

# Lithgow Emerging Economy Project

## An overview for the community

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Maldhan Ngurr Ngurra Lithgow Transformation Hub

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Prepared by

**Acclimate**  
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**Natural Capital**  
Economics

Prepared for



# Acknowledgements



I acknowledge that tonight we are meeting on the land of the Wiradjuri nation, with the Gundungurra nation situated to the south and the Darug nation to the east. I pay my respects to their elders, past, present and emerging.

Tonight I am representing the consortium responsible for developing the Lithgow Emerging Economy Project Transition Plan for Lithgow City Council and the Department of Regional NSW. The consortium includes Acclimate Partners, H4CO, Mosaic insights and Natural Capital Economics (NCE).

On behalf of the consortium, I acknowledge the Mayor, General Manager, councillors and staff of Lithgow City Council and representatives of the Department of Regional NSW, here tonight. I thank them and representatives of the NSW Government agencies who have contributed to the development of the Transition Plan.

I also thank the businesses, universities, and community and not-for-profit organisations who informed this project. In particular, I acknowledge the contribution of the Project Consultative Group and its members.

# Lithgow City Council and the NSW Government commissioned the Lithgow Emerging Economy Project (LEEP) to plan a successful energy transition

## Positioning Lithgow as an economic transition leader

### The next decade will see significant change in Australia's energy sector:

- Australian Government commitment to reduce Australia's emissions by 43% below 2005 levels by 2030; net zero by 2050
- NSW Government commitment to halve emissions by 2030

This **energy transition** to a more diversified energy is accelerating and will have a direct effect on Lithgow.

- Mt Piper is currently scheduled to close in 2040
- Coal leases in the LGA expire between 2036 and 2042.

Together, coal mining and electricity supply contribute almost **46 per cent of Gross Value Added** to the Lithgow economy and employ **more than 16% of the workforce**.

The LEEP Transition Plan is designed to **mitigate the impact of future changes** in coal and coal-fired power generation for Lithgow and define a **pathway of actions**.

This is a **challenging, yet exciting task** that will require coordinated action from all tiers of government, working with businesses, investors and the community to **build a modern, diverse economy with new job opportunities**.



# Global lessons demonstrate early planning for economic diversification and support for workers, supply chains and their communities is critical for successful transitions

## Scenarios for the energy transition

Given the uncertainty of the national energy transition, several scenarios were considered.

### 1. Closures in the near term (2028 to 2032)

The Australian Energy Regulator requires National Electricity Market generators to provide at least 42 months' notice of their intention to close power stations. This does not signal that closure will occur in 2028 but considers the impact should an announcement be made in the future to bring closure forward this early.

### 2. Closures in the near to medium term (2032 to 2036)

This period may represent a scenario where coal prices are sufficient to incentivise further mining, with insufficient drivers for the power station and mines to remain operational for the period to 2040.

### 3. Closures in the medium to long term (2036 to 2040)

This period aligns with EnergyAustralia's announced date for closure of Mt Piper and represents an upper bound for the remaining commercial viability in coal mining and coal-fired energy generation industries.

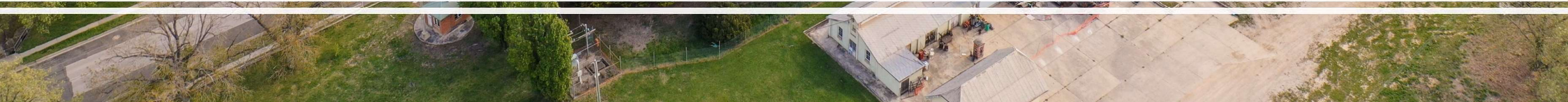
The impact on Lithgow in all instances is significant. Key lessons from transitions around the world are:

- **Plan early** for closures or change
- It takes time to diversify economies
- **Building social compacts** with communities is critical.





# Community Snapshot



# Lithgow's current and projected demographic profile will influence its economic outlook and the requirements to support inclusive growth

## Community snapshot

Lithgow's **aging population** and **recent low unemployment** levels indicate that a requirement for future growth will be the **need to attract additional workers to the LGA** and to **build the capacity of Lithgow's young people**.

