

First Nations Guidelines

Increasing Central-West Orana
income and employment opportunities
from electricity infrastructure projects





Acknowledgement of Country

The Office of Energy and Climate Change acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

The Office of Energy and Climate Change believes in thoughtful, place-based approaches to our work and maintaining strong partnerships with local Aboriginal communities to ensure local priorities and values inform and influence decision-making, and those communities benefit from the economic empowerment and jobs generated from the work of the Office.

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Foreword – Central-West Orana working group

The Central-West Orana working group acknowledges the various Aboriginal clans, groups, languages and mobs throughout NSW and their continued connection to their land, waters and communities.

These guidelines provide a resource to support meaningful engagement with the Central-West Orana local Aboriginal people and their communities. The information outlined in this document has been developed by the working group made up of community members representing key community-run organisations and agencies within the Central-West Orana Renewable Energy Zone.

Working group members strongly believe that these guidelines provide a foundation for the community to achieve their goals of sustainable employment, building business capacity and sharing in the various economic benefits offered by the Electricity Infrastructure Roadmap. Active participation in the planning and delivery of energy infrastructure developments will provide opportunities for Aboriginal people to move towards greater financial security and independence. We recognise the Roadmap has long-term objectives and that the *First Nations Guidelines – Increasing income and employment opportunities from electricity infrastructure projects* and these region-specific guidelines also have a long-term focus. We expect that these guidelines and our conversations will continue to evolve as the Roadmap progresses.

The working group acknowledges the efforts of the Office of Energy and Climate Change in ensuring the region-specific guidelines are built on a foundation of engagement and consultation with the Aboriginal community, with targets reflecting the working group's priorities for local Aboriginal people and businesses, and in respecting Traditional Owners' desire to be proactive in decision-making for their land, waters and resources. This is fundamental to building a collaborative and constructive relationship for implementing the First Nations guidelines under the *Electricity Infrastructure Investment Act 2020*.

Our focus in the guidelines is to deliver positive outcomes in the areas of employment and business growth and to build a foundation for strong positive relationships and partnerships between the local Aboriginal community, energy infrastructure developers and contractors, as well as government, through activities and measures that will strengthen the capability of and give voice to local Aboriginal people and Aboriginal-owned businesses.

Chairperson

Central-West Orana working group

Contents

- Foreword – Central-West Orana working group 3**
- Introduction..... 5**
 - Purpose and objectives5
 - Scope of these guidelines.....6
 - Review6
- Central-West Orana 7**
 - Central-West Orana Renewable Energy Zone.....8
 - About the Aboriginal community8
 - Areas for exploration and conversation 10
 - Central-West Orana engagement protocols..... 12
 - General information about the region 14
- More information 27**

Introduction

The Electricity Infrastructure Roadmap (the Roadmap) establishes an integrated, whole of system approach to transform the State's electricity system by attracting, securing and coordinating private investment to develop the necessary infrastructure. This involves the investment in transmission, energy generation, storage and firming infrastructure as ageing coal fired generation plants retire over the coming decades.

The *Electricity Infrastructure Investment Act 2020* (EII Act) gives special attention to the outcomes for local Aboriginal communities within these regional communities and acknowledges the important role these communities will play in future developments.

Purpose and objectives

The purpose of the First Nations guidelines is to set out the expectations for increasing employment and income opportunities for Aboriginal peoples and communities in the construction and operation of new electricity infrastructure projects in NSW delivered under the Roadmap.

There are 2 parts to the First Nations guidelines:

The general guidelines

The *First Nations Guidelines – Increasing income and employment opportunities from electricity infrastructure projects* provide details about requirements for and approaches to consultation and negotiation with local Aboriginal communities.

The region-specific guidelines

Region-specific guidelines provide detailed socio-demographic information about the regions and the communities and outline particular approaches to engagement and any priority areas of employment and income opportunities for local communities.

A working group was established consisting of Central-West Orana local community representatives. These representatives are from community groups and other organisations that provide support and services to the various Aboriginal communities within that region. This working group was initially established for the purposes of contributing to development of the general guidelines and co-designing these guidelines, to ensure they reflect the economic aspirations of the local communities.

The goals, targets and aspirations outlined in this document have been identified by the working group as priority matters to strengthen economic outcomes for the community. In addition, the guidelines outline how the local Aboriginal communities wish to be engaged with, and how they want to participate in Roadmap activities.

Proponents and entities are asked to consider the matters outlined in this document in their planning, development and decision-making processes under the Roadmap.

This document is intended to provide users with stronger guidance on areas that could be explored with Aboriginal communities during consultation. It provides insights into the community's long-term economic aspirations and may provide a useful foundation for discussions about how Roadmap activities could help achieve them; for example, capacity building or improving the prospects for long-term employment opportunities.

There are 5 Renewable Energy Zones proposed under the EII Act: Central-West Orana, New England, Hunter–Central Coast, South West and the Illawarra. Each of these regions will have its own region-specific guidelines.

Scope of these guidelines

These guidelines have been developed under section 4 of the EII Act and require energy infrastructure proponents to consult and negotiate with local Aboriginal communities about opportunities for increasing employment and income. It is expected that any commitments made will be met by proponents.

The general guidelines set requirements for and approaches to consultation and negotiation with local Aboriginal communities. The information in these region-specific guidelines highlights areas where proponents may seek to work with the local Aboriginal communities to achieve the desired community economic outcomes and aspirations.

While the details in region-specific guidelines are primarily focused on achieving economic and employment outcomes, proponents are not prevented from working with the local Aboriginal community to support other outcomes that have importance for communities.

These guidelines do not replace other consultation obligations with Aboriginal stakeholders and processes under current NSW and Commonwealth legislation concerning cultural heritage, environmental, social, or other impacts of proposals.

Proponents must also exercise due diligence to understand and meet all relevant legislative requirements for proposed projects to ensure consultation with Aboriginal stakeholders addresses all relevant matters of concern. If necessary, parties should seek their own independent legal advice.

Review

The First Nations guidelines will be reviewed at least every 2 years. It is expected that the region-specific guidelines will also be reviewed to ensure outcomes remain relevant for the local community.

Central-West Orana

Located in the heart of NSW, the Central-West Orana region is the second-largest region in the state in terms of landmass. Aboriginal communities retain a strong link with the country and the region features diverse landscapes including the iconic Great Dividing Range.

The local government areas within the Central-West Orana region are:

Bathurst Regional	Forbes	Oberon
Blayney	Gilgandra	Orange
Bogan	Lachlan	Parkes
Cabonne	Lithgow	Warren
Coonamble	Mid-Western Regional	Warrumbungle
Dubbo Regional	Narromine	Weddin

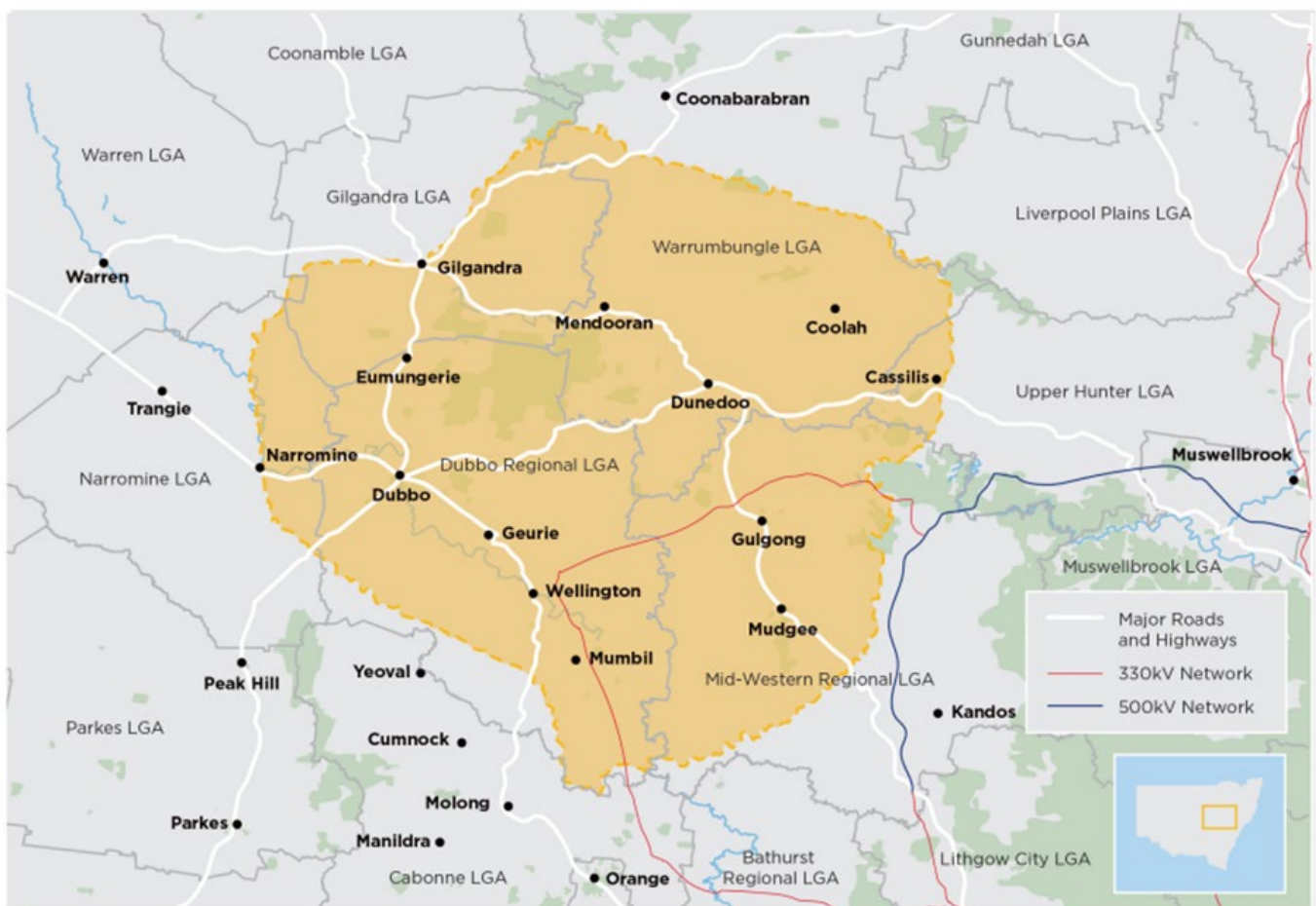


Figure 1 Central-West Orana Renewable Energy Zone

Central-West Orana Renewable Energy Zone

The Minister for Energy and Environment formally declared the Central-West Orana Renewable Energy Zone on Friday 5 November 2021, see Figure 1.

