real costs increased from 3.22% (lowest) to 8.01% (highest) across a number of councils, all far exceeding the proposed peg.
- Contract and tipping costs make up on average 83% of some Sydney metropolitan councils' waste services costs, compared to 78% noted in the IPART report. Waste Processing and disposal costs (tipping) alone increased between 8% and 10% across councils and resulted in an average 3.29% increase in budget costs.
- Contract costs alone have seen a contributing price increase of 1.84% over the previous two financial years.
- Council level data shows significant fluctuations year on year in expenditure on capital, plant and materials, demonstrating the difficulty restraining spending under a cap for significant and one-off plant and infrastructure purchases.

In addition to these costs many metropolitan councils will need to roll out a new food and/or garden waste collection by 2030 in line with the WaSM mandate. This will come at a substantial cost and many of the necessary expenditure items will not be covered by the DWM charge under the proposed peg. Costs such as trials, community education and compostable caddy liners which are essential to the successful commencement of a food waste service may not be eligible costs and as such will form part of the increased costs to council.

Finally, councils located within the levy paying area are already concerned about the loss of Better Waste Funding under the WaSM strategy. This funding has covered the cost of staff and program delivery for many councils across littering and illegal dumping projects over an extended period. Councils have become reliant on this external funding to deliver these important projects, projects which have no opportunity for cost recovery through other means. This coupled with the decrease in non-contestable funding across all WaSM priority areas will have a real and lasting impact on even the most well-resourced metropolitan councils.

In one example a NSW Council that introduced a third organics bin and had outlaid \$7 million in capital expenditure to build the infrastructure necessary to process the contents of the organic collection had to increase its DWM charge by \$90 per service per annum to cover the additional associated costs.

In addition to the increased costs associated with the commencement of new services, there are other concerns resulting from the impacts of the proposed peg which include the necessity to invest further council time and resources in debating increased costs in a public forum. In metropolitan communities, highly mobilised and engaged community members can fuel public debate about councils' fees and charges which in turn takes already stretched resources away from delivering waste services to communities.

THE REBALANCING APPROACH

In August 2020 IPART released the DWM charge review Discussion Paper, which proposed:

- Benchmarking waste-related costs across councils;
- OLG to publish pricing principles in their *Council Rating and Revenue Raising Manual* on how to set DWM charges to ensure they reflect the costs of providing the service and best value for ratepayers;
- Councils to rebalance DWM income and expenses with general rates in line with the pricing principles with the aim of shifting overheads not consistent with the pricing principles to general rates; and
- Councils undertake annual reporting via a simple and streamlined spreadsheet.

It is the position of LGNSW that there is no net benefit to ratepayers from the rebalancing approach. Under this approach, councils would have a 2-year grace period to rebalance the DWM charge with general rates based on clear pricing principles. The general rates base peg would be applied to the new level of general rates after rebalancing. Total council revenue would thus be unaffected as this would merely shift some costs from one journal to another. IPART indicated it would only regulate by exception those councils that exceed the average DWM charge after rebalancing by about 15%. Shifting costs from one ledger to another does not allow for pricing signals to reflect the true cost of waste services, in the water industry ensuring that users pay for what they receive has helped to positively influence how the community values resources.

Of the two options contemplated by IPART (proposed peg or rebalancing), and notwithstanding IPART's limited powers under delegation, rebalancing is the "least worst" option. However local government's concerns with this proposed approach include, but are not limited to:

- a) Some council waste costs may vary significantly from benchmarked costs due to service level, density, demographics, and timing of service introductions compared to other councils, etc.
- b) According to IPART's proposed delineation, the costs of managing illegal dumping would be accounted for as an unbooked clean-up and combined with clean-up costs. However, some councils do not know the cost of illegal dumping on its own as trucks generally do not have scales, it is sometimes combined with clean-ups and is often ad-hoc.
- c) Only those education costs related to waste and recycling can be included in DWM charges, which means the portion of costs of an educator's time dedicated to non-waste issues such as environment and sustainability, and education campaigns not directly related to delivering waste services, could not be included in the DWM charge. This broader engagement and education is often critical to fostering the necessary understanding and behaviour change to achieve waste avoidance, reduction and recovery targets.
- d) Where activities are re-allocated to sit under general rates, there is strong concern that the relative priority of those activities will diminish when having to compete with other activities in general rates, e.g. education campaigns to reduce illegal dumping or avoid the generation of waste, or funding contributions towards Regional Illegal Dumping Squads.

- e) Councils, especially those in regional and rural areas would express concern if there were any risk to employment of waste staff through the rebalancing approach. Surety of employment is critical now more than ever and is necessary for the continued delivery of waste services.
- f) IPART does not have the authority to set policy or require the reporting by councils that this option would require to be effective. That these proposals are outside of IPART's remit should be considered alongside the implications of the rebalancing option.

PRICING PRINCIPLES

Local government generally supports the concept and intent of pricing principles and would in due course welcome updated, realistic and considered guidance on how they should be applied. This will further improve transparency and increase certainty that they are being consistently applied. However key stakeholders should be driving the review of the pricing principles, incorporating a future focus.

It is understood that the *Council Rating and Revenue Raising Manual* is slated for update as part of the broader rating reforms, and that would be the appropriate time for IPART to prompt the inclusion and application of pricing principles.

IPART's Draft Report asks whether the pricing principles "will assist councils to set DWM charges to achieve best value for ratepayers". This question assumes that councils are not already seeking to achieve best value for ratepayers – an unfounded and incorrect assumption. Councils are constantly seeking out the best way to deliver the community's expected services in the most efficient way, to maximise the return to ratepayers. There is no benefit in councils operating inefficiently as it jeopardises their ability to deliver expected community services, and only results in criticism.

Local government supports IPART's suggestion of further detailed examples being included in the *Council Rating and Revenue Raising Manual* to assist in implementing the pricing principles. Examples covering WaSM priorities such as FOGO services or additional collections from multi-unit dwellings for textiles and other emerging priority waste streams would be useful. Note that the examples should serve to demonstrate how the principles are applied, and not necessarily provide the exact formula for all services as these will vary between councils.

PRINCIPLE 1

DWM revenue should equal the efficient incremental cost of providing the DWM service

The intent of this principle is accepted, however it is the definition of DWM service that requires further detail and consideration. The current definitions and guidance provided by the Local Government Act and the *Council Rating and Revenue Raising Manual* are dated and do not reflect modern waste management. As already noted, they do not reflect the Government's current policy direction of converting from a linear waste model to a circular economy.

Given the pace of change in this area it is recommended that once updated, the definitions and guidance on the DWM charge be reviewed every 5 years to maintain currency and reflect real-world conditions.

Updating the definitions and guidance will provide a more definitive list of what costs should be attributed to the DWM charge vs general rates. It is critical that local government drives formulation of the list as they are most familiar with the day to day activities in this area.

IPART's Draft Report includes examples of what activities should be included in the DWM charge. In addition to those activities, local government recommends the following activities should also be included:

- Illegal dumping clean-up costs, particularly where the material predominantly arises from residential sources. For example, councils report that 100% of illegal dumping in some eastern Sydney councils is household waste.
- Broader waste avoidance education, not just focussing on disposal and recycling education, but rather projects in line with the waste hierarchy (such as reusable coffee cup program).
- Events such as Clean Up Australia Day, Tidy Towns and other littering/waste community programs.
- Operational and ongoing costs of a Community Recycling Centre, being a service provided to residents and valued by the community. Noting that for councils to cease operation of such services once established can lead to community frustration.
- Drop off events for hazardous waste, chemicals, e-waste and other future product stewardship scheme items e.g. other electronic waste
- Collection and recycling of materials from residents, including soft plastics, textiles, mattresses, tyres and solar PV panels.

The above list provides broader activities that should be included, however there are several other costs that should be included in the DWM charge. If we look specifically at an example where a council will commence an organics collection, the following additional costs are also relevant:

- Contract development and variations
- Trials and pilots
- Additional staff to support a new service
- Replacement bins and caddies (extra to initial infrastructure provided)
- Multi-unit dwelling (MUD) upgrades and fit outs to allow for food collection
- Audits and evaluation
- Advertising and media
- Consultant costs in designing, consulting community and implementation
- Contamination fees and decontamination costs
- Implementation of smart technology such as RFID which is proven to reduce contamination issues

These would be costs that are directly incurred in providing the service to residents. Without the above, the service would not occur or be less effective.

The above lists are not exhaustive, and the list must also make provision for new services or activities that will be required to implement WaSM and transition to a circular economy. We also reiterate that the guidance of what is / is not included in the DWM charge should be updated


regularly to ensure it keeps pace with modern approaches to “waste management services”, however they are defined.


The report notes that some direct overheads that are incurred in the direct delivery of the any of the DWM services can be included. We note IPART’s Draft Report endeavours to demonstrate how overheads would be calculated in Appendix D however some of the assumptions are not practical for councils. It will not always be practical to directly apportion all overheads appropriately, especially in rural and remote councils where waste services are bundled in with other engineering or environmental responsibilities resulting in a potential shortfall for funding of key management staff.

IPART notes that ‘a separate targeted review would be best placed to consider issues around the equity and efficiency of funding pensioner concessions’. LGNSW concurs this issue should be considered as part of the review of the Rating Manual and what costs are eligible for inclusion in the DWM charge.

There is some concern around the omission of rural transfer stations being identified as a service that can be funded under the DWM charge. Rural and regional councils frequently operate rural transfer stations in lieu of a domestic kerbside service, as enabling rural residents to dispose of waste and recycling at a centralised location is a far more efficient option. Costs, time and distance coupled with safety issues commonly prevent rural and regional councils from operating a domestic kerbside service outside of city, town or village areas. This is another example of where the definition of ‘modern waste management’ needs to be clarified, as historically much of this waste was landfilled on rural properties and councils have worked diligently to minimise this form of land contamination through the provision of accessible waste services.

Finally, cost recovery is a risk to the early adoption of services, there are increasingly instances where councils need to fund research and investigation into new waste service options. These might include changes to waste delivery models and/or the provision of collections covering emerging wastes, such as where councils are investigating how to implement the most effective form of food or food and garden waste collections, possibly including communal collections – noting that public place rubbish bins are not included in the current provisions.

 **Recommendation 3:** Principle 1 is accepted, however the priority is to update the definitions and guidance on ‘domestic waste management’ with local government being central to this process as it is most familiar with the day to day activities in this area.

 **Recommendation 4:** The definitions and guidance on the DWM charge be reviewed every 5 years to maintain currency and reflect real-world conditions.

PRINCIPLE 2

Councils should publish details of all the DWM services they provide, the size of the bin, the frequency of the collection and the individual charges for each service

This is supported in principle, however councils already publish information regarding the waste services they provide and the relevant charges as part of their Fees and Charges information readily available in the Operational Plan and on council websites. This information is usually

itemised to outline bin size, frequency of collection, plus charges for additional service components (additional bins, wheel in/out services etc).

The Your Council website provides a figure for each council's per capita environmental expenditure (including waste), with a comparison figure for other councils in the same 'group'. While this comparison is broader than just 'waste' it does provide a point of reference.

There also needs to be recognition that councils have varying capacity to neatly bundle this information on websites or issue detailed 'community friendly' reports. Further increasing the requirements for annual reporting will add burden and detract from service provision in councils that do not have communications/PR staff on hand.

For some councils publishing a 'price per bin' is not straightforward due to the complex mix of services available to meet varying community needs. Many councils are moving away from a 'standard service' in order to drive down bin void space and maximise waste avoidance. For example, a metropolitan council with a high proportion of single/stand-alone dwellings, multi-unit dwellings and a small rural fringe area offers a mix of bin sizes and frequency of collections depending on household size and need. There are certain overheads which would mean that a fortnightly collection will never cost half that of a weekly collection. Furthermore, having a smaller bin does not necessarily reduce collection costs. Publishing this type of data could cause confusion and concern as costs are not always directly related to bin size and/or collection frequency.

Councils may offer compassionate collections for elderly and/or residents with a disability, such services should be catered for in future domestic waste management services and they are less likely to be cost reflective.



Recommendation 5: Principle 2 is supported in principle, however the mechanisms for this reporting already exist and many councils already publish this information. LGNSW does not support the implementation of any process that duplicates reporting or would provide complex information that is prone to community misinterpretation without relevant context.

PRINCIPLE 3

Within a council area, customers that are:

- *imposing similar costs for a particular service should pay the same DWM charge*
- *paying the same DWM charge for a particular service should receive the same level of service.*

The intent of this principle is acknowledged and supported – same price for the same service – however the wording does not make sense as customers do not impose costs. We assume that the report is referring to councils imposing similar costs.

No two councils are exactly the same and therefore the service cost is likely to vary in some way. Despite the use of the OLG groupings there are still concerns around comparing 'apples' with 'oranges' as OLG groupings differ to Commonwealth council groupings. LGNSW understands there has also been comparison of rural fringe councils where one is in the levy paying area and the other outside the levy paying area.

For example, even if the land area and population of two councils is the same their different distances to market can cause variation in the service cost. Even where the metrics of a service look to be very similar, Council A may be charged less than Council B by the same service provider for their own business reasons e.g. they discount the contract with Council A as a ‘first mover’ to entice others to come on board, while offsetting costs against other contracts. Or it could be a tactic by the service provider to undercut and further monopolise services in a region. These business decisions are out of the control of councils, and the impacts of this are further heightened when we consider the very small number of service providers in the market.

It is acknowledged that in regional and rural areas, councils will have the capacity to vary the cost-of-service delivery where the same service is delivered in different communities. These costs will often reflect variations in infrastructure and transportation costs as well as the time taken to service remote communities. These challenges also apply to councils across NSW.

No council is the same in its service delivery, access to infrastructure and access to service providers, and therefore costs between councils will always vary.

IPART itself notes the following point under this principle:

- *The service level a council provides is a question for councils to decide after consulting with their ratepayers.*

Whilst councils would consult through the IP&R process around service delivery there are many other factors including WaSM mandates and waste/emissions targets that will directly impact councils’ service delivery. In the case of the FOGO mandate, communities may not immediately support the service due to increased cost, but councils will still have an obligation to implement the service. Under this principle if councils provide the service that their community expects it may find itself in the situation where some/many of the expected services are not covered by the DMWC and councils are forced to cover these through general rates.



Recommendation 6: Principle 3 is supported in principle, however there are many factors that affect service costs / offerings, meaning they often cannot – and should not – be directly compared.

PRINCIPLE 4

Any capital costs of providing DWM services should be recovered over the life of the asset to minimise price volatility

The intent of this principle is acknowledged and accepted. Wherever possible the capital costs can be spread over multiple years however there may be circumstances where there is an imperative to introduce the service relatively quickly and in shorter timeframe than the asset’s life (e.g. FOGO rollout and if new landfills were required to manage disaster waste).

Capital costs should continue to be recovered and held in reserve based on forward planning as opposed to relying on borrowings to fund expenditure and recover costs post service implementation, such as in the case of future waste disposal facilities. The interest on financing waste facilities and land acquisition imposes a significant extra financial burden as well as risk on ratepayers and does not represent the most efficient method of financing future works.

There is a level of concern around the management of waste reserves under the proposed peg. Councils require reserves for many things, the common example being the remediation of landfills and the construction of new infrastructure. However, as a result of recent natural disasters, including extensive flooding across the Northern Rivers region councils will need to fund the replacement of large quantities of kerbside bins and other infrastructure such as public place bins over a short timeframe and as such not all expenditure from reserves are long term investments and councils can often have competing needs, all requiring access to reserves.



Recommendation 7: Principle 4 is acknowledged and the intent to minimise price volatility is supported. To that end there may be circumstances where capital costs are best raised in advance and held in reserve (e.g. over a longer term than the asset) or may need to be recovered over a shorter term.

CONCLUSION

In conclusion, LGNSW calls upon IPART to reflect upon the complex factors affecting councils' capacity to deliver waste services at this time of substantial change. This includes issues ranging from difficulties engaging qualified staff, to budgetary shortfalls due to the continuing pandemic, to pervading market forces and increasing community expectations.

The wide range of - at times competing - waste priorities contained in both State and Commonwealth strategies had set the 'goalposts' for the period until at least 2030. It is evident that any substantial change to the DWM charge and the methodology by which councils can set fees and charges would significantly limit the ability to deliver an increasing range of waste services.

In order to protect councils' autonomy and enable them to deliver the services expected of them, LGNSW supports a focus from IPART to identify and work with councils that are not complying with the Pricing Principles and to leave compliant councils to continue delivering quality services that meet the needs and service preferences of individual communities.

This submission has been developed based upon consultation and research with key stakeholders and reflects the views and concerns of LGNSW. We note that councils may share some but not all views contained within the submission and therefore invite IPART to carefully consider each submission received from councils and stakeholders to ensure that the views of the local government sector are reflected in any decision-making process.

Thank you again for the opportunity to comment on the Draft Report - Review of Domestic Waste Management Charges. If you would like further information on LGNSW's position, please contact Susy Cenedese, Strategy Manager Environment on 9242 4080 or via email at susy.cenedese@lgnsw.org.au.

Summary of recommendations

1



LGNSW strongly recommends that IPART not introduce a DWM charge peg or any other benchmark given the significant threat this would pose to delivery of the NSW Government's waste strategy, and because a peg in and of itself does little to address IPART's concerns around consistency and transparency.

2



LGNSW recommends that IPART and the Office of Local Government work with local government to update the definitions and guidance relating to the DWM charge in light of current reforms to the Rating Manual and the Resource Recovery framework.

3



Principle 1 is accepted, however the priority is to update the definitions and guidance on 'domestic waste management' with local government being central to this process as it is most familiar with the day to day activities in this area

4



The definitions and guidance on the DWM charge be reviewed every 5 years to maintain currency and reflect real-world conditions.

5



Principle 2 is supported in principle, however the mechanisms for this reporting already exist and many councils already publish this information. LGNSW does not support the implementation of any process that duplicates reporting or would provide complex information that is prone to community misinterpretation without relevant context.

6



Principle 3 is supported in principle, however there are many factors that affect service costs / offerings, meaning they often cannot – and should not - be directly compared.

7



Principle 4 is acknowledged and the intent to minimise price volatility is supported. To that end there may be circumstances where capital costs are best raised in advance and held in reserve (eg over a longer term than the asset) or may need to be recovered over a shorter term.



PERFORMANCE AUDIT

26 NOVEMBER 2020

Waste levy and grants for waste infrastructure

NEW SOUTH WALES AUDITOR-GENERAL'S REPORT

THE ROLE OF THE AUDITOR-GENERAL

The roles and responsibilities of the Auditor-General, and hence the Audit Office, are set out in the *Public Finance and Audit Act 1983* and the *Local Government Act 1993*.

We conduct financial or 'attest' audits of State public sector and local government entities' financial statements. We also audit the Total State Sector Accounts, a consolidation of all agencies' accounts.

Financial audits are designed to add credibility to financial statements, enhancing their value to end-users. Also, the existence of such audits provides a constant stimulus to entities to ensure sound financial management.

Following a financial audit the Audit Office issues a variety of reports to entities and reports periodically to parliament. In combination these reports give opinions on the truth and fairness of financial statements, and comment on entity compliance with certain laws, regulations and government directives. They may comment on financial prudence, probity and waste, and recommend operational improvements.

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Sydney NSW 2001

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Parliament House
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The Legislative Council
Parliament House
Sydney NSW 2000

In accordance with section 38E of the *Public Finance and Audit Act 1983*, I present a report titled '**Waste levy and grants for waste infrastructure**'.

A handwritten signature in black ink, appearing to read 'Margaret Crawford'.

Margaret Crawford
Auditor-General
26 November 2020

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Waste levy and grants for waste infrastructure

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Section one

Waste levy and grants for
waste infrastructure

Executive summary

Overall, waste generation in New South Wales (NSW) is increasing. This leads to an increasing need to manage waste in ways that reduce the environmental impact of waste and promote the efficient use of resources. In 2014, the NSW Government set targets relating to recycling rates and diversion of waste from landfill, to be achieved by 2021–22. The NSW Waste and Resource Recovery (WARR) Strategy 2014–21 identifies the waste levy, a strong compliance regime, and investment in recycling infrastructure as key tools for achieving these waste targets.

This audit assessed the effectiveness of the NSW Government in minimising waste sent to landfill and increasing recycling rates. The audit focused on the waste levy, which is paid by waste facility operators when waste is sent to landfill, and grant programs that fund infrastructure for waste reuse and recycling.

The waste levy is regulated by the Environment Protection Authority (EPA) and is generally paid when waste is disposed in landfill. The waste levy rates are set by the NSW Government and prescribed in the *Protection of Environment Operations (Waste) Regulation 2014*. As part of its broader role in reviewing the regulatory framework for managing waste and recycling, the EPA can provide advice to the government on the operation of the waste levy.

The purpose of the waste levy is to act as an incentive for waste generators to reduce, re-use or recycle waste by increasing the cost of sending waste to landfill. In 2019–20, around \$750 million was collected through the waste levy in NSW. The government spends approximately one third of the revenue raised through the waste levy on waste and environmental programs.

One of the waste programs funded through the one third allocation of the waste levy is Waste Less, Recycle More (WLRM). This initiative funds smaller grant programs that focus on specific aspects of waste management. This audit focused on five grant programs that fund projects that provide new or enhanced waste infrastructure such as recycling facilities. Four of these programs were administered by the Environmental Trust and one by the EPA.

Conclusion

The waste levy has a positive impact on diverting waste from landfill. However, aspects of the EPA's administration of the waste levy could be improved, including the frequency of its modelling of the waste levy impact and coverage, and the timeliness of reporting. Grant funding programs have supported increases in recycling capacity but are not guided by a clear strategy for investment in waste infrastructure which would help effectively target them to where waste infrastructure is most needed. Data published by the EPA indicates that the NSW Government is on track to meet the recycling target for construction and demolition waste, but recycling targets for municipal solid waste and commercial and industrial waste are unlikely to be met.

Waste levy

The waste levy rate, including a schedule of annual increases to 2016, was set by the NSW Government in 2009. Since 2016, the waste levy rate has increased in line with the consumer price index (CPI). The EPA has not conducted recent modelling to test whether the waste levy is set at the optimal level to achieve its objectives. The waste levy operation was last reviewed in 2012, although some specific aspects of the waste levy have been reviewed more recently, including reviews of waste levy rates for two types of waste. The waste levy is applied at different rates across the state. Decisions about which local government areas (LGAs) are subject to the levy, and which rate each LGA pays, were made in 2009 and potential changes were considered but not implemented in 2014. Currently, there are no objective and transparent criteria for determining which LGAs pay the levy. The EPA collects waste data from waste operators. This data has improved since 2015, but published data is at least one year out of date which limits its usefulness to stakeholders when making decisions relating to waste management.

Grants for waste infrastructure

All state funding for new and enhanced waste infrastructure in NSW is administered through grants to councils and commercial waste operators. The government's Waste and Resource Recovery (WARR) Strategy 2014–21 includes few priorities for waste infrastructure and there is no other waste infrastructure strategy in place to guide investment. The absence of a formal strategy to guide infrastructure investment in NSW limits the ability of the State Government to develop a shared understanding between planners, councils and the waste industry about waste infrastructure requirements and priorities. The Department of Planning, Industry and Environment is currently developing a 20-year waste strategy and there is an opportunity for the government to take a more direct role in planning the type, location and timing of waste infrastructure needed in NSW.

The grants administration procedures used for the grant programs reviewed in this audit were well designed. However, we identified some gaps in risk management, record-keeping and consistency of information provided to applicants and assessment teams. In four of the five programs we examined, there was no direct alignment between program objectives and the NSW Government's overall waste targets.

1. Key findings

The EPA has not conducted recent modelling to test whether the waste levy is set at the optimal level

The waste levy rate, including a schedule of annual increases to 2016, was set by the government in 2009. As part of its broader role in reviewing the regulatory framework for managing waste and recycling, the EPA can provide advice to the government on the operation of the waste levy. The objective of the waste levy is to encourage waste minimisation and diversion of waste from landfill. To achieve this, it must be set at a level that makes the cost of disposal higher than the cost of re-use or recycling, but not so high that it increases the likelihood of waste being illegally dumped or stockpiled above permitted thresholds.

There is evidence that the waste levy has a positive impact on the diversion of waste from landfill. However, the waste levy operation has not been reviewed since 2012 and waste levy rates and increases have not been reviewed since they were set in 2009. Since 2016, the waste levy has increased annually in line with CPI. Several reviews of specific elements of the waste levy have been conducted since 2012, including reviews of waste levy rates for two types of waste. A review of some aspects of the waste levy was conducted during 2020 as a part of work to develop a broader waste strategy, but this review did not examine the waste levy rates.

Since 2012, a number of significant changes have occurred in the waste industry that may have an impact on the effectiveness of the waste levy. These include:

- introduction of China's 'National Sword' policy, which limited export of waste to China to that with very low levels of contamination
- Council of Australian Governments (COAG) ban on exporting waste (to be phased in from 2020), announced in November 2019
- introduction of a waste levy in Queensland (QLD), which changes the economics of paying the waste levy in NSW compared to transporting waste to QLD to avoid paying the levy
- the EPA's 2018 ban on using mixed waste organic outputs on land.

The absence of a recent comprehensive review of the impact of changes in the waste industry means the current waste levy settings are not based on the most up to date information. This means the current settings may not have the optimal impact on minimising waste sent to landfill.

The waste levy is applied at different rates across the state

Decisions about which LGAs are subject to the waste levy were made in 2009. The EPA advises that affected councils were made aware that these decisions were based on factors including waste generation and disposal trends, the ability of ratepayers to pay, and projected population growth. The EPA consulted with councils in 2014 about potential changes to the application of the waste levy but no changes were made at that time.

Currently, a higher levy applies to LGAs in the Sydney metropolitan area and the Hunter, Newcastle and Illawarra regions. A lower levy applies to LGAs in the north-east coast and LGAs immediately west of Sydney. Most LGAs do not pay a waste levy. The current rationale for why particular LGAs pay the waste levy and others pay a lower levy or none at all is not as clear and objective as it could be.

The EPA waste data has improved since 2015 but public reporting on environmental outcomes is not timely

Data collected by the EPA and used for compliance and reporting has improved since 2015 due to legislative changes and improved technology. Environmental outcomes related to the waste levy such as recycling rates and rates of illegal dumping are reported every two years in WARR Strategy progress reports and every three years in NSW State of the Environment Reports. However, data used in these reports is at least a year out of date at publication which limits its usefulness to stakeholders when making decisions relating to waste management.

There is currently no formal strategy in NSW to guide waste infrastructure investment

The government's 2014 Waste and Resource Recovery (WARR) Strategy does not include waste infrastructure priorities or a strategy for waste infrastructure. A draft waste infrastructure strategy was published for consultation by the EPA in 2017 but was never adopted formally. The absence of a formal strategy to guide infrastructure investment in NSW limits the ability of the State Government to develop a shared understanding between planners, councils and the waste industry about waste infrastructure requirements and priorities.

The EPA and the Environmental Trust currently provide funding for waste infrastructure solely through grants to councils and industry. With no strategy to guide what is funded, investment is being led by proposals from councils and private companies, rather than being driven by strategic objectives and priorities. The NSW Government is currently developing a 20-year waste strategy which may include consideration of waste infrastructure.

Overall, grant administration procedures support the achievement of program objectives, but were not always applied consistently

Staff administering waste infrastructure grant programs are supported by internal procedures developed by the Environmental Trust and the EPA. Risk-mitigation practices are in place such as preparing Deeds of Agreement between applicants and funding agencies that outline the expected performance of the grant recipient in terms of agreed outcomes and regular progress reports, and engaging probity officers to oversee assessment committee meetings.

However, we identified gaps in the application of grant administration procedures. For example, in four of the five programs we examined, there was no direct alignment between program objectives and the NSW Government's overall waste target. Within the 12 grant rounds we reviewed, three grant rounds provided inconsistent information to applicants and assessment teams. Of the ten grant rounds administered by the Environmental Trust, two were missing documentation that recorded the rationale for awarding grants and eight were missing one or more conflict-of-interest declarations.

In addition, more than half the grant applications included in the grant rounds reviewed for the audit included flawed cost-benefit analyses, indicating that better support or guidance may be needed to assist grant applicants to meet this requirement. Robust cost benefit analyses for infrastructure projects are an important step in the assessment of whether value for money from the investment will be achieved.

2. Recommendations

By June 2021 the EPA should:

1. establish a schedule for reviewing the waste levy settings that includes:
 - regular reviews to ensure the waste levy is set at the optimal level to achieve its policy objective
 - transparent and objective criteria for determining which local government areas are levied
2. improve the timeliness of reporting on the environmental outcomes from its waste levy compliance activities.

By December 2021 the Department of Planning, Industry and Environment should:

3. determine the state's waste infrastructure needs to inform planning for and funding of waste infrastructure in NSW.

By June 2021 the Environmental Trust should:

4. improve record-keeping during grant program assessment committee meetings
5. ensure that conflict-of-interest declarations are completed for all members of assessment teams and stored in accordance with documented record-keeping requirements.

By June 2021 the EPA and the Environmental Trust should

6. ensure that consistent information is provided to applicants and assessment committees within their respective grant programs.

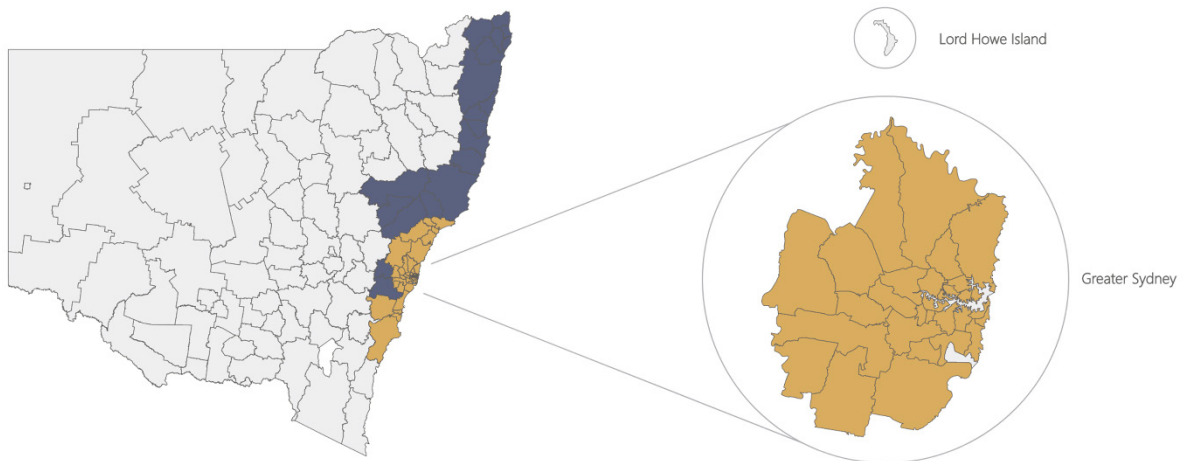
1. Introduction

1.1 Purpose of the waste levy

The waste levy is a market-based instrument legislated under the *Protection of the Environment Operations Act 1997* (the POEO Act) to discourage landfill disposal and promote the reduction in the use of materials and the re-use, recovery or recycling of materials in New South Wales. The levy works by increasing the cost of sending waste to landfill, thereby providing an economic incentive to reduce waste generation and promote reuse and recycling.

The waste levy applies in the regulated area of New South Wales which is made up of the Metropolitan Levy Area (Sydney, Illawarra and Hunter regions) and the Regional Levy Area (the Blue Mountains, Wollondilly and the area north of Port Stephens to the Tweed). The current application of the waste levy to local government areas in NSW is shown in Exhibit 1. Metropolitan Levy Areas are shown as tan and Regional Levy areas as blue.

Exhibit 1: Levied and non-levied areas in NSW



Source: Environment Protection Authority, 2020.

A flat levy is charged on solid waste regardless of the type of waste, but the rate varies across the two geographical regions. In 2020–21, the waste levy is:

- \$146.00 per tonne in the Metropolitan Levy Area
- \$84.10 per tonne in the Regional Levy Area.

Concessional rates apply to some specific waste types.

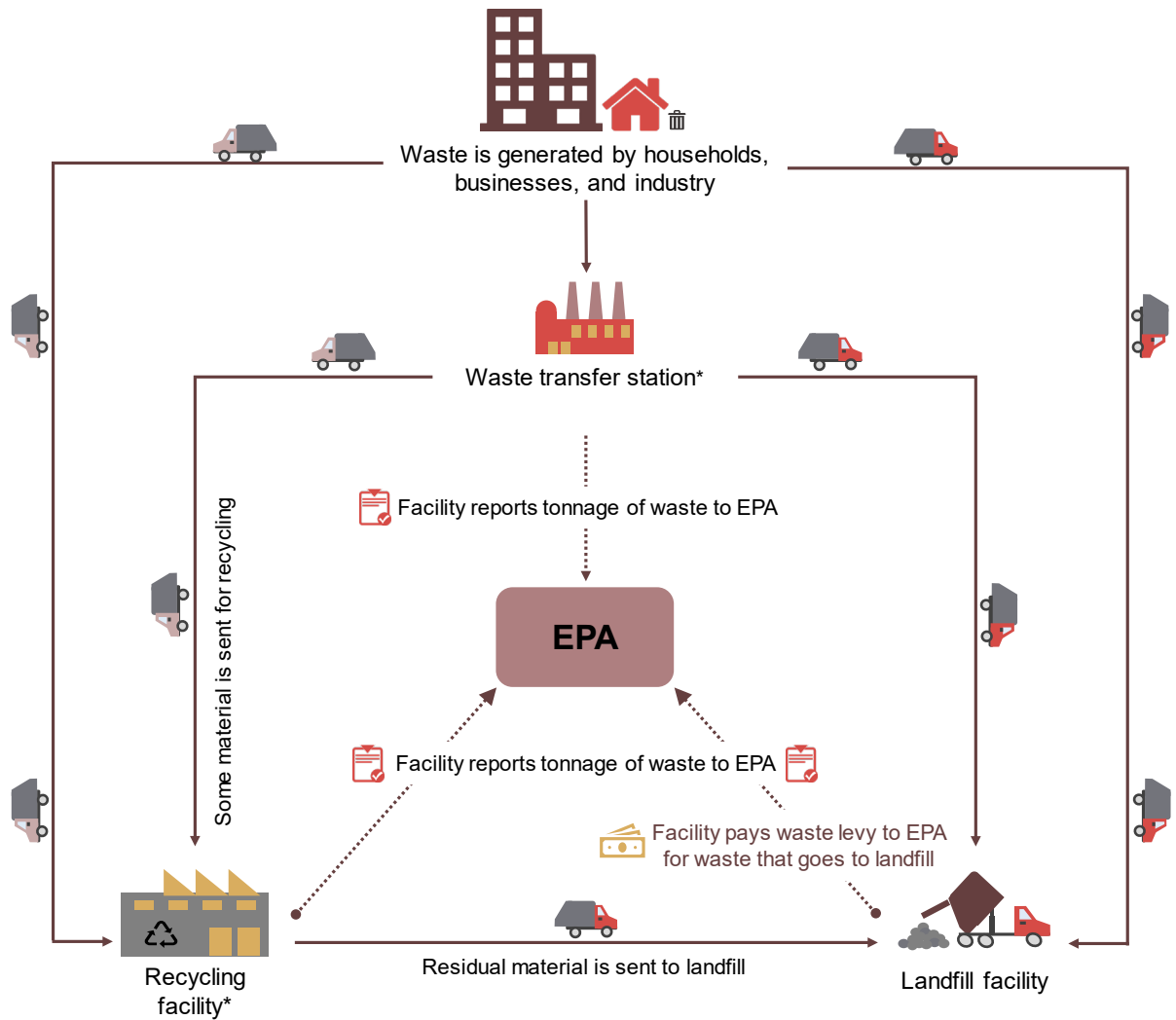
The waste levy is paid on:

- all waste disposed at EPA-licensed landfills in the regulated area
- waste generated in the regulated area disposed at landfills in the non-regulated area.

Certain licensed waste facility operators in New South Wales incur a waste levy liability when waste is delivered to these facilities. These include waste processing, resource recovery and waste storage facilities. The levy liability is then reduced for any waste sent off site for lawful recycling, reuse or disposal.

The waste levy is ultimately paid for by the waste generator through direct payment to landfill operators and council charges paid by ratepayers.

Exhibit 2: Relationship between waste operations and the waste levy in NSW*



* Waste transfer stations, processing facilities and recycling facilities also pay the waste levy when they exceed allowable stockpiles.
Source: Audit Office research.

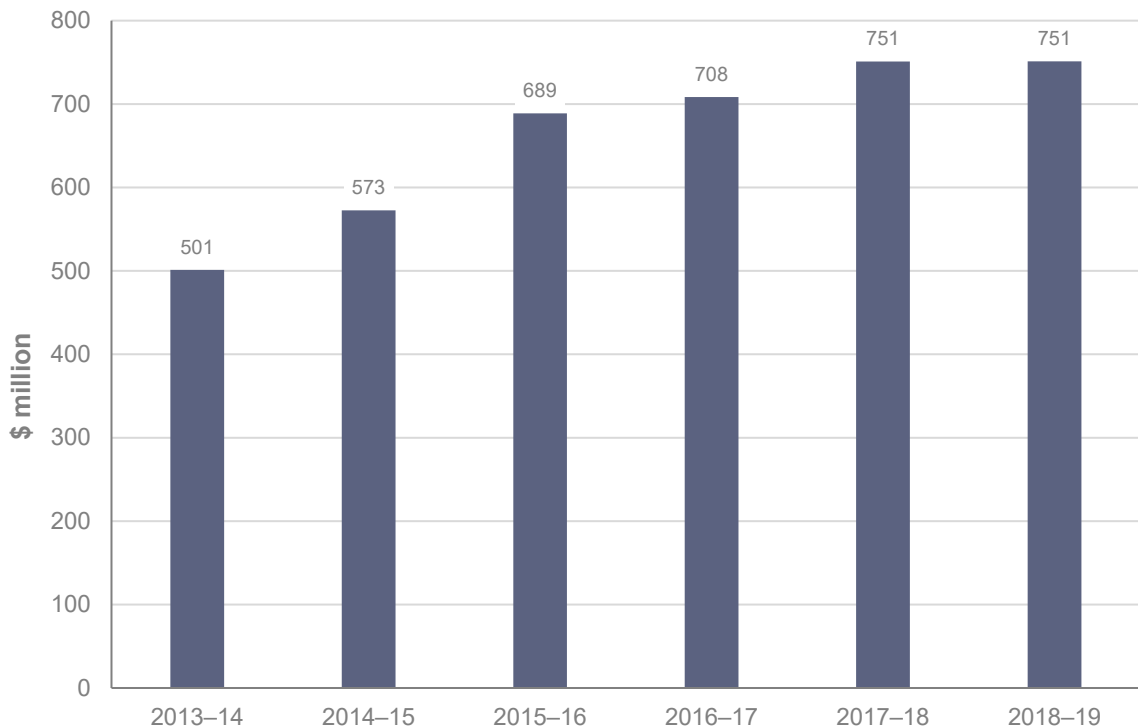
The EPA collects the waste levy from all landfill operators monthly. Other licensed waste facility operators only pay the levy for:

- residual waste sent to landfill
- waste that is stockpiled for more than 12 months or above an authorised limit.

Revenue from the waste levy is placed into the state's consolidated revenue. The waste levy revenue collected between 2013 and 2019 is shown in Exhibit 3. Data published by the EPA in WARR Strategy progress reports indicates that the trend of increasing waste levy revenue is a result of:

- increasing amounts of waste generated and sent to landfill, associated with population growth and construction activity
- increasing waste levy rate per tonne of waste sent to landfill.

Exhibit 3: Waste levy revenue in NSW 2013 to 2019

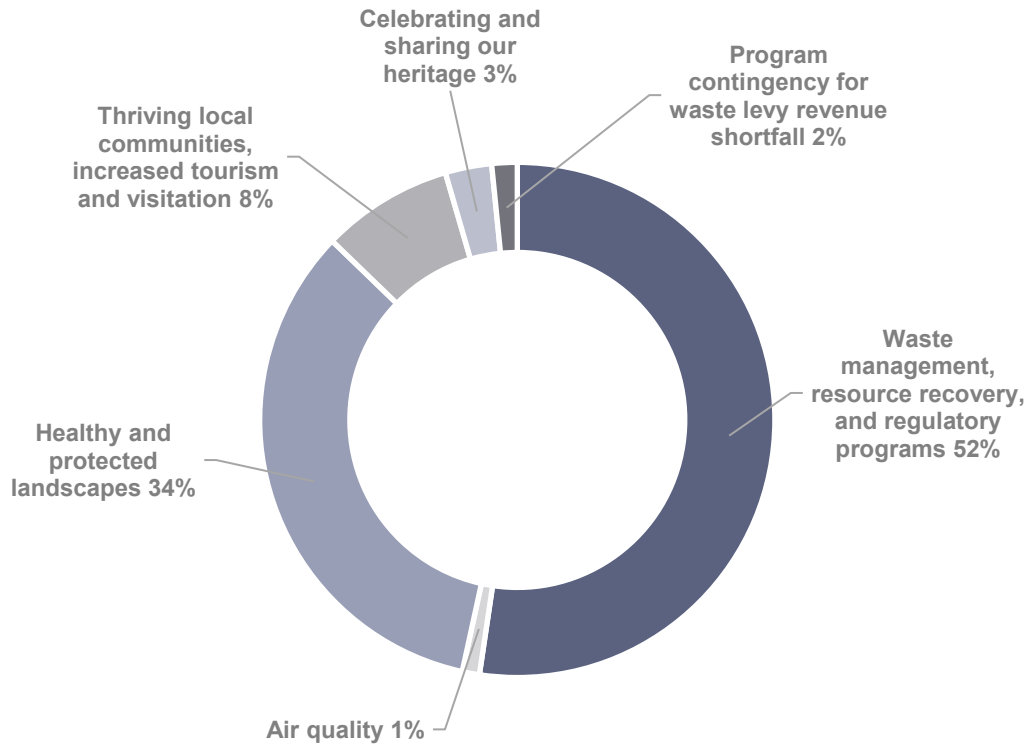


Source: EPA financial statements (audited).

1.2 Waste and environment levy envelope

The government makes one third of the waste levy revenue available for waste and environmental programs. The one third allocation of the waste levy revenue is known as the Waste and Environmental Levy Envelope (WELE). Budgets prepared in 2016–17 identify a range of waste and environmental programs funded from the WELE.

Exhibit 4: Waste and environmental programs funded from the WELE 2016–2020*



* We note that the distribution of the WELE may change from 2020 in line with outcomes-based budgeting.
Source: Budget data prepared by the EPA in 2016–17 (unaudited).

Waste management programs, which represent 52 per cent of the forecast WELE expenditure, include the Waste Less Recycle More initiative valued at \$802.7 million. \$465.7 million was allocated between 2014–15 and 2016–17 and a further \$337 million between 2017–18 and 2020–21.

Waste Less Recycle More directs funds to programs targeted at different aspects of waste management. These include the following:

- Organics infrastructure fund and program
- Waste and recycling infrastructure fund
- Household problem waste program (e.g. batteries, paint and gas bottles)
- Recycling innovation fund
- Business recycling program
- Local government waste and resource recovery program
- Illegal dumping clean-up, prevention and enforcement fund
- Litter prevention and enforcement fund.

Grants funded through these programs are available to councils, non-profit organisations and businesses.

1.3 Waste Avoidance and Resource Recovery Strategy

The Waste Avoidance and Resource Recovery (WARR) Strategy 2014–21 provides a framework for waste management in New South Wales. It sets directions for a range of priority actions with corresponding targets to be achieved by 2021–22:

1. Avoid and reduce the amount of waste generated per person.
2. Increase recycling rates to 70 per cent for municipal solid waste and commercial and industrial waste, and 80 per cent for construction and demolition waste.
3. Increase waste diverted from landfill to 75 per cent.
4. Manage problem waste better by establishing or upgrading 86 drop-off facilities or services for managing household problem wastes state-wide.
5. Reduce the number of litter items by more than 40 per cent compared with 2011–12 levels.
6. Reduce illegal dumping state-wide.

The WARR Strategy identifies the waste levy, a strong compliance regime and funding through the Waste Less, Recycle More initiative as the key tools to achieve these targets. The waste levy increases the cost of waste disposal, making waste avoidance, reduction and recycling more financially attractive than disposal to landfill. The Waste Less, Recycle More initiative provides grant funding to support investment in recycling infrastructure, encourage innovation, improve recycling behaviour and develop new markets for recycled materials, as well as tackle littering and illegal dumping.

The achievement of targets 1, 2, and 3 listed above is linked to the application of the waste levy. The achievement of targets 2, 3 and 4 is linked to the availability of necessary waste processing infrastructure. The waste levy and availability of waste processing infrastructure are only two factors that influence achievement of the targets. Others include:

- regulations and enforcement
- education and behavioural factors
- strong markets for downstream outputs from waste processing.

The Environment Protection Authority (EPA), the Environmental Trust and the Department of Planning, Industry and Environment (DPIE) share responsibilities for delivering the WARR targets:

- The EPA is responsible for developing and enforcing the regulatory framework within which private and public sector entities and individuals manage waste and recycling, and undertaking research, data collection and analysis to ensure a robust evidence base is available for decision-making. The EPA is also responsible for administration of some grants and managing the Waste Less Recycle More program.
- The Environmental Trust is responsible for delivery of the Waste Less, Recycle More grants to Local Government, industry, research institutes, community groups and other stakeholders. These are delivered in partnership with the EPA.
- DPIE's responsibilities include the development of strategic policy and planning for the waste and resource recovery sector.

1.4 About the audit

The objective of this audit was to assess the effectiveness of the NSW Government in minimising waste sent to landfill and increasing recycling rates.

The audit focused on two key tools managed by the government that contribute to achieving these outcomes:

- The waste levy

The audit examined whether the EPA regulates the waste levy in a way that reduces waste generation and diverts waste from landfill.

- Grant programs targeted towards providing waste infrastructure

The audit examined whether funds allocated through Waste Less Recycle More effectively support investment in waste infrastructure that supports reuse and recycling. The audit specifically focused on grant programs that provide funding for new or enhanced recycling infrastructure, and increase the capacity for waste recycling and reuse in NSW:

- Organics infrastructure fund and program
- Waste and recycling infrastructure fund (including Major Resource Recovery Infrastructure Program and Resource Recovery Facility Expansion and Enhancement Fund)
- Product Improvement Program
- Household problem waste program.

Audited agencies were the EPA, DPIE and the Environmental Trust.

2. Waste levy

2.1 Waste levy impact

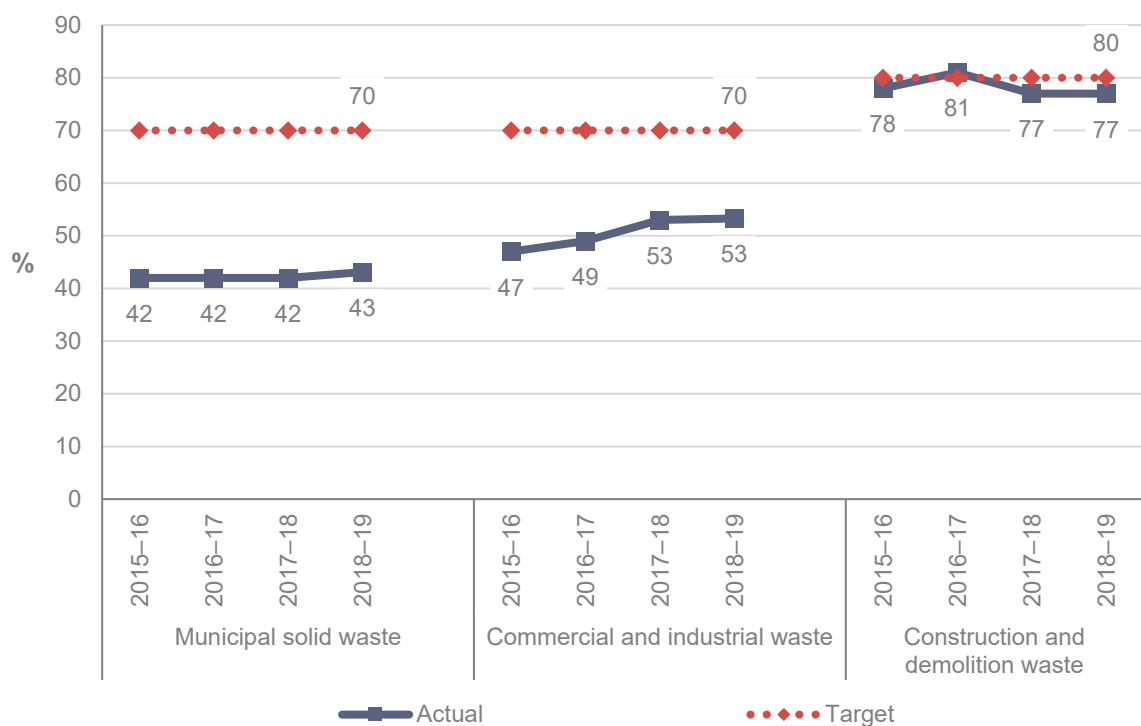
The objective of the waste levy is to provide an incentive for waste generators to re-use or recycle waste rather than send it to landfill. For the waste levy to operate effectively it must be set at a price that results in the cost of disposal being higher than the cost of re-use or recycling, but not so high as to discourage compliance which could lead to waste being illegally dumped or stockpiled above permitted thresholds. The waste levy is not the only cost incurred by waste generators when they send waste to landfill. Transport costs and gate fees imposed by landfill facilities also form part of the overall cost of sending waste to landfill.

The waste levy impact varies by waste stream

Data provided by the EPA indicates that the waste levy may be most effective for Construction and Demolition waste (C&D) and delivers only a minimal effect on household waste, also known as Municipal Solid Waste (MSW). This differential impact, based on rates of diversion from landfill for the three waste streams shown in Exhibit 5, was also noted in economic research commissioned by the Office of Environment and Heritage in 2011 and a review of the waste levy commissioned by the EPA in 2012.

Exhibit 5 identifies the rate of diversion from landfill for each of the three solid waste streams: MSW, Commercial and Industrial (C&I) and C&D between 2015–16 and 2018–19. The graph identifies greater diversion rates for C&D compared with the other two waste types as well as a large gap between current and target performance in diversion rates for MSW and C&I.

Exhibit 5: Changes in diversion rates for the three waste streams 2015–16 to 2018–19



Source: EPA published waste data.

The EPA has not conducted recent modelling to test whether the waste levy is set at the optimal level

The waste levy settings and operation require review from time to time to ensure the levy is meeting its objectives as an economic instrument to reduce waste generation and promote reuse and recycling.

The EPA advised that waste levy rates were last reviewed in 2009, with a path of pricing changes established to 2016 to provide certainty for the waste industry. Since 2016, the levy rate has been indexed in accordance with the Consumer Price Index (CPI).

The operation of the waste levy was last comprehensively reviewed in 2012. At that time, the EPA commissioned a review of the operations of the NSW waste levy that discussed issues and made recommendations consistent with the levy's objectives. A further examination of the waste levy was commissioned by the EPA in 2017, but this focused on improvements to revenue forecast models and not on the operation of the waste levy itself.

Since 2012, there have been a number of events affecting the waste industry in NSW and Australia to varying degrees. These include:

- introduction of the China's 'National Sword' policy, which limited export of waste to China to that with very low levels of contamination
- the Council of Australian Governments (COAG) ban on exporting waste (to be phased in from 2020), announced in November 2019
- introduction of a waste levy in Queensland (QLD), which changes the economics of paying the waste levy in NSW in comparison to transporting waste to QLD
- the EPA's 2018 ban on using mixed waste organic outputs on land.

The EPA has implemented temporary waste levy discounts and exemptions following studies into the effectiveness of the waste levy on specific types of waste, including metal and mixed waste organic outputs. However, there has been no review of the waste levy rates and operation that considers the cumulative impact of the events listed above upon the effectiveness of the waste levy, nor models the optimal level of the waste levy. Queensland, Victoria and South Australia have all reviewed their waste levy arrangements over the past two years.

DPIE is currently leading a project to develop a 20-year waste strategy and commissioned a review of the specific aspects of the waste levy design and settings to inform that work. This review did not examine whether the levy is set at the optimal level.

The waste levy rates are prescribed in the Waste Regulation, which was last reviewed in 2014. The EPA advised that the Waste Regulation will be reviewed in 2021. This provides an opportunity to review the contribution of the waste levy to achieving its objectives.

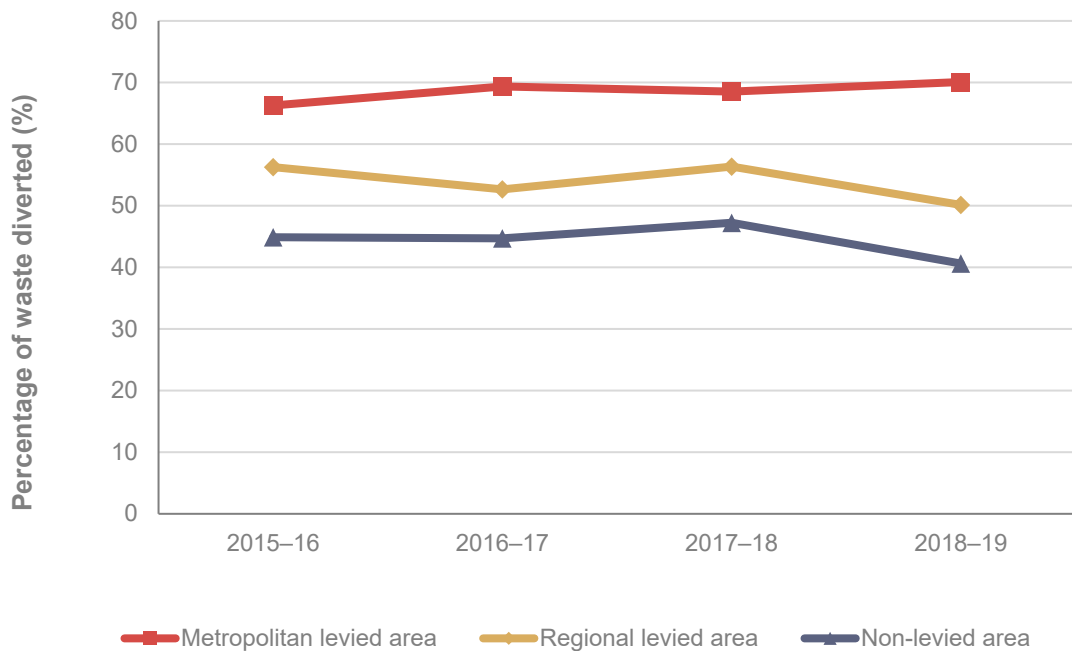
There is evidence that the waste levy has a positive impact on recycling

While the impact of the waste levy is not modelled, there is evidence of a positive relationship between the waste levy and diversion of waste from landfill:

- the 2017 review of the waste levy commissioned by the EPA found that between 2009–10 and 2016–17, waste levy increases corresponded with over 11 per cent waste diversion from landfill in the Sydney metropolitan area relative to what would have occurred if the waste levy had remained constant in real terms
- economists assessing 37 grant applications in 2014 identified four recycling infrastructure projects that were financially viable only because the waste levy would make recycling a more viable option for processing waste than sending the waste to landfill
- waste data published by the EPA since 2015 shows that diversion rates are higher in levied areas of the state.

Exhibit 6 shows the difference in overall diversion rates between the levied and non-levied areas in NSW. The impact of the waste levy in levied areas of NSW is heavily influenced by the impact on construction and demolition waste, most of which is generated in the Sydney metropolitan region. We note that diversion rates are not solely dependent on the waste levy and may be influenced by a range of other factors such as regulations, education and behaviour and markets for outputs from recycling.

Exhibit 6: Waste diversion rates for levied and non-levied areas in NSW



Source: EPA published waste data.

The waste levy is applied at different rates across the state

The waste levy was first implemented in the Sydney metropolitan area in 1971. The geographical coverage was extended to areas immediately outside Sydney in 1996 and then to some regional areas in 2009.

The EPA advised that the changes to the levied areas in 2009 were based on projected population growth, waste generation and disposal trends, ability of ratepayers to pay, and possible waste flows between levied and non-levied areas, and that councils subject to the levy were made aware of the rationale for their inclusion in the levied area at that time. The 2012 review of the waste levy recommended extending the waste levy to apply to more of the state to remove inconsistencies and discourage transport of waste within NSW to areas with lower levy rates. In response to this recommendation, the EPA consulted with councils in 2014 about extending the waste levy beyond the current levied areas. Following this consultation, the geographic coverage of the waste levy was not changed and inconsistencies identified in 2012 remain.

The development of a 20-year waste strategy and the 2021 review of the Waste Regulation provide an opportunity to establish objective criteria for which areas in the state are subject to the waste levy.

2.2 Waste levy compliance and oversight

The WARR Strategy identifies compliance with legislation and regulations as an essential tool in achieving waste targets. Similarly, the EPA's 2014 Waste and Environment Levy Compliance Strategy says that "an important aspect of waste compliance programs is evaluating whether the programs have ultimately contributed to environmental improvements."

All licensed waste facility operators must conduct their activities in accordance with Section 88 of the *Protection of Environment Operations Act 1997* Act and the Protection of the Environment Operations (Waste) Regulation 2014 ('the Regulation').

The waste levy regulatory framework requires all such facility operators to:

- pay the required waste levy
- maintain records relating to waste and vehicles
- report monthly to the EPA on quantity and type of waste received
- provide other information to the EPA as required
- maintain verified weighbridges with data capture software to record quantities of waste
- install video monitoring systems, if directed by the EPA.

The Regulation also enables waste facility operators to obtain deductions from the levy in prescribed circumstances, such as when waste is sent for recycling.

The EPA implements a risk-based waste levy compliance regime

There are 531 licensed waste facilities in New South Wales, 268 of which are in the levied areas. To ensure that licensed waste facility operators comply with the requirements of Section 88 of the *Protection of Environment Operations Act 1997* and the Regulation, the EPA implements a risk-based waste levy compliance and enforcement program outlined in its 2014 Waste and Environment Levy Compliance Strategy. Compliance risk is based on the following risk model:

- financial risk – highest priority risk
- operational/control risk – medium priority risk
- legal risk and strategic risk – lowest priority risk.

EPA implements this model by selecting waste facilities for examination based on their risk profile. Examination includes a range of methods such as scrutiny of past audit history, consideration of waste exemptions and deductions, comparison of weighbridge records against data sent to the EPA, surveys of the volume of waste processed, transported and stored, and video surveillance.

Waste data used to monitor compliance with the waste levy and other regulations has improved since 2015 but reporting on environmental outcomes is not timely

Prior to 2015, only licensed landfill operators were required to report to the EPA on waste. The EPA supplemented this data with information on waste activities collected through surveys of waste processing facility operators and local councils.

Since 2015, the data used by the EPA to perform its compliance activities is based on monthly reports submitted by all licensed waste operators through an online portal. These reports use data from independently calibrated electronic weighbridges and include information on the tonnage of waste received, processed and transported off-site. They also include information about waste re-used or recycled. The data collected through the online portal is subject to auditing by the EPA's waste levy compliance team which checks facility reports against the facility's weighbridge records. Since 2015, the EPA also collects data through an online tracking system on the transport of waste from the metropolitan levy area that is over ten tonnes, and transport of waste tyres and asbestos.

There are penalties in the legislation to ensure waste facility operators do not provide false and misleading information and the EPA conducts internal quality reviews of the dataset. This data is currently used for monitoring waste levy compliance and forecasting waste levy revenue. It also provides the EPA with robust data for making decisions about waste management. However, EPA's waste data relating to environmental outcomes is at least a year out of date when published in WARR Strategy progress reports and NSW State of the Environment reports. While the EPA is meeting its legislative reporting obligations, this data would be more useful to stakeholders making decisions about waste management if reported in a more timely way.

3. Grants for waste infrastructure

Achievement of the 2014–21 state targets for waste and resource recovery (WARR targets) is reliant in part on the availability of infrastructure that supports waste diversion and recycling. The state WARR targets dependent on waste infrastructure are:

- Increase recycling rates to 70 per cent for municipal solid waste and commercial and industrial waste, and 80 per cent for construction and demolition waste.
- Increase waste diverted from landfill to 75 per cent.

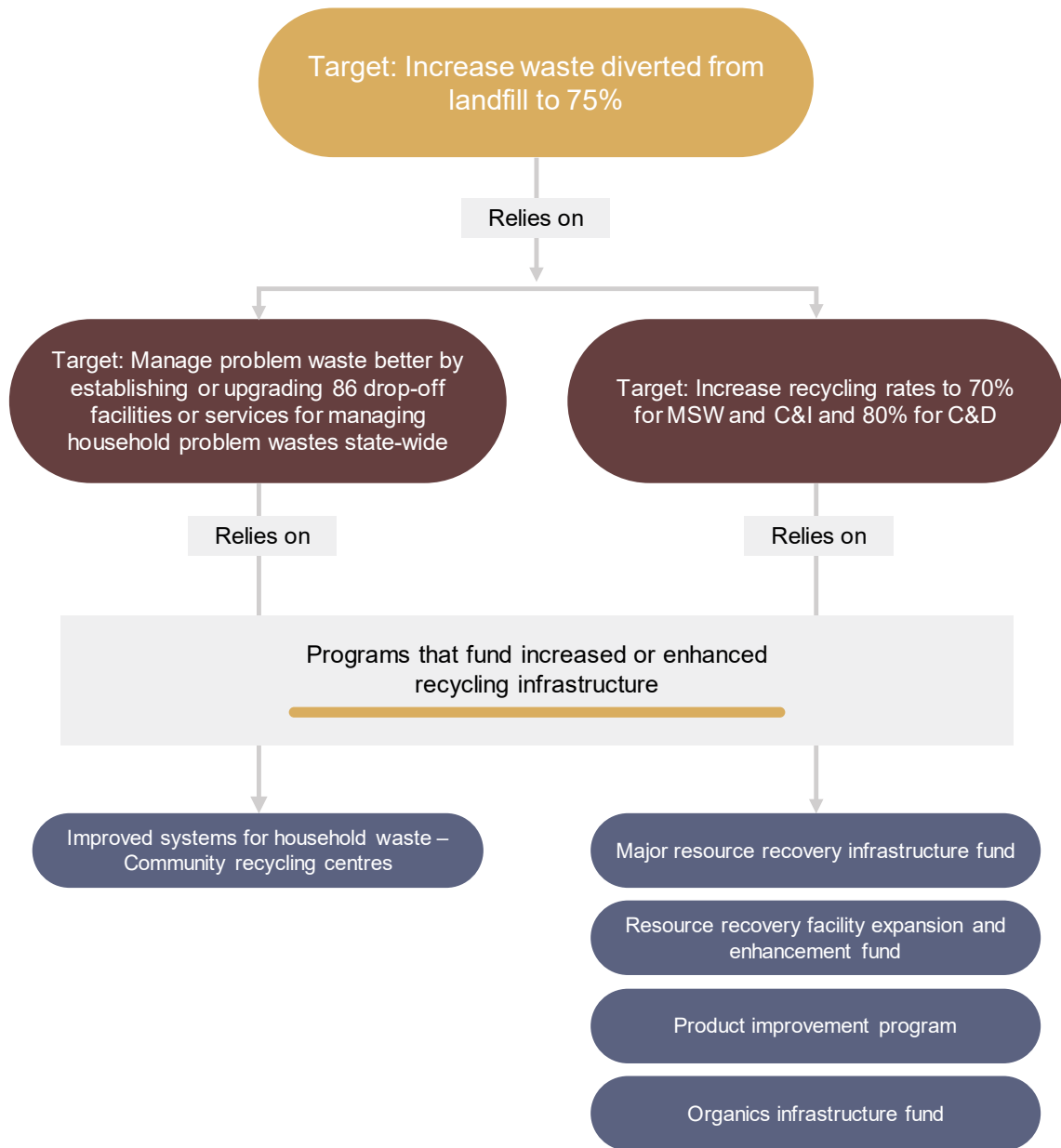
A further target — manage problem waste better by establishing or upgrading 86 drop-off facilities or services for managing household problem wastes state-wide — is dependent on accessible community waste drop-off facilities across NSW.

Exhibit 7 identifies the five grant programs that provide funding for new or enhanced waste infrastructure to increase capacity for reuse or recycling of waste. All five of these programs were examined in the audit.

In addition to the grant programs shown in Exhibit 7, other programs provide funding for infrastructure, but at a smaller scale. Examples of these include:

- Bin Trim which provides rebates to small businesses for small scale recycling equipment such as cardboard and soft plastic balers.
- Litter grants which provide funding for litter bins.
- Weighbridges grants for installation of a weighbridge at waste facilities.
- Landfill consolidation and environmental improvement grants for rural councils to replace old landfills with transfer stations or to improve the infrastructure at landfill sites.

Exhibit 7: Relationship between WARR targets and waste infrastructure grant programs



Source: Audit Office research.

3.1 Planning and funding waste infrastructure

There is currently no formal strategy in NSW to guide waste infrastructure investment

A draft waste infrastructure strategy was published for consultation by the EPA in 2017 but was never adopted nor further developed into a full strategy.

The absence of a formal strategy to guide waste infrastructure in NSW limits the ability of the State Government to develop a shared understanding between planners, councils and the waste industry about what infrastructure is required, when and where.

DPIE is currently preparing a 20-year waste strategy. There is an opportunity for the government to use this waste strategy to set clear parameters for determining priorities for investment in waste infrastructure.

All state government investment in waste infrastructure is delivered through grants

The EPA and the Environmental Trust currently support waste infrastructure solely through grants to councils and industry on application. There is evidence that some waste infrastructure projects would not proceed if it were not for government assistance.

Solely funding waste infrastructure through grants means that proposals from councils and private companies are driving decisions about what waste infrastructure is built in New South Wales. There is a risk that some waste infrastructure projects could be designed to maximise returns to commercial waste operators rather than to respond to government objectives. While it is appropriate and desirable that councils and industry have input into waste infrastructure planning for the state, the State Government could play a more direct role in determining what waste infrastructure is built, and in what locations.

Development of a 20-year waste strategy also provides government with an opportunity to consider a range of funding options for waste infrastructure.

Grant program targets are not clearly aligned with state WARR targets

The audit examined the alignment of targets for the five grant programs included in the audit and the state targets for waste and resource recovery (the WARR targets). We also examined the alignment between program targets and program outcomes.

With the exception of targets for Community Recycling Centres, there is no direct alignment between the WARR targets and targets established for programs that fund waste infrastructure supporting those targets. Programs that fund waste infrastructure set targets for the amount of waste processing capacity they intend to fund. These targets are expressed as tonnages. WARR targets related to waste infrastructure are expressed as per centages of waste to be diverted from landfill and per centage increases in recycling rates. These are related to waste facility throughput. While the WARR targets and program targets are conceptually linked, it is difficult to assess the contribution that waste infrastructure programs make to achieving WARR targets.

Exhibit 8 shows a comparison between the state WARR targets and targets set for individual programs. The table also shows the capacity funded for each of the programs included in the audit.

Exhibit 8: Comparison of WARR targets, infrastructure capacity needed, program capacity targets and capacity funded

Program	WARR target	Program target*	Capacity funded 2014–2019
Household Problem Waste - CRC	86 facilities	86 facilities	110 facilities
Organics processing facilities	Increase waste diverted from landfill to 75% Increase recycling rates to 70% for MSW and C&I	Additional processing capacity of 480,000 tonnes per annum	Additional processing capacity of 536,717 tonnes per annum
Waste and recycling infrastructure fund:	Increase waste diverted from landfill to 75%	Additional processing capacity of 890,000 tonnes per annum	Additional processing capacity of 2,225,263 tonnes per annum
<ul style="list-style-type: none"> • Major resource recovery infrastructure grants • Resource recovery facility expansion and enhancement grants • Product Improvement Program 	Increase recycling rates to 70% for MSW and C&I and 80% for C&D		

* Program targets shown represent the sum of targets set for the 2013–17 WLRM fund and the 2017–21 WLRM extension.

Source: Data provided by the EPA, DPIE and the Environmental Trust (capacity funded is unaudited).

Additional community recycling centres were funded beyond the program targets to respond to gaps in accessibility of households to centres across the Sydney metropolitan area.

Audited agencies informed us that there is a need to fund more capacity than required to meet the targets, as some projects fail to deliver. However, it is unclear why the programs included in the Waste and Recycling Infrastructure Fund have funded capacity that is almost three times in excess of the program target.

3.2 Assessing grant applications and monitoring projects

To maximise the impact of a grant program on meeting the state waste targets, the program must be administered so that:

- projects chosen for funding are those that are likely to deliver the greatest impact on state waste targets
- project risks are managed to minimise the risk that the project does not deliver the agreed outcomes.

The audit examined the grant application, assessment and project monitoring documentation from 12 grant rounds and 20 specific grant projects. Ten of the grant rounds were managed by the Environmental Trust and two by the EPA, referred to as the 'funding agencies'.

Exhibit 9: Grant programs and funding agencies included in the audit

Grant program	Administered by
Household problem waste – Community Recycling Centres	Environmental Trust
Organics infrastructure fund	Environmental Trust
Waste and recycling infrastructure fund	
• Major resource recovery infrastructure grants	Environmental Trust
• Resource recovery facility expansion and enhancement grants	Environmental Trust
• Product Improvement Program	EPA

Source: Audit Office research.

Our sample included completed projects, some that were still in progress and one that was withdrawn. Grant applicants included both councils and private operators. We looked particularly at the contribution of the funded projects to meeting state waste targets, and how the funding agencies managed risk to ensure that the funded project delivered the agreed outcomes.

Implementation of some grant administration procedures requires improvement

Staff from DPIE administer Environmental Trust programs, guided by the requirements of the *Environmental Trust Act (1988)* and supported by grant administration procedures. The EPA follows almost identical grant administration procedures to the Environmental Trust and also supports the Environmental Trust in the following ways.

- delivering information sessions for all grant rounds, including those administered by the Environmental Trust
- conducting regulatory and compliance checks for all grant applications proposing projects to build or enhance waste infrastructure
- verifying self-reported performance of grant recipients.

Grant applications are initially assessed by the EPA and DPIE for completeness and also compliance with environmental and planning regulations. They then undergo scrutiny and analysis by an independent economist.

Grant applications are then assessed by a Technical Review Committee of independent experts and community representatives. Depending on which agency administers the grant program, recommendations for awarding grants are made by this committee to either the Environmental Trust members or the CEO of the EPA.

Grant administration practices support the achievement of program objectives and management of project risks. Risk-mitigation practices include establishing Deeds of Agreement with applicants which outline the expectations of grant recipients in terms of outcomes of the funded project and regular progress reports and engaging probity officers to oversee the deliberations of assessment committee members when they meet.

The audit found that the relationship between the EPA and the Environmental Trust functions well in relation to administering the grants that fund waste infrastructure. However, we identified some opportunities for improvement in the application of grant administration procedures:

- In the ten grant rounds administered by the Environmental Trust that were reviewed for the audit only two had a full set of conflict of interest declarations and confidentiality agreements for all Technical Review Committee members. As Technical Review Committee members are active in the waste industry and may have commercial relationships with applicants, it is important that their independence and objectivity is carefully assessed and records are maintained. We note that there has been improvement in the retention of these documents in recent years.
- While reports are prepared by probity officers present at meetings of the Technical Review Committees, committee deliberations are not recorded for grant programs administered by the Environmental Trust. Technical Review Committee views are instead documented in spreadsheets that record the scoring and other assessment comments of committee members. For two of the ten grants rounds we examined, these spreadsheets could not be located by the Environmental Trust staff. This exposes the risk that the government would be unable to justify awarding grants to particular applicants if the outcomes of a grant round were challenged at a later date. Government agencies are required to keep documentation in accordance with the *State Records Act 1998* and the NSW Government Standard on Records Management. This includes proceedings of meetings.
- Cost-benefit analyses prepared by applicants to demonstrate the economic value of their projects were often poor quality, despite the availability of free support services provided by the funding agencies. Economists engaged by the funding agencies to assess the cost-benefit analyses identified flaws in 69 per cent of those prepared for the grant rounds included in the audit. Without robust cost benefit analyses, there is a risk that the projects awarded grants may not be those delivering the greatest overall benefit in reference to the program objectives. There is an opportunity to work with the NSW Treasury to develop a cost-benefit analysis template more suited to external grant applicants.

Inconsistent information is communicated about grant program priorities

Setting priorities for individual grant rounds can help the government to address gaps in needed waste infrastructure, both in types of waste and locations where infrastructure is required.

Some grant rounds have priorities which are communicated to grant applicants in application guidelines. Priorities are also communicated to assessors in assessment guidelines. In our audit sample of 12 grant rounds, documentation in three rounds included inconsistent and potentially misleading advice for grant applicants and the assessment team about the priorities for the grant round.

Exhibit 10: Examples of inconsistent information about grant program priorities

Application guidelines for the 2017 round of the Resource Recovery Facility Enhancement and Expansion Fund stated that construction and demolition waste would be the priority for funding. However, the guidelines provided to the assessment team said that the priority would be waste recovered from business, industry and households.

Application guidelines for the 2019 round of the Product Improvement Program specified the following priority waste types to guide applicants: mattresses, plastic film or other plastics, copper chrome arsenic timber and other treated timbers, tyres and rubber, nappies and incontinence pads. Guidelines provided to the assessment team only identified paper/cardboard, glass and plastics as the priority materials.

Source: Audit Office research.

Inconsistent information provided to grant applicants and assessors limits the effectiveness of setting priorities. It also prevents applicants from receiving due process and creates a risk that the best projects may not be funded. Applicants may decline to apply for a grant because they believe that their project will not be seen as a priority, or an assessment team may erroneously reject a project that it believes is a low priority.

3.3 Monitoring results

The Environmental Trust and the EPA both execute Deeds of Agreement with successful grant recipients. These Deeds are a form of contract that includes a schedule of payments based on achievement of project milestones. The Deeds of Agreement also include the original grant application forms in which the applicants have committed to environmental outcomes such as processing capacity and throughput and social outcomes such as increased employment.

Grant recipients provide progress reports on agreed milestones but reporting does not include a re-assessment of risks to agreed environmental and social outcomes

While project progress is monitored by the funding agencies, other risks that may affect project outcomes are not formally assessed by the funding agencies throughout the project.

Formal processes are in place for grant recipients to report performance against project targets and request variations to project schedules and scope. However, unless the grant recipient requests a variation, or reports a change to their original risk assessment, the funding agency may be unaware of internal or external risk factors impacting upon the project's agreed social and environmental outcomes until the final milestone report and measures are submitted. One project reviewed for the audit delivered all milestone reports on time until the final report revealed that the project scope had been changed and the agreed waste throughput was unlikely to be delivered. Earlier assessment of project risk might have identified the change of scope and led to earlier investigations.

Final project reports may not reveal whether agreed waste diversion rates and throughput have been achieved

Project infrastructure is typically not yet operating at full capacity when the final milestone payment is made and neither the EPA nor the Environmental Trust follows up to check that the grant recipient achieves the agreed throughput and waste diversion.

Nine completed projects were included in the audit. For those nine, at the time they submitted their final reports:

- 3 had met or exceeded the agreed tonnage of waste diverted from landfill
- 4 had not yet met their agreed outcomes
- 2 had no agreed outcomes relating to waste diverted from landfill.

Successful recipients are expected to deliver outcomes included in their grant applications. For most, these include processing capacity (also known as built capacity) and throughput, which represents commitments to diverting waste from landfill. The funding agencies check that the agreed built capacity has been delivered before the final grant payment is made. They also check six months of throughput data. However, changes in the competitive market for recycling inputs or outputs or regulatory changes mean that the agreed throughput is not always achieved at the time the final reports are received. Neither the Environmental Trust nor the EPA monitor the outcomes of funded projects to know if agreed throughput is ever achieved. This means they do not know if these projects are delivering the expected contribution to WARR targets.

