

LITHGOW CITY COUNCIL

SUBMISSION

JOBS AND SKILLS ROADMAP FOR REGIONAL AUSTRALIA

Acknowledgement of Country

Council respectfully acknowledges the Wiradjuri First Nation Peoples and their Elders past and present, who are the First Nations' Traditional Custodians of the lands where we work, learn and live. We are honoured to recognise our connection to the Wiradjuri lands, and their history, culture, and spirituality and we strive to ensure that we operate in a manner that respects their Elders and ancestors. We also acknowledge the other First Nations lands across Australia in our collaborations, travel, and networking.

We recognise the task First Nation Peoples have in the protection and healing of Country throughout the economic transition process and strive to ensure greater First Nation economic inclusion and empowerment as part of Lithgow's emerging economy.

Executive Summary

Council, and Council's Lithgow Emerging Economy Plan (LEEP) Team, welcome the opportunity to make this submission on behalf of its community and appreciates the work the Commonwealth Government and Jobs and Skills Australia are undertaking to refresh the jobs and skills roadmap for regional Australia (the Roadmap).

Lithgow is undergoing a profound economic structural adjustment as part of the global energy transition. It is likely to lose two thirds of its mining workforce between 2031 and 2036 and 30% of its gross regional product from mining and coal-fired energy generation (43% by 2040). Conversely, the city will benefit from substantial investment in renewable energy generation and storage over a similar timeframe. The transition, however, will hold significant challenges for the schools and VET sectors locally without radical change to a 'business as usual' approach.

In alignment with the Australian Productivity Commission (Australian Productivity Commission (2017)), and others, we recommend a greater focus in the Roadmap on building regional workforce adaptive capacity. In a rapidly changing industrial environment, this is a critical investment in workforce resilience. Council submits that the draft Roadmap be amended for the specific recommendations set out in Table 1. Each of these recommendations is more fully developed in the body of the submission.

Table 1 – summary of recommendations

No.	Recommendations
1	The design principles for the jobs and skills system at Table 2 in the Roadmap should include, as a new funding principle, whether the policy ensures, to the extent possible, the shared use of public resources – including to sector competitors, if it is necessary to provide affordable access to services in regional Australia.
2	The design principles for the jobs and skills system at Table 2 in the Roadmap should include, as a new service design principle, whether the policy ensures, to the extent possible, the creation of a network of specialist VET campuses across regional and sub-regional centres aligned with a region's strengths and supported by affordable student housing and transport options.
3	Metrics related to regional adaptive capacity and resilience – of the type developed by the Australian Productivity Commission (2017) or Baum S., and Mitchell W. (2023) – should be included as part of the Vision Principles in Table 33 of the Roadmap.
4	Metrics related to STEAM skills exposure in school be included as part of the Vision Principles in Table 33 of the Roadmap.

City of Lithgow is undergoing profound economic structural adjustment

Energy Australia's Mount Piper Power Station (MPPS) has commenced transitioning its role in the NEM from baseload to firming. It will transition into a reserve role in the early to mid-2030s. In addition to any job losses at the power station, the changing role of MPPS in the NEM will have substantial impacts on the local coal mining workforce – 80% of which is integrated into supplying MPPS with coal. There is little capacity for coal export switching. Lithgow is widely regarded as a high risk and priority coal region in New South Wales in terms of economic transition to net-zero with 43% of its economy derived from coal-fired power generation and associated coal mining. As NSW Minister Houssos (Natural Resources et. al.) (2023) has noted:

There is no doubt that we have a lot of work to do in the Central West because, specifically in relation to their mines, you would be aware that they have no access to export ports, as we discussed before. There is a particular challenge in terms of the local employment needs for that particular region. Our future jobs and investment authority for the Central West will be clearly focused around those challenges.

The coal-based economy is depicted in Figure 1.

Figure 1 – the coal-based economy

OUR ECONOMY

Current assets



ACTIVE

- 01 Airly Mine
- 02 Springvale Mine
- 03 Clarence Mine

SEEKING APPROVAL

- 04 Invincible Mine
- 05 Cullen Valley Mine
- 06 Angus Place Mine



CARE & MAINTENANCE

- 07 Baal Bone Mine
- 08 Pinedale Mine
- 09 Ivanhoe Mine



- 10 Mount Piper Power Station
- 11 Old Wallerawang Power Station redevelopment



The emerging economy is likely to include substantial renewable energy generation and firming as a consequence of Lithgow's proximity to high voltage electricity transmission infrastructure. Several renewable Major Projects have either been approved or are in the planning assessment process. These are set out in Table 2 with the emerging economic ecosystem depicted in Figure 2.

