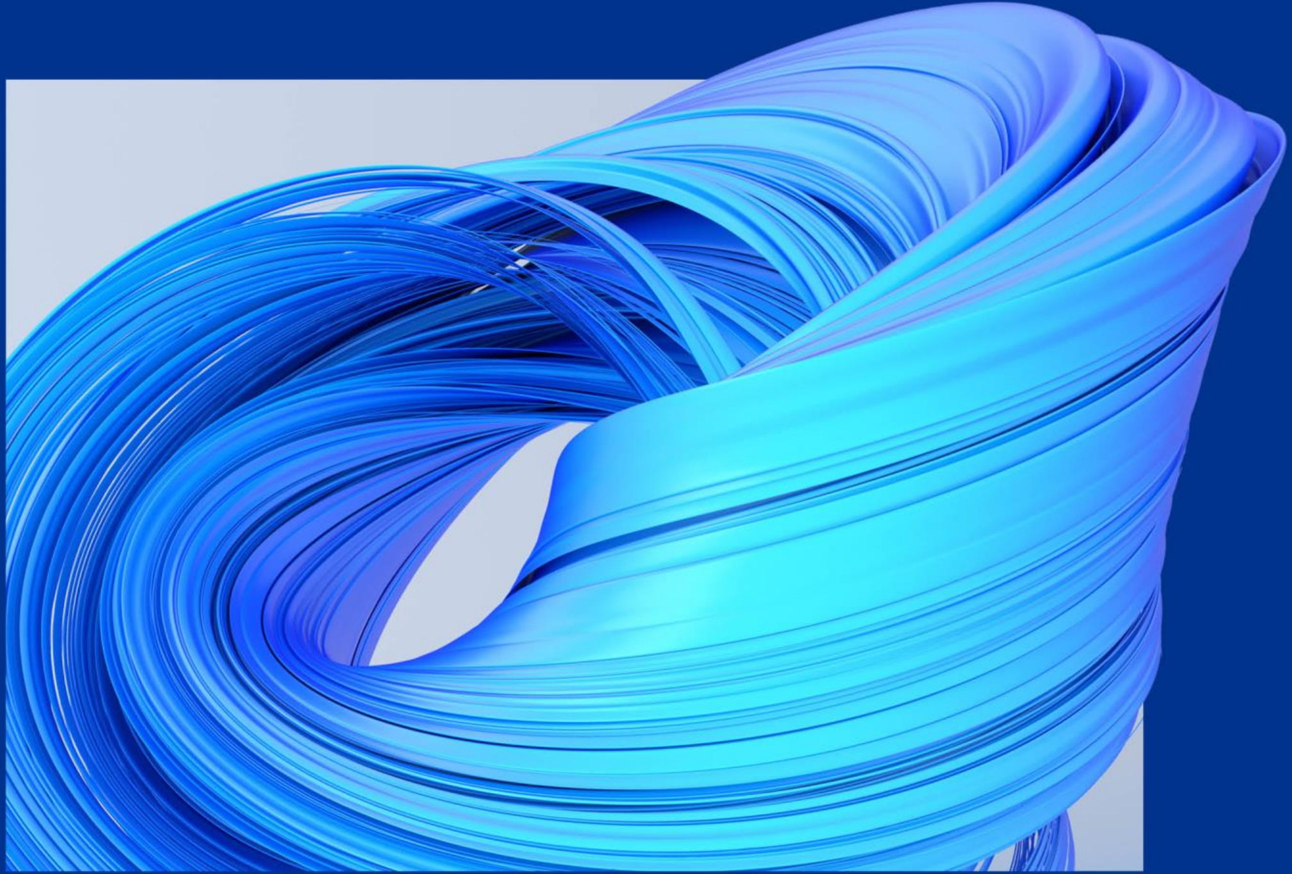
City of Newcastle August Economic Briefing



Economic Transition Forces in the Hunter

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August 2023

01

The Region's Transition to Renewables

The clean energy transition represents major change

The Hunter is the highest emitting region in NSW and with the national commitment to Net Zero, there needs to be significant change in the region to build renewable energy capacity and decarbonise industry. This transition will see the closure of the coal mines and coal fired power stations from now until 2033.