About the Aboriginal community

Aboriginal community profile¹

The data below reflects Dubbo and Wellington only, as one of the largest population centres within Central-West Orana region, to provide a general overview of the Aboriginal and Torres Strait Islander statistics for that region. Further information may be obtained on other local government areas within the Renewable Energy Zone by visiting the Australian Bureau of Statistics to review the relevant Census data.

- In the 2016 Census, 5865 of the 41,483 residents (14.1%) said they had Aboriginal or Torres Strait Islander origins, or both; of these, 97% were Aboriginal.
- About 13% of the Aboriginal population were under 5 years in 2016. This infant population accounted for five-sixths of the Aboriginal population growth between 2011 and 2016.
- The Aboriginal community is significantly younger than the non-Aboriginal population, with a median age of 21 vs 39 years, with a higher proportion under 18 years old: 43% compared with 22% and a lower proportion aged 65 or more: 5% compared with 18%.
- Aboriginal households had an average of 3.2 residents, which was larger than non-Aboriginal households at 2.4. Three in 10 Aboriginal households were couples with children. Three in 10 were one-parent families. 15% of the Aboriginal households were single persons (vs 27% of non-Aboriginal households).
- More than half of Aboriginal households rented their home (57%), with the remaining households owning their homes, either with a mortgage (29%) or without a mortgage (10%).
- The median income of Aboriginal adults was about \$487 a week, which was 68% that of all adults (\$715). The median income gap had closed by 1% since 2011.
- 58% of Aboriginal adults were in the labour force, compared with 68% of non-Aboriginal adults. 16% of the Aboriginal workforce were unemployed, compared with 4% of the non-Aboriginal workforce.
- One in 3 Aboriginal residents was attending an educational institution. 955 Aboriginal people had completed Year 12, which was 54% more than in 2011 and 172% more than in 2006.
- 41% of Aboriginal adults had some type of post-school qualification, compared with 59% of non-Aboriginal adults (4% had a degree or higher, compared with 25%).
- 7.2% of the Aboriginal population reported they had a severe or profound disability. 13% of Aboriginal adults (aged 15+) assisted a person with a severe disability. Aboriginal people had higher disability rates than average in all age groups, with Aboriginal people aged 55–64 years 3 times the average for this age group.

¹ Source: NSW Aboriginal Affairs' *Community Portrait: The Dubbo Opportunity Hub* (covering Dubbo and Wellington), 2017

Aboriginal organisations and groups

There are a range of community organisations, businesses and government agencies that provide direct employment, training and social support and services to local Aboriginal people and communities within the Central-West Orana region.

Aboriginal community organisations and businesses:

- NSW Aboriginal Land Council (NSWALC)
- Local Aboriginal Community Working Party and/or Advisory Groups
- NSW Indigenous Chamber of Commerce (NSW ICC)
- Aboriginal Legal Service (ALS)
- Aboriginal Education Consultative Group (AECG)
- Three Rivers Regional Assembly (TRRA)
- Aboriginal Employment Strategy (AES)
- Local Aboriginal Land Councils (LALCs)
- Aboriginal Medical Service (AMS)
- Privately owned, recognised Aboriginal businesses as identified by the working group

Government agencies:

- NSW Department of Communities and Justice
- Department of Premier and Cabinet
- Department of Regional NSW
- NSW Aboriginal Affairs
- Department of Planning and Environment
- Office of Energy and Climate Change
- National Indigenous Australians Agency
- NSW Training Services
- TAFE NSW
- Aboriginal Housing Office

Annual dates and events of significance

Aboriginal people meet regularly throughout the year to celebrate their ongoing culture and connection and to acknowledge and share their local history during various community gatherings, events and festivals. Examples are Reconciliation Week (27 May – 3 June 2022), NAIDOC week (first full week in July, Sunday to Sunday) and the Koori Knockout (early October; usually the second weekend in October).

Proponents seeking to engage with Aboriginal organisations and groups should be aware of these dates as communities and organisations may be unavailable to meet on these dates or leading up to them. Seeking to meet with the Aboriginal community at times when cultural festivities are occurring could delay community decisions or affect future relationships.

Aboriginal communities can also enter periods of mourning called Sorry Business, without warning, after the loss of a community member. It is requested that proponents who have planned or are expecting to meet with a local Aboriginal community undertake to 'check-in' with a local contact a day or so in advance, to confirm availability and suitability to attend. This is an act of respect for the community, but also a way to reduce unnecessary waste of resources in attending a meeting that has been cancelled due to the unavailability of the community.

There may be other dates when local Aboriginal community groups and organisations are not able to engage. Proponents can avoid these by contacting and submitting their engagement requests to the Chair of the Central-West Orana working group as early as possible. This would allow time for the Chair to respond and advise of the availability of local Aboriginal community groups and stakeholders to meet and any other relevant information that could impact the success of the consultation.

Proponents may also consider referring to the NSW Department of Communities and Justice website, which lists dates of significance to NSW Aboriginal people.

Areas for exploration and conversation

These guidelines have been co-designed with the Central-West Orana working group. The working group has identified key goals and aspirations for their community that they would like proponents to consider in engagements and negotiations and that could be included in their submissions for Roadmap projects. These community-developed goals and aspirations can be considered by Roadmap entities involved in assessing the merits of project proposals. They are intended to be built upon over the longer term.

Goals and aspirations from the Central-West Orana working group

Local Aboriginal communities in this region are seeking to work collaboratively with proponents to achieve positive outcomes through Roadmap projects. They welcome proactive and meaningful engagement, and positive conversations about practical pathways to achieving local goals and aspirations. The matters outlined below were identified by the community as options to achieving their long-term aspirations of sustainable employment and increased business benefits and opportunities for local Aboriginal people and businesses.

Goals and aspirations identified by local communities are two-fold: their primary focus is on protecting, strengthening and developing community outcomes, but communities also recognise the importance of taking up new opportunities when they present, and using them to adapt and develop the ability to shape their own lives and livelihoods, leading to improved economic and social outcomes.

Long-term goals and aspirations of the Central-West Orana working group

- Build Aboriginal business capability and capacity to tender for work packages and/or income opportunities
- Proponents to include timely and adequate training and pre-employment programs to support employment opportunities for Aboriginal people to be taken up as they arise

- A long-term aspirational goal of 20% local employment and contracts to be held by local Aboriginal people and businesses
- Building and maintaining meaningful long-term relationships with local Aboriginal communities; inclusion on the journey to delivery of the Renewable Energy Zone infrastructure projects
- Renewable Energy Zones to provide lower electricity costs for local Aboriginal community-owned properties
- Using community investment funds sourced from infrastructure projects to support cultural and cultural heritage activities and/or projects

Priority activities and outcomes from the Central-West Orana working group

To assist in achieving the long-term goals and aspirations of the Central-West Orana community, local communities have identified several priority activities and outcomes.

Aboriginal communities invite proponents to consider and engage with them about these priority activities and outcomes. This could help proponents to understand the content and consider how it could be supported, and how local community outcomes could be built into business-as-usual planning and design of Roadmap activities. This is key in driving successful and collaborative relationships between industry, government and the community, and to delivering sustainable Roadmap outcomes that will benefit all parties.

As a starting point, proponents should design and implement an Aboriginal participation plan with existing training, employment and support mechanisms. Where support mechanisms are limited or unavailable, proponents should consider designing and creating them to meet their participation plan commitments.

- Where legally, culturally and environmentally practicable, and following relevant local community advice about respectful and appropriate use of the land, consideration should be given to prioritising the use of Aboriginal-owned land for access agreements, ownership and development of the Renewable Energy Zone infrastructure projects
- Procurement of goods and services from Aboriginal-owned businesses should be prioritised where there is adequate capacity and capability
 - across all contract levels and roles
 - for short-term, long-term and recurring work
- Consider joint ventures or partnership opportunities through adjustments to work packages to support Aboriginal participation while building skills, capability and capacity
- Create opportunities for employment, training, traineeships and apprenticeships for Aboriginal people
- Advance specific opportunities in employment and training for Aboriginal women
- Identify and target pre-employment training and upskill opportunities, with a skills analysis for region-specific transferability and longevity, such as:
 - Prioritise Aboriginal group training and recruitment organisations (e.g. Aboriginal Employment Strategy, Yarn'n Aboriginal Employment Service) to provide a range of workforce solutions, personnel services and supports to employees

- Use local training and employment support agencies and providers to match local Aboriginal job seekers to new positions
- Support existing or, if necessary, establish new community education and training programs and schemes to increase workforce skills, capabilities and readiness
- Include people from the local Aboriginal community in selection processes for Aboriginal specialist consultants and in the development of terms of reference, and seek their support of the appointment of such specialists employed on an activity or project
- Provide regular updates to the Central-West Orana working group.

Central-West Orana engagement protocols

Central-West Orana working group

A working group has been set up to support local Aboriginal community engagement and negotiations during a project tendering stage and through the ongoing activities of the infrastructure project lifecycle.

The objectives for the working group are to:

- Achieve a consistent approach to engaging with and involving local Aboriginal communities in Roadmap projects within the Central-West Orana Renewable Energy Zone
- Ensure local Aboriginal community involvement in Roadmap projects
- Ensure Aboriginal inclusion in decision-making processes that may affect them
- Support prospective proponents to understand the local Aboriginal communities' employment and educational needs.

The working group is currently made up of the organisations listed below, and members meet monthly:

- NSW Western Zone Aboriginal Land Council (Director is working group Chair)
- NSW Aboriginal Land Council Central Region
- Dubbo Aboriginal Community Working Party
- NSW Indigenous Chamber of Commerce
- Allira Gathering Association
- Aboriginal Education Consultative Group
- National Indigenous Australians Agency
- Three Rivers Regional Assembly
- Dubbo Local Aboriginal Land Council
- NSW Department of Communities and Justice
- Aboriginal Affairs
- NSW Training Services
- Department of Regional NSW

The working group will support and provide a consistent and single voice for the Central-West Orana Renewable Energy Zone in relation to economic and employment opportunities. The working group should be the first port of call for proponents seeking to engage, consult and negotiate with local Aboriginal communities about Roadmap projects.

