

Office of Energy and Climate Change

# First Nations Guidelines: Central-West Orana

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

October 2023

## Acknowledgment of Country

We acknowledge that Aboriginal and Torres Strait Islander peoples are the First Peoples and Traditional Custodians of Australia, and the oldest continuing culture in human history.

We pay respect to Elders past and present and commit to respecting the lands we walk on, and the communities we walk with.

We celebrate the deep and enduring connection of Aboriginal and Torres Strait Islander peoples to Country and acknowledge their continuing custodianship of the land, seas and sky.

We acknowledge the ongoing stewardship of Aboriginal and Torres Strait Islander peoples, and the important contribution they make to our communities and economies.

We reflect on the continuing impact of government policies and practices, and recognise our responsibility to work together with and for Aboriginal and Torres Strait Islander peoples, families and communities, towards improved economic, social and cultural outcomes.

Artwork:

*Regeneration* by Josie Rose



# 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 Central-West Orana Working Group made up of community members representing key community-run organisations and agencies within the Central-West Orana Renewable Energy Zone.

The Central-West Orana 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 Central-West Orana 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 Central-West Orana's 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. This will be done 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**

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# 1 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.

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## 1.1 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:

### 1.1.1 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.

### 1.1.2 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. 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 (REZs) 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.

### Introduction to the Central-West Orana Working Group

A Central-West Orana Working Group (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. The 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.

For additional details on the Working Group's purpose, objectives and membership, please refer to page 11 under 'Central-West Orana Working Group' in these guidelines.

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## 1.2 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.

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## 1.3 Review

The Minister may amend the First Nations guidelines from time to time. The First Nations guidelines will be reviewed at least every 2 years and updated, if required. It is expected that the region-specific guidelines will also be reviewed and updated, if required, to ensure outcomes remain relevant for the local community.

## 2 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

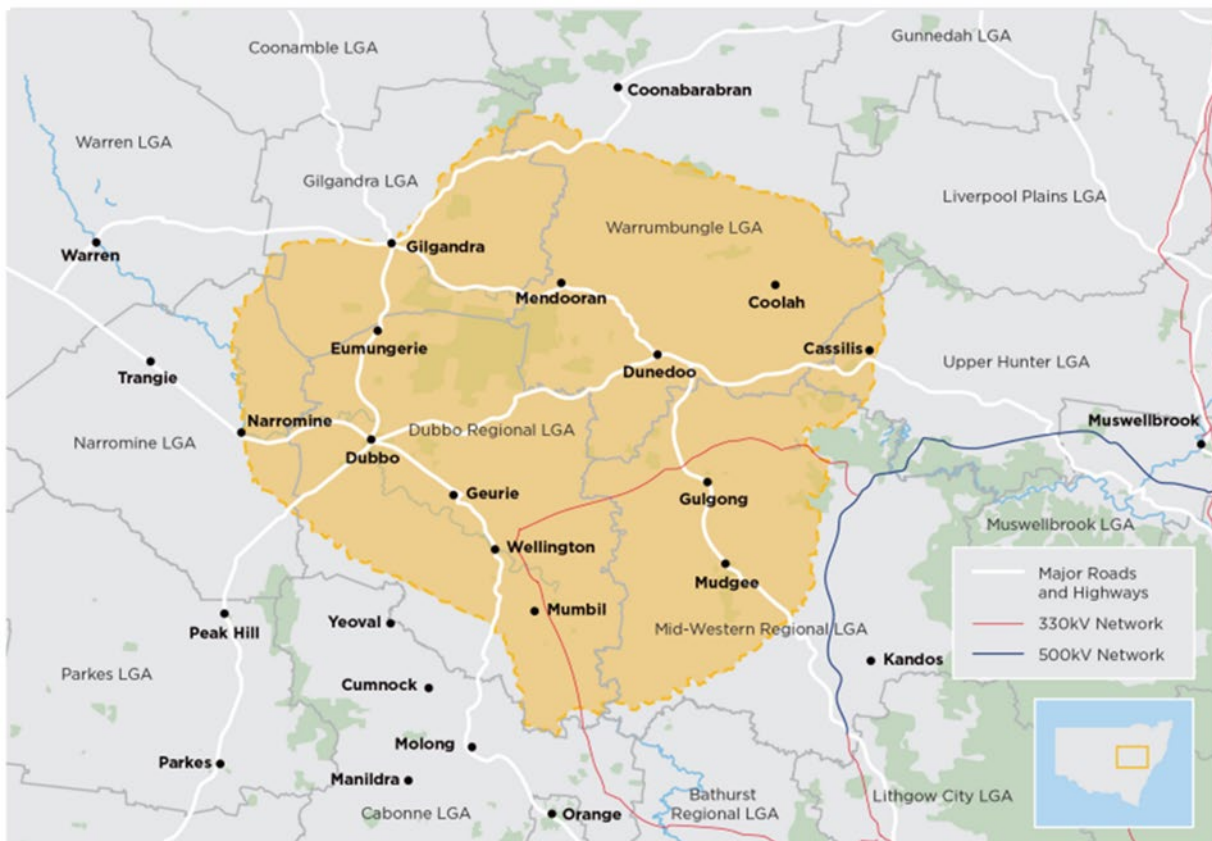


Figure 1: Central-West Orana REZ

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## 2.1 Central-West Orana Renewable Energy Zone

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

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## 2.2 About the Aboriginal community

### 2.2.1 Aboriginal community profile<sup>1</sup>

The data below is from the 2021 Census which is the latest publicly available when this document was developed. It reflects information relating to Dubbo Regional, Gilgandra, Mid-Western Regional and Warrumbungle Shire LGAs only, and is provided to give a general overview of the Aboriginal statistics for the region. Further data may be obtained on these and other LGAs within the REZ by visiting the [Australian Bureau of Statistics \(ABS\)](#).

According to the 2021 Census:

- Of the 94,155 residents, 12,458 people or 13.2% said they had Aboriginal or Torres Strait Islander origins, or both; of these, 96% were Aboriginal.
- The Aboriginal community is significantly younger than the non-Aboriginal population, with a median age of 24 vs 46 years.
- Aboriginal households had an average of 3 residents, which is larger than non-Aboriginal households at 2.3.
- 28% of Aboriginal households are couples with children, compared with 24% of non-Aboriginal households, and 26% of Aboriginal households are single parent families, which is higher than non-Aboriginal households at 8.3%.
- The median income of Aboriginal adults is about \$547 a week, which is 78% that of all non-Aboriginal adults at \$703 per week.
- 56% of Aboriginal people over 15 years old are in the labour force, compared with 64% of non-Aboriginal people over 15 years old.
- Aboriginal residents have a higher proportion attending an educational institution (35% or 4,402 residents), compared with non-Aboriginal residents (21% or 17,355 residents).
- 32% of the Aboriginal population reported they are living with one or more long-term health conditions, compared with 31% of non-Aboriginal residents.
- 966 or 7.8% of Aboriginal people have a need for assistance.

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<sup>1</sup> Source: Australian Bureau of Statistics, Census of Population and Housing, Aboriginal and Torres Strait Islander Peoples Profile (Dubbo Regional LGA12390, Gilgandra LGA12950, Mid-Western Regional LGA15270 and Warrumbungle Shire LGA18020).



## 2.2.2 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 Consultive 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 Central-West Orana Working Group.

### Government agencies and entities:

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

## 2.2.3 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 (usually coinciding with the October long weekend).

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 First Nations Outcomes team at Energy Corporation of NSW (EnergyCo), as early as possible. This would allow time for the team 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. Contact details for the First Nations Outcomes team are on page 14 under 'First Nations Outcomes'.

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

## 3 Areas for exploration and conversation

These guidelines have been co-designed with the Central-West Orana Working Group. The Working Group 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.

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### 3.1 Goals and aspirations of 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. In addition, communities 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 REZ infrastructure projects
- REZs 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.

#### **3.1.1 Priority activities and outcomes of 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 Industry and Aboriginal Participation Plan (IAPP) with existing training, employment and support mechanisms. Where support mechanisms are limited or unavailable, proponents should consider designing and creating them to meet their IAPP commitments.

The Working Group encourages proponents to consider the following priority activities and outcomes when designing an IAPP:

- 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 REZ 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) 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.