Section two

Appendices

Appendix one – Responses from audited agencies



Planning,
Industry &
Environment



DOC20/901468-3

Ms Margaret Crawford
Auditor General
Audit Office
GPO BOX 12
SYDNEY NSW 2001

By email: mail@audit.nsw.gov.au

Dear Ms Crawford,

Thank you for the chance to consider and respond to your Performance Audit of the Department of Planning, Infrastructure and Environment (DPIE), the Environmental Trust (ET) and the Environment Protection Authority (EPA) - *Waste levy and grants for waste infrastructure*.

We would like to express our appreciation for the significant work of your audit team and their ongoing commitment to working through this process with our teams. The audit has identified areas where we can improve our governance of programs and transparency in relation to the information and policies related to the waste levy. We acknowledge that waste management is highly complex and DPIE, the EPA and the ET have been working collaboratively to progress a number of initiatives to increase reuse, recycling and diversion from landfill. We note that this audit looked at two specific parts of waste management being the waste levy and five waste infrastructure grants, comprising 4.9% of the Waste Less Recycle More program over the period of 2014 through June 30, 2019.

The New South Wales (NSW) Government delivers programs and activities through the *Waste Less, Recycle More* program, which delivers \$802 million in funding over nine years to support infrastructure development, education and compliance management. Aside from grants for waste infrastructure, *Waste Less, Recycle More* also includes works such as:

- Local Government Waste and Resource Recovery Program – which includes the Better Waste and Recycling Fund, support and funding for waste management in Aboriginal communities, the regional coordination and strategy for the voluntary regional and metropolitan waste groups and education campaign and support
- the Illegal Dumping Prevention and Enforcement Fund – including illegal dumping, clean up, prevention and engagement programs, Regional Illegal Dumping (RID) Squads and Programs and Compliance Programs
- the Litter Prevention and Enforcement Fund which comprises the EPA's litter prevention programs, including the Hey Tosser! Campaign which has directly contributed to meeting the NSW Government's priority to reduce waste by 40% by 2021.

NSW also has the most comprehensive regulatory regime to manage waste in Australia. Under this regime waste facilities and transporters are appropriately licenced and continuously monitored ensuring that licensees continue to meet their licence conditions, and where they may be non-compliant that appropriate action, including inspections, audits and other targeted activities, is taken to bring them back to a state of compliance.

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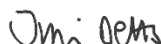
NSW 2150 Australia

To ensure that the management of waste continues to meet the needs of NSW, DPIE is leading the development of a 20-Year Waste Strategy – a whole-of-government initiative for NSW – in partnership with the EPA. The Strategy will provide a long-term strategic focus where communities, industry and all levels of government are working together to build resilient services and markets for waste resources. An issues paper was released in March/April 2020 for consultation and it is expected that the Strategy will be finalised in late 2021.

A detailed response to all recommendations has been provided in the attached Response to Recommendations.

In conclusion, we would like to again thank your team for their professionalism and commitment during the audit and acknowledge the challenging circumstances that the work was undertaken in due to COVID-19 restrictions.

Yours sincerely



JIM BETTS
Secretary

20/11/20

Enclosure



TRACY MACKEY
Chief Executive Officer

16.11.20

Attachment 1 – Department of Planning, Industry and Environment; Environment Protection Authority; and Environmental Trust responses to recommendations from the performance audit of the waste levy and grants for waste infrastructure final report

Recommendation	Response
<p>By June 2021 the EPA should:</p> <p>1. establish a schedule for reviewing the waste levy settings that includes:</p> <ul style="list-style-type: none"> regular reviews to ensure the waste levy is set at the optimal level to achieve its policy objective transparent and objective criteria for determining which local government areas are levied 	<p>Noted</p> <p>The setting of the waste levy is a matter for Government. The NSW Government is developing a whole-of-government 20-Year Waste Strategy which will set the future direction of the state's waste and resource recovery system. Waste levy settings will be explored as part of the development of that Strategy. At this stage of the development of the Strategy it is premature for the EPA to provide a response to this recommendation.</p>
<p>By June 2021 the EPA should:</p> <p>2. improve the timeliness of reporting on the environmental outcomes from its waste levy compliance activities.</p>	<p>Agreed</p> <p>Since implementing best practice methods in measuring waste performance in NSW, the EPA has published recycling, diversion and generation rates for 2015-16, 2016-17 and 2017-18 in the Waste and Resource Recovery Progress Report which was published in June 2019.</p> <p>The EPA continues to improve the timeliness and accessibility of data. The EPA is working towards interactive data being presented via the EPA website and to be in place by June 2021. The roadmap for this work was delayed due to impacts of the 2019-20 bushfires and COVID-19 emergencies which both required response from the team accountable for the roadmap's delivery.</p>
<p>By December 2021 the Department of Planning, Industry and Environment should:</p> <p>3. determine the state's waste infrastructure needs to inform planning for and funding of waste infrastructure in NSW.</p>	<p>Agreed</p> <p>The NSW Government is developing a whole-of-government 20-Year Waste Strategy which will set the future direction of the state's waste and resource recovery system. The 20-Year Waste Strategy is intended to enable the state, businesses and the community to reduce waste, improve resource recovery and approach to waste management as well as generate new economic opportunities, reduce costs to citizens and businesses through a smarter approach, and increase resilience to external shocks.</p> <p>The Strategy will include examination of waste, resource recovery and circular economy infrastructure needs and priorities for the state. The Strategy is expected to be finalised in 2021.</p>
<p>By June 2021 the Environmental Trust should:</p> <p>4. improve record-keeping during grant program assessment committee meetings.</p> <p>5. ensure that conflict-of-interest declarations are completed for all members of assessment teams, and stored in accordance with documented record-keeping requirements.</p>	<p>Noted</p> <p>The gaps in record-keeping identified during the audit related to Technical Review Committee meetings and assessments held between 2013 to 2017. No gaps in record-keeping were identified during the audit for any committee meetings held since 2018. Current meeting procedures now ensure that all relevant records are kept as evidence of the grant assessment process.</p> <p>The conflict of interest declarations that could not be located related to Technical Review Committee meetings held between 2013 to 2017. All conflict of interest declarations relating to assessment meetings since 2018 were located and provided as part of this audit.</p>

Attachment 1 – Department of Planning, Industry and Environment; Environment Protection Authority; and Environmental Trust responses to recommendations from the performance audit of the waste levy and grants for waste infrastructure final report

Recommendation	Response	
		Current meeting procedures now ensure that conflict of interest declarations are completed by all parties involved in the assessment process and that they are maintained in accordance with documented record-keeping requirements.
<p>By June 2021 the EPA and the Environmental Trust should</p> <p>6. ensure that information provided to applicants and assessment committees is consistent.</p>	Noted	<p>The Environmental Trust and EPA agree that it is important to ensure that there are no discrepancies between information provided to applicants and information provided to Technical Review Committees in the assessment of applications.</p> <p>The Trust has updated its procedures to ensure alignment of all information provided to both applicants and assessment committees.</p>

Appendix two – About the audit

Audit objective

The objective of this audit was to assess the effectiveness of the NSW Government in minimising waste sent to landfill and increasing recycling rates.

Audit focus

The audit focused on two key initiatives within the government's Waste and Resource Recovery Strategy (2014–21):

- the waste levy
- grant programs targeted towards funding waste infrastructure.

Audit criteria

We addressed the audit objective by examining the following two criteria:

- the NSW Environment Protection Agency (EPA) regulates the waste levy in a way that reduces waste generation and diverts waste from landfill
- funds allocated through Waste Less Recycle More effectively support investment in waste infrastructure that supports reuse and recycling.

Audit scope

In assessing the criteria, we checked the following aspects:

1. The NSW EPA regulates the waste levy in a way that reduces waste generation and diverts waste from landfill.
 - a) The waste levy is based on research and modelling.
 - b) The EPA monitors the effectiveness and contribution of the waste levy in diverting waste from landfill.
 - c) The EPA reports on the effectiveness of the waste levy to the Minister and stakeholders.
2. Funds allocated through Waste Less Recycle More effectively support investment in waste infrastructure that supports reuse and recycling.
 - a) Clear criteria for assessing waste infrastructure grant applications were applied consistently.
 - b) Assessment criteria were influenced by strategic infrastructure planning.
 - c) Completed waste infrastructure projects that received grants achieved performance in line with contractual agreements and contributed towards diverting waste from landfill or increased recycling rates.
 - d) There is clear accountability for monitoring and reporting on grants approved.
 - e) There is clear accountability for verifying the outcomes of completed waste infrastructure projects funded through grants.

This audit focused on administration of the waste levy and grants that fund waste infrastructure from 2014–15 to 2018–19.

Audit exclusions

The audit did not:

- re-perform economic modelling of the waste levy impact
- examine funding of landfill facilities
- examine the effectiveness of Local Government in achieving the WARR targets
- examine the effectiveness of NSW Government initiatives to reduce littering
- examine waste education programs
- examine state government procurement practices
- comment on government policies.

Audit approach

Our procedures included:

1. Interviewing staff from the EPA and DPIE and consulting with the representatives of the Environmental Trust. These interviews were conducted online due to COVID-19 restrictions in place at the time of the audit.
2. Consultation with stakeholders, including:
 - Treasury
 - NSW Department of Premier and Cabinet
 - Infrastructure NSW
 - Local Government NSW
 - Western Sydney Regional Organisation of Councils
 - Northern Sydney Regional Organisation of Councils
 - Southern Sydney Regional Organisation of Councils
 - Waste Contractors and Recyclers Association of NSW
 - Waste Management Association of Australia, NSW Branch
 - Australian Organics Recycling Association
 - NSW Scrap Metal Recycling Group
 - selected grant recipients, including council representatives, to obtain comment on their experience with the waste infrastructure grant processes.
3. Examining and analysing documentation relating to the waste levy, including:
 - policies, strategy, plans, procedures and guidelines
 - external and internal reports
 - relevant data
 - waste levy modelling assumptions and results.
4. Examining and analysing documentation relating to the selected grant programs, including:
 - policy, strategy, plans, procedures and guidelines
 - external and internal reports
 - relevant data.
5. In-depth examination of documents related to a selection of grant projects summarised in Exhibit 2.1.

Exhibit 2.1: Summary of grant programs, rounds and projects examined in detail for the audit

Grant program	Administered by	Grant rounds included	Projects included
Household problem waste – CRC	Environmental Trust	1	2
Organics infrastructure fund	Environmental Trust	4	6
Waste and recycling infrastructure fund			
• Major resource recovery infrastructure grants	Environmental Trust	3	7
• Resource recovery facility expansion and enhancement grants	Environmental Trust	2	3
• Product Improvement Program	EPA	2	2

We also examined:

- documentation from stakeholders obtained throughout the audit such as research and studies, statistical data and analysis
- information from other jurisdictions for comparison.

The audit approach was complemented by quality assurance processes within the Audit Office to ensure compliance with professional standards.

Audit methodology

Our performance audit methodology is designed to satisfy Australian Audit Standard ASAE 3500 Performance Engagements and other professional standards. The standards require the audit team to comply with relevant ethical requirements and plan and perform the audit to obtain reasonable assurance and draw a conclusion on the audit objective. Our processes have also been designed to comply with requirements specified in the *Public Finance and Audit Act 1983* and the *Local Government Act 1993*.

Acknowledgements

We gratefully acknowledge the co-operation and assistance provided by staff from the EPA, DPIE and the Environmental Trust, recognising in particular the challenges associated with COVID-19 restrictions. We also gratefully acknowledge the representatives from stakeholder organisations who participated in the audit.

Audit cost

The audit cost is \$460,000 including expenses.

Appendix three – Performance auditing

What are performance audits?

Performance audits determine whether State or local government entities carry out their activities effectively, and do so economically and efficiently and in compliance with all relevant laws.

The activities examined by a performance audit may include a government program, all or part of an audited entity, or more than one entity. They can also consider particular issues which affect the whole public sector and/or the whole Local Government sector. They cannot question the merits of government policy objectives.

The Auditor-General's mandate to undertake performance audits is set out in section 38B of the *Public Finance and Audit Act 1983* for state government entities, and in section 421D of the *Local Government Act 1993* for local government entities.

Why do we conduct performance audits?

Performance audits provide independent assurance to the NSW Parliament and the public.

Through their recommendations, performance audits seek to improve the value for money the community receives from government services.

Performance audits are selected at the discretion of the Auditor-General who seeks input from parliamentarians, State and local government entities, other interested stakeholders and Audit Office research.

How are performance audits selected?

When selecting and scoping topics, we aim to choose topics that reflect the interests of parliament in holding the government to account. Performance audits are selected at the discretion of the Auditor-General based on our own research, suggestions from the public, and consultation with parliamentarians, agency heads and key government stakeholders. Our three-year performance audit program is published on the website and is reviewed annually to ensure it continues to address significant issues of interest to parliament, aligns with government priorities, and reflects contemporary thinking on public sector management. Our program is sufficiently flexible to allow us to respond readily to any emerging issues.

What happens during the phases of a performance audit?

Performance audits have three key phases: planning, fieldwork and report writing.

During the planning phase, the audit team develops an understanding of the audit topic and responsible entities and defines the objective and scope of the audit.

The planning phase also identifies the audit criteria. These are standards of performance against which the audited entity, program or activities are assessed. Criteria may be based on relevant legislation, internal policies and procedures, industry standards, best practice, government targets, benchmarks or published guidelines.

At the completion of fieldwork, the audit team meets with management representatives to discuss all significant matters arising out of the audit. Following this, a draft performance audit report is prepared.

The audit team then meets with management representatives to check that facts presented in the draft report are accurate and to seek input in developing practical recommendations on areas of improvement.

A final report is then provided to the head of the audited entity who is invited to formally respond to the report. The report presented to the NSW Parliament includes any response from the head of the audited entity. The relevant minister and the Treasurer are also provided with a copy of the final report. In performance audits that involve multiple entities, there may be responses from more than one audited entity or from a nominated coordinating entity.

Who checks to see if recommendations have been implemented?

After the report is presented to the NSW Parliament, it is usual for the entity's audit committee to monitor progress with the implementation of recommendations.

In addition, it is the practice of Parliament's Public Accounts Committee to conduct reviews or hold inquiries into matters raised in performance audit reports. The reviews and inquiries are usually held 12 months after the report received by the NSW Parliament. These reports are available on the NSW Parliament website.

Who audits the auditors?

Our performance audits are subject to internal and external quality reviews against relevant Australian and international standards.

The Public Accounts Committee appoints an independent reviewer to report on compliance with auditing practices and standards every four years. The reviewer's report is presented to the NSW Parliament and available on its website.

Periodic peer reviews by other Audit Offices test our activities against relevant standards and better practice.

Each audit is subject to internal review prior to its release.

Who pays for performance audits?

No fee is charged for performance audits. Our performance audit services are funded by the NSW Parliament.

Further information and copies of reports

For further information, including copies of performance audit reports and a list of audits currently in-progress, please see our website www.audit.nsw.gov.au or contact us on 02 9275 7100.

OUR VISION

Our insights inform and challenge government to improve outcomes for citizens.

OUR PURPOSE

To help parliament hold government accountable for its use of public resources.

OUR VALUES

Pride in purpose
Curious and open-minded
Valuing people
Contagious integrity
Courage (even when it's uncomfortable)

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ITEM-2 NOM 26/02/19 - LGNSW SAVE OUR RECYCLING

**COUNCILLOR: COUNCILLORS D CLAUSEN, M BYRNE, C DUNCAN,
J DUNN, N NELMES, E WHITE AND P WINNEY-BAARTZ**

PURPOSE

The following Notice of Motion was received on 12 February 2019 from the abovenamed Councillors.

MOTION

That Council:

1. Endorse Local Government NSW's campaign, *Save Our Recycling*, to realise the reinvestment of a 100% of the Waste Levy collected each year by the NSW Government in waste minimisation, recycling and resource recovery.
2. Make representation to the Parliamentary Secretary for the Hunter and local State Members for Newcastle, Wallsend and Charlestown, in support of this campaign objective - for the NSW Government to commit to reinvest 100% of the Waste Levy in waste minimisation, recycling and resource recovery.
3. Write to the Premier, the Hon Gladys Berejiklian MP, the Opposition Leader, the Hon Michael Daley MP, the Minister for Local Government and the Minister for the Environment, the Hon Gabrielle Upton MP, and the Shadow Minister for the Environment and Heritage, Penny Sharpe MLC, seeking bipartisan support for the 100% reinvestment of the Waste Levy collected each year into waste minimisation, recycling and resource recovery.
4. Take a lead role in activating the Local Government NSW *Save Our Recycling* campaign locally, and write to neighbouring councils and the Hunter JO recommending their involvement.
5. Endorse the distribution and display of the Local Government NSW *Save Our Recycling* information on Council premises, as well as involvement in any actions arising from the initiative.
6. Formally advise Local Government NSW that Council has endorsed the *Save Our Recycling* advocacy initiative.

BACKGROUND

This motion requests that CN support Local Government NSW in its advocacy to all those contesting the State election to reinvest 100% of the waste levy collected each year into waste management, recycling and resource recovery in NSW.

The *Protection of the Environment Operations Act 1997* (POEO Act) requires certain licensed waste facilities in NSW to pay a contribution to the NSW Government for each tonne of waste received at the facility. Referred to as the 'waste levy', the contribution aims to reduce the amount of waste being landfilled and promote recycling and resource recovery.

The waste levy applies in the regulated area of NSW which comprises the Sydney metropolitan area, the Illawarra and Hunter regions, the central and north coast local government areas to the Queensland border as well as the Blue Mountains, Wingecarribee and Wollondilly local government areas.

In 2016/17, the NSW Government collected \$726 million from local government, community, businesses and industry via the waste levy, but only committed to use \$72 million through its Waste Less Recycle More initiative – or 10% - on waste minimisation and recycling in 2017-18.

Overall the NSW Government's *Waste Less Recycle More* initiative allocates \$801 million over 8 years (2013-2021) to waste and recycling, however the waste levy collected over that same period will be over \$4.62 billion.

At a local government level, just 18% of the \$300 million collected from the local government sector each year is reinvested in recycling and waste management.

Over the past ten years, City of Newcastle has paid more than \$178 million in the waste levy.

Regardless of how you look at it, the principle remains the same – very little of the waste levy is currently used to support waste minimisation, recycling and resource recovery. The remainder is returned to NSW Government's consolidated revenue.

The reinvestment of the waste levy to support waste and resource recovery infrastructure, develop markets and innovative solutions, and undertake other initiatives to encourage reuse and recycling also offers wide-ranging benefits to our communities right across NSW. There is the potential for economic growth, new infrastructure, new technology and new jobs, particularly in our regional areas.

It should be noted that the following motion was unanimously endorsed at the Local Government NSW 2018 Conference:

That the NSW Government be called upon to ensure that 100% of the levy arising from Section 88 of the Protection of the Environment Operations Act 1997 be used for waste infrastructure and programs, predominantly by local government and the waste sector, for initiatives such as:

- *Development of regional and region-specific solutions for sustainable waste management (e.g. soft plastic recycling facilities, green waste, waste to energy).*

CITY OF NEWCASTLE

Ordinary Council Meeting 26 February 2019 - NOMs distributed under separate cover

Page 7

- *Support innovative solutions to reduce waste and waste transport requirements.*
- *Protect existing and identify new waste management locations.*
- *Local community waste recovery and repair facilities.*
- *Funding a wider range of sustainability initiatives, such as marketing and strategies, that promote and support a circular economy.*

This motion covered motions proposed by Blacktown City Council (Resource recovery locations); Central Coast Council (Waste levy revenues); Cessnock City Council (Recycling crisis - funding support); City of Ryde (Revenue raised by the waste levy); Federation Council (Waste resource); Gwydir Shire Council (Tyre recycling); Hornsby Shire Council (Increase in grant funding for waste levy program); Leeton Shire Council (Increase of waste levy distribution); and Shoalhaven City Council (POEO Levies). Related motions were also submitted by Tweed Shire Council (Recycled products and procurement); Lake Macquarie Council (Support for recycle end markets, reusable, recyclable or compostable packaging); and Orange City Council (Waste management).

As previously noted, this is not a party-political issue: the advocacy initiative calls on all parties and candidates to commit to the 100% hypothecation of the Waste Levy to the purpose for which it is collected.

CN should support this campaign by the NSW local government sector and Local Government NSW and call on all political parties to commit to the reinvestment of 100% of the Waste Levy collected each year by the NSW Government into waste management, recycling and resource recovery.

PREVIOUS DECISIONS

In September 2018, CN adopted a Lord Mayoral Minute advocating for change to the Section 88 Waste Levy.

ATTACHMENTS

Nil.

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That City of Newcastle:

- 1 Notes that City of Newcastle ratepayers will contribute at least \$23.5 million in Waste Levy contributions to the NSW Government this year, receiving a small fraction of this back in the form of grant funding to run environmental awareness campaigns;
- 2 Notes that over the past 10 years the NSW Government has increased the Waste Levy from \$45 per tonne to \$138 per tonne, an increase of over 300 per cent, and that the total Waste Levy paid by the ratepayers of the City of Newcastle over the past 10 years to the NSW Government is \$178 million;
- 3 Notes the release of the NSW Legislative Council Portfolio Committee No. 6 – Planning and Environment report 'Energy from waste' technology (the Report), on matters relating to the waste disposal industry in New South Wales (Attachment 1);
- 4 Notes that Recommendation 4 of the 'Energy from Waste' technology report states that "the NSW Government hypothecate 100 per cent of the waste levy funds contributed by local councils back to these organisations to provide waste management services, including waste reduction, avoidance and re-use programs, and environmental programs to encourage the development of innovative waste management technology.";
- 5 Writes to the NSW Minister for the Environment, the Hon. Gabrielle Upton MP calling on the Minister to accept and implement Recommendation 4 of the Report and sends a copy of this correspondence to the NSW Shadow Minister for the Environment, the Hon. Penny Sharpe MLC.

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On Tuesday, 18 September 2018, the NSW Legislative Council Portfolio Committee No. 6 – Planning and Environment report 'Energy from waste' technology (the Report), on matters relating to the waste disposal industry in New South Wales was released, following a Parliamentary inquiry into waste disposal in NSW.

The terms of reference for the inquiry were broad, including provisions to seek information regarding "the current provision of waste disposal and recycling, the impact of waste levies and the capacity (considering issues of location, scale, technology and environmental health) to address the ongoing disposal needs for commercial, industrial, household and hazardous waste."

In the report forward, Committee Chair, the Hon. Paul Green MLC, notes that "in 2014-2015, New South Wales generated about 19 million tonnes of waste. Indeed, New South Wales is currently the second highest per capita producer of waste in the world. It is therefore essential that waste management services and infrastructure are strategically planned and delivered appropriately. However, successive NSW Governments have failed to effectively leverage waste levy funds to support the development of these much-needed services and facilities, leaving New South Wales dependent on landfill for waste disposal. The committee has made a number of

recommendations to overcome this issue, including that the NSW Government hypothecate a greater percentage of waste levy funds to local councils and the waste industry to support the provision of additional waste services, initiatives and infrastructure”.

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Recommendation four of the Report is that the NSW Government hypothecate 100 per cent of the waste levy funds contributed by local councils back to these organisations to provide waste management services, including waste reduction, avoidance and re-use programs, and environmental programs and to encourage the development of innovative waste management technology.

By supporting this recommendation, City of Newcastle may retain a significant amount of the levy currently paid to the NSW Government, so that these funds can be used exclusively to provide our own waste management services, including waste reduction, avoidance and re-use programs, and environmental programs to encourage the development of innovative waste management technology.

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For 2018/19 the NSW Government charges a levy of \$141.20 per tonne for all waste disposed of at any licensed landfill site, including Summerhill Waste Management Centre. Summerhill collects this levy within the fees and charges outlined above and passes the levy collection to the NSW EPA.

Over the past 10 years we have seen the levy paid increase from \$10.4 million in 2008/09 to \$31.2 million in 2017/18. This has been caused by higher tonnages but also by above CPI hikes in the levy itself which grew from \$45 per tonne to \$138 per tonne over the same period.

That is a 300% increase in ten years.

In total, the City of Newcastle has paid \$178 million in waste levies over the past ten years.

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On 14 May 2013, I submitted a Notice of Motion (NOM 28/05/13 – S88 Waste Levy) regarding Section 88 Waste Levy funds being returned to consolidated revenue by the NSW Government, and the missed opportunities this represented.

In that motion it was noted that the City of Newcastle had provided \$67.8 million over nine years back to the NSW Government via the Section 88 Waste Levy.

The figures in this Notice of Motion from 2013, compared to the current figures, demonstrates the enormous increase in this levy to the rate payers of Newcastle since 2004.

5 HH57 < A9 BHG

5 HLW a Ybh5 . NSW Legislative Council Portfolio Committee No. 6 – Planning and Environment report ‘Energy from waste’ technology

5 HLW a Ybh6 . Notice of Motion – S88 Waste Levy – 28 May 2013

Portfolio Committee No. 6 - Planning and Environment

‘Energy from waste’ technology

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Terms of reference

That Portfolio Committee No. 6 inquire into and report on matters relating to the waste disposal industry in New South Wales, with particular reference to 'energy from waste' technology, and in particular:

- a) the current provision of waste disposal and recycling, the impact of waste levies and the capacity (considering issues of location, scale, technology and environmental health) to address the ongoing disposal needs for commercial, industrial, household and hazardous waste
- b) the role of 'energy from waste' technology in addressing waste disposal needs and the resulting impact on the future of the recycling industry
- c) current regulatory standards, guidelines and policy statements oversighting 'energy from waste' technology, including reference to regulations covering:
 - i. the European Union
 - ii. United States of America
 - iii. international best practice
- d) additional factors which need to be taken into account within regulatory and other processes for approval and operation of 'energy from waste' plants
- e) the responsibility given to state and local government authorities in the environmental monitoring of 'energy from waste' facilities
- f) opportunities to incorporate future advances in technology into any operating 'energy from waste' facility
- g) the risks of future monopolisation in markets for waste disposal and the potential to enable a 'circular economy' model for the waste disposal industry
- h) the transport of all classifications of waste and recyclable materials out of New South Wales and the consequences for waste disposal, government revenue and environment programs, employment, roads and transport routes, and the environment
- i) the prevalence and scale of illegal dumping across New South Wales and the actions of the NSW Environment Protection Authority to address it, and
- j) the sustainability and impacts of the current waste and landfill regime on human and environmental health, including drinking water, soil contamination, fire hazards and emissions
- k) any other related matter.

The terms of reference were self-referred by the committee on 6 April 2017.¹ The terms of reference were extended through the House on 10 August 2017.²

¹ *Minutes*, NSW Legislative Council, 6 April 2017, p 1544.

² *Minutes*, NSW Legislative Council, 10 August 2017, pp 1852-1853.

Committee details

Committee members

The Hon Paul Green MLC	Christian Democratic Party	<i>Chair</i>
The Hon Shayne Mallard MLC	Liberal Party	<i>Deputy Chair</i>
Dr Mehreen Faruqi MLC*	The Greens	
The Hon John Graham MLC*	Australian Labor Party	
The Hon Taylor Martin MLC*	Liberal Party	
The Hon Matthew Mason-Cox MLC	Liberal Party	
The Hon Penny Sharpe MLC	Australian Labor Party	

* Dr Mehreen Faruqi MLC substituted for Mr Jeremy Buckingham MLC from 18 August 2017 for the duration of the inquiry.

* The Hon John Graham MLC substituted for the Hon Ernest Wong MLC from 23 August 2017 for the duration of the inquiry.

* The Hon Taylor Martin MLC replaced the Hon Lou Amato MLC on 30 November 2017.

Contact details

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Chair's foreword

In 2014-2015, New South Wales generated about 19 million tonnes of waste. Indeed, New South Wales is currently the second highest per capita producer of waste in the world. It is therefore essential that waste management services and infrastructure are strategically planned and delivered appropriately. However, successive NSW Governments have failed to effectively leverage waste levy funds to support the development of these much-needed services and facilities, leaving New South Wales dependent on landfill for waste disposal. The committee has made a number of recommendations to overcome this issue, including that the NSW Government hypothecate a greater percentage of waste levy funds to local councils and the waste industry to support the provision of additional waste services, initiatives and infrastructure. The committee has also recommended that the NSW Government identify a government body responsible for leading waste infrastructure planning in New South Wales.

There was a great deal of debate during the inquiry about whether the NSW Environment Protection Authority (NSW EPA) is regulating the waste industry effectively. Stakeholders pointed to the increase in illegal dumping, including the insidious crime of dumping contaminated waste such as asbestos, the growing volume of New South Wales waste being transported to Queensland, and concerns about criminal elements targeting the waste industry, as examples of the NSW EPA failing to provide the strong, decisive, but fair regulatory approach this industry requires. The committee has made several recommendations to overcome these concerns, including that the NSW Government investigate options to restructure the NSW EPA, and undertake an independent review of the NSW EPA's performance of its various functions.

Another key concern for stakeholders was the role of energy from waste technologies in New South Wales. Inquiry participants debated whether there was a place for energy from waste facilities in managing residual waste once higher order waste management techniques have already been exhausted, and whether the *NSW Energy from Waste Policy Statement* is sufficiently robust. Ultimately, the committee supports energy from waste in some circumstances, and has made a number of recommendations aimed at strengthening the regulatory framework for such facilities, including that an expert advisory body chaired by the Chief Scientist examine and report on these issues.

However, the committee does not support the proposal by The Next Generation for an energy from waste facility at Eastern Creek. Many stakeholders, including the NSW EPA and NSW Health, expressed significant concerns about the project, particularly the uncertainty around the risks it may pose to human health and the environment. The committee has therefore recommended that, subject to the current assessment process being conducted by the NSW Department of Planning and Environment, the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek. The reason for the dichotomy in this thought is that there is a live development assessment in play and it is not for the committee to interrupt this legal process. However, we still felt compelled to put our view forward based on the evidence received by the committee.

Finally, this has been a long and complex inquiry and on behalf of the committee, I'd like to express my thanks to all those who participated in it. My thanks also go to my committee colleagues and to the secretariat.



Hon Paul Green MLC
Committee Chair

Key issues

This inquiry highlighted the many, pressing issues facing the waste industry in New South Wales, including concerns about the waste levy, illegal dumping, the interstate transportation of waste, the regulation of energy from waste projects, the regulatory role of the NSW EPA, the lack of strategic planning for waste management infrastructure, and the significant challenges facing the recycling and resource recovery sector.

The high waste levy was partially credited for the state's impressive resource recovery rate, however stakeholders expressed concerns about the waste levy's effectiveness in supporting the development of much-needed waste infrastructure, particularly recycling and resource recovery facilities and alternative waste technologies. Inquiry participants also suggested that the waste levy impacts heavily on certain councils. To overcome some of these issues, the committee has recommended that the NSW Government hypothecate additional levy funds to local councils and the waste industry, and investigate options for reforming the waste levy grant system. We have also recommended that the NSW Government urgently consider attaching the waste levy to the waste generator in New South Wales, particularly for large waste generators or operators of large sites.

The committee received concerning evidence about the problem of illegal dumping in New South Wales. The NSW EPA is attempting to address this insidious environmental crime. However, the committee believes more resources should be directed towards ending this practice. Amongst other recommendations, we have recommended the NSW Government allocate additional resources to, and increase the number of, Regional Illegal Dumping (RID) Squads, and allocate additional resources to support the enhanced use of vehicle trackers.

The committee was alarmed by the large, and growing, amounts of New South Wales waste being transported interstate, particularly to Queensland. This practice is unjustifiable and has serious consequences including significant economic, not to mention environmental, ramifications. We therefore applaud the Queensland Government's announcement, just days before the tabling of this report, that it intends to re-introduce its waste levy. The committee heard that the NSW EPA has attempted, albeit unsuccessfully, to end the interstate transportation of waste. We have recommended that the NSW EPA and its interstate counterparts consider a national approach to addressing this issue, and, more immediately, that the NSW EPA develop and implement a state-wide approach to ending the interstate transportation of waste.

There was debate, particularly during the early stages of this inquiry, about the use of energy from waste technology in New South Wales. Overall the committee believes energy from waste technologies as means of energy recovery may be appropriate in some circumstances, but only after a significant shift up the waste hierarchy to avoid, reduce and re-use waste and the issues of social licence, air pollution impacts and health risks have been addressed. In addition, we have recommended that the NSW Government establish an expert advisory body on energy from waste chaired by the Chief Scientist to examine and report on the energy from waste regulatory framework to create certainty for the market and communities.

A large proportion of submissions received in this inquiry discussed The Next Generation's proposal for an energy from waste facility at Eastern Creek. Stakeholders, including the NSW EPA and NSW Health, expressed significant concerns about the possible risks to human health and the environment posed by the project. These issues stem from concerns about the proposed feedstock for the facility, the lack of a reference facility to demonstrate how the technology will process the feedstock, and uncertainty about the possible emissions from the facility. Other concerns included the siting of the facility, its size, and the failure of the proponent to gain the community support necessary

to operate an energy from waste facility. While the proponent attempted to address these concerns, ultimately, the committee has recommended that, subject to the current assessment process being conducted by the NSW Department of Planning and Environment, the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek.

There was some concern expressed during the inquiry that the NSW EPA is not effectively regulating the waste industry. The agency's inability to stop illegal landfilling was an often-cited example of this argument. The NSW EPA responded forcefully to suggestions that its regulatory regime is inadequate, noting there are significant challenges in regulating the waste industry. In an effort to ensure the NSW EPA pursues its many varied roles more effectively, the committee has recommended that the NSW Government conduct an independent review of the NSW EPA, and investigate options to restructure the agency so it can improve its performance.

Stakeholders painted a troubling picture of the future of waste management in New South Wales, and argued that the NSW Government must take a proactive role in planning and supporting infrastructure development across the state. We acknowledge that the NSW EPA is drafting the first *Waste and Resource Recovery Infrastructure Strategy*, and have recommended that the strategy provide guidance on a range of factors impacting the development of waste infrastructure, such as identifying and zoning land, facilitating new infrastructure and supporting the circular economy. Importantly, the committee has also recommended that the NSW Government identify a lead body, either an existing department or agency or a newly-created body, responsible for leading waste management infrastructure planning in New South Wales.

The fate of the New South Wales recycling and resource recovery sector was an increasingly concerning issue during the inquiry. The ban imposed by China on the importation of plastics may lead to the collapse of the kerbside recycling system, and the committee has recommended that the NSW EPA provide additional support to local councils and resource recovery organisations to meet recycling targets and manage issues such as stream contamination, bureaucratic barriers, lack of product stewardship, and limited market opportunities. In addition, we have also recommended that the NSW EPA investigate, identify and implement alternative solutions to the ban on importation of recyclable plastics by China.

Recommendations

- Recommendation 1** 18
That the NSW Government ensure that all funds allocated to the Waste Less, Recycle More program be spent in accordance with the program.
- Recommendation 2** 18
That the NSW Environment Protection Authority undertake an audit of the Waste Less, Recycle More program to ensure that the funds are fully expended to meet the objectives of the program.
- Recommendation 3** 20
That the NSW Government reclassify Shoalhaven City Council from the Metropolitan Levy Area to either the Regional Levy Area or the unregulated area.
- Recommendation 4** 27
That NSW Government hypothecate 100 per cent of the waste levy funds contributed by local councils back to these organisations to provide waste management services, including waste reduction, avoidance and re-use programs, and environmental programs and to encourage the development of innovative waste management technology.
- Recommendation 5** 27
That the NSW Government investigate opportunities to hypothecate a proportion of waste levy funds contributed by the waste industry back to the industry to support waste management solutions and the development of innovative waste management technology.
- Recommendation 6** 27
That the NSW Government urgently consider attaching the waste levy to the waste generator in New South Wales, particularly for large waste generators or operators of large sites.
- Recommendation 7** 28
That the NSW Government investigate options for reforming the waste levy grant system, including providing greater flexibility in the grant guidelines for waste management projects.
- Recommendation 8** 36
That the NSW Government amend the Protection of the Environment Operations Legislation Amendment (Waste) Regulation 2017 to make it an offence to exhume waste from landfill sites.
- Recommendation 9** 36
That the NSW Government allocate additional resources to support the policing of illegal dumping.
- Recommendation 10** 36
That the NSW Environment Protection Authority strengthen its liaison with NSW Police when it comes to illegal activity in the waste sector, with formal protocols made public, and specifying the channels through which this liaison occurs.
- Recommendation 11** 36
That the NSW Government allocate additional resources to, and expand the number of, Regional Illegal Dumping (RID) squads.

- Recommendation 12** 37
That the NSW Environment Protection Authority immediately increase the use of vehicle trackers and other surveillance techniques, including drones, to prevent illegal dumping.
- Recommendation 13** 37
That the NSW Government allocate additional resources to support the enhanced use of vehicle trackers in the waste industry.
- Recommendation 14** 50
That the NSW Environment Protection Authority:
- develop and implement a state-wide approach to ending the interstate transportation of waste
 - pursue a national approach to addressing the interstate transportation of waste in collaboration with its counterparts in other jurisdictions.
- Recommendation 15** 66
That the NSW Environment Protection Authority provide more detailed information concerning the emissions regime for energy from waste facilities, including explicit reference to international best practice standards, in the *Energy Recovery Facility Guidelines*.
- Recommendation 16** 66
That the NSW Environment Protection Authority set licensing conditions that meet current international best practice for emissions standards, and that licensing conditions be drafted so as to incorporate any future improvements in emissions standards
- Recommendation 17** 67
That the NSW Environment Protection Authority set out the expected community engagement practices and outcomes a proponent must comply with to receive the necessary approvals and community support to operate an energy from waste facility in the *Energy Recovery Facility Guidelines*.
- Recommendation 18** 67
That the NSW Department of Planning and Environment require applicants for energy from waste facilities to provide a short, high-level summary of the Environmental Impact Statement, and that this document be published on the department's website, in addition to the full Environmental Impact Statement.
- Recommendation 19** 68
That the NSW Government establish an expert advisory body on energy from waste chaired by the Chief Scientist to examine and report on the energy from waste regulatory framework to create certainty for the market and communities, with particular reference to:
- changes required to the *Energy from Waste Recovery Guidelines* to guarantee that New South Wales uses only world's best practices in emissions, emissions monitoring and residual waste disposal
 - consent conditions required in any planning approval to guarantee that New South Wales uses only world's best practices in emissions, emissions monitoring and residual waste disposal
 - the impact of energy from waste on human health

- the impact of energy from waste on recycling targets.

- Recommendation 20** **76**
That, subject to the current assessment process being conducted by the NSW Department of Planning and Environment, the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek.
- Recommendation 21** **110**
That the NSW Government investigate options to restructure the NSW Environment Protection Authority so it can improve its performance.
- Recommendation 22** **111**
That the NSW Government conduct an independent review into the NSW Environment Protection Authority, with particular reference to:
- assessing the adequacy of funding for the performance of its compliance, enforcement and other roles
 - improving its community engagement role and the effectiveness of its enforcement and compliance roles
 - the perceived conflict of interest between its compliance and policy and education roles.
- Recommendation 23** **111**
That the NSW Government seek to amend the *Protection of the Environment Administration Act 1991* to provide for the appointment of a chairperson of the board independent of the Chief Executive Officer of the NSW Environment Protection Authority.
- Recommendation 24** **114**
That the NSW Government allocate additional resources to the NSW Environment Protection Authority to conduct investigations into large-scale illegal dumping activities.
- Recommendation 25** **114**
That the NSW Government introduce a 'fit and proper person' test for proprietors and company directors to assess whether individuals may work in the waste industry, incorporating a risk assessment based on a sliding scale.
- Recommendation 26** **114**
That the NSW Environment Protection Authority complete the draft protocol on calculating the quantum of the monetary benefit of illegal dumping and illegal landfilling as soon as practicable.
- Recommendation 27** **115**
That the NSW Government establish an independent inquiry to investigate the operation, regulation and approvals of the Mangrove Mountain Landfill site.
- Recommendation 28** **120**
That the NSW Environment Protection Authority regularly publish up-to-date waste data.

- Recommendation 29** **127**
 That the NSW Environment Protection Authority *Waste and Resource Recovery Infrastructure Strategy* provide guidance on matters including:
- identifying appropriate precincts and locations, including buffer zones, for waste facilities
 - facilitating new infrastructure, particularly alternative waste management options and energy from waste plants
 - enabling the circular economy, including waste generator education, product stewardship, waste levies, market support initiatives and avoidance, reduction and re-use support subsidies
 - creating ‘real markets’ for secondary materials from waste.
- Recommendation 30** **128**
 That the NSW Government investigate opportunities to enhance the collaborative powers of Regional Organisations of Councils to encourage investment in waste facilities, to be funded by the waste levy.
- Recommendation 31** **129**
 That the NSW Government identify a government body, either an existing department or agency or a newly-created body, responsible for leading waste management infrastructure planning in New South Wales, including:
- leading the development of a waste management infrastructure plan for metropolitan Sydney, in collaboration with local government
 - identifying and zoning land, including buffer zones, for waste management facilities, in collaboration with the NSW Department of Planning and Environment and other stakeholders such as local councils
 - leading the development of a waste management infrastructure State Environmental Planning Policy, in collaboration with the NSW Department of Planning and Environment.
- Recommendation 32** **131**
 That the NSW Environment Protection Authority develop and implement resource recovery criteria for landfills in New South Wales.
- Recommendation 33** **135**
 That the NSW Environment Protection Authority provide additional support to local councils and resource recovery organisations to meet recycling targets and manage issues such as stream contamination, bureaucratic barriers, lack of product stewardship, and limited market opportunities.
- Recommendation 34** **136**
 That the NSW Environment Protection Authority urgently investigate, identify and implement alternative solutions to the ban on the importation of recyclable plastics by China.
- Recommendation 35** **140**
 That the NSW Environment Protection Authority, in collaboration with stakeholders, investigate opportunities to embed zero waste strategies and the circular economy in New South Wales.

Recommendation 36

140

That that the NSW Government allocate additional resources to the NSW Environment Protection Authority to develop and implement Extended Producer Responsibility schemes.

Conduct of inquiry

The terms of reference for the inquiry were self-referred by the committee on 6 April 2017.

The committee received 383 submissions, four supplementary submissions and six proforma submissions.

The committee held five public hearings: four at Parliament House in Sydney and one at Rooty Hill RSL, Rooty Hill.

In August 2017, the terms of reference for the inquiry were expanded. Following the expanded terms of reference, the committee received an additional 12 submissions and ten supplementary submissions.

The committee conducted two site visits during the inquiry. The first visit was to the Veolia 'ecoprecinct' at Woodlawn, near Tarago in the Southern Tablelands of New South Wales, and the second visit was to the Genesis recycling facility at Eastern Creek in western Sydney.

Inquiry related documents are available on the committee's website, including submissions, hearing transcripts, tabled documents and answers to questions on notice.

Chapter 1 Waste management in New South Wales

This chapter describes the waste management system in New South Wales including relevant legislation and policies. It also provides an overview of energy from waste across the state, the *NSW Energy from Waste Policy Statement*, and the use of these technologies in other jurisdictions.

Increasing waste

- 1.1** Waste generation and its management, including collection, separation, storage, transportation, processing, treatment and disposal, present a significant challenge for government and the community. The NSW Government acknowledges that inadequate waste management can have a detrimental effect on both the community and the environment:

The community feels the impact of improperly managed waste in many different ways. It can be detrimental to public health through odour, noise, dust, vermin and toxic substances, while wastes of particular concern, like asbestos, can cause significant health problems. The same issues can impact the amenity of local communities to the detriment of public well-being. Waste can also pollute our environment and leach toxins or nutrients into groundwater and land.³

- 1.2** In 2014-2015 Australia produced approximately 64 million tonnes of waste.⁴ During this period, New South Wales generated about 19 million tonnes of waste.⁵ Currently, New South Wales is the second highest per capita producer of waste in the world.⁶ While the annual quantity of waste generated in Australia per capita declined slightly between 2006-2007 and 2014-2015, the national average annual growth rate of waste during this time increased about 1.2 per cent.⁷ This growth is attributed to a range of factors including increasing population and economic growth.⁸ Given that Australia, and New South Wales, are experiencing high rates of population growth and continuing economic growth, it is expected that waste production will also continue to trend upwards.⁹
- 1.3** In New South Wales, the resource recovery rate – proportion of waste diverted from landfill to be re-used, recycled or utilised through energy recovery – is approximately 65 per cent.¹⁰ This rate is credited to the state's waste levy, the high level of resource recovery infrastructure, and 'progressive' waste management policies and investment in infrastructure, market development and education programs.¹¹ Despite this resource recovery rate, stakeholders emphasised that a significant proportion of waste in New South Wales is not recovered or

³ NSW EPA, *NSW Waste Avoidance and Resource Recovery Strategy 2014-21*, 2014, p 4.

⁴ Tabled document, NSW EPA, *Australian National Waste Report 2016*, August 2017, p 9.

⁵ Tabled document, *Australian National Waste Report 2016*, p 40.

⁶ Evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 24 November 2017, p 7.

⁷ Tabled document, *Australian National Waste Report 2016*, p 11.

⁸ Tabled document, *Australian National Waste Report 2016*, p 5.

⁹ See, Evidence, Mr Buffier, 17 August 2017, p 60.

¹⁰ Tabled document, *Australian National Waste Report 2016*, p 40.

¹¹ Tabled document, *Australian National Waste Report 2016*, p 40. Also see, Evidence, Mr Buffier, 17 August 2017, p 60.

recycled.¹² Stakeholders also raised the issue of the growing interstate movement of waste and the impact this is also having on recycling rates.

Waste regulation

1.4 Waste includes any substance that is discarded, rejected, unwanted, surplus or abandoned, or discharged, emitted or deposited in the environment in such a way that causes the environment to be altered. Substances that have the capacity to be recycled, re-used or recovered are also considered to be waste.¹³

1.5 Waste can be categorised in the following streams:

1. municipal (from council operations or households)
2. commercial and industrial
3. construction and demolition.¹⁴

1.6 In New South Wales, municipal waste was the smallest contributor to total waste, representing approximately 28 per cent of waste generated, while waste from commercial, industrial, construction and demolition sources comprised roughly 72 per cent.¹⁵

1.7 The 'fate' or outcome of waste is also classified into three categories:

1. disposal (usually landfill)
2. recycling
3. energy recovery.¹⁶

1.8 The key sources of waste management regulation in New South Wales include:

- the *Protection of the Environment Operations Act 1997*, which provides enforcement provisions, a detailed licensing framework and other tools to protect human health and environment from the inappropriate use of waste¹⁷
- the Protection of the Environment Operations (Waste) Regulation 2014, which includes thresholds for environment protection licences, and outlines the waste levy system
- the Protection of the Environment Operations (Clean Air) Regulation 2010, which provides regulatory measures to control emissions from various sources including industry

¹² See, Evidence, Ms Gayle Sloan, Chief Executive Officer, Waste Management Association of Australia, 26 June 2017, p 22; Evidence, Dr Marc Stammbach, Managing Director, HZI Australia, 17 August 2017, p 16; Evidence, Mr Mike Ritchie, Managing Director, MRA Consulting Group, 7 August 2017, p 10.

¹³ See, *Protection of the Environment Operations Act 1997*, Dictionary.

¹⁴ Tabled document, *Australian National Waste Report 2016*, p 1.

¹⁵ Submission 215, Waste Management Association of Australia, p 2.

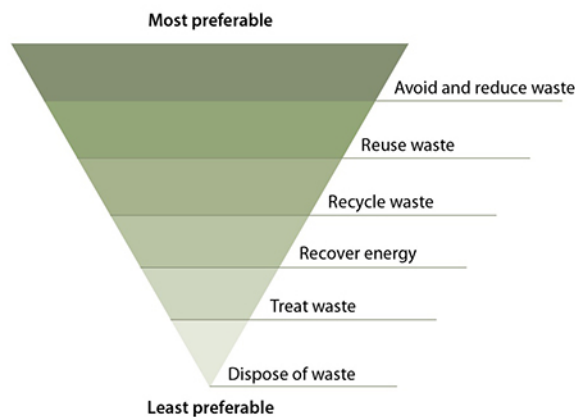
¹⁶ Tabled document, *Australian National Waste Report 2016*, p 1.

¹⁷ See, Evidence, Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery, NSW EPA, 26 June 2017, p 2.

- the *Waste Avoidance and Resource Recovery Act 2001*, which sets the waste hierarchy and the *NSW Waste Avoidance and Resource Recovery Strategy*¹⁸
- the *Environment Protection and Biodiversity Act 1999* (Cth), which provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places.

1.9 The waste hierarchy enshrines the appropriate order for resource management¹⁹ and is set out in Figure 1.

Figure 1 Waste hierarchy



NSW EPA, *The waste hierarchy*, <http://www.epa.nsw.gov.au/wastestrategy/waste-hierarchy.htm>, 14 January 2015.

1.10 The *Waste Avoidance and Resource Recovery Strategy 2014-21* is the state's strategy for reducing waste generation, improving resource recovery rates and keeping materials circulating within the economy. This strategy is supported by Waste Less, Recycle More, a government initiative funded by the waste levy to provide waste and recycling improvements across the state.²⁰ Waste Less, Recycle More and the waste levy are examined in Chapter 2.

1.11 The NSW Environment Protection Authority (NSW EPA) is primarily responsible for waste regulation in New South Wales. Mr Barry Buffier, the then Chair and Chief Executive Officer of the NSW EPA, outlined this role as follows:

... the EPA introduces policies and implements programs that reduce waste, increase recycling and improve behaviour associated with littering and waste disposal to protect the community and the environment. We regulate the transportation, collection, treatment, storage and disposal of waste and support the reduction of the use of materials by encouraging re-use and recycling and material recovery. The New South Wales EPA has the toughest waste regulation in the country and puts significant effort into regulating the waste industry, monitoring compliance and taking enforcement action.²¹

¹⁸ See, Evidence, Mr Beaman, 26 June 2017, p 2.

¹⁹ *Waste Avoidance and Resource Recovery Act 2001*, s 3(b).

²⁰ NSW EPA, *Waste Avoidance and Resource Recovery Strategy, 2014-21*, 2014, p 8.

²¹ Evidence, Mr Buffier, 17 August 2017, p 61.

- 1.12' The NSW EPA's role in regulating waste is examined in Chapter 7.
- 1.13' Local councils and regional organisations of councils also play a role in waste regulation. The NSW Department of Planning and Environment is the consent authority for waste infrastructure, in relation to State Significant Sites. In addition, NSW Health may provide advice regarding possible risks to human health and the environment posed by waste infrastructure development.

Energy from waste

- 1.14' The NSW Government describes energy from waste as a process through which energy and resources are retrieved from waste through thermal treatment. Thermal treatment is defined in Schedule 1 to the *Protection of the Environment Operations Act 1997* as 'the processing of waste by burning, incineration, thermal oxidation, gasification, pyrolysis, plasma or other thermal treatment processes'.²² There are other methods to recover energy from waste that do not rely on thermal treatment such as anaerobic digestion technologies and landfill gas capture.²³ Energy from waste technologies may result in heat, electricity or fuel.
- 1.15' Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, noted that it was critically important to use technology that was fit for the purpose:
- From a technical, economic and social standpoint it is important to understand and integrate three key elements: a comprehensive understanding of waste streams—the feed stock; the use of appropriate conversion technology—matching feedstock with technology; and understanding the end utilisation of recovered materials that makes the most economic sense—whether it be the generation of electricity, heat or fuel or to be used on site or exported to the grid.²⁴
- 1.16' There are approximately 23 bioenergy/energy from waste projects in New South Wales.²⁵ Most of these facilities are relatively small-scale and have a nameplate capacity of less than 10MW. Following on, the combined capacity of all stations is only approximately 250MW and covers bagasse, landfill methane, landfill gas and waste coal mine gas.²⁶
- 1.17' Energy from waste is examined in Chapter 5.

²² NSW EPA, *NSW Energy from Waste Policy Statement* (2015), p i. Also see, *Protection of the Environment Operations Act 1997* Sch 1 pt 3 div 2 s 50(1).

²³ Submission 198, City of Sydney, p 3.

²⁴ Evidence, Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, 7 August 2017, p 39.

²⁵ Submission 189, Clean Energy Finance Corporation, p 2.

²⁶ Submission 189, Clean Energy Finance Corporation, p 2.

NSW Energy from Waste Policy Statement

1.18⁷ In 2015, the NSW EPA published the *NSW Energy from Waste Policy Statement*. The policy sets out the requirements for facilities seeking to recover energy by thermally treating waste, or materials derived from waste. Key features of the policy include:

- the energy from waste process must not result in any increase to ‘the risk of harm to human health or the environment’²⁷
- energy from waste processing should only be used where it is considered ‘the most efficient use of the resource’,²⁸ that is the process will not undermine the higher order waste management options
- a definition of ‘eligible waste fuels’ (certain low-risk waste that can be used as fuel)²⁹
- any facility proposing to thermally treat waste or waste-derived material that is not an eligible waste fuel must meet the requirements for an energy recovery facility³⁰
- operators of energy recovery facilities are required to demonstrate they will use international best practice in relation to:
 - process design and control
 - emission control equipment design and control
 - emission monitoring with real-time feedback to the controls of the process
 - arrangements for the receipt of waste
 - management of residues from the energy recovery process³¹
- the process and air emissions from the facility must satisfy at a minimum the requirements of the Group 6 emission standards within the Protection of the Environment Operations (Clean Air) Regulation 2010³²
- proponents of energy recovery facilities must use reference facilities to demonstrate ‘technologies that are proven, well understood and capable of handling the expected variability and type of waste feedstock’³³
- energy recovery facilities must meet technical, thermal efficiency and resource recovery criteria³⁴
- the ‘good neighbour’ principle, that is a proponent must be considerate, genuinely engage and provide readily available information to stakeholders.³⁵

²⁷ NSW EPA, *NSW Energy from Waste Policy Statement* (2015), p 1. Also see, Evidence, Mr Beaman, 26 June 2017, p 3.

²⁸ NSW EPA, *NSW Energy from Waste Policy Statement* (2015), p 1.

²⁹ NSW EPA, *NSW Energy from Waste Policy Statement*, (2015), p 5.

³⁰ NSW EPA, *NSW Energy from Waste Policy Statement*, (2015), p 6.

³¹ NSW EPA, *NSW Energy from Waste Policy Statement*, (2015), p 6.

³² NSW EPA, *NSW Energy from Waste Policy Statement*, (2015), p 6.

³³ NSW EPA, *NSW Energy from Waste Policy Statement*, (2015), p 6.

³⁴ NSW EPA, *NSW Energy from Waste Policy Statement*, (2015), p 6. Also see, Evidence, Mr Beaman, NSW EPA, 26 June 2017, p 3.

³⁵ NSW EPA, *NSW Energy from Waste Policy Statement*, (2015), p 4. Also see, Evidence, Mr Beaman, 26 June 2017, p 4.

- 1.19^{*} The NSW EPA can also require a facility to meet additional emission controls.³⁶ In addition, the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* outlines the methods required to model and assess emissions of air pollutants.
- 1.20^{*} The committee heard these criteria reflect the *Industrial Emissions Directive for waste incineration and co-incineration plants (Directive 2010/75/EU)*, which is considered the international best practice standard.³⁷
- 1.21^{*} The NSW EPA anticipates publishing the *Energy Recovery Facility Guidelines*, which will set out more specific requirements for proponents of energy recovery facilities to meet, in early 2018.³⁸

Energy from waste projects in Australia

- 1.22^{*} Energy from waste projects are not widespread in Australia. Mr Tim Jordan, Head of Research at the Clean Energy Finance Corporation, explained: "The OECD average is about 2.9 per cent of total energy from waste and bioenergy. The Australian figure is significantly below that".³⁹ There is also no national framework for energy from waste.⁴⁰
- 1.23^{*} The Clean Energy Finance Corporation informed the committee that seven major energy from waste projects have been announced across Australia. It is unclear how many of these projects have been approved for development by the respective state authorities.

³⁶ Evidence, Mr Beaman, 26 June 2017, p 3.

³⁷ See, Evidence, Mr Ritchie, 7 August 2017, pp 16-17; Submission 146, Randwick City Council, p 3; Submission 145, Suez, p 3.

³⁸ NSW EPA, *Energy from waste policy* (24 August 2017) <http://www.epa.nsw.gov.au/wastestrategy/energy-from-waste.html>.

³⁹ Evidence, Mr Tim Jordan, Head of Research, Clean Energy Finance Corporation, 26 June 2017, p 38. Also see, Submission 198, City of Sydney, p 7.

⁴⁰ See, Submission 164, Alexandria Landfill, p 7.

Table 1 Announced major energy from waste projects

Project	Reported Cost (\$m)	Waste Capacity (1,000 tonnes per year)
New Energy, Port Hedland WA	150	100
New Energy, East Rockingham WA	180	225
Phoenix Energy, Kwinana WA	400	400
EMRC Resource Recovery Facility, Perth WA	NA	150
Dial-a-Dump, Eastern Creek NSW	700	1,300
Omega Energy Hunter Resource & Energy Recovery Facility, Weston NSW	NA	150
Boral, Berrima NSW	NA	100

Clean Energy Finance Corporation, Energy from waste in Australia: A state-by-state update, November 2016, p 8.

- 1.24^{*} It is anticipated that the announced projects will use a variety of technologies. For example, the New Energy facility at Port Hedland will use gasification technology,⁴¹ while the New Energy development at East Rockingham and the proposed The Next Generation plant will use combustion technology.⁴² The Next Generation proposal is examined in Chapter 6.

European Union (including the United Kingdom)

- 1.25^{*} In 2015, there were approximately 507 energy from waste facilities operating in Europe.⁴³ As previously noted, *Directive 2010/75/EU* is the primary policy instrument regulating emissions from waste incineration and co-incineration plants.
- 1.26^{*} The committee heard that while most energy from waste facilities in Europe process between 250,000 and 500,000 tonnes a year,⁴⁴ there are larger-scale facilities in operation. For example, Dr Marc Stammbach, Managing Director of Hitachi Zosen Inova (HZI) Australia, noted that, at capacity, the Ferrybridge facility in the United Kingdom will process 1.2 million tonnes of

⁴¹ Evidence, Mr Jason Pugh, Chief Executive Officer, New Energy Corporation, 26 June 2017, p 17.

⁴² See, New Energy Corporation, *Perth Metro, WA*, <http://www.newenergycorp.com.au/projects/perth-metro-wa/>. Also see Evidence, Ms Jane Bremmer, Secretary, National Toxics Network, 27 June 2017, p 39, and Submission 164, Alexandria Landfill, p 31.

⁴³ Confederation of European Waste to Energy Plants, *Waste to Energy Plants in Europe 2015*, http://www.cewep.eu/information/data/studies/m_1565.

⁴⁴ Evidence, Mr Beaman, 26 June 2017, p 8.

waste per annum.⁴⁵ In addition, Dr Ali El Hanandeh, Lecturer, School of Engineering, Griffith University, noted that Germany is also moving towards larger-scale facilities.⁴⁶

1.27 Inquiry participants informed the committee that energy from waste facilities in Europe predominately accept municipal solid waste. Mr Henry Moore, Manager, Waste Reform at the NSW EPA, explained the types of materials used as feedstock in European facilities:

Some of them are [using residual waste] and some are not. Some of them are mass-burn waste incinerators. Waste is generated and trucked, generally straight into these facilities. They are often dealing with a more diverse range of material, and often less controlled in terms of its composition. It is the technology of these facilities that deals with the inherent risks associated with it to produce the no-impact outcome.⁴⁷

1.28 Mr Moore explained that urban encroachment over the last 50 years has meant that energy from waste facilities now operate in Europe within densely populated residential areas:

There have been waste incinerators in Europe for many decades. Over time, those facilities have been significantly upgraded. That speaks to the location of many of them; they were often located outside urban areas or further away. If that was 50 years ago, obviously there has been urban encroachment. As a result, they have become much better in terms of performance outcomes ... a number of these facilities now exist within central city locations around Europe and effectively have no impact on the surrounding environment and air quality.⁴⁸

1.29 Mr Mike Ritchie, Managing Director of MRA Consulting Group, explained that unlike in New South Wales, 'In most of Europe, it is the regional organisations of councils that purchase these facilities, provided by the private sector but contracted by the communities as an alternative to landfill'.⁴⁹

1.30 Stakeholders suggested that energy from waste is pursued in the European Union for various reasons including a greater need for the generation of heat,⁵⁰ the move away from nuclear technology,⁵¹ and the provision of an incentive from the European Union to divert waste from landfill.⁵² Dr Stambach commented: 'The European track record represents a formidable achievement of zero waste to landfill, dramatic reductions in carbon pollution and the sustainable generation of electricity'.⁵³

1.31 An alternate view offered by the National Toxics Network was that although the European Union is often held up as the world's best standard for incinerator operation, it has recently declared a major policy redirection on waste management and the waste to energy

⁴⁵ Evidence, Dr Stambach, 17 August 2017, p 12.

⁴⁶ Evidence, Dr Ali El Hanandeh, Lecturer, School of Engineering, Griffith University, 7 August 2017, p 40.

⁴⁷ Evidence, Mr Henry Moore, Manager, Waste Reform, NSW EPA, 26 June 2017, p 12.

⁴⁸ Evidence, Mr Moore, 26 June 2017, pp 11-12.

⁴⁹ Evidence, Mr Ritchie, 7 August 2017, p 17.

⁵⁰ See, Evidence, Mr Jordan, 26 June 2017, p 36.

⁵¹ Evidence, Dr El Hanandeh, 7 August 2017, p 42.

⁵² Evidence, Dr El Hanandeh, 7 August 2017, p 42.

⁵³ Evidence, Dr Stambach, 17 August 2017, p 12.

incinerator sector in line with the major commitments to a circular economy. This has resulted in a recommendation issued to members to stop the construction of new incinerators and to decommission existing facilities.⁵⁴

United States of America

- 1.32** In 2016, there were approximately 77 energy from waste facilities operating in the United States of America. However, the number of plants operating has been in decline since 2001.⁵⁵ The majority of operating plants are mass burn facilities. A much smaller proportion of plants are modular systems and refuse derived fuel facilities.⁵⁶ The committee received evidence that energy from waste facilities in the United States vary widely in size.⁵⁷
- 1.33** The committee also heard that the use of energy from waste facilities does not appear to adversely affect recycling rates across states or at a national level: the proportion of waste processed at energy from waste facilities declined from 14.3 per cent in 1990 to 12.8 per cent in 2014, whilst recycling rates have increased from 16 per cent in 1990 to 34 per cent from 2010 onwards.⁵⁸
- 1.34** There is no single piece of federal legislation that regulates the development, siting and operation of energy from waste facilities in the United States, rather there are a number of applicable pieces of federal legislation. There are also complexities in the interaction with state legislation and an onus on individual states to enforce federal regulation.⁵⁹

Committee comment

- 1.35** The committee notes that in Australia, there are currently only around seven large-scale energy from waste projects under consideration or approved by the relevant state bodies. However, given the significant proportion of waste across Australia and in New South Wales that is being sent to landfill, we believe there is an opportunity for energy from waste to play a role in diverting waste from landfill in the future.

⁵⁴ Submission 172, National Toxics Network, p 5.

⁵⁵ Energy Recovery Council, *2016 Directory of Waste-to-Energy Facilities*, (2016) p 5 <http://energyrecoverycouncil.org/wp-content/uploads/2016/06/ERC-2016-directory.pdf>

⁵⁶ Energy Recovery Council, *2016 Directory of Waste-to-Energy Facilities*, (2016) p 5 <http://energyrecoverycouncil.org/wp-content/uploads/2016/06/ERC-2016-directory.pdf>

⁵⁷ Energy Recovery Council, *2016 Directory of Waste-to-Energy Facilities*, (2016) <http://energyrecoverycouncil.org/wp-content/uploads/2016/06/ERC-2016-directory.pdf>

⁵⁸ United States Environmental Protection Agency, *Advancing Sustainable Materials Management: 2014 Fact Sheet*, (November 2016), https://www.epa.gov/sites/production/files/2016-11/documents/2014_smmfactsheet_508.pdf. Also see, Energy Recovery Council, *2016 Directory of Energy-From-Waste Facilities*, (2016) p 12.

⁵⁹ WSP Environment Ltd., *Investigation into the performance (environmental and health) of waste to energy technologies internationally State One – Review of Legislative and Regulatory Frameworks for Waste to Energy Plants*, (January 2013), pp 85-86, https://www.wasteauthority.wa.gov.au/media/files/documents/W2E_Technical_Report_Stage_One_2013.pdf.

- 1.36** The committee acknowledges that energy from waste is well-established and widely used in other jurisdictions, particularly in the European Union. Moreover, the *Industrial Emissions Directive for waste incineration and co-incineration plants (Directive 2010/75/EU)* is considered international best practice for energy from waste regulation. We note that a large number of energy from waste facilities in the European Union use municipal solid waste as feedstock and supply subsidised heat to surrounding homes and businesses.
- 1.37** Energy from waste technology is considered in more detail in Chapter 5.

Chapter 2 The waste levy

This chapter outlines the purpose of the waste levy in New South Wales and discusses issues raised by inquiry participants about how the levy operates, including the implementation of the Waste Less, Recycle More initiative, the impact of the levy on recycling rates and the development of waste infrastructure, and the suggestion that the levy unduly burdens certain councils. The chapter also considers proposals to amend the levy, including by increasing the hypothecation of funds to local councils and industry.

Overview and purpose of the waste levy

- 2.1** Section 88 of the *Protection of the Environment Operations Act 1997* requires certain licensed waste facilities in New South Wales to pay a contribution for each tonne of waste received at the facility.⁶⁰ This contribution is referred to as the ‘waste levy’.
- 2.2** The levy is applied to all waste that is received at:
- scheduled waste disposal facilities (NSW Environment Protection Authority (NSW EPA)-licensed landfills)
 - scheduled waste facilities that are not scheduled waste disposal facilities (for example, NSW EPA-licensed waste processing, resource recovery and waste storage facilities) which are in the regulated area or receive waste from the regulated area.⁶¹
- 2.3** Scheduled waste facilities required to pay the levy must also submit a Waste Contribution Monthly Report to the NSW EPA for each reporting period.⁶²
- 2.4** In accordance with 10B of the Protection of the Environment Operations (Waste) Regulation 2014 (Waste Regulation), the levy liability for scheduled waste facilities is extinguished once the waste is sent offsite for lawful recycling, re-use or disposal. The levy becomes payable for these facilities if waste is stockpiled unlawfully or if waste transported from the facility is unlawfully disposed of.⁶³
- 2.5** The ‘regulated area’ refers to councils within the metropolitan levy area (MLA) and the regional levy area (RLA). The regulated area comprises the Sydney metropolitan area, the Illawarra and Hunter regions, the central and north coast local government areas to the

⁶⁰ See, NSW EPA, *Waste levy* (22 August 2017), <http://www.epa.nsw.gov.au/wasteregulation/waste-levy.htm>.

⁶¹ NSW EPA, *Waste levy for scheduled waste facilities* (22 August 2017), <http://www.epa.nsw.gov.au/your-environment/waste/waste-levy/scheduled-waste>.

⁶² NSW EPA, *Waste levy for scheduled waste facilities* (22 August 2017), <http://www.epa.nsw.gov.au/your-environment/waste/waste-levy/scheduled-waste>. Also see, Submission 164, Alexandria Landfill, p 16.

⁶³ NSW EPA, *Waste levy for scheduled waste facilities* (22 August 2017), <http://www.epa.nsw.gov.au/your-environment/waste/waste-levy/scheduled-waste>.

Queensland border, as well as the Blue Mountains, Wingecarribee and Wollondilly local government areas.⁶⁴

- 2.6 The 2017-2018 waste levy rates are \$138.20 per tonne in the MLA, which the City of Sydney noted is the 'highest landfill levy in Australia',⁶⁵ and \$79.60 per tonne in the RLA.⁶⁶ As per usual practice, the 2018-2019 waste levy rates will increase by the Consumer Price Index.⁶⁷
- 2.7 The levy is paid to the NSW EPA, with the collected funds then being remitted to the state's Consolidated Fund.⁶⁸ Mr Barry Buffier, the then Chair and Chief Executive of the NSW EPA, explained that a share of the funds, namely around one third, are then returned to the NSW EPA, along with the NSW Office of Environment and Heritage.⁶⁹
- 2.8 The table below sets out the waste and environmental levy revenues, and expenditures on environmental programs, for the past five years.

Table 2 Waste and environmental levy revenues, and expenditures on environmental programs, for the past five years

Item/Program (\$m)	2012/13	2013/14	2014/15	2015/16	2016/17 (unaudited)
Revenue:					
Total Waste Revenues	\$483.3	\$503.6	\$568.5	\$692.1	\$659.5
Program Expenditure:					
Waste and Regulatory programs	\$61.7	\$76.9	\$111.1	\$100.0	\$91.0
Other Environmental programs	\$61.5	\$90.0	\$95.9	\$90.1	\$88.8
Total Expenditure	\$123.2	\$166.9	\$207.0	\$190.1	\$179.9

Answers to question on notice, NSW EPA, 27 July 2017, p 1.

- 2.9 The committee heard that the levy generates significant funds for the NSW Government. The NSW EPA advised that the levy receipt for 2016-2017 was more than \$630 million.⁷⁰ The committee also heard that:

⁶⁴ NSW EPA, *Waste levy* (22 August 2017), <http://www.epa.nsw.gov.au/your-environment/waste/waste-levy>.

⁶⁵ Submission 198, City of Sydney, p 2.

⁶⁶ See, NSW EPA, *Waste levy* (22 August 2017), <http://www.epa.nsw.gov.au/wasteregulation/waste-levy.htm>.

⁶⁷ See, NSW EPA, *Waste levy*, (22 August 2017), <http://www.epa.nsw.gov.au/wasteregulation/waste-levy.htm>.

⁶⁸ Evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 17 August 2017, p 69.

⁶⁹ Evidence, Mr Buffier, 17 August 2017, p 69.

⁷⁰ Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery, NSW EPA, 26 June 2017, p 4.

- the levy generated \$675 million in state revenue in 2015-2016, up \$91 million from 2014-2015⁷¹
- the government estimates the levy will raise approximately \$2.234 billion in the four-year period to 2020.⁷²

2.10 The waste levy aims to reduce the amount of waste being landfilled and to promote recycling and resource recovery.⁷³ The NSW EPA explained this concept further:

The waste levy is the key economic instrument used in NSW to discourage landfilling and stimulate resource recovery. It effectively increases the cost of landfilling, which makes the cost of recycling more competitive and ensures landfill is the least preferable waste management option – outcomes which are consistent with the waste hierarchy and good environmental practices.⁷⁴

2.11 Some stakeholders agreed that the levy meets these objectives, for example:

- the NSW EPA stated: ‘The levy has driven innovation and investment in new and upgraded recycling infrastructure, which has helped increase recycling rates in NSW from 45 per cent in 2002–03 to 63 per cent in 2014–15. By contrast, the recycling rate in Queensland, which has no waste levy, is only 35 per cent’⁷⁵
- Local Government NSW described the waste levy as an ‘economic driver for waste avoidance and resource recovery’⁷⁶
- the City of Sydney said that the levy ‘is an effective mechanism for encouraging the development of alternative and innovative solutions to landfill that can provide positive environmental and economic outcomes’⁷⁷
- the Clean Energy Finance Corporation argued that waste levies, particularly the New South Wales levy, ensure that waste with recoverable value is not sent to landfill and provide critical funding for waste infrastructure,⁷⁸ and stated: ‘It is evident that Australian states who have introduced a levy have the highest levels of recycling’⁷⁹
- the Waste Management Association of Australia stated: ‘Recycling rates are much higher in NSW, SA, Victoria, ACT (which each apply levies on landfill disposal or in the case

⁷¹ Submission 149, Wollongong City Council, p 1. Also see, Submission 217, Illawarra Pilot Joint Organisation, p 1.

⁷² Submission 217, Illawarra Pilot Joint Organisation, p 1.

⁷³ See, NSW EPA, *Waste levy* (22 August 2017), <http://www.epa.nsw.gov.au/wasteregulation/waste-levy.htm>. Also see, Submission 144, Australian Council of Recycling, p 2.

⁷⁴ Answers to questions on notice, NSW EPA, 20 November 2017, p 2. Also see, Evidence, Mr Buffier, 17 August 2017, p 70.

⁷⁵ Answers to questions on notice, NSW EPA, 20 November 2017, p 2.

⁷⁶ Submission 326, Local Government NSW, p 4. Also see, Submission 179, HZI Australia, p 2.

⁷⁷ Submission 198, City of Sydney, p 2.

⁷⁸ Submission 189, Clean Energy Finance Corporation, p 2.

⁷⁹ Submission 143, New Energy Corporation, p 2.

of ACT set the price for landfill disposal), compared with states with no or very low levies (QLD, WA, Tasmania and NT)⁸⁰

- Toxfree, which operates thermal treatment facilities in Australia, stated: 'Without the waste levy very little recycling would occur, because landfill would be so cheap that investment in recycling infrastructure would not be viable'⁸¹
- Mr Mike Ritchie, Managing Director of MRA Consulting Group, stated: 'The levy is the single most effective instrument anywhere in Australia, and particularly in New South Wales. We would be having recycling rates of 40 per cent right now if we did not have a levy'.⁸²

2.12' The effectiveness of the waste levy in encouraging infrastructure development is discussed later in this chapter.

2.13' The committee also received evidence that an unintended consequence of the waste levy is that waste is being transported interstate, particularly to Queensland, and sent to landfill.⁸³ This issue is examined in Chapter 4.

Committee comment

2.14' The committee supports the retention of the waste levy as a means of reducing the amount of waste sent to landfill, and promoting recycling and resource recovery.

2.15' The committee notes that the waste levy has raised significant funds for the NSW Government. The appropriate hypothecation of the waste levy is discussed later in the chapter, suffice to say, that the committee believes more of the revenue raised by the levy should be funding the delivery of waste services, including waste avoidance, minimisation and re-use programs, and waste recovery infrastructure throughout New South Wales.

2.16' The committee believes that having a substantial waste levy in place in New South Wales has played an important role in encouraging recycling and resource recovery, including through the Waste Less, Recycle More initiative. This is evidenced by the poor resource recovery rates for those states and territories which either have a very low levy or no levy at all.

⁸⁰ Submission 215, Waste Management Association of Australia, p 1. Also see, Tabled document, NSW EPA, *Australian National Waste Report 2016 prepared for Department of the Environment and Energy*, August 2017, p 11.

⁸¹ Submission 141, Toxfree Australia, p 2.

⁸² Evidence, Mr Mike Ritchie, Managing Director, MRA Consulting Group, 7 August 2017, p 17.

⁸³ See for example, Evidence, Ms Jane Bremmer, Secretary, National Toxics Network, 27 June 2017, p 39; Evidence, Mr Tony Khoury, Executive Director, Waste Contractors and Recyclers Association of NSW, 17 August 2017, p 2; Submission 182, Waste Contractors and Recyclers Association of NSW, p 2; Submission 215a, Waste Management Association of Australia, p 1.

Waste Less, Recycle More

- 2.17** Waste Less, Recycle More is the primary initiative funded through the waste levy. It provides funding for business recycling, organics collections, market development, managing problem wastes, new waste infrastructure, local councils and programs to tackle illegal dumping and litter.⁸⁴ The NSW EPA is the lead agency for the initiative, with some grant programs being delivered by the NSW Environmental Trust.
- 2.18** The NSW EPA gave evidence that the objectives of Waste Less, Recycle More programs include stimulating investment in waste and recycling facilities and infrastructure, changing community attitudes to encourage re-use and recycling, and strengthening compliance and enforcement.⁸⁵
- 2.19** The initial Waste Less, Recycle More initiative (2012-2016) received approximately \$465 million in funding.⁸⁶ The initiative has since been extended with a further \$337 million over four years to 2021.⁸⁷
- 2.20** As at October 2016, the government reported that the program had spent approximately \$292.3 million on 822 projects,⁸⁸ which are expected to process over 2.2 million tonnes of waste and create 845 jobs.⁸⁹ Furthermore, the NSW EPA noted that the investment in waste infrastructure, services and education provided via Waste Less, Recycle More initiatives is vital to ensuring the state meets its targets under the *NSW Waste Avoidance and Resource Recovery Strategy 2014–21*.⁹⁰

⁸⁴ NSW EPA, *Waste Less, Recycle More*, (22 September 2017), <http://www.epa.nsw.gov.au/wastestrategy/waste-less-recycle-more.htm>.