Factors like **relatively affordable housing** in Lithgow present a solid foundation for this. One of the **challenges** is that there is **relative socio-economic disadvantage** across the LGA when compared to NSW, with a slightly higher disadvantage in Lithgow township than Lithgow region. This presents a **requirement for growth to be inclusive**.



### *Population*

Lithgow LGA's population declined by 1.2% between 2016 and 2021. Projections expect this population to plateau in the next 20 years, with an aging demographic. This has implications for the future workforce and demand for aged care services.



### *Unemployment*

Until recently, unemployment in Lithgow has been high relative to Regional NSW and NSW as a whole. With currently low unemployment, the workforce for growing or emerging industries will need to be drawn from existing industries or attracted from outside of the LGA.



### *Aboriginal and Torres Strait Islander people*

People of Aboriginal and Torres Strait Islander descent make up 7.8% of the population while only 6.2% speak a language other than English at home.



### *Housing affordability / availability*

Generally, it appears that housing is more affordable in Lithgow LGA than the wider state (including Regional NSW). This may represent a drawcard for attracting skilled workers or retaining existing skilled workers.

# The economic profile provides an indication of the sectors in which Lithgow LGA has specialised, pointing to opportunities and risks for the local economy

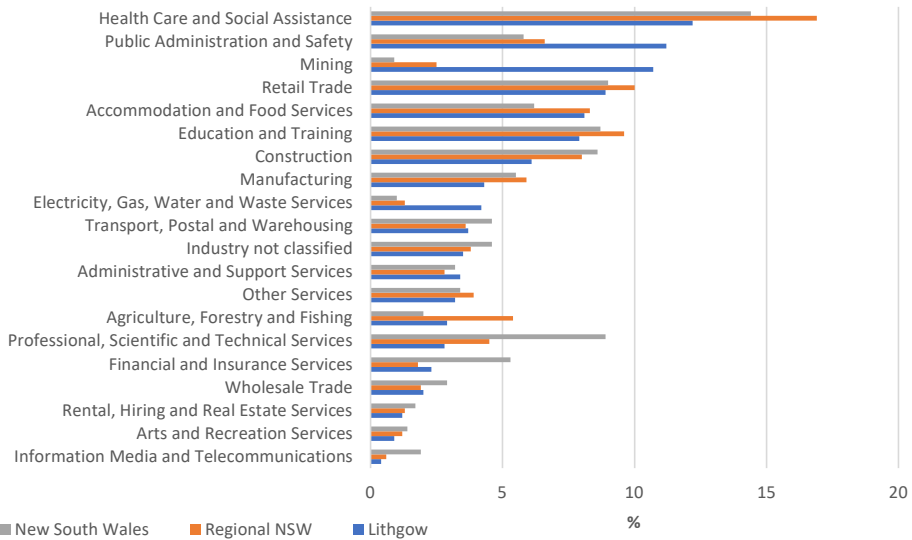
## Community snapshot

Lithgow's **employment** is concentrated in **Health Care and Social Assistance, Mining, and Public Administration and Safety**.

Lithgow's **economic value added** is highly concentrated in **Coal mining and Electricity supply**.

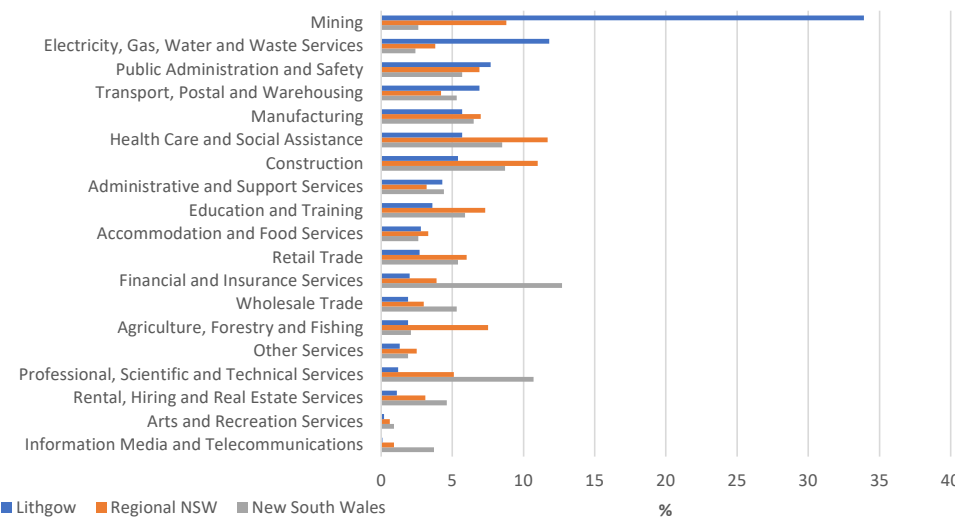
These characteristics indicate **historical strengths** in these sectors, but the **lack of economic diversification** means that the economy is also **highly vulnerable to shocks in these sectors**.