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## 3.2 Central-West Orana engagement protocols

### 3.2.1 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 purpose of the Central-West Orana Working Group is to coordinate and streamline engagement and consultation across renewable energy generation and network infrastructure projects in the Central-West Orana REZ with local Aboriginal community representatives. This is done in an efficient and respectful way, and to reduce consultation fatigue. To achieve this, proponents are encouraged to contact the First Nations Outcomes team at EnergyCo as early as possible to arrange consultation and engagement within project timeframes and the Central-West Orana Working Group availability. Contact details for this team are on page 14 under 'First Nations Outcomes'.

The objectives for the Central-West Orana Working Group are to:

- Achieve a consistent approach to engaging with and involving local Aboriginal communities in Roadmap projects within the Central-West Orana REZ.
- Ensure local Aboriginal community involvement in Roadmap projects, in line with the aspirations and goals set out in these guidelines.
- Ensure Aboriginal inclusion in decision-making processes that may affect them.
- Support prospective proponents to understand the local Aboriginal communities' employment and educational needs.
- Provide advice to proponents in the development of their IAPP. The IAPP is a requirement for both generation and network infrastructure proponents and will be assessed by both the Consumer Trustee, AEMO Services Limited and the Infrastructure Planner, EnergyCo.

The Central-West Orana Working Group is currently made up of the organisations listed below, and members meet monthly. This membership reflects the Central-West Orana Working Group that developed the guidelines.

Central-West Orana Working Group members:

- NSW Western Zone Aboriginal Land Council (Chair of the Working Group)
- NSW Aboriginal Land Council Central Region
- Dubbo Aboriginal Community Working Party
- NSW Indigenous Chamber of Commerce
- Allira Gathering Association
- Aboriginal Education Consultive 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 Central-West Orana Working Group membership may be amended during implementation to ensure appropriate representation of the local Aboriginal community. Amendments require the Central-West Orana Working Group's endorsement of changes to its Terms of Reference.

### 3.2.2 First Nations Outcomes

EnergyCo has established a First Nations Outcomes team, with dedicated staff to coordinate consultation, engagement and implementation of programs and initiatives that deliver outcomes to local Aboriginal communities under the EII Act. It specifically looks at promoting employment, training and income generating opportunities for Aboriginal communities in the REZs.

As part of this program, EnergyCo's First Nations Outcomes team will support the Central-West Orana First Nations Working Group in:

- liaising with proponents during the development of their IAPP
- coordinating and supporting the Central-West Orana Working Group to engage and negotiate with proponents from project inception through project delivery and operation.

EnergyCo's First Nations Outcomes team is the first port of call for proponents seeking to engage, consult and negotiate with local Aboriginal communities about Roadmap projects. Proponents who contact the Central-West Orana Working Group members will be redirected to the First Nations Outcomes team.

The team will manage requests to meet with the Central-West Orana Working Group to coordinate and prioritise requests with Working Group availability.

The team can be contacted at [firstnationsoutcomes@energyco.nsw.gov.au](mailto:firstnationsoutcomes@energyco.nsw.gov.au) or 1800 118 894.

### 3.2.3 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 REZ.

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 EnergyCo's First Nations Outcomes team to:
  - advise of possible activities or projects within the Central-West Orana REZ area, and
  - commence engagement with the Central-West Orana Working Group and 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 IAPP, if available
  - about the specific support and input requested from the Central-West Orana Working Group.

- The Central-West Orana Working Group is looking for proponents to be proactive in their consultation and to bring forward initiatives and proposals for how Aboriginal people and Aboriginal businesses can obtain skills training, employment opportunities, or experience providing goods and services on renewable energy projects. Proposals could include, but are not limited to:
  - training packages, such as ticket bridging or employment incentives in IAPPs
  - forward funding training so local Aboriginal people can be skilled and job ready to be employed on projects
  - identify local organisations and providers that could develop and deliver training programs to Aboriginal people
  - early communication of work packages so local Aboriginal businesses can prepare to bid for work, and the Aboriginal community is aware of training, income and employment opportunities
  - support Aboriginal ownership in renewable energy projects
  - consider opportunities to exceed the minimum requirements under the Renewable Energy Sector Board in geographic areas with a high proportion of Aboriginal people.
- Once adequate information has been provided, the First Nations Outcomes team may convene a meeting with the Working Group members as soon as practicable. They will 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 Central-West Orana Working Group may:
  - guide the proponent through a constructive consultation process, agreed by the parties
  - 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
  - provide support and engagement throughout the project lifecycle to ensure the IAPP targets are achieved
  - 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 IAPP targets.

# 4 General information about the region

## 4.1 Introduction

This section provides more information about the Central-West Orana region. It includes information from Appendix 1 of the *Employment, Skills and Supply-Chains: Renewable Energy in NSW – Final Report* (referred to in this section as ‘the report’)<sup>2</sup>, with updated ABS data.

Appendix 1 of the report examines the economic structure and performance of each REZ 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 REZ region. For the purposes of this analysis, regions are defined by concurrence between ABS’ administrative boundaries and the best approximation of the REZs geographic extent. For this analysis of the REZ, concurrence is based on SA1s and the indicative site boundaries that are published online by the NSW Government, and by SA2s for place of work data. 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 REZ profiles

Baseline theme	Elements
<b>Demographic profile</b>	Population size in 2021 and projected population to 2041 Population density Age distribution Aboriginal and Torres Strait Islander proportion of population Education profile Non-school qualifications Occupational profile Labour force status Labour force status and Aboriginal and Torres Strait Islander status Personal weekly income Gender profile Age profile

<sup>2</sup> 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.



Baseline theme	Elements
<b>Economic structure</b>	Gross Regional Product (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, 2016–2021 The region's competitive strengths
<b>Institutional endowments and industry specialisations</b>	Major educational institutions and their course mix, in terms of highest attainment level and industry pathway

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

## 4.2 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 ABS 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.<sup>3</sup>
- **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.

## 4.3 Central-West Orana

### 4.3.1 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 REZ, 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)

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

- 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 REZ 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.

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 REZ 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 REZ and is expected to increase electricity demand in Central-West NSW. Currently, 132 kilovolt transmission lines provide connection between Parkes and the REZ region (TransGrid, NSW Transmission Annual Planning Report, 2022).

## 4.3.2 Demographic profile

### Population size and density

In 2021, the population in the REZ is 92,183, based on the identified SA1s according to the definition shown in Figure 2 and 2021 ABS Census data. Population in the broader Central West and Orana Region (beyond the REZ) as defined by the Department of Planning and Environment in their planning region projections is estimated to grow at an annual average rate of 0.6% between 2021 and 2041, from 291,073 to 324,943. The main population centres in the Central-West Orana REZ region are Dubbo, Mudgee and Wellington (see Figure 2).