As an energy powerhouse and industrial epicenter, our regional economy and prosperity is intertwined with traditional fossil fuels. The impact is felt not just on the operations closing but those organisations along the value chain that support these large employers, many in Newcastle LGA

As the national and global energy markets transition, building a resilient hydrogen economy in the Hunter represents a major economic opportunity that will secure growth and employment into the future. As does offshore wind and solar. However, these are less labour (FTE) intensive than coal and coal power.

2023

AGL's Liddell power station closed

2025

Origin's Eraring Power Station scheduled to close

2029

AGL's Vale's Point Power Station scheduled to close

2030

The region's largest coal mine, BHP's Mount Arthur to close

2033

AGL Bayswater Power Station is expected to close between 2030-2033

Overview of current regional projects

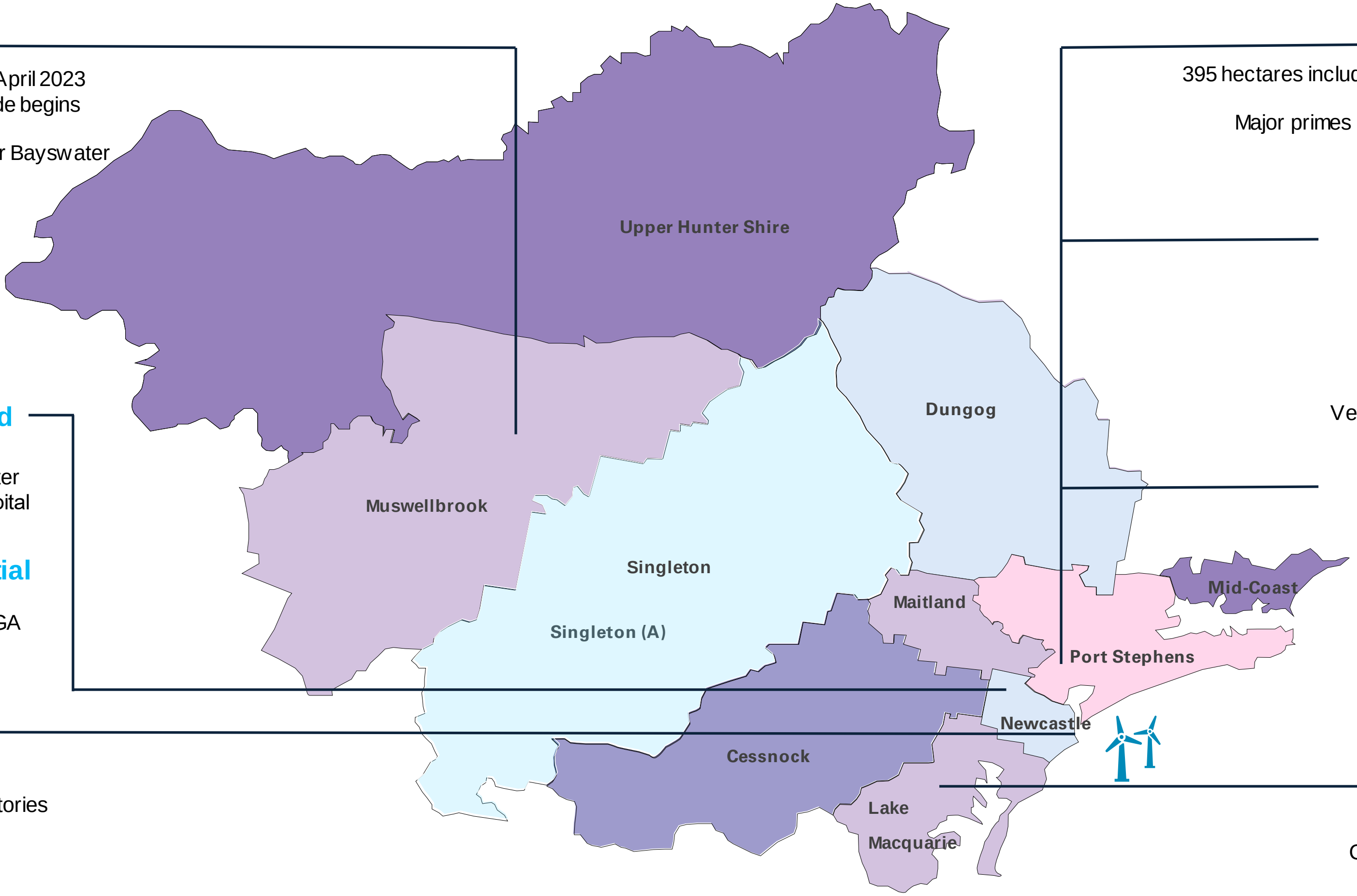
AGL Power stations
Liddell Power Station closure in April 2023
Bayswater Power Station upgrade begins 2022
Capital investment over $30m for Bayswater upgrade