**Employment by industry (2021 Census)**



Source: NIEIR (2022)

**Value added by industry (2021 Census)**



Source: NIEIR (2022)



Shaping the future of Lithgow



# The LEEP team has drafted a vision for Lithgow's transition

## The vision draws on state, regional and local plans

The Transition Plan includes a **draft vision** for the future of Lithgow LGA and a pathway to economic diversification, while also supporting the transition from coal mining and coal-fired power generation.

The vision **draws on aspirations from the community, businesses and all levels of government** outlined in planning documents and identified in consultations. It also draws on lessons from transitions around the world.

The proposed pathway to achieving this vision is:

- **Ensuring a resilient, diverse economy**
- **Supporting the coal transition**
- **Leading for growth.**

### *Have your say*

- What do you like about the vision and pathway for Lithgow in 2030?
- What would you change? Is there anything missing?



Lithgow LGA is an *economy* and *community* that builds on its heritage as an industrial innovator, to lead innovations in energy, advanced manufacturing, and in health and ageing.



Lithgow's economy has sectoral diversity and businesses that attract and retain the workforce they need. Lithgow's community is *diverse* with more families and young people who are drawn by the quality of life, affordable and accessible housing and good education-to-employment *pathways*.



Lithgow is a *critical* interchange for green transport, servicing road and rail networks to facilitate the movement of residents, workers, visitors and freight across the state. Its natural wonders and dynamic, inclusive *community* are a drawcard for residents and visitors alike.

#### *Diversification Pathways*

- Ensuring a resilient, diverse economy
- Supporting the coal transition
- Leading for growth



The decline of coal mining and associated power generation is an opportunity for the community and the *diversification* of the economy is well-planned and equitable, offering a just transition to workers. Infrastructure and natural resources are repurposed and rehabilitated as future economic and community assets, and workers, the community and other stakeholders are engaged in the transition.

# The plan to build a resilient, diverse economy aligns with Lithgow's regional endowments and advantages, demographic trends, and government policies and programs

## Building a resilient, diverse economy

### Regional endowments and advantages

- **Pivotal location in Australia's transport system**, linking Western Sydney and the broad Central West and Orana by road and rail
- **Natural and infrastructure endowments** that support new forms of energy production and distribution
- Well positioned to take advantage of **regional economic opportunities** such as the new Western Sydney airport, inland rail connecting at Parkes, and the Central-West Orana Renewable Energy Zone
- **Rich natural, historical and cultural heritage**
- Solid base of the **right sort of human capital and know-how**

### Priority sectors (rapid growth, able to absorb capital, create jobs)

- **Renewable energy**, particularly solar power, pumped hydro, battery storage and green hydrogen production
- **Industrials: Manufacturing**, including
  - Defence and related metal fabrication and components,
  - Renewable energy components and clean technology innovation,
  - Circular economy manufacturing
  - Transport equipment manufacturing.
- **Tourism**, including accommodation, food services, arts and recreation, retail trade
- **Healthcare and Social Assistance**, and **Public Administration and Safety**



# Renewable energy will be one of the most critical sectors for future growth in Lithgow, which is well placed to be part of the solution to the energy transition