⁸⁵ Answers to questions on notice, NSW EPA, 20 November 2017, p 2. Also see, NSW EPA, *Waste Less, Recycle More*, (22 September 2017), <http://www.epa.nsw.gov.au/wastestrategy/waste-less-recycle-more.htm>.

⁸⁶ Evidence, Mr Beaman, 26 June 2017, p 5. Also see, Submission 217, Illawarra Pilot Joint Organisation, p 1.

⁸⁷ NSW EPA, *Waste Less, Recycle More*, (22 September 2017), <http://www.epa.nsw.gov.au/wastestrategy/waste-less-recycle-more.htm>.

⁸⁸ NSW Government, *Waste Less, Recycle More*, (October 2016), p 6 <http://www.epa.nsw.gov.au/publications/recyclere-use/waste-less-recycle-more-2017-21-brochure-160538>. Also see, Submission 172, National Toxic Network, p 3.

⁸⁹ NSW Government, *Waste Less, Recycle More*, (October 2016), p 6 <http://www.epa.nsw.gov.au/publications/recyclere-use/waste-less-recycle-more-2017-21-brochure-160538>.

⁹⁰ NSW Government, *Waste Less, Recycle More*, (October 2016), p 6 <http://www.epa.nsw.gov.au/publications/recyclere-use/waste-less-recycle-more-2017-21-brochure-160538>.

- 2.21^{*} Figure 2 is a breakdown of how the \$292.3 million allocated to Waste Less, Recycle More has been spent up to July 2016.

Figure 2^{*} Waste Less, Recycle More funds allocated until July 2016



NSW EPA, Waste Less, Recycle More, Scorecard 2016, file:///D:/My%20Documents/Downloads/waste-less-recycle-more-scorecard-2016.pdf

- 2.22^{*} Numerous stakeholders expressed concern about the proportion of funds collected from the waste levy that are allocated to Waste Less, Recycle More. This issue is discussed in detail later in this chapter.

Infrastructure

- 2.23^{*} There was some debate during the inquiry about the use of funds from the waste levy through Waste Less, Recycle More to build waste infrastructure. Mr Henry Anning, Sector Lead for Bioenergy at the Clean Energy Finance Corporation, explained how funding from the levy can contribute to the development of waste infrastructure:

The levy can have two impacts on an individual project. One is if there is a grant program available that can make some capital contribution to the upfront cost of the infrastructure, whether it is recycling or energy from waste as such, and also to the actual revenue stream of the project itself over the life.⁹¹

- 2.24^{*} Some stakeholders emphasised the importance of the levy in funding infrastructure development. For example, the Waste Management Association of Australia said the waste levy was a 'critical factor underpinning the development of resource recovery infrastructure' across New South Wales.⁹² Similarly, the Australian Council of Recycling 'strongly' advocated that resource recovery and recycling facilities be funded by waste levies.⁹³

⁹¹ Evidence, Mr Henry Anning, Sector Lead for Bioenergy, Clean Energy Finance Corporation, 26 June 2017, p 31.

⁹² Submission 215, Waste Management Association of Australia, pp 1-2.

⁹³ Submission 144, Australian Council of Recycling, p 7.

- 2.25** The committee heard that funds are especially useful in developing alternative waste solutions.⁹⁴ For example, Mr Tim Jordan, Head of Research at the Clean Energy Finance Corporation, observed that landfill fees directly impact the development of energy from waste infrastructure: ‘We observed through our investment activity that the economics of energy from waste projects depends heavily on landfill fees. Fees that are set at an appropriate level can help to ensure that value is captured from waste that would otherwise go to landfill’.⁹⁵ The Australian Council of Recycling suggested that opportunities to incorporate future advances in technology into energy from waste facilities will depend on landfill levies.⁹⁶
- 2.26** To illustrate this argument, the Waste Management Association of Australia noted that there are currently five mixed waste processing in operation or commissioning for municipal solid waste in New South Wales. In comparison, Victoria, where there is ‘a much lower levy’, has no mixed waste processing facilities, and Queensland – where there is no levy – has one facility. The association concluded: ‘While cheap disposal is not the only barrier to developing this sort of long-term infrastructure, it is clear that landfill levies can underpin a level of private investment that is not viable in jurisdictions where landfill is cheap’.⁹⁷
- 2.27** However, other local government inquiry participants argued that the levy has been an ineffective tool in encouraging the development of waste infrastructure. For example, Blacktown City Council stated that ‘the amount of revenue generated by the levy and the amount returned to councils and the industry has not leveraged a new alternative waste processing facility in the Sydney metropolitan area for domestic waste in the last 8 years’.⁹⁸ In fact, the council noted that by 2021 there will be a significant gap between the level of waste generated in western Sydney and viable processing facilities:
- The Western Sydney Regional Organisation of Councils Waste and Recycling Infrastructure Needs Assessment (2015) ... has identified that by 2021 there is approximately a 994,000 tonne gap in facilities available to process mixed waste treatment, garden organics processing and putrescible organics processing compared to projected waste generation figures.⁹⁹
- 2.28** Blacktown City Council continued: ‘The use of the blunt instrument of the levy has not leveraged the investment required to facilitate the alternative waste treatment processes needed to ensure that the waste streams generated can be delivered to local facilities’.¹⁰⁰ Similarly, the City of Canterbury Bankstown noted that despite \$85 million being allocated to waste infrastructure projects in the last four years, the council ‘... is still landfill dependant, as the levy funding has not yet provided additional waste processing facilities in the Sydney Metropolitan Area’.¹⁰¹

⁹⁴ Evidence, Dr Ali El Hanandeh, Lecturer, School of Engineering, Griffith University, 7 August 2017, p 44.

⁹⁵ Evidence, Mr Tim Jordan, Head of Research, Clean Energy Finance Corporation, 26 June 2017, p 31.

⁹⁶ Submission 144, Australian Council of Recycling, p 7.

⁹⁷ Submission 215, Waste Management Association of Australia, p 2.

⁹⁸ Submission 214, Blacktown City Council, p 7.

⁹⁹ Submission 214, Blacktown City Council, p 8.

¹⁰⁰ Submission 214, Blacktown City Council, p 8.

¹⁰¹ Submission 168, City of Canterbury Bankstown, p 4.

- 2.29' According to the Illawarra Pilot Joint Organisation, the effectiveness of the levy in allowing councils to develop alternative waste solutions is not always clear, particularly in regional areas. The organisation told the committee:

Despite achieving its intent of making the cost of landfilling very high, this is not always having the expected outcome of reducing waste to landfill by driving the competitiveness of expensive alternative technological solutions ... Councils in regional areas face the challenge of maintaining an adequate income stream to fund landfill operation fixed costs, as they would still be required for some waste streams not suitable for AWTs [Alternative Waste Treatment].¹⁰²

- 2.30' The waste infrastructure needs of New South Wales are discussed in detail in Chapter 8.

Committee comment

- 2.31' There can be no doubt that the waste levy has contributed to the development of waste management projects in this state. However, the committee notes that despite the levy, New South Wales remains dependent on landfill as a means of disposal. While the levy has supported significant investment in alternative waste management technologies, it is clearly insufficient to adequately deal with our overall waste management needs. This is disappointing, as the waste levy has generated significant amounts of money for the NSW Government. As discussed later in this chapter a greater proportion of levy funds should be returned to local councils and the waste industry to fund innovative waste management solutions.
- 2.32' The committee notes that as at October 2016, the Waste Less, Recycle More initiative had only spent \$292 million of its \$465 million allocation. That is, less than two thirds of the allocated funding had been spent. This is a major under-allocation for a significant initiative. This is doubly concerning given the NSW EPA has given evidence that it considers this program vital to the state meeting its waste targets. The committee recommends that the NSW Government ensure that all funds allocated to the Waste Less, Recycle More program be spent in accordance with the program. We also recommend that the NSW EPA undertake an audit of the Waste Less, Recycle More program to ensure that the funds are fully expended to meet the objectives of the program.

Recommendation 1

That the NSW Government ensure that all funds allocated to the Waste Less, Recycle More program be spent in accordance with the program.

Recommendation 2

That the NSW Environment Protection Authority undertake an audit of the Waste Less, Recycle More program to ensure that the funds are fully expended to meet the objectives of the program.

¹⁰² Submission 217, Illawarra Pilot Joint Organisation, p 1.

Levy unduly burdens certain councils

2.33 During the inquiry, the committee heard concerns from numerous local government stakeholders that the waste levy unduly burdens certain councils. For example, the Illawarra Pilot Joint Organisation suggested that councils in its area anticipate contributing over \$130 million to Waste Less, Recycle More (phase two), but noted that these funds will contribute to programs for councils that do not pay the levy:

Wollongong, Shellharbour and Shoalhaven communities alone estimate they will contribute nearly 40 per cent of the WLRM 2 (a total of over \$130 million) via the levy. Yet the WLRM 1 and 2 fund programs across the state, including many areas not subject to the Levy.¹⁰³

2.34 By way of example of how the waste levy can unduly affect some councils, the Shoalhaven local government area covers approximately 4,660 square kilometers and has about 100,000 residents. Like other councils in the region, Shoalhaven City Council is engaged in all aspects of the provision of domestic and some commercial waste disposal and recycling.¹⁰⁴ The committee heard that the size of the local government area and spread of the population cause many challenges for the provision of waste services.¹⁰⁵

2.35 However, a significant concern for Shoalhaven City Council is that the council is classified as a metropolitan area and must pay the higher waste levy rate, while other councils that are closer to Sydney including the Blue Mountains and Wollondilly pay the regional levy. In addition, Eurobodalla, Shoalhaven's nearest neighbour, is outside the regulated area and pays no levy at all.¹⁰⁶ Shoalhaven City Council argued that as a regional area with 'low socio-economic indicators and high unemployment', the classification of the Shoalhaven as a metropolitan area should be reviewed.¹⁰⁷

2.36 Mr Tony Fraser, Manager Works and Services at Shoalhaven City Council, also stated that encouraging innovation in the waste sector requires greater transparency around how the levy is allocated:

I guess the issue that we may have with the EPA levy at the moment is we are paying so much and we are not seeing a lot of returns. Whether we are paying a levy or not I guess the transparency around how those levy payments were coming back for innovation and things like that is probably really important.¹⁰⁸

2.37 The NSW EPA was unable to advise why the Shoalhaven was considered part of the MLA.¹⁰⁹

¹⁰³ Submission 217, Illawarra Pilot Joint Organisation, p 1.

¹⁰⁴ Submission 217, Illawarra Pilot Joint Organisation, p 1.

¹⁰⁵ Evidence, Mr Tony Fraser, Manager Works and Services, Shoalhaven City Council, 7 August 2017, p 32. Also see, Submission 298, Shoalhaven City Council, p 1.

¹⁰⁶ Evidence, Mr Fraser, 7 August 2017, p 32. Also see, Submission 298, Shoalhaven City Council, p 2.

¹⁰⁷ Evidence, Mr Fraser, 7 August 2017, p 32.

¹⁰⁸ Evidence, Mr Fraser, 7 August 2017, p 34.

¹⁰⁹ Evidence, Mr Buffier, 17 August 2017, p 69.

Committee comment

- 2.38'** It is clear that certain councils, such as those in the Illawarra and Shoalhaven, are currently impacted heavily by the waste levy, compared with other local government areas. This is exacerbated in the case of Shoalhaven, as the council appears to have been arbitrarily assigned to the Metropolitan Levy Area, whereas other councils closer to Sydney are in the Regional Levy Area, and Eurobodalla, the council's nearest neighbour, is in the unregulated area. The committee can see no justification for this. Accordingly, we recommend that the NSW Government reclassify Shoalhaven City Council from the Metropolitan Levy Area to either the Regional Levy Area or the unregulated area.

Recommendation 3

That the NSW Government reclassify Shoalhaven City Council from the Metropolitan Levy Area to either the Regional Levy Area or the unregulated area.

Proposals to amend the levy

- 2.39'** The following sections consider some of the proposals discussed by stakeholders to amend the waste levy to better facilitate the waste management system in New South Wales, including greater hypothecation of the levy, attaching the levy to waste rather than where it is disposed of, and the distribution of levy funds. The issue of exhumed waste and the waste levy is examined in Chapter 3.

Hypothecating the levy

- 2.40'** A number of stakeholders raised concerns about the proportion of funds generated from the waste levy that are returned to local councils and the waste industry. As previously noted, the levy is included in the state's consolidated revenue and a proportion is hypothecated back through the Waste Less, Recycle More.¹¹⁰ The Waste Management Association of Australia observed that the \$802 million the government intends to spend over the nine years of Waste Less, Recycle More 'represents a small portion of the money raised via the waste levy, which is a significant source of revenue to the NSW Government'.¹¹¹
- 2.41'** The key concern raised by councils was that the revenue generated by the waste levy is not adequately returned to councils, thus undermining waste planning and infrastructure. For example, Blacktown City Council stated:

The percentage of revenue collected from the Section 88 levy reinvested into waste planning and infrastructure has been too little to ensure there are long term solutions and competition within the sector ... there is a huge discrepancy between the revenue generated by the Section 88 levy and that provided back through this program.¹¹²

¹¹⁰ Evidence, Mr Khoury, 17 August 2017, p 3. Also see, Evidence, Cr Stephen Bali, Mayor, Blacktown City Council, 27 June 2017, p 28.

¹¹¹ Submission 215, Waste Management Association of Australia, p 2.

¹¹² Submission 214, Blacktown City Council, p 8.

- 2.42'** In terms of the amounts councils are receiving back in funding:
- Blacktown City Council stated that in 2015-2016, the council contributed about \$7,026,657 to the waste levy and received approximately \$783,834 back in tied funding from Waste Less, Recycle More¹¹³
 - Mr Mark Roebuck, Manager, City Works and Services at Wollongong City Council, anticipated receiving approximately \$430,000 from council's \$15 million waste levy contribution¹¹⁴
 - Shoalhaven City Council stated that in the previous financial year Shoalhaven paid a levy of almost \$8 million, of which only 4.2 per cent or \$340,000 was returned in grants to support the continuous improvement of its waste operations.¹¹⁵
- 2.43'** Following on from this evidence, the committee heard considerable support expressed for the idea of hypothecating additional funds from the waste levy to local councils. For example, Ms Jane Bremmer, Secretary of the National Toxics Network, said that the levy should be hypothecated to local areas to allow councils to manage its frontline waste products.¹¹⁶
- 2.44'** Wollongong City Council concurred, stating that there could more onsite waste management if additional funds are made available to local councils.¹¹⁷ Similarly, Ms Namoi Dougall, General Manager of the Southern Sydney Regional Organisation of Councils, said: 'We would like to see the allocation of more waste levy funds back to councils',¹¹⁸ arguing the additional funds could be spent on waste infrastructure.¹¹⁹
- 2.45'** However, Mr Ritchie noted that it is important to first clarify what is being hypothecated: 'One question we need to ask is: Hypothecating what? Local government only pay one-third of the levy contributions, so 100 per cent hypothecation means that for every dollar local government put in they would get back \$3'.¹²⁰ Mr Ritchie added: 'I do not think that is what local government is arguing; I think they mean 100 per cent of what they pay ...'.¹²¹ He further observed: '... there is a very strong argument for both local government hypothecation being higher, approaching 100 per cent of their money, and a higher percentage of the total pot, in my view approaching 50 per cent, back to enforcement and infrastructure'.¹²²

¹¹³ Submission 214, Blacktown City Council, p 8. Also see, Evidence, Cr Bali, 27 June 2017, p 27.

¹¹⁴ Evidence, Mr Mark Roebuck, Manager, City Works and Services, Wollongong City Council, 7 August 2017, p 27.

¹¹⁵ Evidence, Mr Fraser, 7 August 2017, p 32.

¹¹⁶ Evidence, Ms Bremmer, 27 June 2017, p 39.

¹¹⁷ Evidence, Mr Roebuck, 7 August 2017, p 27.

¹¹⁸ Evidence, Ms Namoi Dougall, General Manager, SSROC, 7 August 2017, p 26.

¹¹⁹ Evidence, Ms Dougall, 7 August 2017, p 26.

¹²⁰ Evidence, Mr Ritchie, 7 August 2017, p 18.

¹²¹ Evidence, Mr Ritchie, 7 August 2017, p 18.

¹²² Evidence, Mr Ritchie, 7 August 2017, p 18.

2.46' Other stakeholders emphasised the need for greater hypothecation of funds to industry. For example:

- Mr Tony Khoury, Executive Director of Waste Contractors and Recyclers Association of NSW, said industry would 'love' to see more funds returned from the levy to help assist with emerging issues¹²³
- HZI Australia advocated that 'all monies raised through waste levies should be fully reinvested in the waste and resource recovery sector to build resource recovery capacity and thereby reduce reliance on landfill disposal'¹²⁴
- Mr Miles Mason, Business Development Manager at New Energy Corporation, said that the revenue raised from waste levy should be hypothecated to fund waste initiatives in the areas it was received from.¹²⁵

2.47' Mr Garth Lamb, NSW Branch President of the Waste Management Association of Australia, similarly supported hypothecating more of the levy to industry.¹²⁶ However, he noted that it is necessary to ensure the levy encourages behavioural change while supporting infrastructure development:

... the tension is making sure that the levy still effects what it needs to do; it drives behaviour change. Rather than just catch and pass the money back and forth, I think if that money came back in a more substantial fashion to people who are investing in the right infrastructure, that would be very positive.¹²⁷

2.48' Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, concurred, saying: 'From a waste management point of view, it would be good to have some sort of structure around how money can be hypothecated back to the facilities so that they have employ best practices ...'.¹²⁸

2.49' The Clean Energy Finance Corporation was more circumspect about hypothecating the waste levy, with Mr Jordan telling the committee:

Economists generally do not like the idea of hypothecating levies—I am an economist by training—in part for practical reasons. It is very hard once you have designed a hypothecation measure to then unwind it if the economics of a particular project change or there is a change of policy priorities.¹²⁹

¹²³ Evidence, Mr Khoury, 17 August 2017, p 3.

¹²⁴ Submission 179, HZI Australia, p 2.

¹²⁵ Evidence, Mr Miles Mason, Business Development Manager, New Energy Corporation, 26 June 2017, p 19.

¹²⁶ Evidence, Mr Garth Lamb, NSW Branch President, Waste Management Association of Australia, 26 June 2017, p 23.

¹²⁷ Evidence, Mr Lamb, 26 June 2017, p 23.

¹²⁸ Evidence, Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, 7 August 2017, p 44.

¹²⁹ Evidence, Mr Jordan, 26 June 2017, p 32.

2.50 Mr Anning said that rather than hypothecating the levy he would like to see proceeds ‘flow back to the industry and help support the industry to achieve the energy from waste and the landfill diversion and the emissions reduction that can be achieved’.¹³⁰

2.51 In response to suggestions about hypothecating the waste levy, the NSW EPA advised that ‘The setting of the waste levy and how it is used is a matter of government policy’.¹³¹

Onus of the levy

2.52 Certain inquiry participants supported placing the levy on the waste rather than on the location where the waste is disposed of, as is currently the case. Mr Ritchie explained this proposal:

... [Y]ou attach the levy liability to the waste ... [and] the statute is built in such a way that it does not matter where the waste is disposed of. If it is disposed to landfill or the moon for that matter, then the liability arises with the person who sent it and that person cannot absolve themselves of liability.¹³²

2.53 The Waste Management Association of Australia agreed with the idea of a levy that ‘follows the waste, irrespective of where it is landfilled’.¹³³

2.54 Alexandria Landfill also concurred with attaching primary liability for the levy on the waste generator, and drafted a proposed ‘Waste Responsibility Levy’¹³⁴ involving ‘exerting a primary liability for payment of it upon the generator of the waste. In turn this liability can be passed along the chain of responsibility in a manner similar to the GST’.¹³⁵

2.55 Other stakeholders supported the idea of placing the levy on the waste generator as a means of halting the interstate transportation of waste.¹³⁶ Indeed, Mr Ron Wainberg, National Chair, Resource and Energy, Recovery Division of the Waste Management Association of Australia, said attaching liability to the waste would address not only concerns about waste New South Wales waste travelling to Queensland, but also waste moving from Victoria and the Australian Capital Territory into the non-levied areas of New South Wales.¹³⁷

2.56 In response to these suggestions, Mr Buffier said that the NSW EPA is currently considering who should have responsibility for paying the waste levy: ‘One of the ideas we are looking at is having that responsibility going back to the person who produces the waste so that the

¹³⁰ Evidence, Mr Anning, 26 June 2017, p 32.

¹³¹ Evidence, Mr Beaman, 26 June 2017, p 5

¹³² Evidence Mr Ritchie, 7 August 2017, p 14. Also see, Submission 170, MRA Consulting Group, p 1.

¹³³ Submission 215a, Waste Management Association of Australia, p 1. Also see, Evidence, Ms Gayle Sloan, Chief Executive, Waste Management Association of Australia, 26 June 2017, p 21.

¹³⁴ Submission 164, Alexandria Landfill, p 6.

¹³⁵ Submission 164, Alexandria Landfill, p 7. Also see, Evidence, Mr Ian Malouf, Managing Director, Dial A Dump Industries, 17 August 2017, pp 57-58.

¹³⁶ See, Evidence Mr Ritchie, 7 August 2017, p 14.

¹³⁷ Evidence, Mr Ron Wainberg, National Chair, Resource and Energy, Recovery Division, Waste Management Association of Australia, 26 June 2017, p 26.

transport of that waste does not carry the levy responsibility with it'.¹³⁸ Mr Buffier suggested that placing the onus of levy on the waste generator may disincentivise waste operators illegally dumping waste.¹³⁹

- 2.57'** Mr Buffier explained that placing the levy on the waste generator was particularly feasible for larger companies: 'It has some complexity about it but certainly for the larger operators, for a large site, it makes a lot of sense to do that. Where you have smaller sites, one truck et cetera, it probably becomes a bit more difficult to enforce. But there is a real opportunity to do something around that'.¹⁴⁰

Distribution of levy funds

- 2.58'** This section considers stakeholders' concerns that the grant funding model is inflexible and discusses whether the NSW EPA is the appropriate body to allocate funds to councils and industry.

- 2.59'** The NSW EPA advised that the councils are often not spending all of their available funding for waste infrastructure, particularly from the Better Waste and Recycling Fund, a program for local government funded under the Waste Less, Recycle More initiative. Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery at the NSW EPA, told the committee:

We provide \$70 million to the Better Waste and Recycling Fund. That goes to each council and levy area on a per capita basis ... We have handed out about \$70 million, and 20 per cent of that has not been spent by local councils. It is untied funding that we have allocated and they have not been able to spend it.¹⁴¹

- 2.60'** Stakeholders explained that councils may not be spending the money due to the inflexible nature of the grant program. For example, Mr Lamb suggested that the incongruity between the planning framework and the time limits placed on the grants was a significant reason why councils are not taking up grants through the Better Waste and Recycling Fund:

One of the challenges we have touched on in here is around the planning frameworks and the ability to deliver. It is one thing to identify the need for infrastructure; it is another thing to actually be able to physically deliver it through a planning framework. As I understand it, a lot of those grants were time bound, and trying to move anything through a planning framework in New South Wales can be challenging.¹⁴²

- 2.61'** Mr Lamb said he was aware of certain projects where the concept has been 'solid' but the outcomes were undeliverable within the timeframes required for the grant.¹⁴³

¹³⁸ Evidence, Mr Buffier, 17 August 2017, p 71.

¹³⁹ Evidence, Mr Buffier, 17 August 2017, p 71.

¹⁴⁰ Evidence, Mr Buffier, 17 August 2017, p 71.

¹⁴¹ Evidence, Mr Beaman, 26 June 2017, p 13.

¹⁴² Evidence, Mr Lamb, 26 June 2017, p 27.

¹⁴³ Evidence, Mr Lamb, 26 June 2017, p 27.

2.62 A related issue was exemplified by the experience of Mr Garbis Simonian, Chairman of the Australian Industrial Ecology Network, who said his company declined a grant as the administrative requirements were overly burdensome: ‘My company applied for a grant and it was awarded one, but we never took it up because the conditions attached to it were not commercial. The reporting was so onerous and the amount so small that in the end we said we did not want the money’.¹⁴⁴

2.63 Ms Gayle Sloan, Chief Executive Officer of the Waste Management Association of Australia, similarly noted that there is a lack of flexibility in the grants program, specifically the need for industry to ‘match’ funding:

From an industry perspective, I am not sure about with local government, but you do have to match funding and you do have a cap on how much funding—from memory, it is \$500,000 and you have to match it. So if you have competing priorities in council, it might be quite difficult to get those matching funds, because it is not whole, and it is unrealistic to expect that you can deliver waste and resource infrastructure for \$1 million.¹⁴⁵

2.64 Ms Sloan also noted that there is no ability within the current scheme for a one-off grant for a large amount of money.¹⁴⁶

2.65 Further, the committee heard that Waste Less, Recycle More funds cannot be used to buy land for waste infrastructure, thus hindering development. Mr Mark Wood, Group Manager of Engineering Operations at Sutherland Shire Council, explained that the grant system has been established to encourage ‘smaller, piecemeal’ activities such as community recycling centres but does not allow councils to buy land to support larger waste infrastructure.¹⁴⁷ The Sutherland Shire Council argued that the inability to access waste levy funds to purchase land inhibited a regional cooperative approach in developing shared facilities.¹⁴⁸

2.66 Ms Dougall concurred and proposed that the NSW EPA grant system be amended to facilitate the acquisition of land for waste infrastructure:

To free councils and industry to focus on innovation and to plan for smarter solutions, we would like to see the EPA Waste Infrastructure Grants allow for the acquisition of land and for the grants to run for more than three years or to be deliverable in phases. This would recognise that infrastructure takes more than three years and to get approved and built.¹⁴⁹

2.67 As for whether the NSW EPA is the appropriate body to allocate funds from the waste levy, the Australian Industrial Ecology Network suggested the NSW EPA does not have the commercial and technical expertise to manage the grants process, and proposed that an

¹⁴⁴ Evidence, Mr Garbis Simonian, Chairman, Australian Industrial Ecology Network, 17 August 2017, p 40.

¹⁴⁵ Evidence, Ms Sloan, 26 June 2017, p 27.

¹⁴⁶ Evidence, Ms Sloan, 26 June 2017, p 27.

¹⁴⁷ Evidence, Mr Mark Wood, Group Manager, Engineering Operations, Sutherland Shire Council, 7 August 2017, p 30.

¹⁴⁸ Submission 156, Sutherland Shire Council, p 2.

¹⁴⁹ Evidence, Ms Dougall, 7 August 2017, p 26.

innovation-focused agency such the Department of Industry would be better suited to handling this role:

The people managing the grants are not commercial and business minded; they are not practical. As we said, it would be better if grants were taken over by the Department of Industry or someone involved in innovation. There is a lot of innovation involved and technical knowledge is very important. They would be much better equipped to handle that role.¹⁵⁰

2.68' Mr Mark Glover, Director of the Australian Industrial Ecology Network, stated that the NSW EPA is 'hopelessly conflicted' in its multiple roles as the regulator and enforcer, policy developer and 'sponsor and provider of significant amounts of grant funding', thus undermining the grant system.¹⁵¹ Likewise, Mr Simonian said the NSW EPA has a 'very strong bias' towards giving money to local government for infrastructure despite local government not having 'the skills to be able to judge and manage this infrastructure'.¹⁵² To illustrate this argument, Mr Glover said that the NSW EPA's support for developing low-grade composting materials despite there being a limited market for the product, has led to an oversupply of this material.¹⁵³

2.69' The Australian Industrial Ecology Network was further concerned that the NSW EPA does not have an 'exit strategy' once infrastructure needs have been met:

When the EPA makes an intrusion into a marketplace by making a decision that they want people to use tunnel composting or community recycling centres [CRC], it does not have an exit strategy. Are they designed to be there forever as the funders of these exercises? Or are they there to provide initial stimulation to show that it can work? At no point is there an exit strategy for when they decide that enough is enough, it has been proved to work or not, and now we want to find a way to interface with private enterprise to deliver this in the long term.¹⁵⁴

Committee comment

2.70' The first step in an effective allocation of the money from the waste levy is for the NSW EPA to fully expend the money that is allocated to the Waste Less, Recycle More initiative.

2.71' The committee agrees with stakeholders that there must be greater hypothecation of levy funds to local councils and the waste industry. We acknowledge the frustration of local councils who contribute significant sums of money to the waste levy only to receive a small proportion back in grants and other funding. We believe this situation effectively forces local councils to 'double dip' – essentially requiring ratepayers to pay the levy, and then, due to a lack of council funds, requiring those same ratepayers to pay again to support the development of waste infrastructure in their local area.

¹⁵⁰ Evidence, Mr Simonian, 17 August 2017, p 40. Also see, Evidence, Mr Mark Glover, Director, Australian Industrial Ecology Network, 17 August 2017, p 38.

¹⁵¹ Evidence, Mr Glover, 17 August 2017, p 38.

¹⁵² Evidence, Mr Simonian, 17 August 2017, p 40.

¹⁵³ Evidence, Mr Glover, 17 August 2017, p 39.

¹⁵⁴ Evidence, Mr Glover, 17 August 2017, p 40.

- 2.72 We support inquiry participants' suggestion that the waste levies paid by local councils should be returned in the form of waste funding grants to ensure that councils can take care of the waste generated in their area. The committee therefore recommends that the NSW Government hypothecate 100 per cent of the waste levy funds contributed by local councils back to these organisations to provide waste management services, including waste reduction, avoidance and re-use programs, and environmental programs and to encourage the development of innovative waste management technology.
- 2.73 In addition, the committee recommends that the NSW Government investigate opportunities to hypothecate a proportion of waste levy funds contributed by the waste industry back to the industry to support waste management solutions and the development of innovative waste management technology.

Recommendation 4

That NSW Government hypothecate 100 per cent of the waste levy funds contributed by local councils back to these organisations to provide waste management services, including waste reduction, avoidance and re-use programs, and environmental programs and to encourage the development of innovative waste management technology.

Recommendation 5

That the NSW Government investigate opportunities to hypothecate a proportion of waste levy funds contributed by the waste industry back to the industry to support waste management solutions and the development of innovative waste management technology.

- 2.74 The committee acknowledges that the current waste levy system is failing to address the interstate transportation of waste. While this issue is examined in Chapter 4, we take this opportunity to note the proposal to place the onus of the levy on the waste generator. At first glance this proposal appears sound – instead of paying the levy at landfills, the waste generator will be responsible for payment, thus discouraging waste companies from transporting waste outside of the levy area. However, there may be practical implications to such a proposal.
- 2.75 The committee is alarmed that the NSW EPA has failed to address this critical issue for a number of years, thereby exacerbating, and even encouraging, the transportation of waste to Queensland, and undermining New South Wales revenue by hundreds of millions of dollars. The committee recommends that the NSW Government urgently consider attaching the waste levy to the waste generator in New South Wales, particularly for large waste generators or operators of large sites.

Recommendation 6

That the NSW Government urgently consider attaching the waste levy to the waste generator in New South Wales, particularly for large waste generators or operators of large sites.

- 2.76** The committee understands the frustration expressed by both local councils and industry at the seemingly inflexible and overly restrictive grant guidelines which appear to be stifling rather than encouraging innovation in the sector. The committee believes the grant process, particularly restrictions on buying land with grant money, is undermining the development of waste management solutions. We recommend that the NSW Government investigate options for reforming the waste levy grant system, including providing greater flexibility in the grant guidelines for waste management projects, to ensure that local councils and industry groups can efficiently and effectively fund waste infrastructure.

Recommendation 7

That the NSW Government investigate options for reforming the waste levy grant system, including providing greater flexibility in the grant guidelines for waste management projects.

Chapter 3 Illegal dumping

This chapter examines concerns raised about illegal dumping in New South Wales, including the nature and prevalence of these issues and efforts by the NSW Government, including the NSW Environment Protection Authority (NSW EPA) to reduce these behaviours.

Illegal dumping

- 3.1** The NSW EPA describes illegal dumping as the disposal of waste larger than litter on land or in water without the appropriate environment protection licence or planning approvals.¹⁵⁵ Sections 143 and 144 of the *Protection of the Environment Operation Act 1997* deal with the unlawful transportation, acceptance and depositing of waste, and state that the owner, transporter and person receiving the waste or allowing their waste to be received are committing a crime.
- 3.2** The expression ‘illegal landfilling’ colloquially refers to the practice of large-scale illegal dumping. In addition, there are occasions when a property owner requires ‘fill’ for their land; that is, they may require waste to smooth or contour their land. While this practice is lawful, it is unlawful to use illegal ‘fill’ which may contain harmful contaminants such as asbestos or chemicals.¹⁵⁶
- 3.3** The Act provides for a tiered range of on-the-spot fines and penalties for illegal dumping offences. On-the-spot fines for illegal dumping can range from \$7,500 for individuals to \$15,000 for corporations if issued by the NSW EPA.¹⁵⁷ For strict liability waste dumping offences, the penalties include a fine and an additional daily penalty:
- maximum penalty for an individual: \$250,000 and, in the case of a continuing offence, a further daily penalty of \$60,000
 - maximum penalty for a corporation: \$1,000,000 and in the case of a continuing offence, a further daily penalty of \$120,000.¹⁵⁸
- 3.4** Additional penalties for illegal dumping include:
- vehicles used in repeat illegal dumping offences can be seized, and if the offender is convicted, may be forfeited
 - repeat offenders can receive prison sentences of up to two years

¹⁵⁵ NSW EPA, *About illegal dumping and dumpers* (17 November 2017), <http://www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/illegal-dumping-dumpers>.

¹⁵⁶ NSW EPA, *Don't illegally fill your land* (10 December 2017), <http://www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/prevent-illegal-dumping/accepting-fill>.

¹⁵⁷ Note, on-the-spot fines for illegal dumping can range from \$4,000 for individuals to \$8,000 for corporations if issued by an authority that is not the NSW EPA. NSW EPA, *Illegal dumping laws and penalties* (7 October 2017), <http://www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/illegal-dumping-laws-penalties>.

¹⁵⁸ NSW EPA, *Illegal dumping laws and penalties* (7 October 2017), <http://www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/illegal-dumping-laws-penalties>.

- the NSW EPA can require waste transporters to install GPS devices in their vehicles
- a person knowingly supplying false and misleading information regarding an illegal dumping matter can receive a fine of up to \$500,000 for a corporation, or \$240,000 and an 18-month prison sentence for an individual
- an offender can be required to repay any monetary benefit obtained as a result of the offence as an additional penalty.¹⁵⁹

3.5 It is a separate offence for illegally dumped waste to cause land or water pollution.¹⁶⁰

3.6 In 2016–2017, the NSW EPA completed 11 waste prosecutions amounting to \$411,000 in financial penalties. The NSW EPA also issued 78 clean up notices and 53 penalty notices associated with illegal dumping investigations during this period.¹⁶¹ In fact, since 2012, the NSW EPA has completed nearly 70 waste-related prosecutions.¹⁶² The regulatory and compliance regime pursued by the NSW EPA is discussed in detail in Chapter 7.

3.7 Illegal dumping can cause harm to human health and the environment, undermines legitimate businesses and costs millions of dollars per year to clean up.¹⁶³ There was discussion during the inquiry about the nature and prevalence of illegal dumping and the actions of the regulator to address the issue.

Nature and prevalence of illegal dumping

3.8 The NSW EPA expressed significant concern about illegal dumping. For example, Mr Stephen Beaman, the then Executive Director of Waste and Resource Recovery at the NSW EPA, described illegal dumping as an 'insidious environmental crime', and an 'abhorrent behaviour', adding that there is no justification for the practice.¹⁶⁴

3.9 The committee heard that due to the nature of illegal dumping, it is difficult to gain a full understanding of the number of incidents that occur, with the NSW EPA commenting: 'Illegal dumping is difficult to measure as it often happens out of sight and in remote areas'.¹⁶⁵

3.10 Mr Tony Khoury, Executive Director of the Waste Contractors and Recyclers Association of NSW, said that he was unsure of the scale of illegal dumping in New South Wales. However, he observed: 'The talk on the street is that there is more illegal activity now than ever'.¹⁶⁶

¹⁵⁹ NSW EPA, *Illegal dumping laws and penalties* (7 October 2017), <http://www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/illegal-dumping-laws-penalties>.

¹⁶⁰ NSW EPA, *Illegal dumping laws and penalties* (7 October 2017), <http://www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/illegal-dumping-laws-penalties>.

¹⁶¹ Answers to questions on notice, NSW EPA, 20 November 2017, p 5.

¹⁶² Answers to questions on notice, NSW EPA, 20 November 2017, p 5.

¹⁶³ NSW EPA, *About illegal dumping and dumpers* (7 October 2017), <http://www.epa.nsw.gov.au/your-environment/litter-and-illegal-dumping/illegal-dumping-dumpers>.

¹⁶⁴ Evidence, Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery, NSW EPA, 26 June 2017, p 5.

¹⁶⁵ NSW EPA, *NSW Government Illegal Dumping Strategy 2017-21*, 2017, p 7. Also see, Evidence, Mr Mark Gifford, Chief Environmental Regulator, NSW EPA, 24 November 2017, p 4.

3.11' The NSW EPA explained that due to the undercover nature of illegal dumping, pursuing prosecutions for waste offences is extremely challenging:

Illegal dumping matters are complex, and it is often not possible for EPA Authorised Officers, complainants, and our regulatory partner agencies, to gather sufficient evidence to warrant further action. For example, if a complainant is unable to provide details that could be used to identify the alleged dumper, there is very little action the EPA or councils can take. Where we are able to identify the alleged offender, the EPA pursues the most appropriate regulatory action.¹⁶⁷

3.12' As noted earlier, the NSW EPA's regulatory role is examined in Chapter 7.

3.13' The NSW Government reported that household waste comprises approximately 47 per cent of all illegally dumped waste in the state, followed by green waste, construction and demolition waste, and tyres.¹⁶⁸

3.14' Research conducted by the NSW EPA in 2015 found that more than half of the responding local government areas had noticed an increase in the illegal dumping of household waste and asbestos in the past five years.¹⁶⁹ The same research indicated: 'The prevailing view in industry was that the extent of illegal dumping is fairly limited, with only a small minority of businesses adopting the behaviour'.¹⁷⁰

3.15' The research also found that for land managers, the primary problem caused by illegal dumping is the cost of dealing with dumped waste, with 11 per cent of local government areas each spending more than half a million dollars a year on activities relating to the prevention, monitoring and management of illegal dumping.¹⁷¹

3.16' Since the NSW EPA's establishment of RIDonline, an illegal dumping database and reporting tool, in 2015, approximately 32,000 incidents of illegal dumping have been recorded.¹⁷² In addition, the NSW EPA advised: 'Over the past five years, the EPA received and actioned 1,507 reports relating to illegal dumping. This included conducting 641 investigations into reports of major (>200 tonnes) illegal dumping incidents'.¹⁷³

3.17' There was some debate during the inquiry as to the causes of illegal dumping. As noted in Chapter 2, it was suggested that the state's high waste levy is a contributing factor, with Mr Khoury commenting: 'Having a high waste levy will encourage avoidance, stockpiling and illegal activities. That is an unintended consequence of having a high waste levy'.¹⁷⁴ The association listed other potential reasons for illegal dumping:

¹⁶⁶ Evidence, Mr Tony Khoury, Executive Director, Waste Contractors and Recyclers Association of NSW, 17 August 2017, p 6.

¹⁶⁷ Answers to questions on notice, NSW EPA, 20 November 2017, pp 4-5.

¹⁶⁸ NSW EPA, *NSW Government Illegal Dumping Strategy 2017-21*, 2017, p 6.

¹⁶⁹ NSW EPA, *Illegal Dumping Research Report - Summary report*, July 2015, p 3.

¹⁷⁰ NSW EPA, *Illegal Dumping Research Report - Summary report*, July 2015, p 1.

¹⁷¹ NSW EPA, *Illegal Dumping Research Report - Summary report*, July 2015, p 1.

¹⁷² Answers to supplementary questions on notice, NSW EPA, 19 October 2017, p 2.

¹⁷³ Answers to questions on notice, NSW EPA, 20 November 2017, p 4.

¹⁷⁴ Evidence, Mr Khoury, 17 August 2017, p 5.

- the high cost of operating and using NSW EPA regulated landfills and transfer stations
- the low cost of tipping at southeast Queensland landfills
- the potential to claim a waste levy refund on exhumed waste, which acts as an incentive to dump and stockpile waste and then exhume it
- the potential for certain landfills to operate as de-facto transfer stations and claim a waste levy refund
- inadequate enforcement
- the state's regulations and laws have not kept pace with the higher value of waste in New South Wales
- there is a rogue element in the waste industry that has little regard for laws, regulations and waste management objectives.¹⁷⁵

3.18 Mr Beaman disputed any causal connection between the waste levy and illegal dumping.¹⁷⁶ Mr Beaman said: 'There is an underlying antisocial behaviour that people might have and you see this where the levy does not apply there is illegal dumping. They have access to good facilities but they still illegally dump'.¹⁷⁷ Indeed, research conducted by the NSW EPA found that the cost of legal dumping and lack of concern for the community were two of the main drivers of illegal dumping behaviour.¹⁷⁸

3.19 The NSW EPA also noted that community expectations and awareness concerning illegal dumping has led to an increase in reports of this type of behaviour.¹⁷⁹

3.20 In response to concerns about exhumed waste attracting a waste levy refund and the incentive this creates to illegally dump and then exhume waste, the NSW EPA advised that it has proposed reforms in the Protection of the Environment Operations Legislation Amendment (Waste) Regulation 2017 to close this loophole: 'The proposal would make it an offence to exhume waste from a landfill site regardless of whether the landfill is licenced. The public consultation period on the regulatory amendment closed on 12 December 2017'.¹⁸⁰

Actions to reduce illegal dumping

3.21 The committee heard that the NSW EPA has taken a three-pronged approach to waste regulation: changing community attitudes, improving infrastructure and providing a strong compliance regime.¹⁸¹ In accordance with the *Illegal Dumping Strategy 2017-21*, the NSW Government has committed to reducing illegal dumping by 30 per cent by 2020.¹⁸²

¹⁷⁵ Submission 182b, Waste Contractors and Recyclers Association of NSW, p 3.

¹⁷⁶ Evidence, Mr Beaman, 26 June 2017, p 5.

¹⁷⁷ Evidence, Mr Beaman, 26 June 2017, p 5.

¹⁷⁸ NSW EPA, *Illegal Dumping Research Report - Summary report*, July 2015, p 2.

¹⁷⁹ *In camera* evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 24 November 2017, p 13, published by resolution of the committee.

¹⁸⁰ Answers to questions taken on notice, NSW EPA, 21 December 2017, p 2.

¹⁸¹ Evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 17 August 2017, p 61.

¹⁸² NSW EPA, *NSW Government Illegal Dumping Strategy 2017-21*, 2017, p 1.

The strategy sets out how the NSW EPA and other relevant agencies will work with stakeholders to deliver key actions and programs.

- 3.22'** The strategy focuses on reducing the illegal dumping of household waste, construction and demolition waste, discarded tyres and asbestos.¹⁸³
- 3.23'** The Waste Less, Recycle More initiative discussed in Chapter 2 has also funded programs to reduce illegal dumping. The NSW EPA advised: 'Since the commencement of Waste Less, Recycle More initiative, \$123 million has been provided to combat and prevent dumping; \$58 million in 2012-16 and a further \$65 million in 2017-21'.¹⁸⁴ Funds have been provided to local councils, community groups, Local Aboriginal Land Care Services, and other public land managers to clean up dumped waste, install prevention infrastructure such as gates, signage and cameras, and to fund education campaigns.¹⁸⁵ Additionally, \$7.1 million from Waste Less, Recycle More has been allocated to 133 projects under the Combating Illegal Dumping initiative.¹⁸⁶
- 3.24'** The NSW EPA emphasised its close working relationship with local councils to address illegal dumping. In addition to providing financial support through Waste Less, Recycle More, the NSW EPA is a co-regulator on certain 'smaller end' waste matters along with local councils, regulates council-operated licensed waste facilities, and provides training and support for councils and their officers.¹⁸⁷
- 3.25'** The NSW EPA also provides funding and oversight of Regional Illegal Dumping (RID) squads to local councils. The committee was told that since 2012, \$8.5 million has been invested in five RID squads to combat illegal dumping.¹⁸⁸ The NSW EPA said: 'The squads are primarily made up of ex-police who have strong investigation skills and are proficient in the use of surveillance approaches and devices'.¹⁸⁹ The NSW EPA explained the activities undertaken by the squads:

To ensure an effective regional approach to combatting dumping, the squads have cross-border delegations across council areas. They are also involved in education and awareness programs and conduct joint operations with EPA and other land managers dealing with illegal dumping (including the NSW National Parks and Wildlife Service).¹⁹⁰

- 3.26'** The NSW EPA advised: 'In 2015-16 RID squads collectively investigated 11,000 cases (\$47,000t of waste), issued 794 regulatory notices with total fines and prosecutions equalling \$720,200'.¹⁹¹

¹⁸³ NSW EPA, *NSW Government Illegal Dumping Strategy 2017-21*, 2017, p 6.

¹⁸⁴ Answers to supplementary questions on notice, NSW EPA, 19 October 2017, p 1.

¹⁸⁵ Answers to supplementary questions on notice, NSW EPA, 19 October 2017, p 1.

¹⁸⁶ Answers to supplementary questions on notice, NSW EPA, 19 October 2017, pp 1-2.

¹⁸⁷ See for example, Evidence, Mr Buffier, 24 November 2017, p 3 and Evidence, Mr Gifford, 24 November 2017, p 4.

¹⁸⁸ Answers to supplementary questions on notice, NSW EPA, 19 October 2017, p 2.

¹⁸⁹ Answers to questions on notice, NSW EPA, 20 November 2017, p 8.

¹⁹⁰ Answers to questions on notice, NSW EPA, 20 November 2017, p 8.

¹⁹¹ Answers to supplementary questions on notice, NSW EPA, 19 October 2017, p 2.

- 3.27'** In addition to these actions, the NSW EPA advised that it has directed the following resources to address illegal dumping:
- a newly established Waste Crime Taskforce, staffed by four investigators and two waste operations specialists, with dedicated legal and intelligence support to investigate and disrupt waste crime
 - a Special Investigations Unit, comprising three specialist investigators, which focuses on complex and high-profile breaches of environmental legislation, including illegal dumping
 - a stand-alone Illegal Dumping Team, comprising seven staff, responsible for implementing the illegal dumping strategy, and operating programs targeting large scale illegal dumping activities
 - over 60 waste compliance staff who spend a substantial proportion of their time focused on illegal dumping investigations.¹⁹²
- 3.28'** The NSW EPA is also using technology to manage this issue. Mr Barry Buffier, the then Chair and Chief Executive at the NSW EPA, stated: 'We are putting a lot of effort into technology, into tracking waste, into using tracking systems and data collection systems that will give us a much better understanding of where waste is going and who is trying to avoid the system'.¹⁹³
- 3.29'** As part of the effort, as mentioned earlier, the NSW EPA has established RIDonline, a state-wide illegal dumping database and reporting tool. The NSW EPA informed the committee that this program allows for incidents and prevention infrastructures to be mapped to support the development of targeted prevention strategies.¹⁹⁴ The program also has a component that allows local councils and the NSW EPA to communicate directly about incidents. Mr Mark Gifford, Chief Environmental Regulator at the NSW EPA, stated that this mechanism allows for quick response and notification of incidents.¹⁹⁵
- 3.30'** The NSW EPA also uses a waste tracking system to collect, manage and monitor the compliance activity of waste organisations. The committee heard that currently this system only tracks the trucks of businesses under investigation, not all trucks transporting waste.¹⁹⁶ Mr Greg Sheehy, Director of Waste Compliance at the NSW EPA, said that, as at August 2017, the NSW EPA had seven trackers operating on vehicles around Sydney that are allegedly involved in illegal landfilling activity.¹⁹⁷ Mr Buffier observed that tracking every truck in New South Wales '... might be a nice position to get to'.¹⁹⁸

¹⁹² Answers to questions on notice, NSW EPA, 20 November 2017, pp 7-8. Also see, Evidence, Mr Gifford, NSW EPA, 24 November 2017, p 11.

¹⁹³ Evidence, Mr Buffier, 17 August 2017, p 61.

¹⁹⁴ Answers to supplementary questions on notice, NSW EPA, 19 October 2017, p 2.

¹⁹⁵ Evidence, Mr Gifford, 24 November 2017, p 4.

¹⁹⁶ Evidence, Mr Buffier, 17 August 2017, p 61.

¹⁹⁷ Evidence, Mr Greg Sheehy, Director, Waste Compliance, NSW EPA, 17 August 2017, p 61.

¹⁹⁸ Evidence, Mr Buffier, 17 August 2017, p 61.

3.31' The NSW EPA also uses WasteLocate to track the 'cradle to grave' movement of certain problematic waste including tyres and asbestos.¹⁹⁹ Mr Beaman explained how the system operates using QR codes:

WasteLocate is smart phone technology, so it uses a QR code ... You can use your smart phone and scan it in and out. Waste facilities have those scanning plates at the weighbridge. An asbestos removal operator can scan it in on their phone and when it arrives at the tip it scans out and it sort of lays out the transaction. We are using that technology. Really, waste is reverse logistics so it is akin to a parcel tracking system.²⁰⁰

3.32' It was noted that the NSW EPA has real-time oversight over the WasteLocate data,²⁰¹ and is considering expanding this program to other problematic waste streams.²⁰²

3.33' The illegal dumping strategy acknowledges that while increased surveillance and patrolling are effective deterrents, they are only part of the solution.²⁰³ Nevertheless, in November 2017 the NSW EPA announced it has developed *Interim guidelines on EPA use of unmanned aircraft*, which it can use to monitor illegal dumping.²⁰⁴

Committee comment

3.34' The committee acknowledges that there are substantial penalties for illegal dumping in New South Wales. Having said this, while the NSW EPA is actively pursuing investigations and prosecutions targeting illegal dumping, the agency's efforts are being hampered by the inherent difficulty of gathering suitable evidence to pursue legal action, amongst other issues. This issue is examined in Chapter 7.

3.35' While it is difficult to precisely measure the extent of illegal dumping in New South Wales, evidence received during the inquiry highlighted that the practice is prevalent in the community and is costing land managers, particularly local councils, substantial funds to address.

3.36' The committee believes that there is no one specific cause of illegal dumping. Rather, a confluence of social and economic factors emboldens individuals and organisations to pursue this type of unlawful activity. The committee acknowledges that as the levy has increased over time, so have the incentives to dump illegally. As discussed in Chapter 2, we support the waste levy being in place and therefore encourage the NSW EPA to identify and close any 'loopholes' in waste management regulations that may inadvertently encourage illegal dumping. Specifically, we recommend that the NSW Government amend the Protection of the Environment Operations Legislation Amendment (Waste) Regulation 2017 to make it an offence to exhume waste from landfill sites.

¹⁹⁹ Evidence, Mr Beaman, 26 June 2017, p 11; Evidence, Mr Buffier, 17 August 2017, p 62.

²⁰⁰ Evidence, Mr Beaman, 26 June 2017, p 11.

²⁰¹ Evidence, Mr Henry Moore, Manager, Waste Reform, NSW EPA, 26 June 2017, p 11.

²⁰² Evidence, Mr Moore, 26 June 2017, p 11.

²⁰³ NSW EPA, *NSW Government Illegal Dumping Strategy 2017-21*, 2017, p 2.

²⁰⁴ NSW EPA, *Policies and guidelines* (17 November 2017), <http://www.epa.nsw.gov.au/licensing-and-regulation/legislation-and-compliance/policies-and-guidelines>.

- 3.37'** The committee notes the reports from local government that this behaviour has increased. We note that of the funds allocated to the Waste Less, Recycle More initiative to July 2016, only \$8.7 million were spent on illegal dumping. The committee also notes that in 2016-2017, the average fine following the 11 successful waste prosecutions was less than \$40,000. The NSW EPA also gave evidence that the costs of illegal dumping run to millions of dollars per year. The committee therefore recommends that the NSW Government allocate additional resources to support the policing of illegal dumping.
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Recommendation 8

That the NSW Government amend the Protection of the Environment Operations Legislation Amendment (Waste) Regulation 2017 to make it an offence to exhume waste from landfill sites.

Recommendation 9

That the NSW Government allocate additional resources to support the policing of illegal dumping.

- 3.38'** Concerns about a criminal or rogue element operating within the waste industry are examined in Chapter 7. The committee recommends that the NSW EPA strengthen its liaison with NSW Police when it comes to illegal activity in the waste sector, with formal protocols made public, and specifying the channels through which this liaison occurs.
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Recommendation 10

That the NSW Environment Protection Authority strengthen its liaison with NSW Police when it comes to illegal activity in the waste sector, with formal protocols made public, and specifying the channels through which this liaison occurs.

- 3.39'** We acknowledge that the NSW EPA has directed various resources to tackling illegal dumping, including funds from the Waste Less, Recycle More initiative, and the establishment specialist waste teams which, we are told, are staffed by appropriately trained investigative officers. The committee is particularly impressed by the work of the RID squads, which are an excellent example of a regionally-based solution to illegal dumping. The committee appreciates that the RID officers' local knowledge and investigative skills are making a significant contribution to addressing this insidious issue. The committee recommends that the NSW Government allocate additional resources to, and expand the number of, Regional Illegal Dumping (RID) squads.
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Recommendation 11

That the NSW Government allocate additional resources to, and expand the number of, Regional Illegal Dumping (RID) squads.

3.40 The committee also acknowledges the NSW Government's significant investment in technology to address illegal dumping, including RIDonline and WasteLocate to track certain problematic waste streams. We understand that tracking devices are currently only used on vehicles suspected of engaging in unlawful activity. While placing trackers on every truck transporting waste may be unnecessary and expensive, based on the extensive evidence discussed in this chapter and the next regarding illegal dumping and the transfer of waste interstate, it is unacceptable that only seven vehicles were being tracked in August 2017. We believe that more can be done in this area, and recommend that the NSW EPA immediately increase the use of vehicle trackers and other surveillance techniques, including drones, to prevent illegal dumping. Furthermore, we recommend that the NSW Government allocate additional resources to support the enhanced use of vehicle trackers in the waste industry.

Recommendation 12

That the NSW Environment Protection Authority immediately increase the use of vehicle trackers and other surveillance techniques, including drones, to prevent illegal dumping.

Recommendation 13

That the NSW Government allocate additional resources to support the enhanced use of vehicle trackers in the waste industry.

Chapter 4 Transferring waste interstate

This chapter considers stakeholders' concerns about the transfer of waste interstate, particularly the transportation of New South Wales waste to Queensland. It also examines the failure of the proximity principle to address this issue and other proposals to end the practice.

The transfer of waste interstate

4.1 During the inquiry, it became apparent that large amounts of New South Wales waste are being transported interstate, most frequently to Queensland. The NSW Environment Protection Authority (NSW EPA) informed the committee that during 2016-2017, 830,000 tonnes of waste was transported to Queensland from New South Wales, and that 430,000 tonnes of waste was transported in 2015-2016.²⁰⁵ In addition, Mr Barry Buffier, the then Chair and Chief Executive of the NSW EPA, observed that it is 'largely' construction and demolition waste being sent to Queensland.²⁰⁶

4.2 As for the reasons behind this transfer of waste, numerous stakeholders pointed to the fact that Queensland has no waste levy, making it significantly cheaper to landfill waste in Queensland than in the regulated area of New South Wales. For example:

- Mr Buffier advised: 'Waste has always moved between States and Territories and that was not too big a problem, but in 2012 Queensland removed their levy. That has created a situation where we have seen more waste going to Queensland'²⁰⁷
- MRA Consulting Group stated: 'Waste ... flows downhill until it finds the cheapest price to be disposed of. In this case it is Queensland, so it is worth shipping waste 1,000 kilometres to find a cheaper disposal price'²⁰⁸
- Veolia stated: 'QLD, which has an abundance of landfill, therefore a low landfill cost and no landfill levy, will remain the lowest cost option for disposal of non-putrescible waste in Sydney ...'²⁰⁹

4.3 Mr Tony Khoury, Executive Director of the Waste Contractors and Recyclers Association of NSW, explained that waste organisations can save approximately \$70 per tonne of waste by transporting waste to Queensland rather than disposing of it at a western Sydney landfill:

The cost of landfill at a Western Sydney facility for general non-putrescible waste is \$220 per tonne inclusive of the waste levy and GST. By comparison, the general cost of loading ex-Sydney from a waste facility, transport and disposal to a south-east Queensland landfill, along with the cost of an empty return truck is approximately

²⁰⁵ Evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 24 November 2017, p 2.

²⁰⁶ Evidence, Mr Buffier, 17 August 2017, p 67.

²⁰⁷ Evidence, Mr Buffier, 17 August 2017, p 60.

²⁰⁸ Evidence, Mr Mike Ritchie, Managing Director, MRA Consulting Group, 7 August 2017, p 17.

²⁰⁹ Submission 148, Veolia Australia and New Zealand, p 6.

\$150 per tonne inclusive of GST. A gap of \$70 per tonne is encouraging the long-distance transport of waste.²¹⁰

- 4.4 As mentioned in Chapter 2, according to certain stakeholders the comparatively high New South Wales waste levy has contributed to the problem,²¹¹ with Mr Ian Malouf, Managing Director of Dial A Dump Industries, commenting:

The levy brings with it the good and the bad. It brings with it a drive not to landfill material, for the positive ... The downside is that to avoid a load of rubbish going somewhere it should go, because it is an expensive business, there is a financial incentive to lose the load.²¹²

- 4.5 The NSW EPA responded directly to this view, arguing that rather than proving the New South Wales levy is too high, the interstate transportation of waste indicates that Queensland, where waste can be landfilled for approximately \$10 per tonne, 'does not have the right policy settings'²¹³ in place in terms of environmental standards:

If they had the same environmental controls that are in place in New South Wales, and they had to keep money for long-term liabilities and so on, typically the cost would be about \$40 dollars a tonne. There is clearly a differential between the environmental standards.²¹⁴

Committee comment

- 4.6 The committee acknowledges that there is a significant amount of waste travelling from New South Wales to Queensland, contrary to established waste management practices. While we accept that the comparatively high New South Wales waste levy may play a part in contributing to the practice, primary responsibility clearly rests with the Queensland Government for removing its waste levy altogether. We therefore applaud the Queensland Government's announcement, just days before the tabling of this report, that it intends to re-introduce its waste levy. We encourage the NSW EPA, in cooperation with the Queensland Government, to carefully monitor the impact of the re-introduction of Queensland's waste levy and its effect upon the interstate movement of waste.

²¹⁰ Evidence, Mr Tony Khoury, Executive Director, Waste Contractors and Recyclers Association of NSW, 17 August 2017, p 2.

²¹¹ See for example, Evidence, Ms Jane Bremmer, Secretary, National Toxics Network, 27 June 2017, p 39; Evidence, Mr Khoury, 17 August 2017, p 2; Submission 182, Waste Contractors and Recyclers Association of NSW, p 2; Submission 215a, Waste Management Association of Australia, p 1.

²¹² Evidence, Mr Ian Malouf, Managing Director, Dial A Dump Industries, 17 August 2017, p 57.

²¹³ Evidence, Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery, NSW EPA, 26 June 2017, p 12.

²¹⁴ Evidence, Mr Beaman, 26 June 2017, p 12.

Impact of the practice

- 4.7 While transporting waste interstate is not unlawful in most instances,²¹⁵ it was increasingly apparent during the inquiry that the practice is of significant concern. Mr Ron Wainberg, National Chair, Resource and Energy, Recovery Division of the Waste Management Association of Australia, captured many inquiry participants' concerns about the practice:

To be frank, it is absurd that waste is being transported such a long distance for cheap disposal with the environmental impacts of that transport, the road impacts of that transport and the undermining of an industry that has been developed in New South Wales to handle that material as well as the loss of government revenue ...²¹⁶

Economic and financial impact

- 4.8 Stakeholders informed the committee that there are serious economic ramifications stemming from the interstate transportation of waste. Alexandria Landfill noted that the practice has resulted in the 'large and increasing haemorrhage of revenue from NSW EPA as the payment of levy is avoided ...'.²¹⁷ Likewise, the Waste Contractors and Recyclers Association of NSW remarked: '... these long-distance movements to interstate facilities are costing NSW Treasury an estimated \$115 million pa'.²¹⁸
- 4.9 The NSW EPA concurred that there are significant financial implications resulting from the transportation of waste to Queensland. As indicated in the table below, which was provided by the NSW EPA and sets out the waste tonnages transported to Queensland from the Metropolitan Levy Area [MLA], the total potential 'lost' revenue from waste transported outside New South Wales for disposal is at least \$83.5 million over two years.²¹⁹

²¹⁵ Submission 215a, Waste Management Association of Australia, p 1.

²¹⁶ Evidence, Mr Ron Wainberg, National Chair, Resource and Energy, Recovery Division, Waste Management Association of Australia, 26 June 2017, p 25.

²¹⁷ Submission 164, Alexandria Landfill, p 20.

²¹⁸ Submission 182, Waste Contractors and Recyclers Association of NSW, p 2. Also see Submission 145a, Suez, p 1.

²¹⁹ Answers to questions on notice, NSW EPA, received 27 July 2017, p 2. Note, in August 2017 the NSW EPA advised that in 2016-2017, 690,000 tonnes of waste was transported to Queensland from New South Wales, and in 2015-2016, 410,000 tonnes of waste was transported to Queensland from New South Wales. As discussed at the beginning of this chapter, in November 2017, the NSW EPA revised these estimates advising that in 2016-2017, 830,000 tonnes of waste was transported to Queensland from New South Wales, and in 2015-2016, 430,000 tonnes of waste was transported to Queensland from New South Wales (See, Tabled document, NSW EPA, *MLA Waste Tracking System*, 24 November 2017, p 1.) The calculation of lost revenue is therefore provided on the initial estimate.

Table 3 Tonnages transported to Queensland from the Metropolitan Levy Area (MLA) and the potential lost revenue

Financial Year	Waste Treatment	Tonnes	Levy rate	Potential lost revenue
2015-16	Landfill and Other	240,000	\$133.10	\$31,900,000
2015-16	Recycling	170,000		
2016-17	Landfill and Other	380,000	\$135.70	\$51,600,000
2016-17	Recycling	310,000		

Answers to questions on notice, NSW EPA, received 27 July 2017, p 2.

4.10 The NSW EPA advised that the 'real shame' of transporting waste to Queensland is that New South Wales loses resources that could be recycled, which also undermines the generation of jobs. Indeed, Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery at the NSW EPA, noted: 'For every 10,000 tonnes you recycle you generate nine jobs and for landfill it is two'.²²⁰ In addition, the NSW EPA said there are 'very few people, for example, some transporters and some landfill operators' that are benefiting from transferring waste to Queensland, coming 'at the expense of the general community and of society'.²²¹

4.11 The committee also heard that the loss of these waste levy funds is undermining the development of waste infrastructure in New South Wales, with stakeholders commenting:

- 'This activity undermines the NSW waste sector, and especially the ability for NSW operators to invest in new resource recovery capacity'.²²²
- 'Any proposal for establishing infrastructure in New South Wales is currently being heavily undermined by the movement of waste to Queensland'.²²³
- '... cheap landfill disposal discourages further investment in NSW processing & recycling infrastructure'.²²⁴
- 'The current situation provides no long term regulatory certainty and insufficient levels of revenue for waste in Sydney to generate the required financial returns on any potential investment in recycling'.²²⁵

²²⁰ Evidence, Mr Beaman, 26 June 2017, p 7. Also see, Submission 215a, Waste Management Association of Australia, p 1.

²²¹ Evidence, Mr Beaman, 26 June 2017, p 7.

²²² Submission 215, Waste Management Association of Australia, p 3. Also see Evidence, Ms Gayle Sloan, Chief Executive, Waste Management Association of Australia, 26 June 2017, p 21.

²²³ Evidence, Mr Ritchie, 7 August 2017, p 10.

²²⁴ Submission 182, Waste Contractors and Recyclers Association of NSW, p 2.

²²⁵ Submission 148, Veolia Australia and New Zealand, p 6.

- ‘The unnecessary transport of waste undermines any potential investment in resource recovery infrastructure such as Energy from Waste technologies and the associated economic benefits and employment generation such an investment brings’.²²⁶

Impact on recycling

- 4.12*** Inquiry participants also noted that transporting waste hinders recycling efforts in New South Wales. For example, the Waste Management Association of Australia said of the practice: ‘NSW recyclers have lost the opportunity to recover materials from that stream’.²²⁷ A similar argument was raised by Alexandria Landfill, which commented that the practice results in ‘effective avoidance of all recycling strategies pursued by the NSW EPA for the past 20 years’.²²⁸
- 4.13*** Stakeholders noted that without a waste levy, Queensland has a recycling rate of approximately 35 per cent,²²⁹ leading Mr Wainberg to observe: ‘... [Queensland] had a levy for a short period of time and then he got rid of it. When you look at the recycling in Queensland it had a blip. It went up when the levy was introduced; he [former Premier Campbell Newman] took it away and it went down’.²³⁰
- 4.14*** From the NSW EPA’s perspective, Mr Beaman said of the practice: ‘Queensland is simply losing the opportunity to recycle according to the hierarchy. I do not think that is what anyone wants’.²³¹

Impact on road safety

- 4.15*** Another concern raised about the interstate transportation of waste is that it increases traffic movements and the likelihood of road accidents. For example, the Waste Contractors and Recyclers Association of NSW said:
- The practice ... results in 20,000 additional truck movements each way onto the Pacific Highway, creating increased heavy vehicle traffic and congestion, along with additional fuel consumption and increased carbon emissions. It also creates an increased risk of accidents, waste spillages, contamination and environmental damage ...²³²
- 4.16*** Mr Khoury remarked the additional traffic movements are ‘What drives me to keep raising this matter ... I do not want to wake up to the headline one day that a family has been wiped out by one of these unnecessary truck movements heading north’.²³³ He noted that there had

²²⁶ Submission 145, Suez, p 5.

²²⁷ Submission 215a, Waste Management Association of Australia, p 1. Also see, Evidence Mr Ritchie, 7 August 2017, pp 13-14.

²²⁸ Submission 164, Alexandria Landfill Pty Ltd, p 20.

²²⁹ Evidence, Mr Buffier, 17 August 2017, p 60.

²³⁰ Evidence, Mr Wainberg, 26 June 2017, p 26.

²³¹ Evidence, Mr Beaman, 26 June 2017, p 12.

²³² Submission 215a, Waste Management Association of Australia, p 1.

²³³ Evidence, Mr Khoury, 17 August 2017, p 6.

been a 'regrettable' incident where a defective truck carrying waste to Queensland crashed on the Hexham Bridge on the state's north coast.²³⁴

4.17' The Waste Contractors and Recyclers Association of NSW also remarked that 'the grapevine is abuzz with concerns about poorly remunerated drivers, fatigue management breaches & chain of responsibility concerns. Consequently, this activity poses a very serious danger to all road users'.²³⁵

4.18' Suez similarly noted the traffic congestion and unnecessary emissions caused by the practice: 'The carbon footprint of waste disposal from the extra diesel trucks travelling up to Queensland means more heavy goods vehicles on already congested and dangerous major highways every day, putting added pressure on the transport channel between the two states'.²³⁶

4.19' The Waste Contractors and Recyclers Association of NSW acknowledged that Queensland is trying to address the issue by stopping trucks at the border, but argued that this was a less than satisfactory solution:

The Queenslanders have in the last couple of days [August 2017] jumped on the bandwagon. They are now stopping all trucks that are entering Queensland with waste out of New South Wales. I say those trucks by that stage have probably travelled 700 or 800 kilometres too many. Why are we not doing the same at an earlier point?²³⁷

Commercial considerations

4.20' According to the Waste Management Association of Australia, the interstate transportation of waste imposes an unfair burden on the communities receiving the waste.²³⁸ However, the association contended that operators will continue to transport waste for as long as it remains commercially viable to do so, especially if there is minimal chance of regulatory intervention:

The practical reality is that while there remains a major price differential between different disposal points, and while it remains possible to access cheaper disposal points with little risk of regulatory intervention, there will remain a commercial incentive for the large-scale transport of waste. Most waste operators would much prefer to "do the right thing" but they need to remain competitive and viable.²³⁹

4.21' The association attempted to address the issue by asking members to commit to its 'Waste of Origin' pledge. Amongst other commitments, signatories pledge not to transport waste long distances unnecessarily.²⁴⁰

²³⁴ Evidence, Mr Khoury, 17 August 2017, p 6.

²³⁵ Submission 182, Waste Contractors and Recyclers Association of NSW, p 2.

²³⁶ Submission 145a, Suez, p 2.

²³⁷ Evidence, Mr Khoury, 17 August 2017, p 6.

²³⁸ Submission 215a, Waste Management Association of Australia, p 1.

²³⁹ Submission 215a, Waste Management Association of Australia, p 1.

²⁴⁰ Media release, Waste Management Association of Australia, 'Waste industry calls on members and stakeholders to sign "Waste of Origin" pledge', 15 September 2017, https://www.wmaa.asn.au/Public/Media_hub/Newsroom/Media_Releases/Public/Media_hub/Media_Releases.aspx?hkey=409c3920-212c-40d6-97a2-28724a396888.

- 4.22* The impact of commercial considerations was exemplified during the inquiry by the behaviour of Dial A Dump Industries. Mr Malouf said that his company did not transport waste to Queensland for years to its disadvantage: ‘We have been seriously commercially disadvantaged by this practice. Our prices have been consistently undercut and our business damaged’.²⁴¹ However, Mr Malouf acknowledged that the company had recently started sending residual waste via rail to Queensland: ‘... our business was just getting ... smashed by this practice. So to protect our business—really to protect the airspace of our own landfill—we took that option on what I would call a relatively small scale, and we have been doing it for in the order of six months’.²⁴²
- 4.23* Mr Christopher Biggs, Chief Executive Officer of Dial A Dump Industries, confirmed that all waste consignments are tracked using the NSW EPA longline waste tracking system.²⁴³
- 4.24* On 17 August 2017 Dial A Dump Industries called on industry to stop transferring waste to Queensland and to work with regulators to address the issue.²⁴⁴ However, in September 2017 the company informed the committee that the industry had failed to follow this directive and thus it would resume transporting waste to Queensland:
- Unfortunately, this call to the industry has not met with any success. Our competitors actions have intensified to our further commercial detriment.
- In view of no evidence of impending and effective action being taken by the regulators we advise you we will be resuming transportation of waste to Queensland.²⁴⁵
- 4.25* Ultimately, Alexandria Landfill cautioned: ‘... the inescapable conclusion must be that unless the interstate transportation of waste is urgently addressed, recycling of construction and demolition waste in the Sydney area has no future’.²⁴⁶

Committee comment

- 4.26* The overwhelming evidence presented during this inquiry demonstrates that dumping waste interstate, particularly from New South Wales to Queensland, is utterly unjustifiable, both from a community and an environmental perspective, and undermines the waste management policies of both states, especially in relation to resource recovery and the development of waste infrastructure.
- 4.27* We note that the interstate transportation of waste also represents a significant amount of ‘lost’ revenue for the NSW Government, with stakeholders estimating that the loss could be upwards of \$100 million per year, money which could be used to fund waste infrastructure, or

²⁴¹ Evidence, Mr Malouf, 17 August 2017, p 44.

²⁴² Evidence, Mr Malouf, 17 August 2017, p 47.

²⁴³ Evidence, Mr Christopher Biggs, Chief Executive Officer, Dial A Dump Industries, 17 August 2017, p 47.

²⁴⁴ Evidence, Mr Malouf, 17 August 2017, p 44.

²⁴⁵ Correspondence, Mr Ian Malouf, Managing Director, Dial A Dump Industries, to Chair, 20 September 2017, p 1.

²⁴⁶ Submission 164, Alexandria Landfill, p 20.

indeed to fund additional hospitals, schools and transport services. The committee is also very concerned that the unnecessary traffic movements caused by the interstate transportation of waste increases the likelihood of road accidents, particularly if unsafe trucks are being driven by tired drivers.

- 4.28'** While we note industry efforts to stop the interstate transportation of waste, the evidence suggests these actions are undercut without proper regulation. Operators will continue to transport waste wherever disposal is cheapest, particularly if there is little or no risk of regulatory intervention. We strongly encourage the NSW Government and its interstate counterparts to consider how the appropriate regulatory agencies, including the environment protection authorities, police, and roads and traffic authorities, can work together to address this issue. Ending the interstate transportation of waste is the subject of a recommendation later in this chapter.

Current regulatory efforts

- 4.29'** The NSW EPA has at various times attempted to regulate the interstate transportation of waste through the application of the proximity principle, a tracking system for waste from the MLA, and licences for operators sending waste interstate by rail. These are discussed below.

Proximity principle

- 4.30'** The NSW Government attempted to address the interstate transportation of waste and encourage a regional approach to waste management by developing the Protection of the Environment Operations (Waste) Regulation 2014, known as the 'proximity principle'. The regulation makes it an offence to transport waste more than 150 kilometers in certain circumstances:

The Protection of the Environment Operations (Waste) Regulation 2014 ... makes it an offence to transport waste generated in NSW by motor vehicle for disposal more than 150 kilometres from the place of generation, unless the waste is transported to one of the two nearest lawful disposal facilities to the place of generation (even if that facility is located more than 150 kilometres from its place of generation).²⁴⁷

- 4.31'** Mr Buffier advised that the NSW EPA looked to overseas jurisdictions when developing the proximity principle and sought to encourage the management of waste closer to the place of generation: '... the proximity principle works well overseas. We were attracted to that in New South Wales. It reduces that carbon footprint but it also sends a signal about communities being responsible for the waste that they create'.²⁴⁸
- 4.32'** Fines for a penalty notice for this offence amount to \$15,000 for corporations and \$7,500 for individuals, and penalties of up to \$44,000 may be imposed by a court on conviction for this offence.²⁴⁹

²⁴⁷ NSW EPA, *Proximity Principle: Offence for transport of waste*, <http://www.epa.nsw.gov.au/wasteregulation/proximity-principle.htm>, 14 January 2015.

²⁴⁸ Evidence, Mr Buffier, 17 August 2017, p 62.

²⁴⁹ NSW EPA, *Proximity Principle: Offence for transport of waste*, <http://www.epa.nsw.gov.au/wasteregulation/proximity-principle.htm>, 14 January 2015.