Contact details for the working group:

- Director Western Zone, NSW Aboriginal Land Council – 02 6885 7000

Engagement approach

This is an overview of the engagement protocols as determined by the Central-West Orana working group members as representatives for and on behalf of their community. It is expected that prospective proponents will exercise these guidelines during engagement and negotiations with the region when tendering for an infrastructure project within the Central-West Orana Renewable Energy Zone.

People or organisations wishing to undertake engagement, consultation and/or negotiation about Roadmap activities and projects with local Aboriginal peoples and communities are asked to follow the engagement approach set out below:

- Contact the Central-West Orana working group to:
 - advise of possible activities or projects within the Central-West Orana Renewable Energy Zone area, and
 - commence engagement with local Aboriginal communities.
- The proponent should be ready to provide detailed and relevant information, in writing:
 - about the proposed project, including the type of infrastructure proposed
 - the timeframe for negotiations and engagement
 - the estimated project timeline, if successful
 - where possible, the estimated project cost and resources, if successful
 - the proposed participation plan, if available
 - about the specific support and input requested from the working group.
- Once adequate information has been provided, the Chair may convene a meeting with the working group members as soon as practicable to review the proposal and to commence the engagement and negotiations about the employment and income targets for the local Aboriginal people and businesses, and the project plan in general, as appropriate.
- The working group may guide the proponent through a constructive consultation process, agreed by the parties.
- The working group may collaborate with the proponent to identify and access the local Aboriginal workforce, businesses and services as required, to contribute to the content of a tender proposal.
- The working group may provide support and engagement throughout the project lifecycle to ensure the participation plan targets are achieved.
- The working group may provide support and local insight to the development of proposals that will contribute to the tender's employment and spend targets, as well as the proponent's proposed participation plan targets.

General information about the region

Introduction

This section provides more information about the Central-West Orana region, and is taken from Appendix 1 of the *Employment, Skills and Supply-Chains: Renewable Energy in NSW – Final Report* (referred to in this section as ‘the report’).²

Appendix 1 of the report examines the economic structure and performance of each Renewable Energy Zone region within its broader economic context. The objective is to establish region-specific baselines that collectively describe the region’s progress on a transition to renewable energy. This is indicated by their integration within local and global supply chains, industry composition, the depth of training and development opportunities available to local and incoming workforces, and current labour market capacity.

‘Region’ refers to a spatial approximation of the Renewable Energy Zone region. For the purposes of this analysis, regions are defined by concurrence between ABS’ administrative boundaries and the best approximation of the Renewable Energy Zone’s geographic extent. For priority Renewable Energy Zones (Central-West Orana, New England and South West), concurrence is based on SA1s and the indicative site boundaries that are published online by the NSW Government.

In the absence of published maps, the Hunter–Central Coast uses SA4 boundaries as a proxy, while Illawarra is based on SA3s. Planning for these are in their early stages and indicative sites have not been specified. While the administrative boundaries do not perfectly align, they are the best fit for the purpose of Census data collection and analysis.

Using a combination of ABS and qualitative data, this chapter profiles each region as outlined in Table 1.

Table 1 Components of Renewable Energy Zone profiles

Baseline theme	Elements
Demographic profile	Population size in 2016 and projected population to 2041 Population density Age distribution Educational attainment Aboriginal share of population Skills profile Employment status Average income
Economic structure	GRP growth, compared to state-wide and national GRP growth Industry mix and contribution to the region’s GRP Shifts in the industries’ share of production, 2015–2020 The region’s competitive strengths
Institutional endowments and industry specialisations	Major educational institutions and their course mix, in terms of highest attainment level and industry pathway Industry qualifications by share of residents

² Briggs C, Gill J, Atherton A, Langdon R, Jazbec M, Walker T, Youren M, Tjondro M, Rutovitz J, Cunningham R, Wright S and Nagrath K (2021) *Employment, Skills and Supply-Chains: Renewable Energy in NSW – Final Report*, University of Technology Sydney and SGS Economics and Planning, Sydney.

Key barriers and constraints for Renewable Energy Zone development are also discussed at a high level. These are based on stakeholder inputs from workshops, interviews and surveys conducted as part of this study, as well as desktop research.

Economic concepts and notational convention

The following terms and concepts are used to describe the economic structure of the regions. They are defined here for ease of reference:

- **Statistical Areas (SA)** – refers to the statistical areas, reflecting the location of people and communities, used by the Australian Bureau of Statistics for the publication and analysis of official statistics and other data. It is updated every 5 years to account for growth and change in Australia’s population, economy and infrastructure.³
- **Location quotient (LQ)** – a ratio that compares the region to a larger reference region (for this analysis it is NSW) according to some characteristic. In the bubble charts, a position on far right indicates specialisation while a larger bubble size indicates the average annual employment growth between 2012 and 2017.
- **Gross Regional Product (GRP)** – a measure of size or net wealth generated by the local economy. Changes in this figure can indicate employment shifts, changes to productivity and/or industry mix.

Central-West Orana

Summary

Moderate population growth is forecast in the region, driven by a combination of natural increase and recent investment attraction to encourage the regional relocation of businesses and residents. In addition to the Renewable Energy Zone, Central-West and Orana is home to:

- the Parkes Special Activation precinct (a leader in greening initiatives through the establishment of Australia’s first Eco-Industrial precinct)
- the Parkes site of the Gig State project (which aims to deliver metro-level digital connectivity)
- major critical infrastructure across the health, justice and education domains.

Central-West and Orana’s local economy has a strong agrarian history, although mining, food processing and service provision are growing in their share of employment. Planned solar and wind energy projects in the region will increase demand for appropriately skilled workers such as wind turbine technicians, system designer and installation technicians. While the region currently has a sizeable talent pool of technicians and tradespeople, education and training is likely to become a central focus, given known skills shortages and a need to reskill or upskill the existing workforce to engage in specific renewable energy activities.

In preparation for Renewable Energy Zone construction commencing, a preliminary assessment indicates that institutional capacity to deliver core and secondary skills along the renewables supply chain is low. There is an enabling role for governments and industry to pinpoint the right skills mix and training support to maximise regional benefits from the Central-West and Orana’s renewables specialisation.

³ For more detailed information on this classification, see the Australian Statistical Geography Standard (ASGS) Edition 3

Central-West and Orana's economy is diverse, demonstrating strong agribusiness, mining and construction sectors (REDS 2018). Several solar and wind developments are already operational: Dubbo Solar Hub, Bodangora Wind Farm and Burrundulla Solar Farm, with many others under construction, approved, or in planning phase.

Beyond the Renewable Energy Zone site, wind and solar farms extend as far as Nyngan, Forbes, Blayney and Gunnedah. The Parkes Special Activation Precinct lies to the south-west of the Central-West and Orana Renewable Energy Zone and is expected to increase electricity demand in Central-West NSW. Currently, 132 kilovolt transmission lines provide connection between Parkes and the Renewable Energy Zone region (TransGrid 2021).

Demographic profile

Population size and density

In 2016, the population within the Central-West Orana Renewable Energy Zone was 87,140 based on the identified SA1s (ABS 2016), with population density concentrated in key centres (Figure 2).

Based on DPIE planning region projections, the broader Central-West region's population (extending beyond the Renewable Energy Zone boundary) is estimated to grow by 7.5% from a base of 284,679 in 2016 to 306,011 in 2041 (DPIE 2020).

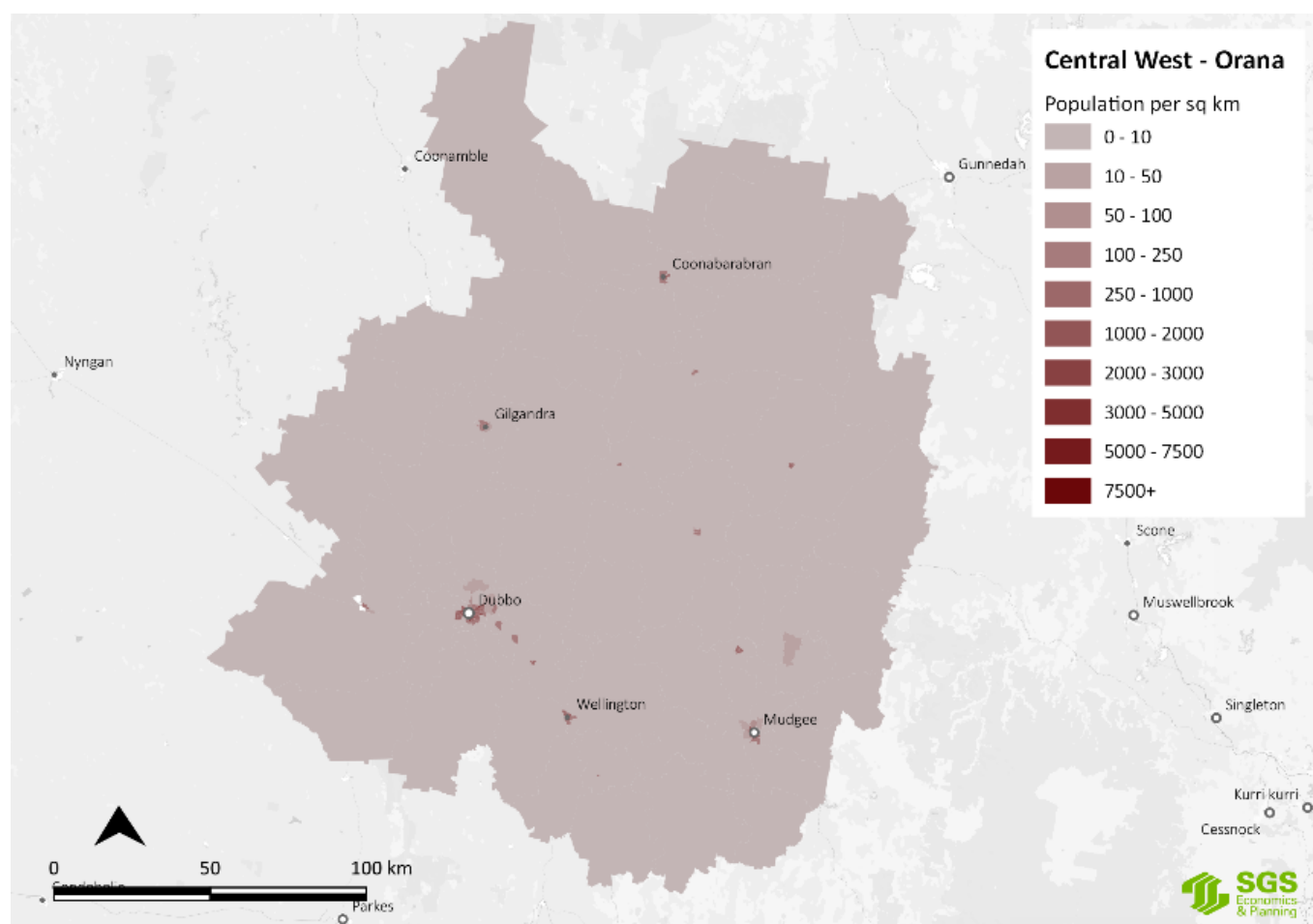


Figure 2 Map of population density in Central-West Orana around the Renewable Energy Zone

Source: ABS, Census 2016

This is expected to translate into a slight to moderate increase of the local workforce, noting that the region has a higher proportion of retirement aged individuals compared to the state average (Figure 3).