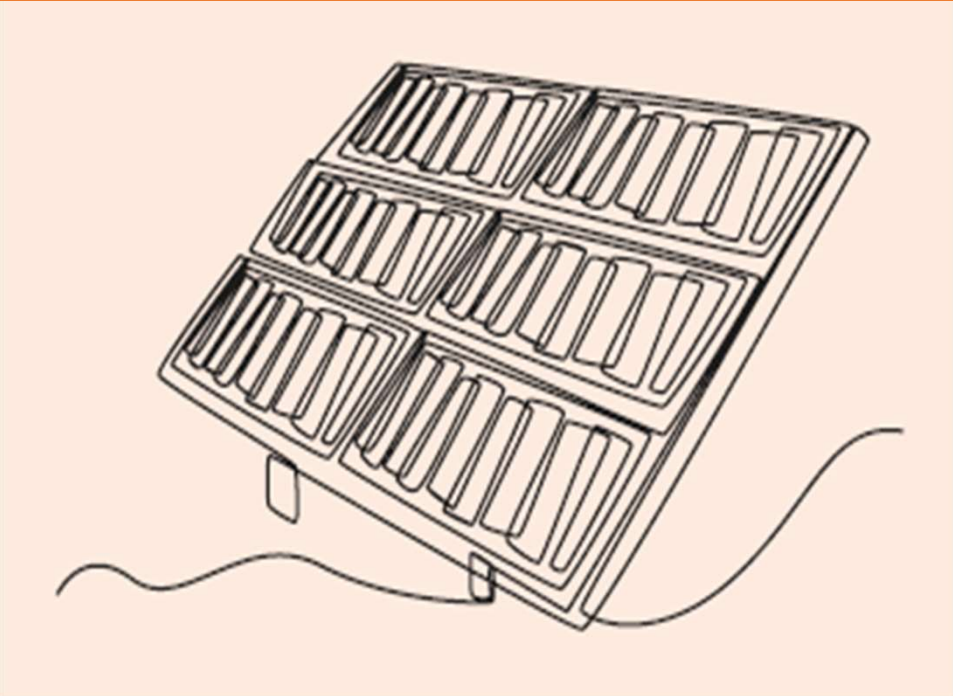
## Industrials: Renewable Energy

Lithgow LGA has the advantage of **existing high voltage transmission infrastructure**, which can provide grid support and a critical link between the Central-West Orana REZ and Sydney.

The LGA also has **key natural resources** suited to renewable energy generation, including land, solar and water resources.

- **Battery energy storage systems** to provide grid stability during low generation periods
- **Solar** can be an early mover, including for rooftops
- **Pumped hydro energy storage**, drawing on water resources currently used for power generation and mining
- **Green hydrogen production**, such as from solar energy and water resources. Will require investment in an electrolyser
- **Green transport and logistics** for long-haul vehicles and trains using hydrogen, including a refuelling station linking planned hydrogen highways

Proposed outcome: Lithgow becomes a global example of successful transition to a renewables-led, new energy economy



# Lithgow LGA's proud industrial heritage of more than 150 years provides a foundation for growth and innovations in advanced manufacturing

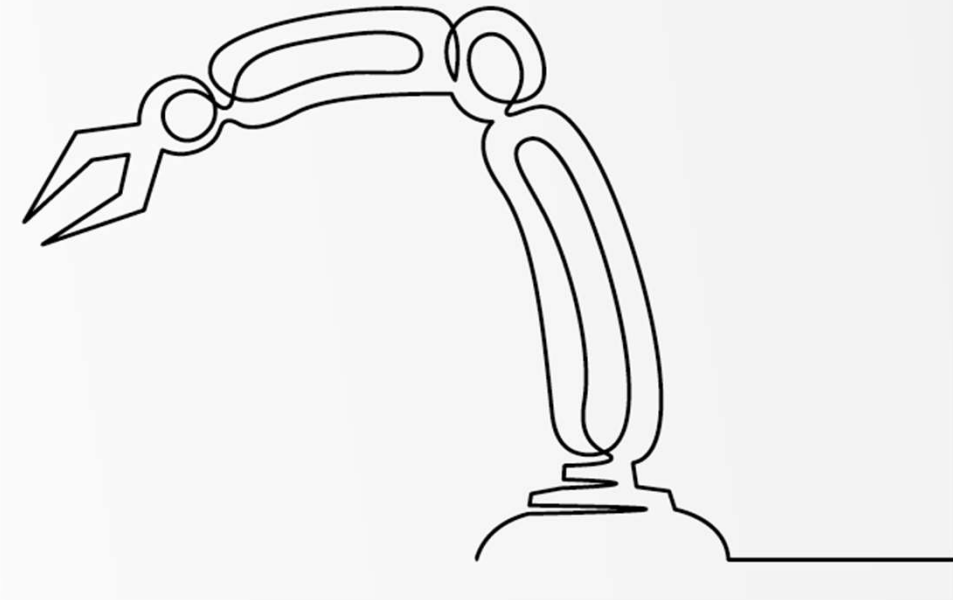
## Industrials: Manufacturing Industries

Manufacturing is the **equal fourth largest contributor to Lithgow's economy**, with 46 manufacturers **employing 8% of the population**. Lithgow LGA offers access to **affordable industrial land, water, energy and a workforce skilled in relevant trades**, close to Western Sydney.