- 4.33* However, Mr Buffier informed the committee that the proximity principle has been challenged by an affiliate of the Bingo Group, leading the NSW EPA to seek advice about the legality of the regulation.²⁵⁰ The advice suggested that the proximity principle may offend s 92 of the Commonwealth Constitution, which provides that all trade amongst the states must be free. Accordingly, Mr Buffier advised that the principle is not currently being enforced: 'We formed the view that it offended section 92 of the Constitution and that it could not be enforced. We relayed that information that we would not be enforcing it to the industry'.²⁵¹
- 4.34* Certain inquiry participants expressed frustration with the NSW EPA's decision not to enforce the regulation. For example, Suez described not enforcing the proximity principle as a 'backwards step', and noted that 'The proximity principle is written into the European Commission's Waste Framework Directive and has also been a central value in municipal solid waste management in Japan for over 35 years'.²⁵²
- 4.35* In addition, Mr Mike Ritchie, Managing Director of MRA Consulting Group, said that the decision has led to confusion in the waste industry:

We now have a strange situation where the proximity rule is on the statute books but the agents within the EPA have said that it is not being enforced. We are trying to advise clients as to whether it is actually a statute or it is not and where to make their commercial decisions. That is a very difficult situation. We need to resolve that urgently.²⁵³

- 4.36* The NSW EPA told the committee that it understands stakeholders' frustrations and has a working party to devise '... possibilities with which we might more effectively manage waste so it does not get transported huge distances'.²⁵⁴

Tracking system and licences

- 4.37* In accordance with the Protection of the Environment Operations (Waste) Regulation 2014, when 10 tonnes or more of waste generated in the MLA is transported outside of New South Wales, the shipment must be tracked.²⁵⁵ The waste consignor has the legal obligation to ensure the transported waste transported is properly tracked. However, Mr Khoury expressed concern that the tracking system was not being used:

I am not confident that transporters are using that system. The reason I am not confident of that is because if they used that system and they reported each and every

²⁵⁰ Evidence, Mr Buffier, 17 August 2017, p 74.

²⁵¹ Evidence, Mr Buffier, 17 August 2017, p 63.

²⁵² Submission 145, Suez, p 4.

²⁵³ Evidence, Mr Ritchie, 7 August 2017, p 13.

²⁵⁴ Evidence, Mr Buffier, 17 August 2017, p 72.

²⁵⁵ Protection of the Environment Operations (Waste) Regulation 2014, section 65. Also see, NSW EPA, *Tracking waste from the Metropolitan Levy Area*, (4 October 2017) <http://www.epa.nsw.gov.au/your-environment/waste/tracking-waste-mla>. Exclusions for this requirement are legislated under the Protection of the Environment Operations (Waste) Regulation 2014.

transaction that they were transporting interstate they would be dobbing themselves in in contravention of the proximity principle.²⁵⁶

4.38' Despite these concerns, the Waste Management Association of Australia supported a national waste tracking system: 'At a minimum, all States and Territories should have a common waste tracking system in order that these issues can be better tracked and understood'.²⁵⁷

4.39' As for whether rail operators require an environment protection licence to send waste to Queensland, the committee received conflicting evidence. Mr Khoury explained that the NSW EPA has said that a licence is required, however certain operators dispute this assertion and are operating without a licence:

Rail operators who are currently loading containers of waste and sending them north dispute the fact that they need to be licensed by the EPA. On the other hand, the EPA say that those waste rail facilities need to be licensed by the EPA ... In respect of a level playing field, other legitimate waste operators operating from Clyde and Banksmeadow are expected to hold an EPA facility licence to comply with their operating conditions to transfer waste by rail.²⁵⁸

4.40' Mr Khoury added: 'The industry simply does not understand why the regulator has not moved to swiftly enforce the law that requires a rail operator to hold a waste facility licence. It allows waste movements by rail to go north without a waste facility licence'.²⁵⁹ The association said that while it has not discussed this issue with the Hon Gabrielle Upton MP, Minister for the Environment, this concern has been raised with other environment ministers.²⁶⁰

4.41' The NSW EPA advised that it was aware of these concerns and is investigating the matter: 'There is an active investigation into what we believe is a facility operating without a licence. We are finalising that investigation. That facility has a different view to us, so we are working through that, and I am hoping to resolve that and commence proceedings shortly'.²⁶¹

Committee comment

4.42' The committee acknowledges that the NSW EPA has attempted to regulate the interstate transportation of waste, albeit with no success. Figures show that the amount of waste being transferred interstate is growing.

4.43' We also note that there is confusion within the waste industry as to whether operators require an environment protection licence to send waste interstate via rail. We believe the NSW EPA should have acted quickly and decisively to resolve this issue. As discussed throughout this report, the NSW EPA must provide a level regulatory playing field to ensure legitimate waste operators are not disadvantaged by operators who act unlawfully.

²⁵⁶ Evidence, Mr Khoury, 17 August 2017, p 4.

²⁵⁷ Submission 215a, Waste Management Association of Australia, p 1.

²⁵⁸ Evidence, Mr Khoury, 17 August 2017, p 10.

²⁵⁹ Evidence, Mr Khoury, 17 August 2017, p 10.

²⁶⁰ Evidence, Mr Khoury, 17 August 2017, p 11.

²⁶¹ Evidence, Mr Buffier, 17 August 2017, p 67.

4.44 We accept that the NSW EPA looked to overseas jurisdictions to replicate other successful policies in introducing the proximity principle as a means of addressing the interstate transportation of waste. However, it is unclear why the NSW EPA did not initially consider whether the principle contravenes s 92 of the Commonwealth Constitution. Moreover, the committee is confounded by the apparent lack of urgency the agency has displayed in finding an alternative to the proximity principle, which we believe has contributed to the growth in the interstate transportation of waste.

Need for nationally consistent framework

4.45 The committee heard that there are two primary options for addressing the interstate transportation of waste: Queensland could re-introduce a waste levy²⁶² or, there could be a nationally consistent framework of levies.²⁶³ Mr Buffier observed that ‘a levy in Queensland would certainly solve the problem overnight’,²⁶⁴ however, he also commented: ‘A national system is preferable when you are talking about market instruments and where they apply, and constitutional issues’.²⁶⁵

4.46 Stakeholders agreed that a national approach to the waste levy is essential.²⁶⁶ Indeed, the Waste Management Association of Australia said a national levy should ‘follow the lead of NSW and provide strong market based instruments to encourage investment in resource recovery’,²⁶⁷ noting that ‘The actual amount of the levy does not necessarily need to be consistent in every state or region’.²⁶⁸ HZI Australia, on the other hand, supported a harmonised levy set at the New South Wales level or even higher.²⁶⁹

4.47 The NSW EPA advised that the Heads of the EPA, a collection of leaders from the various authorities across Australia, have initiated a waste subcommittee to consider a national solution to the problem of interstate dumping of waste.²⁷⁰ However, Mr Buffier acknowledged the ‘glacial pace’ of national solutions.²⁷¹

²⁶² See, Evidence Mr Ritchie, 7 August 2017, p 10; Evidence, Mr Malouf, 17 August 2017, p 44.

²⁶³ See, Evidence, Ms Bremmer, 27 June 2017, p 39; Submission 170, MRA Consulting Group, p 1; Submission 179, HZI Australia, p 2; Submission 215a, Waste Management Association of Australia, p 1.

²⁶⁴ Evidence, Mr Buffier, 17 August 2017, p 63.

²⁶⁵ Evidence, Mr Buffier, 17 August 2017, p 71.

²⁶⁶ See, Submission 215, Waste Management Association of Australia, p 3. Also see, Evidence, Ms Sloan, 26 June 2017, p 21, Submission 144, The Australian Council of Recycling, p 3.

²⁶⁷ Submission 215, Waste Management Association of Australia, p 3. Also see, Evidence, Ms Sloan, 26 June 2017, p 21.

²⁶⁸ Submission 215a, Waste Management Association of Australia, p 1. Also see, Evidence, Ms Sloan, 26 June 2017, p 21.

²⁶⁹ Submission 179, HZI Australia, p 2.

²⁷⁰ Evidence, Mr Beaman, 26 June 2017, p 7.

²⁷¹ Evidence, Mr Buffier, 24 November 2017, p 9.

Committee comment

- 4.48'** The committee notes that the re-introduction of a waste levy in Queensland would immediately address the interstate transportation of waste from New South Wales. We note the Queensland Government's intention to take this action.
- 4.49'** However, more broadly we also believe that a national approach to waste levies would be preferable, acknowledging that such a solution would take some time to develop and implement. Accordingly, pursuing this approach to the exclusion of all others is undesirable. We note that stakeholders supported pursuing a relatively high, but not necessarily consistent, national waste levy and recommend that the NSW EPA and its interstate counterparts consider this proposal as part of a national approach to addressing this issue. More immediately, we recommend that the NSW EPA develop and implement a state-wide approach to ending the interstate transportation of waste.

Recommendation 14

That the NSW Environment Protection Authority:

- develop and implement a state-wide approach to ending the interstate transportation of waste
 - pursue a national approach to addressing the interstate transportation of waste in collaboration with its counterparts in other jurisdictions.
-

Chapter 5 Energy from waste

This chapter details the debate about employing energy from waste technologies and the regulation of this technology in New South Wales, specifically with regard to feedstock, emissions, the need for a reference facility and gaining a social licence to operate. It also considers siting considerations and the need for greater certainty in the planning process.

Debate about energy from waste technology

5.1 As noted in Chapter 1, energy from waste is an umbrella term that captures certain technologies. Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, broadly explained the concept: ‘The energy recovery from waste is the conversion of non-recyclable waste materials into useable heat, electricity or fuel through a variety of processes, including combustion, gasification, pyrolysis, anaerobic digestion and landfill gas recovery’.²⁷²

5.2 There was a great deal of debate during the inquiry about using energy from waste technologies.²⁷³ Various inquiry participants, including some environmental organisations, certain local councils, and residents’ groups in western Sydney, presented arguments opposing energy from waste. In summary, these arguments were that:

- the technologies are not environmentally sound, for example combustion technologies were referred to as ‘dinosaurs’,²⁷⁴ ‘a mediaeval approach of putting rubbish on a fire’,²⁷⁵ and ‘landfills in the sky instead of landfills in the ground’²⁷⁶
- energy from waste presents an unreasonable risk to human health and the environment²⁷⁷
- these technologies are only marginally more efficient than landfill²⁷⁸
- the focus on diversion from landfill rates is ‘greenwashing’, as energy from waste may result in the stockpiling of waste²⁷⁹
- these technologies will undermine resource recovery as recyclables will be ‘cannibalised’ and included in the feedstock for energy from waste projects²⁸⁰

²⁷² Evidence, Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, 7 August 2017, p 38. Also see, Submission 145, Suez, pp 1-2.

²⁷³ As noted above, while there are various energy from waste technologies, a great deal of evidence focused on the thermal treatment of waste.

²⁷⁴ Submission 172, National Toxics Network, p 6.

²⁷⁵ Evidence, Cr Stephen Bali, Mayor, Blacktown City Council, 27 June 2017, p 26.

²⁷⁶ Evidence, Ms Jo Immig, Coordinator, National Toxics Network, 27 June 2017, p 38. Also see, Submission 54, Mr Rodney Lane, p 1.

²⁷⁷ See, Evidence, Ms Immig, 27 June 2017, p 35; Submission 4, Total Environment Centre, p 1; Submission 173, Jacfin, p 2; Submission 173a, Jacfin, p 3.

²⁷⁸ Submission 173a, Jacfin, p 3.

²⁷⁹ Submission 4, Total Environment Centre, p 1 and 6.

- the use of combustion technologies discourages waste organisations from employing effective source separation²⁸¹
- these technologies discourage the circular economy²⁸²
- energy from waste technologies are not a form of renewable energy²⁸³
- there is a limited market in Australia for the use of residual energy to heat homes²⁸⁴
- it can be challenging to update technology,²⁸⁵ for example, retrofitting emissions control technology places a significant financial burden on energy from waste projects²⁸⁶
- projects demand long-term contracts for the supply of waste, thus posing a significant financial risk, and have caused some cities to face bankruptcy²⁸⁷
- thermal treatment facilities are an expensive form of waste disposal and 'renewable energy' production²⁸⁸
- it is irresponsible to spend significant funds on managing residual waste.²⁸⁹

5.3 On the other hand, other stakeholders, including the NSW Environment Protection Authority (NSW EPA), waste management organisations and some local councils advocated the use of energy from waste. The following statement from the NSW EPA summarised many of the arguments in favour of energy from waste:

We believe that energy recovery from waste is a genuine part of a modern, integrated waste management strategy. The thermal treatment of waste is an opportunity to recover the embodied energy, offset the use of non-renewable energy sources, reduce disposal of waste to landfill and avoid long-term methane emissions from landfilled waste. Many of the leading waste management jurisdictions around the world include some level of energy recovery in their policy mix.²⁹⁰

5.4 The key arguments presented to the committee supporting energy from waste included that:

- energy from waste is a means of energy recovery and not waste disposal²⁹¹

²⁸⁰ See, Evidence, Cr Bali, 27 June 2017, p 25; Submission 4, Total Environment Centre, p 2.

²⁸¹ Submission 172, National Toxics Network, p 4.

²⁸² Submission 214, Blacktown City Council, p 7.

²⁸³ Submission 172, National Toxics Network, p 4.

²⁸⁴ Submission 214, Blacktown City Council, p 18.

²⁸⁵ See, Submission 167, NSROC, p 3; Submission 214, Blacktown City Council, p 18.

²⁸⁶ Submission 172, National Toxics Network, p 13.

²⁸⁷ Evidence, Ms Immig, 27 June 2017, p 35.

²⁸⁸ Submission 172, National Toxics Network, p 5.

²⁸⁹ Evidence, Ms Bremmer, 27 June 2017, p 41.

²⁹⁰ Evidence, Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery, NSW EPA, 26 June 2017, p 3.

²⁹¹ See, Submission 145, Suez, pp 1-2; Submission 146, Randwick City Council, p 2; Submission 215, Waste Management Association of Australia, p 4.

- the waste hierarchy dictates that it is preferable to recover energy from a residual material rather than disposing of it, as is current practice²⁹²
- when using best practice technologies, energy from waste produces less harmful emissions than landfill and can assist in reaching renewable energy goals²⁹³
- these technologies can be a viable alternative to landfill²⁹⁴
- energy from waste can be used to manage waste closer to where it is generated²⁹⁵
- using this technology will not unduly impact resource recovery as evidenced by countries with high resource recovery rates that also employ energy from waste²⁹⁶
- the *NSW Energy from Waste Policy Statement* – specifically the resource recovery criteria – supports the waste hierarchy and promotes recycling prior to using energy from waste²⁹⁷
- modern energy from waste facilities can adapt to upstream changes in waste recycling and will not discourage advances in recycling²⁹⁸
- these technologies are used extensively overseas²⁹⁹
- energy from waste technologies can assist councils to achieve the waste diversion targets set out in the *NSW Waste Avoidance and Resource Recovery Strategy*³⁰⁰

²⁹² See, Evidence, Mr Beaman, 26 June 2017, p 10; Evidence, Ms Gayle Sloan, Chief Executive Officer, Waste Management Association of Australia, 26 June 2017, p 29; Submission 141, Toxfree Australia, p 2; Submission 143, New Energy Corporation, p 3; Submission 146, Randwick City Council, p 2; Submission 154, Hunter Joint Organisation of Councils, p 5; Submission 156, Sutherland Shire Council, p 2; Submission 158, Hunters Hill Council, p 2; Submission 170, MRA Consulting Group, p 2; Submission 190, National Waste and Recycling Industry Council, p 2; Submission 198, City of Sydney, p 1; Submission 291, Outotec, p 2; Submission 326, Local Government NSW, p 5.

²⁹³ See, Submission 189, Clean Energy Finance Corporation, pp 1-2; Evidence, Mr Mike Ritchie, Managing Director, MRA Consulting Group, 7 August 2017, p 11.

²⁹⁴ See, Evidence, Mr Grant Musgrove, Chief Executive Officer, Australian Council of Recycling, 26 June 2017, p 40; Evidence Mr Ritchie, 7 August 2017, p 11; Submission 145, Suez, pp 1-2; Submission 164, Alexandria Landfill, p 28; Submission 215, Waste Management Association of Australia, p 3; Submission 216, Re.Group, p 6.

²⁹⁵ Submission 176, SSROC, p 2.

²⁹⁶ See, Evidence, Mr Henry Anning, Sector Lead for Bioenergy, Clean Energy Finance Corporation, 26 June 2017, p 34; Evidence, Associate Professor McCabe, 7 August 2017, p 40; Submission 143, New Energy Corporation, p 3; Submission 149, Wollongong City Council, p 2; Submission 154, Hunter Joint Organisation of Councils, p 5.

²⁹⁷ See, Submission 141, Toxfree Australia, p 3; Submission 146, Randwick Council, p 2; Submission 154, Joint Hunter Organisation of Councils, p 6; Submission 170, MRA Consulting Group, p 2; Submission 215, Waste Management Association of Australia, p 7; Submission 216, Re.Group, p 4; Submission 326, Local Government NSW, p 5.

²⁹⁸ Submission 215, Waste Management Association of Australia, p 9. Also see, Submission 179, HZI Australia, p 6.

²⁹⁹ Evidence, Mr Roger Bligh, Sales Director, Metal, Energy and Water, Outotec South-East Asia Pacific, 7 August 2017, p 45; Submission 47, Mrs Cheryle Brack, p 1; Submission 115, Cleanaway, p 4; Submission 170, MRA Consulting Group, p 3.

- this technology may provide cheaper power to communities³⁰¹
- energy from waste is a 'renewable energy source' that can be used across all three energy sectors—namely, through the production of bioelectricity, heat and liquid biofuels³⁰²
- energy from waste can provide 'firm' electricity and can complement 'variable' energy sources such as solar and wind³⁰³
- residual energy can be used to heat homes, as is common in Europe³⁰⁴
- this technology makes it possible to exploit cogeneration opportunities,³⁰⁵ for example, the use of residual heat energy to develop agriculture³⁰⁶
- the energy from waste market in New South Wales is 'ripe for further investment',³⁰⁷ as evidenced by the large and increasing population and associated growth in waste production, population density, high cost and lack of land, and high landfill gate fees³⁰⁸
- upgrading energy from waste technology is reasonably easy due to the modular nature of facilities³⁰⁹
- energy from waste facilities licensed under the *Industrial Emissions Directive for waste incineration and co-incineration plants (Directive 2010/75/EU)* must adhere to Best Available Technology requirements which are regularly reviewed and updated as appropriate³¹⁰
- energy from waste projects create employment opportunities.³¹¹

³⁰⁰ See, Submission 326, Local Government NSW, p 3; Evidence, Mr Mark Roebuck, Manager, City Works and Services, Wollongong City Council, 7 August 2017, p 27; Evidence, Mr Chris Derksema, Sustainability Director, City of Sydney, 7 August 2017, p 19; Submission 146, Randwick City Council, p 1; Submission 150, WSROC, pp 4-5; Submission 154, Hunter Joint Organisation of Councils, p 5; Submission 167, NSROC, p 1.

³⁰¹ Submission 141, Toxfree Australia, p 3.

³⁰² Evidence, Associate Professor McCabe, 7 August 2017, p 38.

³⁰³ Evidence, Mr Tim Jordan, Head of Research, Clean Energy Finance Corporation, 26 June 2017, p 36. Also see, Submission 164, Alexandria Landfill, p 27; Submission 215, Waste Management Association of Australia, p 9; Submission 141, Toxfree Australia, p 2.

³⁰⁴ Evidence, Mr Bligh, 7 August 2017, p 46.

³⁰⁵ Evidence, Associate Professor McCabe, 7 August 2017, p 39.

³⁰⁶ See, Evidence, Mr Stephen Sasse, Chief Executive Officer, Nectar Farms, 17 August 2017, pp 12-13.

³⁰⁷ Submission 189, Clean Energy Finance Corporation, p 2.

³⁰⁸ Submission 189, Clean Energy Finance Corporation, p 2. Also see, Submission 115, Cleanaway Waste Management, p 3.

³⁰⁹ See, Submission 146, Randwick City Council, p 3; Submission 170, MRA Consulting Group, p 3; Submission 179, HZI Australia, p 6; Submission 215, Waste Management Association of Australia, p 9.

³¹⁰ Submission 215, Waste Management Association of Australia, p 9. Also see, Submission 141, Toxfree Australia, p 4.

³¹¹ Submission 189, Clean Energy Finance Corporation, p 2.

Committee comment

- 5.5'** The committee acknowledges that there is significant concern amongst some stakeholders about energy from waste, particularly around whether these technologies, specifically combustion technology, pose an undue risk to human health and the environment.
- 5.6'** Having said this, the committee also recognises the importance of managing waste in accordance with the waste hierarchy and the *NSW Waste Avoidance and Resource Recovery Act 2001*, which dictate that energy recovery is preferable to disposal. It is clear that in New South Wales, the current dependence on landfill is unsustainable, and that local councils and the NSW Government must work collaboratively to deliver suitable alternatives for waste management. Ultimately, energy from waste technologies will be one component of this solution, only after a significant shift up the waste hierarchy to avoid, reduce and re-use waste and the issues of social license, air pollution impacts and health risks have been addressed.
- 5.7'** We also believe it is important to emphasise that the *NSW Energy from Waste Policy Statement* only allows residual waste to be used as feedstock in energy from waste projects, and that the policy includes resource recovery criteria to ensure recyclables are not included in the fuel mix.

Regulation of energy from waste

- 5.8'** As noted in Chapter 1, energy from waste technology is primarily regulated by the *NSW Energy from Waste Policy Statement*. The policy is administered by the NSW EPA. While many stakeholders supported the NSW EPA in this role,³¹² others stated that they had little 'faith' the agency can adequately regulate energy from waste.³¹³ The NSW EPA's regulatory role is examined in Chapter 7. In addition, the approval process for state significant sites is the responsibility of the NSW Department of Planning and Environment and is discussed in Chapter 6.
- 5.9'** There was some debate during the inquiry about the *NSW Energy from Waste Policy Statement*, with some inquiry participants supporting the policy,³¹⁴ and others critical of it.³¹⁵ One significant concern raised about the policy was that it lacked sufficient supporting information to provide a clear understanding of expected standards and outcomes.

³¹² See, Submission 170, MRA Consulting Group, p 3; Submission 179, HZI Australia, p 6; Submission 143, New Energy Corporation, p 5; Submission 198, City of Sydney, p 6; Submission 146, Randwick City Council, p 3; Submission 156, Sutherland Shire Council, p 3; Evidence, Ms Sloan, 26 June 2017, p 23; Submission 149, Wollongong City Council, p 2.

³¹³ See, Evidence, Ms Melinda Wilson, No Incinerator for Western Sydney, 27 June 2017, p 44; Evidence, Mr Antony Lewis, Secretary, Blacktown and District Environment Group, 27 June 2017, p 44.

³¹⁴ See, Evidence, Mr Ritchie, 7 August 2017, p 10; Submission 215, Waste Management Association of Australia, p 9; Evidence, Mr Jordan, 26 June 2017, p 31; Submission 216, Re.Group, p 6; Submission 182, Waste Contractors and Recyclers Association of NSW, p 2; Evidence, Mr Derksema, 7 August 2017, p 19.

³¹⁵ See, Evidence, Ms Immig, 27 June 2017, p 35; Submission 172, National Toxics Network, pp 6 and 8; Submission 173a, Jacfin, p 2; Tabled document, Dr James Whelan, Researcher and Community Organiser, Environmental Justice Australia, *A checklist for responsible air pollution management*, August 2017, p 3.

The National Toxics Network expressed concern about the emergence of the New South Wales *Energy from Waste Policy Statement* as it seemed to appear out of nowhere and without a robust community debate. They considered it a flawed policy with internal inconsistencies including a lack of key guidance material and inadequate provisions for managing air pollution and toxic ash produced by waste incinerators.³¹⁶ This concern is explored throughout this chapter and in Chapter 6.

Protecting human health and the environment

- 5.10'** Inquiry participants highlighted that any energy from waste project, and the associated policy, should effectively manage risks to human health and the environment.³¹⁷ Indeed, the NSW EPA described this imperative as 'paramount'.³¹⁸
- 5.11'** NSW Health advised that determining the potential human health risks posed by a project requires an understanding of the possible emissions. Moreover, the characteristics of emissions are determined by:
- the amount and type of feedstock
 - the combustion processes used
 - the efficiency of air pollution control technologies employed.³¹⁹
- 5.12'** Dr Ben Scalley, Director of Environmental Health Branch at NSW Health, noted that it is also important to consider the extent to which the population is exposed to emissions and the susceptibility of the population in the surrounding area. Dr Scalley added: 'Exposure and susceptibility will depend on the location of that facility and the demographic and health characteristics of the population around that area, especially socio-economic disadvantage'.³²⁰
- 5.13'** NSW Health emphasised the need to consider the potential health risks posed by an energy from waste facility on a case-by-case basis:
- As health risks associated with any energy from waste facility will be specific to the facility, any assessment of the overall benefit of a facility needs to be done on a case-by-case basis, especially when the feedstock can differ so broadly. Broad statements are really difficult in this area.³²¹
- 5.14'** The committee's attention was also drawn to the need to manage and negotiate risks. Dr Scalley noted that many activities, including emissions from coal-powered energy facilities

³¹⁶ Evidence, Ms Immig, 27 June 2017, p 35.

³¹⁷ See, Submission 170, MRA Consulting Group, p 2; Submission 179, HZI Australia, p 2; Submission 215, Waste Management Association of Australia, p 4.

³¹⁸ Evidence, Mr Beaman, 26 June 2017, p 3.

³¹⁹ Evidence, Dr Ben Scalley, Director, Environmental Health Branch, NSW Health, 7 August 2017, p 2.

³²⁰ Evidence, Dr Scalley, 7 August 2017, p 2.

³²¹ Evidence, Dr Scalley, 7 August 2017, pp 2-3.

and transport, increase risks to human health and the environment.³²² However, he said it is important to balance risks against potential positive outcomes.³²³

- 5.15^{*} To mitigate possible risks to human health and the environment, the *NSW Energy from Waste Policy Statement* requires that projects meet international best practice techniques in relation to process design and control, emission control equipment design and control, emission monitoring, arrangements for receipt of waste, and management of residues from the energy recovery process.³²⁴ *Directive 2010/75/EU* is the primary instrument used to regulate energy from waste facilities in the European Union and was considered the international best practice benchmark by many inquiry participants.³²⁵
- 5.16^{*} In addition to referencing international best practice techniques, the *NSW Energy from Waste Policy Statement* articulates other safeguards to minimise risks to human health and the environment, including identifying eligible waste fuels, technical criteria, thermal efficiency criteria, resource recovery criteria, the need for a reference facility, and that the facility, at a minimum, comply with the requirements of the Group 6 emission standards within the Protection of the Environment Operations (Clean Air) Regulation 2010.³²⁶

Feedstock

- 5.17^{*} As noted earlier, the fuel mix, in other words the amount and type of feedstock being fed into an energy from waste facility, affects emissions. As Dr Scalley put it, ‘... it is important that we know what is being burnt in the energy from waste process in order to properly assess the potential health risks from the air pollution coming out of the facility’.³²⁷
- 5.18^{*} Inquiry participants debated whether the *NSW Energy from Waste Policy Statement* adequately regulates feedstock for facilities. This was a key concern regarding the proposed facility at Eastern Creek and is examined Chapter 6.
- 5.19^{*} In New South Wales, only residual waste can be used in an energy from waste facility. The National Toxics Network was concerned that residual waste streams often contain hazardous materials, including plastics, and said: ‘Burning residual waste is known to generate toxic and hazardous air pollutants’.³²⁸ Likewise, the Total Environment Centre stated: ‘Mixed waste has high levels of contamination ... The thermal treatment of waste that is

³²² Evidence, Dr Scalley, 7 August 2017, p 2. Also see, Evidence, Mr Bligh, 7 August 2017, p 48; Evidence, Dr Marc Stammach, Managing Director, HZI Australia, 17 August 2017, p 12.

³²³ Evidence, Dr Scalley, 7 August 2017, p 2.

³²⁴ NSW EPA, *NSW Energy from Waste Policy Statement* (2015), p 6.

³²⁵ See, Evidence, Mr Ritchie, 7 August 2017, pp 16-17; Submission 145, Suez, p 3; Submission 146, Randwick City Council, p 2.

Note, the Director-General’s Environment Assessment Requirements for the proposed energy from waste facility at Eastern Creek refers to the European Union’s *Waste Incineration Directive 2000* (see, http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6236); this directive was replaced by the *Industrial Emissions Directive for waste incineration and co-incineration plants (Directive 2010/75)* from January 2014.

³²⁶ NSW EPA, *NSW Energy from Waste Policy Statement* (2015), pp 5-7.

³²⁷ Evidence, Dr Scalley, 7 August 2017, p 2.

³²⁸ Submission 172, National Toxics Network, p 4.

unsorted will result in the release of dangerous pollution no matter what technology or management regimes are in place'.³²⁹

- 5.20'** Other stakeholders argued that the *NSW Energy from Waste Policy Statement* – via the technology requirements and the resource recovery criteria – goes some way to addressing concerns about how a facility manages its feedstock. For example, Mr Mike Ritchie, Managing Director of MRA Consulting Group, remarked that the NSW EPA has 'rightly' erred on the side of caution by requiring a proponent to have technology that is robust enough to manage any waste stream, ensuring there is less reliance on whether the feedstock has been appropriately sorted.³³⁰
- 5.21'** The resource recovery criteria in the policy detail the type of waste that may be used as feedstock, depending on factors such as waste stream and source separation. As previously mentioned, certain stakeholders suggested that these criteria, when appropriately policed, are sufficient to ensure recyclables are not included in the waste streams servicing facilities.
- 5.22'** Inquiry participants proposed that the policy should include additional guidance, such as:
- requiring energy from waste proposals to demonstrate how inappropriate objects will be excluded from the waste stream³³¹
 - requiring all commercial and industrial waste to be either pre-sorted and shredded or sorted and shredded at the facility prior to the combustion process³³²
 - requiring all waste entering the facility to be validated through a pre-treatment off-site process transfer station³³³
 - providing a definition of a 'processing facility' in relation to the resource recovery criteria³³⁴
 - encouraging a greater focus on emissions standards rather than detailed regulation of inputs.³³⁵
- 5.23'** As noted in Chapter 1, the NSW EPA anticipates releasing the *Energy Recovery Facility Guidelines* in early 2018.³³⁶

³²⁹ Submission 4, Total Environment Centre, p 4.

³³⁰ Evidence, Mr Ritchie, 7 August 2017, pp 12-13.

³³¹ Submission 214, Blacktown City Council, p 17.

³³² Submission 214, Blacktown City Council, p 17.

³³³ Evidence, Cr Bali, 27 June 2017, p 25.

³³⁴ Evidence, Mr Ritchie, 7 August 2017, p 12.

³³⁵ See, Evidence, Mr Ritchie, 7 August 2017, p 12; Submission 144, Australian Council of Recycling, p 3.

³³⁶ NSW EPA, *Energy Recovery Facility* (25 August 2017), <https://www.epa.nsw.gov.au/your-environment/waste/waste-facilities/energy-recovery>.

Emissions

- 5.24¹ The committee heard that it is ‘non-negotiable’ for a proposed energy from waste facility to meet emissions standards.³³⁷ The Clean Energy Finance Corporation emphasised the need for a strong regulatory system for air quality and emissions: ‘Air quality and management of emissions is critically important for human health and community acceptance of energy from waste facilities, particularly in populated areas’.³³⁸
- 5.25¹ The Australian Government has carriage of the *National Environment Protection Council Act 1994* (Cth) which provides for the National Environment Council to set National Environment Protection Measures to protect and manage aspects of the environment, including ambient air emissions.³³⁹ In addition, NSW Health advised that certain state agencies, and in some cases industry, have a role in regulating and monitoring emissions:
- ... the Environmental Protection Agency is the regulator for air quality in New South Wales. The person who monitors in New South Wales the non-ambient air quality impacts is the Office of Environment and Heritage. Some monitoring is also done by the industry in different areas.³⁴⁰
- 5.26¹ Key standards and monitoring requirements for energy from waste facilities in New South Wales include:
- the National Environment Protection (Ambient Air Quality) Measure, which provides a nationally consistent framework for monitoring and reporting (on a 24 hour and annual basis) on common ambient air pollutants including carbon monoxide, lead, nitrogen dioxide, photochemical oxidants (ozone), sulfur dioxide and particulate matter, such as PM10 and PM2.5³⁴¹
 - the *NSW Energy from Waste Policy Statement*, which as noted above includes provisions for emissions standards and monitoring (including continuous and non-continuous monitoring of certain emissions) that reflect the European Union’s *Directive 2010/75/EU* and the Group 6 emission standards within the Protection of the Environment Operations (Clean Air) Regulation 2010
 - licensing conditions set by the NSW EPA.
- 5.27¹ In addition, in 2016, the NSW EPA released *Approved methods for the modelling and assessment of air pollutants in NSW*, which details the statutory methods to be used for modelling and assessing emissions of air pollutants. The NSW EPA refers to these methods when assessing air quality

³³⁷ Evidence, Mr Ron Wainberg, National Chair, Resource and Energy, Recovery Division, Waste Management Association of Australia, 26 June 2017, p 28.

³³⁸ Submission 189, Clean Energy Finance Corporation, p 3.

³³⁹ National Environment Protection Council, *National Environment Protection Measures*, <http://www.nepc.gov.au/nepms>.

³⁴⁰ Evidence, Dr Scalley, 7 August 2017, p 6.

³⁴¹ Australian Government, Department of Environment and Energy, *Air quality standards*, <http://www.environment.gov.au/protection/air-quality/air-quality-standards>. Also see, SLR Consulting, *National Environment Protection (Ambient Air Quality) Measure Update 2016* (19 June 2016), <https://slrconsulting.com/au/news/2016/national-environment-protection-ambient-air-quality-measure-update-2016>.

impact assessments submitted as part of a planning application, and may also refer to them in licences and notices issued under the *Protection of the Environment Operations Act 1997*.³⁴²

5.28' While certain stakeholders supported the emissions regime,³⁴³ other inquiry participants raised concerns about the possible emissions from energy from waste plants, including:

- difficulty in determining emissions, and consequently assessing potential health risks, when feedstock is not clearly articulated and/or is sourced from a variety of locations³⁴⁴ (this issue is examined in Chapter 6)
- emissions of particulate matter and gases, and particles from specific chemicals, will impact air quality and are associated with health risks³⁴⁵
- combusting residual waste will lead to emissions of persistent organic pollutants (POPs) such as dioxins and furans³⁴⁶
- New South Wales emission limits do not meet international best practice standards³⁴⁷
- reliance on international best practice standards will not control the release POPs and other hazardous pollutants³⁴⁸
- New South Wales regulatory controls are outdated and have not been written to properly consider energy from waste technology³⁴⁹
- the NSW EPA's licensing conditions do not adequately reflect emissions standards³⁵⁰
- emissions monitoring at energy from waste facilities is post incineration (testing releases from the smoke stack) and is 'nothing more than closing the gate after the horse has bolted'³⁵¹
- the use of 'grab samples' – that is the non-continuous emissions monitoring – is a 'significant flaw'.³⁵²

³⁴² NSW EPA, *Modelling and assessing air emissions* (29 September 2017), <https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/modelling-assessing-air-emissions>.

³⁴³ See, Evidence, Mr Ritchie, 7 August 2017, pp 16-17; Submission 145 Suez, p 4; Submission 164, Alexandria Landfill, p 47.

³⁴⁴ Evidence, Dr Scalley, 7 August 2017, p 2.

³⁴⁵ Evidence, Dr Scalley, 7 August 2017, p 2.

³⁴⁶ Evidence, Ms Immig, 27 June 2017, p 35; Evidence, Ms Bremmer, 27 June 2017, p 38.

³⁴⁷ See, Evidence, Ms Bremmer, 27 June 2017, p 36; Evidence Ms Immig, 27 June 2017, p 36; Submission 214, Blacktown City Council, p 15.

³⁴⁸ Submission 172, National Toxics Network, p 11. Also see, Evidence, Ms Bremmer, 27 June 2017, p 38.

³⁴⁹ See, Evidence, Cr Bali, 27 June 2017, p 25; Evidence, Mr Gerald Barr, 27 June 2017, p 50.

³⁵⁰ Evidence, Dr James Whelan, Researcher and Community Organiser, Environmental Justice Australia, 17 August 2017, p 27.

³⁵¹ Submission 4, Total Environment Centre, p 4.

³⁵² Submission 172, National Toxics Network, p 11.

- 5.29** The National Toxics Network and The Total Environment Centre were also concerned about the toxicity of the residual ash created by energy from waste plants, arguing that dioxins and other POPs may leach into the food chain and groundwater if not securely landfilled.³⁵³
- 5.30** Dr James Whelan, Researcher and Community Organiser at Environmental Justice Australia, provided evidence that there are no enforceable national standards for criteria pollutants, which include fine particle pollution PM2.5 or coarse particles PM10.³⁵⁴
- 5.31** The committee received numerous proposals to improve the emissions regime, including:
- emissions standards should be continually updated to reflect improvements in technology, and licensing conditions should be revised accordingly³⁵⁵
 - mandating the use of biomonitoring in environments surrounding energy from waste facilities, and testing eggs, meat and vegetation in these areas³⁵⁶
 - support for continuous emissions monitoring and the suggestion that significant penalties should apply for non-compliance³⁵⁷
 - compulsory online broadcasting of real time emission testing data online³⁵⁸
 - mandatory monthly testing of heavy metals, polycyclic aromatic hydrocarbons, and chlorinated dioxins and furans³⁵⁹
 - requiring a proponent to obtain accurate baseline data to determine whether the plant is adversely impacting on the air quality once operations commence³⁶⁰
 - setting up monitoring stations in residential areas to ensure there is no impact on local communities³⁶¹
 - local councils and the NSW EPA should work together to monitor energy from waste plants, and the cost of these resources could be levied through a licensing fee on the facility.³⁶²

³⁵³ Submission 172, National Toxics Network, p 4 and Submission 4, Total Environment Centre, p 1. Also see Evidence, Ms Immig, 27 June 2017, p 35.

³⁵⁴ Evidence, Dr Whelan, 17 August 2017, p 27.

³⁵⁵ See, Evidence, Dr Whelan, 17 August 2017, p 21; Evidence, Cr Bali, 27 June 2017, p 25; Submission 214, Blacktown City Council, p 20.

³⁵⁶ Submission 172, National Toxics Network, p 12.

³⁵⁷ Submission 174, Blacktown and District Environment Group, p 2.

³⁵⁸ Evidence, Cr Bali, 27 June 2017, pp 25-26; Submission 214, Blacktown City Council, p 17.

³⁵⁹ Evidence, Cr Bali, 27 June 2017, pp 25-26; Submission 214, Blacktown City Council, p 17.

³⁶⁰ Evidence, Cr Bali, 27 June 2017, pp 25-26; Submission 214, Blacktown City Council, p 17.

³⁶¹ Evidence, Cr Bali, 27 June 2017, pp 25-26; Submission 214, Blacktown City Council, p 17.

³⁶² Evidence, Cr Bali, 27 June 2017, pp 25-26; Submission 214, Blacktown City Council, p 17.

- 5.32'** In addition, to assist proponents, Alexandria Landfill proposed that the NSW EPA should provide more comprehensive 'up front' requirements for emissions modelling, including:

Specifying requirements for air quality modelling based on stack concentrations, dispersion rate and areas and specifying operating values or the values proposed as licence limits as the case may be.

Specifying the amount of information required about volatile organic compounds (both chemicals included and the contribution they make); and persistent and bio accumulative chemicals.

Specifying the appropriate toxicity reference values and screening guidelines, health standards and assessment methodology. Specifying the specific scenarios which are required to be assessed to consider the potential human health risks these include including emissions at the IED limit; emissions at the project specific limits and emissions at upset.³⁶³

Reference facility

- 5.33'** As previously noted, the technology used in energy from waste facilities must be proven, well understood and capable of handling the expected variability of the feedstock. The NSW EPA advised that this can be best achieved by referencing fully operational plants using the same technologies, known as 'reference facilities'. Referring to the *NSW Energy from Waste Policy Statement*, the NSW EPA explained the concept of a reference facility:

In the colloquial sense our view is you should be able to go and kick the tyres of it [an energy from waste facility]. We designed the policy to be conservative to make sure that anyone that comes forward we are able to assess another facility elsewhere around the world to make sure it delivers.³⁶⁴

- 5.34'** The application of this provision to the proposal put forward by The Next Generation is examined in Chapter 6. However, more generally, certain stakeholders suggested this provision is restrictive and stifles innovation. For example, Toxfree, which currently operates several thermal treatment facilities in Australia, said the 'strict interpretation' of the reference facility provision 'suffocates innovation and investment and has already driven companies, investment and employment out of the state'.³⁶⁵

- 5.35'** Likewise, New Energy Corporation, the company responsible for developing largescale thermal treatment facilities in Western Australia, said: 'The NSW EfW [energy from waste] policy is currently restrictive with regards to emerging or innovative EfW technologies as they may not be able to demonstrate fully operational reference plants on like waste types'.³⁶⁶ New Energy Corporation continued: 'The requirement for facilities to have reference plants of similar waste and size internationally is effectively preventing newer technologies like

³⁶³ Submission 164, Alexandria Landfill, p 61.

³⁶⁴ Evidence, Mr Beaman, 26 June 2017, p 7.

³⁶⁵ Submission 141, Toxfree Australia, pp 3-4.

³⁶⁶ Submission 143, New Energy Corporation, p 4. Also see Evidence, Mr Jason Pugh, Chief Executive Officer, New Energy Corporation, 26 June 2017, p 16.

gasification that have less developed track record from proceeding with any commercial facilities'.³⁶⁷

- 5.36' Stakeholders proposed various amendments to the reference facility provision, including that:
- the NSW EPA should promote innovative technologies that operate effectively in other jurisdictions³⁶⁸
 - novel facilities be given conditional licences subject to the facility/technology meeting milestones that prove performance and compliance³⁶⁹
 - the NSW EPA develop a mechanism for approving emerging or innovative energy from waste technologies which do not present risk of harm to the environment or health.³⁷⁰

Social licence

- 5.37' The *NSW Energy from Waste Policy Statement* requires operators to be 'good neighbours' and supports effective consultation and communication with the community. There was a consensus from stakeholders that this 'social licence' to operate a facility is of vital importance. For example, Mr Grant Musgrove, Chief Executive Officer of the Australian Council of Recycling, remarked: 'Getting the social licence to operate is everything'.³⁷¹
- 5.38' According to the Australian Industrial Ecology Network, the persistent barrier to obtaining a social licence is the lack of adequate community consultation, which undermines community confidence in energy from waste projects.³⁷² Other inquiry participants similarly expressed concern that the community is often inadequately informed about new or novel technologies.³⁷³
- 5.39' This argument was further supported by the Southern Sydney Regional Organisation of Councils (SSROC) report *Community attitudes towards, and understanding of, Resource Recovery in the SSROC Region, with a focus on Recovering Energy from Waste* (2015), which concluded the SSROC community supported energy from waste, and that concerns about this technology could be overcome with good stakeholder engagement and communication.³⁷⁴

³⁶⁷ Submission 143, New Energy Corporation, p 4.

³⁶⁸ See, Submission 143, New Energy Corporation, p 5; Submission 149, Wollongong City Council, p 3.

³⁶⁹ Submission 141, Toxfree Australia, pp 3-4.

³⁷⁰ Submission 215, Waste Management Association of Australia, p 9.

³⁷¹ Evidence, Mr Musgrove, 26 June 2017, p 41. Also see, Submission 198, City of Sydney, p 5; Submission 175, Australian Industrial Ecology Network, p 9.

³⁷² Waste Management Association of Australia, *Sustainability Guide for Energy from Waste (E/W) Projects and Proposals*, (24 January 2005), <http://www.ecowaste.com.au/content/EfW%20Sustainability%20Guide.pdf>, referred to in Submission 175, Australian Industrial Ecology Network Pty Ltd, p 5.

³⁷³ See, Submission 146, Randwick City Council, p 3; Submission 217, Illawarra Pilot Joint Organisation, p 2.

³⁷⁴ Submission 176, SSROC, Attachment 1, Elton Consulting, *Community attitudes towards, and understanding of, Resource Recovery in the SSROC Region, with a focus on Recovering Energy from Waste: Social*

5.40^{*} Inquiry participants acknowledged that gaining a social licence involves ongoing stakeholder engagement with active participation from government agencies and the proponent of the project.³⁷⁵ Mr Jason Pugh, Chief Executive Officer of New Energy Corporation, emphasised the need to actively engage with the community and address their concerns:

The community is the number one stakeholder in these projects. That is not a throwaway line. They are—it is as simple as that. We really worked hard to make the issues local and relatable. Just saying that energy from waste is done successfully around the world is not good enough for your local community. Effective listening was certainly a priority.³⁷⁶

5.41^{*} Mr Pugh continued: ‘The main point of that is you need to face up to the hard issues. If they are real to the community then they are real. Perceived issues are real and they need to be addressed correctly’.³⁷⁷

5.42^{*} As to the best way to obtain a social licence, the NSW Government has released *NSW Energy from Waste Compliance Table*, which lists activities that are considered when evaluating social licence for a NSW Environmental Trust Grant Application, such as having a consultation and engagement plan, and logging issues raised and responses provided.³⁷⁸ However, there was no consensus amongst inquiry participants as to what constitutes effective community engagement in respect to energy from waste projects. This was particularly evident in the context of the proposed facility at Eastern Creek, examined in Chapter 6.

5.43^{*} The Waste Management Association of Australia published the *Sustainability Guide for Energy from Waste (EfW) Projects and Proposals*, which sets out three elements to facilitate an appropriate level of engagement with the community:

- providing information that is topical, of an appropriate quality and readily accessible
- intimately involving stakeholders in the decision-making process
- maintaining a transparent and accountable process.³⁷⁹

5.44^{*} Likewise, Blacktown City Council observed that proponents should provide accurate, reliable information, particularly around emissions and resource recovery, on a regular basis through a variety of forums to build trust and confidence between themselves and the community.³⁸⁰

Research Study Report, December 2015, p 6. Also see, Evidence, Ms Hazel Storey, Strategic Coordinator, Resource Recovery and Waste, SSROC, 7 August 2017, p 28.

³⁷⁵ See, Submission 167, NSROC, p 2; Submission 145, Suez, p 3.

³⁷⁶ Evidence, Mr Pugh, 26 June 2017, p 15.

³⁷⁷ Evidence, Mr Pugh, 26 June 2017, p 15.

³⁷⁸ NSW EPA, *NSW Energy from Waste Compliance Table*, p 5, <http://www.environment.nsw.gov.au/resources/grants/160208-energy-compliance-PPW.pdf>

³⁷⁹ Waste Management Association of Australia, *Sustainability Guide for Energy from Waste (EfW) Projects and Proposals*, (24 January 2005), <http://www.ecowaste.com.au/content/EfW%20Sustainability%20Guide.pdf>, pp 21-22, referred to in Submission 175, Australian Industrial Ecology Network Pty Ltd, p 5.

³⁸⁰ Submission 214, Blacktown City Council, p 23.

5.45 Another option, presented by Mr Pugh, was to enhance the accessibility of environmental impact assessments: 'These documents are generally 700 pages long and they are highly complex. We believe a more high-level summary document would be far more appropriate for the digestion of community members'.³⁸¹

Siting

5.46 There are no requirements in the *NSW Energy from Waste Policy Statement* dictating specific locations for energy from waste facilities. This led to debate during the inquiry about the appropriate siting of energy from waste facilities. Another related concern was the size of such facilities. These concerns were pertinent to debate regarding The Next Generation proposal and are examined in Chapter 6.

5.47 Key concerns about the siting of energy from waste facilities included:

- the NSW Government has failed to actively plan and locate areas for such facilities³⁸²
- availability of waste tonnage³⁸³ and surety of waste stock³⁸⁴
- access to transport³⁸⁵
- air sheds³⁸⁶
- the cost of land and urban encroachment on industrial land.³⁸⁷

5.48 These issues are examined in relation to all waste infrastructure development in Chapter 8.

Committee comment

5.49 The NSW EPA has an important role in setting the standards for energy from waste facilities. The committee notes that the agency has appropriately erred on the side of caution by requiring energy from waste projects to meet stringent criteria under the *NSW Energy from Waste Policy Statement*, including by referencing international best practice standards. However, we believe that all stakeholders, including proponents and the wider community, would benefit from additional and more specific guidance about energy from waste project requirements, and note that the NSW EPA anticipates publishing *Energy Recovery Facility*

³⁸¹ Evidence, Mr Pugh, 26 June 2017, p 15.

³⁸² See, Submission 182, Waste Contractors and Recyclers Association of NSW, p 2.

³⁸³ Evidence, Mr Bligh, 7 August 2017, p 48; Evidence, Mr Anning, 26 June 2017, p 37; Submission 148, Veolia Australia and New Zealand, p 13; Submission 215, Waste Management Association of Australia, p 10.

³⁸⁴ Evidence, Mr Emmanuel Vivant, Executive Director-Development, Performance and Innovation, Suez Australia, 26 June 2017, p 47; Also see, Submission 145, Suez, pp 3-4; Submission 148, Veolia Australia and New Zealand, p 13.

³⁸⁵ See, Evidence, Mr Wainberg, p 24; Evidence, Mr Mark Taylor, General Manager, NSW Resource Recovery, Veolia, 26 June 2017, p 65; Submission 215, Waste Management Association of Australia, p 10.

³⁸⁶ Submission 215, Waste Management Association of Australia, p 3.

³⁸⁷ Evidence, Mr Musgrove, 26 June 2017, p 41.

Guidelines in early 2018. The committee urges the NSW EPA to release these guidelines as soon as practicable to provide greater certainty in the market and in communities.

- 5.50' We acknowledge concerns among inquiry participants about feedstock provisions in the *NSW Energy from Waste Policy Statement* and note that the NSW EPA has included resource recovery criteria in the policy to ensure waste is appropriately sorted. While the committee supports the use of residual waste for energy from waste facilities in some circumstances, these provisions will need to be rigorously enforced to ensure recyclables are not included in the feedstock.
- 5.51' The committee also recognises that stakeholders are particularly concerned about possible emissions from energy from waste facilities. As noted earlier, and examined in Chapter 6, the *NSW Energy from Waste Policy Statement* requires a proponent to provide a clear and accurate explanation of how their plant will operate to ensure the possible emissions from the facility can be determined. If a proponent is unable to satisfy this requirement the potential risks to human health and the environment cannot be sufficiently determined and the project will not be approved.
- 5.52' We also believe that the emissions regime as reflected in the *NSW Energy from Waste Policy Statement* must be clearly articulated to ensure that proponents and the community have a better understanding of how emissions are regulated and monitored. The committee recommends that the NSW EPA provide more detailed information concerning the emissions regime for energy from waste facilities, including explicit reference to international best practice standards, in the *Energy Recovery Facility Guidelines*.
-

Recommendation 15

That the NSW Environment Protection Authority provide more detailed information concerning the emissions regime for energy from waste facilities, including explicit reference to international best practice standards, in the *Energy Recovery Facility Guidelines*.

- 5.53' We note concerns that the NSW EPA may not impose sufficiently stringent licensing conditions on the proposed facility. To overcome these concerns, we recommend that the NSW EPA set licensing conditions that meet current international best practice for emissions standards, and that licensing conditions be drafted so as to incorporate any future improvements in emissions standards.
-

Recommendation 16

That the NSW Environment Protection Authority set licensing conditions that meet current international best practice for emissions standards, and that licensing conditions be drafted so as to incorporate any future improvements in emissions standards

- 5.54' The committee understands that reference facilities provide a level of assurance that an energy from waste facility using the same feedstock and technology can operate successfully.
-

Given that this is a relatively new technology in Australia, we support the requirement that proponents of such projects provide reference facilities. Indeed, we believe it is likely that once there are large-scale energy from waste facilities operating in other states, these technologies will be brought to New South Wales for development.

- 5.55' The committee also believes that gaining community support is essential for any proponent seeking to operate an energy from waste facility in New South Wales. For this to occur, the NSW EPA must provide more detailed information on the expected community engagement practices and outcomes a proponent must comply with. While we acknowledge the need for some flexibility in these documents, it is necessary to provide clearly articulated standards to encourage certainty for both the proponent and the community. We therefore recommend that the NSW EPA set out the expected community engagement practices and outcomes a proponent must comply with to receive the necessary approvals and community support to operate an energy from waste facility in the *Energy Recovery Facility Guidelines*.

Recommendation 17

That the NSW Environment Protection Authority set out the expected community engagement practices and outcomes a proponent must comply with to receive the necessary approvals and community support to operate an energy from waste facility in the *Energy Recovery Facility Guidelines*.

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- 5.56' We agree that the environmental impact statements used to support development applications for large-scale energy from waste facilities are not user-friendly from a community perspective. The committee therefore recommends that the NSW Department of Planning and Environment require applicants for energy from waste facilities to provide a short, high-level summary of the Environmental Impact Statement, and that this document be published on the department's website, in addition to the full Environmental Impact Statement.

Recommendation 18

That the NSW Department of Planning and Environment require applicants for energy from waste facilities to provide a short, high-level summary of the Environmental Impact Statement, and that this document be published on the department's website, in addition to the full Environmental Impact Statement.

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- 5.57' Given the significant concerns in relation to energy from waste technology and the impact of emissions on air quality, there needs to be a much more detailed assessment of the issues surrounding this technology and its use in New South Wales. The committee recommends that the NSW Government establish an expert advisory body on energy from waste chaired by the Chief Scientist to examine and report on the energy from waste regulatory framework, to create certainty for the market and communities.

Recommendation 19

That the NSW Government establish an expert advisory body on energy from waste chaired by the Chief Scientist to examine and report on the energy from waste regulatory framework to create certainty for the market and communities, with particular reference to:

- changes required to the *Energy from Waste Recovery Guidelines* to guarantee that New South Wales uses only world's best practices in emissions, emissions monitoring and residual waste disposal
 - consent conditions required in any planning approval to guarantee that New South Wales uses only world's best practices in emissions, emissions monitoring and residual waste disposal
 - the impact of energy from waste on human health
 - the impact of energy from waste on recycling targets.
-

5.58' Given the particular topography of the Sydney Basin and the trapping of air pollution within the basin, the committee believes that the pressure on air quality should be considered when assessing energy from waste incinerator proposals.

Chapter 6 The Next Generation energy from waste project

This chapter examines the proposal by The Next Generation to build an energy from waste facility at Eastern Creek. The chapter discusses many of the issues raised by inquiry participants in relation to the proposed facility including the proponent's social licence to operate, the siting of the project, the lack of reference facilities and the proposed feedstock for the project. The chapter also considers issues with regard to emissions standards and monitoring, and considers whether the proponent is a 'fit and proper person' to operate an energy from waste facility.

The proposal

- 6.1** The Next Generation NSW Pty Ltd has applied to the NSW Department of Planning and Environment (the department) to build a large-scale energy from waste facility at Honeycomb Drive at Eastern Creek, New South Wales. The site currently houses the Genesis Xero Waste Recycling Facility, a Material Processing Centre for construction and demolition waste and commercial and industrial waste, and has waste disposal facilities and landfill capacity.³⁸⁸
- 6.2** The proponent proposes that the facility will source feedstock from the residual chute waste at the Genesis MPC, and will accept suitable and eligible waste fuels from authorised third parties.³⁸⁹ The fuel, or feedstock, will be mixed before the feed hopper pushes it onto the continually moving grate furnace where it will be combusted.³⁹⁰ A proportion of the electricity generated at the facility will be exported to the national grid, and the remainder will be used onsite.³⁹¹
- 6.3** The following waste outputs will be generated by the facility: bottom ash, boiler ash, air pollution control ash (also known as flue gas treatment residue), ferrous material residue, and liquid effluent.³⁹² Urbis, consultants engaged by The Next Generation to provide the amended Environmental Impact Statement (EIS), reported that the following air emissions are expected:
- Particulate matter, assumed to be emitted as PM10 and PM2.5a
 - Hydrogen Chloride
 - Hydrogen Fluoride

³⁸⁸ Submission 164, Alexandria Landfill, p 30.

³⁸⁹ Submission 164, Alexandria Landfill, pp 10 and 30.

³⁹⁰ See, Submission 164, Alexandria Landfill, p 33; Urbis, *Environmental Impact Statement: The Next Generation NSW Energy from Waste Facility, Eastern Creek*, April 2015, p 29, <https://majorprojects.accelo.com/public/7a4f50ec1958c641911d137a62c1a147/01.%202015-04-28%20Environmental%20Impact%20Statement.pdf>.

³⁹¹ Submission 164, Alexandria Landfill, p 52.

³⁹² Urbis, *Environmental Impact Statement: The Next Generation NSW Energy from Waste Facility, Eastern Creek*, April 2015, pp 39-40, <https://majorprojects.accelo.com/public/7a4f50ec1958c641911d137a62c1a147/01.%202015-04-28%20Environmental%20Impact%20Statement.pdf>.

- Carbon Monoxide
- Sulfur Dioxide
- Oxides of nitrogen (expressed as Nitrogen Dioxide)
- Heavy metals (including Mercury, Cadmium, Arsenic and Chromium)
- Gaseous and vaporous organic substances (expressed as total organic carbon)
- Dioxins and Furans
- Hydrogen Sulfide
- Chlorine
- Ammonia
- Polycyclic-Aromatic Hydrocarbons.³⁹³

6.4 Urbis reported that the emissions, except for PM10 (particulate matter less than 10 microns in diameter), are not projected to exceed emissions standards. Urbis concluded that when combined with maximum background levels, the PM10 emissions from the plant result in a cumulative concentration of 50.9 µg/m³, which is 'marginally' over the 24-hour PM10 criteria of 50 µg/m³.³⁹⁴

6.5 The Next Generation is a wholly owned subsidiary of the Alexandria Landfill Corporate Group and is part of the Dial A Dump Industries Group.³⁹⁵ Alexandria Landfill listed in its submission to this inquiry some of the justifications and benefits of the project:

- will deliver a net positive greenhouse gas effect
- will complement the existing waste disposal and recycling facility adjacent to the proposed facility
- is permissible within the zone and complies with relevant state and local policies
- uses best practice technology to minimise the discharge of emissions
- the feedstock is residual waste fuel that cannot feasibly be re-used or recycled
- will not lead to any adverse health effects from dioxins and furans, and will not have any non-carcinogenic or carcinogenic effects.³⁹⁶

³⁹³ Urbis, *Environmental Impact Statement: The Next Generation NSW Energy from Waste Facility, Eastern Creek*, April 2015, p 126, <https://majorprojects.accelo.com/public/7a4f50ec1958c641911d137a62c1a147/01.%202015-04-28%20Environmental%20Impact%20Statement.pdf>.

³⁹⁴ Urbis, *Environmental Impact Statement: The Next Generation NSW Energy from Waste Facility, Eastern Creek*, April 2015, p 126, <https://majorprojects.accelo.com/public/7a4f50ec1958c641911d137a62c1a147/01.%202015-04-28%20Environmental%20Impact%20Statement.pdf>.

³⁹⁵ See, The Next Generation, <http://www.tngnsw.com.au/>.

³⁹⁶ Submission 164, Alexandria Landfill, p 51.

6.6 Alexandria Landfill suggested that other benefits of the project will include:

- energy security and diversity
- maximising energy recovery from waste in accordance with the *NSW Energy from Waste Policy Statement*
- saving landfill space for more contaminated wastes that cannot be thermally treated
- reducing greenhouse gas emissions that would otherwise have been generated from the breakdown of the waste material had it gone to landfill
- breaking reliance on landfilling
- creating employment opportunities.³⁹⁷

The planning process

6.7 The proposed development will have a capital investment exceeding \$30 million and is being assessed as a State Significant Development.³⁹⁸

6.8 The department informed the committee that it received preliminary information about the proposal in 2013. The department subsequently instructed the proponent to consider the following environmental assessment requirements as part of the official application: air quality emissions and human health impacts, source volume and composition of waste material to be used, noise impacts, traffic, visual impacts and biodiversity.³⁹⁹

6.9 Due to the novel nature of the proposal, in 2014, before the development application was received or exhibited, the department and the NSW Environment Protection Authority (NSW EPA) engaged two independent experts to provide technical advice for the proposed development.⁴⁰⁰ These experts were Environmental Risk Sciences Pty Ltd (EnRiskS), an Australian-based risk assessment consultant with experience in human health risk assessment, and Arup, an international engineering consultancy with experience dealing with

³⁹⁷ Submission 164, Alexandria Landfill, pp 51-52. Also see Evidence, Mr Ian Malouf, Managing Director, Dial A Dump Industries, 17 August 2017, p 43.

³⁹⁸ NSW Department of Environment and Planning, *Eastern Creek Energy from Waste - Key Features and FAQs* (15 December 2017), <http://www.planning.nsw.gov.au/Assess-and-Regulate/Projects/Eastern-Creek-Energy-from-Waste/Key-Features-and-FAQs>.

³⁹⁹ Evidence, Ms Anthea Sargeant, Executive Director, Key Sites and Industry Assessments, NSW Department of Planning and Environment, 27 June 2017, p 2.

⁴⁰⁰ Evidence, Ms Sargeant, 27 June 2017, p 2. Also see, NSW Department of Planning and Environment, *Eastern Creek Energy from Waste - Key Features and FAQs* (15 December 2017), <http://www.planning.nsw.gov.au/Assess-and-Regulate/Projects/Eastern-Creek-Energy-from-Waste/Key-Features-and-FAQs>.

energy from waste facilities in Europe.⁴⁰¹ The independent experts have been working closely with the department, the NSW EPA and NSW Health throughout the assessment process.⁴⁰²

- 6.10'** In 2015, The Next Generation submitted the initial application, including an EIS, to the department for a 1.35 million tonne energy from waste facility. This proposal was exhibited in May to July 2015. The application was made publicly available and stakeholders were invited to make a submission in response to the proposal. The department stated: 'A total of 44 submissions were received, including 34 public submissions. Of these 29 objected to the proposal. Blacktown City Council, the Environment Protection Agency and NSW Health also objected to the proposal'.⁴⁰³ In addition, as required under the *Environmental Planning and Assessment Act 1979*, the department published, and regularly updated, information in relation to the proposal on its website.⁴⁰⁴
- 6.11'** Following this process, the department requested The Next Generation provide an amended EIS and a response to the submissions made by stakeholders, particularly regarding concerns about the project's potential impact on air emissions and human health.⁴⁰⁵
- 6.12'** The amended EIS and associated documents were submitted to the department and placed on public display from December 2016 to March 2017. The amended EIS sought approval to thermally treat up to 1.105 million tonnes per annum (tpa) of residual waste fuel in two stages, with Stage 1 and Stage 2 each having a maximum capacity of 552,500 tpa.⁴⁰⁶
- 6.13'** As part of the amended EIS, the Next Generation engaged AECOM to conduct a human health risk assessment. The AECOM assessment concluded that the project presented a 'low and acceptable' risk to human health from odour, noise, ozone, hazards, soil and water.⁴⁰⁷ Pacific Environment was contracted by the proponent to determine possible emissions from the plant.⁴⁰⁸

⁴⁰¹ NSW Department of Planning and Environment, *Eastern Creek Energy from Waste - Key Features and FAQs* (15 December 2017), <http://www.planning.nsw.gov.au/Assess-and-Regulate/Projects/Eastern-Creek-Energy-from-Waste/Key-Features-and-FAQs>.

⁴⁰² See, Evidence, Ms Sargeant, 27 June 2017, p 3. Also see, Evidence, Portfolio Committee No. 6 – Planning and Environment, Budget Estimates 2017-18, Mr Marcus Ray, Deputy Secretary, Planning Services, NSW Department of Planning and Environment, 8 September 2017, p 7.

⁴⁰³ Evidence, Ms Sargeant, 27 June 2017, p 2.

⁴⁰⁴ Evidence, Ms Sargeant, 27 June 2017, p 3.

⁴⁰⁵ Evidence, Mr Chris Ritchie, Director Industry Assessments, NSW Department of Planning and Environment, 27 June 2017, p 10.

⁴⁰⁶ Answers to supplementary questions on notice, NSW Department of Planning and Environment, 25 July 2017, p 1.

⁴⁰⁷ Urbis, *Energy from waste amended EIS final*, p 258 https://majorprojects.accelo.com/public/319eab3ee366048fa411ca967d58bb8c/Amended%20EIS_%20%20Eastern%20Creek%20Energy%20from%20Waste_%20Volume%201B.pdf. Fichtner were engaged by the proponent to conduct the initial Human Health Risk Assessment. Also see, Evidence, Ms Amanda Lee, Technical Director Environment, AECOM Technology Corporation, 27 June 2017, p 22.

⁴⁰⁸ Urbis, *Energy from waste amended EIS final*, p 258 https://majorprojects.accelo.com/public/319eab3ee366048fa411ca967d58bb8c/Amended%20EIS_%20%20Eastern%20Creek%20Energy%20from%20Waste_%20Volume%201B.pdf.

- 6.14** The department conducted the same community engagement process for the amended EIS as it had for the initial application.⁴⁰⁹ In addition, the committee heard that the department met with concerned stakeholders including the council and a local school, and visited the proposed development site.⁴¹⁰
- 6.15** The department received 990 submissions in response to the amended EIS. Ms Anthea Sargeant, Executive Director, Key Sites and Industry Assessments at the NSW Department of Planning and Environment, advised: ‘Of these, 949 objected to the proposal, 14 provided comment and two expressed support for the proposal’.⁴¹¹ The department advised that the key issues raised by submission authors in the planning process were the size and location of the project, the proposed technology and feedstock, and concerns the plant would adversely affect the air quality and, in turn, the health of residents in western Sydney and the environment.⁴¹²
- 6.16** Following advice from EnRiskS, the NSW EPA’s response to the EIS stated that the proponent’s human health risk assessment was unable to accurately assess the health risks posed by the project due to a number of assumptions and variables:
- The EPA notes the human health risk assessment and supporting assessments use a range of information, assumptions and data to derive estimates to qualitatively and quantitatively characterise and define critical facility operations, parameters and emissions. In general there are numerous assumptions and variables relating to the waste/fuel, plant and project operations and performance, and emissions. These have not been clearly identified, well characterised or comprehensively evaluated in the human health risk assessment. This brings into question the thoroughness and veracity of the assessment.⁴¹³
- 6.17** Mr Stephen Beaman, the then Executive Director Waste and Resource Recovery at the NSW EPA, similarly told the committee that ‘... there are too many gaps, there is too much uncertainty in the assessment to reach a robust or preferable solution’.⁴¹⁴ Mr Beaman concluded ‘... [we] are unable with confidence to say that the human health and environment is going to be protected and therefore we cannot support it’.⁴¹⁵

⁴⁰⁹ Evidence, Ms Sargeant, 27 June 2017, p 7.

⁴¹⁰ Evidence, Ms Sargeant, 27 June 2017, p 7.

⁴¹¹ Evidence, Ms Sargeant, 27 June 2017, p 2.

⁴¹² Evidence, Mr Ritchie, 27 June 2017, p 7; Evidence, Ms Sargeant, 27 June 2017, p 9.

⁴¹³ Answers to questions on notice, NSW Department of Planning and Environment, 25 July 2017 – Appendix A, NSW EPA, Response to EPA, Attachment D, NSW EPA – Human Health Risk Assessment, p 1. Also see, EnRiskS, *Energy from Waste Facility, Eastern Creek, NSW – Review of Health Risk Related Matters Covered in the EIS*, 8 March 2017, pp 2 and 5-8.
https://majorprojects.accelo.com/public/80af9922e944bbe722605d8198d3dbe6/Attachment%20E_%20Review%20of%20Health%20Risk,%20Attachment%20F_%20Air%20Quality%20Ozone%20Assessment%20and%20Attachment%20G_%20Soil%20and%20Water%20Assessment.pdf.

⁴¹⁴ Evidence, Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery, NSW EPA, 26 June 2017, p 9.

⁴¹⁵ Evidence, Mr Beaman, 26 June 2017, p 6.

- 6.18'** Dr Ben Scalley, Director of the Environmental Health Branch at NSW Health, agreed that the amended EIS did not provide sufficient information to characterise the health risks of the energy from waste facility.⁴¹⁶
- 6.19'** In March 2017, the department requested that the applicant provide further information to respond to these submissions and the technical reviews undertaken by EnRiskS and Arup.⁴¹⁷ The proponent's response was received in late September 2017 and sought approval only for Stage 1 of the development:
- On 29 September 2017, the Applicant lodged a Response to Submissions (RTS) report with the Department seeking approval for only Stage 1 of the development to treat a maximum of 552,500 tpa of residual waste fuel and requesting the Minister's agreement to amend the development application under clause 55 of the Environmental Planning and Assessment Regulation 2000.⁴¹⁸
- 6.20'** The response also sought to address emissions modelling concerns raised following the amended EIS. Urbis noted that the updated air quality assessment and human health risk assessment demonstrated that the project posed a low and acceptable risk to human health.⁴¹⁹
- 6.21'** In December 2017, the department agreed to the proponent's request to amend the application, referred the proponent's response to submissions report to the relevant authorities and independent experts for final comment, and made the report available on its website.⁴²⁰ Submissions to the applicant's response to submissions report were due in February 2018.

Next steps

- 6.22'** Following the conclusion of the consultation period, the department will prepare an assessment report with a recommendation for determination of the application. Mr Chris Ritchie, Director Industry Assessments at the NSW Department of Planning and Environment, explained that the report will consider the evidence received, and considerable weight will be given to the opinion of the NSW EPA:

⁴¹⁶ Evidence, Dr Ben Scalley, Director, Environmental Health Branch, NSW Health, 7 August 2017, p 4.

⁴¹⁷ Evidence, Ms Sargeant, 27 June 2017, p 2. Also see, Answers to further questions on notice, NSW Department of Planning and Environment, 13 November 2017, p 1.

⁴¹⁸ Answers to further questions on notice, NSW Department of Planning and Environment, 13 November 2017, p 1. Also see, Urbis, *Response to submissions report, SSD6236: Energy from Waste, Eastern Creek*, December 2017, p 1, <https://majorprojects.accelo.com/public/a0d99df811d1bda71ee654fe51c8987e/A%20Response%20to%20Submissions%20on%20the%20Amended%20EIS%20-%20Eastern%20Creek%20Energy%20from%20Waste%20Proposal>.

⁴¹⁹ Urbis, *Response to submissions report, SSD6236: Energy from Waste, Eastern Creek, December 2017*, p 2, <https://majorprojects.accelo.com/public/a0d99df811d1bda71ee654fe51c8987e/A%20Response%20to%20Submissions%20on%20the%20Amended%20EIS%20-%20Eastern%20Creek%20Energy%20from%20Waste%20Proposal>.

⁴²⁰ NSW Department of Planning and Environment, *Eastern Creek - Energy from Waste* (15 December 2017), <http://www.planning.nsw.gov.au/Assess-and-Regulate/Projects/Eastern-Creek-Energy-from-Waste>.

The department is tasked to write an assessment report and to make a recommendation so all advice received from EPA and from our experts will form part of that. It is EPA's policy so we will consider very carefully if the EPA is adamant that this is not meeting its policy. That will then form part of our assessment which will then form part of our recommendation to the commission.⁴²¹

- 6.23'** The assessment report will be provided to the independent Planning and Assessment Commission (the commission) and will be publicly available on the department's website.⁴²² Ms Sargeant advised: 'The commission has a delegation from the Minister for Planning to determine the application. The commission will hold a public meeting and will invite submitters to present their views on the proposal. It will then prepare its report and determine the application'.⁴²³
- 6.24'** Following the determination by the commission, the department will notify the applicant, councils and submitters of the decision, place a notice of determination in local papers and make the decision and the commission's report publicly available on its website.⁴²⁴

Concerns about the planning process

- 6.25'** Certain inquiry participants expressed the view that the planning process for state significant developments is inadequate. Examples of concerns raised about this process included:
- the process is time consuming and expensive particularly for novel projects⁴²⁵
 - the existing regulatory framework does not adequately identify the impacts and other factors against which such a proposal should be assessed (for example, which regulatory standards, guidelines and policy statements 'energy from waste' technology assessed against)⁴²⁶
 - applicants are provided with too many opportunities to amend their proposals⁴²⁷
 - the commission has 'only ever rejected a handful of projects and normally for extraordinary political reasons, not on their merits'.⁴²⁸

⁴²¹ Evidence, Mr Ritchie, 27 June 2017, p 6. Also see, Evidence, Portfolio Committee No. 6 – Planning and Environment, Budget Estimates 2017-18, Mr Ray, 8 September 2017, p 7.

⁴²² Evidence, Ms Sargeant, 27 June 2017, p 3.

⁴²³ Evidence, Ms Sargeant, 27 June 2017, p 3. Also see, Evidence, Portfolio Committee No. 6 – Planning and Environment, Budget Estimates 2017-18, Hon Anthony Roberts, Minister for Planning, 8 September 2017, pp 6-7.

⁴²⁴ Evidence, Ms Sargeant, 27 June 2017, p 3.

⁴²⁵ Submission 164, Alexandria Landfill, pp 54-55.

⁴²⁶ Submission 173, Jacfin, pp 1-2. Also see, Evidence, Mr Christopher Biggs, Chief Executive Officer, Dial A Dump Industries, 27 June 2017, pp 20-21.

⁴²⁷ Evidence, Ms Kim Vernon, No Incinerator for Western Sydney, 27 June 2017, p 44.

⁴²⁸ Evidence, Dr James Whelan, Researcher and Community Organiser, Environmental Research Australia, 17 August 2017, p 22.

- 6.26^{*} The department contended that there have been no failures in the planning processes for The Next Generation proposal, stating: ‘... our process is very well-documented, and we followed that process. It is the same process that we follow for every project’.⁴²⁹

Committee comment

- 6.27^{*} The committee notes that the NSW Department of Planning and Environment and the NSW EPA have been aware of The Next Generation energy from waste proposal since 2013, and that two independent consultants, Arup and EnRiskS were engaged early on to analyse the technology and potential human health impacts. We also note that in 2015, The Next Generation submitted an initial application that many, including the relevant government agencies, considered inadequate, leading to the submission of an amended proposal in 2016.
- 6.28^{*} The committee acknowledges that the amended proposal drew a great deal of community interest with more than 900 submissions received, the vast majority of which did not support the project. Importantly, the NSW EPA and NSW Health found further shortcomings in this proposal, particularly the lack of clarity around feedstock and emissions, and were therefore unable to accurately determine the risks to human health and the environment. The department is now considering the proponent’s response to these concerns.
- 6.29^{*} Inquiry participants’ specific concerns about the project are outlined throughout this chapter, as is the proponent’s response. Based on this evidence, as things currently stand, the committee does not support the development of this project. The proponent has not provided an adequate reference facility to demonstrate that the technology can adequately process the proposed fuel. Additionally, the proponent has provided inconsistent evidence about the project, particularly around key concerns including size, feedstock and emissions, and has failed to gain the community support for the project to proceed. These issues are discussed in detail below.
- 6.30^{*} The committee recommends that, subject to the current assessment process being conducted by the NSW Department of Planning and Environment, the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek.

Recommendation 20

That, subject to the current assessment process being conducted by the NSW Department of Planning and Environment, the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek.

⁴²⁹ Evidence, Ms Sargeant, 27 June 2017, p 3.

Community support

- 6.31'** As discussed in Chapter 5, the *NSW Energy from Waste Policy Statement* requires operators of prospective facilities garner a 'social licence' through meaningful engagement and being a good neighbour.⁴³⁰ Moreover, in assessing The Next Generation's application, the department will consider whether it has gained a 'social licence' to operate the Eastern Creek project.⁴³¹
- 6.32'** The Next Generation assured the committee that it had conducted extensive community engagement activities in relation to its proposed energy from waste development: "There have been three community forums ... three presentations to councils and officers, two public exhibitions, 8,000 DVDs delivered door-to-door to houses in the area, website videos which are updated regularly, and information pamphlets delivered door-to-door".⁴³² In addition, the company has pursued public relations efforts on radio, news and television programs and social media.
- 6.33'** The Next Generation also noted the department had conducted its own community engagement about the proposal, and said that this inquiry had invited community attention to the project.⁴³³ Mr Ian Malouf, Managing Director of Dial A Dump Industries, commented: "There has not been a private infrastructure proposal which has had such extensive community consultation".⁴³⁴
- 6.34'** The proponent acknowledged that the community has concerns about the project.⁴³⁵ However, Mr Christopher Biggs, Chief Executive Officer of Dial A Dump Industries, questioned whether the concerns are 'rationally based or reasonably based'.⁴³⁶ In his evidence to the committee, Mr Biggs remarked: "... there are members of the community who do not want to listen or do not want to understand, and that is simply on the basis of saying, "Not in my backyard,"...".⁴³⁷ Likewise, Mr Malouf played down suggestions that a large proportion of the community do not support the proposal: "There has been significant criticism, if that is the way you want to put it, from a small minority of people. The greater community, I believe, is definitely in favour of this project".⁴³⁸
- 6.35'** However, many inquiry participants expressed frustration with The Next Generation's community engagement strategy. Dr James Whelan, Researcher and Community Organiser, Environmental Research Australia, observed: "Best practice community engagement is not

⁴³⁰ NSW EPA, *NSW Energy from Waste Policy Statement* (2015), p 4. Also see, Evidence, Dr Whelan, 17 August 2017, p 24.