Table 2 – Renewable Major Projects Lithgow Local Government Area

Project	Planning approval status
Lake Lyell PHES	Unapproved – preparing EIS
Great Western BESS	Approved
Pinecrest BESS	Unapproved – preparing EIS
Mount Piper BESS	Approved
Wallerawang BESS	Approved
Ben Bullen Wind Farm and BESS	Unapproved – preparing EIS
Mount Lambie Wind Farm and BESS	Unapproved – preparing EIS
Sunny Corner Wind Farm and BESS	Unapproved – preparing EIS

Figure 2 – Emerging Economy



Implications of the energy transition for jobs and skills

The energy and associated workforce transition set out above, will hold significant challenges for the schools and VET sectors locally without radical change.

The offerings of TAFE NSW in Lithgow were substantially pared back as a consequence of the reforms implemented by Smart and Skilled in NSW. Offerings presently include electrical engineering, mechanical engineering and fabrication (only with support of the Mudgee TAFE campus) and TAFE NSW has recently commenced a trial of carpentry trades. It also offers courses in tertiary preparation, aged care, hospitality, children's services, community services, disability, animal studies and English language skills. A substantial proportion of the Lithgow workforce is employed in VET related employment (mining, power generation, defence manufacturing, and food processing and manufacturing) – although this is projected to change radically over the next five to ten years. Lithgow is not the location of a Connected Learning Centre.

Additionally, Lithgow has had a long-documented history of being in a university delivery 'black spot'.

A comprehensive history of higher education options and gaps in the City of Lithgow is helpfully set out in Hutchinson, M. (2014), When the war is over: Lithgow, Western Sydney and the search for higher education options. *History Education Review*, 43(1), 1-16.

The central thesis of the paper is that Lithgow had long fallen through the cracks of higher education service provision. Despite several false starts and attempts, Lithgow had never quite landed the university presence its industrial contribution to Australia merited and required.

For a brief four-year period, Western Sydney University operated a small teaching campus in Lithgow. It closed its doors to teaching in 2018 and completely in 2025.

The gap in higher education offerings in Lithgow has a long and entrenched history. It is expressly acknowledged by Henderson (2014) and tacitly by Western Sydney University's attempt to address it in 2014. It is likely that the absence of higher education offerings has substantially contributed to a loss of industrial productivity, innovation and opportunity in a city that has otherwise been a 'heavy lifter' in the creation of gross State product. The gap is also likely to have contributed to long-term relative disadvantage and ultimately a figure of just 6.5% of residents holding higher education qualifications. Without Government strategic intervention, the loss of 43% of the Lithgow economy by value-added production over the next five to 15 years against a background of high levels of existing social and economic disadvantage (Index of

Relative Socio-economic Disadvantage (903.3) and the lowest 10% of Australian localities), this situation is likely to substantially worsen.

It is also noted that there is no public transport between Lithgow and Bathurst (Bathurst TAFE and Charles Sturt University) from 09:47am and 15:30pm weekdays and between Bathurst and Lithgow from 07:35am and 19:25pm weekdays.

Priority on workforce adaptive capacity

Adaptive capacity is a system's ability to adjust to changes and challenges. It encompasses both the potential to adapt and the resources available to do so, including financial, human, institutional, and natural resources.

Whilst strategic intervention in job creation and industry attraction in regional economic development are important, so too are workforce investments. Workforce considerations have not had the prominence that they previously enjoyed. This is already reflected in the proposed Roadmap at p.9:

Regional Australia predominantly faces a people (or labour supply) issue rather than a jobs (or demand) issue.

People are the economy's most important economic asset.

As Roberta Ryan of the University of Newcastle¹ noted in the context of the Hunter Region of New South Wales:

Historically, the approach to regional development and planning has been framed by developing sector-specialisations based around physical resources or assets ... but that ... in an environment where new opportunities emerge quickly and existing markets can decline with little warning, the [Hunter] region needs to prioritise building a workforce with transferable skills across sectors and developing human capital that is nimble, adaptable and resilient to change.

The focus on a region's adaptive capacity is also a strong focus of the findings of the Australian Productivity Commission. A significant – perhaps the most significant – factor shaping the relative adaptive capacity for each region relates to people-related factors (including educational achievement, employment rates, skill levels, personal incomes and community cohesion).

For these reasons, Council recommends that metrics related to regional adaptive capacity and resilience – of the type developed by the Australian Productivity Commission (2017) or Baum S., and Mitchell W. (2023) – be included as part of the Vision Principles in Table 33 of the Roadmap.

¹ See statement accompanying release of *The Hunter Insight Series: The Geography of Jobs* accessed at <https://www.newcastle.edu.au/newsroom/featured/rethink-needed-on-hunters-economic-development-priorities>.