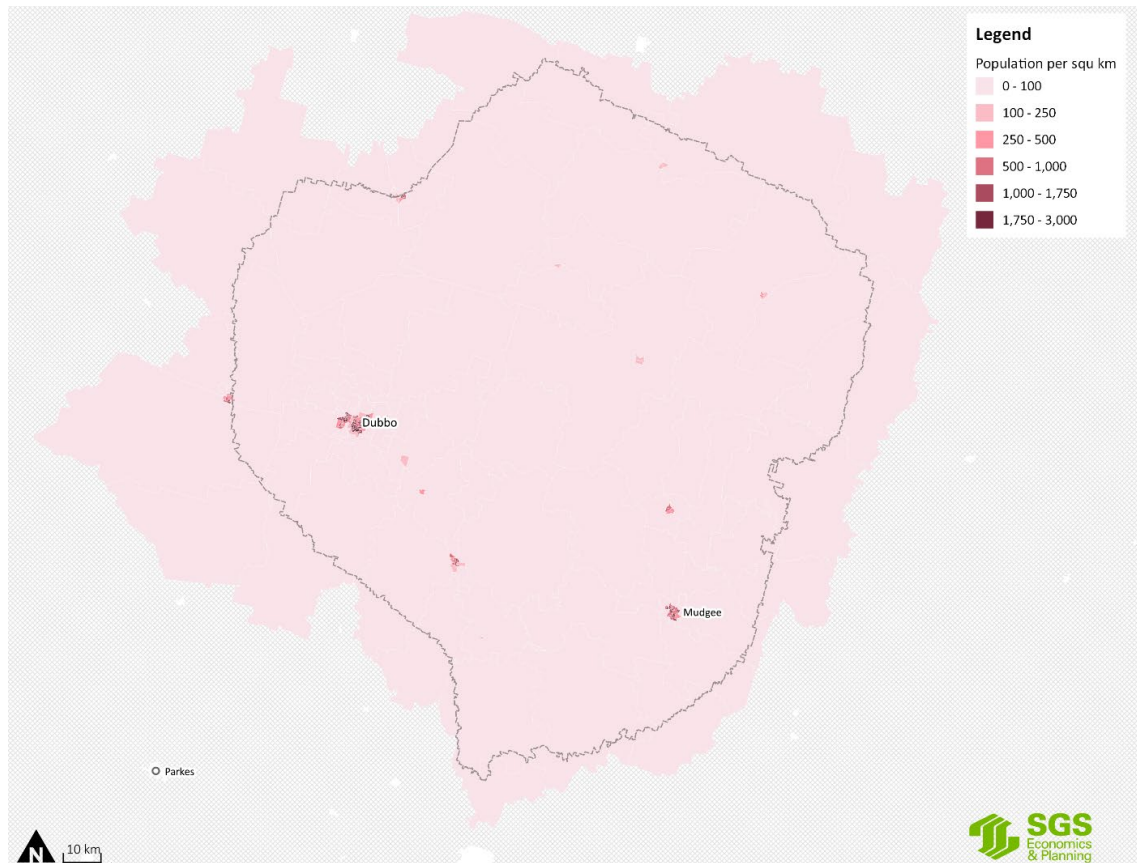


Figure 2: Map of population density in Central-West Orana REZ region

### Age distribution

The age distribution of the region is skewed slightly older than the NSW average, with lower proportions of people aged between 20 and 49 years old (see Figure 4 on page 20). This is generally characteristic of regional communities, which have historically observed a trend of younger adult populations seeking out education and employment opportunity in metropolitan areas or regional centres. The age groups between 60 and 89 years of age also account for a higher proportion of the region's population compared to the NSW proportion. However, the region has a slightly higher share of children compared to both NSW and Australia, with the 0-9 year old age group accounting for the largest share of the population, at 13.7%.

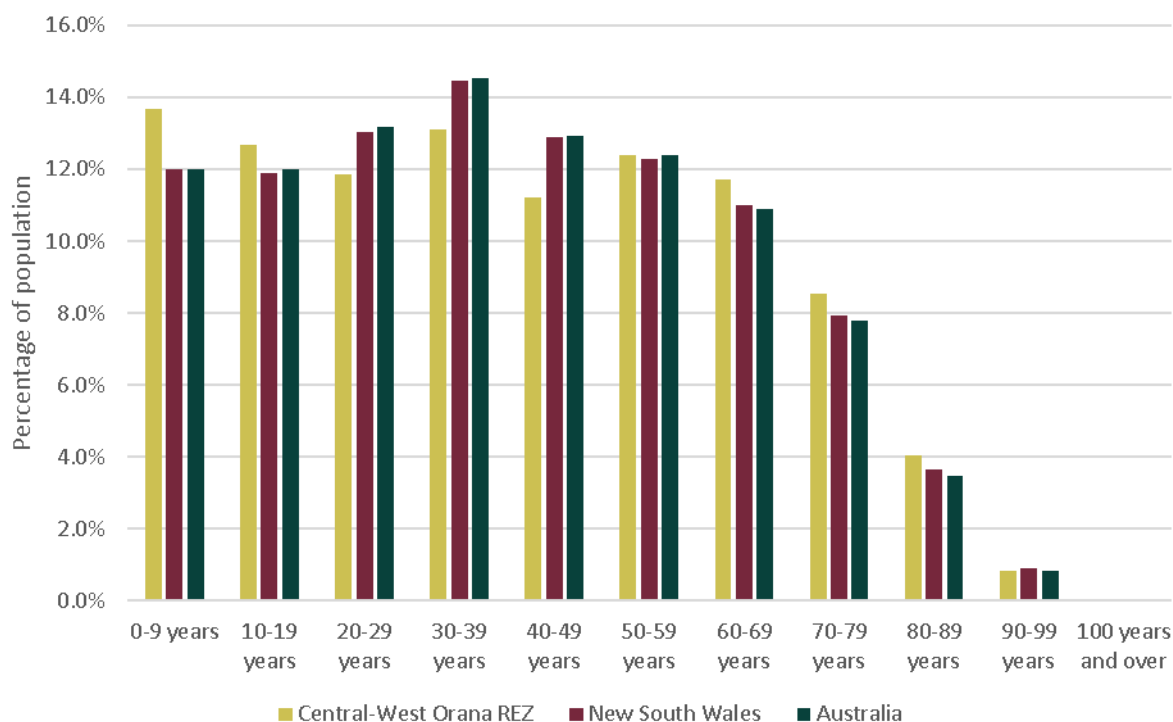


Figure 3: Age distribution, Central-West Orana REZ, NSW & Australia, (PUR) (2021)

Source: ABS Census TableBuilder 2021.

### Aboriginal and Torres Strait Islander share of population

The Aboriginal and Torres Strait Islander share of population in the Central-West Orana region is relatively high at 15.1% (see Table 2), which is significantly higher than the NSW proportion of 3.6% and Australian proportion of 3.4%.

Table 2: Aboriginal and Torres Strait Islander population, Central-West Orana REZ, NSW & Australia, (PUR) (2021)

Origin	Central-West Orana REZ	New South Wales	Australia
Non-Aboriginal and Torres Strait Islander	84.9%	96.4%	96.6%
Aboriginal and Torres Strait Islander	15.1%	3.6%	3.4%

Source: ABS Census TableBuilder 2021.

## Educational profile

The population of Central-West Orana has a higher share of people with Certificate III and IV qualifications compared to NSW overall, as well as a higher share with a Secondary Education. The region has a commensurately lower proportion of people with qualifications at the Bachelor degree level or higher compared to NSW and Australia.

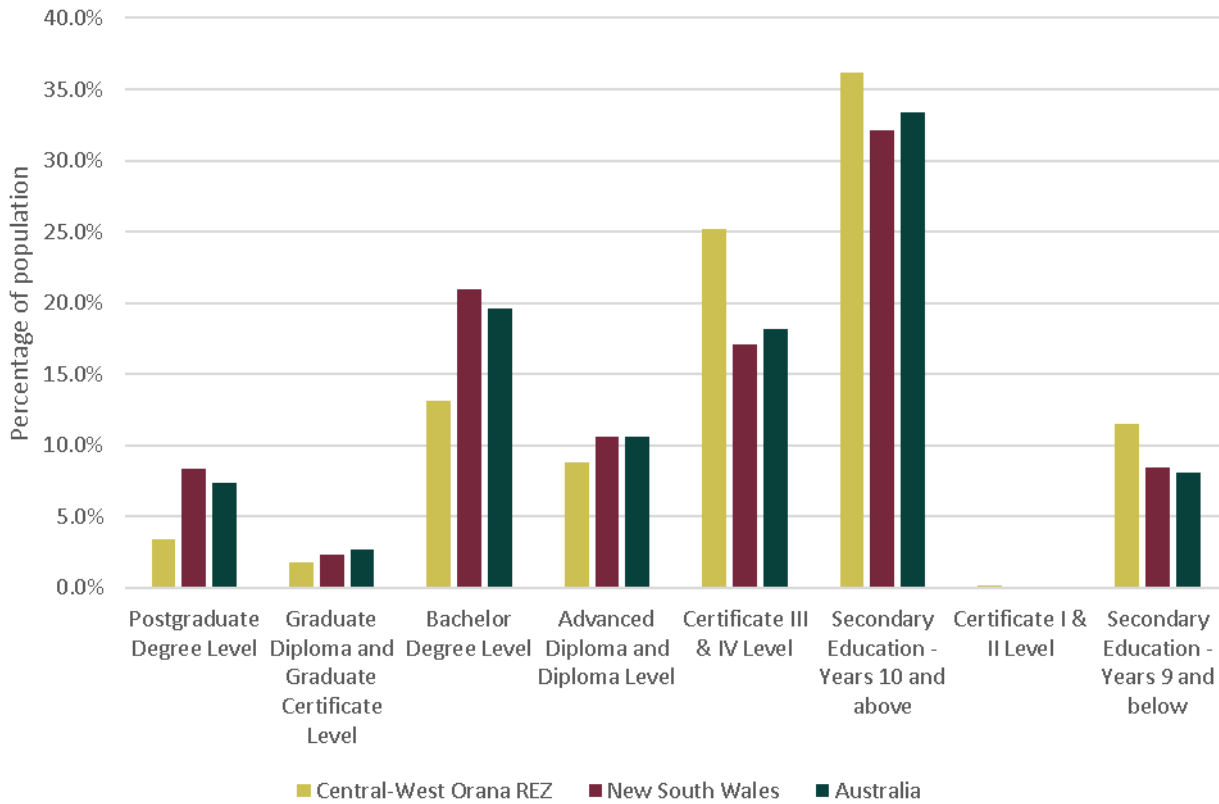


Figure 4: Highest level of education attainment, Central-West Orana REZ, NSW & Australia, (PUR) (2021)

Source: ABS Census TableBuilder 2021.