Supply chain and trade issues are prompting Australian governments to focus on building **on-shore, advanced manufacturing capability**, in areas Lithgow has a competitive advantage.

- **Defence** and related metal fabrication and components
- **Renewable energy components** to meet increasing demand **and clean technology innovations**, such as green building materials, with potential to attract a Clean Manufacturing Precinct
- **Circular economy manufacturing**, integrating innovative reprocessing of by-products from local manufacturing to create high-value products
- **Green transport equipment manufacturing**, specifically converting, manufacturing and maintain freight rollingstock to use green hydrogen

**Proposed outcome:** Lithgow develops an advanced, circular manufacturing sector that anchors the future economy, building on the LGA's history of industrial innovation and leveraging its skilled workforce, transport infrastructure and potential for renewable energy production.



# Tourism can play a more significant role in the future economy, leveraging its regional endowments as the gateway between the Blue Mountains and the Central West

## Tourism

Nearly two-thirds of the LGA is national park or state forest, offering outdoor activities such as rock climbing, hiking, and offroad 4WD. Lithgow has a rich **Aboriginal cultural heritage**, and **mining and industrial historical sites**. The LGA has a **growing arts and cultural movement** with an expanding calendar of events, festivals and trails.

However, **Lithgow's tourism sector is relatively small**. Almost 600,000 people visit the region annually, while the Blue Mountains receive around 2 million tourists a year and Bathurst and Orange have approximately 1.2 million visits a year. Western Sydney Airport and improvements to the Great Western Highway are projected to significantly increase opportunities for tourism.

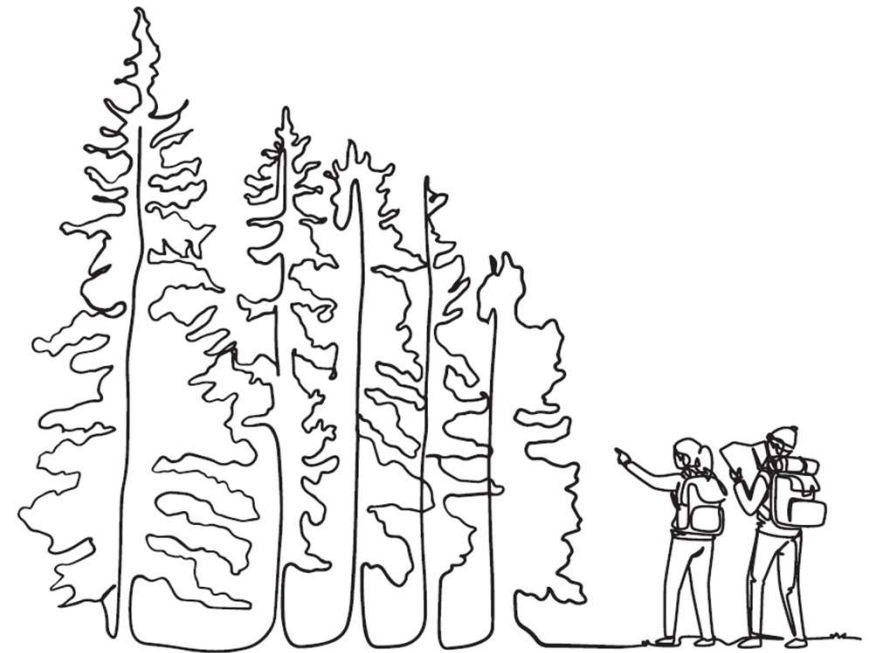
Lithgow can position itself as a **destination of choice** for:

- **Eco-tourism**
- **Extreme sports** such as trail running and mountain biking
- **Regional tourism**, such as foodie trails linked to Bathurst, Orange and Mudgee.