⁴³¹ Evidence, Ms Sargeant, 27 June 2017, p 9.

⁴³² Evidence, Mr Malouf, 17 August 2017, p 45.

⁴³³ Evidence, Mr Malouf, 17 August 2017, p 45.

⁴³⁴ Evidence, Mr Malouf, 17 August 2017, p 43.

⁴³⁵ Evidence, Mr Biggs, 27 June 2017, p 20.

⁴³⁶ Evidence, Mr Biggs, 27 June 2017, p 20.

⁴³⁷ Evidence, Mr Biggs, 27 June 2017, p 19.

⁴³⁸ Evidence, Mr Malouf, 17 August 2017, p 45.

within a bull's roar of what has been going on ... around the project; it is pretty close to worse practice really. There has been no meaningful engagement'.⁴³⁹

6.36' Likewise, when asked whether The Next Generation met the 'good neighbour' test, Ms Melinda Wilson from No Incinerator for Western Sydney responded: 'No, not at all'.⁴⁴⁰

6.37' Dr Marc Stambach, Managing Director of Hitachi Zosen Inova (HZI) Australia, the technology supplier for the project, acknowledged: 'Our client could have maybe done a better community engagement right in the beginning'.⁴⁴¹

6.38' Stakeholders provided instances where they felt the proponent had not conducted meaningful or wide-ranging consultation, including:

- poorly conducted letterbox drops that did not reach potentially affected residents⁴⁴²
- the Blacktown and District Environment Group, which has operated for about 20 years, did not receive documentation nor was it consulted about the project⁴⁴³
- the proponent and its consultants provided insufficient responses to community concerns raised during at their public forums, for example:
 - residents were told to 'read the EIS' when they about air quality concerns⁴⁴⁴
 - in response to potential health risks arising from the project, the proponent said '... two in three people get cancer anyway'⁴⁴⁵
 - in response to concerns about emissions modelling, the proponent's consultant said 'All models are wrong but some are useful'.⁴⁴⁶

6.39' Members of the No Incinerator for Western Sydney action group voiced dissatisfaction with the public relation efforts undertaken by The Next Generation. For example, Ms Wilson expressed frustration with the 'paid advertisements and newspaper interviews' which included quotes from the proponent about the community 'running a scare campaign about the potential impacts of the facility and making inaccurate claims'.⁴⁴⁷ She told the committee: 'The proponent's public relations person has even been on our No Incinerator for Western Sydney Facebook page and stated there would be "No ill effects on the local population, don't be swayed by wild inaccurate claims"'.⁴⁴⁸

⁴³⁹ Evidence, Dr Whelan, 17 August 2017, p 24. Also see, Evidence, Ms Melinda Wilson, No Incinerator for Western Sydney, 27 June 2017, p 48; Submission 385, Ms Michelle McCallum, p 1.

⁴⁴⁰ Evidence, Ms Wilson, 27 June 2017, p 48.

⁴⁴¹ Evidence, Dr Marc Stambach, Managing Director, HZI Australia, 17 August 2017, p 18.

⁴⁴² See, Evidence, Mr Antony Lewis, Secretary, Blacktown and District Environment Group, 27 June 2017, p 48; Evidence, Ms Vernon, 27 June 2017, p 45.

⁴⁴³ Evidence, Mr Lewis, 27 June 2017, p 46.

⁴⁴⁴ Evidence, Ms Wilson, 27 June 2017, pp 43 and 45.

⁴⁴⁵ Evidence, Ms Vernon, 27 June 2017, p 46.

⁴⁴⁶ Evidence, Cr Stephen Bali, Mayor, Blacktown City Council, 27 June 2017, p 30.

⁴⁴⁷ Evidence, Ms Wilson, 27 June 2017, p 43.

⁴⁴⁸ Evidence, Ms Wilson, 27 June 2017, p 43.

- 6.40* There were also claims by the action group that The Next Generation was inaccurately portraying the environmental and health impacts of the project to the community. Ms Wilson told the committee:

The proponent is making public claims such as waste to energy incineration is “cleaner than composting” when in reality for every four tonnes of waste incinerated, it makes one tonne of toxic contaminated ash that needs to be sent to a hazardous waste landfill. The proponent also claimed that “Greenpeace are all for incineration”. Greenpeace have confirmed to us they have always been opposed to all forms of incineration in Australia.⁴⁴⁹

- 6.41* It was suggested that these actions had led to the proponent being viewed as untrustworthy. For example, Ms Ilmiye Uluc from No Incinerator for Western Sydney said that there are ‘a lot of gaps’ in the proponent’s evidence, leading her to doubt the information they provide.⁴⁵⁰
- 6.42* Ms Kim Vernon from No Incinerator for Western Sydney also said that she was ‘terribly upset’ at the proponent’s suggestion that the ‘community do not want to understand’ the project, telling the committee that she had spent a significant amount of time over the past two years trying to comprehend details of the proposal.⁴⁵¹ Cr Stephen Bali, Mayor of Blacktown City Council, similarly argued that the community wants to understand the proposal.⁴⁵²

Committee comment

- 6.43* The committee believes that The Next Generation has failed to adequately engage with the local community regarding its proposed energy from waste facility. Indeed, the company appears intent on antagonising some members of the community and ultimately, this has led to widespread distrust and undermined any semblance of a ‘social licence’ to operate.
- 6.44* It appears that the behaviour and statements of representatives from The Next Generation and its consultants at public forums have done little to help the situation. It also appears that stakeholders had significant and genuinely held concerns, and that acting in what seems to have been interpreted as a dismissive fashion has worked to undermine the proponent’s reputation in the community.
- 6.45* Overall, we concur with the comment that the community engagement for this project did not come within ‘a bull’s roar’ of best practice. As discussed in Chapter 5, we have recommended that the *Energy Recovery Facility Guidelines* to be published by the NSW EPA in 2018 provide guidance on effective community engagement.

⁴⁴⁹ Evidence, Ms Wilson, 27 June 2017, p 43.

⁴⁵⁰ Evidence, Ms Ilmiye Uluc, No Incinerator for Western Sydney, 27 June 2017, p 46.

⁴⁵¹ Evidence, Ms Vernon, 27 June 2017, p 47.

⁴⁵² Evidence, Cr Bali, Mayor, 27 June 2017, p 30.

Siting

- 6.46^{*} As noted in Chapter 5, there are no requirements in the *NSW Energy from Waste Policy Statement* dictating appropriate locations for energy from waste facilities. The pressing need to identify and zone land for waste infrastructure is examined in Chapter 8.
- 6.47^{*} Alexandria Landfill intends for the proposed energy from waste facility to be part of a 'broader and integrated waste management operation' at the Eastern Creek site.⁴⁵³ The committee heard that the site was chosen for numerous reasons including:
- the company already owns land in the area
 - it is close to the existing landfill
 - the site is located 1.2 kilometres from the grid
 - the project aligns with NSW Government policies for infrastructure and employment in western Sydney such as *NSW 2021* and the *Western Sydney Employment Area Draft Structure Plan*.⁴⁵⁴
- 6.48^{*} Mr Malouf, and others, also noted that energy from waste plants exist in major cities overseas.⁴⁵⁵
- 6.49^{*} The map below provides the regional context of the site.

⁴⁵³ Submission 164, Alexandria Landfill, p 30.

⁴⁵⁴ See, Submission 164, Alexandria Landfill, p 23; Evidence, Mr Malouf, 17 August 2017, pp 43 and 54.

⁴⁵⁵ Evidence, Mr Mike Ritchie, Managing Director, MRA Consulting Group, 7 August 2017, p 17; Evidence, Mr Roger Bligh, Sales Director, Metal, Energy and Water, Outotec South-East Asia Pacific, 7 August 2017, p 45; Evidence, Mr Malouf, 17 August 2017, p 54; Submission 47, Ms Cheryle Brack, p 1; Submission 115, Cleanaway Waste Management, p 4.

Figure 3 Map demonstrating regional context of proposed site



Urbis, *Energy from waste amended EIS*, p 25,
https://majorprojects.accelo.com/public/37ce9bc9707ea35fd5137bdab2f7667a/Amended%20EIS_%20%20Eastern%20Creek%20Energy%20from%20Waste_%20Volume%201.A.pdf

6.50 While certain stakeholders supported the project, and believed it would be benefit western Sydney,⁴⁵⁶ many inquiry participants expressed considerable concern about the location of the proposed energy from waste facility, including:

- that it would be located near residential areas; the closest homes are approximately 800 metres from the site, and there are nearby schools, sporting facilities, and other amenities⁴⁵⁷
- the air quality in western Sydney is already poor due to the emissions, including odour emissions, from other industrial sites in the area⁴⁵⁸

⁴⁵⁶ See, Evidence, Dr Stambach, 17 August 2017, p 12; Submission 44, Mr Hugh Williams, p 1; Submission 51, Mr Matthew Lamens, p 1.

⁴⁵⁷ See, Evidence, Ms Wilson, 27 June 2017, pp 43 and 47; Submission 20, Ms Catherine Hosking, p 1; Submission 26, Name suppressed, p 1; Submission 60, Mr Ron Rose, p 1; Submission 94, Mr Steven Taylor, p 1; Submission 95, Mrs Emma Powney, p 1; Submission 194, Ms Lisa McKinnon, p 1; Submission 205, Mr Jason Edwards, p 1; Submission 209, Mr Glen Clark, p 1.

⁴⁵⁸ See, Submission 24, Mr Gavin Wilson, p 1; Submission 40, Ms Alicia Schloeffel, p 1; Submission 126, Mrs Annalissa Ozdemir, p 1; Submission 127, Mrs Safiye Ozdemir, p 1; Submission 131, Mr Stephen Richards, p 1; Submission 160, Name suppressed, p 1; Submission 204, Mr Michael Donohue, p 1.

- the topography of the Sydney Basin, that is the single air shed in Sydney, exacerbates certain air quality impacts in the area around the project⁴⁵⁹
- residents of western Sydney experience poorer health outcomes, particularly in relation to cardiovascular disease and respiratory disease, that may be exacerbated by further emissions.⁴⁶⁰

6.51 A large number of individual inquiry participants expressed the view that this confluence of factors means the project will cause undue harm to human health and the environment. A stakeholder captured many of the health concerns related to the proposal:

This proposed incinerator is just to[o] close to Minchinbury and neighbouring communities ... I am deeply concerned that my family and our community will get sick from all the air pollution coming from the plant and all the trucks supplying the incinerator. What about the effects to the wildlife in the area and possible effects if something goes wrong ... I am really concerned if something goes wrong at the plant ... Accidents can happen even with the best technology ...⁴⁶¹

6.52 Typical comments from other stakeholders included:

- the proposal is '... a great health risk to everyone and will cause long term health issues in the western Sydney'⁴⁶²
- 'This incinerator is not in the best interest of our community. Health is going to be at risk'⁴⁶³
- 'The health issues this is going to cause are enormous. We already have a waste disposal facility which caused horrible fumes around homes and people breathing them I can just imagine what the incinerator will cause'⁴⁶⁴
- 'I am very concerned about the long-term health of the community especially the children in the area'⁴⁶⁵
- 'I URGE YOU NOT TO ALLOW THIS ENVIRONMENTAL HORROR TO BE BUILT. The dangers to the population and to the environment far outweigh any perceived short term benefits'.⁴⁶⁶

⁴⁵⁹ Evidence, Dr Scalley, 7 August 2017, p 3. Also see, Evidence, Mr Beaman, 26 June 2017, p 9; Evidence, Dr Whelan, 17 August 2017, p 25; Submission 39, Mr Phil Upton, p 1; Submission 377, Mr Phil Bradley, p 1.

⁴⁶⁰ Evidence, Dr Scalley, 7 August 2017, p 2. Also see, Evidence, Dr Whelan, 17 August 2017, p 25; Submission 5, Ms Gabrielle Maston, p 2.

⁴⁶¹ Submission 38, Name suppressed, p 1.

⁴⁶² Submission 162, Mrs Carolyn Ahmet, p 1.

⁴⁶³ Submission 186, Mrs Judith Ridgley, p 1. Also see, Submission 364, Ms Cemile Can, p 1; Submission 365, Mrs Rosann Kirk, p 1; Submission 366, Mr David Kirk, p 1.

⁴⁶⁴ Submission 136, Mrs Anna Kosovich, p 1. Also see, Submission 128, Name suppressed, p 1.

⁴⁶⁵ Submission 113, Mrs Margaret McCarthy, p 1. Also see, Submission 61, Mr Mohammad Sami, p 1; Submission 135, Mr Bedir Solbudak, p 1; Submission 162, Mrs Carolyn Ahmet, p 1.

⁴⁶⁶ Submission 55, Mr Timothy Williams, p 1 [emphasis as per original].

- 6.53** Mr Antony Lewis Secretary of the Blacktown and District Environment Group also encouraged the committee to consider the impact of the project on the health of native flora and fauna.⁴⁶⁷
- 6.54** Other concerns expressed about the siting of the proposal include:
- home prices may decrease⁴⁶⁸
 - the project may place significant pressure on surrounding infrastructure such as roads and hospitals⁴⁶⁹
 - the project does not meet operational requirements for the Western Sydney Employment Area,⁴⁷⁰ and compromises other strategic planning objectives for the Greater Sydney region⁴⁷¹
 - allowing the facility will create uncertainty around the planning processes in western Sydney and undermine further development.⁴⁷²

Committee comment

- 6.55** The committee notes that The Next Generation's proposed energy from waste facility would be built on land that currently includes waste management facilities. As discussed in Chapter 5 and Chapter 8, urban encroachment has seen homes increasingly built near industrial sites. The proposed site is no different. Residents of western Sydney live less than one kilometre from the site and we understand the concerns of many individuals about the potential health and other impacts of a facility like this being built right on their doorstep.
- 6.56** The committee notes the concerns of the stakeholders that raised issues associated with the topographic structure of the Sydney Basin and the challenges of trapped air pollution within it. The Next Generation proposal could add substantially to the challenges of managing air pollution across Sydney.

Reference facility

- 6.57** As discussed in Chapter 5, a key criterion of the *NSW Energy from Waste Policy Statement* is the need for a reference facility; that is, the proponent must demonstrate the technology being used is proven, well understood and capable of handling the expected variability and type of feedstock.
- 6.58** Alexandria Landfill put forward that that the energy from waste facilities identified in Table 4, which was prepared by Ramboll (consultants engaged by The Next Generation), as suitable

⁴⁶⁷ Evidence, Mr Lewis, 27 June 2017, p 42.

⁴⁶⁸ See, Submission 82, Mrs Lee-Anne Williams, p 2; Submission 91, Mr Matthew Cini, p 1.

⁴⁶⁹ See, Submission 74, Mr Norm Warren, p 1; Submission 100, Mrs Elizabeth Gibbeson, p 1; Submission 171, Mrs Kerry Loveday, p 1; Submission 180, Mrs Kerry Tosswill, p 1.

⁴⁷⁰ See, Submission 173, Jacfin, p 1. Also see, Submission 173a, Jacfin, p 4.

⁴⁷¹ Submission 173, Jacfin, p 2.

⁴⁷² Submission 173a, Jacfin, p 6.

reference facilities for the Eastern Creek project. The table sets out the capacity, fuel mix, technology and supplier used for the proposed reference facilities.

Table 4 Reference facilities - Key parameters

Facility/Location	Country	Commission year	Capacity t/a	Fuel mix	Furnace/Boiler	Supplier Furnace/Boiler	APC	Supplier APC
TNG	AU	-	4 x 276'250	C&I, C&D	Grate	HZI	Semi dry (lime)	-
Grossräschen	DE	2008	1 x 246'000	C&I, C&D	Grate	AEE*	Semi dry (lime)	LAB
Heringen	DE	2009	2 x 148'500	C&I, C&D, some MSW	Grate	AEE*	Semi dry (lime)	LAB
Premnitz	DE	2008	1 x 150'000	C&I, C&D	Grate	AEE*	Semi dry (lime)	Lühr
Hannover	DE	2005	2 x 140'000	C&I, C&D, some MSW	Grate	AEE*	Semi dry (lime)	LAB
Knapsack	DE	2009	2 x 150'000	C&I, C&D	Grate	AEE*	Semi dry (lime)	Lühr
Ferrybridge	UK	2015	2 x 256'500	C&I, C&D, some MSW, waste wood	Grate	HZI	Semi dry (lime)	HZI
Riverside	UK	2011	3 x 195'000	MSW, C&I	Grate	HZI	Semi dry (lime)	HZI

Ramboll, Memo, 26 October 2016, (Appendix DD.1 of amended EIS)

<https://majorprojects.accelo.com/public/78f3b5307775e59a7587a2fa31c6afbb/Appendix%20DD.1%20Reference%20Facilities.pdf>

6.59 As previously noted, the NSW EPA concluded that these reference facilities are inadequate.⁴⁷³ The following sections detail issues raised about the use of the reference facilities, specifically the proposed technology and feedstock for the project.

Technology

6.60 The proponent was adamant that the moving grate incinerator technology proposed for the Eastern Creek facility could process the feedstock, used best available technology, and is used extensively overseas (as per the reference facilities above, all of which use grate technology).⁴⁷⁴ Alexandria Landfill also explained the emissions control technology to be used, which is also consistent with that used in the reference facilities:

The semi-dry flue gas cleaning process is designed to remove acidic gaseous contaminants by chemical absorption with hydrated lime. Heavy metals and organic contaminant compounds (i.e. dioxins and furans) are reduced by adsorption on activated carbon.⁴⁷⁵

6.61 The proponent told the committee that a selective non-catalytic reduction system (SNCR) will be used to remove nitrogen oxide from the energy from waste facility.⁴⁷⁶

6.62 Mr Damon Roddis, National Practice Leader Air Quality and Noise at Pacific Environment, who was contracted by the proponent to undertake the technical air quality assessment for

⁴⁷³ See, Answers to questions on notice, NSW Department of Planning and Environment, 25 July 2017, Appendix A, NSW EPA, Response to EIS, p 4. Also see, Evidence, Mr Beaman, 26 June 2017, p 10.

⁴⁷⁴ See, Evidence, Mr Damon Roddis, National Practice Leader Air Quality and Noise, Pacific Environment, 27 June 2017, p 12; Evidence, Mr Malouf, 17 August 2017, p 44; Evidence, Dr Stammbach, 17 August 2017, p 12; Submission 164, Alexandria Landfill, pp 31-33..

⁴⁷⁵ Submission 164, Alexandria Landfill, p 36. Also see, Evidence, Mr Roddis, 27 June 2017, p 18.

⁴⁷⁶ Submission 164, Alexandria Landfill, p 37.

The Next Generation project, noted that pollution control equipment accounts for ‘approximately two-thirds of the capital cost of an energy from waste facility’.⁴⁷⁷ Mr Roddis contended that the large scale of the project will not cause ‘... any challenges or uncertainties ... because the pollution control technology on the back of the energy-from-waste facility is tried and tested’.⁴⁷⁸

- 6.63** This argument was supported by Mr Biggs, Chief Executive Officer of Dial A Dump Industries, proponents of the Next Generation Project, who stated that the emissions control technology is sufficient to ensure that contaminated materials ‘... will not be released to the atmosphere’ and therefore not ‘... cause a health concern for the surrounding community’.⁴⁷⁹
- 6.64** The committee also heard that there are procedures in place should the plant need to be shut down for maintenance or unplanned events.⁴⁸⁰
- 6.65** However, as noted earlier in the chapter, inquiry participants raised concerns about how the proposed technology interacted with feedstock and the need to match the feedstock and emissions control technology. Other issues raised in this regard included:
- discussion as to whether the project meets best practice standards, particularly in relation to emissions control⁴⁸¹
 - whether it was appropriate to use SNCR for emissions control⁴⁸²
 - emissions monitoring systems do not encompass areas outside of the stack where the ‘worst pollutants’ form⁴⁸³
 - inadequate consideration has been given to necessary safety practices such as maintaining the emissions filtering system.⁴⁸⁴

Feedstock issues

- 6.66** Stakeholders identified three main issues regarding the proposed fuel mix or feedstock for The Next Generation project: the characterisation of the feedstock, the dependence on construction and demolition waste and the screening processes to be employed at the plant. The issues are outlined below.

⁴⁷⁷ Evidence, Mr Roddis, 27 June 2017, p 17.

⁴⁷⁸ Evidence, Mr Roddis, 27 June 2017, p 14.

⁴⁷⁹ Evidence, Mr Biggs, Chief, 27 June 2017, p 17.

⁴⁸⁰ See, Evidence, Dr Stambach, 17 August 2017, p 18.

⁴⁸¹ See, Answers to questions on notice, NSW Department of Planning and Environment, received 25 July 2017, - Appendix A, NSW EPA, Response to EIS, Attachment F, Review of the Air Quality and Ozone Impact Assessment, p 1; Evidence, Ms Bremmer, 27 June 2017, p 38; Evidence, Cr Bali, 27 June 2017, p 30.

⁴⁸² Submission 214, Blacktown City Council, p 15.

⁴⁸³ Evidence, Ms Bremmer, 27 June 2017, p 37.

⁴⁸⁴ Evidence, Mr Lewis, 27 June 2017, p 42.

Characterisation of the feedstock

- 6.67'** One key concern regarding the characterisation of feedstock for the project, was around the fact that 20 per cent of the feedstock was identified as 'other' – that is, unidentified – in the amended EIS. It was brought to the committee's attention that the 20 per cent of 'other' feedstock equated to about 110,000 tonnes of waste (for the then proposed 1.105 million tpa facility), which is the size of some energy from waste facilities.⁴⁸⁵
- 6.68'** As noted earlier, the NSW EPA and NSW Health expressed significant concern that without a clear understanding of the proposed feedstock, it is not possible to accurately determine emissions from The Next Generation plant.⁴⁸⁶ Consequently, the potential risks to human health and the environment posed by the project cannot be 'properly and robustly' determined.⁴⁸⁷
- 6.69'** The NSW EPA and NSW Health emphasised this issue during the inquiry and explained it was a primary reason why both organisations did not support the project.⁴⁸⁸ In fact, Mr Henry Moore, Manager of Waste Reform at the NSW EPA, advised that the proposed facility, as at June 2017, did not satisfy the eligible waste fuel requirements in the *NSW Energy from Waste Policy Statement*.⁴⁸⁹
- 6.70'** Acknowledging concerns about the insufficient characterisation of the feedstock, Dr Scalley from NSW Health advised that '... there are ways that we can make an adequate characterisation of the health risk assessment with some uncertainty'.⁴⁹⁰ For example, a sensitivity analysis could be used to model worst case scenarios.⁴⁹¹ However, he noted that not all uncertainties could be subject to this type of analysis,⁴⁹² and observed: '... I think there is a lot of additional uncertainty ... related to this [project]'.⁴⁹³
- 6.71'** Some inquiry participants supported the position taken by NSW EPA and NSW Health in relation to the feedstock. For example, Dr Ali El Hanandeh, Lecturer, School of Engineering at Griffith University, stated feedstock will 'definitely' affect emissions and explained that it is essential for energy from waste facilities to use the correct technology to clean emissions.⁴⁹⁴ Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture at the University of Southern

⁴⁸⁵ Evidence, Cr Bali, Mayor, 27 June 2017, p 30.

⁴⁸⁶ See, Answers to questions on notice, NSW Department of Planning and Environment, Attachment A, 25 July 2017 - Appendix A NSW EPA, Attachment A, 2017, p 1; Evidence, Dr Scalley, 7 August 2017, pp 5 and 9.

⁴⁸⁷ Answers to questions on notice, NSW Department of Planning and Environment, received 25 July 2017 - Appendix A, NSW EPA, Attachment A, 2017, p 1. Also see, Evidence, Dr Scalley, 7 August 2017, pp 3 and 4. Also see, Evidence, Mr Gerald Barr, 27 June 2017, p 50.

⁴⁸⁸ See, Evidence, Mr Beaman, 26 June 2017, p 6; Evidence, Dr Scalley, 7 August 2017, p 4.

⁴⁸⁹ Evidence, Mr Henry Moore, Manager, Waste Reform, NSW EPA, 26 June 2017, p 9.

⁴⁹⁰ Evidence, Dr Scalley, 7 August 2017, p 7.

⁴⁹¹ Evidence, Dr Scalley, 7 August 2017, p 7.

⁴⁹² Evidence, Dr Scalley, 7 August 2017, p 7.

⁴⁹³ Evidence, Dr Scalley, 7 August 2017, p 7.

⁴⁹⁴ Evidence, Dr Ali El Hanandeh, Lecturer, School of Engineering, Griffith University, 7 August 2017, p 40.

Queensland, agreed with Dr El Hanandeh and said the committee should ‘absolutely’ be sceptical about claims that the feedstock does not matter.⁴⁹⁵

- 6.72** Supporters of the proposal were more circumspect about the need to characterise feedstock. Indeed, when questioned about the lack of clarity around the feedstock, Mr Roddis from Pacific Environment stated: ‘... the content of the waste is not important’.⁴⁹⁶ Mr Roddis continued: ‘It is almost immaterial as to the volume or the waste composition that goes into the facility compared to what comes out at the end of the facility’.⁴⁹⁷
- 6.73** Similarly, Mr Mike Ritchie, Managing Director of MRA Consulting Group, was adamant that it is not possible to identify all the feedstock in a large-scale facility, nor is it expected in overseas plants.⁴⁹⁸
- 6.74** For its part, the proponent insisted that the waste streams providing feedstock to the Eastern Creek proposal will be of the appropriate quality and standard and noted that, following the submission of the amended EIS, The Next Generation had commissioned three separate waste audits of the potential feedstock for the facility.⁴⁹⁹ Mr Biggs explained that the audits included ‘a full disclosure there of quantities, proportions and chemical composition of the materials’ included in the waste streams.⁵⁰⁰
- 6.75** These audits were compiled in the MRA Consulting Group report *Feedstock Review in Accordance with the Resource Recovery Criteria of the New South Wales EfW Policy Statement*.⁵⁰¹ Table 5 is a breakdown of the material composition of the proposed feedstock.

⁴⁹⁵ Evidence, Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, 7 August 2017, p 40.

⁴⁹⁶ Evidence, Mr Roddis, 27 June 2017, p 14.

⁴⁹⁷ Evidence, Mr Roddis, 27 June 2017, p 14. Also see p 23.

⁴⁹⁸ Evidence, Mr Ritchie, 7 August 2017, p 13.

⁴⁹⁹ Submission 164, Alexandria Landfill, p 74. Also see, Evidence, Mr Biggs, 27 June 2017, p 14.

⁵⁰⁰ Evidence, Mr Biggs, 27 June 2017, p 14.

⁵⁰¹ Evidence, Mr Biggs, 17 August 2017, p 55.

Table 5 Material composition of proposed feedstock – arising from existing and planned facilities

Category	Sub-category	Sources (current or planned)					TOTAL (t)	%
		Genesis MPC and Genesis Alexandria (t) ⁷	Genesis EC Landfill		C&I Dirty MRF (t) ⁸	Genesis EC (excl. MPC)		
			MRF residual (t) ⁹	Shredder Flocc (t) ¹⁰		Waste wood (t)	Textiles (t)	
Paper	Recyclable paper	865	4,543					
	Disposable contaminated (soft) paper	687	4,197					
	Cardboard	2,560	4,696	317	46,187	-	-	65,300
	Liquid paperboard	11	242					
	Nappies	11	983					
Wood or timber	Untreated wood - MDF board	5,132	346					
	Untreated wood - All other	60,508	1,531					
	Treated wood - CCA treated	5,343	180	2,425	38,161	58,557		172,182
	Treated wood - lead painted	-	-					
Plastic	Recyclable plastic containers excl. EPS	111	1,489					
	Other rigid plastics excl. EPS	2,948	4,370					
	EPS	89	388	17,428	37,742	-	-	82,641
	Soft (films) plastics	3,458	10,340					
	Composite plastics	1,507	2,770					
Metal (Ferrous and non-ferrous)	Recyclable metal containers	44	464					
	Composite	366	990	1,147	7,554	-	-	13,863
	Other metals	1,663	1,634					
	Food/kitchen - vegetable	11	1,461	-	24,062	-	-	

Category	Sub-category	Sources (current or planned)					TOTAL (t)	%	
		Genesis MPC and Genesis Alexandria (t) ⁷	Genesis EC Landfill		C&I Dirty MRF (t) ⁸	Genesis EC (excl. MPC)			
			MRF residual (t) ⁹	Shredder Flocc (t) ¹⁰		Waste wood (t)	Textiles (t)		
Organic (not wood or timber)	Food/kitchen - meat	-	125	-	-	-	-	-	
	Garden/vegetables	1,441	713	-	12,746	-	-	109,492	
	Textiles/rags	10,907	18,041	8,877	13,738	-	9,812		
	Rubber	488	603	3,905	1,925	-	-		
	Leather	111	526						
WEE	e-waste	-	-						
	Mobiles	-	-					0.00%	
	Toners	-	-						
Hazardous	Medical	-	-						
	Chemicals	-	-						
	Paint	-	-						
	Asbestos	-	-					0.00%	
	Batteries car	-	-						
	Batteries other	-	-						
Glass	Other hazardous	-	-						
	Glass containers		55		3,844			6,850	
Other (including earth and building materials)	Glass other	111	2,840					1.24%	
	Insulation	67	-						
	Carpet/underlay	887	-		11,361				
	Compounds (excl. plastic and metal)	1,053	1,378					102,172	
	Asphalt	1,330	-					18.49%	
	Inert incl. non-hazardous building waste	8,247	1,745	47,263	28,842				
TOTAL (t)		109,954	66,653	81,361	226,162	43,537	9,812	552,727	100.00%

Tabled document, Dial A Dump Industries, 17 August 2017, MRA Consulting Group, Feedstock review in accordance with the Resource Recovery Criteria of the NSW EfW Policy Statement, July 2017, PP 6-7.

6.76 The proponent was confident that the audits would provide the necessary information to ensure the application complied with the NSW Energy from Waste Policy Statement.⁵⁰²

⁵⁰² Evidence, Mr Biggs, 27 June 2017, pp 18-19.

6.77 Dial A Dump Industries gave evidence that identifying 20 per cent of the feedstock in the amended EIS as ‘other’ was a ‘regrettable error’ that has ‘caused no end of difficulty’.⁵⁰³ Mr Biggs explained the proportion of feedstock described as ‘other’ should have been labelled ‘fines’:

There is a quantity of mixed residual waste, which may be paper, cardboard, timber, plastic and so on. Then you have a quantity of grit and dirt and particles so fine that you cannot individually identify whether one is plastic, metal or dirt. So the 20 per cent of other should have been labelled “fines”.⁵⁰⁴

6.78 The committee heard that the issue has been addressed in the subsequent waste stream audits.⁵⁰⁵

Dependence on construction and demolition waste

6.79 As previously noted, the amended EIS provided by The Next Generation (with a maximum capacity of 1.105 million tpa) stated that the design fuel mix (the feedstock) for the facility comprises 28.69 per cent construction and demolition waste (C&D) waste and 23.27 per cent chute waste (i.e. approximately 50 per cent of C&D waste in total).⁵⁰⁶

6.80 Stakeholders contended this could be problematic for the following reasons:

- there are no reference facilities as heavy dependent on C&D waste⁵⁰⁷
- the anticipated quantities of stock are unavailable and will be increasingly difficult to secure in the future⁵⁰⁸
- approving this proposal may lead to a monopoly.⁵⁰⁹

⁵⁰³ Evidence, Mr Biggs, 27 June 2017, p 14.

⁵⁰⁴ Evidence, Mr Biggs, 27 June 2017, p 14.

⁵⁰⁵ Evidence, Mr Biggs, 27 June 2017, p 17.

⁵⁰⁶ Submission 164, Alexandria Landfill, p 32.

⁵⁰⁷ See, EnRiskS, *Energy from Waste Facility, Eastern Creek, NSW – Review of Health Risk Related, Matters Covered in the EIS*, March 2017, p 3

https://majorprojects.accelo.com/public/80af9922e944bbe722605d8198d3dbe6/Attachment%20E_%20Review%20of%20Health%20Risk,%20Attachment%20F_%20Air%20Quality%20Ozone%20Assessment%20and%20Attachment%20G_%20Soil%20and%20Water%20Assessment.pdf;

Evidence, Mr Antony Lewis, Secretary, Blacktown and District Environment Group, 27 June 2017, p 42; Arup, *Technical Note*, 16 March 2017, p 2,

<https://majorprojects.accelo.com/public/25d138603e0c2e0a262e30f56812006f/Key%20queries%20regarding%20amended%20EIS%20160317.pdf>; Submission 182, Waste Contractors and Recyclers Association of NSW, p 3, Submission 173a, Jacfin, p 2.

⁵⁰⁸ See, Submission 182, Waste Contractors and Recyclers Association of NSW, p 3; Arup, *Technical Note*, 16 March 2017, p 4,

<https://majorprojects.accelo.com/public/25d138603e0c2e0a262e30f56812006f/Key%20queries%20regarding%20amended%20EIS%20160317.pdf>; Submission 176a, National Toxics Network, p 3; Answers to questions on notice, NSW Department of Planning and Environment, 25 July 2017, Attachment A, NSW EPA, Response to amended EIS, 24 March 2017, p 1.

⁵⁰⁹ Answers to questions on notice, NSW Department of Planning and Environment, 25 July 2017, Attachment A, NSW EPA, Response to amended EIS, Attachment B, 24 March 2017, p 1.

- 6.81** The amended EIS acknowledged that there are no reference facilities accepting a similar percentage of C&D waste.⁵¹⁰ However, Alexandria Landfill suggested that it is 'inaccurate and unhelpful' to compare The Next Generation waste streams and feedstock to European facilities, as fuel for these plants is often sorted prior to arrival at the facility thus information regarding its waste declaration/identification is 'lost'.⁵¹¹
- 6.82** Alexandria Landfill proposed that it is preferable to rely on the physical and chemical characteristics of the proposed fuel.⁵¹² In addition, the proponent suggested that the moving grate technology to be used in the proposed facility is robust enough to handle a wide range of residual waste from C&D, C&I and certain municipal solid waste.⁵¹³
- 6.83** The proponent refuted concerns about the availability of feedstock,⁵¹⁴ and provided the committee with the MRA Consulting Group report of the complied feedstock audits which discusses the availability and composition of feedstock for the proposed facility.⁵¹⁵

Screening processes at Genesis Xero Recycling

- 6.84** Alexandria Landfill informed the committee that Genesis (landfill and recycling) is licensed to receive up to two million tonnes of C&D waste and general solid waste per annum, and that this waste is subject to regular independent audits and monitoring.⁵¹⁶ Genesis also manages asbestos waste and floc waste.⁵¹⁷
- 6.85** Alexandria Landfill stated that the screening and processing of waste at the Genesis facility are best practice, align with legislative requirements,⁵¹⁸ and will not be altered should The Next Generation proposal be approved.⁵¹⁹ In addition, Mr Biggs assured the committee that any waste received from third parties will go through the Genesis processes prior to the being sent to the proposed energy from waste facility.⁵²⁰

⁵¹⁰ Appendix DD.1, *Ramboll, Memorandum 26 October 2016*, p 1, <https://majorprojects.accelo.com/public/78f3b5307775e59a7587a2fa31c6afbb/Appendix%20DD.1%20Reference%20Facilities.pdf>.

⁵¹¹ Submission 164, Alexandria Landfill, p 38.

⁵¹² Submission 164, Alexandria Landfill, p 38.

⁵¹³ Submission 164, Alexandria Landfill, p 38.

⁵¹⁴ See for example, Submission 164, Alexandria Landfill, p 13; Evidence, Mr Biggs, 27 June 2017, p 20; Tabled document, Dial A Dump Industries, *Feedstock review in accordance with the Resource Recovery Criteria of the NSW EfW Policy Statement*, July 2017, p 2. Also see, Urbis, *Response to submissions report, SSD6236: Energy from Waste, Eastern Creek*, December 2017, pp 24-25, <https://majorprojects.accelo.com/public/a0d99df811d1bda71ee654fe51c8987e/A%20Response%20to%20Submissions%20on%20the%20Amended%20EIS%20-%20Eastern%20Creek%20Energy%20from%20Waste%20Proposal>.

⁵¹⁵ Tabled document, *Feedstock review in accordance with the Resource Recovery Criteria of the NSW EfW Policy Statement*, July 2017.

⁵¹⁶ Submission 164, Alexandria Landfill, p 65.

⁵¹⁷ Submission 164, Alexandria Landfill, p 73. Floc waste is the residue from the stripping, shredding and crushing of motor vehicles.

⁵¹⁸ Submission 164, Alexandria Landfill, p 67.

⁵¹⁹ Submission 164, Alexandria Landfill, p 67.

⁵²⁰ See, Evidence, Mr Biggs, 17 August 2017, p 55; Evidence, Mr Biggs, 27 June 2017, pp 16 and 17. Also see, Evidence, Dr Stambach, 17 August 2017, p 14.

- 6.86* As previously noted, The Next Generation stated that only eligible residual waste will be used to fuel the energy from waste facility. For the avoidance of doubt, Mr Malouf told the committee: ‘Fuel for the plant will be the residual combustible waste that is left over after materials have been separated and sorted for recycling or for disposal in licensed landfill facilities’.⁵²¹
- 6.87* Alexandria Landfill provided the table below, in its amended EIS and in its submission the inquiry, detailing the composition of the proposed feedstock for the facility.⁵²²

Table 6 The Next Generation - Proposed fuel mix (Source: Ramboll, PDB; 2016)

	Units	CRW	C&D	C&I	Floc waste	Paper Pulp	Glass Recovery	GO Residual	AWT Residual	MRF Residual	Design Fuel Mix
Fuel Mix	%	23.37%	28.69%	16.84%	14.43%	4.81%	1.72%	2.06%	6.87%	1.20%	100
Compositional Analysis											
Paper/Card	%	4.30	14.05	22.44	3.93	78.40	62.00	30.00	21.05	38.54	16.75
Plastic Film	%	10.20	6.37	10.90	10.90	21.60	3.80	2.50	20.00	26.94	10.47
Dense Plastic	%	0.00	6.37	10.90	10.90	0.00	34.20	2.50	21.05	0.00	7.32
Textiles	%	5.30	0.00	12.89	0.18	0.00	0.00	0.00	10.53	0.00	4.16
Glass	%	0.00	0.00	1.81	0.00	0.00	0.00	4.00	0.00	8.50	0.49
Vegetation	%	8.30	0.00	1.70	0.00	0.00	0.00	35.00	3.16	0.00	3.16
Other combustibles	%	0.00	0.00	0.00	70.40	0.00	0.00	0.00	0.00	0.00	10.16
Metal	%	1.80	1.12	0.37	0.00	0.00	0.00	5.00	0.00	7.59	1.00
Fines	%	0.00	0.94	0.18	0.00	0.00	0.00	0.00	11.58	0.00	1.10
Wood	%	58.20	43.90	21.53	0.85	0.00	0.00	0.00	4.21	0.00	30.24
Combustibles	%	0.00	0.00	2.84	2.84	0.00	0.00	0.00	2.11	0.00	1.03
Non-Combustibles	%	4.50	0.00	0.00	0.00	0.00	0.00	21.00	1.05	0.03	1.56
Hazardous	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gyprock	%	2.40	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.42
Other	%	5.00	20.75	14.44	0.00	0.00	0.00	0.00	5.26	18.40	10.14
Total	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Submission 164, Alexandria Landfill, p 32. Also see, Urbis, *Environmental Impact Statement The Next Generation NSW Energy from Waste Facility, Eastern Creek, April 2015, pp 32-33.*
<https://majorprojects.accelo.com/public/7a4f50ec1958c641911d137a62c1a147/01.%202015-04-28%20Environmental%20Impact%20Statement.pdf>.

- 6.88* Stakeholders raised significant concerns about the screening processes to be employed at The Next Generation plant. These issues are set out below, as are the proponent’s responses.

Issues concerning the screening process for The Next Generation project

Issue: Recyclables will be included in the feedstock.⁵²³

Response: Best practice procedures ensure recyclables are not included in the feedstock; recyclables are commercially valuable thus it does not make sense to include this type of material the waste stream;

⁵²¹ Evidence, Mr Malouf, 17 August 2017, p 44.

⁵²² Submission 164, Alexandria Landfill, p 32. Also see, Urbis, *Environmental Impact Statement: The Next Generation NSW Energy from Waste Facility, Eastern Creek, April 2015, pp 32-33.*
<https://majorprojects.accelo.com/public/7a4f50ec1958c641911d137a62c1a147/01.%202015-04-28%20Environmental%20Impact%20Statement.pdf>. Also see, Submission 164, Alexandria Landfill, pp 10 and 30.

⁵²³ Answers to questions on notice, NSW Department of Planning and Environment, 25 July 2017, Appendix A, NSW EPA, Response to amended EIS, Attachment B, 24 March 2017, p 3. Also see, Evidence, Cr Bali, 27 June 2017, p 29; Submission 355, The Hon Richard Jones, p 1.

a large proportion of C&D waste is recycled before potentially becoming feedstock for an energy from waste facility.⁵²⁴

Issue: Insufficient screening processes will be employed for third party waste, which comprises approximately 45 per cent of the feedstock.⁵²⁵

Response: All third-party waste will be processed on site.⁵²⁶

Issue: Lax screening processes used at overseas sites will be replicated at the Eastern Creek facility.⁵²⁷

Response: Genesis employs best practice separating and sorting processes.⁵²⁸

Issue: Hazardous materials including asbestos, plastics, chemicals, paints, treated wood, and shredder folc, will be included in the feedstock.⁵²⁹

Response: As indicated in the feedstock audit prepared by MRA Consulting Group, *Feedstock review in accordance with the Resource Recovery Criteria of the NSW EfW Policy Statement*, hazardous material, including asbestos, will not be included in the feedstock.⁵³⁰ Asbestos would not make it through the separation and sorting process.⁵³¹ Moreover, asbestos does not burn.⁵³² However, should hazardous material be incinerated, the filtration systems could adequately 'scrub' emissions.⁵³³

Issue: Municipal waste may be included in the feedstock.⁵³⁴

Response: There is no proposal to accept municipal solid waste as feedstock.⁵³⁵

⁵²⁴ See for example, Evidence, Dr Stambach, 17 August 2017, p 14.

⁵²⁵ Submission 214, Blacktown City Council, p 10. Also see, Evidence, Ms Vanessa Parkes, Waste Manager, Blacktown City Council, 27 June 2017, p 29.

⁵²⁶ Evidence, Mr Biggs, 17 August 2017 2017, p 55; Evidence, Mr Biggs, 27 June 2017, p 16.

⁵²⁷ Evidence, Cr Bali, Mayor 27 June 2017, p 29.

⁵²⁸ Submission 164, Alexandria Landfill, p 72.

⁵²⁹ See, Submission 172a, National Toxics Network, p 3; Submission 182, Waste Contractors and Recyclers Association of NSW, p 3; Submission 214, Blacktown City Council, p 10; Submission 324, Mr Erkan Mentesh, p 1; Submission 378, Name suppressed, p 1; Submission 385, Ms Michelle McCallum, p 1; Arup, *Technical Note*, 16 March 2017, pp 5-6, <https://majorprojects.accelo.com/public/25d138603e0c2e0a262e30f56812006f/Key%20queries%20regarding%20amended%20EIS%20160317.pdf>.

⁵³⁰ See, Evidence, Mr Biggs, 27 June 2017, p 22; Submission 164, Alexandria Landfill, p 75.

⁵³¹ See, Evidence, Mr, Malouf, 17 August 2017, pp 44, 49 and 56; Evidence, Mr Biggs, 27 June 2017, p 22.

⁵³² See, Evidence, Mr Malouf, 17 August 2017, p 44.

⁵³³ Evidence, Mr Roddis, 27 June 2017, p 18. Also see, Urbis, *Response to submissions report, SSD6236: Energy from Waste, Eastern Creek*, December 2017, p 23, <https://majorprojects.accelo.com/public/a0d99df811d1bda71ee654fe51c8987e/A%20Response%20to%20Submissions%20on%20the%20Amended%20EIS%20-%20Eastern%20Creek%20Energy%20from%20Waste%20Proposal>.

⁵³⁴ Evidence, Cr Bali, Mayor, 27 June 2017, p 29.

⁵³⁵ Evidence, Mr Biggs, 27 June 2017, p 20.

Size of reference facilities

- 6.89*** During the early stages of the inquiry, when The Next Generation sought approval for a facility with a maximum capacity of 1.105 million tpa, the committee received a substantial volume of evidence objecting to such a large development.⁵³⁶
- 6.90*** Many stakeholders informed the committee that most overseas facilities are smaller than the initially proposed project. Indeed, the NSW EPA advised that, at capacity [i.e. 1.105 million tpa], the project would be one of the largest energy from waste plants in the world, with most other facilities operating in the range of between 250,000 and 500,000 tpa.⁵³⁷
- 6.91*** In addition to earlier issues raised about the availability of feedstock, Associate Professor McCabe explained that concerns with such large-scale facilities include whether appropriate source separation has occurred within the waste stream, the cost and distance feedstock needs to travel, and whether the project is palatable to the community.⁵³⁸
- 6.92*** In relation to the reference facilities identified in Table 4 (page 86), the proponent argued that the table demonstrated that there are comparable large-scale energy from waste facilities overseas, emphasising the Ferrybridge plant in the United Kingdom.⁵³⁹ The committee also received evidence of other large-scale projects, including a 1.6 million tpa development in Mexico, and a 1.8 million tpa project in China.⁵⁴⁰
- 6.93*** Another argument put forward by Dr Stambach from HZI Australia is that, unlike in Europe, smaller energy from waste projects are not viable in Sydney.⁵⁴¹
- 6.94*** As previously noted, later in the inquiry the proponent amended the development application for the energy from waste facility, and is currently only seeking approval for Stage 1 of the development, that is to treat a maximum of 552,500 tpa of residual waste fuel.⁵⁴²

Committee comment

- 6.95*** The committee acknowledges that the moving grate technology to be used at The Next Generation facility has been employed extensively overseas. However, as examined throughout this chapter, the proponent has been unable to sufficiently explain how this technology will interact with the proposed fuel or feedstock for the facility.

⁵³⁶ See, Submission 9, Name Suppressed, p 1; Submission 10, Name suppressed, p 1; Submission 15, Ms Mariza Harris, p 1; Submission 253, Name suppressed, p 1; Submission 301, Mr Frank Brenner, p 1; Submission 306, Name suppressed, p 1; Submission 351, Name suppressed, p 1; Submission 373, Mr Stefano Olivieri, p 1.

⁵³⁷ Evidence, Mr Beaman, 26 June 2017, p 7. Also see, Evidence, Associate Professor McCabe, 7 August 2017, p 41; Evidence, Dr El Hanandeh, 7 August 2017, p 41.

⁵³⁸ Evidence, Associate Professor McCabe, 7 August 2017, p 41.

⁵³⁹ See, Evidence, Mr Biggs, 27 June 2017, p 14; Evidence, Dr Stambach, 17 August 2017, p 16.

⁵⁴⁰ Evidence, Dr Stambach, 17 August 2017, p 16.

⁵⁴¹ See, Evidence, Dr Stambach, 17 August 2017, pp 16-17.

⁵⁴² Answers to further questions on notice, NSW Department of Planning and Environment, 13 November 2017, p 1.

- 6.96'** We are also of the opinion, along with the NSW EPA and NSW Health, that it is neither practicable nor safe to leave 20 per cent of the feedstock for such a large facility unidentified. The committee, like the community, is unconvinced by the proponent and its supporters' argument that the feedstock is unimportant to determining the emissions and therefore the health risks associated with this project.
- 6.97'** The proponent should have conducted a more thorough examination of the feedstock before submitting the amended EIS. This document gave rise to lingering doubts about the potential risks associated with the facility, and while the independent audits may identify the previously unidentified material as 'fines', in this instance we believe the evidence is too little, too late.
- 6.98'** Importantly, we also remain unconvinced that hazardous material will not be included in the feedstock for the proposed facility. In coming to this view, we have taken into consideration the past actions of the proponent, discussed later in this chapter, which demonstrate a clear disregard for the appropriate handling of asbestos waste. We also note concerns about the inclusion of treated timber in the waste stream.
- 6.99'** The committee also notes that there are no energy from waste facilities as heavily dependent on C&D waste as the plant proposed by The Next Generation. The proposal has therefore failed to address a key criterion of the *NSW Energy from Waste Policy Statement*, in that it has not provided a reference facility that is comparable to the proposed project.
- 6.100'** The committee acknowledges concerns about the size of The Next Generation proposal. The committee believes these concerns have arisen largely because the proponent has not provided clear and consistent information to the community about the anticipated tonnage of the project.

Emissions standards and monitoring

- 6.101'** As discussed in Chapter 5, the Commonwealth has primary responsibility for emissions standards. However, the NSW Government has a role in setting and monitoring standards.
- 6.102'** Alexandria Landfill proposed that 'Best practice accountable, real time emissions monitoring technology' will be installed in the project.⁵⁴³ Moreover, Mr Roddis from Pacific Environment noted that 'ongoing monitoring' of emissions, including continuous stack testing or periodic testing, would be a standard consent condition across all energy from waste facilities.⁵⁴⁴ Indeed, HZI Australia assured the committee that the technology proposed for the facility will meet European emissions standards.⁵⁴⁵
- 6.103'** As noted in Chapter 5, the *NSW Energy from Waste Policy Statement* requires facilities to adhere to the emissions standards and monitoring for the Group 6 emission standards within the Protection of the Environment Operations (Clean Air) Regulation 2010 which reflect the European Union's *Directive 2010/75/EU*.⁵⁴⁶ The project would also need to meet licence limits

⁵⁴³ Submission 164, Alexandria Landfill, p 51.

⁵⁴⁴ Evidence, Mr Roddis, 27 June 2017, p 13.

⁵⁴⁵ Evidence, Dr Stammach, 17 August 2017, p 18.

⁵⁴⁶ EnRiskS, *Energy from Waste Facility, Eastern Creek, NSW – Review of Health Risk Related Matters Covered in the EIS*, 8 March 2017, p 5,

set by the NSW EPA and National Environment Protection (Ambient Air Quality) Measure.⁵⁴⁷

6.104 However, as discussed in Chapter 5, some stakeholders argued that the regulatory controls in New South Wales are not sufficient to monitor energy from waste technology. Concerns raised in this regard included:

- the NSW EPA does not have the capacity to adequately monitor and regulate The Next Generation project⁵⁴⁸
- the NSW EPA is unlikely to set licensing conditions, including emissions standards, at the highest possible standard⁵⁴⁹
- if approved, the project will contribute to fine particle pollution,⁵⁵⁰ and compound air quality concerns in western Sydney.⁵⁵¹

Air emissions modelling

6.105 There was discussion during the inquiry about the air emissions modelling provided by the proponent in the amended EIS. Mr Roddis informed the committee that detailed investigations have been undertaken to determine the potential emissions from the proposed development:

I have conducted numerous investigations involving atmospheric dispersion modelling based on real-world measurements taken at equivalent facilities in Europe and have investigated multiple scenarios ranging from the expected operation through to upset conditions, and use of the emergency diesel generators that are proposed, to regulatory scenarios, one based on the New South Wales Protection of the Environment Operations (Clean Air) Regulation 2010 and one based on what are largely more stringent emission limits that the proposed facility is designed to operate under, namely the European Union's Industrial Emissions Directive.⁵⁵²

6.106 Mr Roddis said that these investigations demonstrated that the proposed facility will not compromise human health or the environment as per the NSW EPA requirements:

Under all of those scenarios the conclusions of our technical report are that the air quality impacts of the proposed facility are well within ground level concentration limits as mandated by the New South Wales EPA. And based on the technology that is being proposed, which is proven technology essentially tried and tested in the

https://majorprojects.accelo.com/public/80af9922e944bbe722605d8198d3dbe6/Attachment%20E_%20Review%20of%20Health%20Risk,%20Attachment%20F_%20Air%20Quality%20Ozone%20Assessment%20and%20Attachment%20G_%20Soil%20and%20Water%20Assessment.pdf.

⁵⁴⁷ Evidence, Dr Whelan, 17 August 2017, p 20.

⁵⁴⁸ Submission 182, Waste Contractors and Recyclers Association of NSW, p 3.

⁵⁴⁹ Evidence, Dr Whelan, 17 August 2017, p 21.

⁵⁵⁰ Evidence, Dr Whelan, 17 August 2017, p 20.

⁵⁵¹ Tabled document, Dr James Whelan, Researcher and Community Organiser, Environmental Justice Australia, *A checklist for responsible air pollution management*, August 2017, p 1.

⁵⁵² Evidence, Mr Roddis, 27 June 2017, p 12. Also see, Submission 164, Alexandria Landfill, p 55.

European Union, I believe that the facility can be operated without compromising the health of the local or regional community.⁵⁵³

6.107 As previously discussed, many stakeholders, including the NSW EPA and NSW Health, were unconvinced that the proponent could effectively model emissions without a clearer understanding of the feedstock for the project. Indeed, the NSW EPA had an extensive list of concerns relating to the projected air pollutant emissions in the amended EIS.⁵⁵⁴

6.108 According to inquiry participants, additional concerns with the modelling included:

- whether it is appropriate to allow a proponent to conduct emissions modelling⁵⁵⁵
- a suggestion that the ‘... modelled deposition rates (from stack emissions) appear to have been underestimated by Next Gen’s consultants by a factor of 365’.⁵⁵⁶
- that the first EIS had an unacceptable level of emissions but the amended EIS, with apparently the same inputs, came up with a figure that is 10 times lower, and therefore within the current standards.⁵⁵⁷

6.109 In response to concerns about the difference in emissions modelling between the first and second EIS, Mr Roddis explained that the assessments considered different stack parameters and emissions assumptions thus the level of emissions varied significantly:

It is very clear within the comparison of the two EISs that we are talking about different stack parameters and different emissions assumptions. The EIS provided an example that was the design specification of the facility—in other words, the industrial emissions directive—as the best-case scenario. That was the upper-limit conservative estimate of facility emissions. The second EIS—which was done at the request of the EPA after the first EIS—was to provide some real-world emissions. That is what we now call our “expected case”, and it is based on actual stack testing data from existing facilities across Europe.⁵⁵⁸

6.110 Mr Roddis elaborated further:

We believe that we have been conservative in our real-world scenario, or what we call our expected case. However, the reason for there being a ten-fold difference in some parameters is that one was based on a regulatory case—that is, a regulatory upper limit—and one was based on an expected case.⁵⁵⁹

⁵⁵³ Evidence, Mr Roddis, 27 June 2017, p 12.

⁵⁵⁴ See, Answers to questions on notice, NSW Department of Planning and Environment, 25 July 2017, Appendix A, NSW EPA, Response to EIS, Attachment D, pp 4-9.

⁵⁵⁵ Evidence, Dr Whelan, 17 August 2017, pp 22-23.

⁵⁵⁶ Submission 173a, Jacfin, p 7.

⁵⁵⁷ See, Evidence, Cr Bali, 27 June 2017, p 30; Evidence, Mr Lewis, 27 June 2017, p 48.

⁵⁵⁸ Evidence, Mr Roddis, 27 June 2017, p 15.

⁵⁵⁹ Evidence, Mr Roddis, 27 June 2017, p 15. Also see, Urbis, *Response to submissions report, SSD6236: Energy from Waste, Eastern Creek*, December 2017, p 31, <https://majorprojects.accelo.com/public/a0d99df811d1bda71ee654fe51c8987e/A%20Response%20to%20Submissions%20on%20the%20Amended%20EIS%20-%20Eastern%20Creek%20Energy%20from%20Waste%20Proposal>.

- 6.111' Mr Roddis acknowledged that the NSW EPA had 'extensive comments' concerning the project's technical air quality assessment, and said that The Next Generation would respond to these concerns in its response to submissions to the amended EIS.⁵⁶⁰

Committee comment

- 6.112' We share inquiry participants' concerns about the emissions modelling provided by the proponent in the amended EIS and note that The Next Generation intends to respond to these issues in its response to submissions. As discussed in Chapter 5, the committee also acknowledges and supports the proponent's suggestion that the NSW EPA provide more 'up front' requirements for emissions modelling. This is why we recommend that the NSW EPA include in its *Energy Recovery Facility Guidelines*, comprehensive information concerning emissions modelling requirements for energy from waste proposals.

Fit and proper person test

- 6.113' Section 83 of the *Protection of the Environment Operations Act 1997* sets out requirements, including an operator's compliance history, to determine whether an individual or company is a 'fit and proper person' to operate an environment protection licence.
- 6.114' The NSW EPA advised that since 2005, companies associated with the proponent have received three written warnings, nine penalty notices, five official cautions, and been convicted of one prosecution.⁵⁶¹ In addition, the EPA informed the committee that between 2012 and July 2017, there have been 581 complaints associated with the proponent and his companies.⁵⁶² The information provided by the NSW EPA is in Appendix A.
- 6.115' The NSW Department of Planning and Environment also advised that between 2010 and 2016, six actions for non-compliance had been taken against companies associated with the proponent.⁵⁶³
- 6.116' In light of these compliance issues, certain stakeholders contended that Mr Malouf is not a fit and proper person to operate the proposed energy from waste facility. For example, Ms Michelle McCallum, member of the Demolition Contractors Association (NSW) and the Asbestos Removal Contractors Association (NSW), stated:

I have huge concerns with deeming the applicant a 'fit and proper person' under various legislation, including the POE Act. The large number of penalty notices,

⁵⁶⁰ Evidence, Mr Roddis, 27 June 2017, p 12. Also see, Urbis, *Response to submissions report, SSD6236: Energy from Waste, Eastern Creek*, December 2017, pp 26-27, <https://majorprojects.accelo.com/public/a0d99df811d1bda71ee654fe51c8987e/A%20Response%20to%20Submissions%20on%20the%20Amended%20EIS%20-%20Eastern%20Creek%20Energy%20from%20Waste%20Proposal>.

⁵⁶¹ Answers to supplementary questions on notice, NSW EPA, 27 July 2017, Attachment 1, p 1.

⁵⁶² Answers to supplementary questions on notice, NSW EPA, 27 July 2017, Attachment 1, p 2.

⁵⁶³ Answers to questions on notice, NSW Department of Planning and Environment, 27 July 2017, p 2.

improvement notices, clean up notices etc (all on public record) that this operator has received from NSW EPA is a huge concern.⁵⁶⁴

- 6.117'** Similarly, Dr Whelan from Environmental Justice Australia stated: 'The proponent for Eastern Creek has not built or operated plants of this nature previously. The company has been fined for non-compliance (mishandling asbestos)'.⁵⁶⁵
- 6.118'** Ms Wilson from No Incinerator for Western Sydney told the committee the proponent was involved in an incident where asbestos-contaminated soil was illegally dumped,⁵⁶⁶ stating: 'Why would we trust someone that has a history of doing the wrong thing?'⁵⁶⁷
- 6.119'** The committee also heard concerns that members of the Dial A Dump Industries leadership team do not take responsibility for their actions. For example, Cr Stephen Bali, Mayor of Blacktown City Council, said that the company has previously blamed an individual employee or customer for non-compliant activity rather than taking responsibility itself.⁵⁶⁸ Mr Lewis from Blacktown and District Environment Group concurred, and said that the culture at the company did not encourage the leadership team to show responsibility.⁵⁶⁹
- 6.120'** Mr Malouf responded forcefully to the suggestion that he was not a 'fit and proper' person to operate and energy from waste facility, arguing he has '... 33 years in business and a very, very good track record'⁵⁷⁰ with 'no deliberate or intended environmental breaches'.⁵⁷¹ Moreover, while he agreed that his companies have 18 breaches for non-compliant activity from the NSW EPA on the public record,⁵⁷² he does not believe the compliance breaches will affect his standing:

Section 225 of the *Protection of the Environment Operations Act* indicates that payment of a penalty infringement notice is not an admission of the facts upon which the notice is based. So you will find that, on that record that you are referring to, most of the breaches are penalty infringement notices.⁵⁷³

- 6.121'** In relation to the 581 community complaints against Dial A Dump Industries recorded since 2001, Mr Malouf suggested that many of these related to odour issues from the Alexandria Landfill site.⁵⁷⁴

⁵⁶⁴ Submission 385, Ms Michelle McCallum, p 1. Also see, Tabled document, *A checklist for responsible air pollution management*, August 2017, p 3; Evidence, Ms Wilson, 27 June 2017, p 44.

⁵⁶⁵ Tabled document, *A checklist for responsible air pollution management*, August 2017, p 3.

⁵⁶⁶ Evidence, Ms Wilson, 27 June 2017, p 44.

⁵⁶⁷ Evidence, Ms Wilson, 27 June 2017, p 46.

⁵⁶⁸ Evidence, Cr Bali, 27 June 2017, p 32.

⁵⁶⁹ Evidence, Mr Lewis, 27 June 2017, p 46.

⁵⁷⁰ Evidence, Mr Malouf, 17 August 2017, p 47.

⁵⁷¹ Evidence, Mr Malouf, 17 August 2017, p 43.

⁵⁷² Evidence, Mr Malouf, 17 August 2017, p 45.

⁵⁷³ Evidence, Mr Malouf, 17 August 2017, p 47.

⁵⁷⁴ Evidence, Mr Malouf, 17 August 2017, p 46.

Committee comment

- 6.122** The committee acknowledges concerns from some stakeholders that the proponent is not a 'fit and proper person' to operate an energy from waste facility. There is a significant history of non-compliance in the company's 33-year history, including the mishandling of asbestos. The committee is also concerned about suggestions that the proponent and his leadership team appear unwilling to accept responsibility for past mistakes, given the size, scope and novelty of the facility proposed to be built and operated.

Chapter 7 NSW EPA

This chapter discusses the role of the NSW Environment Protection Authority (NSW EPA) in regulating the waste industry. The chapter outlines concerns raised during the inquiry about whether the NSW EPA is performing this role effectively, including suggestions that the agency's compliance model is inadequate and allows criminal elements within the industry to flourish. The chapter also discusses concerns that NSW EPA staff are ill-equipped to investigate and prosecute offences.

Regulating the waste industry

7.1 As the regulatory authority responsible for the *Protection of the Environment Operations Act 1997*, the NSW EPA investigates and reports on alleged non-compliance with environment protection legislation for the purposes of regulatory action, including prosecution.⁵⁷⁵ The NSW EPA explained its 'responsive and risk-based approach'⁵⁷⁶ to its regulatory functions:

To encourage voluntary compliance, the EPA works hard to maintain contemporary legislative and policy frameworks that provide regulatory certainty to industry. We develop guidelines and deliver a range of education and support campaigns to build understanding of regulatory requirements and provide assistance to the regulated community. We also use licensing to regulate high-risk activities.⁵⁷⁷

7.2 While the NSW EPA noted that the 'vast majority' of stakeholders are law-abiding and committed to ensuring the waste industry is innovative and sustainable,⁵⁷⁸ the agency observed: 'The opportunity for profiting from unlawful activities means that there is a persistent criminal element in the waste industry that is both agile and difficult to neutralise'.⁵⁷⁹

7.3 The NSW EPA acknowledged the challenges of regulating the waste industry, specifically the difficulties of effectively managing the wide variety of operators and the need to discourage unlawful behaviours:

Waste is a multi-billion-dollar industry in NSW that is made up of operators across the entire business spectrum, from large multinational corporations through to sole traders.

This diversity makes the EPA's role as a regulator of the waste industry both complex and challenging. Effective regulation requires ongoing regulatory reform to keep pace with highly innovative and agile industry stakeholders and discourage unlawful activities such as illegal dumping and waste levy avoidance.⁵⁸⁰

⁵⁷⁵ Answers to questions on notice, NSW EPA, 20 November 2017, p 3. In accordance with Section 6 of the *Protection of the Environment Operations Act 1997* the NSW EPA is the regulatory authority for the Act unless otherwise stated.

⁵⁷⁶ Answers to questions on notice, NSW EPA, 20 November 2017, p 3.

⁵⁷⁷ Answers to questions on notice, NSW EPA, 20 November 2017, p 3.

⁵⁷⁸ Answers to questions on notice, NSW EPA, 20 November 2017, p 2.

⁵⁷⁹ Answers to questions on notice, NSW EPA, 20 November 2017, p 2.

⁵⁸⁰ Answers to questions on notice, NSW EPA, 20 November 2017, p 2.

- 7.4 The NSW EPA relies on several channels to identify potential non-compliance, including the Environment Line (a one-stop pollution and environmental incident reporting service), RIDonline, analysis of data received through the Waste and Resource Reporting Portal, and engagement with local councils and other regulatory agencies.⁵⁸¹ The NSW EPA also collaborates with interstate environmental regulators.⁵⁸²
- 7.5 In addition, where appropriate, the NSW EPA works with the NSW Police Force to investigate possible non-compliance with waste legislation.⁵⁸³ A Memorandum of Understanding, updated in April 2017, between the NSW Police Force and the NSW EPA/Office of Environment and Heritage sets out how the agencies partner and collaborate on matters, including provisions for exchange of information, joint operations and operational assistance.⁵⁸⁴
- 7.6 The NSW EPA advised that the nature and scope of an investigation is determined by the circumstances of the matter, the significance of any actual or potential environmental harm or impact on human health, and the prospects of identifying potential offenders. Each matter is then prioritised for further action as appropriate.⁵⁸⁵
- 7.7 Where non-compliance is detected, the NSW EPA said it takes enforcement action that is 'proportional, drives behavioural change, and delivers maximum benefit to the NSW community' as required by its *Regulatory Position Statement* and *Compliance Policy*.⁵⁸⁶ Additionally, the NSW EPA observed: 'Any action taken by the EPA aims to ensure that environmental impacts are contained, minimised or made good, and the sanction applied reflects the seriousness of the incident and acts as a deterrent to re-offending'.⁵⁸⁷
- 7.8 The *EPA Prosecution Guidelines* set out the factors to be considered prior to pursuing a prosecution. As with all criminal offences, the evidence threshold is 'beyond reasonable doubt'.⁵⁸⁸ The NSW EPA informed the committee that since being re-established in 2012, the agency has completed over 405 prosecutions (as of 4 November 2017) with a success rate of over 95 per cent, which has resulted in the court imposing over \$7.7 million in financial penalties.⁵⁸⁹

Concerns about the regulation of the waste industry

- 7.9 During the inquiry, the committee heard from certain stakeholders who suggested that the NSW EPA is not adequately fulfilling its regulatory role in relation to the waste industry. For example, the Waste Contractors and Recyclers Association of NSW stated:

581 Answers to questions on notice, NSW EPA, 20 November 2017, p 3.
 582 Answers to questions on notice, NSW EPA, 20 November 2017, p 10.
 583 Answers to questions on notice, NSW EPA, 20 November 2017, p 10.
 584 Answers to questions on notice, NSW EPA, 20 November 2017, p 9.
 585 Answers to questions on notice, NSW EPA, 19 October 2017, p 2.
 586 Answers to questions on notice, NSW EPA, 20 November 2017, p 3.
 587 Answers to questions on notice, NSW EPA, 20 November 2017, p 3.
 588 Answers to questions on notice, NSW EPA, 20 November 2017, p 4.
 589 Answers to questions on notice, NSW EPA, 20 November 2017, p 5

There is a widely held perception within the NSW waste management industry that the EPA (& the NSW Government) is failing to support legitimate business operators across the sector by strongly regulating and enforcing compliance from the “illegitimate” rogue operators.⁵⁹⁰

- 7.10** The association also referred to ‘a strongly held perception by many legitimate operators in the waste and recycling industry that the EPA prefers a confrontational approach to dealing with industry – rather than trying to work collaboratively towards common goals’.⁵⁹¹ In addition, the association suggested that the EPA is not ‘... adequately and suitably resourced to enable a fair and proper regulation of waste activities across New South Wales’.⁵⁹²
- 7.11** Similarly, the Australian Organics Recycling Association argued that the NSW EPA is ‘not open’ to working with it to understand the commercial and practical realities of the industry.⁵⁹³
- 7.12** Inquiry participants also raised concerns about how and when the NSW EPA chooses to pursue regulatory responses. For example, Dr James Whelan, Researcher and Community Organiser at Environmental Justice Australia, said that it appears that the NSW EPA contains its responses to the ‘very lowest end of the spectrum’.⁵⁹⁴ Dr Whelan noted that this perceived inaction is particularly concerning as communities living in the ‘most air polluted environments’ ‘have little faith in either the system or the environmental watchdog, the EPA ...’.⁵⁹⁵
- 7.13** Along similar lines, the committee also received evidence criticising the NSW EPA’s supposed reluctance to pursue criminal prosecutions. A stakeholder told the committee: ‘... [waste] organisations continue to take advantage of a waste compliance enforcement regime that is not being policed at the appropriate level. There is little or no fear of being caught, exposed or prosecuted, nor are they being held accountable for their actions’.⁵⁹⁶ The stakeholder remarked that the EPA’s self-reporting regulatory model ‘does not capture’ unlawful activity.⁵⁹⁷
- 7.14** The stakeholder was also concerned about the training and qualifications of NSW EPA staff. They contended that the NSW EPA is ‘ill-equipped to enforce environmental matters that are closely aligned with criminal matters’ and is ‘out of its depth when trying to manage, enforce and prosecute high-profile entities within the waste industry’.⁵⁹⁸ Indeed, the stakeholder suggested Operation Trojan, an extensive investigation into the potential non-payment of waste levies by certain waste companies conducted by the NSW EPA in 2011-2014, was

⁵⁹⁰ Submission 182b, Waste Contractors and Recyclers Association of NSW, p 2.

⁵⁹¹ Submission 182b, Waste Contractors and Recyclers Association of NSW, p 1.

⁵⁹² Evidence, Mr Tony Khoury, Executive Director, Waste Contractors and Recyclers Association of NSW, 17 August 2017, p 2.

⁵⁹³ Submission 395, Australian Organics Recycling Association, p 2.

⁵⁹⁴ Evidence, Dr James Whelan, Researcher and Community Organiser, Environmental Justice Australia, 17 August 2017, p 26.

⁵⁹⁵ Evidence, Dr Whelan, 17 August 2017, p 27.

⁵⁹⁶ *In camera* evidence, Witness C, 23 October 2017, p 13, published by resolution of the committee.

⁵⁹⁷ *In camera* evidence, Witness C, 23 October 2017, p 17, published by resolution of the committee.

⁵⁹⁸ *In camera* evidence, Witness C, 23 October 2017, p 13, published by resolution of the committee.

undermined by the investigatory and prosecutorial skills of NSW EPA officers and a potential leak of information by the NSW EPA to the waste industry.⁵⁹⁹

7.15' Moreover, the stakeholder suggested that '... there is too much interference from public servants trying to direct investigations, with no investigating experience, and making decisions in an untimely manner'.⁶⁰⁰ To clarify, the stakeholder stated that they did not believe this behaviour was intentional, rather that officers and managers are 'out of their depth'.⁶⁰¹

7.16' Meanwhile, Dr Stephen Goodwin, President of the Mountain Districts Association, suggested that the NSW EPA can, inappropriately, take a heavy-handed approach to responding to certain incidents.⁶⁰² Likewise, the Australian Organics Recycling Association said that its members are being 'unfairly targeted' in compliance action and with regulatory barriers.⁶⁰³

7.17' Other concerns raised specific to the regulation of the waste industry included:

- failure to regulate large-scale dumping and waste levy avoidance, examined later in this chapter
- ineffective oversight of environment protection licensing conditions, thereby allowing legitimate waste operators to pursue unlawful activities such as stockpiling waste⁶⁰⁴
- investigations not being conducted in a timely manner⁶⁰⁵
- unwillingness to address odour issues from waste facilities in western Sydney⁶⁰⁶
- frustration that urban tree waste is excluded as an 'eligible waste fuel' in the *NSW Energy from Waste Policy Statement*⁶⁰⁷
- ineffectiveness of a 'one-size fits all' approach to regulation and the 'dysfunction'⁶⁰⁸ of the *Protection of the Environment Operations Act 1997* to address compliance concerns, which unduly burdens certain industry participants⁶⁰⁹
- frustration that the NSW EPA '... move goal posts, set rules and take time over their aspect of regulating the industry, whereas those operating within the industry do not have that same power or latitude'⁶¹⁰

⁵⁹⁹ *In camera* evidence, Witness C, 23 October 2017, p 18, published by resolution of the committee.

⁶⁰⁰ *In camera* evidence, Witness C, 23 October 2017, p 14, published by resolution of the committee.

⁶⁰¹ *In camera* evidence, Witness C, 23 October 2017, p 17, published by resolution of the committee.

⁶⁰² Evidence, Dr Stephen Goodwin, President, Mountain Districts Association, 17 August 2017, p 32.

⁶⁰³ Submission 395, Australian Organics Recycling Association, p 2.

⁶⁰⁴ Submission 182b, Waste Contractors and Recyclers Association of NSW, p 2.

⁶⁰⁵ *In camera* evidence, Witness C, 23 October 2017, p 15, published by resolution of the committee.

⁶⁰⁶ See for example, Submission 211, Mr Joseph Incorvil, p 1; Submission 281, Name suppressed, p 1; Submission 376, Mrs Kerri Bradbury, p 1.

⁶⁰⁷ Submission 177, Active Tree Services, p 2. Also see, Evidence, Mr Mark Willcocks, Director, Active Tree Services, 7 August 2017, p 52.

⁶⁰⁸ Submission 395, Australian Organics Recycling Association, p 5.

⁶⁰⁹ Submission 395, Australian Organics Recycling Association, p 2.

⁶¹⁰ *In camera* evidence, Witness G, 13 February 2018, p 2, published by resolution of the committee.

- suggestion that the NSW EPA currently prioritise regulation over providing advice and support to industry participants⁶¹¹
- concerns that the definition of ‘waste’ is too restrictive and limits opportunities to market certain products⁶¹²
- waste projects being held up and ‘stymied’ by the NSW EPA’s application of the precautionary principle⁶¹³
- concerns about phoenix companies⁶¹⁴
- the high level of subcontracting in the waste industry.⁶¹⁵

7.18 In addition, a stakeholder contended that organised criminal elements are operating in the waste industry.⁶¹⁶ In response, the NSW EPA acknowledged that ‘There are certainly some very bad elements in the waste industry, and some of them tend to be one-off individuals who are particularly bad’.⁶¹⁷ This assessment was corroborated by the NSW Police Force, which advised that there is ‘very little’ evidence of links between organised crime, outlaw motorcycle gangs and the waste industry.⁶¹⁸ Moreover, the police said that certain unscrupulous waste industry participants ‘... might be people with criminal links as opposed to using the waste industry as a means to further their organisation or organised crime’.⁶¹⁹

7.19 Another key concern raised by many inquiry participants was around licensing conditions set by the NSW EPA. For example, Dr Whelan stated that, in anticipation of ‘pushback’, the NSW EPA does not pursue tough licensing conditions for major polluting industries such as mines.⁶²⁰ Dr Whelan suggested that this lax approach may be reflected in how the NSW EPA sets licensing conditions for large-scale energy from waste facilities in the future.⁶²¹ Furthermore, Dr Whelan expressed concern about the willingness of the NSW EPA to amend licensing conditions when industries appear unable to meet these requirements.⁶²²

7.20 The committee also heard that the lax regulatory environment, including in relation to licensing, has led to the inappropriate establishment and inadequate monitoring of the landfill site at Mangrove Mountain. The case study below outlines these issues.