Engineering and related technologies accounts for the largest share of qualifications in the region, followed by management and commerce (see Figure 5). However, compared with NSW overall, there is a significantly lower share population with qualifications in management and commerce in the region. This is likely due to the region’s focus on primary production and mining, which are less likely to impose a qualification-based entry to industry. The region also has a comparatively higher share of people with health-related qualifications.

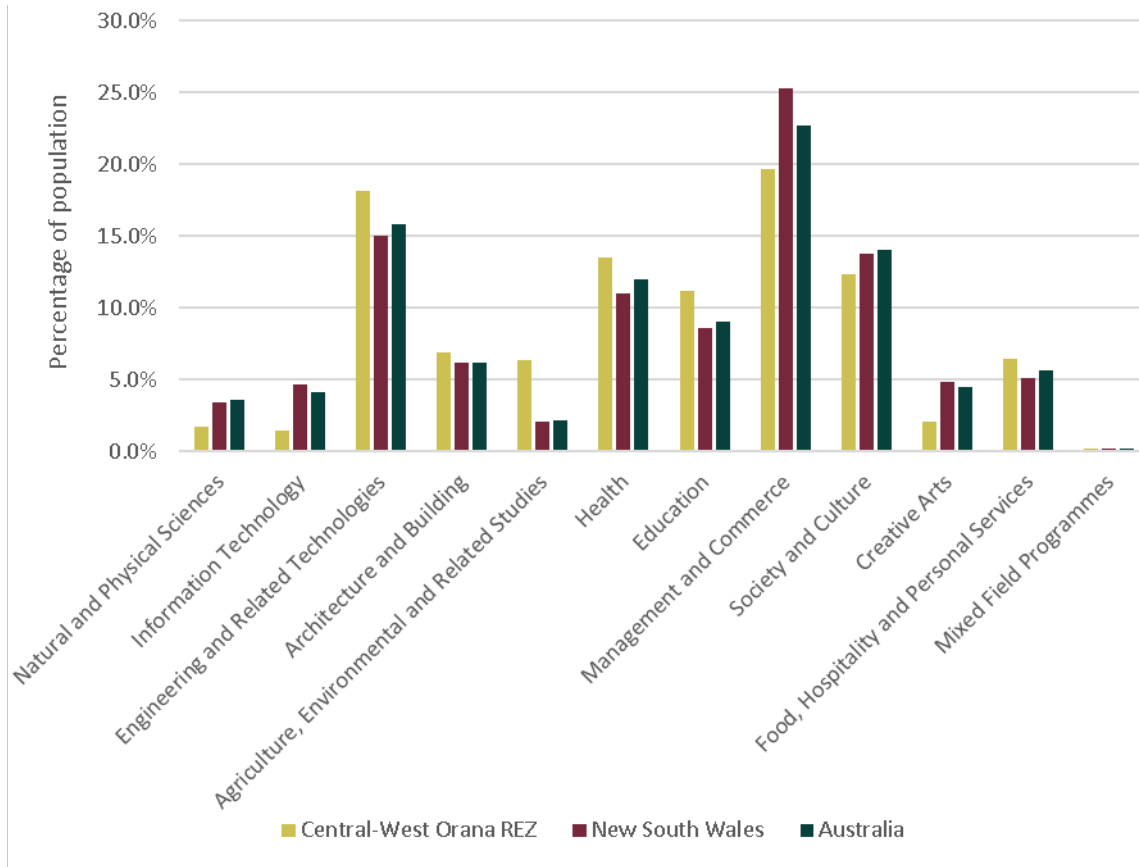


Figure 5: Non-school qualification, Central-West Orana REZ, NSW & Australia, (PUR) (2021)

Source: ABS Census TableBuilder 2021.

## Occupational 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 Orana REZ region’s largest employing occupations in 2021 were carers and aides, sales assistants and salespersons, farmers and farm managers, and education professionals (see Figure 6). These occupations largely reflect the industry distribution in the area, with higher shares in those relating to engineering, farming and machinery operations.

Therefore, there is some alignment with the technical occupational needs of renewable energy activities in the region, as well as education professionals to support the skills response of education providers and industry. As in many sectors, the region’s ageing workforce may also present challenges to increasing the skills base for in-demand skills.

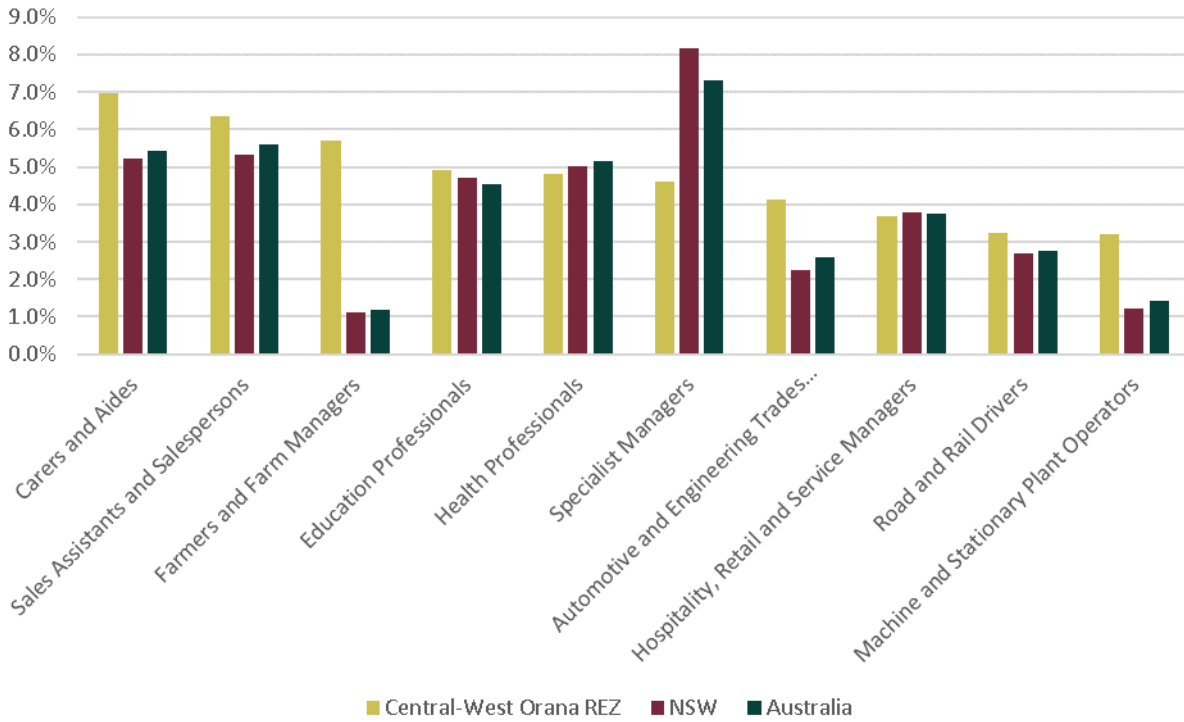


Figure 6: Ten largest occupation groups (2-digit level), Central-West Orana REZ, NSW & Australia, (PUR) (2021)

Source: ABS Census TableBuilder 2021.

