

# Regional Economic Forecasts – Economic Outlook for Central Queensland

Final report

December 2025





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# EXECUTIVE SUMMARY

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# CENTRAL QUEENSLAND - KEY FINDINGS

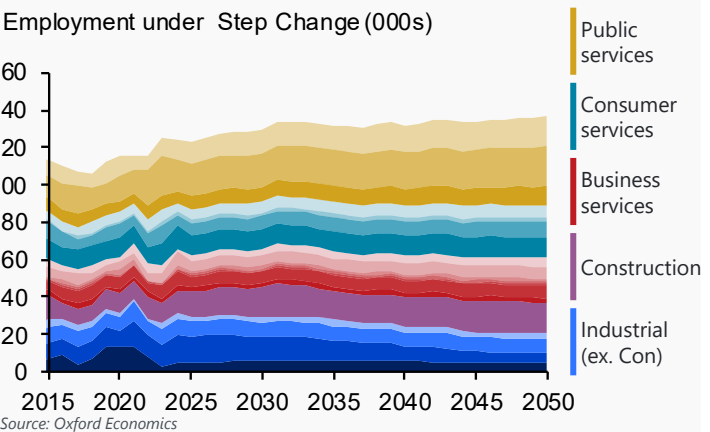
**Public sector will continue to be a main source of employment, with utilities playing an increasingly important role as mining roles decline.**

Central Queensland’s total employment under all scenarios is expected to grow, with health, public administration and education industries offsetting declines in industrial jobs.

Utilities employment is also expected to grow quite significantly under all scenarios driven by the renewable rollout in the Fitzroy Renewable Energy Zone (REZ) and grid related investment

Mining will dominate the direct declines in industrial employment as demand for coal declines both globally and locally. This decline in industrial jobs does not take into account industrial growth opportunities identified in the *Regional Investment Analysis* report.

## Industrial employment outlook under central Step Change scenario



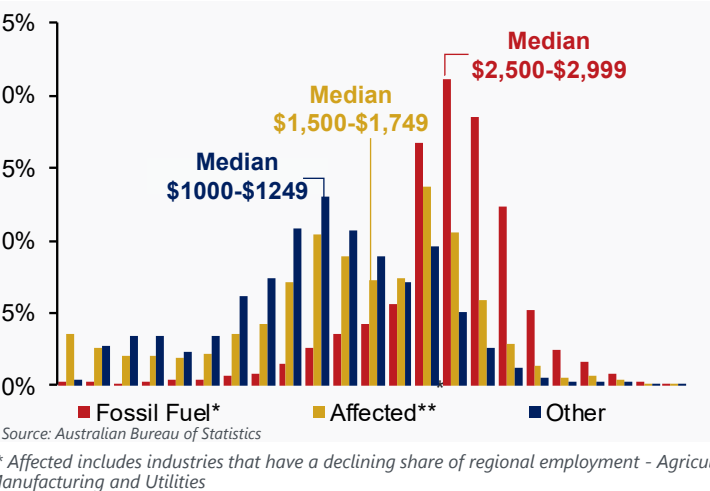
\* Fossil fuel workers include those employed in coal mining, fossil fuel based electricity supply and gas supply.

**Fossil fuel workers are mostly prime working-aged, concentrated in higher income brackets and are overwhelmingly educated through vocational pathways.**

Workers in fossil fuel sector have an age distribution distorted towards the 25-34 and 35-44 age groups, but have significantly fewer workers aged 15-24, and marginally more entering retirement age. As a result, a significant share may naturally retire in the coming decades, softening the impact of the transition.

Workers in fossil fuel industries are predominantly employed full time, with nearly 85% in full-time roles and typically have higher incomes suggesting that transitioning workers out of this sector may result in reduced income and should focus on building from existing competencies of the highly technically skilled workforce.