Age distribution

The age distribution of the region is skewed slightly older than the NSW average, with lower proportions across all age groups between 20–29 and 40–49 years old. This is generally characteristic of regional communities, which have historically observed a trend of younger populations seeking out education and employment opportunity in metropolitan areas or regional centres.

The age groups between 50–59 and 80–89 all contain a higher proportion of the region’s population compared to the NSW average. There is however a slightly higher share of children aged 0–9 and 10–19. Interestingly, the 0–9-year-old age group is the largest, being 14.6% of the total population.

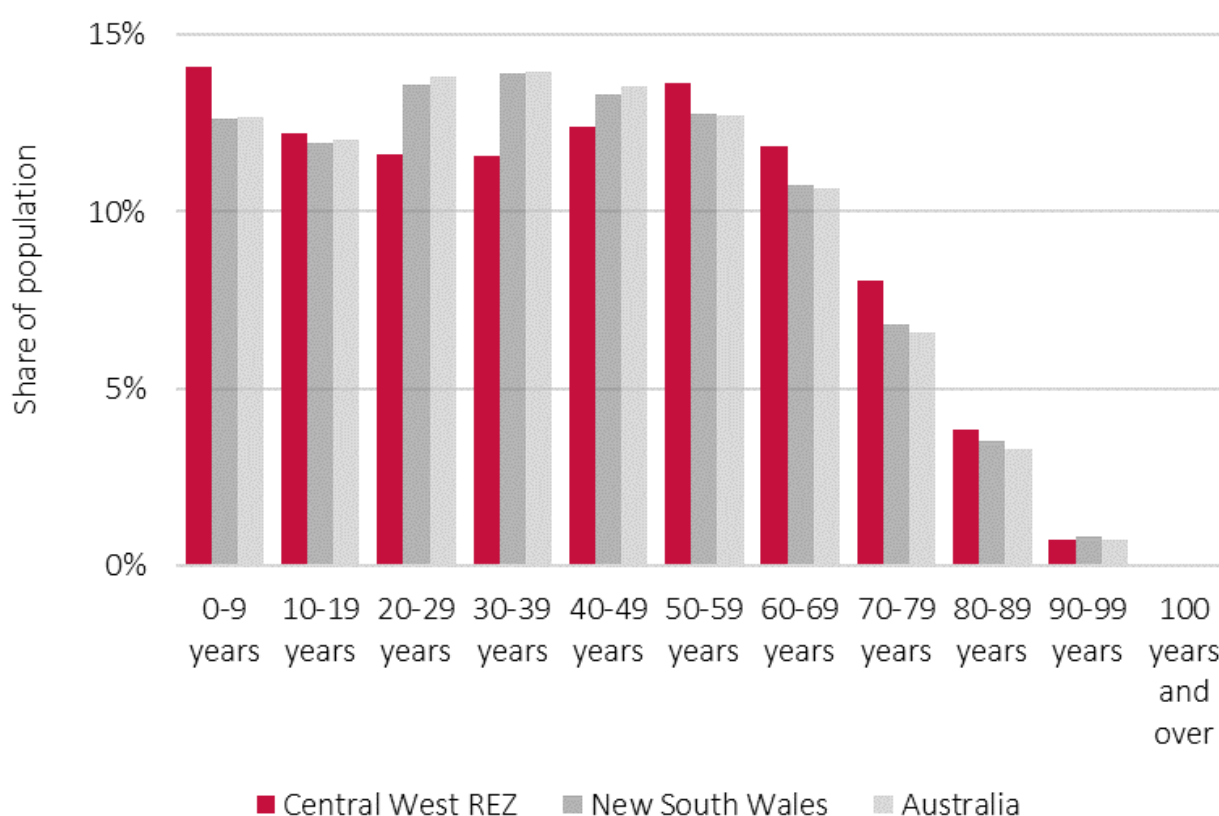


Figure 3 Age distribution, Central-West and Orana Renewable Energy Zone region, 2016

Source: ABS, Census 2016

First Nations share of population

The Aboriginal share of population is relatively high at 13.4% (Table 2). This is significantly higher than the NSW state average (3.1%).

Table 2 Aboriginal population, Central-West and Orana Renewable Energy Zone region, 2016

	Aboriginal	Non-Aboriginal	Total
Total	10,630	68,992	79,622
Share	13.4%	86.6%	100%

Source: ABS, Census 2016

Skills profile

The ABS uses a skill-based classification of occupations that is agnostic to the industry within which the job is held. The Central-West and Orana region's largest employing occupations in 2016 were automotive and engineering trades workers, education professionals, other technicians and trades workers and skilled animal and horticultural workers (Figure 4). These occupations largely reflect the industry distribution in the area and speak to the need for trade workers with skills in engineering, likely for use in agricultural machinery and mining machinery maintenance and operation.

There is therefore some alignment with the technical occupational needs of renewable energy activities, as well as education professionals to support the skills response of education providers and industry. The relative scarcity of labourers compared to the NSW and the national shares of employment suggest a potential pressure point for Renewable Energy Zone construction if these skills must be sourced from outside the region. As in many sectors, the region's ageing workforce may also present challenges to increasing the skills base for in-demand skills.

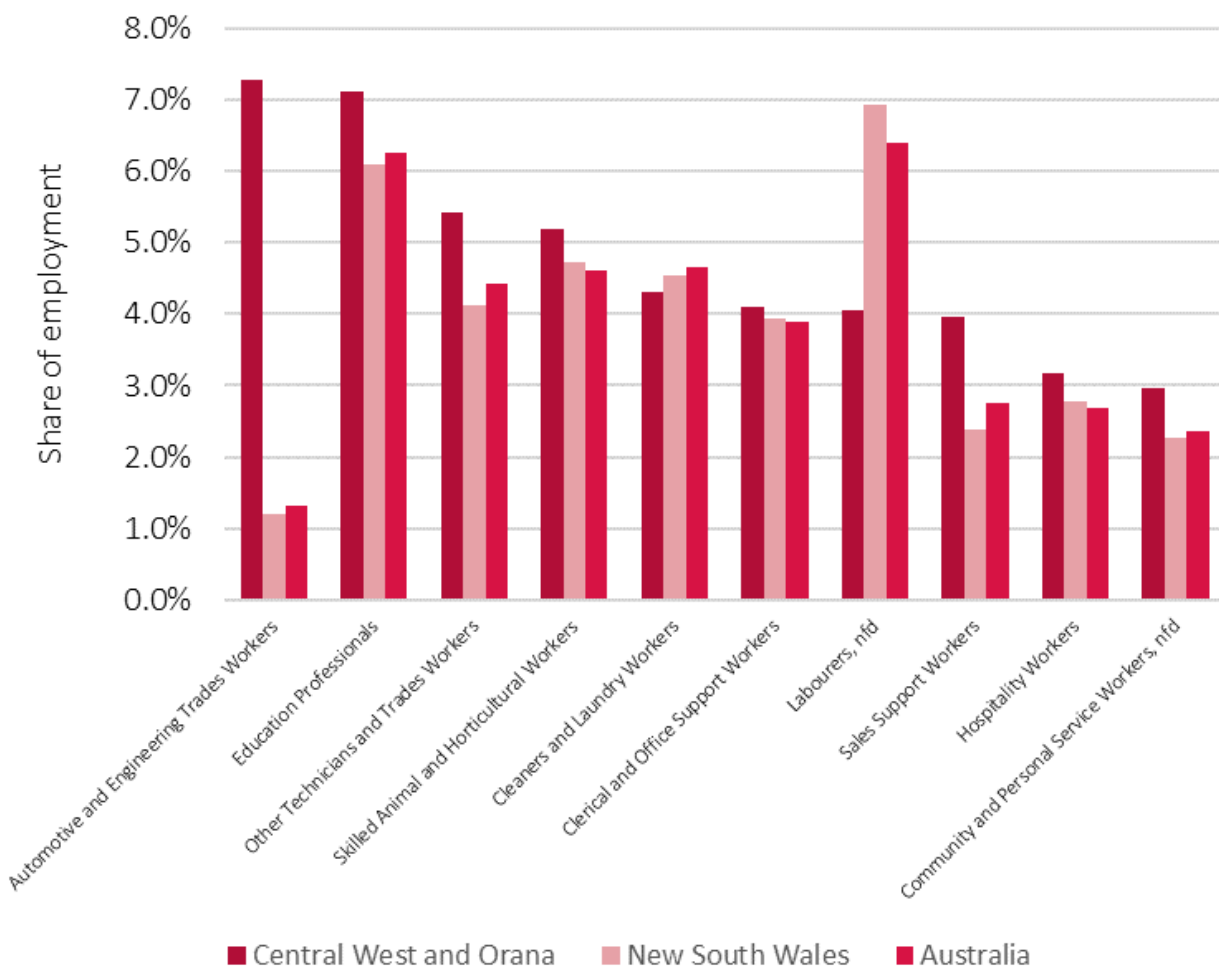


Figure 4 Ten largest occupation groups (2-digit level) in the Central-West and Orana Renewable Energy Zone region
Source: SGS Economics and Planning using 2016 Census data

Employment status and average income

Compared to the regional NSW average, the Central-West and Orana region has a slightly higher share of full-time workers and lower share of part-time workers (Figure 5). Its levels of unemployment are largely in line with state-wide average (Figure 6). This may suggest there is not a lot of unused labour capacity in the region that can be easily redirected into other uses.