Hunter Coast Transmission Project
EnergyCo

John Hunter Health and Innovation Precinct
Redevelopment of the John Hunter and John Hunter Children's Hospital

Government / Residential
EnergyCo
City of Newcastle / Newcastle LGA
Port Stephens
Lake Macquarie

Clean Energy Precinct
Port of Newcastle
15 MOU signatories
15 Letter of Support/Intent signatories



Hunter Infrastructure Project
Transgrid
Australian Renewable Energy Agency (ARENA)

Williamtown SAP
395 hectares including the RAAF Base and Newcastle Airport
Major primes and potential energy needs include
Boeing
BAE
Lockheed Martin

Newcastle Airport
Terminal upgrade
Airport expansion (international)
Hydrogen Export Hub

Hunter Park Precinct
Venues NSW Precinct Redevelopment

Industrial precincts
Tomago
Molycop
Newcastle Port
BlueScope Steel
Newcastle Manufacturing Precinct

Super Batteries
Waratah
Lake Macquarie

Eraring & Vales Point Power Stations
Coal-fired power stations scheduled for closure in 2025 and 2029

Implications and Considerations for CN

The Hunter region is heavily reliant on the coal industry, with coal mining and power generation accounting for around 15% of the region's jobs. The closure of coal-fired power stations would have a significant impact on these jobs, as well as on the wider economy of the region.

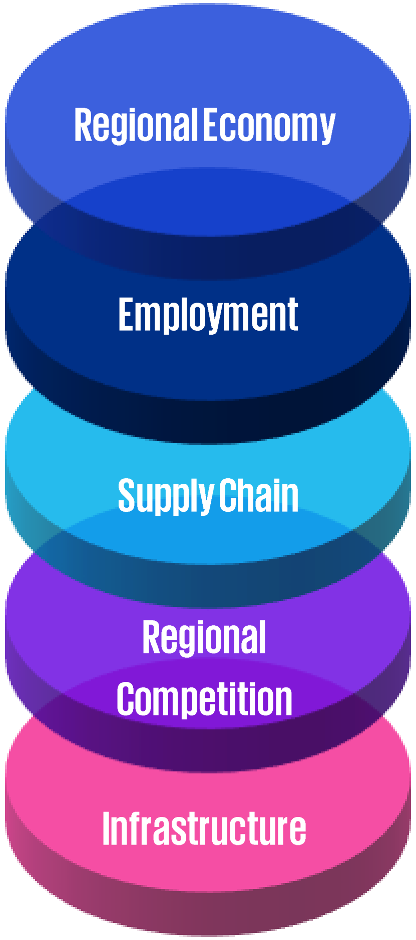
A reduction in coal exports would lead to a slowdown in the region's economy. The region relies on royalties and taxes from coal mining to fund public services, which may impact infrastructure development and services.

The estimated job losses in the Hunter region from coal and power station closures could be as high as 12,000 by 2030. This would have direct impacts on workers and the region’s population, and indirect impacts on businesses and towns that rely on the coal industry.

The fossil fuel industry supports a wide range of local businesses, from suppliers to transport companies. A decline in the coal sector can lead to reduced demand for their services, affecting their viability. Disused land rehabilitation costs will impact resource management.