## Employment status and average income

Compared to the NSW average, the Central-West Orana REZ region has a slightly higher share of full-time workers, and similar share of part time workers (see Figure 7). The Central-West Orana REZ also has slightly lower proportion of residents who were unemployed and looking for full- and part-time work.

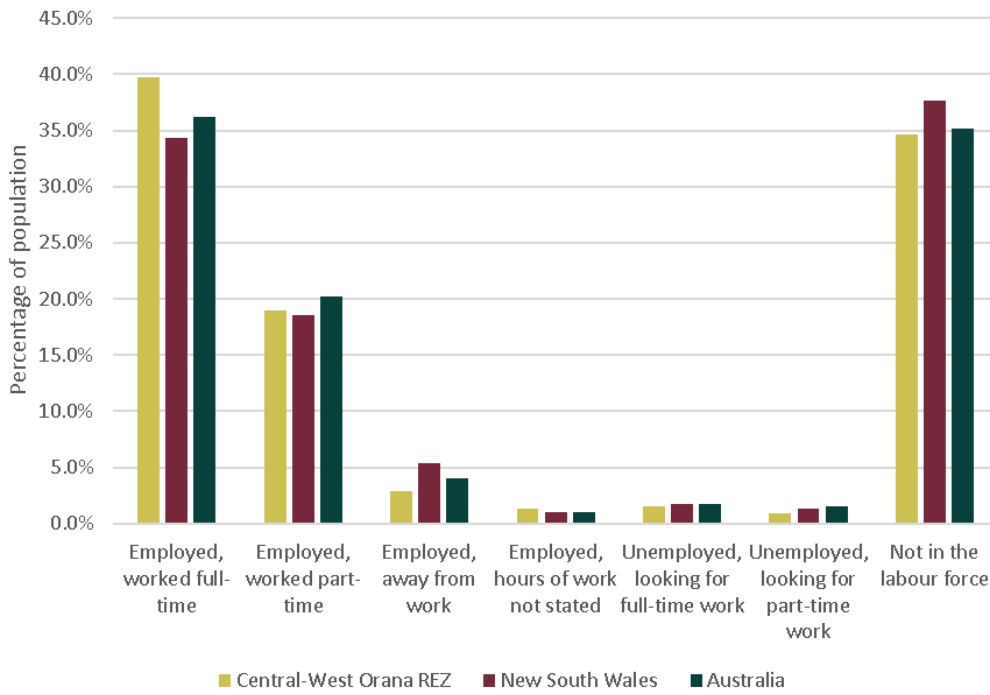


Figure 7: Labour force status, Central-West Orana REZ, NSW & Australia, (PUR) (2021)

Source: ABS Census TableBuilder 2021.

Historically, the unemployment rate in the Central-West Orana REZ region has fluctuated more substantially compared to the rest of NSW and Australia (see Figure 8). The fluctuations may be due to dominance of the Agricultural sector in the region and the cyclical nature of employment in this industry. The most recent data from 2023 shows the unemployment rate in the Central-West Orana REZ region is higher than the NSW and Australian rate, at 4.0%.



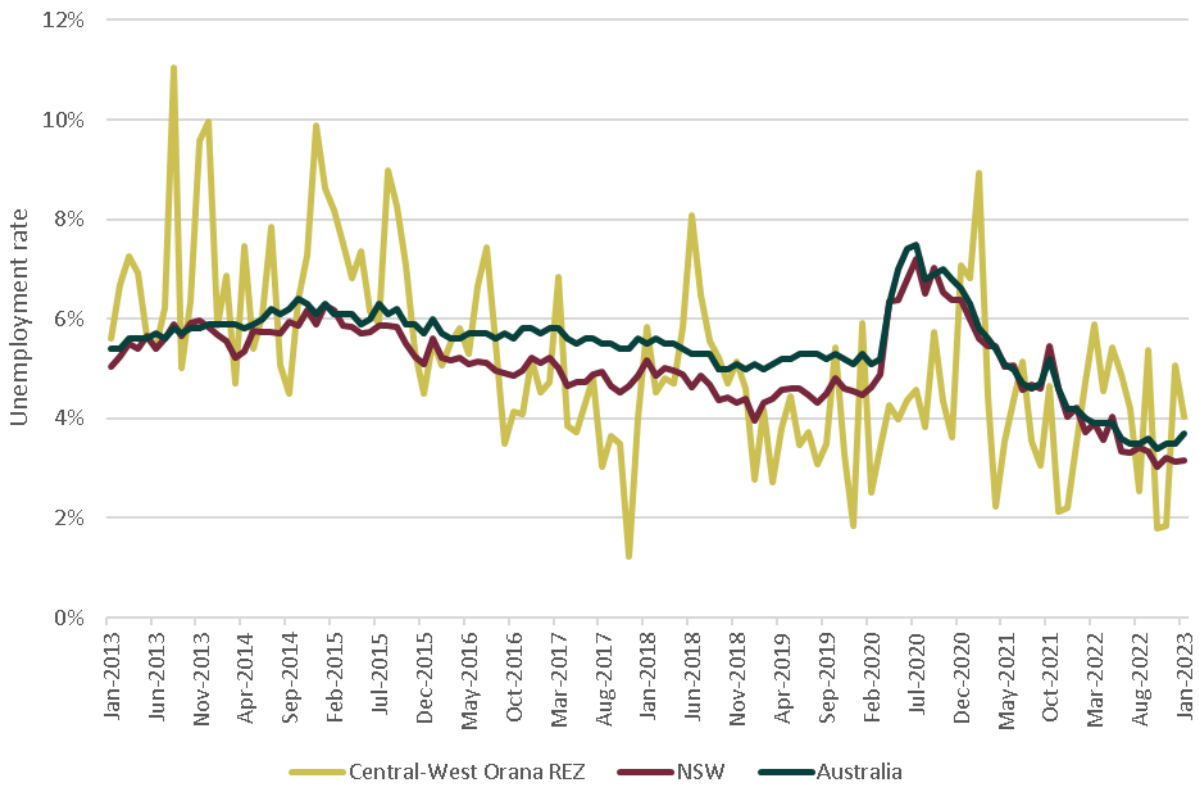


Figure 8: Unemployment rate, Central-West Orana REZ, NSW, Australia (2013-2023)

Source: ABS Labour Force Australia, January 2023.

In 2021, the share of Aboriginal and Torres Strait Islander unemployment in the region was 5.7% (Table 3), the same as the NSW proportion (Table 4), and lower than the proportion across Australia of 6.8% (Table 5). The proportion of Aboriginal and Torres Strait Islander peoples employed full-time was higher in the Central-West Orana REZ region than the respective NSW and Australian rates, while shares of the Aboriginal and Torres Strait Islander population recorded as not in the labour force were also lower.

Table 3: Aboriginal and Torres Strait Islander and Non-Aboriginal and Torres Strait Islander population by work status, Central-West Orana REZ, (PUR) (2021)

Origin	Employed, worked full-time	Employed, worked part-time	Employed, away from work	Employed, hours of work not stated	Unemployed, looking for full-time work	Unemployed, looking for part-time work	Not in the labour force
Non-Aboriginal and Torres Strait Islander	41.0%	19.2%	2.9%	1.2%	1.2%	0.8%	33.7%
Aboriginal and Torres Strait Islander	30.9%	17.4%	2.8%	2.2%	3.7%	2.0%	40.8%

Source: ABS Census TableBuilder 2021.

Table 4: Aboriginal and Torres Strait Islander and Non-Aboriginal and Torres Strait Islander population by work status, NSW, (PUR) (2021)

Origin	Employed, worked full-time	Employed, worked part-time	Employed, away from work	Employed, hours of work not stated	Unemployed, looking for full-time work	Unemployed, looking for part-time work	Not in the labour force
Non-Aboriginal and Torres Strait Islander	34.6%	18.6%	5.4%	1.0%	1.7%	1.3%	37.4%
Aboriginal and Torres Strait Islander	28.4%	17.6%	4.6%	1.6%	3.6%	2.1%	42.0%

Source: ABS Census TableBuilder 2021.