⁶¹¹ *In camera* evidence, Witness G, 13 February 2018, p 2, published by resolution of the committee.

⁶¹² *In camera* evidence, Witness G, 13 February 2018, pp 2-3, published by resolution of the committee.

⁶¹³ *In camera* evidence, Witness G, 13 February 2018, p 3, published by resolution of the committee.

⁶¹⁴ Evidence, Mr Mark Gifford, Chief Environmental Regulator, NSW EPA, 24 November 2017, p 3.

⁶¹⁵ Evidence, Mr Gifford, 24 November 2017, p 8.

⁶¹⁶ *In camera* evidence, Witness C, 23 October 2017, p 13, published by resolution of the committee.

⁶¹⁷ *In camera* evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 24 November 2017, p 16, published by resolution of the committee.

⁶¹⁸ *In camera* evidence, Detective Superintendent Deborah Wallace, NSW Police Force, 24 November 2017, p 3 and p 4, published by resolution of the committee.

⁶¹⁹ *In camera* evidence, Detective Superintendent Deborah Wallace, NSW Police Force, 24 November 2017, p 6, published by resolution of the committee.

⁶²⁰ Evidence, Dr Whelan, 17 August 2017, p 27.

⁶²¹ Evidence, Dr Whelan, 17 August 2017, p 27

⁶²² Evidence, Dr Whelan, 17 August 2017, p 24.

Case study: Mangrove Mountain landfill site

The Mangrove Mountain landfill site is located on the New South Wales Central Coast, and is operated by Verde Terra Pty Ltd, an affiliate of the waste company Bingo.⁶²³ Landfilling at the site began in 1998 when Gosford City Council (now part of Central Coast Council) issued a development consent for a minor redevelopment of the Mangrove Mountain Memorial Golf Course.⁶²⁴

In 2001, the NSW EPA issued the site with an environmental protection licence. The licence has since been varied on at least 13 occasions,⁶²⁵ despite the Mountain Districts Association suggestion that the site conflicts with the requirements of the NSW EPA *Environment Environmental Guidelines: Solid Waste Landfills*.⁶²⁶ The site operated as a regional waste facility licensed to accept general solid waste (non-putrescible) until May 2014.⁶²⁷ Verde Terra is currently refining plans to alter the site.⁶²⁸

The site sits in the catchment of the Ourimbah Creek system which supplies water into Mardi Dam and Mangrove Creek Dam.⁶²⁹ The local community is concerned that the landfill will contaminate the water supply of the Central Coast region.⁶³⁰

The Mountain Districts Association said the NSW EPA have taken 'zero' action in response to compliance concerns regarding the site.⁶³¹ For example, in one instance in 2015, the NSW EPA did not act promptly when an uncontrolled discharge in Ourimbah Creek was traced to the Mangrove Mountain site.⁶³²

In February 2016, the NSW EPA began regular meetings with the Mountain Districts Association to discuss the site.⁶³³ In September 2016, following consultation with the Mountain Districts Association, SLR Consulting was contracted by the NSW EPA to conduct an independent environmental review of the site.⁶³⁴ The NSW EPA reported that the consultant concluded that there was no evidence of the landfill contaminating the water supply.⁶³⁵

⁶²³ NSW EPA, *Mangrove Mountain Landfill* (26 September 2017), <http://www.epa.nsw.gov.au/working-together/community-engagement/community-news/mangrove-mountain-landfill>.

⁶²⁴ Submission 169, Mountain Districts Association, pp 2-3.

⁶²⁵ Submission 169, Mountain Districts Association, p 3.

⁶²⁶ See Evidence, Dr Goodwin, 17 August 2017, p 30 and NSW EPA, *Environmental Guidelines: Solid Waste Landfills*, Second edition 2016, <http://www.epa.nsw.gov.au/resources/waste/solid-waste-landfill-guidelines-160259.pdf>

⁶²⁷ Submission 169, Mountain Districts Association, p 3; NSW EPA, *Mangrove Mountain Landfill* (7 July 2017), <http://www.epa.nsw.gov.au/working-together/community-engagement/community-news/mangrove-mountain-landfill>.

⁶²⁸ NSW EPA, *Mangrove Mountain Landfill* (7 July 2017), <http://www.epa.nsw.gov.au/working-together/community-engagement/community-news/mangrove-mountain-landfill>.

⁶²⁹ Submission 169, Mountain Districts Association, p 3.

⁶³⁰ Evidence, Dr Goodwin, 17 August 2017, p 33.

⁶³¹ Evidence, Dr Goodwin, 17 August 2017, pp 29-30.

⁶³² Evidence, Dr Goodwin, 17 August 2017, p 31.

⁶³³ Evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 17 August 2017, p 66.

⁶³⁴ SLR Consulting, *Technical, Environmental and Operational Review Mangrove Mountain Landfill Wisemans Ferry Road, Mangrove Mountain NSW*, May 2017, <http://www.epa.nsw.gov.au/working-together/community-engagement/community-news/mangrove-mountain-landfill>.

However, the Mountain Districts Association contended that the NSW EPA has misconstrued the report's findings.⁶³⁶ The association also conducted its own groundwater investigation and said it had found 'serious concerns' about the data supplied by the operator and used in the consultant's report.⁶³⁷

7.21 Another key issue was around the NSW EPA's multiple roles. As noted in Chapter 2, the Australian Industrial Ecology Network suggested that the NSW EPA is 'hopelessly conflicted' as it exercises its roles as 'regulator and enforcer', 'developer of policy', and 'and sponsor and provider of significant amounts of grant funding'.⁶³⁸ Following on, the committee received evidence that the NSW EPA should be restructured to enhance the regulation of the waste industry. The Australian Organics Recycling Association stated:

Government is urged to implement the type of reform and cultural change that was so effective in shifting the priorities of WorkCover NSW to SafeWork NSW to achieve regulation and compliance together with support and education as equal priorities.

This may require restructuring the EPA to achieve a better balance between regulating illegal activities and working with, and supporting, the organics recycling industry which is operating in good faith for sustainable environmental outcomes.⁶³⁹

7.22 It was also brought to the committee's attention that this is not the first investigation into the NSW EPA.⁶⁴⁰ Indeed, the NSW Legislative Council's General Purpose Standing Committee No. 5 conducted an inquiry into the management and performance of the NSW EPA in 2014-2015. The committee concluded that 'overall the EPA is performing the majority of its functions in keeping with its objectives',⁶⁴¹ and made 17 recommendations to address specific concerns regarding the agency's governance structures and engagement with stakeholders.⁶⁴² While the government response to the report noted the recommendations regarding the governance of the agency, and supported those that sought to enhance communication with stakeholders,⁶⁴³ during this inquiry the committee was encouraged to strengthen the NSW EPA by reiterating the recommendations of the 2015 report.⁶⁴⁴

together/community-engagement/community-news/mangrove-mountain-landfill. Also see, Evidence, Mr Buffier, 17 August 2017, p 66.

⁶³⁵ NSW EPA, *Mangrove Mountain Landfill* (7 July 2017), <http://www.epa.nsw.gov.au/working-together/community-engagement/community-news/mangrove-mountain-landfill>.

⁶³⁶ Evidence, Dr Goodwin, 17 August 2017, p 31.

⁶³⁷ Evidence, Dr Goodwin, 17 August 2017, p 31.

⁶³⁸ Evidence, Mr Mark Glover, Director, Australian Industrial Ecology Network, 17 August 2017, p 38.

⁶³⁹ Submission 395, Australian Organics Recycling Association, p 3.

⁶⁴⁰ Answers to questions on notice, NSW EPA, 20 November 2017, p 1.

⁶⁴¹ General Purpose Standing Committee No. 5, The performance of the NSW Environment Protection Authority (February 2015), p xi.

⁶⁴² General Purpose Standing Committee No. 5, The performance of the NSW Environment Protection Authority (February 2015), p xi.

⁶⁴³ Government response, Hon Mark Speakman, Minister for the Environment, 13 August 2015.

⁶⁴⁴ Evidence, Dr Whelan, 17 August 2017, pp 20-21.

NSW EPA response to concerns

7.23 The NSW EPA responded forcefully to suggestions that the regulatory regime is inadequate, describing itself as ‘Australia’s leading environmental regulator’⁶⁴⁵ and stating the agency is ‘very strong’ on its compliance and enforcement activities.⁶⁴⁶

7.24 In response to suggestions that the agency is reluctant to pursue criminal prosecutions, the NSW EPA argued: ‘In many cases issuing penalty notices represents greater public benefit than pursuing prosecutions as it delivers a prompter regulatory response, reduces pressure on the judicial system and the cost imposed on Government, and is transparently reported on the NSW EPA’s public register’.⁶⁴⁷ In addition, the NSW EPA noted that prosecuting unlawful activity is ‘highly resource-intensive’, and that the agency therefore focuses on ‘individuals who are intentionally engaging in illegal activities which pose a high risk of harm to the NSW community and the environment’.⁶⁴⁸

7.25 The NSW EPA also noted:

- the challenges of obtaining sufficient evidence to pursue a prosecution and prove the offence beyond reasonable doubt⁶⁴⁹
- the inherent difficulty of waste investigations given the dispersed and disaggregated nature of the activity and the sophistication of many of the players involved in unlawful waste activities⁶⁵⁰
- the challenge of proving that material is in fact waste, and determining whether environmental harm has occurred due to the illegal activity.⁶⁵¹

7.26 Despite these challenges, the NSW EPA pointed out its relatively high prosecution rate, compared with that of Victoria:

In 2016–17, we completed 103 prosecutions, resulting in over \$2.4 million in financial penalties being imposed by courts. In contrast, it has been reported that over the same period the Victorian EPA completed 11 prosecutions for \$175,000 in financial penalties.⁶⁵²

7.27 In response to criticism about the timeliness of investigations, the NSW EPA advised that: ‘All waste investigations conducted by the EPA are completed within statutory timeframes’.⁶⁵³ The NSW EPA also noted that the *EPA Guideline on Timely Investigations with a view to Prosecution* details ‘strict timelines for deciding which matters should be investigated with a view to prosecution’, and that all decisions about whether a prosecution should proceed are finalised

⁶⁴⁵ Answers to questions on notice, NSW EPA, 20 November 2017, p 3.

⁶⁴⁶ Evidence, Mr Buffier, 17 August 2017, p 61.

⁶⁴⁷ Answers to questions on notice, NSW EPA, 20 November 2017, p 3.

⁶⁴⁸ Answers to questions on notice, NSW EPA, 20 November 2017, p 4.

⁶⁴⁹ Answers to questions on notice, NSW EPA, 20 November 2017, p 4.

⁶⁵⁰ Answers to questions on notice, NSW EPA, 20 November 2017, p 8.

⁶⁵¹ Answers to questions on notice, NSW EPA, 20 November 2017, p 8.

⁶⁵² Answers to questions on notice, NSW EPA, 20 November 2017, p 4.

⁶⁵³ Answers to questions on notice, NSW EPA, 20 November 2017, p 8.

before the three-year limitation period for such offences expires.⁶⁵⁴ In addition, the agency noted that investigations resulting in clean-up notices and penalty notices are usually completed in less than 12 months.⁶⁵⁵

7.28 The NSW EPA strongly disputed suggestions that its staff are incapable or apathetic towards regulating the waste industry,⁶⁵⁶ pointing to:

- its ‘rigorous’ recruitment and selection processes⁶⁵⁷
- employment of ‘highly credentialed and experienced’ investigative officers and managers, many of whom have a tertiary education⁶⁵⁸
- high staff retention rates⁶⁵⁹
- results of the *2016 People Matter NSW Public Sector Employee Survey* indicating a positive workplace environment with an engaged workforce⁶⁶⁰
- extensive in-house and external training opportunities⁶⁶¹
- an in-house legal branch and access to many barristers who are available to provide legal advice to the NSW EPA and its Board.⁶⁶²

7.29 The committee also heard that in 2016, the NSW EPA established the Intelligence and Analysis Unit which is responsible for strategic, operational and tactical intelligence functions for operational staff and the senior management team, and is the contact point between the NSW EPA and other New South Wales, interstate and federal agency intelligence agencies.⁶⁶³

7.30 In relation to phoenix companies, the NSW EPA noted the ‘challenge’ of investigating and prosecuting companies for non-compliance once a business is deregistered.⁶⁶⁴ The NSW EPA said it is therefore focusing a ‘great deal’ of attention on understanding how and why these corporate structures are created.⁶⁶⁵

7.31 The NSW EPA also acknowledged the challenges of regulating the large number of subcontractors operating in the waste industry, noting that this issue poses significant challenges when attempting to establish evidence of accountability for illegal waste dumping.⁶⁶⁶ Mr Gifford proposed one possible solution to this issue, namely, making the

⁶⁵⁴ Answers to questions on notice, NSW EPA, 20 November 2017, p 8.

⁶⁵⁵ Answers to questions on notice, NSW EPA, 20 November 2017, p 9.

⁶⁵⁶ Answers to questions on notice, NSW EPA, 20 November 2017, p 4.

⁶⁵⁷ Answers to questions on notice, NSW EPA, 20 November 2017, p 5.

⁶⁵⁸ Answers to questions on notice, NSW EPA, 20 November 2017, p 5.

⁶⁵⁹ Answers to questions on notice, NSW EPA, 20 November 2017, p 5.

⁶⁶⁰ Answers to questions on notice, NSW EPA, 20 November 2017, pp 4 and 9.

⁶⁶¹ Answers to questions on notice, NSW EPA, 20 November 2017, p 6.

⁶⁶² Answers to questions on notice, NSW EPA, 20 November 2017, p 11.

⁶⁶³ Answers to questions on notice, NSW EPA, 20 November 2017, p 10.

⁶⁶⁴ Evidence, Mr Gifford, 24 November 2017, p 3.

⁶⁶⁵ Evidence, Mr Gifford, 24 November 2017, p 3.

⁶⁶⁶ Evidence, Mr Gifford, 24 November 2017, p 8.

owner of the vehicle and the trailer associated with the vehicle that transports waste responsible for the transport, 'so you would have someone to come back to'.⁶⁶⁷

Committee comment

- 7.32'** The committee appreciates the challenges involved in regulating the waste industry. While it is apparent that most waste operators comply with the regulatory system, a small proportion of industry participants appear insistent on operating outside of the law.
- 7.33'** A strong regulatory regime is undoubtedly dependent on a clear and consistent approach to the enforcement of sanctions, particularly when pursuing prosecutions. We note that the NSW EPA has protocols in place to ensure that investigations are conducted in a timely manner, and that prosecution is pursued as a final resort should other deterrents prove ineffective or inappropriate.
- 7.34'** Having said this, it is clear there is a perception amongst stakeholders that the NSW EPA is not effectively performing its regulatory role in relation to the waste industry. The NSW EPA responded by emphasising the many, valid reasons the agency pursues a responsive and risk-based approach to regulation. However, we believe the NSW EPA must engage more effectively with stakeholders to promote its regulatory role and activities.
- 7.35'** In addition, while we accept that NSW EPA staff appear to be adequately qualified and receive appropriate training, we believe the agency must make greater efforts to take a consistent and genuine approach to interactions with industry participants, particularly in relation to compliance issues. In addition, the agency should make a concerted effort across the board to engage more effectively with industry participants, particularly industry groups, to facilitate better working relationships.
- 7.36'** The committee notes the proposal to restructure the NSW EPA. The committee has not received sufficient evidence to recommend this action. Rather, we recommend the NSW Government investigate options to restructure the NSW EPA so it can improve its performance.

Recommendation 21

That the NSW Government investigate options to restructure the NSW Environment Protection Authority so it can improve its performance.

- 7.37'** Further, we believe that the NSW Government should conduct an independent review into the NSW EPA, with particular reference to:
- assessing the adequacy of funding for the performance of its compliance, enforcement and other roles
 - improving its community engagement role and the effectiveness of its enforcement and compliance roles

⁶⁶⁷ Evidence, Mr Gifford, 24 November 2017, p 8.

- the perceived conflict of interest between its compliance and policy and education roles.

Recommendation 22

That the NSW Government conduct an independent review into the NSW Environment Protection Authority, with particular reference to:

- assessing the adequacy of funding for the performance of its compliance, enforcement and other roles
- improving its community engagement role and the effectiveness of its enforcement and compliance roles
- the perceived conflict of interest between its compliance and policy and education roles.

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- 7.38*** The committee notes that the NSW Government has failed to follow the recommendation of the previous inquiry by then General Purpose Standing Committee No. 5 into the performance of the NSW EPA that recommended that the NSW Government amend the *Protection of the Environment Administration Act 1991* to provide for the appointment of a chairperson of the board independent of the Chief Executive Officer of the NSW EPA. The committee believes that this action would assist to improve the performance of the NSW EPA and notes that with the retirement of Mr Buffier, there is the opportunity for the government to make this change prior to the appointment of a new CEO.

Recommendation 23

That the NSW Government seek to amend the *Protection of the Environment Administration Act 1991* to provide for the appointment of a chairperson of the board independent of the Chief Executive Officer of the NSW Environment Protection Authority.

Regulating illegal landfilling

- 7.39*** During the inquiry it was suggested that the current regulatory regime does not provide a 'level playing field' and is undermining the ability of legitimate waste businesses to compete against rogue operators who engage in illegal landfilling.
- 7.40*** Mr Tony Khoury, Executive Director of the Waste Contractors and Recyclers Association of NSW, explained the practical implications of this problem, saying that while a 'decent operator' is required to meet strict regulatory and licencing standards, a rogue operator starts-up by 'just by having a block of land or having a shed'.⁶⁶⁸ He continued: 'Our laws are structured in such a way that the really good people comply. The really good people are then penalised when they do something wrong. But the rogue operators just go about their business'.⁶⁶⁹

⁶⁶⁸ Evidence, Mr Khoury, 17 August 2017, p 5.

⁶⁶⁹ Evidence, Mr Khoury, 17 August 2017, p 5.

- 7.41 Mr Khoury suggested that there are examples of these types of unlawful operations are currently operating in western Sydney.⁶⁷⁰ The Waste Contractors and Recyclers Association of NSW pointed to the case of a company accused of illegally dumping waste, as demonstrating this inconsistent regulatory approach. The association asserted: 'In the 15 months it has taken (from 7th June 2016 until 4th September 2017) for the EPA to issue a Notice of Clean-Up Action, the operator of this site has continued to undercut the legitimate law-abiding industry'.⁶⁷¹
- 7.42 The Waste Management Association of Australia agreed that the NSW EPA is inconsistent in its approach to legitimate landfill businesses and rogue operators: 'A common complaint by industry is that it often appears easier for NSW regulators to "crack down" on visible and legitimate operators, than it is to pursue and prosecute the illegitimate operators'.⁶⁷²
- 7.43 Moreover, there was some concern expressed during the inquiry that the NSW EPA was under-resourced and ill-equipped to regulate landfill. For example, the Waste Management Association of Australia argued that monitoring landfill conformance 'strains the resources of an already extended EPA',⁶⁷³ and said that it is 'critical' that the NSW EPA be appropriately resourced and focused on regulating 'all operators, and especially the rogue operators that undermine the efforts of the sector as a whole'.⁶⁷⁴ The association proposed providing additional resources to the NSW EPA and/or requiring landfill operators to submit regular compliance reports, submitted on their behalf by an independent certifier, attesting that landfill standards are being met.⁶⁷⁵
- 7.44 Likewise, Mr Khoury questioned whether the penalties associated with illegal dumping are enough deter rogue operators from operating sizable unlawful facilities.⁶⁷⁶ Indeed, the association proposed raising the current penalties for illegal dumping: 'An obvious disincentive is in making the fine for each incidence of illegal dumping significantly greater than the cost of lawful disposal'.⁶⁷⁷
- 7.45 The NSW Police Force suggested that the introduction of a 'fit and proper person' test, similar to the system used in the tattoo industry, could deter individuals from pursuing unlawful activities such as illegal dumping.⁶⁷⁸ It was noted that this type of 'front end' regulation ensures that authorities are 'on the front foot right at the beginning' and are 'not playing catch up'.⁶⁷⁹ The committee heard that the test could be performed on all waste

⁶⁷⁰ Evidence, Mr Khoury, 17 August 2017, p 8.

⁶⁷¹ Submission 182b, Waste Contractors and Recyclers Association of NSW, p 2.

⁶⁷² Submission 215a, Waste Management Association of Australia, p 2.

⁶⁷³ Submission 215a, Waste Management Association of Australia, p 2.

⁶⁷⁴ Submission 215a, Waste Management Association of Australia, p 2.

⁶⁷⁵ Submission 215a, Waste Management Association of Australia, p 2.

⁶⁷⁶ Evidence, Mr Khoury, 17 August 2017, p 2.

⁶⁷⁷ Submission 215a, Waste Management Association of Australia, p 1.

⁶⁷⁸ *In camera* evidence, Detective Superintendent Deborah Wallace, NSW Police Force, 24 November 2017, p 3 and p 8, published by resolution of the committee.

⁶⁷⁹ *In camera* evidence, Detective Superintendent Deborah Wallace, NSW Police Force, 24 November 2017, p 3, published by resolution of the committee.

industry participants including subcontractors, and could be a risk-based assessment that considers different criteria for industry participants.⁶⁸⁰

7.46' Mr Barry Buffier, the then Chair and Chief Executive of the NSW EPA, agreed with the need to create a level playing field to ensure legitimate waste operators are not undercut:

... when you are regulating an industry you are aiming to provide a level playing field for all the operators in that industry. If there is an opportunity for people to avoid a regulation or avoid a levy or avoid a cost, that provides them with a competitive advantage which they should not have over the genuine operators.⁶⁸¹

7.47' The NSW EPA advised that illegal dumping cannot be easily resolved by compliance or licensing requirements, and that the challenges are compounded by a confluence of other factors:

This is an issue that neither specific regulatory requirements nor licencing can easily fix, as the low barrier to entry will continue to attract those who have no regard for the laws put in place to protect the environment. The problem is exacerbated by the high level of sub-contracting in the industry leading to difficulties in establishing evidence of accountability for illegal waste dumping.⁶⁸²

7.48' The committee heard that these difficulties were exemplified during the investigation of the alleged illegal landfill site at Spencer on the New South Wales Central Coast. Mr Buffier explained the case was complicated by the fact that the NSW EPA was initially not the appropriate regulatory authority and that once the agency took on this role, approximately 18 months ago, 'We have undertaken a long, complicated and exhaustive monitoring and investigation. These are not simple matters to prosecute'.⁶⁸³

7.49' The NSW EPA acknowledged that the regulatory regime could be enhanced by additional resourcing and increased penalties, particularly monetary penalties for offences relating to illegal dumping and illegal landfilling.⁶⁸⁴ The NSW EPA advised that it is drafting a protocol on how to calculate the quantum of the monetary benefit for such activities.⁶⁸⁵ In addition, the NSW EPA said it could consider a 'fit and proper person' test for waste industry participants, including sub-contractors.⁶⁸⁶

⁶⁸⁰ *In camera* evidence, Detective Superintendent Deborah Wallace, NSW Police Force, 24 November 2017, pp 3-4, published by resolution of the committee.

⁶⁸¹ Evidence, Mr Buffier, 17 August 2017, pp 60-61.

⁶⁸² Answers to questions on notice, NSW EPA, 20 November 2017, p 2.

⁶⁸³ Evidence, Mr Buffier, 17 August 2017, p 64.

⁶⁸⁴ *In camera* evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW Environment Protection Authority, 24 November 2017, p 14, published by resolution of the committee.

⁶⁸⁵ *In camera* evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW Environment Protection Authority, 24 November 2017, p 14, published by resolution of the committee and *In camera* evidence, Mr Mark Gifford, Chief Environmental Regulator, NSW EPA, 24 November 2017, p 15, published by resolution of the committee.

⁶⁸⁶ Evidence, Mr Gifford, 24 November 2017, p 11.

Committee comment

- 7.50'** As already touched on in Chapter 3, the committee notes that monitoring and regulating illegal landfill is being hampered by a range of factors including the covert nature of activities, the availability of land to dispose of waste, high levels of sub-contracting in the industry, and the difficulties associated with establishing the necessary evidentiary threshold for illegal dumping. The committee believes that greater resources should be directed at investigating illegal landfilling to disrupt, and eventually end the practice altogether. We recommend the NSW Government allocate additional resources to the NSW EPA to conduct investigations into large-scale illegal dumping activities.
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Recommendation 24

That the NSW Government allocate additional resources to the NSW Environment Protection Authority to conduct investigations into large-scale illegal dumping activities.

- 7.51'** The committee considers that there appears to be significant merit in introducing a 'fit and proper person' test, based on a sliding scale, to overcome concerns about criminal elements targeting the waste industry. We note the evidence provided by the NSW Police Force that this type of upfront regulation provides a significant advantage to regulators, in that it may deter unscrupulous individuals from participating in the waste industry in the first place. We recommend that the NSW Government introduce a 'fit and proper person' test for proprietors and company directors to assess whether individuals may work in the waste industry, incorporating a risk assessment based on a sliding scale.
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Recommendation 25

That the NSW Government introduce a 'fit and proper person' test for proprietors and company directors to assess whether individuals may work in the waste industry, incorporating a risk assessment based on a sliding scale.

- 7.52'** The committee acknowledges stakeholders' concerns about the penalties associated with illegal dumping offences. As discussed in Chapter 3, there are significant financial penalties imposed for waste crimes. However, it is the responsibility of the court to impose these penalties. We note that the NSW EPA is currently preparing a draft protocol to better calculate the quantum of the monetary benefit of illegal dumping. This will assist the NSW Government in considering whether, and by how much, to increase monetary penalties for such behaviour. The committee recommends that the NSW EPA complete the draft protocol on calculating the quantum of the monetary benefit of illegal dumping and illegal landfilling as soon as practicable.
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Recommendation 26

That the NSW Environment Protection Authority complete the draft protocol on calculating the quantum of the monetary benefit of illegal dumping and illegal landfilling as soon as practicable.

- 7.53** The committee appreciates the concerns raised by the Mountain Districts Association about the Mangrove Mountain landfill site. It is understandable that the presence of a fully operational landfill site that sits on top of the Ourimbah Creek system is a matter of alarm for the local community, even though the site stopped receiving waste in 2014. We also note that the NSW EPA, the NSW Department of Planning and Environment and independent consultants have determined that the site has not contaminated the water supply.
- 7.54** The committee recognises that the former Gosford City Council was the consent authority for the initial site redevelopment. However, once the NSW EPA was given this responsibility, the agency should have conducted better stakeholder engagement to prior to issuing and amending the environment protection licence. We believe this may have gone some way to reassuring the local community about the safety of the project. It is also disappointing to receive evidence that it can take weeks for NSW EPA officers to investigate complaints, given that during this time crucial evidence may be lost. We strongly encourage the NSW EPA to take more prompt action to investigate potential breaches of environment protection licence conditions.
- 7.55** The committee believes that there are significant unresolved issues regarding the Mangrove Mountain landfill site, including licence variations and the role of the then Gosford City Council in issuing development consent. The committee therefore recommends that the NSW Government establish an independent inquiry to investigate the operation, regulation and approvals of the Mangrove Mountain Landfill site.

Recommendation 27

That the NSW Government establish an independent inquiry to investigate the operation, regulation and approvals of the Mangrove Mountain Landfill site.

Chapter 8 The future of waste management

This chapter examines the future of waste management in New South Wales, starting with concerns about the shortfall in waste infrastructure. It outlines the need for greater strategic planning in this area, including support for an infrastructure plan and a lead agency to oversee its implementation. The chapter also considers the urgent need to identify and zone land for waste facilities. Finally, the chapter discusses strengthening landfill regulation, addresses concerns about the recycling industry and considers how to enable the circular economy.

Need for more waste infrastructure

8.1 Evidence presented during the inquiry, particularly from local councils, suggested that New South Wales currently has insufficient waste infrastructure to meet demand. While Local Government NSW noted that many regional areas have limited access to adequate recycling facilities,⁶⁸⁷ a great deal of focus was the lack of waste services in the Sydney Metropolitan Area, including:

- limited recycling and resource recovery facilities for all types of waste and technologies
- insufficient access to putrescible landfill (this issue being twofold; the Suez facility at Lucas Heights is the only active putrescible landfill in Sydney, and access to Veolia's Woodlawn facility is limited due to a lack of conveniently located transfer stations and the limited capacity of existing transfer stations)
- the two Alternative Waste Treatment facilities in metropolitan Sydney, SAWT at Camps Creek and UR-3R at Eastern Creek, appear to have limited capacity to service metropolitan councils.⁶⁸⁸

8.2 Moreover, inquiry participants expressed significant concern that New South Wales is not adequately equipped to manage increasing amounts of waste into the future. For example, the Southern Sydney Regional Organisation of Councils (SSROC) stated:

It is generally understood by State and Local Government and the waste and resource recovery industry that NSW is facing the challenge of insufficient infrastructure (from processing plants to transfer stations, to organics and recycling facilities) being available to treat not just the existing waste but the projected growth in waste generation in the short-term future.⁶⁸⁹

8.3 This argument was supported by research conducted by SSROC and the Western Sydney Regional Organisation of Councils (WSROC) about their respective local areas, which concluded that urban destiny and population growth will pose significant challenges for the provision of waste management services in Sydney into the future.⁶⁹⁰

⁶⁸⁷ Submission 326, Local Government NSW, p 3.

⁶⁸⁸ See, Submission 146, Randwick Council, p 1; Submission 156, Sutherland Shire Council, pp 1-2; Submission 176, SSROC, pp 2-3; Submission 168, City of Canterbury Bankstown, p 1.

⁶⁸⁹ Submission 176, SSROC, pp 2-3.

⁶⁹⁰ See, Evidence, Ms Namoi Dougall, General Manager, SSROC, 7 August 2017, p 26; Submission 150, WSROC, p 2.

- 8.4 The issue crystallised in September 2017, following the release of the NSW Environment Protection Authority (NSW EPA) *Waste and Resource Recovery Infrastructure Strategy 2017-2021 Consultation Draft*. The consultation draft was informed by an infrastructure needs analysis.⁶⁹¹ The NSW EPA provided the table below, detailing the known expected capacity and projected throughput for waste facilities across the state in 2021. The numbers shown in red indicate the shortfall of available capacity projected by 2021.

Table 7 Known expected capacity and projected throughput for waste facilities across New South Wales in 2021.

	Putre- scible Landfill	Non- putre- scible Landfill	Mixed Waste Treatment	Energy Recovery Facility	Non- putre- scible Waste MRF	C&D Waste Process	Packaging MRF	Garden Organics Process	Putre- scible Organics Process
2021 Known capacity ('000 tpa)	3180	2924	763	143	3765	5242	1299	1133	972
2021 Projected throughput ('000 tpa)	2438	2165	1768	478	2669	4342	1583	1520	984
2021 Gap ('000 tpa)	742	759	-1005	-336	1096	900	-284	-387	-12

Tabled document, NSW EPA, Waste and Resource Recovery Infrastructure Strategy 2017-2021 Consultation Draft (2017), p 7.

- 8.5 The NSW EPA acknowledged that there needs to be 'significant investment' to build infrastructure that can process the anticipated 20 million tonnes of waste New South Wales will generate by 2021, particularly if the state is to meet its 'ambitious target to divert 75 per cent of waste from landfill'.⁶⁹² Mr Barry Buffier, the then Chair and Chief Executive of the NSW EPA, advised: 'Even if we are successful in increasing the recycling rates above where they are now and we drive down the total amount going to landfill, there is a finite amount of infrastructure available for landfill and we will require more as we go forward'.⁶⁹³

Stakeholder concerns about waste infrastructure

- 8.6 Inquiry participants contended that infrastructure development is hampered by a range of factors, including:
- a failure to hypothecate enough of the waste levy to infrastructure development, rather than it going to consolidated revenue, as discussed in Chapter 2
 - the government has had a limited role in planning waste infrastructure⁶⁹⁴ and left industry responsible for determining services,⁶⁹⁵ leading to 'ad hoc'⁶⁹⁶ infrastructure that considers commercial imperatives before community benefit⁶⁹⁷

⁶⁹¹ Tabled document, NSW EPA, *Waste and Resource Recovery Infrastructure Strategy 2017-2021 Consultation Draft* (2017), p 1.

⁶⁹² Evidence, Mr Barry Buffier, the then Chair and Chief Executive, NSW EPA, 17 August 2017, p 60.

⁶⁹³ Evidence, Mr Buffier, Chair 17 August 2017, p 60.

⁶⁹⁴ Submission 168, City of Canterbury Bankstown, p 2.

⁶⁹⁵ See, Submission 326, Local Government NSW, p 4; Evidence, Mr Mike Ritchie, Managing Director, MRA Consulting Group, 7 August 2017, p 11.

- where government bodies, including the Greater Sydney Commission, have been involved in infrastructure planning, their efforts have been inadequate⁶⁹⁸
- lack of up-to-date waste data undermines the ability of government and industry to assess the current demand for waste services and to systematically and pre-emptively identify and address any gaps in infrastructure⁶⁹⁹
- there is lack of certainty in the planning process, as discussed later in this chapter.

8.7 Inquiry participants also cautioned of the significant consequences if waste management is not planned and delivered appropriately.⁷⁰⁰ Mr Charles Casuscelli, Chief Executive Officer of WSROC, said: ‘Waste has the ability ... to bring a city to its knees. If we do not manage waste properly, the effects on our urban lifestyle will be as dramatic as running out of electricity or gas, or running out of water’.⁷⁰¹ Similarly, Ms Namoi Dougall, General Manager of SSROC, observed: ‘We risk future public health issues if we do not plan now for adequate waste infrastructure for our growing population ...’.⁷⁰²

8.8 According to stakeholders, other implications arising from a lack of adequate waste infrastructure would include imposing additional collection costs on councils and ratepayers,⁷⁰³ more truck movements,⁷⁰⁴ and exacerbating the lack of competition in the market.⁷⁰⁵

Committee comment

8.9 Waste management is clearly an essential service that has wide-ranging implications for the wellbeing of individuals, the environment and the community as a whole, particularly in relation to public health. It appears that successive NSW Governments have taken a backseat in waste infrastructure planning and delivery, which has led to a projected shortfall of services across the state.

8.10 As discussed in Chapter 2, it is frustrating to receive evidence that despite large sums of money being raised by the waste levy, waste infrastructure is not being planned and delivered in a comprehensive manner to meet the needs of the community. The following section examines possible solutions to addressing this issue such as enhanced strategic planning, and improved recycling efforts and infrastructure.

⁶⁹⁶ Submission 326, Local Government NSW, p 4.

⁶⁹⁷ See, Submission 198, City of Sydney, p 3; Submission 167, NSROC, p 2.

⁶⁹⁸ See, Evidence, Ms Gayle Sloan, Chief Executive Officer, Waste Management Association of Australia, 26 June 2017, p 24; Evidence, Mr Charles Casuscelli, Chief Executive Officer, WSROC, 27 June 2017, p 26; Evidence, Ms Amanda Bombaci, Regional Waste Coordinator, WSROC, 27 June 2017, p 33; Submission 158, Hunters Hill Council, p 1.

⁶⁹⁹ See, Submission 170, MRA Consulting Group, p 4; Submission 198, City of Sydney, p 2.

⁷⁰⁰ See, Evidence, Ms Jo Immig, Coordinator, National Toxics Network, 27 June 2017, p 35.

⁷⁰¹ Evidence, Mr Casuscelli, 27 June 2017, p 26.

⁷⁰² Evidence, Ms Dougall, 7 August 2017, p 26.

⁷⁰³ Submission 168, City of Canterbury Bankstown, p 2.

⁷⁰⁴ See, Submission 168, City of Canterbury Bankstown, p 2; Evidence, Mr Mark Wood, Group Manager, Engineering Operations, Sutherland Shire Council, 7 August 2017, p 28.

⁷⁰⁵ Submission 156, Sutherland Shire Council, pp 1-2.

- 8.11⁷⁰⁶ The committee understands stakeholders' frustration about access to up-to-date waste data. Failing to publish this data undermines the development of waste management infrastructure and in the current climate, where the state is facing an impending shortfall in services, this is unacceptable. We recommend that the NSW EPA regularly publish up-to-date waste data.

Recommendation 28

That the NSW Environment Protection Authority regularly publish up-to-date waste data.

Strategic planning for waste management

- 8.12⁷⁰⁶ Many stakeholders argued there is a clear and pressing need for waste management planning at a strategic level if the state's long-term waste disposal and infrastructure needs are to be met. Mr Casuscelli encapsulated many inquiry participants' concerns when he stated: '... there seems to be a lack of coordination at a very strategic level for building waste processing capability ...'.⁷⁰⁶ Mr Casuscelli noted that while there have been 'lots of attempts at defining targets and recycling', '... we do not have a strategic view of waste management—that is, where do we locate the next generation of waste processing facilities?'⁷⁰⁷ Moreover, he suggested this lack of coordination is hindering innovation as investors find it too difficult to pursue projects.⁷⁰⁸
- 8.13⁷⁰⁹ According to Mr Mark Taylor, General Manager, NSW Resource Recovery at Veolia, there is a need for government to 'drive the agenda' in this area.⁷⁰⁹ Likewise, the Waste Management Association of Australia and SSROC argued that while industry is best-suited to planning and delivering infrastructure, government should provide certainty and guidance in this area.⁷¹⁰
- 8.14⁷¹¹ Early in the inquiry, the committee heard that unlike other Australian jurisdictions, New South Wales does not have a waste infrastructure plan.⁷¹¹ Inquiry participants called on the NSW Government to rectify this situation.⁷¹² Amongst other proposals, stakeholders suggested that the strategic plan:
- identify appropriate precincts and locations, including buffer zones, for waste services⁷¹³
 - facilitate 'at least \$2 billion' in new infrastructure⁷¹⁴

⁷⁰⁶ Evidence, Mr Casuscelli, 27 June 2017, p 26.

⁷⁰⁷ Evidence, Mr Casuscelli, 27 June 2017, p 26.

⁷⁰⁸ Evidence, Mr Casuscelli, 27 June 2017, p 34.

⁷⁰⁹ Evidence, Mr Mark Taylor, General Manager, NSW Resource Recovery, Veolia, 26 June 2017, p 61. Also see, Evidence, Ms Immig, 27 June 2017, p 40.

⁷¹⁰ See, Evidence, Ms Sloan, 26 June 2017, p 22; Evidence, Ms Dougall, 7 August 2017, p 26.

⁷¹¹ See, Submission 215, Waste Management Association of Australia, p 2 and p 3; Submission 168, City of Canterbury Bankstown, p 2.

⁷¹² See, Evidence, Ms Sloan, 26 June 2017, p 22; Evidence, Mr Garth Lamb, NSW Branch President, Waste Management Association of Australia, 26 June 2017, pp 23-24; Submission 326, Local Government NSW, p 4; Evidence, Ms Bombaci, 27 June 2017, p 33.; Submission 190, National Waste and Recycling Industry Group, p 3.

⁷¹³ See, Evidence, Ms Sloan, 26 June 2017, p 22.

- support energy from waste, the circular economy and creating ‘real markets’ for secondary materials from waste⁷¹⁵
- consider waste generator education, product stewardship, waste levies, market support initiatives and re-use support subsidies.⁷¹⁶

8.15 In addition, the committee heard that the strategic plan should be supported by a waste management infrastructure State Environment Planning Policy (SEPP) to provide clear development pathways.⁷¹⁷ Ms Gayle Sloan, Chief Executive Officer of the Waste Management Association of Australia, cautioned that if this action is not taken ‘New South Wales can continue to see facilities closing and no real planning or discussion with industry as to what is required into the future’.⁷¹⁸ Land and planning processes are examined later in this chapter.

8.16 As previously mentioned, in August 2017, the NSW EPA announced it had developed a *Waste and Resource Recovery Infrastructure Strategy Consultation Draft*.⁷¹⁹ The EPA explained the strategy as follows:

It is anticipated that this strategy will aid ongoing development of regional waste and resource recovery implementation plans. Local governments and waste industry participants lead planning and investment in NSW’s waste and resource recovery systems. This draft strategy has been developed to guide decision making to ensure NSW gets the correct mix of infrastructure to meet future needs.⁷²⁰

8.17 The consultation period for the draft strategy closed in late November 2017. The NSW EPA received over 25 submissions, representing over 150 organisations, and is currently reviewing these submissions with a view to publishing the finalised strategy in early 2018.⁷²¹

8.18 Many stakeholders advocated identifying waste as an ‘essential service’ to ensure that the industry can be managed, legislated and planned for accordingly.⁷²² In fact, s 4 of the *NSW Essential Services Act 1988* defines ‘the provision of garbage, sanitary cleaning or sewerage services’ as an ‘essential service’.⁷²³

⁷¹⁴ Evidence, Mr Ritchie, 7 August 2017, p 11.

⁷¹⁵ Evidence, Ms Sloan, 26 June 2017, p 23. Also see, Submission 190, National Waste and Recycling Industry Council, p 3.

⁷¹⁶ Submission 190, National Waste and Recycling Industry Council, p 1.

⁷¹⁷ See, Evidence, Ms Sloan, 26 June 2017, p 22; Submission 170, MRA Consulting Group, p 4.

⁷¹⁸ Evidence, Ms Sloan, 26 June 2017, p 22.

⁷¹⁹ Evidence, Mr Stephen Beaman, the then Executive Director, Waste and Resource Recovery, NSW EPA, 26 June 2017, p 2.

⁷²⁰ Tabled document, *Waste and Resource Recovery Infrastructure Strategy 2017-2021 Consultation Draft* (2017), p 1.

⁷²¹ NSW EPA, *Draft Waste and Resource Recovery Infrastructure Strategy 2017-2021*, 27 November 2017, <http://www.epa.nsw.gov.au/your-environment/recycling-and-re-use/warr-strategy/draft-nsw-warr-infrastructure-strategy-2017-2021>.

⁷²² See, Submission 176, SSROC, p 3, Evidence, Ms Dougall, 7 August 2017, p 26, Submission 168, City of Canterbury Bankstown, p 2, Evidence, Mr Casuscelli, 27 June 2017, p 26, Evidence, Mr Chris Derksema, Sustainability Director, City of Sydney, 7 August 2017, p 19.

⁷²³ Submission 326, Local Government NSW, p 4.

- 8.19'** The following sections examine opportunities to enhance strategic planning for waste services across the state, including current regional waste management plans and support for a lead agency to oversee waste infrastructure. There is also discussion about the pressing need for land to site waste facilities.

Regional waste management

- 8.20'** The committee heard that the government has attempted to enhance waste infrastructure planning through the development of regional waste management plans. According to Mr Stephen Beaman, the then Executive Director of Waste and Resource Recovery at the NSW EPA, regional waste plans have been agreed to or developed by most local councils across New South Wales.⁷²⁴ Mr Beaman advised that the NSW EPA has funded local government to develop and implement these plans, marking a 'significant step forward in waste and recycling planning' by local councils for their local communities.⁷²⁵ He explained the long-term impact and integration of these plans:

The integration of these regional waste plans and the new infrastructure strategy will provide local councils with a long-term game plan. In addition, the EPA has been working with the Department of Planning and Environment and the Greater Sydney Commission to further develop and integrate these strategies into long-term planning.⁷²⁶

- 8.21'** Local councils and regional organisations of councils (ROCs) spoke positively about regional planning for waste infrastructure. The committee heard that the advantages of regional planning included:

- encouraging commitment to improving regional cooperation and identifying opportunities to improving recycling and resource recovery practices across the region⁷²⁷
- securing long-term sustainability and investment in waste infrastructure, this being vital given the growing need for individual councils to aggregate the waste generated across their local government areas to secure the necessary funds to develop a viable waste facility.⁷²⁸

- 8.22'** ROCs can also work together under the umbrella of RENEW NSW, an initiative supported by the Waste Less, Recycle More initiative. RENEW NSW monitors and facilitates improvements in waste management and resource recovery practices and serves as an advisory body on matters such as infrastructure sharing, resource recovery systems, regional procurement, drop-off centres and other activities.⁷²⁹

⁷²⁴ Evidence, Mr Beaman, 26 June 2017, p 3.

⁷²⁵ Evidence, Mr Beaman, 26 June 2017, p 3.

⁷²⁶ Evidence, Mr Beaman, 26 June 2017, p 3.

⁷²⁷ Submission 150, WSROC, p 1. Also see, Evidence, Mr Mark Roebuck, Manager, City Works and Services, Wollongong City Council, 7 August 2017, p 31.

⁷²⁸ See, Evidence, Ms Sloan, 26 June 2017, p 26; Evidence, Mr Henry Anning, Sector Lead for Bioenergy, Clean Energy Finance Corporation, 26 June 2017, p 34.

⁷²⁹ RENEW NSW, *About RENEW NSW*, <http://renewnsw.com.au/about-renew-nsw/>.

8.23 Despite supporting a regional approach to waste infrastructure management, stakeholders noted that its effectiveness is hampered without appropriate mechanisms or sufficient support in place. For example, the committee heard that ROCs face legal and financial limitations that hinder their ability to develop waste infrastructure. The City of Canterbury Bankstown explained:

Individual councils have limited power and resources to secure suitable sites and address these issues. Even regional groupings are somewhat limited in their power and capability to drive the procurement and protection of appropriate sites for sensitive waste infrastructure including new landfills and large-scale processing facilities that will ultimately service the Greater Sydney population.⁷³⁰

8.24 Likewise, Ms Sloan stated ‘The ROCs do not have any power. They do share services, but they cannot join in and resolve to do things and override a council, because you cannot bind a council’.⁷³¹ Ms Sloan suggested this may undermine the ability of ROCs to aggregate waste and enter into long-term contracts for waste facilities.⁷³²

8.25 Ms Amanda Bombaci, Regional Waste Coordinator at WSROC, drew attention to the importance of long-term planning for waste infrastructure, arguing that regional plans are currently limited to short-term targets to meet corresponding funding cycles.⁷³³

8.26 Meanwhile, Mr David Hojem, Manager of Waste Services at Shoalhaven City Council, argued that the current approach does not adequately acknowledge the challenges faced by regional councils, stating: ‘Most of [the NSW Government plans] are designed around the metropolitan area and they do not give any thought to the different challenges we face in the regional areas’.⁷³⁴

8.27 MRA Consulting Group suggested that there is role for government to guide and provide authority to local councils over waste infrastructure, as is the case in some international jurisdictions:

In Asia and Europe, EfW facilities are often procured by councils or groups of councils. Councils and ROCs (Regional Organisation of Councils) should be provided with greater guidance from government on the procurement of regional infrastructure, and given the authority to lead in the consolidation of residual wastes to ensure the long term financial viability of all waste processing infrastructure.⁷³⁵

⁷³⁰ Submission 168, City of Canterbury Bankstown, p 2. Also see, Evidence, Ms Bombaci, 27 June 2017, p 34.

⁷³¹ Evidence, Ms Sloan, 26 June 2017, p 26.

⁷³² Evidence, Ms Sloan, 26 June 2017, p 26.

⁷³³ Evidence, Ms Bombaci, 27 June 2017, p 33.

⁷³⁴ Evidence, Mr David Hojem, Manager, Waste Services, Shoalhaven City Council, 7 August 2017, p 35.

⁷³⁵ Submission 170, MRA Consulting Group, p 4.

A plan for metropolitan Sydney

- 8.28'** A key issue raised by the City of Sydney was that, unlike other utilities such as water, there is no overarching strategic plan for waste management in metropolitan Sydney.⁷³⁶ While regional plans have been developed, the city argued that a metropolitan plan is needed to meet the unique challenges of managing waste in Sydney, such as 'the concentration of waste generation, the need to manage resources at the point of generation to facilitate a more circular based economy, and ... to address some of the governance issues that inhibit optimal waste outcomes ...'.⁷³⁷
- 8.29'** Moreover, it was argued that managing waste in this way would provide for strategic planning that 'identifies and secures land for our existing and future waste treatment capacity requirements'.⁷³⁸ The city emphasised the importance of such an approach given that metropolitan waste is rarely managed within the local government area it is generated in.⁷³⁹
- 8.30'** Mr Chris Derksema, Sustainability Director at the City of Sydney, suggested there be 'a single lead organisation' responsible for the development and delivery of the metropolitan waste plan with support from other agencies and stakeholders.⁷⁴⁰ He suggested that this role could be played, at least in part, by the EPA, stating: '... the EPA would be seen to be the starting agency, at least, or it could be a consortium of agencies between the Department of the Environment and Energy as well as EPA to start with'.⁷⁴¹
- 8.31'** There was also support from other inquiry participants to develop and implement a metropolitan plan for waste management in Sydney.⁷⁴²

Need for a lead agency

- 8.32'** A number of local government stakeholders expressed concern that there was no lead agency in relation to waste infrastructure management. Indeed, the City of Sydney noted that the NSW EPA has little control over the strategic direction of waste infrastructure despite being responsible for waste:

In NSW, the Environmental Protection Authority (EPA) is responsible for waste as the environmental regulator and promotion of increased resource recovery, but it has limited ability to influence the strategic development and placement of waste or resource recovery treatment facilities.⁷⁴³

- 8.33'** Others noted the limited role played by the NSW Department of Planning and Environment. Blacktown City Council told the committee: 'The Department of Planning and Environment

⁷³⁶ Submission 198, City of Sydney, pp 1-2.

⁷³⁷ Evidence, Mr Derksema, 7 August 2017, p 19.

⁷³⁸ Submission 198, City of Sydney, p 3.

⁷³⁹ Submission 198, City of Sydney, p 1. Also see, Submission 150, WSROC, p 2.

⁷⁴⁰ Evidence, Mr Derksema, 7 August 2017, p 19. Also see, Submission 198, City of Sydney, p 8.

⁷⁴¹ Evidence, Mr Derksema, 7 August 2017, p 21.

⁷⁴² See, Submission 150, WSROC, p 2; Submission 214, Blacktown City Council, p 7; Submission 167, NSROC, p 2.

⁷⁴³ Submission 198, City of Sydney, p 3.

appears to be taking no role in planning for such infrastructure particularly identifying appropriate locations'.⁷⁴⁴ WSROC concurred, stating: 'There appears to be no role taken by Department of Planning and Environment to plan for such infrastructure, which is concerning given waste disposal and processing is an essential household and commercial service'.⁷⁴⁵

- 8.34'** Stakeholders agreed that both the NSW Department of Planning and Environment and the NSW EPA should have roles in infrastructure planning,⁷⁴⁶ with the City of Sydney suggesting that increased collaboration between the two bodies is required to achieve waste management objectives.⁷⁴⁷
- 8.35'** Ultimately, the City of Sydney proposed that the NSW Government 'identify a lead organisation as responsible for delivery of adequate waste and resource recovery capacity with support from other agencies and stakeholders'.⁷⁴⁸ Ms Bombaci suggested a lead agency would overcome the 'fragmented'⁷⁴⁹ nature of waste management infrastructure development, and would reflect the fact that waste management is a collective responsibility.⁷⁵⁰
- 8.36'** The City of Canterbury Bankstown pointed out that the Commonwealth Productivity Commission's 2006 report *Waste Management* states: 'the State and Territory should consider ... passing the responsibilities for waste disposal to appropriately-constituted regional waste authorities'.⁷⁵¹ The report reasoned that such authorities were important 'particularly in those larger urban centres where the majority of local governments do not have the scale or resources to efficiently and effectively handle such roles'.⁷⁵²

Land and planning processes

- 8.37'** Throughout the inquiry, stakeholders emphasised the need to identify and set aside land for future waste infrastructure development. Indeed, SSROC observed that the 'most pressing issue' for the provision of waste infrastructure is ensuring that suitable land is available to site these projects.⁷⁵³ The key concerns for stakeholders included:

⁷⁴⁴ Submission 214, Blacktown City Council, p 8.

⁷⁴⁵ Submission 150, WSROC, p 2.

⁷⁴⁶ Evidence, Ms Bombaci, 27 June 2017, p 33.

⁷⁴⁷ Submission 198, City of Sydney, p 8.

⁷⁴⁸ Submission 198, City of Sydney, p 8.

⁷⁴⁹ Evidence, Ms Bombaci, 27 June 2017, p 33.

⁷⁵⁰ Evidence, Ms Bombaci, 27 June 2017, p 34.

⁷⁵¹ Submission 168, City of Canterbury Bankstown, p 2, quoting Productivity Commission, *Waste Management* (2006), p XXXVIII.

⁷⁵² Submission 168, City of Canterbury Bankstown, p 2, quoting Productivity Commission, *Waste Management* (2006), p XXXVIII.

⁷⁵³ Submission, 176, SSROC, p 2.

- it is increasingly difficult to secure land, particularly in western Sydney, for waste facilities due to urban encroachment and competition for commercial and industrial land⁷⁵⁴
- there is a great deal of opposition to waste facilities in urban areas⁷⁵⁵
- the cost of land is so high, especially in Sydney, that it is not viable to build waste infrastructure,⁷⁵⁶ which leads to more truck movements as waste is managed increasingly further away from where it is generated⁷⁵⁷
- finding land within appropriately zoned precincts and air sheds, particularly for energy from waste facilities⁷⁵⁸
- transportation challenges for greenfield sites, such as poor road networks and long travel times, and lack of convenient aggregation points (i.e. transfer stations)⁷⁵⁹
- once a waste facility, such as the Eastern Creek landfill, closes, the site may not be used for similar services again, particularly as planning authorities must manage residents' expectations, waste needs and environmental considerations.⁷⁶⁰

8.38' In addition, stakeholders suggested that the lack of legislative certainty exacerbated the inherent difficulties of developing waste management infrastructure, specifically the need for market certainty and appropriate risk allocation.⁷⁶¹ The Hunter Joint Organisation of Councils explained some of these complexities and emphasised the need for a consistent regulatory environment:

The timeline for the development of any new EfW facilities is at least 3-5 years given the range of required financing, planning and approval processes. The waste industry requires clear and consistent policy to allow certainty for investment decisions and to source the capital to develop new facilities.⁷⁶²

8.39' It was also suggested that improving planning processes will increase competition, and prevent the development of a potential monopoly or duopoly.⁷⁶³

⁷⁵⁴ Submission 150, WSROC, pp 1-2. Also see, Submission 198, City of Sydney, p 3; Submission 149, Wollongong City Council, pp 1-2.

⁷⁵⁵ Evidence, Ms Gemma Dawson, Manager Waste Strategy, City of Sydney, 7 August 2017, p 21.

⁷⁵⁶ Submission 326, Local Government NSW, p 4

⁷⁵⁷ See, Evidence, Ms Dawson, 7 August 2017, p 21.

⁷⁵⁸ Submission 215, Waste Management Association of Australia, p 3. Also see, Evidence, Ms Sloan, 26 June 2017, p 29.

⁷⁵⁹ Submission 215, Waste Management Association of Australia, p 3.

⁷⁶⁰ See, Submission 150, WSROC, p 3; Submission 214, Blacktown City Council, p 8; Submission 215, Waste Management Association of Australia, p 3.

⁷⁶¹ See, Submission 145, Suez, p 2; Submission 215, Waste Management Association of Australia, p 10; Submission 146, Randwick City Council, p 3; Evidence, Mr Roger Bligh, Sales Director, Metals, Energy and Water, Outotec South-East Asia Pacific, 7 August 2017, p 50.

⁷⁶² Submission 154, Hunter Joint Organisation of Councils, p 3.

⁷⁶³ See, Submission 143, New Energy Corporation, p 6; Submission 215, Waste Management Association of Australia, p 10.

- 8.40^{*} Inquiry participants encouraged the NSW Government to implement a stable planning and regulatory environment which includes clear processes for siting and permitting of waste management facilities,⁷⁶⁴ and supported the development of a waste management infrastructure SEPP.⁷⁶⁵
- 8.41^{*} Stakeholders argued both courses of action would provide certainty in the planning process, such as decreasing approval timeframes, while maintaining the commercial competitiveness of the industry and addressing community concerns.⁷⁶⁶
- 8.42^{*} The need for a consistent planning process for all waste management facilities is examined in Chapter 8.

Committee comment

- 8.43^{*} While industry is clearly best-placed to deliver waste management solutions, the committee expects the NSW Government to take a lead role in strategically planning waste infrastructure across the state. We note that the NSW EPA has released the consultation draft of the *Waste and Resource Recovery Infrastructure Strategy* and expects the final strategy to be released in early 2018. We recommend that the strategy consider many of the proposals raised by stakeholders in this inquiry.

Recommendation 29

That the NSW Environment Protection Authority *Waste and Resource Recovery Infrastructure Strategy* provide guidance on matters including:

- identifying appropriate precincts and locations, including buffer zones, for waste facilities
- facilitating new infrastructure, particularly alternative waste management options and energy from waste plants
- enabling the circular economy, including waste generator education, product stewardship, waste levies, market support initiatives and avoidance, reduction and re-use support subsidies
- creating ‘real markets’ for secondary materials from waste.

- 8.44^{*} Evidence presented during the inquiry clearly demonstrates that regional collaboration is essential for the long-term sustainability of the state’s waste infrastructure, particularly as we

⁷⁶⁴ See, Evidence, Ms Dougall, 7 August 2017, p 26; Evidence, Mr Derksema, 7 August 2017, p 19; Evidence, Mr Bligh, 7 August 2017, pp 50–51; Mr Tony Khoury, Executive Director, Waste Contractors and Recyclers Association of NSW, 17 August 2017, p 9; Submission 144, Australian Council of Recycling, p 7; Submission 145, Suez, p 2; Submission 150, WSROC, p 3; Submission 158, Hunters Hill Council, p 1; Submission 173a, Jacfin, p 1; Submission 215, Waste Management Association of Australia, pp 9-10.

⁷⁶⁵ See, Evidence, Mr Ritchie, 7 August 2017, p 11; Evidence, Ms Sloan, 26 June 2017, p 29; Evidence, Mr Derksema, 7 August 2017, p 19; Submission 148, Veolia Australia and New Zealand, p 14.

⁷⁶⁶ See, Evidence, Ms Sloan, 26 June 2017, p 29. Also see, Submission 215, Waste Management Association of Australia, p 4; Submission 148, Veolia Australia and New Zealand, p 14.

move towards alternate waste management options which require significant investment. As discussed in Chapter 2, we note that councils, and therefore ratepayers, have contributed significant funds to consolidated revenue through payment of the waste levy. The committee believes more of these funds should be invested in regional waste management solutions. This is why the committee has supported greater hypothecation of levy funds to support the development of waste infrastructure.

- 8.45' While regional waste management plans and Regional Organisations of Councils are good starting points, the committee recognises the need to enhance the powers of these organisations to procure and site waste infrastructure. While we did not receive sufficient evidence to make a specific recommendation for legislative change, we recommend that the NSW Government investigate opportunities to enhance the collaborative powers of Regional Organisations of Councils to encourage investment in waste facilities, to be funded by the waste levy.

Recommendation 30

That the NSW Government investigate opportunities to enhance the collaborative powers of Regional Organisations of Councils to encourage investment in waste facilities, to be funded by the waste levy.

- 8.46' We also note concerns that there is no lead agency for waste infrastructure. While the NSW EPA is responsible for waste, the planning approval process is the responsibility of the NSW Department of Planning and Environment. Given the challenges facing the state in terms of waste infrastructure in the future, we believe it is vital that one government body is identified who can take lead responsibility and play that critical strategic coordination role. We therefore recommend that the NSW Government identify a government body – either an existing department or agency or a newly-created body, such as an expert panel comprising of representatives from relevant authorities – responsible for waste management infrastructure planning in New South Wales.
- 8.47' Further, the committee is persuaded by the need for a metropolitan Sydney waste management plan. The regional plans have not adequately addressed concerns specific to metropolitan Sydney, including the need for land to site facilities and the movement of waste around the city. We recommend that the body charged with responsibility for leading waste infrastructure planning develop a waste management infrastructure plan for metropolitan Sydney, in collaboration with local government.
- 8.48' The committee notes with concern the pressing need to identify suitable land to site waste infrastructure in New South Wales, particularly in Sydney. In short, it appears that establishing industrial zones for waste infrastructure is becoming increasingly difficult due to the increasing geographic spread, especially of Sydney residential areas, and the need to balance a potential exclusion zone for the comfort and safety of residents with having waste infrastructure in proximity to the areas producing waste.
- 8.49' We therefore believe that a significant component of the waste infrastructure planning body's role should be to collaborate with stakeholders, including the NSW Department of Planning and Environment and local councils, to identify and zone land, including buffer zones, for waste management infrastructure. The committee also recognises the need to encourage

greater certainty in the planning process and therefore recommends that a waste management infrastructure SEPP be developed.

Recommendation 31

That the NSW Government identify a government body, either an existing department or agency or a newly-created body, responsible for leading waste management infrastructure planning in New South Wales, including:

- leading the development of a waste management infrastructure plan for metropolitan Sydney, in collaboration with local government
 - identifying and zoning land, including buffer zones, for waste management facilities, in collaboration with the NSW Department of Planning and Environment and other stakeholders such as local councils
 - leading the development of a waste management infrastructure State Environmental Planning Policy, in collaboration with the NSW Department of Planning and Environment.
-

Landfill

- 8.50'** Landfill is currently the only option for managing residual waste in New South Wales. There are main two types of landfill: the first receives putrescible waste, and the second receives non-putrescible waste.
- 8.51'** The Australian Landfill Owners Association described landfills as 'an essential element in today's integrated waste management infrastructure'.⁷⁶⁷ However, other inquiry participants expressed significant concerns about the impact of landfills, including emissions of greenhouse gases, the ineffectiveness of landfill gas capture techniques, lack of amenity, and loss of renewable resources.⁷⁶⁸
- 8.52'** As discussed in Chapter 5, inquiry participants noted that disposal is the last step of the waste hierarchy and promoted the use of higher order waste management procedures.⁷⁶⁹
- 8.53'** As noted earlier, landfill capacity in New South Wales may be insufficient to meet future demand. The committee heard that following the closure, or imminent closure of smaller landfills around Sydney, the city's capacity for putrescible waste landfill is increasingly limited to the Suez facility at Lucas Heights and the Veolia's Woodlawn facility, which is 250 kilometres to the south of Sydney.⁷⁷⁰

⁷⁶⁷ Submission 394, Australian Landfill Owners Association, p 1.

⁷⁶⁸ See, Submission 326, Local Government NSW, p 5; Submission 198, City of Sydney, p 4; Submission 164, Alexandria Landfill, p 26.

⁷⁶⁹ Submission 215a, Waste Management Association of Australia, p 3. Also see, Submission 216, Re.Group, p 5.

⁷⁷⁰ Evidence, Ms Sloan, 26 June 2017, p 21. Also see Submission 148, Veolia Australia and New Zealand, p 2.

- 8.54** While there was some concern about the capacity of non-putrescible landfill,⁷⁷¹ a great deal of discussion focussed on the capacity of putrescible landfill.⁷⁷² For example, Veolia suggested that while the current landfill capacity for putrescible waste is sufficient, there is a need for long-term strategic consideration of future landfill needs:

... existing and proposed facilities, in combination, provide sufficient capacity at about 2.5 m[illion] tonnes annually, at current levels of putrescible residual waste generation, to serve the immediate waste disposal requirements for putrescible waste in Sydney. However, a long term strategic view of waste management in Sydney needs to recognise that as the population continues to increase and the city expands, it will be essential to have the infrastructure in place to manage the projected waste and recovered material streams.⁷⁷³

- 8.55** Likewise, Ms Sloan contended that Sydney will eventually need a new landfill unless more resource recovery facilities are developed:

Waste generation rates continue to increase—on average, 2.2 per cent per annum compared with a population increase of 1.5 per cent per annum—and unless additional resource recovery capacity is developed, New South Wales will eventually need to develop a new landfill or landfills to service the Sydney population.⁷⁷⁴

Landfill regulation

- 8.56** Stakeholders expressed significant concerns with regard to the regulation, or lack thereof, of landfill. The committee received evidence that under the current planning system it is easier to receive approval for a landfill than for alternativewaste treatment projects. The City of Sydney stated: 'Despite landfill being recognised as the least preferable method of managing resources and waste in the waste strategy, development approvals for the expansion of additional landfill capacity continue to be awarded at a greater volume than resource recovery'.⁷⁷⁵
- 8.57** Inquiry participants noted that, unlike energy from waste facilities, New South Wales has no resource recovery limits for landfills.⁷⁷⁶ The Waste Management Association of Australia contended that this is inconsistent with the waste management hierarchy: 'The current NSW EfW [energy from waste] Policy has established resource recovery hurdles for the use of waste in EfW, but without limits for landfills in its regulatory framework. This means that the recognised higher order use of waste faces more hurdles than landfilling'.⁷⁷⁷
- 8.58** HZI Australia concurred and concluded: 'By logic of the waste hierarchy, this should be overcome by either stricter hurdles for landfilling or the introduction of landfill bans for all

⁷⁷¹ Submission 148, Veolia Australia and New Zealand, p 5.

⁷⁷² See, Evidence, Mr Ritchie, 7 August 2017, p 10; Submission 167, NSROC, p 1.

⁷⁷³ Submission 148, Veolia Australia and New Zealand, p 3.

⁷⁷⁴ Evidence, Ms Sloan, 26 June 2017, p 21.

⁷⁷⁵ Submission 198, City of Sydney, p 4. Also see, Submission 156, Sutherland Shire Council, p 2.

⁷⁷⁶ See, Submission 198, City of Sydney, p 4; Evidence, Mr Ritchie, 7 August 2017, pp 15-16; Submission 141, Toxfree Australia, p 1.

⁷⁷⁷ Submission 215, Waste Management Association of Australia, p 8. Also see, Submission 143, New Energy Corporation, p 3.

non-treated waste or waste with biological potential and any plastics'.⁷⁷⁸ Other proposals for strengthening landfill regulation included:

- establishing clear standards for landfill sites that incorporate agreed industry best performance indicators, particularly around leachate treatment and the rectification of legacy landfills⁷⁷⁹
- establishing clearly mandated buffer zones around landfills, and enabling multiple waste uses on site⁷⁸⁰
- ensuring landfill is a 'final sink' for residual materials only, as is the case in certain European countries⁷⁸¹

Committee comment

- 8.59'** The committee notes with concern the apparent subversion of the waste management hierarchy which sees extensive resource recovery criteria established for energy from waste facilities, while there is no similar policy for landfill. Obviously, the waste levy has successfully deterred recyclable materials from being sent from landfill. However, the committee believes that resource recovery criteria for landfill would complement the levy and encourage further recycling. We therefore recommend that the NSW EPA develop and implement resource recovery criteria for landfills in New South Wales.

Recommendation 32

That the NSW Environment Protection Authority develop and implement resource recovery criteria for landfills in New South Wales.

Recycling

- 8.60'** During the inquiry the committee heard that New South Wales has the 'largest recycling sector in Australia'⁷⁸², with Mr Mike Ritchie, Managing Director of MRA Consulting Group, stating that 'New South Wales is one of the best recycling States in the country'⁷⁸³.
- 8.61'** However, Mr Buffier from the NSW EPA, advised that New South Wales is also 'the second highest per capita producers of waste in the world' and stressed the importance of achieving the 75 per cent landfill diversion target, stating:

We are on about 63 per cent recycling rates now—up from 45 per cent. We are aiming to get to 75 per cent recycling rates by 2021. If we do not get to 75 per cent recycling

⁷⁷⁸ Submission 179, HZI Australia, p 5.

⁷⁷⁹ Submission 215a, Waste Management Association of Australia, p 2.

⁷⁸⁰ Submission 215a, Waste Management Association of Australia, p 2.

⁷⁸¹ Evidence, Dr Marc Stammbach, Managing Director, HZI Australia, 17 August 2017, p 15. Also see, Submission 164, Alexandria Landfill, p 12.

⁷⁸² Evidence, Mr Ritchie, 7 August 2017, p 10.

⁷⁸³ Evidence, Mr Ritchie, 7 August 2017, p 10.

rates we will be drowning in our own waste. The reality is we will be exhausting landfill in Sydney if we do not get to 75 per cent. The total volume of waste produced in New South Wales is at about—we are the second highest per capita producers of waste in the world—17 million tonnes.⁷⁸⁴

- 8.62** The committee heard that it is also critical to consider resource recovery and waste generation rates in light of the fact that since 2012, there has only been a 'slight reduction' in per capita waste reduction in New South Wales.⁷⁸⁵
- 8.63** It was unclear how many recyclables are currently landfilled. Mr Buffier contended that a very low percentage of recyclables end up in landfill in New South Wales '... because if a recyclable ends up in landfill, you pay the levy on it'.⁷⁸⁶ In addition, the committee heard that while there is agreement about how to measure waste and recycling levels, the NSW EPA intends to take some issues raised in relation to these definitions 'to a national level for discussion'.⁷⁸⁷
- 8.64** Many councils said that they are working towards achieving the *NSW Waste and Resource Recovery Strategy* target of 75 per cent diversion of all waste by 2021.⁷⁸⁸ However, the committee heard that recycling rates in local government areas vary.⁷⁸⁹ For example, within Shoalhaven City Council the recycling rate 'varies between 47 per cent and 67 per cent, ... [while] West Nowra is 14.1 per cent'.⁷⁹⁰ Cr Stephen Bali, Mayor of Blacktown City Council, argued councils 'should be learning from each other how to divert waste' from landfill, to improve municipal recycling rates.⁷⁹¹

Barriers to recycling

- 8.65** Inquiry participants told the committee the recycling industry is adversely affected by a range of factors including:
- a lack of local resource recovery capacity⁷⁹²
 - changes in the international market⁷⁹³
 - lack of end markets⁷⁹⁴
 - cost-efficiency limits.⁷⁹⁵

⁷⁸⁴ Evidence, Mr Buffier, 24 November 2017, p 7.

⁷⁸⁵ Evidence, Mr Buffier, 17 August 2017, p 66.

⁷⁸⁶ Evidence, Mr Buffier, 17 August 2017, p 67.

⁷⁸⁷ Evidence, Mr Buffier, 17 August 2017, pp 63-64.

⁷⁸⁸ See, Submission 150, WSROC, p 4; Submission 154, Joint Hunter Organisation of Councils, p 5, Submission 146, Randwick City Council, p 1.

⁷⁸⁹ See, Submission 146, Randwick City Council, p 1; Submission 149, Wollongong City Council, p 1; Submission 298, Shoalhaven City Council, p 2.

⁷⁹⁰ Submission 298, Shoalhaven City Council, p 2.

⁷⁹¹ Evidence, Cr Stephen Bali, Mayor, Blacktown City Council, 27 June 2017, p 31.

⁷⁹² Submission 156, Sutherland Shire Council, p 2.

⁷⁹³ Evidence, Mr Khoury, 17 August 2017, p 2.

⁷⁹⁴ Submission 115, Cleanaway, p 3.

- 8.66** While these issues are concerning, the committee also heard that these barriers have driven stakeholders to consider alternative waste technologies.⁷⁹⁶ For example, as discussed in Chapter 5, certain councils and ROCs are considering energy from waste due to constraints around existing resource recovery and waste processing options.⁷⁹⁷
- 8.67** In addition, during the inquiry the committee heard that China had announced new standards for the importation of plastics for recycling, effectively closing the Chinese market for processing baled up plastics from yellow household bins from Australia.⁷⁹⁸ It was suggested that this import ban stemmed from the high level of contamination in the baled-up recyclables.⁷⁹⁹
- 8.68** Mr Harry Wilson, President of the Waste Contractors and Recyclers Association of NSW, expressed concern about the impact of the closure of the Chinese market. Mr Wilson noted that the industry is looking for alternative international markets,⁸⁰⁰ and pointed to the lack of local markets as one of the reasons that the plastics were initially shipped to China, stating ‘it has been hard to create markets in Australia for products made from recycled plastics.’
- 8.69** In response to questioning about the closure of the Chinese market and the potential for baled up plastics to be stockpiled and exceed licenced limits, Mr Buffier informed the committee that as at November 2017, ‘I do not have the precise answer to that at this stage. It is a problem’.⁸⁰¹
- 8.70** Inquiry participants also raised specific concerns regarding the challenges faced by the local glass recycling industry and the difficulty in producing products to suit the marketplace⁸⁰² within the current regulatory system. Indeed, Mr Mark Glover, Director of the Australian Industrial Ecology Network, said the existing recycling market for glass had failed and that industry required support to develop a viable solution, such as using glass as a ‘secondary resource’.⁸⁰³
- 8.71** Mr Tony Khoury, Executive Director of the Waste Contractors and Recyclers Association of NSW explained that glass waste could be used for drainage mediums and road base, but that the market was constrained by the procurement decisions of government, stating, the ‘big missing link ... is the purchasing decisions of government both at a State and local level who

⁷⁹⁵ See, Submission 149, Wollongong City Council, p 2; Submission 179, HZI Australia, p 2; Submission 215, Waste Management Association of Australia, p 4.

⁷⁹⁶ Submission 149, Wollongong City Council, p 3.

⁷⁹⁷ Submission 150, WSROC, p 3.

⁷⁹⁸ Evidence, Mr Khoury, 17 August 2017, p 7; Evidence, Dr Stambach, 17 August 2017, p 14; Also see, Phil Lasker, Jenya Goloubeva, Bill Birtles, *China’s ban on foreign waste leaves Australian recycling industry eyeing opportunities* (11 December 2017), ABC News, <http://www.abc.net.au/news/2017-12-10/china-ban-on-foreign-rubbish-leaves-recycling-industry-in-a-mess/9243184>.

⁷⁹⁹ Evidence, Mr Harry Wilson, President, Waste Contractors and Recyclers Association of NSW, 17 August 2017, p 7.

⁸⁰⁰ Evidence, Mr Wilson, P17 August 2017, p 7.

⁸⁰¹ Evidence, Mr Buffier, 24 November 2017, p 10.

⁸⁰² Evidence, Mr Wilson, 17 August 2017, p 3.

⁸⁰³ Evidence, Mr Mark Glover, Director, Australian Industrial Ecology Network, 17 August 2017, p 39.

should be encouraged more to buy the product back that they are generating through the kerbside system’.⁸⁰⁴

8.72 According to stakeholders, government regulation prevents the waste glass market from expanding, including:

- the exemption process is slow, for example, in New South Wales an individual exemption is required each time a product containing waste glass is used in road base whereas in Europe a generic approval can be sought and approved⁸⁰⁵
- there are definitional issues around what constitutes ‘waste glass’⁸⁰⁶
- suggestion that there is a conflict in having a regulator who is also empowered to define waste.⁸⁰⁷

Proposed government and industry responses

8.73 Stakeholders discussed potential responses from government and industry to improve the recycling industry, including a review of the waste levy system and product stewardship.

8.74 Mr Grant Musgrove, Chief Executive Officer of the Australian Council of Recycling, called for a review of the waste levy system to better reflect what is recyclable and to reduce the waste levy for ‘residuals of recycling’ which are ‘non-viable’. Mr Musgrove explained:

We have residuals of recycling—cardboard, cars, anything. They are technologically and commercially non-viable. They are too materially complex. Government has listened to us and given us a 50 per cent reduction in the landfill levy applied to shredder floc, which is what is left over after you shred a car ... There is the potential for that to be applied, theoretically, across other material streams, but that involves a root-and-branch review of the levy system.⁸⁰⁸

8.75 The Waste Contractors and Recyclers Association of NSW and the Australian Industrial Ecology Network similarly advocated for changes to the waste levy, arguing that subsidies and incentives drawn from the levy could be used by recyclers to develop facilities, ‘produce a cleaner product’ and assist recyclers compete ‘with the producers of virgin quarry products’.⁸⁰⁹

8.76 Mr Glover strongly advocated for industry-led, whole-of-life product stewardship at a national level to improve recycling outcomes and minimise residual waste. Mr Glover argued that currently manufacturers, users and recyclers are not engaged in designing a system within which products are managed to maximise their ‘highest net resource value’ or follow

⁸⁰⁴ Evidence, Mr Khoury, 17 August 2017, p 3.

⁸⁰⁵ Evidence, Mr Garbis Simonian, Chairman, Australian Industrial Ecology Network, 17 August 2017, p 39.