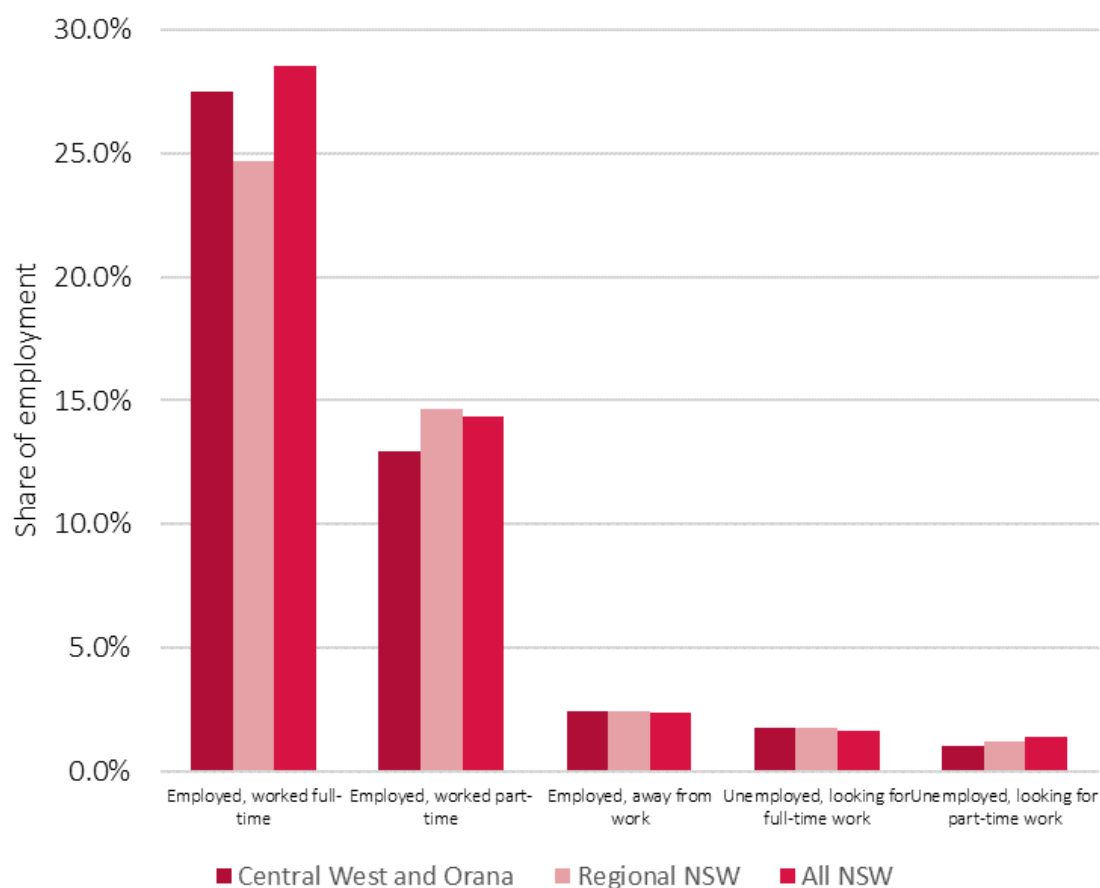


Figure 5 Labour force status, Central-West and Orana Renewable Energy Zone region
Source: ABS, Census 2016

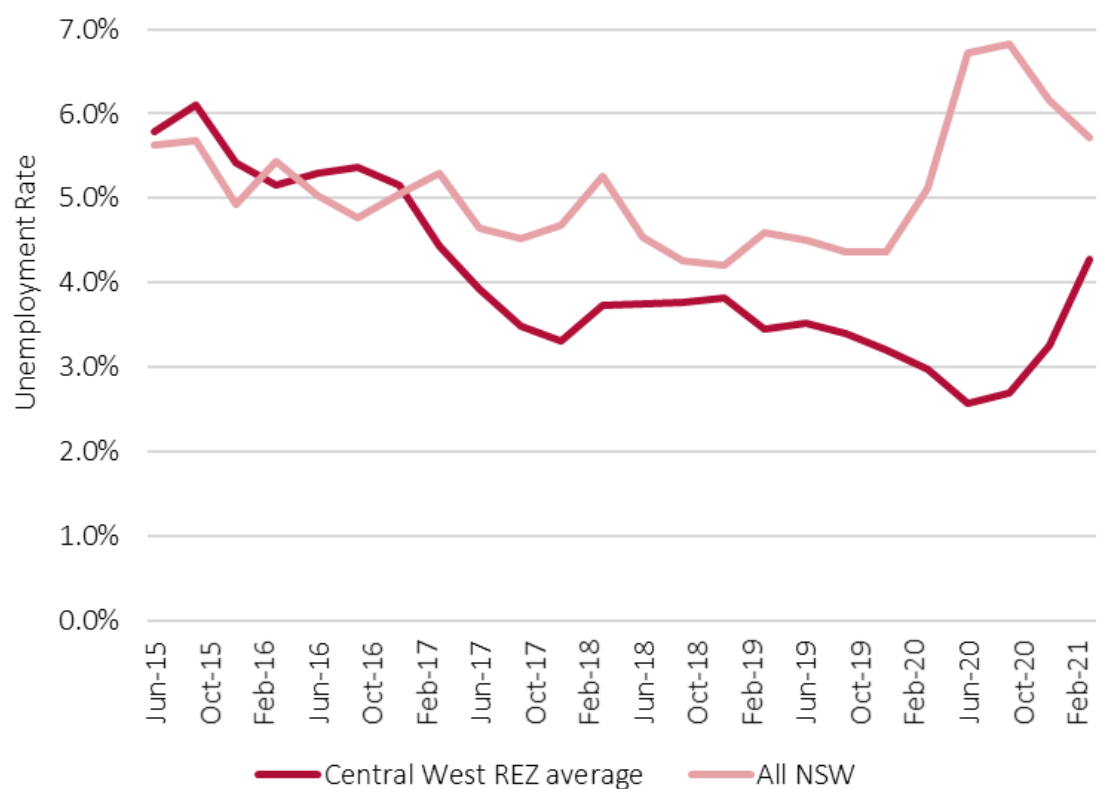


Figure 6 Unemployment, Central-West Renewable Energy Zone, 2015 to 2021
Source: Department of Education, Skills and Employment, 2021

In 2016, the share of Aboriginal unemployment in the region was 10.2% (Table 3) compared to the NSW average of 8.9% (Table 4). Shares of the Aboriginal population not in the labour force are also higher in this region.

Table 3 Aboriginal and non-Aboriginal population by work status, Central-West and Orana Renewable Energy Zone region, 2016

	Full-time	Part-time	Unemployed	Not in labour force	Total
Aboriginal	26.9%	15.2%	10.2%	47.7%	100.0%
Non-Aboriginal	40.9%	18.9%	3.2%	37.0%	100.0%

Source: ABS, Census 2016

Table 4 Aboriginal Nations and non-Aboriginal population by work status, all NSW, 2016

	Full-time	Part-time	Unemployed	Not in labour force	Total
Aboriginal	28.7%	16.7%	8.9%	45.7%	100.0%
Non-Aboriginal	39.0%	19.5%	4.0%	37.5%	100.0%

Source: ABS, Census 2016

In 2016, income distribution in the Central-West Orana region was skewed more towards the lower end of income bands than the rest of NSW and Australia (Figure 7), although income earnings have been increasing gradually in the 10 years to May 2021 across NSW (Figure 8).

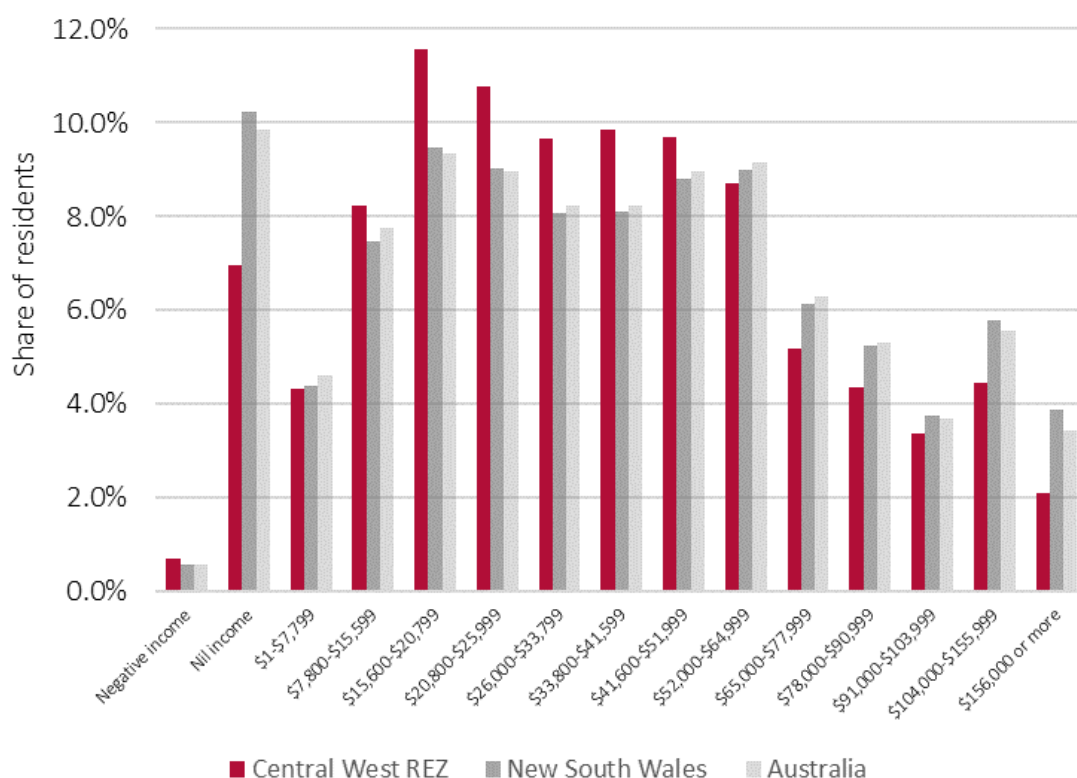


Figure 7 Average annual income, Central-West and Orana Renewable Energy Zone region, 2016