Table 5: Aboriginal and Torres Strait Islander and Non-Aboriginal and Torres Strait Islander population by work status, Australia, (PUR) (2021)

Origin	Employed, worked full-time	Employed, worked part-time	Employed, away from work	Employed, hours of work not stated	Unemployed, looking for full-time work	Unemployed, looking for part-time work	Not in the labour force
Non-Aboriginal and Torres Strait Islander	36.6%	20.4%	4.0%	1.0%	1.7%	1.5%	34.8%
Aboriginal and Torres Strait Islander	27.3%	16.4%	3.6%	1.7%	4.3%	2.5%	44.2%

Source: ABS Census TableBuilder 2021.

In 2021, income distribution in the Central-West Orana REZ region was skewed more towards the lower end of income bands than the rest of NSW and Australia (see Figure 9), with lower shares of weekly incomes in the brackets above \$2,000 per week by comparison. Around a fifth of the population in the region earn between \$800-\$1,249 per week.

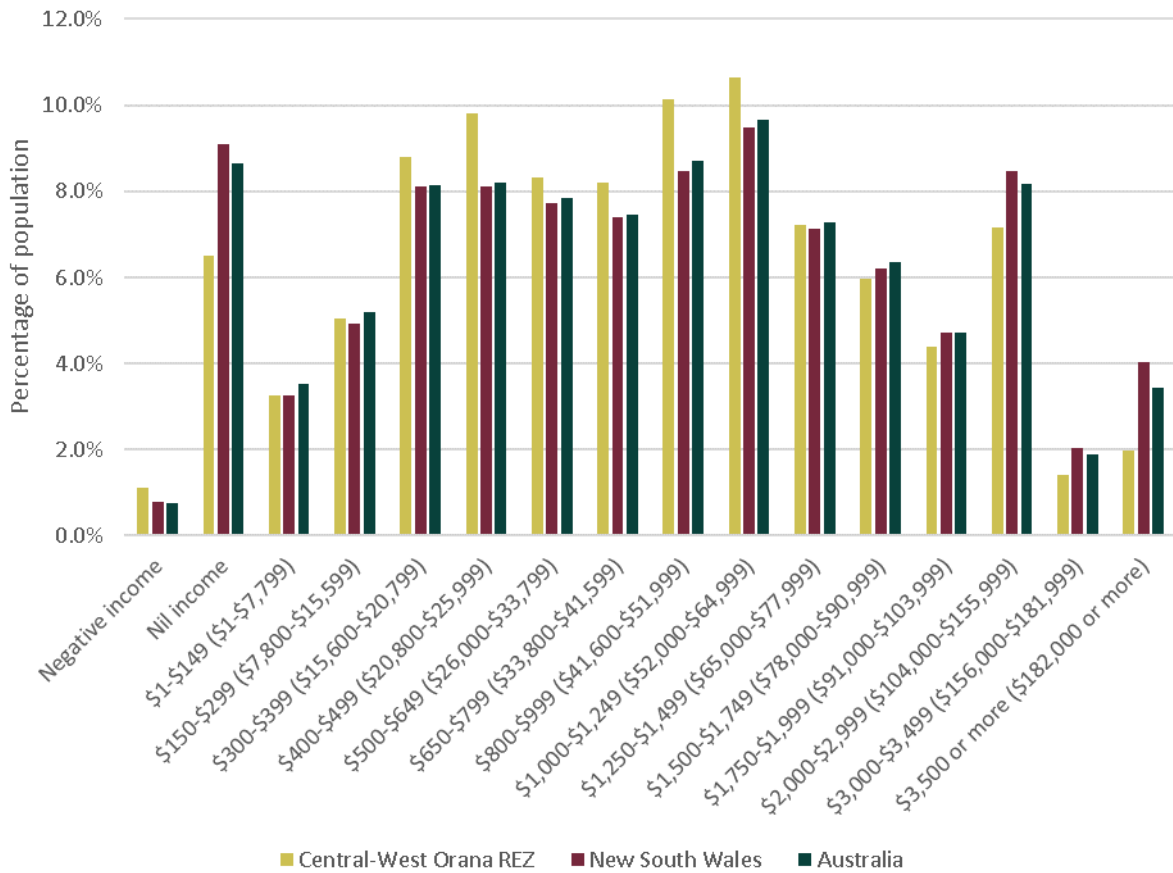


Figure 9: Personal weekly income, Central-West Orana REZ, NSW & Australia, (PUR) (2021)

Source: ABS Census TableBuilder 2021.

### 4.3.3 Economic structure

The following data is a profile of the people who work in the Central-West Orana REZ.

#### GRP growth

GRP growth in the Central-West Orana REZ region has been at a similar level to that of NSW and Australia overall since 2015, though this has fluctuated between years (see Figure 10). There was a sharp increase in GRP growth between 2016 and 2017, but this declined between 2017 and 2020, influenced by drought impacts affecting crop and pasture production. 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 shifted 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.

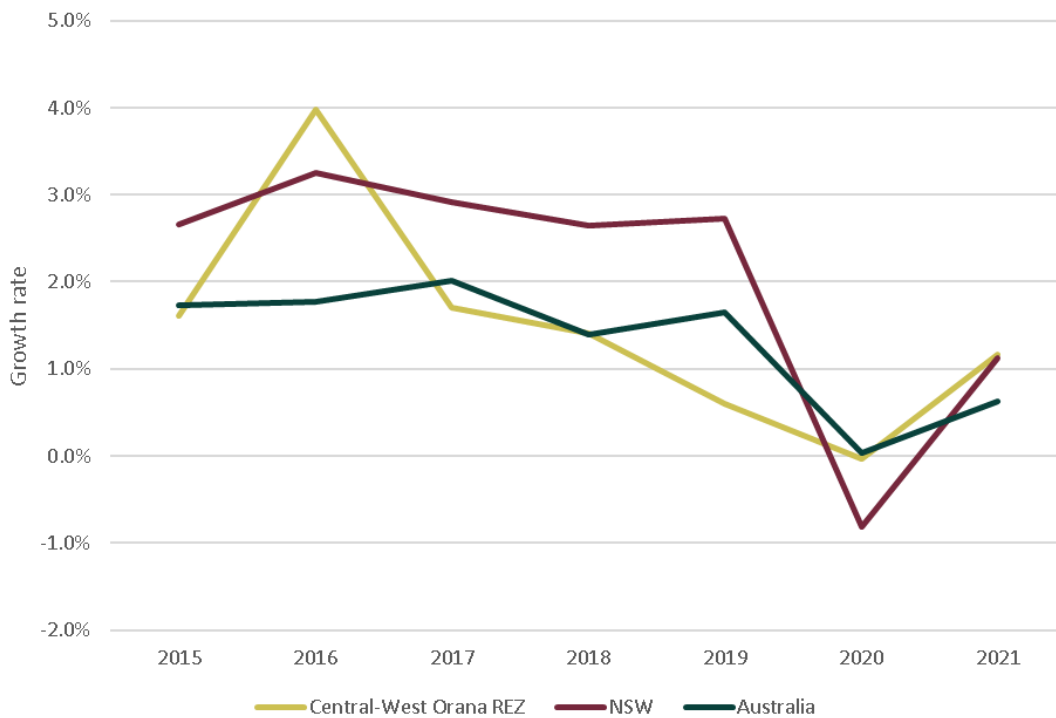


Figure 10: GRP growth compared to NSW and Australia, Central-West Orana REZ region (2015-2021)

Source: Australian National Accounts: National Income, Expenditure and Product December 2022 and SGS Economics and Planning’s Australian Economic Wellbeing GDP by Industry.

## Industry mix

Primary production collectively accounted for the majority of income generated in the region in 2021. Around 15.7% and 10.3% of the region’s GRP was attributable to mining and agriculture respectively. Population serving industries such as construction (8.8%), health care (9.1%), education and training (6.5%) and public administration (7.7%) also represented large shares of GRP. Collectively, these industries accounted for over half of the region’s GRP (Figure 11).