⁸⁰⁶ See, Evidence, Mr Wilson, 17 August 2017, p 3; Evidence, Mr Simonian, 17 August 2017, p 42.

⁸⁰⁷ Evidence, Mr Simonian, 17 August 2017, p 42.

⁸⁰⁸ Evidence, Mr Grant Musgrove, Chief Executive Officer, Australian Council of Recycling, 26 June 2017, p 42.

⁸⁰⁹ Evidence, Mr Wilson, 17 August 2017, p 3; Evidence, Mr Khoury, 17 August 2017, p 3; Evidence, Mr Simonian, 17 August 2017, p 41.

‘streaming or cascading’ principles where products can be directed to their ‘next best use’ and avoid becoming a ‘stranded asset’.⁸¹⁰ Mr Glover further stated:

Given half a chance, using [Australian Industrial Ecology Network] AIEN principles we could sit down with the right people and come up with a solution, but they are not in the room at the moment. Those are the areas where governments can struggle because they simply do not have the tools to be able to deliver it.

... it is very important to get the original manufacturers or the brands that put this stuff in the market to be at the table to understand the complexities and help come up with solutions. They are very often just let completely off the hook and allowed to produce wine bottles because we love the product but at the end of the day they are not there to help us solve the other problem. That is where you do have Federal legislation which can start to bring this together if we get a bit of national cohesion.⁸¹¹

- 8.77’ Dr Stambach similarly advocated for more local recycling solutions which better adhered to the principles of sustainability.⁸¹²
- 8.78’ The circular economy is examined in the following section.

Committee comment

- 8.79’ While the committee acknowledges that resource recovery rates are relatively high in New South Wales, recycling is not without its challenges and costs. The committee is particularly concerned about the lack of local recycling capacity. As discussed throughout this report, waste management issues could be addressed more thoroughly should additional waste levy funds be released from consolidated revenue for this purpose. We note our earlier recommendation to hypothecate more waste levy funds, and further recommend that the NSW EPA provide additional support to local councils and resource recovery organisations to meet recycling targets and manage issues such as stream contamination, bureaucratic barriers, lack of product stewardship, and limited market opportunities.

Recommendation 33

That the NSW Environment Protection Authority provide additional support to local councils and resource recovery organisations to meet recycling targets and manage issues such as stream contamination, bureaucratic barriers, lack of product stewardship, and limited market opportunities.

- 8.80’ We are disappointed with the NSW EPA’s response to the recent import ban of recycled plastics in China. We note that unless an alternate market is located, which seems unlikely, recyclable plastics will be stockpiled, leading to potential breaches of environmental protection licences and risks to human health and the environment, not to mention the potential collapse of the state’s kerbside recycling system. We recommend that the NSW EPA urgently

⁸¹⁰ Evidence, Mr Glover, 17 August 2017, pp 38-39. Also see, Evidence, Mr Simonian, 17 August 2017, p 41.

⁸¹¹ Evidence, Mr Glover, Director, 17 August 2017, p 42.

⁸¹² Evidence, Dr Stambach, 17 August 2017, p pp 14-16.

investigate, identify and implement alternative solutions to the ban on the importation of recyclable plastics by China, to ensure that waste is not stockpiled.

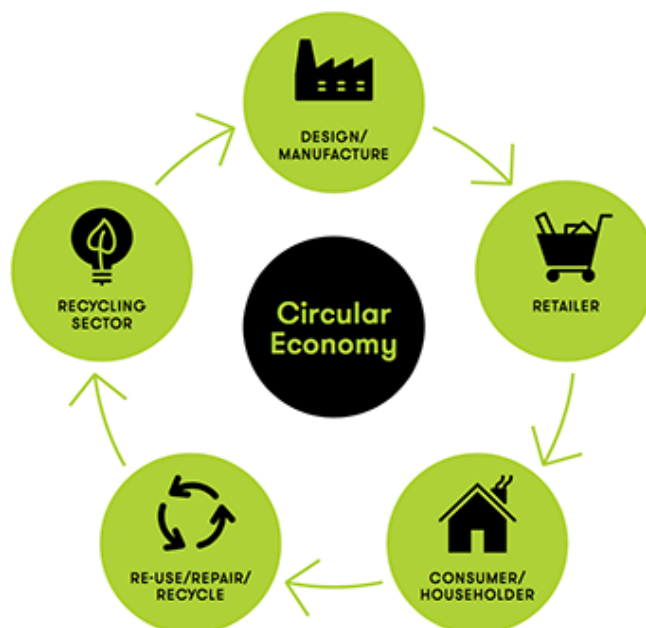
Recommendation 34

That the NSW Environment Protection Authority urgently investigate, identify and implement alternative solutions to the ban on the importation of recyclable plastics by China.

Enabling the circular economy

8.81⁸¹³ According to the Australian National Waste Report, unlike the traditional 'take, make and dispose' economic model, the circular economy 'envisages keeping products, components, and materials at their highest utility and value at all times'.⁸¹⁵ Veolia reported that Australia is set to garner approximately \$26 billion in value from the circular economy by 2025.⁸¹⁴ Green Industries SA developed the infographic below to demonstrate the circular economy.

Table 8⁸¹⁴ The circular economy



Green Industries SA, What is the circular economy, <http://www.greenindustries.sa.gov.au/circular-economy>

8.82⁸¹⁵ There was consensus amongst stakeholders about the need to promote the circular economy.⁸¹⁵ However, inquiry participants explained that it is challenging to take action for various reasons, including:

⁸¹³ Tabled document, NSW EPA, *Australian National Waste Report 2016*, received 17 August 2017, p 32.

⁸¹⁴ Veolia, *Circular economy and the city* (5 February 2016), <https://www.veolia.com/anz/circular-economy-and-the-city>.

⁸¹⁵ See, Evidence, Ms Sloan, 26 June 2017, p 23; Evidence, Ms Dougall, 7 August 2017, p 26; Evidence, Mr Derksema, 7 August 2017, p 20.

- there is no money from Waste Less, Recycle More dedicated to waste re-use infrastructure, often leaving social enterprise and charities to promote these activities⁸¹⁶
- as discussed earlier, there is a lack of government support for ‘sustainable procurement methodologies’ such as using road base that includes recycled glass⁸¹⁷
- it is difficult to define a successful circular economy, thus making it challenging to allocate grant funding, and develop policy and legislation⁸¹⁸
- as discussed in Chapter 5, there is debate about whether energy from waste technologies can be used to support the circular economy.

8.83 To address issues surrounding the circular economy, Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, suggested that ‘... the Committee start some conversations about a circular economy and what it means for New South Wales and, indeed, the nation. Legislative guidelines would also help to drive waste management because they are key to a circular economy’.⁸¹⁹ Ms Sloan noted South Australian Government is investigating opportunities to embed the circular economy in markets.⁸²⁰

Extended Producer Responsibility

8.84 The concept of ‘Extended Producer Responsibility’ (EPR) was discussed by several stakeholders during the inquiry. The Waste Management Association of Australia explained what is meant by the term:

Extended Producer Responsibility (EPR) commonly forms part of an integrated waste management strategy, and is defined in the 2001 OECD Guidance as “an environmental policy approach in which a producer’s responsibility for a product is extended to the post-consumer stage of a product’s life cycle”.

It adopts the Polluter Pays Principle (PPP), an environmental policy principle which requires that the costs of pollution be borne by those who cause it.

And the circular economy concept, aiming to close materials loops and extend the lifespan of materials through longer use and the increased use of secondary raw materials, improving resource security.⁸²¹

8.85 The Waste Management Association of Australia said benefits of EPR schemes include increasing recycling rates, reducing public expenditure on waste management and encouraging

⁸¹⁶ Evidence, Ms Bombaci, 27 June 2017, p 31. Also see Evidence, Mr Antony Lewis, Secretary Blacktown and District Environment Group, 27 June 2017, p 48.

⁸¹⁷ Evidence, Ms Sloan, 26 June 2017, p 23.

⁸¹⁸ Evidence, Mr Glover, 17 August 2017, p 38.

⁸¹⁹ Evidence, Associate Professor Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland, 7 August 2017, p 44.

⁸²⁰ Evidence, Ms Sloan, 26 June 2017, p 23.

⁸²¹ Submission 215, Waste Management Association of Australia, p 12. Also see, Submission 144, Australian Council of Recycling, p 4.

the maximum use from products.⁸²² Ms Sloan told the committee that EPR also offers an opportunity to consider how a product comes to market and encourages early engagement with waste generators.⁸²³

- 8.86'** Types of products that attract EPR include small consumer electronics, large appliances, packaging (including plastics, beverage containers), tyres, end of life vehicles and batteries, waste oil, paint, chemicals and fluorescent light bulbs.⁸²⁴ Mr Garth Lamb, NSW Branch President of the Waste Management Association of Australia, said EPR is particularly beneficial when addressing problematic wastes.⁸²⁵
- 8.87'** A national approach has been taken to EPR schemes,⁸²⁶ with EPR principally governed by the *Product Stewardship Act 2011* (Cth). The NSW EPA explained: 'Each year all jurisdictions provide a product list of problematic wastes for attention under the *Product Stewardship Act*. Management at a national level can provide consistent action to achieve the product stewardship goals'.⁸²⁷ Examples of national EPR schemes include the National Television and Computer Recycling Scheme, and the Australian Packaging Covenant.⁸²⁸ The Australian Government commenced a review of the *Product Stewardship Act* in March 2017.⁸²⁹
- 8.88'** However, Mr Grant Musgrove, Chief Executive Officer of the Australian Council of Recycling, noted that most Commonwealth schemes are voluntary and argued this undermined their effectiveness: 'All of those schemes, other than e-waste, are voluntary. To put it mildly ... none of the schemes are working because of their voluntary nature'.⁸³⁰ Mr Musgrove added: 'Quite frankly, the Commonwealth is asleep at the wheel'.⁸³¹ Moreover, the Australian Council of Recycling stated that Australia 'falls way behind' other comparable countries in respect to EPR programs.⁸³²
- 8.89'** The *Waste Avoidance and Resource Recovery Act 2001* provides for the introduction of EPR schemes in New South Wales. The container deposit scheme, which commenced operation in December 2017, is an example of an EPR initiative. Mr Musgrove suggested that

⁸²² Submission 215, Waste Management Association of Australia, p 12 quoting OECD, 'The State of Play on Extended Producer Responsibility (EPR): Opportunities and Challenges - Global Forum on Environment: Promoting Sustainable Materials Management' (2014), p 3.

⁸²³ Evidence, Ms Sloan, 26 June 2017, p 25.

⁸²⁴ Submission 144, Australian Council of Recycling, p 5.

⁸²⁵ Evidence, Mr Lamb, 26 June 2017, p 25.

⁸²⁶ NSW EPA, *Product stewardship schemes* (22 September 2017), <http://www.epa.nsw.gov.au/your-environment/recycling-and-re-use/warr-strategy/product-stewardship-schemes>; Submission 144, Australian Council of Recycling, p 5.

⁸²⁷ NSW EPA, *Product stewardship schemes* (22 September 2017), <http://www.epa.nsw.gov.au/your-environment/recycling-and-re-use/warr-strategy/product-stewardship-schemes>.

⁸²⁸ NSW EPA, *Product stewardship schemes* (22 September 2017), <http://www.epa.nsw.gov.au/your-environment/recycling-and-re-use/warr-strategy/product-stewardship-schemes>.

⁸²⁹ Media Release, Hon Josh Frydenberg MP, Minister for Environment and Energy, 'Review of product stewardship act 2011', 10 March 2017, <http://www.environment.gov.au/minister/frydenberg/media-releases/pubs/mr20170310.pdf>.

⁸³⁰ Evidence, Mr Musgrove, 26 June 2017, p 40.

⁸³¹ Evidence, Mr Musgrove, 26 June 2017, p 40.

⁸³² Submission 144, Australian Council of Recycling, p 4.

once the container deposit scheme is established, the necessary infrastructure will be in place to develop other EPR schemes such as a more effective recycling system for e-waste:

When the CDS [container deposit scheme] is introduced, over time that will have an entire level of infrastructure built around it and that maybe very useful in subjecting other materials to EPR—think something like e-waste. Why should you not pay a few dollars extra for a laptop or something and be able to get a refund when you take it back to the store? We can then process it. A lot more could be done at the Commonwealth level and in time—but I would say the time is not quite ready yet in terms of the infrastructure—post CDS, a couple of years down the road we can look at other material streams.⁸³³

- 8.90** Stakeholders encouraged the development of more EPR initiatives. For example, Ms Jane Bremmer, Secretary of the National Toxics Network, said that EPR is a ‘very important’ component of the ‘Zero Waste programs’ and would ‘definitely’ work in Australia.⁸³⁴ Similarly, Ms Gabrielle Maston said that the government must look outside of ‘band-aid’ solutions to waste and ‘create a culture of recycling’, including by taking actions such as: ‘... ban plastic bags, education on reducing food packing waste in households, education programs for big food to reduce food packaging in stores, tax industrial companies who produce waste, create compost exchange centres’.⁸³⁵
- 8.91** Mr Antony Lewis Secretary of the Blacktown and District Environment Group, expressed the view that industry, that is the waste generator, is best positioned to manage waste re-use and reduction,⁸³⁶ and argued that the government needs to ensure the domestic market is not undercut by poorly manufactured imported products.⁸³⁷
- 8.92** The Australian Council of Recycling cautioned that the introduction of energy from waste facilities prior to the introduction of EPR legislation may create certain challenges including the potential loss of recyclable and recoverable material back into a circular material economy, and the incineration of wastes which have no energy value or that are hazardous.⁸³⁸ The council further noted that when EPR has been introduced in countries where energy from waste is well-established, such as Japan, there has been a reduction in waste available to incinerate, ‘... leading Councils to adjust their recycling systems, collecting less, to ensure sufficient waste is available to feed the EfW plants.’⁸³⁹

Committee comment

- 8.93** It is clear from the evidence received to this inquiry that the traditional ‘take, make and dispose’ model of waste management is unsustainable and we note that countries across the world, including Australia, are embracing more environmentally-sound policies.

⁸³³ Evidence, Mr Musgrove, 26 June 2017, p 40.

⁸³⁴ Evidence, Ms Jane Bremmer, Secretary, National Toxics Network, 27 June 2017, p 40.

⁸³⁵ Submission 5, Ms Gabrielle Maston, pp 3- 4.

⁸³⁶ Submission 174, Blacktown and District Environment Group, p 2.

⁸³⁷ Evidence, Mr Antony Lewis, Secretary, Blacktown and District Environment Group, 27 June 2017, p 48.

⁸³⁸ Submission 144, Australian Council of Recycling, pp 4-5.

⁸³⁹ Submission 144, Australian Council of Recycling, p 5.

The committee supports efforts to promote the waste hierarchy including enabling the circular economy, promoting zero-waste initiatives, and using disposal as a method of 'last resort'.

- 8.94'** We note that there are significant challenges to promoting the circular economy, and believe that industry, waste generators and policy makers must work collaboratively to address these challenges. Indeed, without a clear and concise definition of what the concept entails it is difficult to develop policies to support the circular economy. We therefore recommend that the NSW EPA, in collaboration with stakeholders, investigate opportunities to embed zero waste strategies and the circular economy in New South Wales.
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Recommendation 35

That the NSW Environment Protection Authority, in collaboration with stakeholders, investigate opportunities to embed zero waste strategies and the circular economy in New South Wales.

- 8.95'** The committee supports the use of Extended Producer Responsibility schemes. We believe that such schemes have great potential to increase resource recovery rates, reduce public expenditure on waste management and encourage the maximum use from products. While the Commonwealth is primarily responsible for these schemes, the NSW Government can pursue these programs as well, as evidenced by the Container Deposit Scheme. We therefore recommend that the NSW Government allocate additional resources to the NSW EPA to develop and implement Extended Producer Responsibility schemes.
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Recommendation 36

That that the NSW Government allocate additional resources to the NSW Environment Protection Authority to develop and implement Extended Producer Responsibility schemes.

Appendix 1⁸⁴⁰ Tables of compliance breaches and complaints associated with the proponent of The Next Generation and his companies⁸⁴⁰

Compliance breaches associated with proponent and his companies

Year	Company name	Breach	Penalty
2005	Alexandria Landfill Pty Ltd	Breach of cl.80 of POEO Waste	Written warning
2005	Alexandria Landfill Pty Ltd	Breach of licence condition	Penalty notice
2007	Alexandria Landfill Pty Ltd	Breach of licence condition	Penalty notice
2007	Alexandria Landfill Pty Ltd	Breach of licence condition	Penalty notice
2009	Alexandria Landfill Pty Ltd	Breach of cl.14 of the POEO Waste Regulation	Written warning
2011	Alexandria Landfill Pty Ltd	Breach of licence condition	Penalty notice
2012	Alexandria Landfill Pty Ltd	Breach of licence condition	Prosecution - convicted

Year	Company name	Breach	Penalty
2009	Boiling Pty Ltd	Breach of licence condition	Penalty notice
2009	Boiling Pty Ltd	Breach of licence condition	Written warning
2011	Boiling Pty Ltd	Breach of licence condition	Official Caution
2012	Boiling Pty Ltd	Breach of licence condition	Official Caution
2012	Boiling Pty Ltd	Breach of licence condition	Penalty notice
2013	Boiling Pty Ltd	Breach of licence condition	Official Caution

Year	Company name	Breach	Penalty
2012	Dial-A-Dump (EC) Pty Ltd	Breach of licence condition	Penalty notice
2012	Dial-A-Dump (EC) Pty Ltd	Breach of licence condition	Penalty notice
2015	Dial-A-Dump (EC) Pty Ltd	Breach of licence condition	Official Caution
2016	Dial-A-Dump (EC) Pty Ltd	Breach of licence condition	Official Caution
2017	Dial-A-Dump (EC) Pty Ltd	Breach of licence condition	Penalty notice

⁸⁴⁰ Answers to questions on notice, NSW EPA, 25 July 2017, Attachments 1 and 2.

Complaints associated with the proponent and his companies

Year	Company name	Number of complaints
2001	Alexandria Landfill Pty Ltd	1
2002	Alexandria Landfill Pty Ltd	295
2003	Alexandria Landfill Pty Ltd	49
2004	Alexandria Landfill Pty Ltd	50
2005	Alexandria Landfill Pty Ltd	23
2006	Alexandria Landfill Pty Ltd	15
2007	Alexandria Landfill Pty Ltd	10
2008	Alexandria Landfill Pty Ltd	6
2009	Alexandria Landfill Pty Ltd	20
2010	Alexandria Landfill Pty Ltd	35
2011	Alexandria Landfill Pty Ltd	57
2012	Alexandria Landfill Pty Ltd	9

Year	Company name	Number of complaints
2012	Dial-A-Dump (EC) Pty Ltd	4
2013	Dial-A-Dump (EC) Pty Ltd	1
2014	Dial-A-Dump (EC) Pty Ltd	2
2015	Dial-A-Dump (EC) Pty Ltd	1
2016	Dial-A-Dump (EC) Pty Ltd	1
2017	Dial-A-Dump (EC) Pty Ltd	2

Appendix 2' Submissions

No	Author
1	Ms Lesley Watson
2	Mr Patrick Phelan
3	Mr David Campbell
4	Total Environment Centre
5	Ms Gabrielle Maston
6	Name suppressed
7	Confidential
8	Confidential
9	Name suppressed
10	Name suppressed
11	Confidential
12	Confidential
13	Name suppressed
14	Name suppressed
15	Ms Mariza Harris
16	Name suppressed
17	Name suppressed
18	Name suppressed
19	Name suppressed
20	Mrs Catherine Hosking
21	Name suppressed
22	Name suppressed
23	Name suppressed
24	Mr Gavin Wilson
25	Name suppressed
26	Name suppressed
27	Name suppressed (Partially confidential)
28	Name suppressed
29	Name suppressed
29a	Name suppressed
30	Mr Cameron Haywood (Partially confidential)
31	Name suppressed

No	Author
32	Confidential
33	Mrs Karina Micallef
34	Mr Kemal Ozdemir
35	Confidential
36	Mr David Green
37	Name suppressed
38	Name suppressed
39	Mr Phil Upton
40	Ms Alicia Schloeffel
41	Name suppressed
42	Name suppressed
43	Name suppressed
44	Mr Hugh Williams
45	Mrs Carmel Bartkiewicz
46	Name suppressed
47	Mrs Cheryle Brack
48	Name suppressed
49	Confidential
50	Name suppressed
51	Mr Matthew Lamens
52	Name suppressed
53	Name suppressed (Partially confidential)
54	Mr Rodney Lane
55	Mr Timothy Williams
56	Confidential
57	Mr Fotos Melaisis
58	Confidential
59	Mr Leanne Flood
60	Mr Ron Rose
61	Mr Mohammad Sami
62	Name suppressed
63	Name suppressed
64	Name suppressed
65	Confidential
66	Name suppressed

No	Author
67	Confidential
68	Name suppressed
69	Name suppressed
70	Name suppressed
71	Name suppressed
72	Name suppressed
73	Confidential
74	Mr Norm Warren
75	Name suppressed
76	Name suppressed
77	Confidential
78	Name suppressed
79	Name suppressed
80	Confidential
81	Mr Dermot Staunton
82	Mrs Lee-Anne Williams (Partially confidential)
83	Name suppressed (Partially confidential)
84	Name suppressed (Partially confidential)
85	Name suppressed (Partially confidential)
86	Confidential
87	Name suppressed
88	Mr Gerald Barr
89	Confidential
90	Ms Margaret Flynn
91	Mr Mathew Cini
92	Name suppressed
93	Name suppressed
94	Mr Steven Taylor
95	Mrs Emma Powney
96	Name suppressed
97	Name suppressed
98	Name suppressed
99	Mr Xavier David
100	Mrs Elizabeth Gibbeson
101	Name suppressed

No	Author
102	Name suppressed
103	Name suppressed
104	Confidential
105	Name suppressed
106	Name suppressed
107	Mr Timogen Chung
108	Confidential
109	Confidential
110	Confidential
111	Mr Arpan Patel
112	Confidential
113	Mrs Margaret McCarthy
114	Name suppressed
115	Cleanaway Waste Management
116	Name suppressed
117	Name suppressed
118	Name suppressed
119	Name suppressed
120	Mr Krishna Govender
121	Name suppressed
122	Confidential
123	Confidential
124	Name suppressed
125	Name suppressed
126	Mrs Annalissa Ozdemir
127	Mrs Safiye Ozdemir
128	Name suppressed
129	Name suppressed
130	Name suppressed
131	Mr Stephen Richards
132	Name suppressed
133	Mrs Ann Phelan
134	Name suppressed
135	Mr Bedir Solbudak
136	Mrs Anna Kosovich

No	Author
137	Confidential
138	Name suppressed
139	Confidential
140	Name suppressed
141	Toxfree
142	Name suppressed
143	New Energy Corporation
144	Australian Council of Recycling
145	Suez
145a	Suez
146	Randwick City Council
147	Name suppressed
148	Veolia
149	Wollongong City Council
150	Western Sydney Regional Organisation of Councils (WSROC)
150a	Western Sydney Regional Organisation of Councils (WSROC)
151	Confidential
152	Confidential
153	Name suppressed
154	Hunter Joint Organisation of Councils
155	Name suppressed
156	Sutherland Shire Council
157	Name suppressed
158	Hunters Hill Council
159	Name suppressed
160	Name suppressed
161	Name suppressed
162	Mrs Carolyn Ahmet
163	Mr Carlos Ormazabal
164	Alexandria Landfill
165	Australian Pork Limited
166	Name suppressed
167	Northern Sydney Regional Organisation of Councils (NSROC)
168	City of Canterbury Bankstown
169	Mountain Districts Association

No	Author
170	MRA Consulting Group
171	Mrs Kerry Loveday
172	National Toxics Network
172a	National Toxics Network
173	Jacfin
173a	Jacfin
174	Blacktown and District Environment Group
174a	Blacktown and District Environment Group
174b	Blacktown and District Environment Group
175	Australian Industrial Ecology Network
176	Southern Sydney Regional Organisation of Councils (SSROC)
177	Active Tree Services
177a	Active Tree Services
178	Mr Brian Graham
179	Hitachi Zosen Inova (HZI) Australia
180	Mrs Kerry Tosswill
181	Name suppressed
181a	Name suppressed
182	Waste Contractors and Recyclers Association of NSW
182a	Confidential
182b	Waste Contractors and Recyclers Association of NSW
183	Mr Derek Ridgley
184	Confidential
185	Name suppressed
186	Mrs Judith Ridgley
187	Name suppressed
188	Mr Wojciech Wieckowski
189	Clean Energy Finance Corporation
190	National Waste and Recycling Industry Council
191	Mrs Barbara Wieckowski
192	Name suppressed
193	Name suppressed
194	Ms Lisa McKinnon
195	Mr Mark Russell
196	Mr Alpeshkumar Patel

No	Author
197	Mr Hong Kyung Ji
198	City of Sydney
199	Confidential
200	Mr Michael Zammit
201	Mr Peter Robertson
202	Name suppressed
203	Mrs Feray Arnout
204	Mr Michael Donohue
205	Mr Json Edwards
206	Mrs Cindy Clarke
207	Ms Sonia Bennett
207a	Ms Sonia Bennett
208	Confidential
209	Mr Glen Clark
210	Name suppressed (Partially confidential)
211	Mr Joseph Incorvil
212	Mr Richard Caruana
213	Name suppressed
214	Blacktown City Council
215	Waste Management Association Australia
215a	Waste Management Association Australia
216	Re.Group
217	Illawarra Pilot Joint Organisation
218	Mr Barry Turner
219	Confidential
220	Mr Robert Lewis
221	Name suppressed
222	Mrs Jennifer Sullivan
223	Mr John Azzopardi
224	Confidential
225	Name suppressed
226	Name suppressed
227	Name suppressed
228	Confidential
229	Mr Mario Bellantoni

No	Author
230	Name suppressed
231	Miss Alexandra Bellantoni
232	Name suppressed
233	Mr David Clarke
234	Name suppressed
235	Confidential
236	Mr Stephen Borg
237	Mr Paul Barrett
238	Mr Ramez Bishara
239	Mrs Sherry Melika
240	Confidential
241	Name suppressed
242	Name suppressed
243	Name suppressed
244	Name suppressed
245	Mr Aloysius Dion Van Gramberg
246	Mr Rafael Aducayen
247	Mr Mark Farrant
248	Mr Rob Vail
249	Mrs Julie Harris
250	Name suppressed
251	Name suppressed
252	Mr Domenic and Mrs Domenica Sergi
253	Name suppressed
254	Mrs Patricia Papatotiriou
255	Mrs Megan Malek
256	Confidential
257	Name suppressed
258	Name suppressed
259	Name suppressed
260	Confidential
261	Mrs Joy Welshman
262	Mrs Helen Fone
263	Name suppressed
264	Name suppressed

No	Author
265	Confidential
266	Name suppressed
267	Name suppressed
268	Name suppressed
269	Confidential
270	Name suppressed
271	Ms Thorunn Ingvarsdottir
272	Mr Peter Gilbert
273	Name suppressed
274	Name suppressed
275	Name suppressed
276	Ms Patricia Kahler
277	Mrs Sharon Bellette
278	Name suppressed
279	Name suppressed
280	Mr Mick Collins
281	Name suppressed
282	Mrs Bianca Dowsett
283	Ms Chulin Liu
284	Mr Pravin Rai
285	Name suppressed
286	Mr Arthur Bozikas
287	Name suppressed
288	Name suppressed
289	Mr John Ackland
290	Name suppressed
291	Outotec
292	Mrs Anita Lazaro
293	Name suppressed
294	Confidential
295	Name suppressed
296	Name suppressed
297	Mr Robert Hammer
298	Shoalhaven City Council
299	Ms Susan Wilson

No	Author
300	Confidential
301	Mr Frank Brenner
302	Confidential
303	Name suppressed
304	Mr Michael Rynn
305	Confidential
306	Name suppressed
307	Mrs Raquel Blemith
308	Name suppressed
309	Confidential
310	Name suppressed
311	Name suppressed
312	Mr Antony Lewis
313	Mr Csaba Molnar
314	Name suppressed (Partially confidential)
315	Name suppressed
316	Name suppressed
317	Name suppressed
318	Name suppressed
319	Confidential
320	Mr Wayne Olling
321	Name suppressed
322	Mr Joseph Granic
323	Confidential
324	Mr Erkan Mentesh
325	Mr Filiz Mentesh
326	Local Government NSW
327	Mr Pinar Arnoute
328	Name suppressed
329	Mr Kemal Arnout
330	Ms Maria Yang
331	Name suppressed
332	Name suppressed
333	Name suppressed
334	Name suppressed

No	Author
335	Name suppressed
336	Name suppressed
337	Name suppressed
338	Name suppressed
339	Mr Daniel Hatcher
340	Name suppressed
341	Name suppressed
342	Name suppressed
343	Name suppressed
344	Name suppressed (Partially confidential)
345	Name suppressed
346	Name suppressed
347	Confidential
348	Confidential
349	Mrs Karyne Opdam
350	Name suppressed
351	Name suppressed
352	Name suppressed
353	Name suppressed
354	Confidential
355	The Hon Richard Jones
356	Confidential
357	Name suppressed
358	Name suppressed
359	Name suppressed
360	Name suppressed
361	M Zohre Can
362	Name suppressed
363	Name suppressed
364	Ms Cemile Can
365	Mrs Rosann Kirk
366	Mr David Kirk
367	Name suppressed
368	Name suppressed
369	Name suppressed

No	Author
370	Confidential
371	Name suppressed
372	Name suppressed
373	Mr Stefano Olivieri
374	Mr Fawad Sami
375	Mr Phillip Roffey
376	Mrs Kerri Bradbury
377	Mr Phil Bradley
378	Name suppressed
379	Confidential
380	Confidential
381	Mr Peter Ferns
382	Mr Robert Fung
383	Mrs Ilmiye Uluc
384	Mr Gerry Gillespie
385	Ms Michelle McCallum
386	Confidential
386a	Confidential
387	Glenwood Community Association
388	Name suppressed
389	Name suppressed
390	Name suppressed
391	Name suppressed
392	Name suppressed
393	No Incinerator for Western Sydney
393a	No Incinerator for Western Sydney
394	Australian Landfill Owners Association
395	Australian Organics Recycling Association

Appendix 3' Witnesses at hearings

Date	Name	Position and Organisation
Monday 26 June 2017		
Macquarie Room, Parliament House, Sydney	Mr Stephen Beaman	The then Executive Director, Waste and Resource Recovery, NSW EPA
	Mr Henry Moore	Manager, Waste Reform, NSW EPA
	Mr Miles Mason	Business Development Manager, New Energy Corporation
	Mr Jason Pugh	Chief Executive Officer, New Energy Corporation
	Mr Garth Lamb	NSW Branch President, Waste Management Association of Australia
	Ms Gayle Sloan	Chief Executive Officer, Waste Management Association of Australia
	Mr Ron Wainberg	National Chair, Resource and Energy, Recovery Division, Waste Management Association of Australia
	Mr Tim Jordan	Head of Research, Clean Energy Finance Corporation
	Mr Henry Anning	Sector Lead for Bioenergy, Clean Energy Finance Corporation
	Mr Grant Musgrove	Chief Executive Officer, Australian Council of Recycling
	Mr Emmanuel Vivant	Executive Director – Development, Performance and Innovation, Suez Australia
	Ms Donna Rygate	Chief Executive, Local Government NSW
	Ms Susy Cenedese	Strategy Manager Environment, Local Government NSW
	Ms Leisha Deguara	Senior Policy Officer - Waste, Local Government NSW
	Mr Mark Taylor	General Manager, NSW Resource Recovery, Veolia

Date	Name	Position and Organisation
Tuesday 27 June 2017		
Boomerang Room, Rooty Hill RSL, Rooty Hill	Mr Chris Ritchie	Director, Industry Assessments, NSW Department of Planning and Environment
	Ms Anthea Sargeant	Executive Director, Key Sites and Industry Assessments, NSW Department of Planning and Environment
	Mr Christopher Biggs	Chief Executive Officer, Dial A Dump Industries
	Ms Clare Brown	Director Planning, Urbis
	Ms Amanda Lee	Technical Director - Environment, AECOM
	Mr Damon Roddis	National Practice Leader - Air Quality and Noise, Pacific Environment
	Mr Charles Casuscelli	Chief Executive Officer, WSROC
	Ms Amanda Bombaci	Regional Waste Coordinator, WROC
	Cr Stephen Bali	Mayor, Blacktown City Council
	Ms Vanessa Parkes	Environment Manager, Blacktown City Council
	Ms Jo Immig	Coordinator, National Toxics Network
	Ms Jane Bremmer	Secretary, National Toxics Network
	Mr Antony Lewis	Secretary, Blacktown and District Environment Group
	Ms Melinda Wilson	Member, No Incinerator for Western Sydney
	Mrs Ilmiye Uluc	Member, No Incinerator for Western Sydney
	Ms Kim Vernon	Member, No Incinerator for Western Sydney

Date	Name	Position and Organisation
Monday 7 August 2017		
Macquarie Room, Parliament House, Sydney	Dr Ben Scalley	Director, Environmental Health Branch, NSW Health
	Mr Adi Prasad	Environmental Consultant, MRA Consulting Group
	Mr Mike Ritchie	Managing Director, MRA Consulting Group
	Mr Chris Derksema	Sustainability Director, City of Sydney
	Ms Gemma Dawson	Manager Waste Strategy, City of Sydney
	Mr Mark Roebuck	Manager, City Works and Services, Wollongong City Council
	Mr Mark Wood	Group Manager, Engineering Operations, Sutherland Shire Council
	Ms Namoi Dougall	General Manager, SSROC
	Ms Hazel Storey	Strategic Coordinator, Resource Recovery and Waste, SSROC
	Mr Tony Fraser	Manager, Works and Services, Shoalhaven City Council
	Mr David Hojem	Manager, Waste Services, Shoalhaven City Council
	A/Prof Bernadette McCabe	Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland
	Dr Ali El Hanandeh	Lecturer, School of Engineering, Griffith University
	Mr Roger Bligh	Sales Director, Metals, Energy and Water, Outotec South-East Asia Pacific
	Mr Mark Willcocks	Director, Active Tree Services

Date	Name	Position and Organisation
Thursday 17 August 2017		
Macquarie Room, Parliament House, Sydney	Mr Tony Khoury	Executive Director, Waste Contractors and Recyclers Association of NSW
	Mr Harry Wilson	President, Waste Contractors and Recyclers Association of NSW
	Mr Stephen Sasse	Chief Executive Officer, Nectar Farms
	Dr Marc Stammbach	Managing Director, HZI Australia
	Dr James Whelan	Researcher and Community Organiser, Environmental Justice Australia
	Dr Stephen Goodwin	President, Mountain Districts Association
	Ms Marilyn Steiner	Member, Mountain Districts Association
	Mr Garbis Simonian	Chairman, Australian Industrial Ecology Network
	Mr Mark Glover	Director, Australian Industrial Ecology Network
	Mr Ian Malouf	Managing Director, Dial A Dump Industries
	Mr Christopher Biggs	Chief Executive Officer, Dial A Dump Industries
	Mr Damon Roddis	National Practice Leader – Air Quality and Noise, Pacific Environment
	Ms Clare Brown	Director Planning, Urbis
	Mr Barry Buffier	The then Chair and Chief Executive, NSW EPA
	Mr Greg Sheehy	Director, Waste Compliance, NSW EPA
	Mr Henry Moore	Manager, Waste Reform, NSW Environment Protection Authority
Monday 23 October 2017		
Macquarie Room, Parliament House, Sydney	Witness A	<i>In camera</i>
	Witness B	<i>In camera</i>
	Witness C	<i>In camera</i>
Friday 24 November 2017		
Macquarie Room, Parliament House, Sydney	Detective Superintendent Deborah Wallace	NSW Police Force
	Mr Barry Buffier	The then Chair and Chief Executive, NSW EPA

Date	Name	Position and Organisation
	Mr Mark Gifford	Chief Environmental Regulator, NSW EPA
Tuesday 13 February 2018		
Macquarie Room, Parliament House, Sydney	Witness E	<i>In camera</i>
	Witness F	<i>In camera</i>
	Witness G	<i>In camera</i>

Appendix 4 Minutes

Minutes No. 41

Thursday 6 April 2017

Portfolio Committee No. 6 – Planning and Environment

Members Lounge, Parliament House, Sydney, at 1.00 pm

1. Members present

Mr Green, *Chair*

Mr Amato, *Deputy Chair*

Ms Buckingham

Mr Mallard

Mr Mason-Cox

Ms Sharpe (substituting for Mr Mookhey)

Mr Wong

2. Previous minutes

Resolved, on the motion of Mr Wong: That draft minutes no. 40 be confirmed.

3. Correspondence

The committee noted the following items of correspondence:

Received:

- 28 March 2017 – Letter from Mr Green, Mr Mookhey and Mr Buckingham requesting a meeting of Portfolio Committee No. 6 to consider a proposed self-reference into 'energy from waste' technology.

4. Changes in committee membership

The committee noted the following changes in committee membership:

- Ms Cusack replaced by Mr Mason-Cox
- Ms Taylor replaced by Mr Mallard.

5. Consideration of terms of reference – 'Energy from waste' technology

The Chair tabled the following terms of reference received from Mr Green, Mr Mookhey and Mr Buckingham, on 28 March 2017:

That Portfolio Committee No.6 inquire into and report on matters relating to the waste disposal industry in New South Wales, with particular reference to 'energy from waste' technology, and in particular:

- a) the current provision of waste disposal and recycling, the impact of waste levies and the capacity (considering issues of location, scale, technology and environmental health) to address the ongoing disposal needs for commercial, industrial, household and hazardous waste
- b) the role of 'energy from waste' technology in addressing waste disposal needs and the resulting impact on the future of the recycling industry
- c) current regulatory standards, guidelines and policy statements oversighting 'energy from waste' technology, including reference to regulations covering:
 - i. the European Union
 - ii. United States of America
 - iii. international best practice
- d) additional factors which need to be taken into account within regulatory and other processes for approval and operation of 'energy from waste' plants

- e) the responsibility given to state and local government authorities in the environmental monitoring of 'energy from waste' facilities
- f) opportunities to incorporate future advances in technology into any operating 'energy from waste' facility
- g) the risks of future monopolisation in markets for waste disposal and the potential to enable a 'circular economy' model for the waste disposal industry, and
- h) any other related matter.

Resolved, on the motion of Ms Sharpe: That the committee adopt the terms of reference.

Mr Amato and Mr Mallard joined the meeting.

6. Conduct of the inquiry into 'energy from waste' technology

6.1 Proposed timeline

Resolved, on the motion of Mr Buckingham: That the committee adopt the following timeline for the administration of the inquiry:

- Sunday 28 May 2017 – submission closing date
- June and July 2017 – commence public hearings and site visits
- December 2017 – report deliberative and table report.

6.2 Closing date for submissions

Resolved, on the motion of Ms Sharpe: That the closing date for submissions be Sunday 28 May 2017.

6.3 Stakeholder list

Resolved, on the motion of Mr Mallard: That the secretariat circulate to members the Chair's proposed list of stakeholders to provide them with the opportunity to amend the list or nominate additional stakeholders, and that the committee agree to the stakeholder list by email, unless a meeting of the committee is required to resolve any disagreement.

6.4 Advertising

The committee noted that all inquiries are advertised via twitter, stakeholder letters and a media release distributed to all media outlets in New South Wales.

7. Adjournment

The committee adjourned at 1.03 pm *sine die*.

Tina Higgins
Committee Clerk

Minutes No. 42

Monday 26 June 2017

Portfolio Committee No. 6 – Planning and Environment

Macquarie Room, Parliament House, Sydney, at 9.03 am

1. Members presentMr Green, *Chair*Mr Amato, *Deputy Chair* (until 12.45 pm)

Dr Faruqi (substituting for Mr Buckingham)

Mr Graham (substituting for Mr Wong) (from 9.58 am)

Mr Mallard

Ms Sharpe (substituting for Mr Mookhey) (from 9.08 am)

2. Apologies

Mr Mason-Cox

3. Previous minutes

Resolved, on the motion of Mr Amato: That draft minutes no. 41 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received:

- 11 April 2017 – Email from the Hon Shaoquett Moselmane MLC, Opposition Whip, to secretariat, advising that the Hon Penny Sharpe MLC will be substituting for the Hon Daniel Mookhey MLC for the duration of the inquiry
- 6 April 2017 – Email from the Hon Catherine Cusack MLC to Chair, requesting to participate in the inquiry
- 12 April 2017 - Email from the Hon Catherine Cusack MLC to Chair, stating that she no longer wishes to participate in the inquiry
- 18 April 2017 – Note from Dr John Byrnes regarding access to records on landfill sites
- 19 April 2017 – Email from the Climate Council to committee, advising that they are not in a position to submit an application at present
- 9 May 2017 – Email from Dr John Byrnes to secretariat, regarding waste industry
- 16 May 2017 – Email from Mr Tim Allerton, City PR to Chair, suggesting a committee briefing and attaching documents
- 1 June 2017 – Letter from James Higgins, Allens, to Chair, requesting the committee consider inviting Jacfin Pty Ltd to appear at a hearing
- 5 June 2017 - Letter from the Hon Rob Stokes, Member for Pittwater, to Chair, attaching information from Active Tree Services and requesting it be considered by the committee
- 19 June 2017 – Letter from Mr Barry Buffier, Chair and CEO, NSW EPA to Secretariat, advising of NSW EPA representatives to appear at the public hearing on 26 June 2017
- 19 June 2017 – Email from Ms Louise Higgins, Executive Assistant to Secretary, NSW Department of Planning and Environment to Secretariat, advising of Department of Planning Environment representatives to appear at the public hearing on 27 June 2017
- 21 June 2017 – Email from Shaoquett Moselmane, Opposition Whip, to secretariat, advising Hon John Graham will substitute for Hon Ernest Wong at hearings on June 26 and 27
- 21 June 2017 - Email from Ms Louise Higgins, Executive Assistant to Secretary, NSW Department of Planning and Environment, to Secretariat, advising that the department will not be making a submission to the inquiry
- 22 June 2017 - Email from Mr Jeremy Buckingham, to secretariat, advising Dr Mehreen Faruqi will substitute for Mr Buckingham at the hearings on 26 and 27 June.

Sent:

- 8 May 2017 – Letter from Chair to Dr John Byrnes, regarding access to records on landfill sites
- 8 June 2017 – Letter from Chair to Mr Ian Malouf, regarding concerns raised in his submission
- 15 June 2017 – Letter from Chair to Mr Barry Buffier, NSW EPA, inviting NSW EPA to appear at the public hearing on 26 June 2017
- 15 June 2017 – Letter from Chair to Ms Carolyn McNally, Department of Planning and Environment, inviting the Department to appear at the public hearing on 27 June 2017 =
- 20 June 2017 – Letter from Chair to Mr Edmond Atalla MP, Member for Mount Druitt, advising of public hearing at Rooty Hill RSL on 27 June 2017.

5. Inquiry into ‘energy from waste’ technology**5.1 Pro forma submissions**

Resolved, on the motion of Mr Mallard: That the committee publish one copy of Proforma A-F on its website, noting the number of copies that have been received.

5.2 Public submissions

The committee noted that the following submissions were published by the committee clerk under the authorisation of the resolution appointing the committee: submission nos. 1-5, 15, 20, 24, 33-34, 36, 39-40, 44-45, 47, 51, 54-57, 59-61, 74, 81, 88, 90-91, 94, 95, 99-100, 107, 111, 113, 115, 120, 126-127, 131, 133, 135-136, 141, 143-146, 148-150, 154, 158, 162-165, 167-168, 170-174, 174a, 175-180, 182-183, 186, 188-191, 194-198, 200, 201, 203-207a, 209, 211-212, 214-218, 220, 222-223, 229, 231, 233, 236-239, 245-249, 252, 254-255, 261-262, 271-272, 276-277, 280, 282-284, 286, 289, 291-292, 297, 299, 301, 304, 307, 312-313, 320, 322, 324-327, 329-330, 339, 349, 355, 361, 364-366, 373-377 and 381-383.

5.3 Partially confidential submissions

Resolved, on the motion of Mr Amato: That the committee keep the following information confidential, as per the request of the authors: submission authors’ names in submissions nos. 6, 9, 10, 13, 14, 16, 17, 18, 19, 21, 22, 23, 25, 26, 29, 31, 37, 38, 41-43, 46, 48, 50, 52, 62, 63-64, 66, 68-72, 75-76, 78-79, 87, 92-93, 96-98, 101-103, 105-106, 114, 116-119, 121, 124-125, 128-130, 132, 134, 138, 140, 142, 147, 153, 155, 157, 159-161, 166, 181, 181a, 185, 187, 192, 193, 202, 213, 221, 225-227, 230, 232, 234, 241-244, 250-251, 253, 257-259, 263-264, 266-268, 270, 273-275, 278-279, 281, 285, 287-288, 290, 293, 295-296, 303, 306, 308, 310-311, 315-318, 321, 328, 331-338, 340-343, 345-346, 350-353, 357-360, 362-363, 367-369, 371-372 and 378.

Resolved, on the motion of Mr Amato: That the committee keep names and/or identifying and sensitive information, and potential adverse mention, confidential, as per the recommendation of the secretariat, in submission nos. 27, 30, 53, 82-85, 210 and 314.

5.4 Confidential submissions

Resolved, on the motion of Mr Mallard: That the committee keep submission nos. 7, 8, 11, 12, 32, 35, 49, 56, 58, 65, 67, 73, 77, 80, 86, 89, 104, 108-110, 112, 122-123, 137, 139, 151-152, 169, 184, 199, 208, 219, 224, 228, 235, 240, 256, 260, 265, 269, 294, 300, 302, 305, 309, 319, 323, 347-348, 354, 356, 370 and 379-380 confidential, as per the recommendation of the secretariat, as they contain identifying and/or sensitive information.

5.5 Future hearings

Resolved, on the motion of Mr Amato: That a further hearing be held on 17 August 2017 in Sydney, with the following witnesses, subject to availability, invited to that hearing: Waste Contractors and Recyclers Association of NSW, HZI Australia, Active Tree Services, Australian Industrial Ecology Network Pty Ltd, Australian Council of Recycling, Outotec, Visy, Shoalhaven City Council, NSW Health and the Environmental Justice Australia.

5.6 Site visit

The committee noted that it will not be conducting regional site visits.

5.7 Arrangements for Western Sydney hearing

The secretariat briefed the committee on arrangements for the Western Sydney hearing on Tuesday 27 June.

5.8' Allocation of question time

Resolved, on the motion of Ms Sharpe: That the allocation of time for questions be managed by the Chair.

5.9' Public hearing

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Mr Stephen Beaman, Executive Director, Waste and Resource Recovery, NSW Environment Protection Authority
- Mr Henry Moore, Manager, Waste Reform, NSW Environment Protection Authority.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Miles Mason, Business Development Manager, New Energy Corporation
- Mr Jason Pugh, Chief Executive Officer, New Energy Corporation.

Mr Mason tendered the following documents:

- Presentation – 'Parliamentary Inquiry into EfW technologies'
- Hon Albert Jacob MLA, Minister for Environment; Heritage – 'Statement that a proposal may be implemented' regarding the Boodarie Waste-to-Energy and materials recovery facility, Port Hedland
- New Energy Company Profile document 'Our vision is a world with zero landfill; where waste fuels a sustainable future.'

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Ms Gayle Sloan, Chief Executive Officer, Waste Management Association of Australia
- Mr Ron Wainberg, National Chair, Resource and Energy, Recovery Division, Waste Management Association of Australia
- Mr Garth Lamb, NSW Branch President, Waste Management Association of Australia.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Tim Jordan, Head of Research, Clean Energy Finance Corporation
- Mr Henry Anning, Sector Lead for Bioenergy, Clean Energy Finance Corporation.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- Mr Grant Musgrove, Chief Executive Officer, Australian Council of Recycling.

The evidence concluded and the witness withdrew.

The following witness was sworn and examined:

- Mr Emmanuel Vivant, Executive Director – Development, Performance and Innovation, Suez.

The evidence concluded and the witness withdrew.

The following witnesses were sworn and examined:

- Ms Donna Rygate, Chief Executive, Local Government NSW
- Ms Susy Cenedese, Strategy Manager, Environment, Local Government NSW
- Ms Leisha Deguara, Senior Policy Officer – Waste, Local Government NSW.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- Mr Mark Taylor, General Manager, NSW Resource Recovery, Veolia.

The evidence concluded and the witness withdrew.

The public and media withdrew.

5.10 Tendered documents

Resolved, on the motion of Mr Mallard: That the committee accept and publish the following documents tendered by Mr Mason during the public hearing:

- Presentation – ‘Parliamentary Inquiry into EfW technologies’
- Hon Albert Jacob MLA, Minister for Environment; Heritage – ‘Statement that a proposal may be implemented’ regarding the Boodarie Waste-to-Energy and materials recovery facility, Port Hedland
- New Energy Company Profile document ‘Our vision is a world with zero landfill; where waste fuels a sustainable future.’

6. Travel of Mr Mallard’s SRA to offsite hearing

Resolved, on the motion of Mr Mallard: That Mr Mallard’s SRA, Shani Murphy, be authorised to travel with the committee on the bus on Tuesday 27 June 2017.

7. Media at hearing on 27 June 2017

The committee noted the secretariat’s advice that media is expected at the offsite hearing on Tuesday 27 June 2017.

8. Adjournment

The committee adjourned at 4.45 pm, until Tuesday 27 June 2017, Boomerang Room, Rooty Hill RSL, Rooty Hill (public hearing for inquiry into ‘energy from waste’ technology).

Kate Mihaljek
Committee Clerk

Minutes No. 43

Tuesday 27 June 2017

Portfolio Committee No. 6 – Planning and Environment

Boomerang Room, Rooty Hill RSL, Rooty Hill Sydney, at 10.00 am

1. Members present

Mr Green, *Chair*

Mr Amato, *Deputy Chair*

Dr Faruqi (substituting for Mr Buckingham)

Mr Graham (substituting for Mr Wong)

Mr Mallard

Ms Sharpe (substituting for Mr Mookhey)

2. Apologies

Mr Mason-Cox

3. Public hearing

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Ms Anthea Sargeant, Executive Director, Key Sites and Industry Assessment, Department of Planning and Environment
- Mr Chris Ritchie, Director, Industry Assessments, Department of Planning and Environment.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Christopher Biggs, Chief Executive Officer, DADI Group
- Mr Damon Roddis, National Practice Leader – Air Quality and Noise, Pacific Environment
- Ms Amanda Lee, Technical Director – Environment, AECOM
- Ms Clare Brown, Director Planning, Urbis.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Charles Casuscelli, Chief Executive Officer, Western Sydney Regional Organisation of Councils
- Ms Amanda Bombaci, Regional Waste Coordinator, Western Sydney Regional Organisation of Councils
- Cr Stephen Bali, Mayor, Blacktown City Council
- Ms Vanessa Parkes, Environment Manager, Blacktown City Council.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Ms Jo Immig, Coordinator, National Toxics Network
- Ms Jane Bremmer, Secretary, National Toxics Network.

Ms Immig tendered the following document:

- 'Statement to the NSW Parliamentary Inquiry into Waste to Energy'

Ms Bremmer tendered the following documents:

- Zero Waste Europe, 'Air Pollution from Waste Disposal: Not for Public Breath'
- Alliance for a Clean Environment, 'Public health impacts associated with incinerators – a compilation of studies'
- GAIA, 'Waste Gasification & Pyrolysis: High Risk, Low Yield Processes for Waste Management'
- Dr Jeffery Morris et al, 'What is the best disposal option for the "Leftovers" on the way to Zero Waste?'
- 'Incinerator accidents'

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Antony Lewis, Blacktown and District Environment Group
- Ms Melinda Wilson, No Incinerator for Western Sydney
- Ms Ilmiye Uluc, No Incinerator for Western Sydney
- Ms Kim Vernon, No Incinerator for Western Sydney.

The evidence concluded and the witnesses withdrew.

Ms Wilson tendered the following document:

The following inquiry participant did not need to be sworn and provided a short statement:

- Mr Gerald Barr, community member.

The evidence concluded and the witness withdrew.

The public and media withdrew.

4. **Tendered documents**

Resolved, on the motion of Mr Mallard: That the committee accept and publish the following documents tendered during the public hearing:

- ‘Statement to the NSW Parliamentary Inquiry into Waste to Energy’
- Zero Waste Europe, ‘Air Pollution from Waste Disposal: Not for Public Breath’
- Alliance for a Clean Environment, ‘Public health impacts associated with incinerators – a compilation of studies’
- GAIA, ‘Waste Gasification & Pyrolysis: High Risk, Low Yield Processes for Waste Management’
- Dr Jeffery Morris et al, ‘What is the best disposal option for the “Leftovers” on the way to Zero Waste?’
- ‘Incinerator accidents’

5. **Site visit**

Resolved, on the motion of Mr Mallard: That, the committee conduct a site visit to the Woodlawn waste facility operator by Veolia in Tarago.

6. **Witnesses at future**

Resolved, on the motion of Ms Sharpe: That, the following witnesses, subject to availability, be recalled/invited to the hearing on 17 August 2017:

- NSW EPA
- Dial A Dump Industries/The New Generation/Alexandria Landfill - Mr Ian Malouf
- an expert on public health.

7. **Submissions**

7.1 **Public submissions**

The committee noted that the following submissions were published by the committee clerk under the authorisation of the resolution appointing the committee: submission nos. 322, 324-327, 329-330, 339, 349, 355, 361, 364-366, 373-377 and 381-383.

7.2 **Partially confidential submissions**

Resolved, on the motion of Mr Amato:

- That the committee keep names and/or identifying and sensitive information, and potential adverse mention, confidential, as per the request of the author and/or the recommendation of the secretariat, in submission nos. 321, 328, 331-338, 340-343, 345-346, 350-353, 357-360, 362-363, 367-369, 371-372 and 378.
- That the committee keep names and/or identifying and sensitive information, and potential adverse mention, confidential, as per the recommendation of the secretariat, in submission no 344.

7.3 **Confidential submissions**

Resolved on the motion of Mr Graham: That the committee keep submission nos. 323, 347-348, 354, 356, 370 and 379-380 confidential, as per the request of the author.

8. **Adjournment**

The committee adjourned at 3.15 pm.

Tina Higgins
Committee Clerk

Minutes No. 44

Monday 7 August 2017

Portfolio Committee No. 6 – Planning and Environment

Macquarie Room, Parliament House at 9.52 am

1. Members presentMr Green, *Chair*Mr Amato, *Deputy Chair*

Mr Buckingham (from 9.55 am)

Mr Graham (substituting for Mr Wong)

Mr Mallard

Mr Mason-Cox (from 10.38 am)

2. Apologies

Ms Sharpe

3. Draft minutes

Resolved, on the motion of Mr Amato: That draft minutes nos. 42 and 43 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received:

- 28 June 2017 – Email from the Hon Shaoquett Moselmane MLC, Opposition Whip, to Secretariat, advising that the Hon John Graham MLC will be substituting for the Hon Ernest Wong MLC for the energy from waste technology hearings on 7 and 17 August 2017
- 29 June 2017 – Letter from Mr Christopher Biggs, Dial A Dump Industries, to Chair, providing additional information on proposed Pigouvian Tax, a brochure entitled Fix the waste levy to fix illegal dumping and a memorandum of advice entitled Alexandria Landfill Pty Ltd and A Waste Responsibility Tax Proposal
- 4 July 2017 – Email from Mr Peter Maganov, Manager Sustainability & Strategic Waste, Randwick City Council, to Secretariat, declining the invitation to appear at the energy from waste technology hearing on 7 August 2017
- 5 July 2017 – Email from Mark Taylor, Veolia, to Secretariat, confirming 22 August 2017 as the date for the committee's site visit to the Woodlawn facility operated by Veolia and suggesting activities
- 11 July 2017 – Email from Dr Nick Florin, UTS, to Secretariat, declining the invitation to appear at the energy from waste technology hearing on 7 August 2017
- 11 July 2017 – Email from Ms Hazel Storey, Strategic Coordinator Resource Recovery and Waste, Southern Sydney Regional Organisation of Councils (SSROC), to Secretariat advising that Attachment A to Submission 176 can be made public
- 13 July 2017 – Email from Mr Mark Taylor, Veolia, to Secretariat, agreeing to document outlining answers to questions on notice and additional information
- 13 July 2017 – Transcript correction from Mr Antony Lewis, Blacktown and District Environment Group, to Secretariat, informing the committee that the Blacktown and District Environment Group visited the Genesis facility on 10 December 2016
- 20 July 2017 – Email from Mr Ben Madden, UTS, to Secretariat, declining the invitation to appear at the energy from waste technology hearing on 7 August 2017
- 20 July 2017 – Email Ms Bronte Walker, Dial A Dump Industries, to Committee providing additional information to the inquiry:
 - 'Additional information provided by the proponent on community consultations undertaken regarding the proposed energy from waste facility at Eastern Creek'
 - United Kingdom, Department for Environment, Food and Rural Affairs, 'Energy from Waste: A guide to the debate'

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/284612/pb14130-energy-waste-201402.pdf

- Paul Chrostowski and Sarah Foster, 'Resolution of a controversy - Do waste to energy plants cause public health impacts?'
<http://www.cpfassociates.com/ChrostowskiFoster2014CausationandWTE.pdf>
- WSP Environmental for the Government of Western Australia Department of Environment and Conservation, 'An investigation into the performance (environmental and health) of waste to energy technologies internationally, Summary Report – Waste to Energy - A review of legislative and regulatory frameworks, state of the art technologies and research on health and environmental impact'
http://www.wtert.com.br/home2010/arquivo/noticias_eventos/W2E_Summary_Report_20123.pdf
- WSP Environmental for the Government of Western Australia Department of Environment and Conservation, 'An investigation into the performance (environmental and health) of waste to energy technologies internationally, Stage Three - A Review of recent research on the health and environmental impacts of Waste to Energy Plants'
https://www.wasteauthority.wa.gov.au/media/files/documents/W2E_Technical_Report_Stage_Three_2013.pdf
- 31 July 2017 – Email from Mr Royce DeSousa, Visy, to Secretariat, declining the invitation to appear at the energy from waste technology hearing on 17 August 2017
- 31 July 2017 – Email from Ms Kristina Chown, NSW EPA, to Secretariat, regarding publication status of Attachments A and B to answers to questions on notice
- 1 August 2017 – Email from Mr James Higgins, Allens, to Secretariat, requesting that Mr Richard Lancaster SC represent Jacfin at the energy from waste technology hearing on 17 August 2017.

Sent

- 30 June 2017 – Letter from Chair, to Ms Tania Buxton, Event Sales Executive, Concept 33, thanking Ms Buxton for the services provided at the hearing at Rooty Hill RSL on 27 June 2017.

5. Committee membership

The committee noted that the Hon Penny Sharpe MLC has replaced the Hon Daniel Mookhey MLC as a substantive member of the committee.

6. Inquiry into 'energy from waste' technology

6.1 Public submissions

Resolved, on the motion of Mr Amato: That the committee accept and publish submission nos 298, 150a and 177a.

6.2 Attachment A to submission no. 176

Resolved, on the motion of Mr Amato: That the committee accept and publish Attachment A to submission no. 176, Executive summary of 'Community attitudes towards, and understanding of, Resource Recovery in the SSROC Region, with a focus on recovering energy from waste'.

6.3 Answers to questions on notice and supplementary questions on notice

Resolved, on the motion of Mr Graham: That the committee publish answers to questions on notice from:

- Mr Miles Mason, New Energy Corporation (including attachments 1-6), received 7 July 2017
- Mr Mark Taylor, Veolia, received 10 July 2017
- Ms Bronte Walker, Dial A Dump Industries, received 20 July 2017
- Ms Jo Immig, National Toxics Network, received 24 July 2017
- Mr Tim Jordan, Clean Energy Finance Corporation, received 24 July 2017
- Ms Susy Cenedese, Local Government NSW, received 25 July 2017
- Ms Lennie Le, Australian Council of Recycling, received 25 July 2017

- Ms Gayle Sloan, Waste Management Association of Australia, received 25 July 2017.

Resolved, on the motion of Mr Graham: That the:

- committee publish answers to questions on notice from Ms Anthea Sargeant, NSW Department of Planning and Environment, received 25 July 2017, with the exception of the response to question 8, which is to remain confidential, as per the request of the author
- secretariat clarify with Ms Kristina Chown, NSW EPA, the publication status of answers to questions on notice, received 27 July 2017, specifically relating to Attachment A and Attachment B, and that the publication of these documents be considered at the next meeting.

6.4’ Tendered documents from hearing on 27 June 2017

Resolved, on the motion of Mr Amato: That the committee accept and publish the following documents tendered during the public hearing on 27 June 2017:

- Jane Bremmer, ‘Zero Waste Solutions not dirty energy incinerators’
- Blacktown and District Environment Group, ‘Opening Statement’
- Jindrich Petrlik and Peter Behnisch, ‘Persistent Organic Pollutants (POPs) in Free Range Chicken Eggs from Western Balkan Countries: Bosnia and Herzegovina’
- Hsiu-Ling Chen et al, ‘Associations between dietary intake and serum polychlorinated dibenzo-p-dioxin and dibenzofuran (PCDD/F) levels in Taiwanese’
- ‘High levels of dioxins found in chicken eggs sampled near waste incinerators and metallurgical plant in China’
- Environmental Protection Agency, ‘Final Draft BAT Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery’
- ‘Plume plot Western Sydney’ video
- ‘Plume Plotter Images for Last 3 Days’
- ‘Plume Plotter for proposed Western Sydney incinerator’
- Australian Investment and Securities Commission, ‘Current & Historical Company Extract’
- ‘Asphalt Site Plan Proposed Plant’
- Blacktown City Council, ‘Notice of Proposed Development’
- Greenpeace, ‘Statement regarding incineration’
- ‘Emissions from Incinerators’
- Resource, ‘Suez fined £220k after worker suffers incinerator burns’
- Greenpeace, ‘Pollution and health impacts of waste incinerators’
- The Washington Post, ‘Trash fire inside Montgomery County incinerator plant disrupts wastes deliveries’
- Chase, ‘End of the charade of safety – 11 hospitalised in Poolbeg incinerator accident’
- National Toxics Network, ‘Mega incinerator proposal for Eastern Creek will stigmatise Western Sydney and cause toxic pollution’
- Natalie O’Brien and Heath Aston, ‘Pollution trail to megadump’

Resolved, on the motion of Mr Amato: That the committee keep confidential, as per the recommendation of the secretariat, the following tendered documents:

- ‘Petition To the President and Members of the Legislative Council’
- ‘Petition To the President and Members of the Legislative Council’
- ‘Petition To the President and Members of the Legislative Council’
- No Incinerator WS Community Statement’

6.5’ Jacfin - legal representation at hearing

The committee noted that Jacfin have requested that Mr Richard Lancaster SC appear on their behalf at the hearing, without a company representative giving evidence.

Resolved, on the motion of Mr Mallard: That Jacfin be advised that a company representative should attend the hearing, with the option of being accompanied by a legal representative if they wish, subject to the legal representative sitting behind the witness and not taking an active role during proceedings.

6.6' Site visit to Woodlawn Bioreactor

The committee noted that it is compulsory for members to wear steel capped boots during the site visit to the Woodlawn Bioreactor on 22 August, and that members are encouraged to bring their own boots as there are only a limited number of boots available at the facility.

6.7' Public hearing

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witness was sworn and examined:

- Dr Ben Scalley, Director, Environmental Health Branch, NSW Health.
- The evidence concluded and the witness withdrew.

The following witnesses were sworn and examined:

- Mr Mike Ritchie, Director, MRA Consulting Group
- Mr Adi Prasad, Environmental Consultant, MRA Consulting Group.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Chris Derksema, Sustainability Director, City of Sydney
- Ms Gemma Dawson, Manager Waste Strategy, City of Sydney.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Mark Wood, Group Manager – Engineering Operations, Sutherland Shire Council
- Mr Mark Roebuck, Manager City Works and Services, Wollongong City Council
- Ms Namoi Dougall, General Manager, Southern Sydney Regional Organisation of Councils
- Ms Hazel Storey, Strategic Coordinator Resource Recovery and Waste, Southern Sydney Regional Organisation of Councils

The evidence concluded and the witnesses withdrew.

The public and the media withdrew.

6.8' Deliberative meeting

The committee noted correspondence received from Mr Michael Zissis, Senior Associate, Allens, received 7 August 2017, regarding a legal representative appearing on behalf of Jacfin at the hearing.

Resolved, on the motion of Mr Mason-Cox: That Mr Zissis (representing Jacfin) be advised that:

- Mr Lancaster to accompany a director or other company representative of Jacfin to the hearing this afternoon (or alternatively at the next hearing scheduled for August). Questions would be directed to the representative of Jacfin, who could confer with Mr Lancaster and/or take the questions on notice
- Jacfin could request to give their evidence in camera, but under the same conditions as outlined above
- Instead of appearing at the hearing, Jacfin could ask the committee to rely on the submission already made to the inquiry and/or provide a supplementary submission.

6.9' Public hearing continued

Witnesses, the public and the media were admitted.

The following witnesses were sworn and examined:

- Mr Tony Fraser, Manager Works and Services, Shoalhaven City Council
- Mr David Hojem, Manager, Waste Services, Shoalhaven City Council.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- A/Prof Bernadette McCabe, Principal Scientist (Bioresources and Waste Utilisation), National Centre for Engineering in Agriculture, University of Southern Queensland

The following witness was examined via teleconference:

- Dr Ali El Hanandeh, Lecturer, Griffith School of Engineering

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- Mr Roger Bligh, Sales Director, Metals, Energy and Water, S.E. Asia Pacific, Outotec.

Mr Bligh tendered the following documents:

- Outotec's UK Energy Projects
- Google map, Hedderheim, identifying Municipal waste to energy plant, Nordweststadt, Frankfurt and 5 km radius from Efw plant
- Google map, Hedderheim, identifying Municipal waste to energy plant, Nordweststadt, Frankfurt
- Image of energy from waste plant
- Outotec – Waste to energy sample references
- Outotec Sewage Sludge Thermal Processing Plant, Zurich Switzerland.
- Outotec, 'Working for Resource Efficiency, Sustainability Report 2015'.

The evidence concluded and the witness withdrew.

The following witness was sworn and examined:

- Mr Mark Willcocks, Executive Chairman, Active Tree Services.

The evidence concluded and the witness withdrew.

The public and media withdrew.

6.10' Jacfin - legal representation at hearing

The committee noted that Jacfin advised that they will not be attending the hearing on 7 August but have requested to reserve their right to appear at the hearing on 17 August.

6.11' Tendered documents

Resolved, on the motion of Mr Mallard: That the committee accept and publish the following documents tendered during the public hearing:

- Outotec's UK Energy Projects
- Google map, Hedderheim, identifying Municipal waste to energy plant, Nordweststadt, Frankfurt and 5 km radius from Efw plant
- Google map, Hedderheim, identifying Municipal waste to energy plant, Nordweststadt, Frankfurt
- Image of energy from waste plant
- Outotec – Waste to energy sample references
- Outotec Sewage Sludge Thermal Processing Plant, Zurich Switzerland.
- Outotec, 'Working for Resource Efficiency, Sustainability Report 2015'.

7.' Adjournment

The committee adjourned at 3.46 pm.

Tina Higgins
Committee Clerk

Minutes no. 46

Thursday 17 August 2017

Portfolio Committee No. 6 – Planning and Environment

Macquarie Room, Parliament House at 9.22 am

1. Members presentMr Green, *Chair*Mr Amato, *Deputy Chair*

Mr Buckingham (from 9.30 am – 12.00 pm and 1.30 pm – 3.30 pm)

Dr Faruqi (from 12.00 pm – 12.45 pm and 3.30 pm – 4.30 pm)

Mr Graham (substituting for Mr Wong)

Mr Mallard

Mr Mason-Cox (from 10.30 am)

Ms Sharpe

2. Draft minutes

Resolved, on the motion of Ms Sharpe: That draft minutes nos. 44 and 45 be confirmed.

3. Correspondence

The committee noted the following items of correspondence:

Received:

- 8 August 2017 – Email from Ms Kristina Chown, NSW EPA, to Secretariat, clarifying that the information in Attachments A and B to answers to questions on notice is factual and not confidential
- 8 August 2017 – Email from Dr Stephen Goodwin, Mountain Districts Association, to secretariat requesting its submission (sub no. 169) be made public and to appear as witnesses at the hearing on Thursday 17 August 2017
- 9 August 2017 – Email from Mr Chris Ritchie, Department of Planning and Environment, to Secretariat, clarifying the department has no objection to the committee publishing all of the information provided in response to Question 8 to answers to questions on notice
- 12 August 2017 – Email from Dr John Byrne to committee, outlining alleged incidents of illegal dumping of waste.
- 15 August 2017 – Email from Mr Jeremy Buckingham MLC, to Secretariat, advising that Dr Mehreen Faruqi MLC will replace him as a substantive member of the committee for the remainder of the energy from waste inquiry following the hearing on 17 August 2017
- 16 August 2017 – Email from Mr Jeremy Buckingham MLC, to Secretariat, advising that Dr Mehreen Faruqi MLC will substitute for him during the hearing on 17 August 2017 for the Mountain Districts Association and EPA sessions.

4. Inquiry into ‘energy from waste’ technology**4.1 Substitution of Dr Mehreen Faruqi**

The committee noted that Dr Mehreen Faruqi will be substituting for Mr Jeremy Buckingham for two sessions at the public hearing on 17 August 2017 and for the duration of the inquiry from 18 August 2017.

4.2 Parliamentary Library research paper

The committee noted receipt of a confidential research paper from the NSW Parliamentary Library entitled ‘International energy from waste facilities’ and requested the secretariat to ask the library if the research paper could be published.

4.3 Answers to questions on notice

Resolved, on the motion of Ms Sharpe:

- that the committee publish response 8 in answers to questions on notice, Ms Anthea Sargeant, Department of Planning and Environment, received on 25 July 2017

- that the committee publish answers to questions on notice, including Attachments A and B, from Ms Kristina Chown, NSW EPA, received 27 July 2017.

4.4 Attendance of Jacfin legal advice

Resolved, on the motion of Ms Sharpe: That Jacfin be invited to appear at a future hearing for the inquiry into energy from waste technology and that a legal representative be permitted to sit beside them to assist them in an advisory capacity.

4.5 Closing date for further submissions

The committee noted that the closing date for submissions is Sunday 10 September 2017.

Mr Buckingham arrived at 9.30 am

4.6 Public hearing

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Mr Tony Khoury, Executive Director, Waste Contractors and Recyclers Association of NSW
- Mr Harry Wilson, President, Waste Contractors and Recyclers Association of NSW.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Dr Marc Stambach, Managing Director, HZI Australia
- Mr Stephen Sasse, Executive Director, Nectar Farms.

Dr Stambach tendered the following documents:

- Hitachi Zosen Inova, 'Waste is our Energy' – Hitachi Zosen Inova company profile
- Hitachi Zosen Inova, 'Ferrybridge Multifuel Plant/UK Energy-from-Waste Plant' brochure
- Hitachi Zosen Inova, 'Energy from Waste Reference Projects since 2000 in chronological order'
- Hitachi Zosen Inova, 'Energy from Waste Plants & Hi-Tech Glasshouses, The benefits of co-location.'

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined

- Dr James Whelan, Researcher and Community Organiser, Environmental Justice Authority.

Dr Whelan tendered the following document:

- Environmental Justice Australia, 'A checklist for responsible air pollution management.'

The evidence concluded and the witness withdrew.

The following witnesses were sworn and examined:

- Dr Stephen Goodwin, President, Mountain Districts Association
- Ms Marilyn Steiner, Mountain Districts Association

Dr Goodwin tendered the following documents:

- Mountain Districts Association, 'Documentary Evidence of the Statutory Failures of both the Environment Protection Authority and the former Gosford City Council's Management of the Remodelling of Mangrove Mountain Memorial Golf Course' August 2017
- Mountain Districts Association, 'Additional notes on Mangrove Mountain Landfill to the Portfolio Committee No. 6 – Environment and Planning Parliamentary Enquiry into Energy from Waste Technology.'

The evidence concluded and the witnesses withdrew.

The public and the media withdrew.

Mr Green left the meeting.

4.7' Deliberative meeting

Mr Amato assumed the role of Chair in Mr Green's absence.

Resolved, on the motion of Mr Graham: That the committee authorise the recording of proceedings by Mr Antony Lewis, Blacktown & District Environment Group, with the consent of the witnesses.

Mr Green re-joined the meeting.

4.8' Public hearing continued

Witnesses, the public and the media were admitted.

The following witnesses were sworn and examined:

- Mr Garbis Simonian, Chairman, Australian Industrial Ecology Network
- Mr Mark Glover, Director, Australian Industrial Ecology Network.

Mr Simonian tendered the following documents:

- Australian Industrial Ecology Network, 'EfW Parliamentary Committee #6'
- 'And Biomass is so much more than firewood!'
- 'How material recovered from Wastes ACTUALLY make it Back into the Productive Economy'.

The evidence concluded and the witnesses withdrew.

The following witness were sworn and examined:

- Mr Ian Malouf, Managing Director, Dial A Dump Industries

The Chair noted that Mr Christopher Biggs, Chief Executive Officer, Dial A Dump Industries Group, Mr Damon Roddis, National Practice Leader – Air Quality and Noise, Pacific Environment, and Ms Clare Brown, Director Planning, Urbis, did not need to be sworn as they had already sworn an oath at an earlier hearing for this inquiry.

Mr Biggs tendered the following documents:

- MRA Consulting Group, 'Feedstock review in accordance with the Resource Recovery Criteria of the NSW EfW Policy Statement: A submission to Dial a Dump Industries' 24 July 2017
- Eco Sustainable, 'Chute Residual Waste: Composition Audit: Report produced for Dial a Dump Industries' April 2017
- APC Waste Consultants, 'Report: Audit of potential feedstock for The Next Generation energy-from-waste facility for Dial A Dump Industries' September 2016.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Barry Buffier, Chair and Chief Executive, NSW Environment Protection Authority
- Mr Greg Sheehy, Director Waste Compliance, NSW Environment Protection Authority

The Chair noted that Mr Henry Moore, Manager, Waste Reform, NSW Environment Protection Authority, did not need to be sworn as he had already sworn an oath at an earlier hearing for this inquiry.

Mr Buffier tendered the following documents:

- Environment Protection Authority, Bar graph 'NSW – Generation and Disposed Trend'
- NSW EPA, 'Waste and Resource Recovery Infrastructure Strategy 2017-2021, Draft for consultation'
- NSW Government, 'Waste Less, Recycle More'
- Blue Environment, 'Australian National Waste Report 2016.'

The evidence concluded and the witnesses withdrew.

The public and media withdrew.

4.9' Tendered documents

Resolved, on the motion of Ms Sharpe: That the committee accept and publish the following documents tendered during the public hearing:

- Hitachi Zosen Inova, 'Waste is our Energy' – Hitachi Zosen Inova company profile
- Hitachi Zosen Inova, 'Ferrybridge Multifuel Plant/UK Energy-from-Waste Plant' brochure
- Hitachi Zosen Inova, 'Energy from Waste Reference Projects since 2000 in chronological order'
- Hitachi Zosen Inova, 'Energy from Waste Plants & Hi-Tech Glasshouses, The benefits of co-location.'
- Environmental Justice Australia, 'A checklist for responsible air pollution management.'
- Mountain Districts Association, 'Documentary Evidence of the Statutory Failures of both the Environment Protection Authority and the former Gosford City Council's Management of the Remodelling of Mangrove Mountain Memorial Golf Course' August 2017
- Mountain Districts Association, 'Additional notes on Mangrove Mountain Landfill to the Portfolio Committee No. 6 – Environment and Planning Parliamentary Enquiry into Energy from Waste Technology'
- Australian Industrial Ecology Network, 'EfW Parliamentary Committee #6'
- 'And Biomass is so much more than firewood!'
- 'How material recovered from Wastes ACTUALLY make it Back into the Productive Economy'.
- MRA Consulting Group – 'Feedstock review in accordance with the Resource Recovery Criteria of the NSW EfW Policy Statement: A submission to Dial a Dump Industries' 24 July 2017
- Eco Sustainable, 'Chute Residual Waste: Composition Audit: Report produced for Dial a Dump Industries' April 2017
- APC Waste Consultants, 'Report: Audit of potential feedstock for The Next Generation energy-from-waste facility for Dial A Dump Industries' September 2016.
- Environment Protection Authority, Bar graph 'NSW, Generation and Disposed Trend'
- NSW EPA, 'Waste and Resource Recovery Infrastructure Strategy 2017-2021, Draft for consultation'
- NSW Government, 'Waste Less, Recycle More'
- Blue Environment, 'Australian National Waste Report 2016'.