The increasing number of regions vying for renewable energy investment means that competition can be fierce. The Hunter region needs to develop a strong value proposition and demonstrate its competitive advantages to attract investors and secure projects.

Whilst significant shared infrastructure is required to support a renewable economy, the Hunter already has over 1,000 km of gas pipelines, 1,500 km of electricity transmission lines and established wastewater infrastructure.



A report by ARENA estimated that the Hunter region could generate up to $10 billion in new revenue from renewable energy by 2050. However, prices of renewable energy can be volatile so preparing for market price fluctuations by developing risk mitigators is essential.

The development of a new regional economy, based on renewable energy and other industries, could create new jobs in the manufacturing, construction, and tourism sectors. This could lead to up to 10,000 new jobs in the Hunter region by 2030.

Engaging with renewable energy projects fosters collaboration between the government, local businesses, and communities, creating a more cohesive supply chain network and can lead to economic diversification, with the growth of new industries in the supply chain.

Transitioning away from fossil fuels can improve the region's environmental quality, potentially boosting tourism as visitors are attracted to cleaner and more sustainable destinations.

The Port of Newcastle is working with proponents and potential offtakers to establish infrastructure requirements and inform the design of common-user, large scale storage and export facilities on the Clean Energy Precinct. To support this, common-user shared agreements have been drafted.

02

ESG Reporting Requirements

Rise of ESG Framework Reporting Requirements

Environmental, social, and governance (ESG) reporting is becoming increasingly important for businesses of all sizes, including local councils.

The rise of ESG reporting requirements is due to a number of factors including growing awareness, increasing regulatory pressure and recognition that ESG can impact financial performance.

In Australia, ASX-listed organisations are recommended to disclose on gender diversity, workforce diversity and climate change metrics.

This expectation on ESG reporting requires councils to be transparent about their ESG performance, challenges, risks and opportunities and may result in operational changes

Increased transparency will also increase accountability for councils to their stakeholders and LGA around ESG issues. The direction of the NSW Building Commissioner and NSW Environmental Protection Agency

ESG Reporting Frameworks – What's Changing?

The Australian government is currently in the process of developing mandatory climate-related reporting requirements for large businesses, including local councils. The new requirements are expected to be implemented in 2024.

ISSB Climate-Related Disclosure Standards could become mandatory in 2024-2025

The proposed requirements will cover a range of climate-related issues, including:

- Greenhouse gas emissions
- Adaptation to climate change
- Mitigation of climate change
- Risks and opportunities associated with climate change

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ISSB's IFRS S1 and S2 Reporting Requirements focused on sustainability-related financial information

- These frameworks will help investors, creditors, and other stakeholders to make informed decisions about the entities they invest in.
- The Treasury has just completed a second consultation on the implementation of these requirements, with legislation due to be introduced in the coming months.
- While not all organisations are likely to be mandated to comply with the new sustainability reporting standards in the immediate term, the impact could soon be felt by entities of all sizes on the supply chain including Local Governments.

For CN, ESG reporting would cover climate change, water use, waste management, social responsibility and governance.

These standards will put climate reporting in the same footing as financial performance. This will change the way we view organisational value – not just in dollars and cents, but in overall impact.

ESG Reporting Implications and Considerations for CN

Theme	Example	Implications for Newcastle
• Stakeholder activism	• Glencore, a major coal producer in the region, is facing increasing pressure from shareholders to reduce its carbon emissions. Being headquartered in the EU, rules they need to follow globally are more stringent than in Australia. There is pressure to sell / divest their coal operations	• This could lead to changes in organisations operations in the Newcastle region,, impacting direct employments and the value chain
• Procurement	• Major companies, such as BHP and Woolworths, are increasingly demanding that their suppliers report on their carbon emissions. As they commit to emission reduction targets, the expectation is there suppliers also track and reduce emissions	• Manufacturers, agribusiness and mining services will need to have mature tracking and reporting of emissions in order to be able to be a supplier to these agencies
• Insurance	• Large local player in Newcastle had a whole team for a year negotiating insurance with Japanese insurance company, being the only option	• Insurance companies are becoming increasingly risk-averse when it comes to coal mining. The difficulty in obtaining insurance could make it more difficult for coal exposed industries to operate .
• Access to finance	• Westpac has committed to not financing new coal-fired power plants. Westpac has also set a target of reducing its exposure to thermal coal by 30% by 2030. We know multiple clients in the Hutner that have had to change banks.	• The lack of access to finance could make it difficult for coal companies to invest in new projects.