Source: ABS, Census 2016

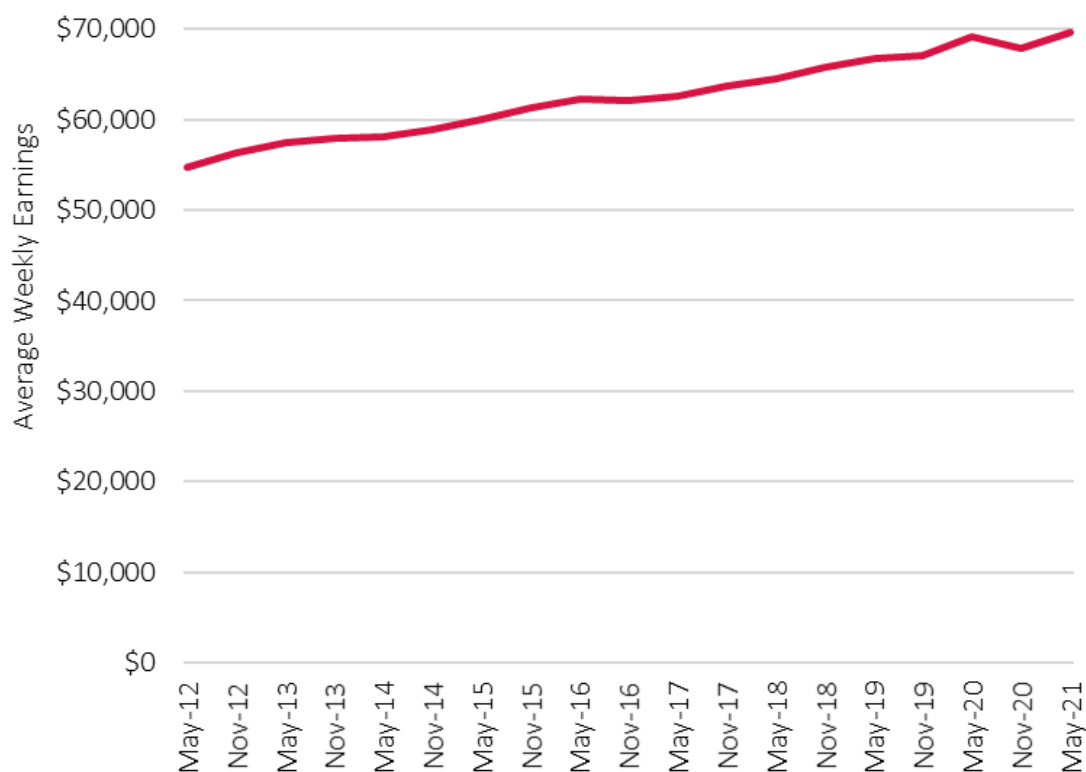


Figure 8 Average annual earnings, all NSW, 2012 to 2021

Source: ABS, Average Weekly Earnings, Australia, 2021

Economic structure

GRP growth

This region has generally underperformed against the national and state economy over the past decade, however with significant fluctuations (Figure 9). There was sharp GRP growth between 2016 and 2017, but this has since fallen sharply, in part due to the drought impacts affecting crop and pasture production between mid-2017 and 2020.

While fluctuations are typical of regional farming communities, whose economies are heavily sensitive to changes in environmental factors and trade conditions, the compounding effects of drought, water insecurity, bushfires and the COVID-19 pandemic have challenged recovery in GRP growth. As NSW shifts into drought recovery phase in 2020 and 2021, it also appears that Australia's agricultural industries mitigated the impacts of ongoing labour supply vulnerability from travel restrictions and export disruptions by diversifying their markets (Cameron et al. 2021). This can be observed in the gradual GRP recovery to pre-COVID levels.

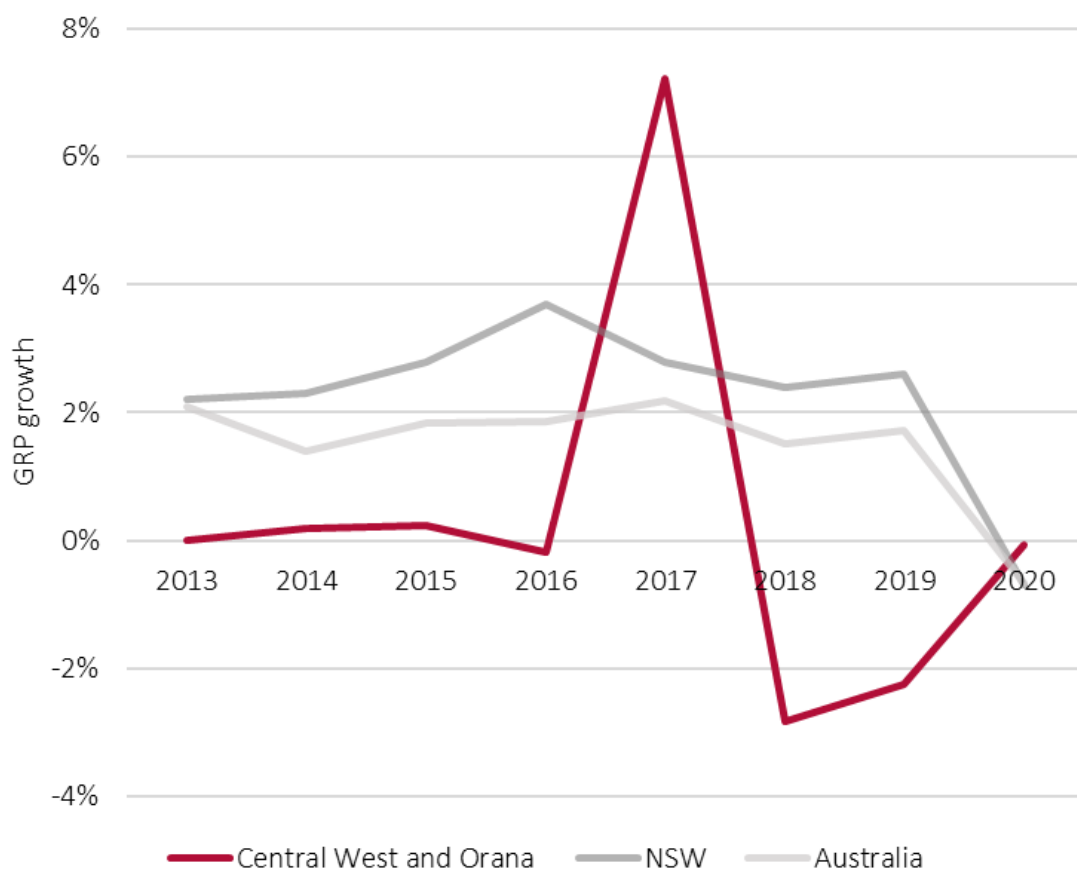


Figure 9 GRP growth compared to NSW and Australia, Central-West and Orana Renewable Energy Zone region

Source: Australian National Accounts: State Accounts, Cat. No. 5220.0 and SGS Economics Planning (can get data from Performance of Cities and Regions)

Industry mix

Primary production collectively accounted for the majority of total income generated in the regional economy in 2020. 27.6% and 18.5% of the region's GRP was attributable to mining and agriculture respectively. Population serving industries such as construction (7%), health care (6%), education and training (5.2%) and public administration (5.1%) also represented large shares of GRP. Collectively, these industries accounted for nearly 70% of the region's total GRP (Figure 10).

Another way to measure the size and contribution of different industries in the region is to look at the share of employment each industry makes up. This is shown in Figure 11. Agriculture makes up the largest share of employment in the Central-West and Orana Renewable Energy Zone, followed by health care and social assistance. While mining makes up a larger share than the state average, the industry is underrepresented compared with its contribution to GDP. This is mostly due to the capital-intensive nature of the industry and high value of outputs produced.

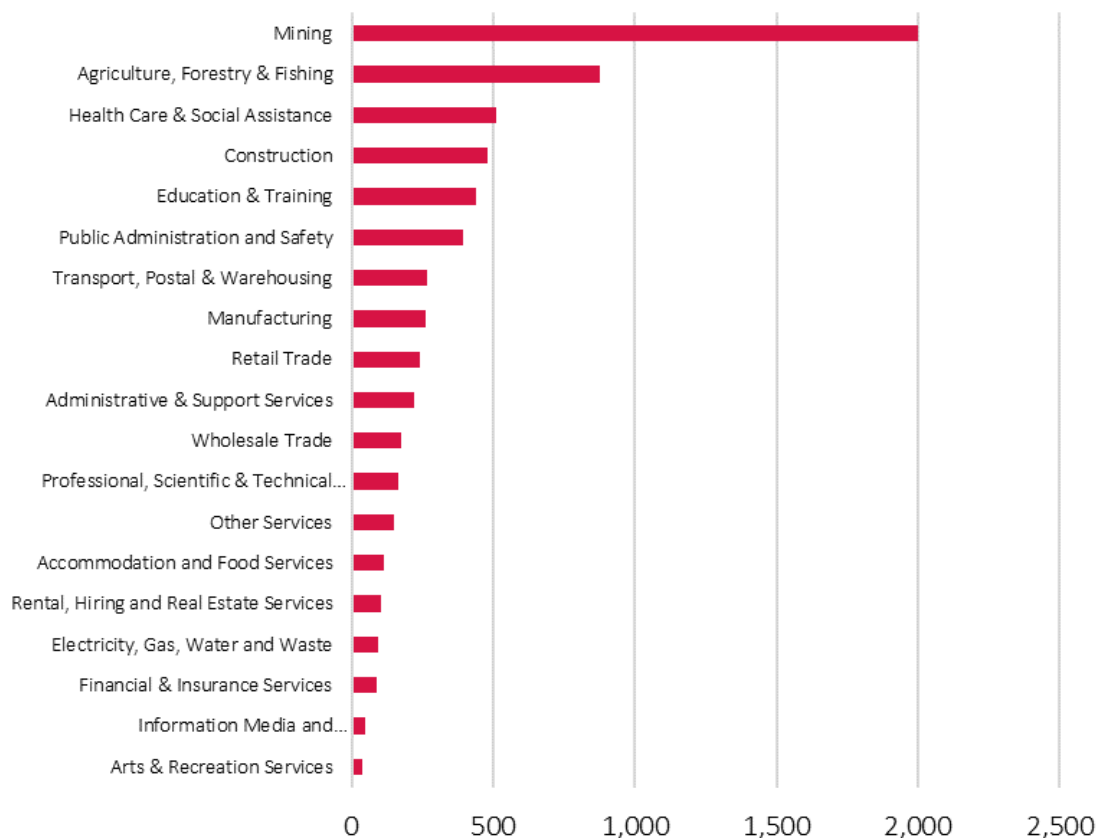


Figure 10 Industry contribution to GRP in 2020, Central-West and Orana region

Source: Australian National Accounts: State Accounts, Cat. No. 5220.0 and SGS Economics Planning