4.10 Site visit to Genesis waste facility at Eastern Creek

Resolved, on the motion of Mr Mason-Cox: That the committee conduct a site visit to the Genesis waste facility at Eastern Creek.

5. Adjournment

The committee adjourned at 4.35 pm. until Tuesday 22 August 2017, Tarago (site visit to Woodlawn Bioreactor).

Teresa McMichael
Committee Clerk

Minutes no. 47

Tuesday 22 August 2017

Portfolio Committee No. 6 – Planning and Environment

Veolia Woodlawn facility, Tarago, at 10.30 am

1. Members presentMr Green, *Chair*Mr Amato, *Deputy Chair*

Mr Mallard

Mr Mason-Cox

Ms Sharpe

2. Apologies

Dr Faruqi

Mr Wong

3. Inquiry into ‘energy from waste’ technology**3.1 Site visit**

The committee conducted a site visit to the Woodlawn facility and met with the following representatives from Veolia:

- Mr Mark Taylor, General Manager, NSW Resource Recovery
- Mr Henry Gundry, Woodlawn Facilities Manager
- Mr Chris O’Farrell, Woodlawn MBT Manager
- Ms Vanessa Seaton, Municipal Contracts Manager
- Ms Vanessa Toparis, Community Liaison Officer

3.2 Recording of proceedings to Dial A Dump Industries

Resolved, on the motion of Ms Sharpe: That Dial A Dump Industries be provided with a copy of the in-house video recording of their appearance before the committee on 17 August 2017.

4. Adjournment

The committee adjourned at 2.12 pm *sine die*.

Teresa McMichael

Committee Clerk

Minutes no. 52

Friday 20 October 2017

Portfolio Committee No. 6 – Planning and Environment

Hospital Road, Parliament House, Sydney, at 10.30 am

1. Members present

Mr Green, *Chair*

Mr Amato, *Deputy Chair*

Mr Faruqi

2. Apologies

Mr Graham

Mr Mallard

Mr Mason-Cox

Ms Sharpe

3. Site briefing on bus

The committee received a site briefing while travelling to Eastern Creek from the following Dial A Dump Industries representatives:

- Mr Christopher Biggs, Chief Executive Officer
- Ms Anthea Gilmore, In House Counsel
- Ms Katie McCallum, In House Counsel

4. Tour of Genesis Xero Recycling Facility, Eastern Creek

The committee toured the Genesis Xero Recycling Facility. In addition to Ms Gilmore and Ms McCallum, the following Dial A Dump Industries representatives joined the committee:

- Mr Rodney Johnson, Group Operations
- Mr Darin Marks, Chief Financial Officer
- Mr Paul Foster, Site Operations Manager

5. Adjournment

The committee adjourned at 1.05 pm, until Monday 23 October 2017 (energy from waste hearing).

Kate Mihaljek

Committee Clerk

Minutes no. 53

Monday 23 October 2017

Portfolio Committee No. 6 – Planning and Environment

Macquarie Room, Parliament House, Sydney, at 12.01 pm

1. Members presentMr Green, *Chair*

Dr Faruqi

Mr Graham

Mr Mallard

Ms Sharpe

2. Apologies

Mr Amato

Mr Mason-Cox

3. Draft minutes

Resolved, on the motion of Ms Sharpe: That minutes no.s 46, 47 and 51 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received:

- 23 August 2017 – Email from the Hon Shaoquett Moselmane MLC, Opposition Whip, to the secretariat, advising that the Hon John Graham MLC will substitute for the Hon Ernest Wong MLC for the remainder of the inquiry
- 23 August 2017 – Email from Ms Bronte Walker, Dial A Dump Industries, to the secretariat providing a signed copy of media guidelines and agreeing to the committee's request to visit the Genesis facility
- 24 August 2017 – Letter from Mr Christopher Biggs, Dial A Dump Industries, to the Chair, clarifying issues raised during the hearing on 17 August 2017
- 6 September 2017 – Email from Mr Christopher Biggs, Dial A Dump Industries, to secretariat, attaching correspondence between Dial A Dump Industries and the Hon Gabrielle Upton, Minister for the Environment
- 6 September 2017 – Anonymous letter and attachments, to secretariat, regarding NSW EPA investigation into certain waste companies
- 7 September 2017 – Anonymous letter and attachments, to secretariat, regarding NSW EPA investigation into practices at a certain company
- 18 September 2017 – Anonymous letter and attachments, to secretariat, regarding NSW EPA investigation into practices at a certain waste company
- 20 September 2017 – Letter from Mr Christopher Biggs, Dial A Dump Industries, to Chair advising that Dial A Dump Industries have recommenced transporting waste to Queensland
- 3 October 2017 – Email from Mr James Higgins, Allens Lawyer, to Chair, advising that Jacfin have declined the invitation to appear at the hearing on 23 October
- 3 October 2017 – Letter from the Office of the Chief Scientist of Australia, to the Chair, declining the invitation to appear at the hearing on 23 October.

Sent:

- 16 August 2017 – Email from the secretariat to Ms Kristina Chown, NSW EPA, in response to Ms Chown's telephone enquiry, advising of the committee's power to order the production of documents at a hearing
- 23 August 2017 – Email from the secretariat to Ms Bronte Walker, Dial A Dump Industries, providing a link to the recording of the Dial A Dump witnesses on 17 August 2017

- 24 August 2017 – Letter from the Chair, to Mr Mark Taylor, Veolia, thanking him for hosting the committee at the Woodlawn facility
- 21 September – Letter from the Chair to Dr Alan Finkel, Chief Scientist of Australia, inviting Dr Finkel to appear at the hearing on 23 October
- 5 October 2017 – Email from the Chair to Ms Anthea Sargeant, Department of Planning and Environment, requesting an answer to an additional question on notice
- 5 October 2017 – Email from the Chair to Mr Buffier, NSW EPA, requesting answers to additional questions on notice
- 13 October 2017 - Letter from the Chair to Mr Buffier, NSW EPA, requesting an update on the recommendations from the 2015 General Purpose Standing Committee No. 5 Report into the performance of the NSW EPA.

Resolved, on the motion of Ms Sharpe: That the committee keep confidential the following correspondence:

- 6 September 2017 – Anonymous letter and attachments, to secretariat, regarding NSW EPA investigation into certain waste companies
- 7 September 2017 – Anonymous letter and attachments, to secretariat, regarding NSW EPA investigation into a certain company
- 18 September 2017 - Anonymous letter and attachments, to secretariat, regarding NSW EPA investigation into practices at a certain waste company.

5. Inquiry into 'energy from waste' technology

5.1 Public submissions

The committee noted the following submissions were published by the committee clerk under the authorisation of the resolution appointing the committee: submission nos. 145a, 172a, 173a, 174b, 215a, 384, 385, 387, 393, 394, 395.

5.2 Public attachments

Resolved, on the motion of Ms Faruqi: That the committee publish, but not make available on the committee's website due to their size:

- Attachment 4 to Submission 214
- Attachments A, B, C to Submission 173a.

5.3 Confidential submission

Resolved, on the motion of Ms Sharpe: That the committee keep submission nos. 386, 386a and 182a confidential, as per the request of the authors.

5.4 Submission No. 393a

Resolved, on the motion of Mr Graham: That the committee publish submission 393a and that the Chair write to Dial A Dump Industries inviting a right of reply.

5.5 Answers to questions on notice

Resolved, on the motion of Dr Faruqi: That the committee publish answers to questions on notice from:

- Mr Tony Khoury, Waste Contractors & Recyclers Association of NSW, received on 23 August 2017
- Dr James Whelan, Environmental Justice Australia, received on 24 August 2017
- Dr Ali El Hanandeh, received on 1 September 2017
- Associate Professor Bernadette McCabe, received on 1 September 2017
- Mr Mark Roebuck, Wollongong City Council, received on 5 September 2017
- Ms Bronte Walker, Dial A Dump Industries, received on 7 September 2017
- Dr Marc Stammbach, Hitachi Zosen Inova Australia, received 13 September 2017
- Mr Mark Gifford, NSW EPA, received 13 September 2017

- Mr Mark Gifford, NSW EPA, received 14 September 2017
- Mr Roger Bligh, Outotec, received 19 September 2017
- Mr Barry Buffier, NSW EPA, received 19 October 2017.

5.6' NSW Parliamentary Library Research Paper

The committee noted that the NSW Parliamentary Library Research Paper will remain confidential

5.7' Site visit report from Veolia Woodlawn Facility

Committee noted the site visit report from Veolia Woodlawn Facility.

5.8' Report deliberative date

Resolved, on the motion of Dr Faruqi: That the report deliberative meeting be conducted on Friday 8 December 2017.

5.9' *In camera* hearing

The committee previously agreed to take in camera evidence from individual submission authors.

The committee proceeded to take in camera evidence.

Persons present other than the committee: Ms Beverly Duffy, Ms Kate Mihaljek, Ms Alyce Umback, Ms Monica Loftus, and Hansard reporters.

The following witness was sworn and examined:

- Witness B.

The Chair noted that Witness A did not need to be sworn as they had already sworn an oath at an earlier hearing for this inquiry.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- Witness C.

Witness C tendered the following documents:

- Document 1, financial information
- Document 2, diagram
- Document 3, dated September 2013
- Document 4, dated October 2013

The evidence concluded and the witness withdrew.

5.10' Tendered documents

Resolved, on the motion of Dr Faruqi: That the committee accept and keep confidential the following documents tendered by Witness C during the hearing:

- Document 1, financial information
- Document 2, diagram
- Document 3, dated September 2013
- Document 4, dated October 2013.

5.11' NSW EPA right of reply and appearance at a further hearing

Resolved, on the motion of Ms Sharpe:

- That the secretariat draft correspondence to the NSW EPA identifying issues about the waste industry during the inquiry, and request a detailed written response
- That following receipt of the response, the NSW EPA appear at a hearing, to be conducted part in camera and in public, to discuss the issues raised.

6.' Adjournment

The committee adjourned at 2.13 pm, sine die

Kate Mihaljek
Committee Clerk

Minutes no. 54

Friday 24 November 2017

Portfolio Committee No. 6 – Planning and Environment

Macquarie Room, Parliament House, Sydney, at 9.00 am

1. Members presentMr Green, *Chair*Mr Amato, *Deputy Chair*

Dr Faruqi

Mr Graham

Mr Mallard

Ms Sharpe

2. Apologies

Mr Mason-Cox

3. Previous minutes

Resolved, on the motion of Dr Faruqi: That minutes no.s 52 and 53 be confirmed.

4. Correspondence

The Committee noted the following items of correspondence:

Received

- 24 October 2017 – Email from Mr Tony Khoury, Waste Contractors & Recyclers Association of NSW, to secretariat providing information about an incident involving a truck carrying exhumed waste
- 26 October 2017 – Email from Ms Anthea Sargeant, Department of Planning and Environment, to secretariat, requesting a two extension for answers to questions on notice
- 26 October 2017 – Document from Witness C entitled 'reasons for no action'
- 27 October 2017 – Email from Witness C providing additional information regarding tendered document
- 31 October 2017 – Email from Mr Barry Buffier, NSW EPA, regarding appearance at hearing on 24 November 2017
- 1 November 2017 – Correspondence from Mr Christopher Biggs, The Next Generation, to Chair, responding to right of reply
- 6 November 2017 – Email from Mr Tony Khoury, Waste Contractors & Recyclers Association of NSW, to secretariat providing information about the NSW EPA consultation concerning proposed changes to NSW environment protection legislation introducing minimum standards for managing construction waste and other improvements to waste management practices in NSW
- 22 November 2017 – Email from NSW Police Force, to secretariat, requesting that the police answers to questions on notice received on 22 November 2017 be kept confidential
- 23 November 2017 – Email from Mr Andrew O'Sullivan, to secretariat, advising that Mr Mason-Cox will not be attending the hearing on 24 November 2017.

Sent

- 24 October 2017 – Letter from the Chair to Mr Ian Malouf, Dial A Dump Industries, inviting a right to reply to submission no 393a
 - 25 October 2017 – Letter from the Chair to Mr Ian Malouf, Dial A Dump Industries, thanking him for hosting the committee at the Genesis Xero Recycling Centre
 - 30 October 2017 – Letter from the Chair to Mr Barry Buffier, NSW EPA, regarding invitation to appear at hearing on 24 November 2017, and pre-hearing questions
 - 7 November 2017 – Letter from the Chair to Commissioner Michael Fuller, NSW Police Force, regarding invitation to appear in camera at hearing on 24 November 2017, and pre-hearing questions.
- Resolved, on the motion of Mr Mallard: That the committee keep confidential the following correspondence:

- 24 October 2017 – Email from Mr Tony Khoury, Waste Contractors & Recyclers Association of NSW, to secretariat providing information about an incident involving a truck carrying exhumed waste
- 26 October 2017 – Document from Witness C entitled ‘reasons for no action’
- 27 October 2017 – Email from Witness C providing additional information regarding tendered document
- 22 November 2017 - Email from NSW Police, to secretariat, requesting that the police answers to questions on notice received on 22 November 2017 be kept confidential.

5. Inquiry into ‘energy from waste’ technology

5.1 Right of reply – The Next Generation

Resolved, on the motion of Ms Sharpe: That the committee publish correspondence from Mr Christopher Biggs, The Next Generation, to Chair, except identified excerpts due to confidentiality concerns.

5.2 *In camera* transcript

Resolved, on the motion of Mr Amato: That the in camera transcript from 23 October 2017 be kept confidential.

5.3 Partially confidential submission

Resolved, on the motion of Mr Mallard: That the committee authorise the publication of submission no.182b with the exception of sensitive information identified, which is to remain confidential, as per the request of the secretariat, and agreement of the author.

5.4 Report deliberative date

Resolved, on the motion of Dr Faruqi: That the committee extend the reporting date to the end of March 2018.

5.5 Answers to questions on notice

Committee noted the following answers to questions on notice were published by the committee clerk under authorisation of the resolution appointing the committee:

- Mr Barry Buffier, NSW EPA, received 1 November 2017.

Resolved, on the motion of Mr Amato: That the committee publish answers to questions on notice from:

- Ms Anthea Sargeant, Department of Planning and Environment, received 13 November 2017
- Mr Barry Buffier, NSW EPA, received 20 November 2017.

Resolved, on the motion of Mr Amato: That the committee keep confidential answers to questions on notice from:

- NSW Police Force, received 22 November 2017.

5.6 *In camera* hearing

The committee previously agreed to take in camera evidence from certain organisations.

The committee proceeded to take in camera evidence.

Persons present other than the committee: Ms Teresa McMichael, Ms Kate Mihaljek, Ms Monica Loftus, and Hansard reporters.

The following witness was sworn and examined:

- Witness D

Resolved on the motion of Mr Graham: That Witness D be shown confidential 'Document 2, diagram' tendered by Witness C at the in camera hearing on 23 October 2017.

The evidence concluded and the witnesses withdrew.

Resolved, on the motion of Ms Sharpe: That a representative from the Waste Strategy Unit at the NSW EPA, be allowed to attend the next in camera session of the hearing.

The Chair noted that Mr Buffier did not need to be sworn as he had already sworn an oath at an earlier hearing for this inquiry

The following witness was sworn:

- Mr Mark Gifford, Chief Environmental Regulator, NSW Environment Protection Authority. Mr Buffier and Mr Gifford were examined.

Mr Buffier tendered the following document:

- Document A

The evidence concluded and the witnesses withdrew.

5.7 Public hearing

Witnesses, the public and the media were admitted.

The Chair noted that Mr Buffier and Mr Gifford did not need to be sworn as they had already sworn an oath at an earlier hearing for this inquiry.

Mr Buffier tendered the following document:

- MLA Waste Tracking System.

The evidence concluded and the witnesses withdrew.

The public and the media withdrew.

5.8 Tendered documents

Resolved, on the motion of Mr Mallard: That the committee accept and publish the following documents tendered during by Mr Buffier during the public hearing:

- MLA Waste Tracking System.

6. Inquiry into Budget Estimates 2017-2018

6.1 Report deliberative

Resolved, on the motion of Mr Mallard: That:

The draft report be the report of the committee and that the committee present the report to the House;

The transcripts of evidence, tabled documents, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry be tabled in the House with the report;

Upon tabling, all unpublished transcripts of evidence, tabled documents, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry, be published by the committee, except for those documents kept confidential by resolution of the committee;

The committee secretariat correct any typographical, grammatical and formatting errors prior to tabling;

That the report be tabled on Wednesday 29 November 2017.

7. Inquiry into the music and arts economy in New South Wales

7.1 Terms of reference

The committee to note the following terms of reference referred by the House on 23 November 2017:

That Portfolio Committee No. 6 - Planning and Environment inquire into and report on the music and arts economy in New South Wales, including regional New South Wales, and in particular:

- (a) progress on the implementation of the Government response to the New South Wales Night-Time Economy Roundtable Action Plan,
- (b) policies that could support a diverse and vibrant music and arts culture across New South Wales,
- (c) policies that could support the establishment and sustainability of permanent and temporary venue spaces for music and for the arts,
- (d) policy and legislation in other jurisdictions, and options for New South Wales including red tape reduction and funding options, and
- (e) any other related matter.

7.2 Closing date for submissions

Resolved, on the motion of Ms Sharpe: That the closing date for submissions be 28 February 2018.

7.3 Stakeholder list

Resolved, on the motion of Ms Sharpe: That the secretariat circulate to members the Chair's proposed list of stakeholders to provide them with the opportunity to amend the list or nominate additional stakeholders, and that the committee agree to the stakeholder list by email, unless a meeting of the committee is required to resolve any disagreement.

7.4 Advertising

The committee noted that it is standard practice is to advertise all inquiries via twitter, stakeholder letters and a media release distributed to all media outlets in New South Wales.

It is no longer standard practice to advertise in the print media.

Resolved, on the motion of Mr Mallard: That the inquiry be advertised on a live music website.

7.5 Hearing dates

Resolved, on the motion of Ms Sharpe: That hearing dates be determined by the Chair after consultation with members regarding their availability.

8. Adjournment

The committee adjourned at 12.12 pm, *sine die*

Kate Mihaljek
Committee Clerk

Minutes no. 55

Tuesday 13 February 2018

Portfolio Committee No. 6 – Planning and Environment

Macquarie Room, Parliament House, Sydney, at 12.52 pm

1. Members presentMr Green, *Chair*Mr Mallard, *Deputy Chair*

Dr Faruqi

Mr Graham (from 12.58 pm)

Mr Martin

Mr Mason-Cox

Ms Sharpe

2. Election of the Deputy Chair

The Chair called for nominations for Deputy Chair.

Mr Martin moved: That Mr Mallard be elected Deputy Chair of the Committee.

There being no further nominations, the Chair declared Mr Mallard elected Deputy Chair.

3. Previous minutes

Resolved, on the motion of Ms Sharpe: That minutes no. 54 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received

- 24 November 2017 – Email from Ms Sheena Graham, on behalf of Mr Barry Buffier, NSW EPA advising of a correction to response to Question 3 of the NSW EPA answers to questions on notice received on 20 November 2017
- 27 November 2017 – Email from Mr Tony Khoury, Waste Contractors and Recyclers Association of NSW, to secretariat, notifying the committee of an accident involving a truck transporting waste, and indicating that Mr Khoury could speak to the committee about this issue
- 28 November 2017 – Email from NSW Police, to secretariat, advising that they would like the in camera transcript sent via email
- 28 November 2017 – Email from Ms Sheena Graham, NSW EPA, on behalf of, Mr Barry Buffier, NSW EPA, advising that he would like the in camera transcript sent via email
- 29 November 2017 – Email from Witness C, to secretariat, regarding phone conversation on 28 November 2017
- 29 November 2017 – Email from Witness C, to secretariat, regarding information concerning a speech from former Minister for the Environment Robyn Parker
- 30 November 2017 – Letter from the Hon Don Harwin MLC, Minister for Resources, Minister for Energy and Utilities, Minister for the Arts, Vice-President of the Executive Council, to the Clerk of the Parliaments, advising of appointments to Government positions on Legislative Council committees
- 1 December 2017 – Email from Witness C, to secretariat, suggesting additional questions on notice to NSW EPA
- 6 December 2017 – Email from Witness C, to secretariat, providing response to NSW EPA answers to questions on notice received on 20 November 2017
- 6 December 2017 – Email from Witness C, to secretariat, forwarding a third party's response to NSW EPA answers to questions on notice received on 20 November 2017
- 20 December 2017 – Email from Witness C, to secretariat, advising that NSW EPA staff may be aware of his identity

- 6 February 2018 – Email from Witness C, to secretariat, forwarding information from a third party from within the EPA, about the EPA’s answers to questions on notice, including in relation to the waste levy.

Resolved, on the motion of Dr Faruqi: That the committee keep confidential the following correspondence:

- 29 November 2017 – Email from Witness C, to secretariat, regarding phone conversation on 28 November 2017
- 29 November 2017 – Email from Witness C, to secretariat, regarding information concerning a speech from former Minister for the Environment Robyn Parker
- 1 December 2017 – Email from Witness C, to secretariat, suggesting addition questions on notice to NSW EPA
- 6 December 2017 – Email from Witness C, to secretariat, providing response to NSW EPA answers to questions on notice received on 20 November 2017
- 6 December 2017 – Email from Witness C, to secretariat, forwarding a third party’s response to NSW EPA answers to questions on notice received on 20 November 2017
- 20 December 2017 – Email from Witness C, to secretariat, advising that NSW EPA staff may be aware of his identity
- 6 February 2018 – Email from Witness C, to secretariat, forwarding information from a third party from within the EPA, about the EPA’s answers to questions on notice, including in relation to the waste levy.

5. Inquiry into ‘energy from waste’ technology

5.1 Confidential tendered document

Resolved, on the motion of Mr Mason-Cox: That the committee keep confidential Document A received from the NSW EPA on 24 November 2017.

5.2 Answers to questions on notice

The committee noted that the following answers to questions on notice had been published:

- answers to questions on notice from Mr Mark Gifford, NSW EPA, received 21 December 2017.
- Resolved, on the motion of Mr Mallard: That the committee keep confidential the following answers to questions on notice:
- answers to questions on notice from Mr Mark Gifford, NSW EPA, received 21 December 2017
- answer to supplementary question on notice from Mr Mark Gifford, NSW EPA, received 21 December 2017.

5.3 Return of answers to questions on notice and supplementary questions

Resolved, on the motion of Mr Mallard: That any answers to questions on notice and supplementary questions arising from the in camera hearing on 13 February 2018 be requested to be provided by Wednesday 28 February 2018.

5.4 *In camera* hearing

Resolved, on the motion of Mr Mallard: That the committee proceed to take evidence from Witnesses E, F and G in camera.

The committee proceeded to take in camera evidence.

Persons present other than the committee: Ms Sharon Ohnesorge, Ms Kate Mihaljek, Ms Monica Loftus, Ms Jenelle Moore, and Hansard reporters.

The following witnesses were sworn and examined:

- Witness E
- Witness F
- Witness G

Witness G tendered the following document:

- Document A – Regulation of industry by the EPA
- Document B – Information from a third party
- Document C – Information from a third party
- Document D – Information from a third party
- Document E – Information from a third party.

The evidence concluded and the witnesses withdrew.

5.5* Tendered documents

Resolved, on the motion of Mr Mason-Cox: That the committee accept and keep confidential the following documents tendered during the in camera hearing:

- Document A – Regulation of industry by the EPA
- Document B – Information from a third party
- Document C – Information from a third party
- Document D – Information from a third party
- Document E – Information from a third party.

6.* Music and arts economy

Resolved, on the motion of Mr Graham: The secretariat draft a proposed schedule of activities for the inquiry, and circulate this to members.

7.* Adjournment

The committee adjourned at 1.38 pm, until Monday 19 March 2018, Room 1254 (report deliberative meeting for inquiry into 'energy from waste' technology).

Kate Mihaljek
Committee Clerk

Minutes no. 56

Monday 19 March 2018

Portfolio Committee No. 6 – Planning and Environment

Room 1254, Parliament House, Sydney, at 9.36 am

1. Members present

Mr Green, *Chair*

Mr Mallard, *Deputy Chair*

Dr Faruqi

Mr Graham

Mr Martin

Mr Mason-Cox

Ms Sharpe

2.* Minutes

Resolved, on the motion of Mr Mallard: That draft minutes no. 55 be confirmed.

3.* Correspondence

The committee noted the following items of correspondence:

Received:

- 12 February 2018 – Email from NSW Police, to secretariat, regarding in camera evidence that may be included in the energy from waste technology report
- 13 February 2018 – Email from Witness E, to secretariat, providing a document from a third party
- 13 February 2018 – Email from Witness E, to secretariat, advising that they would like the in camera transcript sent via email
- 14 February 2018 – Email from NSW Police, to secretariat, regarding in camera evidence that may be included in the energy from waste technology report
- 15 February 2018 – Email from Ms Genelle Watkins, Create NSW, to secretariat, regarding the agency's submission to the inquiry into the music and arts economy
- 19 February 2018 – Email from Witness C, to secretariat, regarding in camera evidence that may be included in the energy from waste technology report
- 20 February 2018 – Email from Witness G, to secretariat, regarding in camera evidence that may be included in the energy from waste technology report, and reiterating request to remain unidentified
- 20 February 2018 – Email from Ms Genelle Watkins, Create NSW, to secretariat, advising that the Create NSW submission to the inquiry into the music and arts economy will be submitted on 7 March 2018
- 20 February 2018 – Email from Witness C, to secretariat, regarding in camera evidence that may be included in the energy from waste technology report
- 21 February 2018 – Email from Witness C, to secretariat, advising that a waste company is buying certain facilities
- 21 February 2018 – Email from Ms Genelle Watkins, Create NSW, to committee, requesting a further extension for its preliminary submission to the inquiry into the music and arts economy
- 22 February 2018 – Mr Justin Field MLC, The Greens, to secretariat, advising that Ms Dawn Walker MLC is substituting for Mr Jeremy Buckingham MLC for the duration of the inquiry into the music and arts economy
- 27 February 2018 – Email Mr Mark Gifford, NSW EPA, to secretariat, regarding in camera evidence that may be included in the energy from waste technology report
- 27 February 2018 – Email Mr Tony Khoury, Waste Contractors and Recyclers Association of New South Wales, to secretariat, providing clip of radio interview concerning media article about the transfer of waste interstate
- 9 March 2018 – The Hon Natasha Maclaren-Jones MLC, Government Whip, to secretariat, advising that the Hon Catherine Cusack MLC is substituting for the Hon Matthew Mason-Cox MLC for the duration of the inquiry into the music and arts economy.

Sent

- 12 February 2018 – Email from secretariat to NSW EPA, identifying possible in camera evidence that may be included the energy from waste technology report
- 12 February 2018 – Email from secretariat to NSW Police Force, identifying possible in camera evidence that may be included the energy from waste technology report
- 12 February 2018 – Email from secretariat to Witness C, identifying possible in camera evidence that may be included the energy from waste technology report
- 15 February 2018 – Email from secretariat to Witness E, identifying possible in camera evidence from Witness G that may be included the energy from waste technology report
- 20 February 2018 – Email from secretariat, to Witness C, regarding in camera evidence that may be included the energy from waste technology report
- 20 February 2018 – Email from secretariat, to Witness G, Witness E and Witness F, regarding in camera evidence that may be included the energy from waste technology report
- 21 February 2018 – Email from secretariat to Ms Genelle Watkins, Create NSW, noting that the agency's preliminary submission to the inquiry into the music and arts economy should be provided as close as possible to 7 March 2018

- 12 March 2018 – Email from secretariat to Ms Genelle Watkins, Create NSW confirming advice regarding the agency’s final submission to the inquiry into the music and arts economy.

Resolved, on the motion of Mr Mallard: That the committee keep confidential the following correspondence:

- 12 February 2018 – Email from secretariat to NSW EPA, identifying possible in camera evidence that may be included the energy from waste technology report
- 12 February 2018 – Email from secretariat to NSW Police Force, identifying possible in camera evidence that may be included the energy from waste technology report
- 12 February 2018 – Email from secretariat to Witness C, identifying possible in camera evidence that may be included the energy from waste technology report
- 12 February 2018 – Email from NSW Police, to secretariat, regarding in camera evidence that may be included the energy from waste technology report
- 13 February 2018 – Email from Witness E, to secretariat, providing a document from a third party
- 13 February 2018 – Email from Witness E, to secretariat, advising that they would like the in camera transcript sent via email
- 14 February 2018 – Email from NSW Police, to secretariat, regarding in camera evidence that may be included the energy from waste technology report
- 15 February 2018 – Email from secretariat to Witness E, identifying possible in camera evidence from Witness G that may be included the energy from waste technology report
- 19 February 2018 – Email from Witness C, to secretariat, regarding in camera evidence that may be included the energy from waste technology report
- 20 February 2018 – Email from secretariat, to Witness C, regarding in camera evidence that may be included the energy from waste technology report
- 20 February 2018 – Email from Witness G, to secretariat, regarding in camera evidence that may be included the energy from waste technology report, and reiterating request to remain unidentified
- 20 February 2018 – Email from secretariat, to Witness G, Witness E and Witness F, regarding in camera evidence that may be included the energy from waste technology report
- 20 February 2018 – Email from Witness C, to secretariat, regarding in camera evidence that may be included the energy from waste technology report
- 21 February 2018 – Email from Witness C, to secretariat, advising that a waste company is buying certain facilities
- 27 February 2018 – Email Mr Mark Gifford, NSW EPA, to secretariat, regarding in camera evidence that may be included the energy from waste technology report.

4. Inquiry into ‘energy from waste’ technology

4.1 Partially confidential submissions

Resolved, on the motion of Mr Mason-Cox: That the committee keep names and/or identifying and sensitive information, and potential adverse mention, confidential, as per the request of the author and/or the recommendation of the secretariat, in submission nos. 388-392.

4.2 Answers to questions on notice

Resolved, on the motion of Mr Mason-Cox: That the committee keep confidential the following answers to questions on notice:

- answers to questions on notice from Witnesses E, F and G, received 26 February 2018.

4.3 Consideration of Chair’s draft report

The Chair submitted his draft report entitled ‘Energy from waste technology’ which, having been previously circulated, was taken as being read.

Key issues

Resolved, on the motion of Dr Faruqi: That paragraph 5 be amended by omitting ‘Overall, the committee supports the use of energy from waste technologies as a means of energy recovery and as an alternative to waste disposal. We have made a number of recommendations to enhance the regulation of energy from waste in New South Wales, including ensuring the NSW EPA’s *Energy Recovery Facility Guidelines* are appropriately robust, particularly with regard to the emissions regime and social licence requirements for proposed facilities’ and the following new sentences be inserted instead:

‘Overall the committee believes some energy from waste technologies as means of energy recovery may be appropriate in some circumstances, but only after a significant shift up the waste hierarchy to avoid, reduce and re-use waste and the issues of social licence, air pollution impacts and health risks have been addressed’.

Chapter 1

Resolved, on the motion of Dr Faruqi: That paragraph 1.2 be amended by inserting ‘Currently, New South Wales is the second highest per capita producer of waste in the world’. [FOOTNOTE: Evidence, Mr Barry Buffier, Chair and Chief Executive, NSW EPA, 24 November 2017, p 7] after ‘During this period, New South Wales generated about 19 million tonnes of waste.’

Resolved, on the motion of Ms Sharpe: That paragraph 1.3 be amended by inserting at the end: ‘Stakeholders also raised the issue of the growing interstate movement of waste and the impact this is also having on recycling rates’.

Resolved, on the motion of Dr Faruqi: That the following new paragraph be inserted after paragraph 1.30:

‘An alternate view offered by the National Toxics Network was that although the European Union is often held up as the world’s best standard for incinerator operation, it has recently declared a major policy redirection on waste management and the waste to energy incinerator sector in line with the major commitments to a circular economy. This has resulted in a recommendation issued to members to stop the construction of new incinerators and to decommission existing facilities’. [FOOTNOTE: Submission 172, National Toxics Network, p 5]

Dr Faruqi moved: That paragraph 1.34 be amended by omitting ‘there is an opportunity for energy from waste to play a role in diverting waste from landfill in the future’ and inserting instead ‘there may be a role for energy from waste after higher order waste reduction methods have been fully implemented’.

Question put.

The committee divided.

Ayes: Dr Faruqi, Mr Graham, Ms Sharpe.

Noes: Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox.

Question resolved in the negative.

Resolved, on the motion of Dr Faruqi: That paragraph 1.35 be amended by omitting:

‘We also recognise that many plants are within heavily urbanised areas, making it unlikely that siting requirements such as a buffer or exclusionary zone are in place in those jurisdictions, as is the case in New South Wales’.

Chapter 2

Resolved, on the motion of Ms Sharpe: That the following sentence and table be inserted after paragraph 2.7: ‘The table below sets out the waste and environmental levy revenues, and expenditures on environmental programs, for the past five years’.

Table 1: Waste and environmental levy revenues, and expenditures on environmental programs, for the past five years

Item/Program (\$m)	2012/13	2013/14	2014/15	2015/16	2016/17 (unaudited)
Revenue:					
Total Waste Revenues	\$483.3	\$503.6	\$568.5	\$692.1	\$659.5
Program Expenditure:					
Waste and Regulatory programs	\$61.7	\$76.9	\$111.1	\$100.0	\$91.0
Other Environmental programs	\$61.5	\$90.0	\$95.9	\$90.1	\$88.8
Total Expenditure	\$123.2	\$166.9	\$207.0	\$190.1	\$179.9

[FOOTNOTE: Answers to question on notice, NSW EPA, 27 July 2017, p 1.]

Resolved, on the motion of Ms Sharpe: That paragraph 2.13 be amended by omitting 'Overall' before 'the committee supports the retention of the waste levy.'

Resolved, on the motion of Dr Faruqi: That paragraph 2.14 be amended by inserting 'including waste avoidance, minimisation and re-use programs' before 'and waste recovery infrastructure in New South Wales'.

Resolved, on the motion of Mr Graham: That the following new committee comment and recommendations be inserted after paragraph 2.30:

'Committee comment

The committee notes that as at October 2016, the Waste Less, Recycle More initiative had only spent \$292 million of its \$465 million allocation. That is, less than two thirds of the allocated funding had been spent. This is a major under-allocation for a significant initiative. This is doubly concerning given the NSW EPA has given evidence that it considers this program vital to the state meeting its waste targets. The committee recommends that the NSW Government ensure all funds allocated to the Waste Less, Recycle More program be spent in accordance with the program. We also recommend that the NSW EPA undertake an audit of the Waste Less, Recycle More initiative to ensure that the funds are fully expended to meet the objectives of the program.

Recommendation X

That the NSW Government ensure that all funds allocated to the Waste Less, Recycle More program be fully expended in accordance with the program.

Recommendation X

That the New South Wales Environment Protection Authority undertake an audit of the Waste Less, Recycle More program to ensure that the funds are fully expended to meet the objectives of the program?

Resolved, on the motion of Ms Sharpe: That paragraph 2.36 be amended by omitting 'unduly burdened' and inserting instead 'impacted heavily'.

Resolved, on the motion of Mr Graham: That the following new committee comment be inserted before paragraph 2.68:

'Committee comment

The first step in an effective allocation of the money from the waste levy is for the NSW EPA to fully expend the money that is allocated to the Waste Less, Recycle More initiative'.

Ms Sharpe moved: That paragraph 2.69 and Recommendation 2 be amended by omitting 'hypothecate 100 per cent of' and inserting instead 'substantially increase'.

Question put.

The committee divided.

Ayes: Dr Faruqi, Mr Graham, Ms Sharpe.

Noes: Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox.

Question resolved in the negative.

Resolved, on the motion of Dr Faruqi: That paragraph 2.69 and Recommendation 2 be amended by inserting 'and environmental programs' after 'to provide waste management services'.

Resolved, on the motion of Dr Faruqi: That paragraph 2.69 and Recommendation 2 be amended by inserting 'including waste reduction, avoidance and re-use programs' after 'waste management services'.

Resolved, on the motion of Ms Sharpe: That the following new committee comment be inserted after paragraph 2.71:

'Committee comment

The committee is alarmed that the NSW EPA has failed to address this critical issue for a number of years, thereby exacerbating, and even encouraging, the transportation of waste to Queensland, and undermining New South Wales revenue by hundreds of millions of dollars'.

Resolved, on the motion of Ms Shape: That recommendation 4 be omitted: 'That the NSW Environment Protection Authority investigate whether attaching the waste levy to the waste generator is a viable option in New South Wales', and the following new recommendation be inserted instead:

'That the NSW Government urgently consider attaching the waste levy to the waste generator in New South Wales, particularly for large waste generators or operators of large sites.'

Chapter 3

Resolved, on the motion of Mr Graham: That paragraph 3.15 be amended by inserting 'each' after 'local government areas'

Resolved, on the motion of Dr Faruqi: That paragraph 3.17 be amended by omitting 'illegally' before 'dump' and inserting 'and stockpile' before 'waste' in dot point 3.

Resolved, on the motion of Mr Graham: That paragraph 3.34 be amended by inserting 'amongst other issues' after 'the agency's efforts are being hampered by the inherent difficulty of gathering suitable evidence to pursue legal action'.

Resolved, on the motion of Mr Graham: That paragraph 3.36 be amended by inserting 'The committee acknowledges that as the levy has increased over time, so have the incentives to dump illegally' after 'Rather, a confluence of social and economic factors emboldens individuals and organisations to pursue this type of unlawful activity'.

Resolved on the motion of Mr Mason-Cox: That paragraph 3.36 and Recommendation 6 be amended by omitting 'as soon as practicable' after 'that the NSW Government amend'.

Resolved, on the motion of Mr Graham: That the following new committee comment be inserted after paragraph 3.36:

'Committee comment

The committee notes the reports from local government that this behaviour has increased. We note that of the funds allocated to the Waste Less, Recycle More initiative to July 2016, only \$8.7 million were spent on illegal dumping. The committee also notes that in 2016-2017, the average fine following the 11 successful waste prosecutions was less than \$40,000. The NSW EPA also gave evidence that the costs of illegal dumping run to millions of dollars per year. The committee therefore recommends that the NSW Government allocate additional resources to support the policing of illegal dumping'.

Resolved, on the motion of Mr Graham: That the following new recommendation be inserted after Recommendation 6:

'Recommendation X

That the NSW Government allocate additional resources to support the policing of illegal dumping'.

Resolved on the motion of Mr Graham: That paragraph 3.37 be amended by inserting at the end: 'The committee recommends that the NSW EPA strengthen its liaison with NSW Police when it comes to illegal activity in the waste sector, with formal protocols made public, and specifying the channels through which this liaison occurs.

Resolved, on the motion of Mr Graham: That the following new recommendation be inserted after paragraph 3.37:

'Recommendation X

That the NSW Environment Protection Authority strengthen its liaison with NSW Police when it comes to illegal activity in the waste sector, with formal protocols made public, and specifying the channels through which this liaison occurs.

Resolved, on the motion of Dr Faruqi: That paragraph 3.38 and Recommendation 7 be amended by inserting 'and expand the number of' after 'The committee recommends that the NSW Government allocate additional resources to'.

Resolved, on the motion of Mr Mason-Cox: That paragraph 3.39 be amended to omit 'it is surprising' and inserting instead 'it is unacceptable'.

Resolved, on the motion of Mr Mason-Cox: That paragraph 3.39 and Recommendation 8 be amended by:

- a) omitting 'investigate how' and inserting instead 'immediately increase the use of' after 'that the NSW Environment Protection Authority'
- b) omitting 'can be used' before 'to prevent illegal dumping'.

Chapter 4

Resolved, on the motion of Ms Sharpe: That paragraph 4.27 be amended by inserting 'with stakeholders estimating that the loss could be upwards of \$100 million per year' after 'for the NSW Government'.

Resolved, on the motion of Ms Sharpe: That paragraph 4.33 be amended by omitting 'There was a court challenge on that issue' before 'We formed the view'.

Resolved, on the motion of Ms Sharpe: That paragraph 4.42 be amended by:

- a) omitting 'with very limited' and inserting instead 'with no'
- b) inserting at the end: 'Figures show that the amount of waste being transferred interstate is growing'.

Chapter 5

Resolved, on the motion of Dr Faruqi: That paragraph 5.4 be amended by omitting 'recycling and' before 'waste diversion targets' in dot point 10.

Resolved, on the motion of Dr Faruqi: That paragraph 5.6 be amended by inserting 'only after a significant shift up the waste hierarchy to avoid, reduce and re-use waste and the issues of social license, air pollution impacts and health risks have been addressed' after 'one component of this solution'.

Resolved, on the motion of Dr Faruqi: That paragraph 5.9 be amended by inserting after 'standards and outcomes':

'The National Toxics Network expressed concern about the emergence of the New South Wales Energy from Waste Policy Statement as it seemed to appear out of nowhere and without a robust community debate. They considered it a flawed policy with internal inconsistencies including a lack of key guidance material and inadequate provisions for managing air pollution and toxic ash produced by waste incinerators'.

[FOOTNOTE: Evidence, Ms Jo Immig, Coordinator, National Toxics Network, 27 June 2017, p 35]

Resolved, on the motion of Dr Faruqi: That paragraph 5.10 be amended by:

- a) omitting 'There was consensus among' before 'inquiry participants'
- b) inserting 'highlighted' after 'inquiry participants'.

Resolved, on the motion of Dr Faruqi: That the following new paragraph be inserted after paragraph 5.29:

'Dr James Whelan from Environmental Justice Australia provided evidence that there are no enforceable national standards for criteria pollutants, which include fine particle pollution PM2.5 or coarse particles PM10.'

[FOOTNOTE: Evidence, Dr James Whelan, Researcher and Community Organiser, Environmental Justice Australia, 17 August 2017, p 27]

Resolved, on the motion of Ms Sharpe: That paragraph 5.48 be amended by inserting at the end: 'and in communities'.

Resolved, on the motion of Dr Faruqi: That paragraph 5.49 be amended by inserting 'in some circumstances' after 'While the committee supports the use of residual waste for energy from waste facilities'.

Resolved, on the motion of Mr Mason-Cox: That paragraph 5.54 be amended by:

- a) omitting 'gaining a social licence' and inserting instead 'gaining community support' before 'is essential for any proponent'
- b) omitting 'receive the social licence necessary' and inserting instead 'receive the necessary approvals and community support'.

Resolved, on the motion of Mr Mason-Cox: That Recommendation 14 be amended by omitting 'receive the social licence necessary' and inserting instead 'receive the necessary approvals and community support'.

Resolved, on the motion of Dr Faruqi: That paragraph 5.55 and Recommendation 15 be amended by inserting 'in addition to the full Environmental Impact Statement' after 'department's website'.

Resolved, on the motion of Ms Sharpe: That the following new committee comment be inserted after paragraph 5.55:

'Committee comment

Given the significant concerns in relation to energy from waste technology and the impact of emissions on air quality there needs to be a much more detailed assessment of the issues surrounding this technology and its use in New South Wales. The committee recommends NSW Government establish an expert advisory body on energy from waste chaired by the Chief Scientist to examine and report on the energy from waste regulatory framework, to create certainty for the market and communities'.

Resolved, on the motion of Ms Sharpe: That the following new recommendation be inserted after the new committee comment inserted after paragraph 5.55:

'Recommendation X

That the NSW Government establish an expert advisory body on energy from waste chaired by the Chief Scientist to examine and report on the energy from waste regulatory framework to create certainty for the market and communities, with particular reference to:

- changes required to the *Energy from Waste Recovery Guidelines* to guarantee that New South Wales uses only world's best practices in emissions, emissions monitoring and residual waste disposal
- consent conditions required in any planning approval to guarantee that New South Wales uses only world's best practices in emissions, emissions monitoring and residual waste disposal
- the impact of energy from waste on human health

- the impact of energy from waste on recycling targets'.

Dr Faruqi moved: That the following new recommendation be inserted after Recommendation 15:

'Recommendation X

That the NSW Government enact legislation that bans energy from waste incinerators within at least 15 kilometres from areas zoned for residential use'.

Question put.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Graham, Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox, Ms Sharpe.

Question resolved in the negative.

Dr Faruqi moved: That the following new recommendation be inserted after Recommendation 15:

'Recommendation X

That in recognition of opportunities to avoid, minimise and reduce waste through measures higher in the waste hierarchy, that a moratorium be enacted on new energy from waste incinerator proposals.'

Question put.

The committee divided.

Ayes: Dr Faruqi, Mr Graham, Ms Sharpe.

Noes: Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox.

Question resolved in the negative.

Resolved, on the motion of Ms Sharpe: That the following new committee comment be inserted after Recommendation 15:

'Committee comment

Given the particular topography of the Sydney Basin and the trapping of air pollution within the basin, the committee believes that the pressure on air quality should be considered when assessing energy from waste incinerator proposals.'

Ms Sharpe moved: that the following new recommendation be inserted after the new committee comment inserted after Recommendation 15:

'Recommendation X

That the government enact legislation to ban energy from waste incinerators within the Sydney basin and impose a moratorium on any new incinerator proposal until a more detailed examination is done by an expert advisory body chaired by the Chief Scientist.'

Question put.

The committee divided.

Ayes: Dr Faruqi, Mr Graham, Ms Sharpe.

Noes: Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox.

Question resolved in the negative.

Chapter 6

Resolved, on the motion of Ms Sharpe: That paragraph 6.5 be amended by inserting 'and is part of the Dial A Dump Industries Group' after 'The Next Generation is a wholly owned subsidiary of the Alexandria Landfill Corporate Group'.

Resolved, on the motion of Dr Faruqi: That paragraph 6.29 be amended by omitting:

'In summary, we believe the technology – that is moving grate combustion – is sound, and agree that thermal waste disposal options should be included in the policy mix. However, the committee is left short of being convinced that this the right technology in the right place, even just for Stage 1 of the project' after 'Based on this evidence, as things currently stand, the committee does not support the development of this project'.

Mr Mason-Cox moved: That paragraph 6.29 be omitted: Inquiry participants' specific concerns about the project are outlined throughout this chapter, as is the proponent's response. Based on this evidence, as things currently stand, the committee does not support the development of this project. The proponent has not provided an adequate reference facility to demonstrate that the technology can adequately process the proposed fuel. Additionally, the proponent has provided inconsistent evidence about the project, particularly around key concerns including size, feedstock and emissions, and has failed to gain the social licence for the project to proceed. These issues are discussed in detail below', and that the following new paragraph be inserted instead:

'The committee acknowledges that The Next Generation proposal is currently undergoing a rigorous and comprehensive approval process prior to a decision being made to refer the project to the Planning Assessment Commission for an independent determination. The committee does not wish to pre-empt this process but acknowledges the overwhelming public opposition to this project proceeding as currently proposed.'

Question put.

The committee divided.

Ayes: Mr Martin, Mr Mason-Cox.

Noes: Dr Faruqi, Mr Graham, Mr Green, Mr Mallard, Ms Sharpe.

Question resolved in the negative.

Dr Faruqi moved: That Recommendation 16 be amended by:

- a) omitting 'subject to further investigations' before 'the NSW Government not approve the energy from waste facility proposed'
- b) omitting 'at this time' after 'the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek'.

Question put.

The committee divided.

Ayes: Dr Faruqi, Mr Graham, Ms Sharpe.

Noes: Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox.

Question resolved in the negative.

Resolved, on the motion of Mr Mallard: That Recommendation 16 be amended by:

- a) omitting 'That, subject to further investigations, the NSW Government' and inserting instead 'That, subject to the current assessment process being conducted by the NSW Department of Planning and Environment, the NSW Government'
- b) omitting 'at this time' after 'The Next Generation at Eastern Creek'.

Mr Mason-Cox moved: That paragraph 6.30 and Recommendation 16, as amended, be omitted: 'The committee recommends that, subject to further investigations, the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek at this time.

Recommendation 16

That, subject to the current assessment process being conducted by the NSW Department of Planning and Environment, the NSW Government not approve the energy from waste facility proposed by The Next Generation at Eastern Creek'.

Question put.

The committee divided.

Ayes: Mr Mason-Cox.

Noes: Dr Faruqi, Mr Graham, Mr Green, Mr Mallard, Mr Martin, Ms Sharpe.

Question resolved in the negative.

Mr Mason-Cox moved: That paragraph 6.29 be amended by omitting 'and has failed to gain the social licence' and inserting instead 'and has failed to gain the community support' before 'for the project to proceed'.

Question put.

The committee divided.

Ayes: Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox.

Noes: Dr Faruqi, Mr Graham, Ms Sharpe.

Question resolved in the affirmative.

Mr Mason-Cox moved: That:

- a) the level 1 heading before paragraph 6.31 be amended by omitting 'Social licence' and inserting instead 'Community support'
- b) the term 'social licence' be put in inverted commas where it appears in paragraphs 6.31 to 6.45.

Question put.

The committee divided.

Ayes: Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox.

Noes: Ms Sharpe, Dr Faruqi, Mr Graham.

Question resolved in the affirmative.

Resolved, on the motion of Dr Faruqi: That paragraph 6.43 be amended by:

- a) omitting 'The Next Generation may have done itself a disservice by failing to adequately engage' and inserting instead 'The Next Generation has failed to adequately engage' before 'with the local community'
- b) omitting 'as noted by Dr Marc Stambach' after 'the local community regarding its proposed energy from waste facility'
- c) omitting 'Perhaps the company's assertion that there has not been a private infrastructure proposal which has had such extensive community consultation is true. However, because stakeholders have not felt that this engagement is genuine, these efforts have been ineffective, to say the least' at the end.

Resolved on the motion of Ms Sharpe: That paragraph 6.56 be omitted: 'In hindsight, it may have been in the proponent's best interest to have conducted more thorough community engagement and to have

initially applied for a smaller facility to garner the social licence to operate the facility in that particular location’, and the following new paragraph be inserted instead:

‘The committee notes the concerns of the stakeholders that raised issues associated with the topographic structure of the Sydney Basin and the challenges of trapped air pollution within it. The Next Generation proposal could add substantially to the challenges of managing air pollution across Sydney.’

Resolved, on the motion of Dr Faruqi: That:

- a) paragraph 6.62 be amended by inserting ‘who was contracted by the proponent to undertake the technical air quality assessment for The Next Generation project’ after ‘Mr Damon Roddis, National Practice Leader Air Quality and Noise, Pacific Environment’
- b) paragraph 6.63 be amended by inserting ‘Chief Executive Officer, Dial A Dump Industries Group, proponents of the Next Generation Project’ after ‘This argument was supported by Mr Biggs’.

Resolved, on the motion of Dr Faruqi: That paragraph 6.97 be amended by omitting ‘In hindsight’ before ‘the proponent should have conducted a more thorough examination’.

Resolved, on the motion of Ms Sharpe: That paragraph 6.100 be amended by omitting at the end: ‘While a large-scale project may be needed to meet future waste needs in Sydney, it would appear logical, at least in the first instance, to start with smaller plants that are more palatable to the community’.

Resolved, on the motion of Dr Faruqi: That paragraph 6.112 be amended by omitting ‘The Next Generation intends to address these issues’ and inserting instead ‘The Next Generation intends to respond to these issues’.

Chapter 7

Resolved, on the motion of Ms Sharpe: That paragraph 7.36 be amended by:

- a) omitting ‘While we can see the potential benefit of breaking up the functions of the agency’ before ‘the committee has not received sufficient evidence to recommend this action’
- b) inserting ‘so it can improve its performance’ after ‘the NSW Government investigate options to restructure the NSW EPA’.

Resolved, on the motion of Ms Sharpe: That Recommendation 17 be amended by inserting at the end: ‘so it can improve its performance’.

Resolved, on the motion of Mr Mason-Cox: That the following new committee comment and recommendation be inserted after Recommendation 17:

‘Committee comment

Further, we believe that the NSW Government should conduct an independent review into the NSW EPA, with particular reference to:

- assessing the adequacy of funding for the performance of its compliance, enforcement and other roles
- improving its community engagement role and the effectiveness of its enforcement and compliance roles
- the perceived conflict of interest between its compliance and policy and education roles.

Recommendation X

That the NSW Government conduct an independent review into the NSW Environment Protection Authority, with particular reference to:

- assessing the adequacy of funding for the performance of its compliance, enforcement and other roles

- improving its community engagement role and the effectiveness of its enforcement and compliance roles
- the perceived conflict of interest between its compliance and policy and education roles.’

Resolved, on the motion of Ms Sharpe: That the following new committee comment be inserted after the new recommendation:

‘Committee comment

The committee notes that the NSW Government has failed to follow the recommendation of the previous inquiry by then General Purpose Standing Committee No. 5 into the performance of the EPA that recommended that the NSW Government amend the *Protection of the Environment Administration Act 1991* to provide for the appointment of a chairperson of the board independent of the Chief Executive Officer of the NSW EPA. The committee believes that this action would assist to improve the performance of the EPA and notes that with the retirement of Mr Buffier, there is the opportunity for the government to make this change prior to the appointment of a new CEO’.

Resolved, on the motion of Ms Sharpe: That the following new recommendation be inserted after the new committee comment:

‘Recommendation X

‘That the NSW Government seek to amend the *Protection of the Environment Administration Act 1991* to provide for the appointment of a chairperson of the board independent of the Chief Executive Officer of the NSW Environment Protection Authority’.

Resolved, on the motion of Mr Mallard: That paragraph 7.49 and Recommendation 19 be amended by inserting ‘for proprietors and company directors’ after ‘That the NSW Government introduce a fit and proper person test’.

Resolved, on the motion of Dr Faruqi: That the following new committee comment be inserted after paragraph 7.52:

‘Committee comment

‘The committee believes that there are significant unresolved issues regarding the Mangrove Mountain landfill site, including licence variations and the role of the then Gosford City Council in issuing development consent’.

Resolved, on the motion of Ms Sharpe: That the following new recommendation be inserted after the new committee comment after paragraph 7.52:

‘Recommendation X

That the NSW Government establish an independent inquiry to investigate the operation, regulation and approvals of the Mangrove Mountain Landfill site’.

Chapter 8

Resolved, on the motion of Dr Faruqi: That Recommendation 22 be amended by inserting ‘and avoidance, reduction’ after ‘enabling the circular economy, including waste generator education, product stewardship, waste levies, market support initiatives’.

Resolved, on the motion of Ms Sharpe: That paragraph 8.80 and Recommendation 27 be amended to by omitting ‘an alternative solution’ and inserting instead ‘alternative solutions’.

Resolved, on the motion of Dr Faruqi: That paragraph 8.94 and Recommendation 28 be amended by:

- a) inserting ‘zero waste strategies and’ after ‘that the NSW Environment Protection Authority, in collaboration with stakeholders, investigate opportunities to embed’
- b) omitting ‘markets’ after ‘the circular economy in New South Wales’.

Dr Faruqi moved: That Recommendation 29 be amended by inserting ‘mandatory’ before ‘Extended Producer Responsibility Schemes’.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Graham, Mr Green, Mr Mallard, Mr Martin, Mr Mason-Cox, Ms Sharpe.

Question resolved in the negative.

Resolved, on the motion of Mr Graham: That:

The draft report as amended be the report of the committee and that the committee present the report to the House;

The transcripts of evidence, submissions, tabled documents, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry be tabled in the House with the report;

Upon tabling, all unpublished attachments to submissions be kept confidential by the committee;

Upon tabling, all unpublished transcripts of evidence, submissions, tabled documents, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry be published by the committee, except for those documents kept confidential by resolution of the committee;

The committee secretariat correct any typographical, grammatical and formatting errors prior to tabling;

The committee secretariat be authorised to update any committee comments and the key issues section where necessary to reflect changes to recommendations or new recommendations resolved by the committee;

Dissenting statements be provided to the secretariat within 24 hours after receipt of the draft minutes of the meeting;

That the report be tabled on Monday 26 March 2018.

Resolved, on the motion of Mr Mallard: That the committee note its appreciation for the hard work and diligence of the secretariat this inquiry.

4.4 Publication of *in camera* evidence

Resolved, on the motion of Dr Faruqi: That the committee authorise the partial publication of:

- the *in camera* transcript from 23 October 2017, as agreed to by Witness C
- the *in camera* transcript from 24 November 2017, as agreed to by the NSW EPA
- the *in camera* transcript from 24 November 2017, as agreed to by the NSW Police Force
- the *in camera* transcript from 13 February 2018, as agreed to by Witness G.

5. Music and the arts economy

5.1 Public submissions

The committee noted that:

- the following submissions were published by the committee clerk under the authorisation of the resolution appointing the committee: submission nos. 1-3, 5-10, 13, 14, 16-18, 21-23, 25-27, 31-37, 43, 46, 47, 49, 50, 52-55, 57, 59, 61, 62 63-66, 71, 73, 75, 77, 78, 81, 83-88, 90, 91, 95-100, 106-110, 111, 112, 123-131, 133-147, 154-160, 165, 168-180, 185, 186, 189-190, 193-195, 197, 199, 200, 203, 205-209, 211-220, 222-258, 260, 261, 263-269, 269a, 27-276, 280-288, 291-293, 295, 296, 298, 299
- submissions 49, 62, 195 are from a persons under 18 years of age who wish to have their submissions made public, and in accordance with standard practice, the secretariat has confirmed the authors would like their submission to be published, together with their name.

5.2 Partially confidential submissions

Resolved, on the motion of Mr Martin: That the committee authorise the publication of submission nos. 15, 19-20, 24, 28-30, 38-42, 44, 48, 56, 60, 67, 68, 70, 72, 74, 79, 80, 82, 92, 93, 101-105, 113-122, 14-153, 163-164, 166, 167, 181, 187, 191, 192, 198, 201, 202, 204, 210, 221, 259, 262, 277-279, 290, 294 and 300, with the exception of identifying and/or sensitive information, which is to remain confidential, as per the request of the author.

5.3 Confidential submissions

Resolved, on the motion of Mr Martin: That the committee keep submission nos. 11, 12, 45, 51, 58, 69, 76, 89, 94, 132, 161,162, 182, 183, 188, 196, 289 and 297 confidential, as per the request of the author.

5.4 Submissions 4, 4a and 4b

Resolved, on the motion of Dr Faruqi:

- That the committee authorise the publication of submission nos. 4 and 4a, with the exception of identifying and/or sensitive information, and/or adverse mention, which is to remain confidential, as per the recommendation of the secretariat.
- That the committee keep submission no. 4b confidential, as per the recommendation of the secretariat.

5.5 Public hearing

Resolved, on the motion of Ms Sharpe: That the amended hearing schedule for the public hearing on 26 March 2018 in the Jubilee Room/McKell Room, Parliament House be adopted.

6. Adjournment

The committee adjourned at 1.05 pm, until Monday 26 March 2018, 9.00 am, Jubilee Room/McKell Room (public hearing).

Kate Mihaljek
Committee Clerk

Draft minutes no. 57

Monday 26 March 2018

Portfolio Committee No. 6 – Planning and Environment

Jubilee Room, Parliament House, Sydney, at 8.50 am

1. Members

Mr Green, *Chair*
Mr Mallard, *Deputy Chair* (from 11.15 am)
Ms Cusack
Mr Graham
Mr Martin

2. Apologies

Ms Sharpe
Ms Walker

3. Minutes

Resolved, on the motion of Mr Martin: That draft minutes no. 56 be confirmed.

4. Correspondence

Received:

- 22 March 2018 – Email from Ms Dawn Walker MLC to secretariat advising that she will be an apology to the hearing on 26 March 2018
- 26 March 2018 – Email from Lliam Caulfied, on behalf of Ms Sharpe MLC, advising that Ms Sharpe will be an apology to the hearing on 26 March 2018.

5. Inquiry into 'energy from waste' technology

5.1 Rescission of motion to adopt and table report

Resolved, by leave, on the motion of Mr Martin: That the committee rescind its decision of 19 March 2018 that:

- The draft report as amended be the report of the committee and that the committee present the report to the House
- The report be tabled on 26 March 2018.

5.2 Recommittal of report

The committee recommitted the report.

Resolved, on the motion of Mr Martin:

- That paragraph 4.6 be amended by omitting at the end: 'We therefore recommend that the NSW Government lobby the Queensland Government to re-introduce its waste levy' and inserting instead:

'We therefore applaud the Queensland Government's announcement, just days before the tabling of this report, that it intends to re-introduce its waste levy. We encourage the NSW EPA, in cooperation with the Queensland Government, to carefully monitor the impact of the re-introduction of Queensland's waste levy and its effect upon the interstate movement of waste.'

- That Recommendation 10 be omitted: 'That the NSW Government lobby the Queensland Government to re-introduce its waste levy.'
- That paragraph 4.48 be amended by omitting at the end: 'This is why we have already recommended that the NSW Government lobby the Queensland Government to achieve this outcome' and inserting instead:

'We note the Queensland Government's intention to take this action.'

- That the 'Key issues' section be amended to reflect points 1-3.

Resolved on the motion of Mr Graham:

- That the report, as amended, be the report of the committee and that the committee present the report to the House
- That the report be tabled on 28 March 2018.

6. The music and arts economy in New South Wales

7. Adjournment

The committee adjourned at 5.05 pm, until Monday 28 May 2018 (music and arts site visit to Newcastle).

Kate Mihaljek
Committee Clerk

Appendix 5^{*} Dissenting statements

The Hon Matthew Mason-Cox MLC, Liberal Party

The proposal by The Next Generation NSW Pty Ltd to build a 1.35 million tonne energy from waste facility at Eastern Creek was lodged with the Department of Planning and Environment in 2015. The proposed development will have a capital investment exceeding \$30 million and is being assessed by the Government as a State Significant Development. This application is currently undergoing a rigorous and comprehensive assessment process prior to an independent determination being made by the Planning and Assessment Commission on whether the project will proceed.

Impacts of this project on air quality, emissions and human impacts, source volume and composition of waste material to be used, noise impacts, traffic, visual impacts and biodiversity impacts have been addressed by expert reports. A community engagement process has been conducted with over 990 submissions in response to the amended EIS raising issues concerning the size and location of the project, the proposed technology and feedstock and concerns the plant would adversely affect the air quality and, in turn, the health of residents in western Sydney and the environment. The overwhelming number of submissions were against the project proceeding.

In March 2017 the Department requested the proponent to provide further information to respond to these submissions and technical reviews conducted by independent experts appointed by the Department and the NSW EPA. The proponent's response was received in September 2017 and sought approval for only Stage 1 of the development. In December 2017 the Department agreed to this request and published the report on its website. Submissions to the proponent's response were due in February 2018.

The Department is now preparing an assessment report with a recommendation for determination of the proponent's application. This report will consider the mountain of evidence received and will give considerable weight to the opinion of the NSW EPA and advice from independent experts. The assessment report will be provided to the independent Planning and Assessment Commission. The Commission will hold a public meeting and will invite submitters to present their views on the proposal. It will then prepare its report and determine the application. The Commission's determination is expected later this year.

The Commission may well determine on the basis of the evidence before it that this project should not proceed.

It is not appropriate for a Committee of this Parliament to pre-empt or second guess the final outcome of this exhaustive and independent assessment process without having access to the weight of all the evidence that has been assembled. Accordingly, the majority decision of the Committee to recommend that the Government not approve this project is respectively premature and ill founded. It is a political decision. It undermines a proper, independent and comprehensive assessment process. In my opinion, this is not a desirable outcome.

Dr Mehreen Faruqi MLC, The Greens

This inquiry was a very timely opportunity to investigate the systemic issues of the way NSW deals with an ever-increasing amount of waste. I am heartened that the committee recognised this issue, and in particular the importance of reducing and avoiding waste production in the first place, including moving towards zero waste and a circular economy.

The Committee has made some strong recommendations that will go some way to addressing the significant issues of waste, including a recommendation to further investigate the Mangrove Mountain Landfill site. However, I am concerned that the committee did not unambiguously oppose the contentious proposal from ‘The Next Generation’ for an energy from waste incinerator at Eastern Creek and more broadly, did not recommend a moratorium on energy from waste facilities or an exclusion zone to ensure such facilities should they be built are more than 15km from residential areas.

Energy from Waste Facilities in General

Energy from waste is towards the bottom of the waste hierarchy, just above treating and disposing waste. The priority should not be approving ‘end of pipe’ solutions, but rather focusing on waste avoidance, reuse and recycling.

If there is a place for energy from waste, it should only be considered once other opportunities to reduce waste, including mandatory extended producer responsibility and product stewardship programs, have been exhausted; and only if there is community support and the air pollution impacts and health risks have been addressed. We are also deeply concerned that the development of such a facility would impact on recycling rates and perhaps provide a disincentive to reduce waste, as such a facility would essentially create a new market for waste disposal.

Given NSW is so far away from a zero waste or circular economy future, the Greens believe there should be a moratorium on new energy from waste facilities while waste avoidance, reuse and recycling programs are expanded. We heard significant evidence that energy from waste facilities are in decline in Europe and the United States. Europe especially is phasing out these facilities as it realises the significant environmental, health and economic benefits of zero waste policies.

The Greens are also deeply concerned about the health and air pollution effects of waste from energy facilities on local communities, which is why we recommended that the NSW Government enact legislation to establish a 15 km buffer zone to protect residential areas from such facilities, should they be approved. Exclusion zones should apply not just in the Sydney Basin but for residents across the rest of the state.

Next Generation energy from waste facility at Eastern Creek

With regards to ‘The Next Generation’ energy from waste incinerator proposal at Eastern Creek, it is clear that this facility lacks a social license and could have significant impacts on the health and well-being of people living in Western Sydney. The committee heard significant evidence from the community about how such a facility could impact their health, including emissions of small particulates (PM 2.5 and PM 10), hydrogen chloride, hydrogen fluoride and heavy metals.

Given this evidence, the committee’s recommendation that the facility not proceed, “subject to the current assessment process being conducted by the NSW Department of Planning and Environment” is inadequate. In my view, the ‘The Next Generation’ energy from waste incinerator at Eastern Creek should not be allowed to proceed.

SUBJECT: NOM 28/05/13 - S88 WASTE LEVY

COUNCILLOR: N NELMES

PURPOSE

The following Notice of Motion was received on 14 May 2013 from the abovementioned Councillor:

Précis

Over the past nine years The City of Newcastle has provided **\$67.8 million** back to the NSW State Government via the section 88 Waste Levy. This Levy was introduced to encourage landfill operators to reduce the amount of reusable waste going into landfill. The City of Newcastle's Summerhill Waste Management Facility has worked towards these goals by introducing methane capture and storage, separation of green waste and other reusable waste however this levy paid directly to the State Government continues to rise.

MOTION

PART A:

- 1 Council requests a Moratorium on payment of our Section 88 Waste Levy to the consolidated revenue of the State government for the next two financial years.
- 2 During this period the Levy would still be collected and accounted for to maintain competitive neutrality in the Waste Management Industry.
- 3 The Levy would be redirected to The City of Newcastle's Infrastructure backlog, allowing major asset renewals projects to be completed.

PART B

That Newcastle City Council participate in a combined regional submission through Hunter Councils to the State Government quantifying the impact of the imposed waste levy and seeking to:

- Reduce the impact of the levy on the residents and business of Newcastle and the Hunter Region;
- Reduce or eliminate the portion of the levy absorbed into the general operation of the State (hidden tax) rather than being returned to Local Government to improve Waste Management practices and;
- Ensure the return of the levy to Local Government is in proportion to the amount collected to reduce the cross-subsidization occurring at the expense of Newcastle and Hunter residents and businesses.

PART C:

Ask the Interim General Manager to call a special meeting of Lower Hunter Council General Managers to create a statement of common purpose on this issue as soon as possible with the goal of advocating collectively to the NSW Government.

BACKGROUND

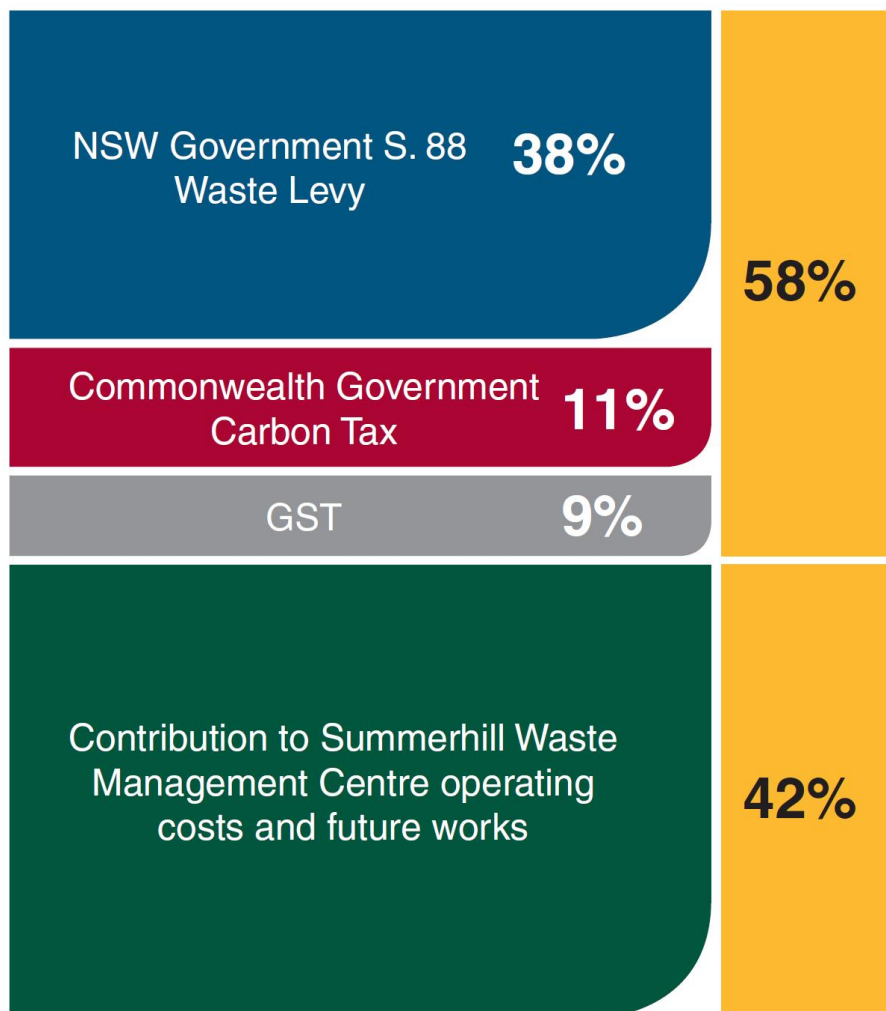
This financial year we will send \$M down the F3 into the consolidated revenue of the State Government. Council's throughout the State are facing similar long-term financial problems to Newcastle, with rate capping and costing shifting from the State Government. This option to reinvest the Levy into Local roads, parks, pools, and community buildings is the optimal use of this tax for the Citizens of Newcastle.

The table below shows the payment of the levy against tonnes during these nine years.

Financial Year	Annual Levy Payment (\$)	Annual Tonnes Subject to Levy
2003/04	\$2,148,587	205,321
2004/05	\$2,643,051	211,665
2005/06	\$3,071,271	206,639
2006/07	\$4,906,498	222,311
2007/08	\$7,660,701	250,268
2008/09	\$10,320,777	270,146
2009/10	\$11,550,926	226,093
2010/11	\$12,832,170	207,746
2011/12	\$10,772,925	150,152
Total	\$65,906,907	1,950,341
Total inc 2012/13	\$67,852,574	1,974,902

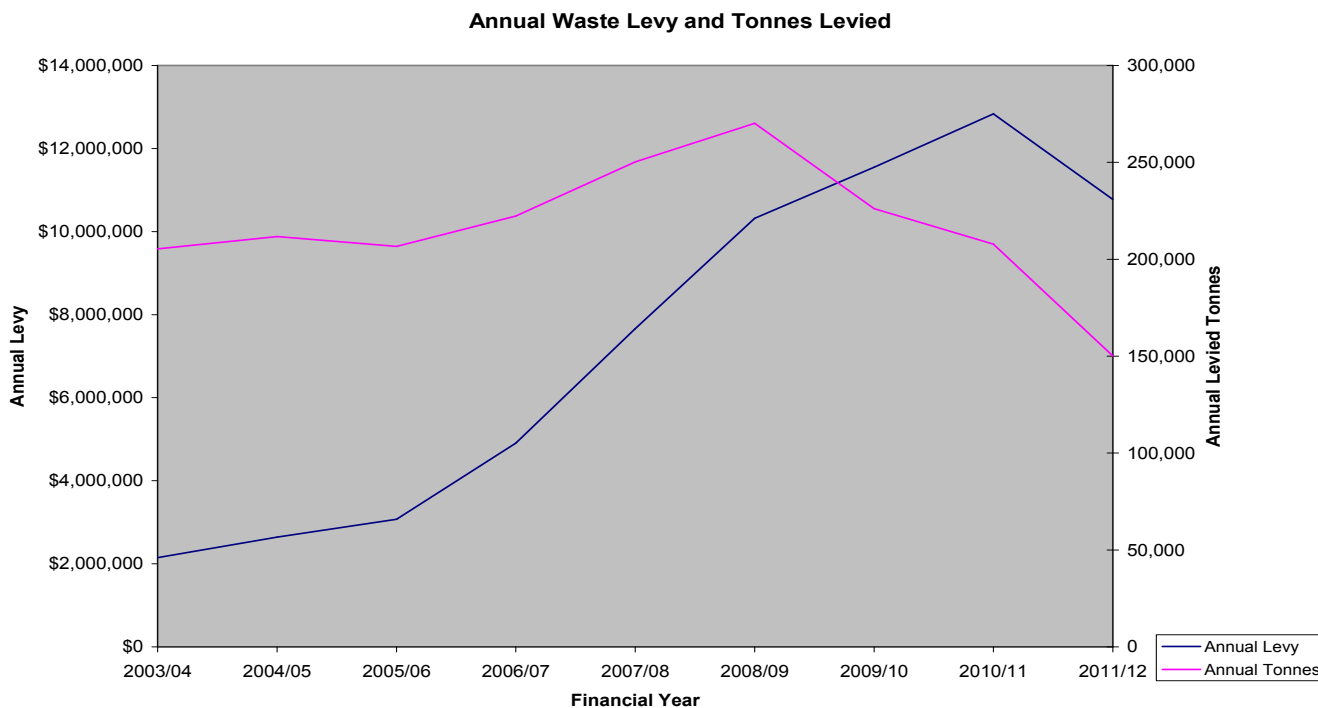
Tipping fees (27% of total NCC costs)

Whilst the SWMC is expected to collect \$24.87 million in fees during 2012/2013 the State Government charges (Section 88 Levy), Carbon Tax and GST. 38% of the tipping fee is made up of State Government levy as shown below.



Over the past nine years TCoN has provided **\$67.8 million** back to the **NSW State Government**. **Employee costs only make up 6.4%** of the total expenditure for SWMC.

The graph below shows the impact of the levy. The levy have made competition with other smaller facilities (eg Bedminster Plant and Raymond Terrace) more difficult. This has led to more aggressive pricing and a loss of tonnes throughput. This is why Council is now considering moving swiftly towards developing resource recovery capability.



ATTACHMENTS

Nil