03

Skills Development & Education

Workforce Challenges regarding the Energy Transition

Supply vs Demand

Infrastructure Australia is projecting shortages across **34 out of 50 public infrastructure occupations** with the peak of demand for skills **48% higher than supply** including a **peak deficit of 41,000 engineers and 15,000 structural and civil trades.**

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Regional Competition

The transition to renewable energy may lead to increased competition for skilled workers as other regions also invest in renewable projects. This competition **could impact the availability and retention of qualified employees.**

Ageing Workforce

Many employees in the coal industry approaching retirement age. According to a 2019 report by the New South Wales Minerals Council, **around 28% of the coal mining workforce** in New South Wales (including the Hunter Valley) **was aged 55 or older.**

Skills Mismatch

Many workers in the coal sector possess skills that may not directly transfer to renewable energy industries. Adapting to new roles in the renewable sector may require acquiring additional skills related to **solar, wind, battery technology, or smart grid management.**

Geographical Challenges

Renewable energy projects, such as wind and solar farms, may be located in different areas compared to traditional coal mines. This geographic shift can impact commuting patterns and **create logistical challenges for workers and the towns that support and house them.**

Skills Development & Education

With long-standing heavy industries in the region, the Hunter's education system has evolved to have particular strengths in engineering and heavy industry trades. As such, activity is already underway to prepare for the energy transition and build the future workforce.

Training Services NSW has mapped skills for clean energy which includes specific roles and courses required in the renewable sector.

TAFE NSW in Newcastle has established a Steering Committee focused on delivering the new energy skills needed for the future.

The Upper Hunter has established a Hunter Region Economic Transition Steering Committee with a strong focus on workforce transition.

The University of Newcastle has established a work integrated learning program to provide on-the-job experience for students and enable local businesses to manage their talent pipeline.

Labour Supply Channels to be considered

With workforce supply vs demand being a key recognised challenge in the transition to a renewable economy, there are a number of avenues and talent pipelines that can be invested into to help build a skilled workforce for the future.