Consequential focus on STEAM education

One concrete, evidence-based response within the control of regional leaders and communities is investment in accessible STEAM-focused technical education (see, for example, Hellsing, K. et. al. (2020)). Creating opportunities for young people to learn formal STEAM skills – and related creative, problem solving, critical thinking, teamwork, and communication skills – is a practical investment in meeting employer needs, increasing attractiveness as a place to do business, and guiding young people to rewarding careers.

STEAM education is not just about university qualified professionals in science and engineering but all jobs from the application of technology in precision agriculture to theoretical physics. It is a proven path to workforce productivity in all industry sectors and builds resilience to the workforce megatrends of automation and the use of artificial intelligence. Finally, STEAM skills build occupational and geographic mobility critical to ensuring workforce adaptive capacity and resilience.

For these reasons, Council recommends that metrics related to STEAM skills exposure in both primary and secondary schools be included as part of the Vision Principles in Table 33 of the Roadmap. If we really want to move the dial on industry productivity and regional economic resilience STEAM skills is where the rubber hits the road.

Council's adaptive skill hub pilot – a case study

During the 2025 calendar (school) year, Council piloted a Central West Regional Adaptive Skills Hub under funding provided by the Commonwealth Government's National Priority Fund. The aim of the Program was to:

- pilot the shared use (full capitalisation) of expensive STEAM equipment between the region's public, independent and Catholic secondary schools and, on a mobile basis, each of the region's public, independent and Catholic primary schools,
- strategically intervene in stage 3 primary school education to encourage STEAM skills and reduce "STEAM phobia",
- strategically intervene in stage 5 secondary school education to encourage students into applied STEAM (iSTEM) particularly targeting First Nation and women student cohorts, and
- facilitate science and technology communication through a specialist communicator, upskilling teachers in the use and application of STEAM

equipment and improving regional STEAM teacher support, attraction and retention.

Although the pilot is on-going, the results are very promising with uptake from all primary schools across the local government area, a doubling of stage 5 STEAM related enrolments (including a larger than representative number of First Nations and women students), vastly reduced costs related to the purchase and maintenance of STEAM equipment (and corollary increased access), and a surveyed increase in teacher STEAM teaching and equipment confidence. A second stage of the pilot will consider whether greater cooperation rather than competition between schools can lead to a greater utilisation of scarce STEAM teacher resourcing in regions.

The Victorian Government's regional 'tech schools' have led to a demonstrable improvement in workforce adaptive capacity in Victorian regions. They have done so, by ensuring that students in rural Victoria have similar access to STEAM learning facilities as is enjoyed by students in metropolitan Melbourne. Other Commonwealth Government objectives, such as improving results for the participation of women and Aboriginal and Torres Strait Islander peoples in STEAM education can also be achieved. This also builds on the ambitions of the Commonwealth Government's regional development framework: "no one held back and no one left behind".

For these reasons, it is recommended that the design principles for the jobs and skills system at Table 2 in the Roadmap, includes, as a new funding principle, whether the policy ensures, to the extent possible, the shared use of public resources – including to public and private sector competitors if it is necessary to provide affordable access to services in regions.

VET Service delivery – a greater focus on regional specialisation

There can be little argument that the maintenance of general campuses of TAFE in all regional and sub-regional centres across New South Wales was not sustainable.

Given that circumstance, a policy choice arose between providing 'cut-down' generalist-access campuses (i.e. 'connected learning centres') across all regional and sub-regional centres in New South Wales with a deep reliance on technology for remote delivery or, rather, specialist campuses closely aligned with a region's strengths and supported, as part of a network, with affordable accommodation options for students needing to study away from home.

The cross political support for 'connected learning centres' in NSW has probably worsened outcomes for young people and the emerging workforce in rural New South Wales. Whilst there has been little comprehensive or independent analysis of the consequences of that choice, the strong anecdotal evidence is that the vocation education and training sector is now under considerable strain with the 'connected

learning centres' ill-equipped to provide the job ready skills and 'hands on' vocational training required by the economies of New South Wales regions.

Council recommends that Commonwealth VET funding should pivot, in a logical and orderly way, to a network of specialist and appropriately funded campuses across regional and sub-regional centres. These specialist centres should be supported by affordable student accommodation options, flexible (and intensive) training delivery – ensuring the ability to deliver training to geographically diverse students in work placements, regional (and sub-regional) public transport networks and re-imagined campus and course prospectus information (to both secondary school students and their parents). This initiative also has the capacity to assist the Commonwealth and state governments meet their respective affordable housing policy objectives in a targeted way. The policy re-think should be accompanied by robust and independent analysis of targets and objectives.

For these reasons, it is recommended that the design principles for the jobs and skills system at Table 2 in the Roadmap, includes, as a new service design principle, as to whether the policy ensures, to the extent possible, the creation of a network of specialist campuses across regional and sub-regional centres aligned with a region's strengths and supported by affordable student housing and transport options.

References

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