This will require **strategic investments and aggressive marketing**. Growth will depend on:

- Training local, particularly young, workers and supporting Aboriginal operators and rangers
- Placemaking initiatives to enhance the community and built environment
- Upgrading regional services and roads to key attractions, positioning Lithgow as the regional train interchange, and leveraging transport connections, including for trail bike loops
- Improving trails, signage, mapping, bike paths, parklands, and parking at access points

**Proposed outcome:** The relevance of tourism to Lithgow's economy and the employment of young workers is enhanced by strategic investment and strong marketing initiatives that capitalize on the diversity and uniqueness of local, natural, historical and cultural tourism opportunities.



# Health care and social assistance, including aged care, is the largest employer in the LGA and it will be vital to maintain this to promote health and wellbeing

## Health care and social assistance

The health and social assistance sector, including aged care, is the leading employer in Lithgow LGA with **14.2% of the workforce**. However, due to the nature of the sector, its contribution to the economy is only equal fourth at 5.8% of the economy.

It is one of the major growth sectors across the Australian economy, and like most parts of the country, Lithgow has challenges in recruiting and retaining staff and specialists.

With an ageing population, Lithgow has a range of growth opportunities:

- **Position Lithgow and its villages at the forefront of healthy, active ageing**
- **Local services to meet unmet demand**, such as expanded mental health care, more complex orthopaedics and surgical procedures, and lung function tests.
- **Lithgow Health, Ageing and Innovation Precinct** for South Bowenfels site, service delivery areas in Lithgow and Portland, and a potential campus for commercial healthcare and ageing ventures.
- **Attracting service providers and manufacturers of products for new models of care**, healthy ageing, in-home and respite care in people's homes, the community and online.
- **Retirement villages, in-community ageing and residential aged care**

**Proposed outcome:** Lithgow's health care and social assistance sector remains the LGA's largest employer and provides specialist and general services, centred around a Health, Ageing and Innovation Precinct, to promote the health and wellbeing of the community and consumers from neighbouring areas, including ageing and vulnerable people.



# Lithgow LGA is the base for a range of executive, service delivery, judicial, public safety, security and defence activities of government that has potential to grow

## Public Administration and Safety Industries

Public Administration and Safety Industries employed **10.7% of the workforce** in 2020-21 and contributed **7.8% of Gross Value Added** to the economy, the **third largest sector** in Lithgow. This is significantly higher than for NSW and Regional NSW.

Growth in the public administration and safety sector will be **driven by government decisions** to expand or establish services in Lithgow. Operating regional services hubs in a decentralised public sector can improve services and policy development, create social and economic opportunities for communities, and reduce operating costs for government.

- Lithgow's **proximity to Sydney and particularly to the growing Western City metropolis** offers convenience, combined with potential for affordability.
- Lithgow's potential role as a **future multi-modal transport hub** would support mobility of workers between public administration hubs in the LGA, the region and in Sydney.
- Services that **leverage existing operations**, such as the contact centre capacity of PoliceLink and the State Debt Recovery Centre's processing and collection of fees and fines.
- **Lithgow's infrastructure** may demonstrate competitive advantage, including affordable vacant or underutilised buildings and **warehousing that offers secure and government-compliant networks and storage**. This could also be attractive to the private sector.
- Attraction of further government services would position Lithgow as **a location for people to pursue a public service career**, enabling mobility between agencies while retaining their skills within the community.

**Proposed outcome:** Lithgow is respected as a base for decentralized government services, which provide a steady economic foundation for the community.



# Lessons learned from around the world demonstrate early planning and support for workers, supply chains and their communities is critical for successful transitions

## Supporting the coal transition

In September 2021, EnergyAustralia announced that it would “**transition out of coal assets by 2040**”, including Mt Piper. Consents for the major underground coal mines currently operating in the LGA will **expire between 2036 and 2042**.

The impact on Lithgow in all instances is significant. The sector employs **more than 16% of Lithgow’s workforce**, with a **high share of well-paying jobs** in an industry-specific skilled workforce. For example, the West Centennial Coalfields employ about 800 FTE workers plus more than 100 FTE contractors and each site trades with an average of 73 local suppliers each year.