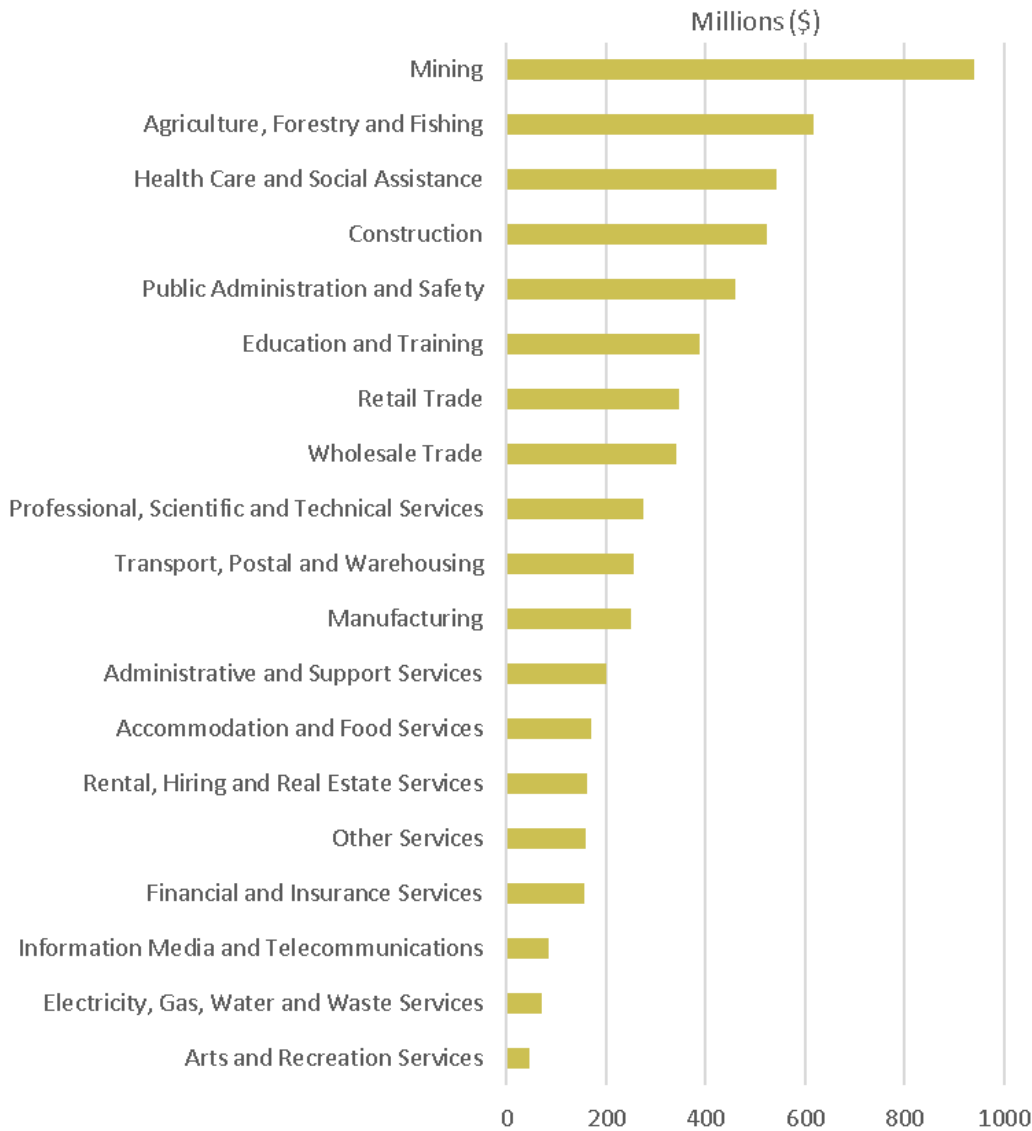


Figure 11: Industry contribution to GRP, Central-West Orana REZ (\$ Millions)

Source: SGS Economics and Planning’s Australian Economic Wellbeing GDP by Industry.

Health care and social assistance is the largest industry in the Central-West Orana REZ region (Figure 12), accounting for 16.8% of jobs, followed by education and training at 9.8% and retail trade at 9.7%. While mining makes up a larger share in the region than the NSW average, the industry is underrepresented compared with its contribution to GDP. This is influenced by the capital-intensive nature of the industry and high value of outputs produced.

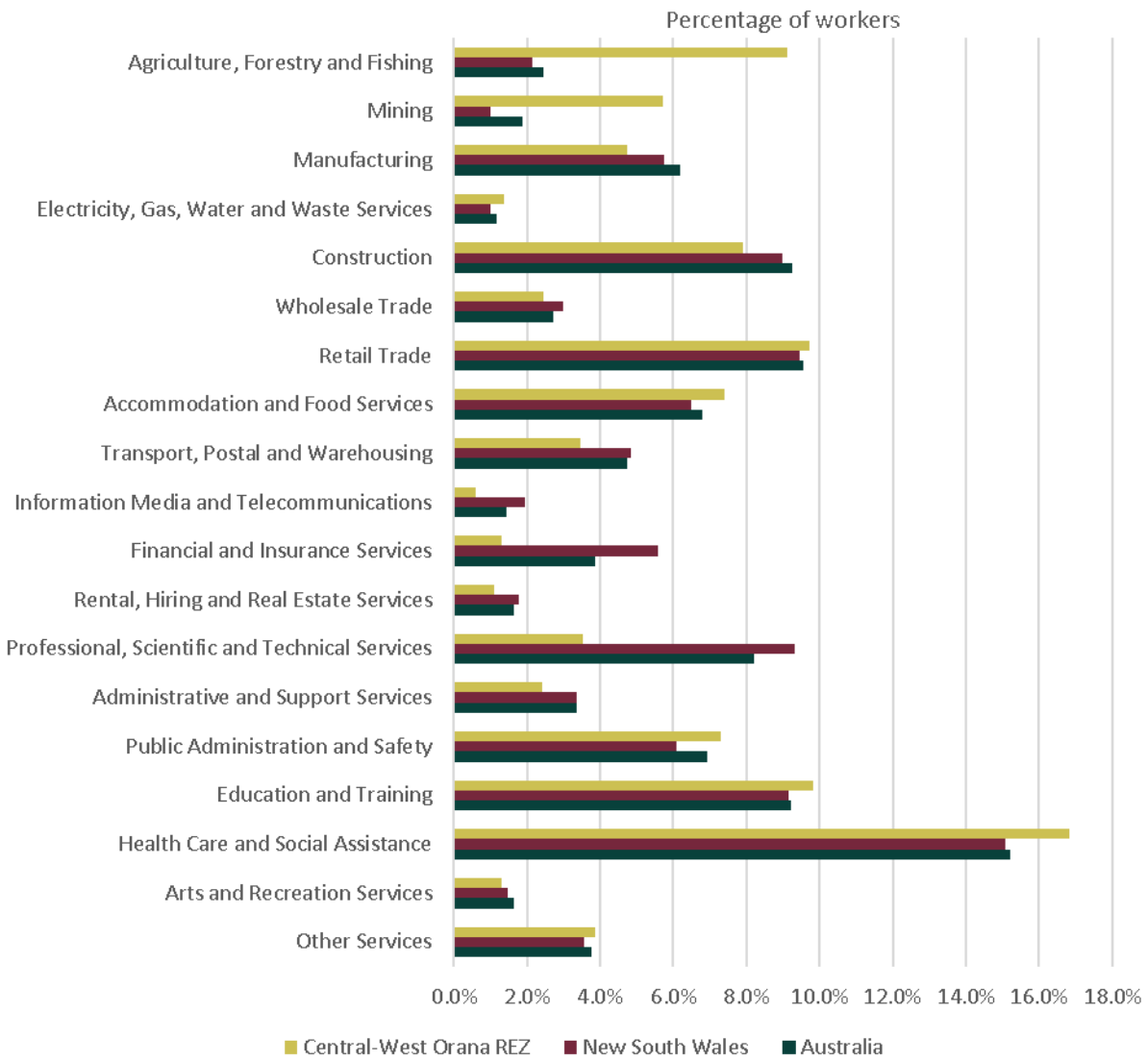


Figure 12: Industry share of employment, Central-West Orana REZ, NSW & Australia, (POW) (2021)

Source: ABS Census TableBuilder 2021.

### Shifts in industries' share of production 2016-2021

The dominant trend in the region's economic structure over the past five years has been growth in the health care and social assistance, public administration and safety and professional, scientific and technical services industries as a share of GRP (Figure 13). In comparison, both agriculture and mining decreased, with mining dropping from 18.2% of GRP in 2016 to 15.7% in 2021. Other industries that grew over this period were retail trade, wholesale trade and administrative and support services. While traditional industries like agriculture and manufacturing are critical to the economy of the region, increasingly population serving industries and health and education are becoming more important as the economy transitions to professional services.