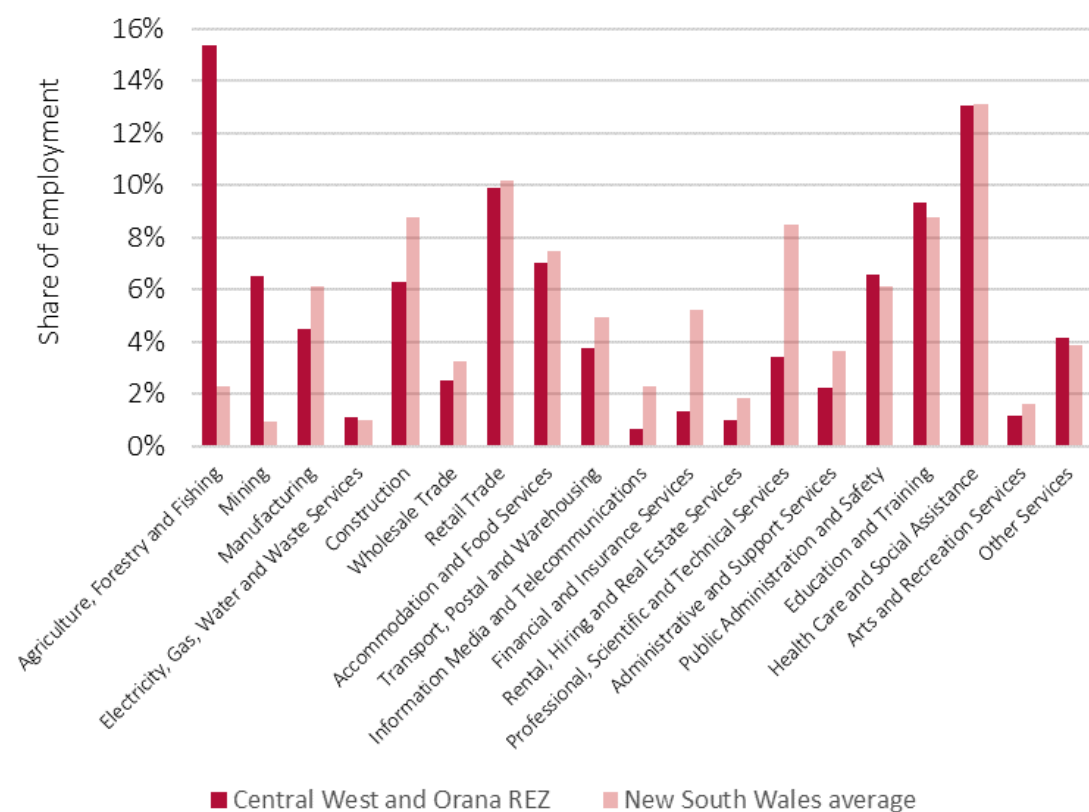


Figure 11 Industry share of employment, Central-West and Orana region

Source: SGS Economics and Planning using 2016 Census data

Shifts in industries' share of production, 2015–2020

The dominant trend in the region's economic structure over the past 5 years has been strong growth in agriculture related industries (Figure 12). As a share of GRP, these industries grew by almost 6% over the period. In comparison, mining and population serving jobs all fell slightly as a share of total production, despite growing in absolute terms over the same period.

Manufacturing grew as a share of total production in Central-West and Orana, albeit very marginally. Other industries experiencing growth included retail, professional, scientific and technical services, and accommodation and food services. The lack of a clear link between the types of industries that have grown proportionally in the area over the past 5 years suggests that there are no major structural shifts taking place in this regional economy at the current time.

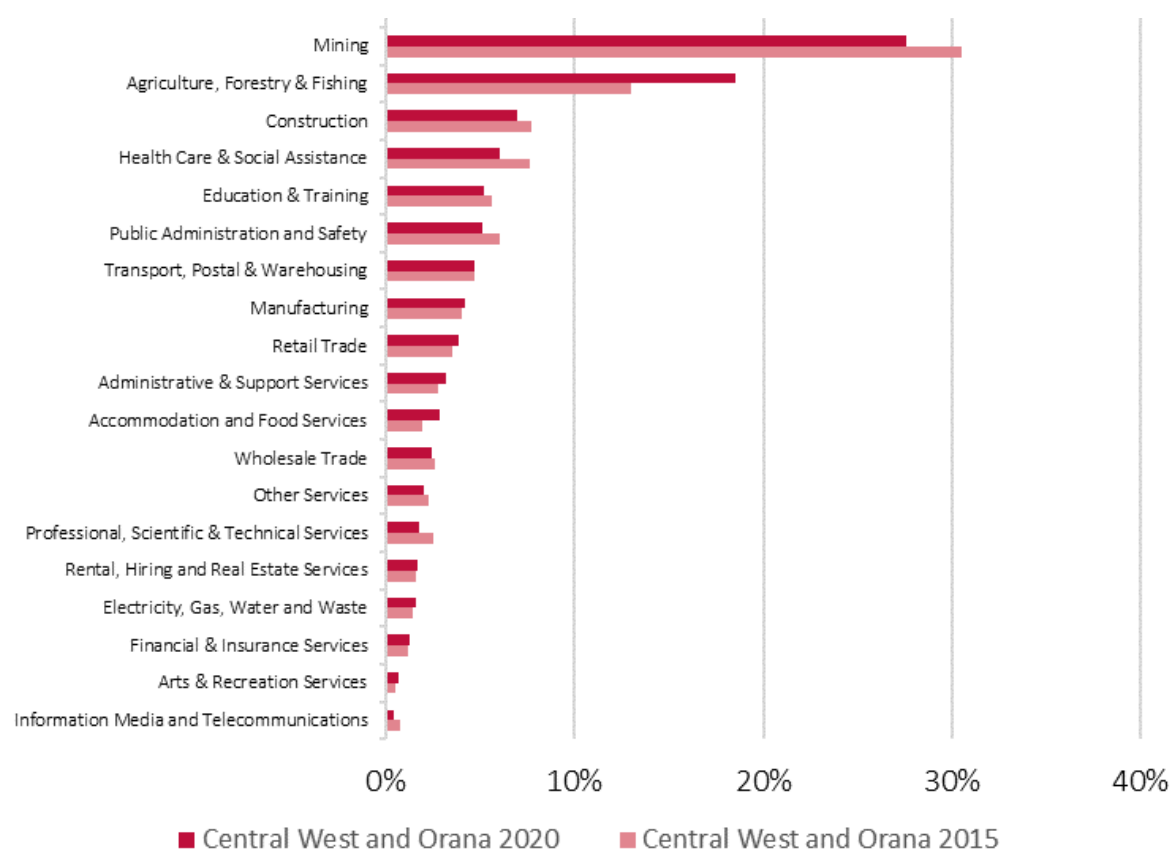


Figure 12 Industry structure over time (GRP contribution 2015–2020), Central-West and Orana region

Source: Australian National Accounts: State Accounts, Cat. No. 5220.0 and SGS Economics and Planning

Competitive strengths

The location quotient (LQ) analysis shown in Figure 13 provides some insight to the competitive strengths inherent in the region's economic structure. As expected, the region's agriculture and mining sectors are outliers in their relative growth and specialisation, shown by their positioning on the far right of the x-axis.

Slight specialisations in electricity, gas, water and waste services and education and training were also observed. Construction and administrative and support services are growing quickly compared to the state of NSW, but would generally not be considered an area of specialisation in the region based on available data.

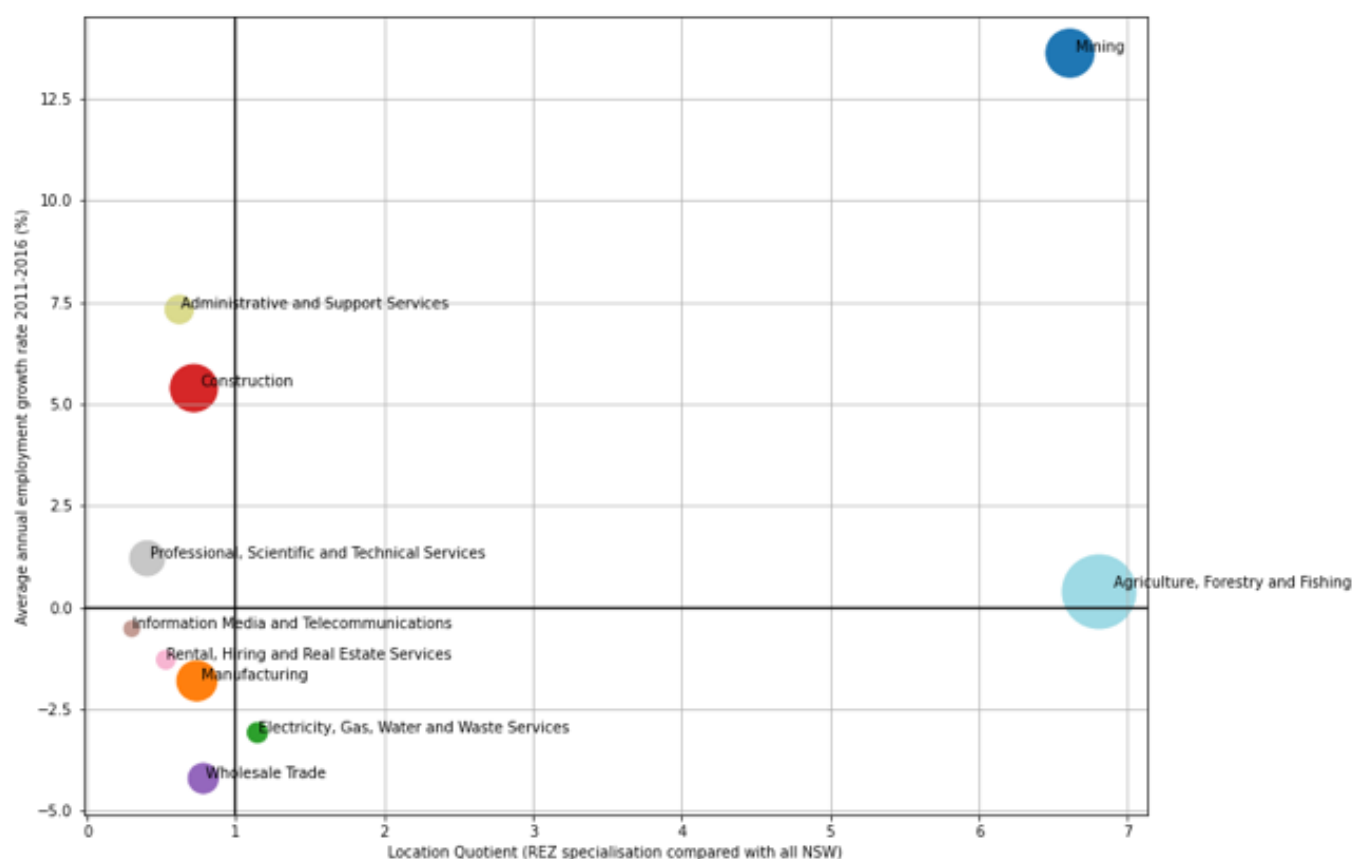


Figure 13 Location quotient of industries in the Central-West and Orana region

Source: SGS Economics and Planning using 2016 Census data

Institutional endowments and qualifications

Major education institutions

Educational assets in the region include the Charles Sturt University, which has a campus at Dubbo. The campus offers 2 Bachelor programs: a Bachelor of Social Work and Bachelor of Nursing. There are TAFE campuses at Dubbo, Wellington, Gilgandra, Coonabarabran, Dunedoo, Gilgandra and Mudgee. Dubbo TAFE offers Advanced Diplomas and Diplomas, while the others offer Certificates.