The intention is to retain as many workers and suppliers in the community, including:

- Early workforce planning and preparation, including career planning, skills recognition and training in adjacent skills; redundancy payments
- Supply chain mapping to identify risks and opportunities for diversification
- Providing support beyond skills, including financial and personal counselling services, consideration of intergenerational issues.

### Early priorities include:

- Establishing a rapid response framework for any unplanned early closures
- Engaging in NSW and Commonwealth Government transition responses, including the National Net Zero Authority, Royalties for Rejuvenation and the Expert Panel for Central West
- Develop insights from local experience from Wallerawang, and with other transition regions
- Embed processes for formal dialogue between industry and governments on closure planning and transition governance, including monitoring the closure of Yallourn
- Engage early on closure announcements and seek community inputs to future uses of infrastructure and resources

**Proposed outcome:** Any decline in mining and coal-fired power generation is planned and equitable and offers a just transition to workers. Infrastructure and natural resources are repurposed or rehabilitated as future economic and community assets, and workers, the community and other stakeholders are engaged in shaping future opportunities.





# Leading the diversification of Lithgow's economy, attracting investment and enabling placemaking and planning requires clear governance, ambition and coordinated action

## Leading for growth

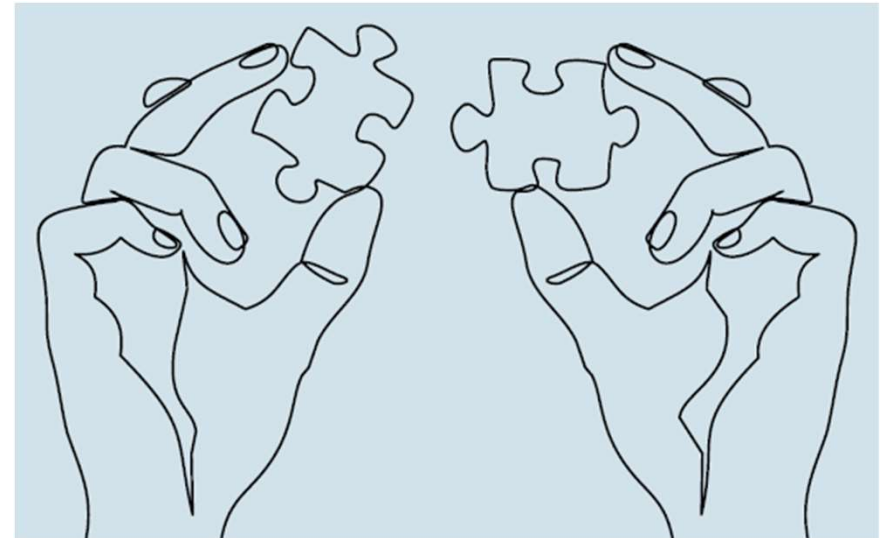
The transition will require a coordinated approach between all levels of government to work with stakeholders to create a positive investment environment, attract new industries and support businesses to expand.

The LEEP Transition Plan recommends that a governance framework be developed outlining authority, accountability, leadership, direction and management of the Lithgow transition, with:

- **top-down leadership** that facilitates **local ownership and innovation**
- a **place-based approach** that draws on local resources and stakeholders to mobilise change and investment
- **learning from regional and international transitions.**

**Key actions that will benefit the whole economy** include:

- **Optimising infrastructure**, particularly road and rail transport connections, repurposing transmission lines and natural resources currently used for coal and energy production, and underutilised commercial buildings
- Developing a **masterplan** to ensure access to suitably zoned land and appropriate planning approvals
- **Developing a regional workforce plan** and **attracting and retaining a skilled workforce**, including reskilling mining and energy workers and building a local education to employment pathway that develops science, technology, engineering, arts and maths (STEAM) skills for future jobs and for tourism and the care economy
- Ensuring an **inclusive approach to growth**
- **Placemaking** that makes Lithgow, its villages and valleys a vibrant place to live, work, study, play and visit.