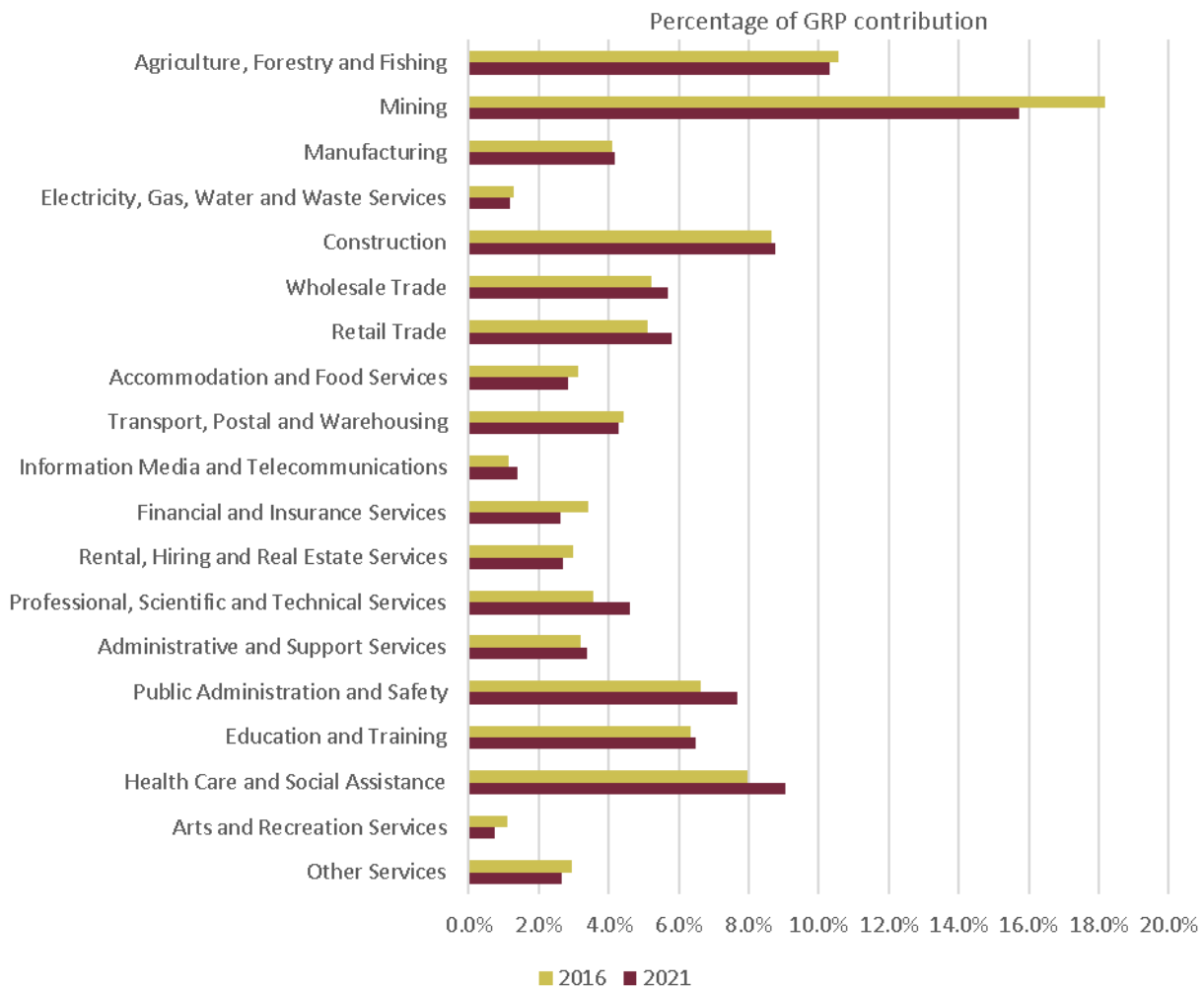


Figure 13: GRP contribution in Central-West Orana REZ (2016-2021)

Source: SGS Economics and Planning's Australian Economic Wellbeing GDP by Industry.

## Competitive strengths

The location quotient (LQ) analysis shown in Figure 14 provides some insight to the competitive strengths inherent in the Central-West Orana REZ 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.

The LQ also indicates slight specialisations in the electricity, gas, water and waste services and education and training sectors. Construction, health care and social assistance industries also grew quickly in recent times compared to NSW, but are less specialised for the region.

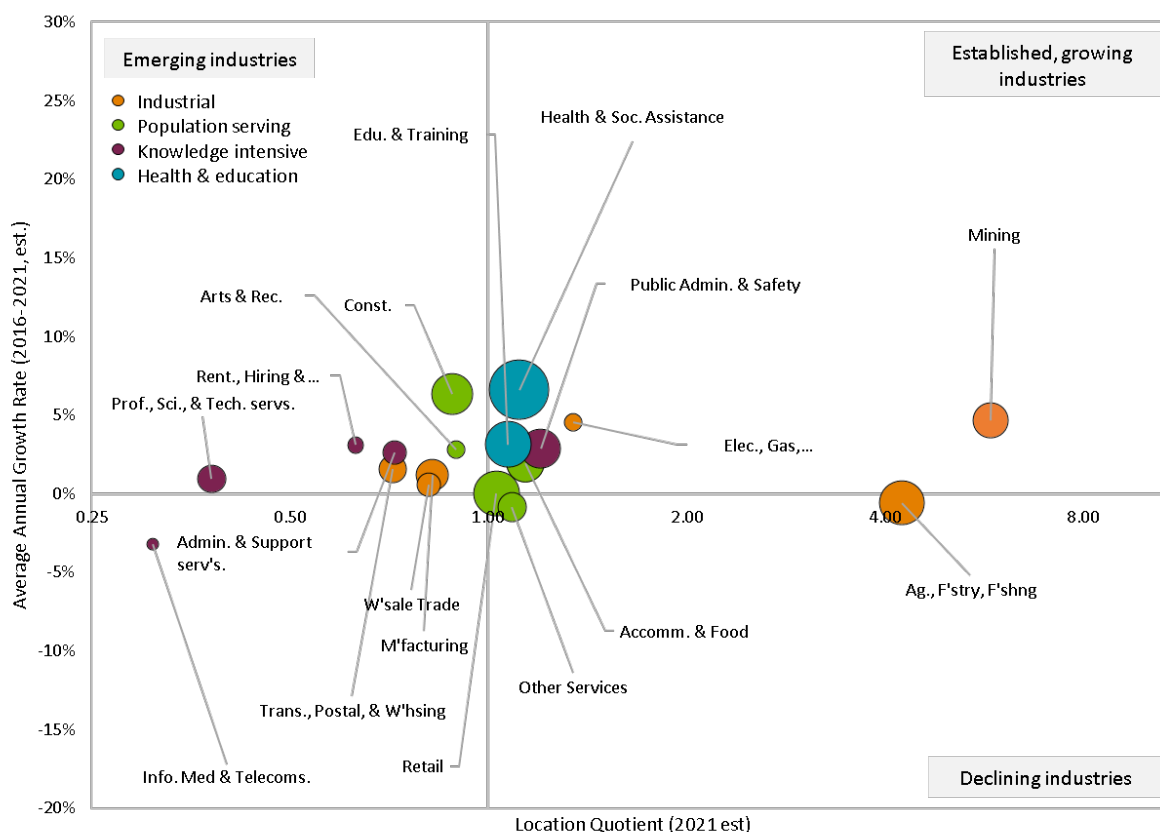


Figure 14: Location Quotient of industries in the Central-West Orana REZ region

Source: SGS Economics and Planning, ABS Census TableBuilder 2016, ABS Census TableBuilder 2021.



## **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. Additionally, University of Sydney offers its Doctor of Medicine program at the School of Rural Health in Dubbo.

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).

## 5 More information

See the first two links for more information about the data in these guidelines. See the third link for more details regarding the Our Place on Country: Aboriginal Outcomes Strategy 2020-23. For more information about dates of significance to NSW Aboriginal People, refer to the fourth link. Finally, refer to the fifth link for more information about the Electricity Infrastructure Investment Act 2020.

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

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