School leavers and new entrants

Retention and redeployment of workers within the sector

Workers from adjacent sectors

Increased supply from outside the labour market

Attracting skilled migrant workers into regions on a long-term basis

04

Economic Outlook

Australian Economic Outlook

Short-term economic outlook

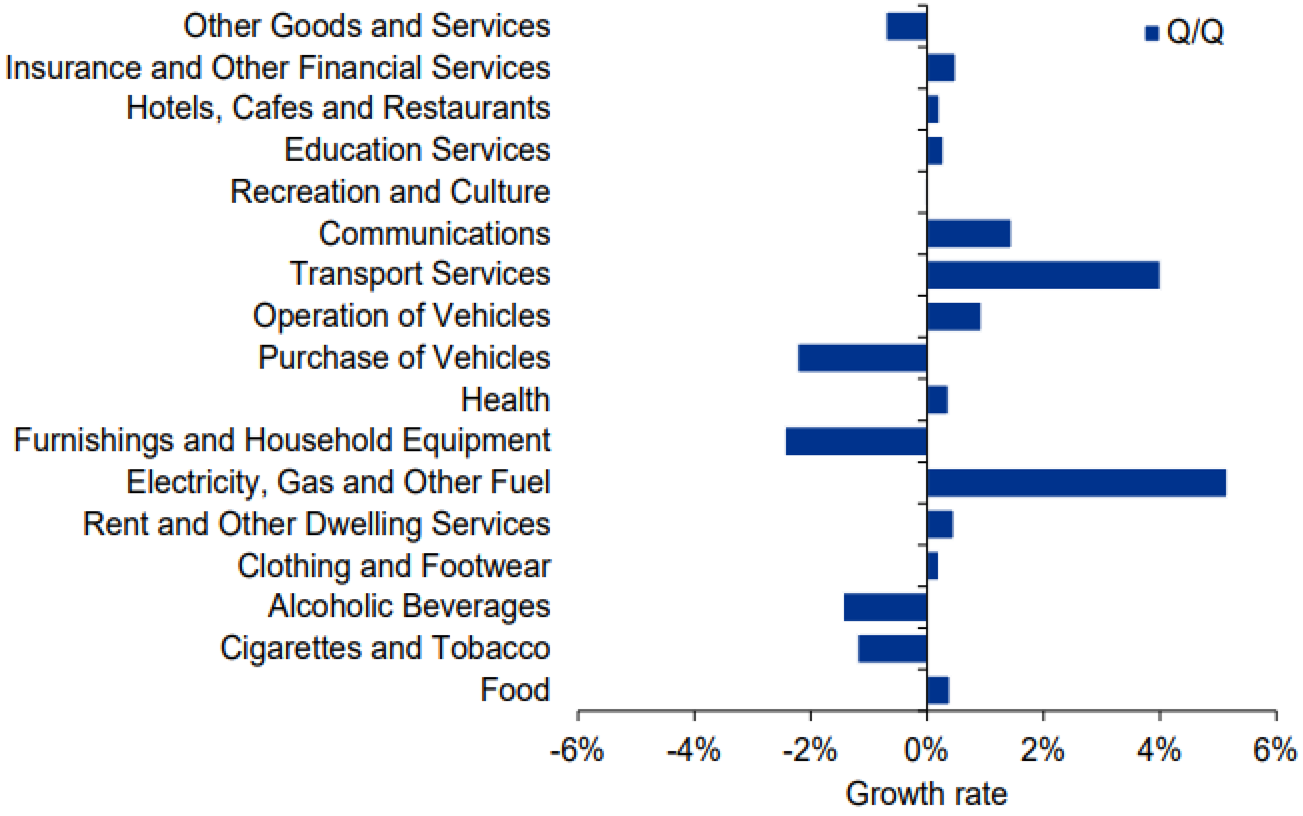
The growth profile will be a mix of flat and marginally negative growth for the remainder of 2023 and into 2024. During this time, it is anticipated that there will be a slowdown in business investment.

Consumption

High inflation and the rapid tightening cycle have taken a toll on household spending.

Looking ahead, household consumption is expected to dampen further through the remainder of 2023 since the saving ratio has returned to its pre-COVID level.

Household Final Consumption Expenditure, Q1 2023



Source: ABS, KPMG

Australian Workforce Trends

Availability

- The balance between labour demand and supply has improved as more immigrants arrived in Australia.
- Recent labour market data showed some signs of easing, with the unemployment rate going up to 3.6 percent in May 2023 from 3.5 percent in March 2023.

Wages

- The annual wages growth recorded in March 2023 is the highest level recorded since September 2012, and was driven by both the private and public sectors.
- We anticipate that the tightness in the labour market and existing inflationary pressures will lead to further wage growth in the near term.
- The decisions on the minimum wage and award wages, along with a 15 percent pay rise for many aged care workers announced in this year's Budget, are expected to contribute significantly to wage growth.

Global Landscape

KPMG expects global headline inflation to continue to decline through the remainder of 2023, reflecting the easing of supply issues as well as the lagged impact of monetary policy tightening.

	Dec-22	Jun-23	Dec-23	Jun-24	Dec-24	Jun-25	Dec-25
GDP (real)	3.7%	3.0%	1.2%	0.2%	-0.2%	0.4%	1.5%
Inflation*	7.8%	6.3%	4.2%	3.3%	2.9%	2.6%	2.5%
Unemployment*	3.5%	3.6%	4.0%	4.3%	4.8%	5.0%	4.9%

**values at end of period*

- The World Bank's June 2023 Global Economic Prospects warns of a fragile world economy throughout 2023 and 2024.
- Global inflation may have peaked, yet there are still potential risks that could cause it to rise again, making monetary policy tightening challenging.
- Supply chain problems that emerged during the pandemic have now evaporated and global shipping costs have normalised.

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