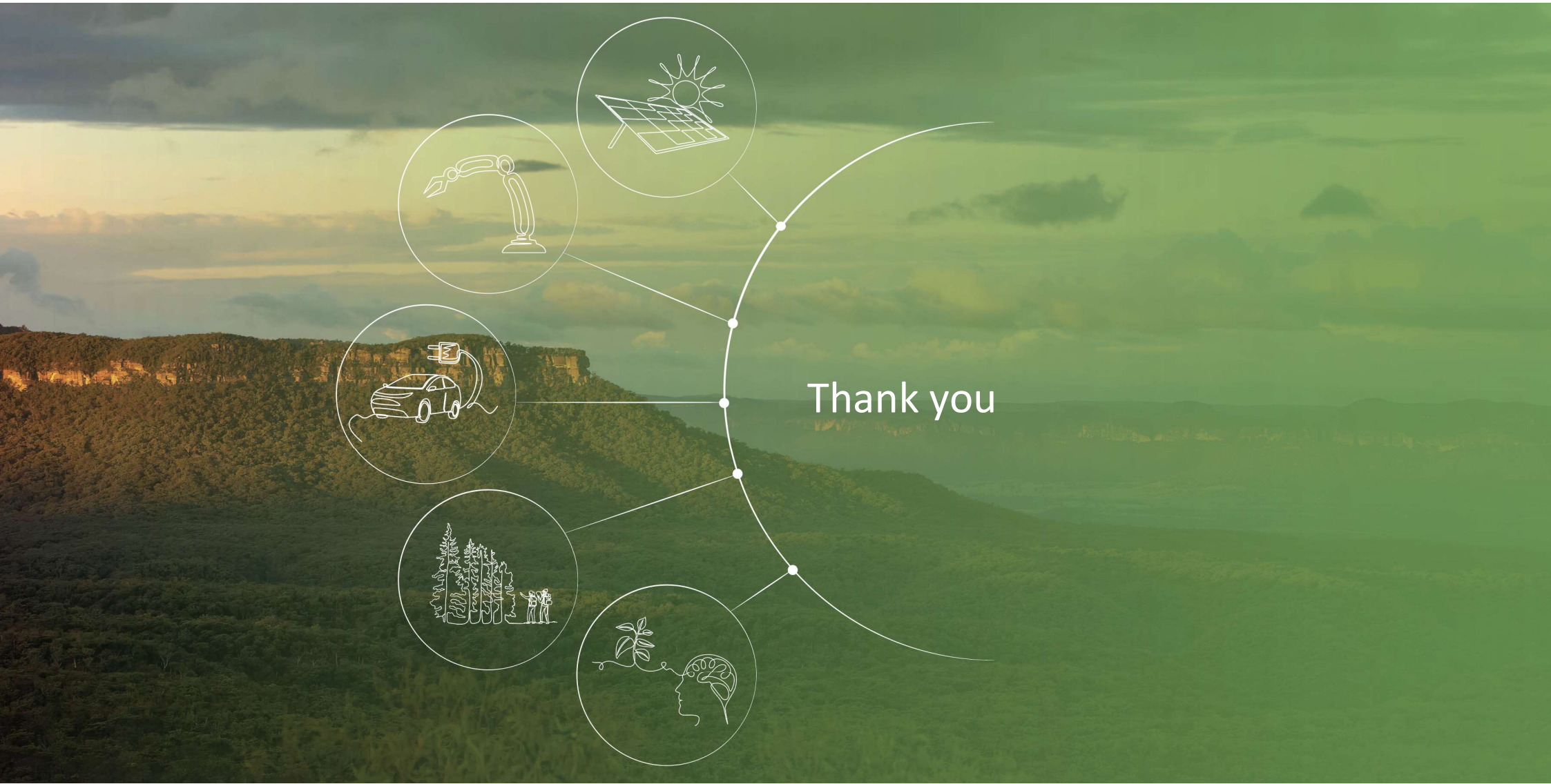


# Key takeaways

## Leading for growth

- **The time to start work is now** – business as usual will not set Lithgow up for success.
- The **opportunities are exciting** to build on Lithgow’s industrial heritage and it will be important to **maintain active commitment** to proactive diversification.
- This report is based on **significant evidence**, but there is **no guarantee** on outcomes. However, there should be a **high level of confidence** in the directions and actions proposed.
- **Investors will ultimately determine what sectors grow.**
- **The three tiers of government are already working closely together.** This will be critical to create a positive investment environment and attract State Significant Projects, including planning, working across all levels of government on policy and programs, and engaging with the community to achieve social licence.
- It will be vital to work with **key local stakeholders across all priority and foundational sectors** to drive growth and support the future transition.





Thank you

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