In the Castlereagh area, the TAFE campuses at the Gilgandra, Coonabarabran and Dunedoo do not offer courses on trade skills. Apprentices must travel to other campuses to access these education pathways. There are Connected Learning Centres at Coonabarabran and Grenfell, which offer remote learning.

A combination of factors challenges education provision in the region, including the variable quality of high-speed internet to support remote learning and the tyranny of distance, which makes travel costs for students and employers prohibitively high. This has contributed to a skills gap in the workforce (REDS 2018).

Registered Training Organisations (RTO) also providing training coverage to the region, offering recognised training courses for construction, work at heights, and crane operation at a Certificate level. Two Group Training Organisations (GTO) further serve the area with targeted placement of school leavers with employers in engineering and construction.

There are opportunities for greater engagement on science, technology, engineering and mathematics (STEM) at the primary and secondary school level. This can motivate the pipeline of talent into renewable energy industries. STEM skills are increasingly sought after by industry, as there are significant skill shortages of workers with these capabilities. Raising the standard of baseline STEM skills would provide benefit for workers to acquire a broader interdisciplinary skillset, combining scientific expertise with software and data skills (CSIRO Futures 2016).

Tertiary qualifications by share of all residents

The population of Central-West Orana has a higher level of the population with Certificate III and IV than the rest of NSW and Australia and a commensurately lower proportion of those with Bachelors or Masters degrees.

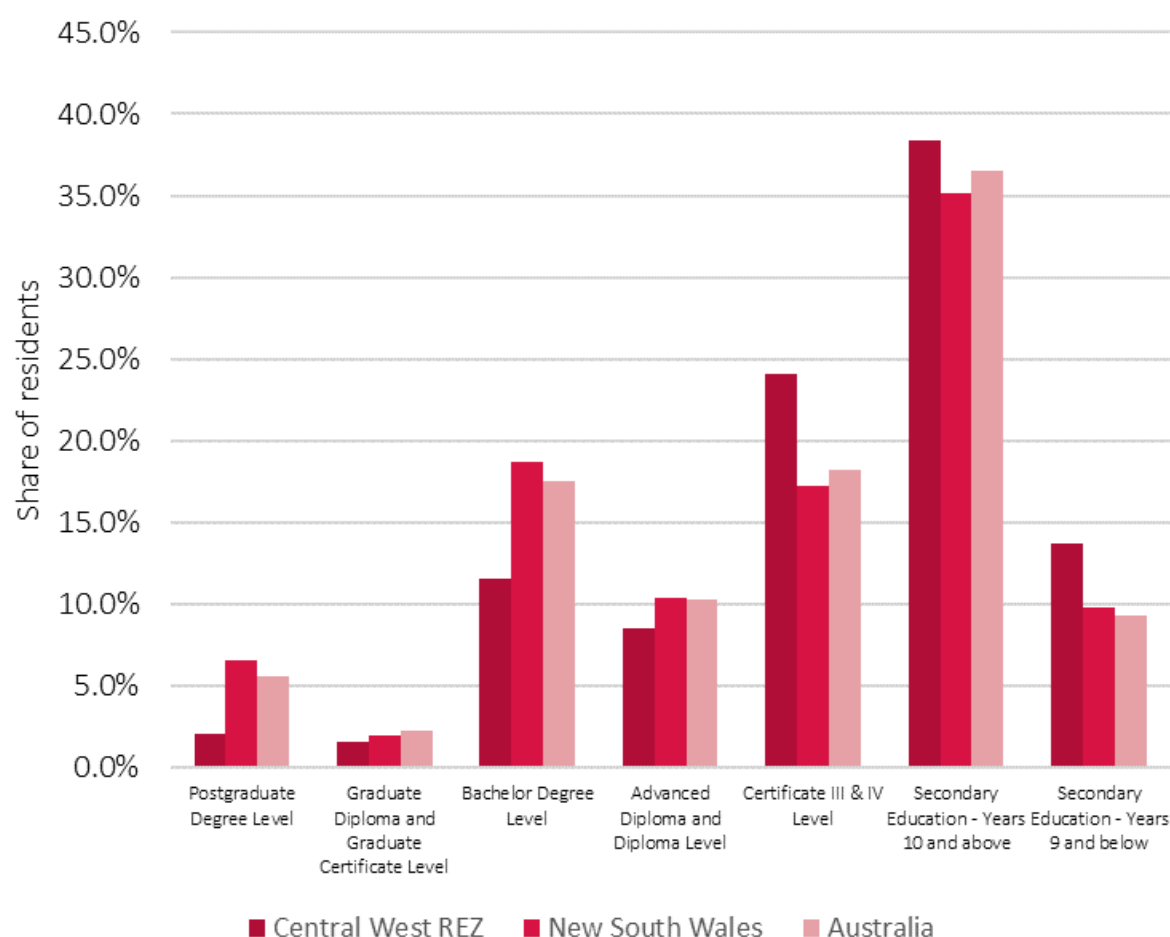


Figure 14 Highest level of educational attainment, Central-West and Orana Renewable Energy Zone region, 2016
Source: ABS, Census 2016

Engineering and related technologies accounts for the largest share of qualifications in the region, followed by management and commerce (Figure 15). However, compared with the rest of NSW, there is a significantly lower share population with qualifications in management and commerce. This is unsurprising given the region's focus on primary production and mining, which are less likely to impose a qualification-based entry to industry.

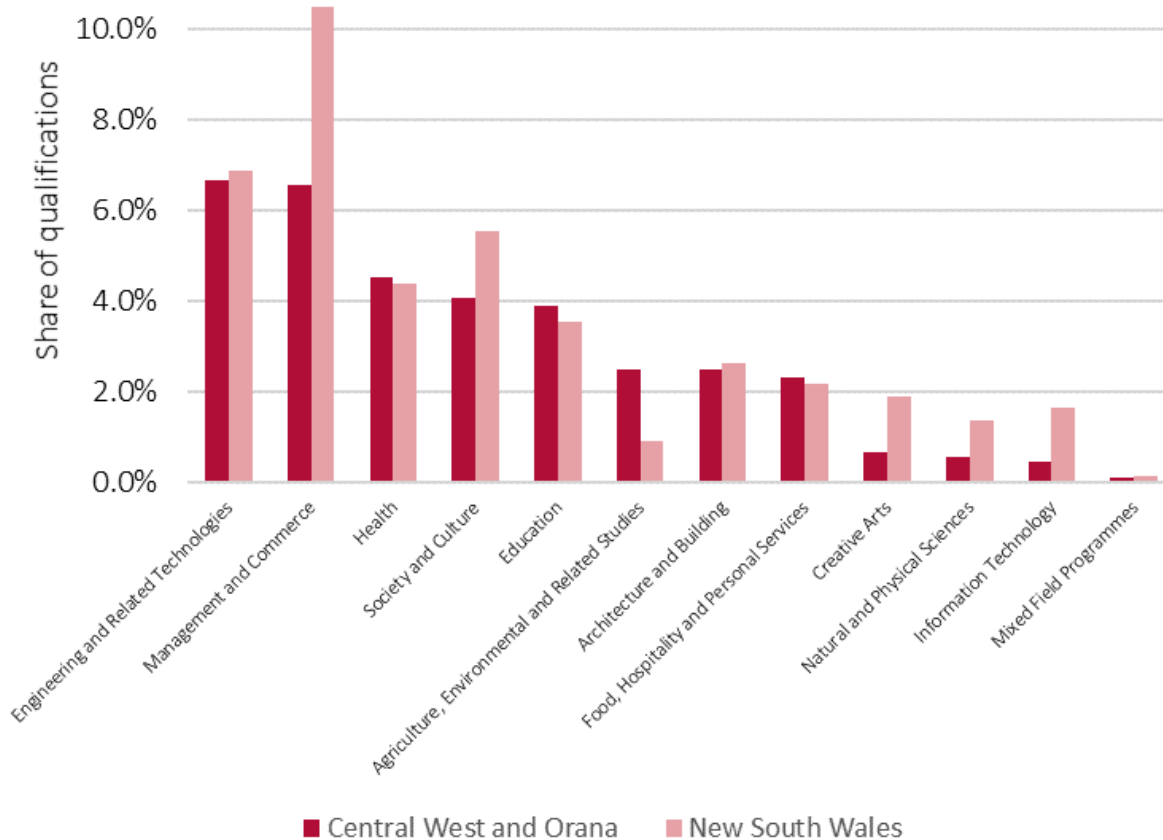


Figure 15 Top qualifications by share of all residents, Central-West and Orana Renewable Energy Zone region
Source: SGS Economics and Planning using 2016 Census data

More information

- [Australian Bureau of Statistics Census data](#)
- [Australian Statistical Geography Standard \(ASGS\) Edition 3](#)
- [Department of Communities and Justice – Dates of significance to NSW Aboriginal People](#)
- [Electricity Infrastructure Investment Act 2020](#)
- [Our Place on Country: Aboriginal Outcomes Strategy 2020-23 \(PDF 7.7MB\)](#)