## Total personal weekly gross income for fossil fuel and affected industries



\*\* Affected includes industries that have a declining share of regional employment - Agriculture, Mining, Manufacturing and Utilities

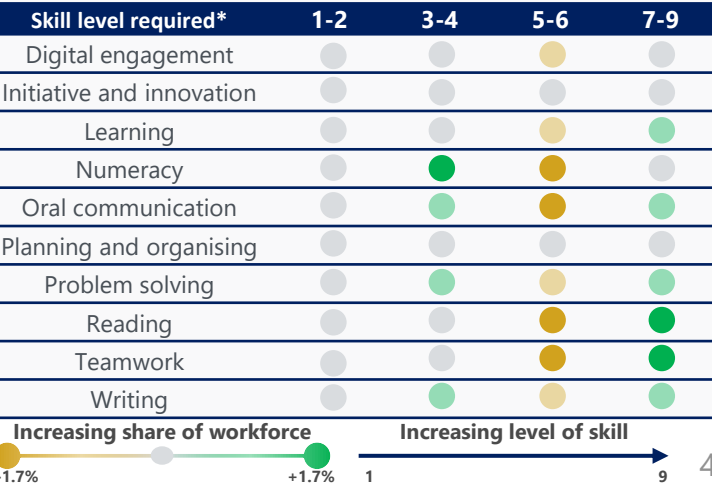
**The shift in industry make up is expected to drive a divergence of competency across key skills and a shift away from Certificate III qualifications.**

Due to the high concentration of mining jobs in the current workforce that are expected to decline significantly over the forecast, the share of the workforce requiring a skill level equivalent to a Cert III is expected to decline.

The majority of growing demand is expected to go into higher qualifications including diplomas and bachelor and above. However, there is also expected to be an increase in the proportion of jobs requiring Cert II or no Qualification such as accounting clerks and some machinery operators.

A similar trend can be seen for competency levels across most key generalist and foundational skills, with the workforce demand increasing for both higher and lower competency levels.

## Additional skill and qualification demand by 2035 under Step Change



# INTRODUCTION

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# NZEA has engaged Oxford Economics to support evidence-based action in transition-affected regions.

## Project Overview

**The Net Zero Economy Authority (NZEA) commissioned this project to understand opportunities presented by the net zero transition for regional communities.** There are a number of regions central to Australia's energy system and industrial base that face disproportionate exposure to structural shifts as emissions-intensive activities decline. The Hunter, Central Queensland and Latrobe Valley were prioritised for this project due to the size and complexity of their region and economies, but the analytical framework can be deployed in other regions. These regions also present opportunities to lead in clean energy generation, advanced manufacturing, and resource-based value-adding, provided that the right policy, investment and workforce conditions are in place. The project seeks to inform strategic planning and intervention by forecasting how regional economies will evolve under different decarbonisation scenarios.

**Oxford Economics was engaged to deliver a structured, scenario-led analysis across three core domains.** These include forward-looking forecasts of industry and labour market change, an assessment of each region's comparative advantages and investment potential, and a detailed examination of transition pathways for fossil fuel and related workers. The analytical framework integrates AEMO's 2025 transition scenarios with regional planning assumptions, closure timelines, and infrastructure settings to ensure alignment with real-world transition drivers. Regional priorities and economic exposures have been informed by the NZEA's own statistical framework, which identifies both downside risks and economic opportunities across Australia's key regions.<sup>1</sup> The analytical framework used within this project can be deployed across other NZEA priority regions beyond the Hunter, Central Queensland and Latrobe Valley.

**The project aims to generate region-specific insights that can support practical decision-making across multiple levels of government.** By quantifying the scale and timing of industrial change, identifying investment barriers, and mapping reskilling needs, the work creates an evidence base that links long-term economic modelling with near-term policy and program levers. This enables a more coordinated approach to managing transition risk while positioning each region to attract and retain high-value activity.

**This work provides a foundation for coordinated, place-based action across governments, industry and communities.** Outputs will support the NZEA's role in shaping policy, allocating resources, and engaging stakeholders on transition risks and opportunities. By identifying emerging demand for labour and skills, sectoral growth trajectories, and enablers of investment readiness, the project aims to assist in sequencing investment, workforce support and infrastructure development. Ultimately, the analysis will help ensure that transition efforts are locally grounded, forward-looking, and capable of delivering resilient and inclusive economic outcomes.

## Project Components

**The project was structured into three core analytical components to align with NZEA's transition objectives.** Each stream was applied consistently across the Hunter, Central Queensland, and Latrobe Valley regions. Separate reports were developed for each component in each region to ensure depth, comparability, and regional specificity. In addition, a summary report has been developed synthesizing the key insights across all three project components.

### Regional Economic Forecasts



This stream provides scenario-based projections of industry composition, employment, and skills demand across 5, 10, and 25 years. These forecasts are based on AEMO's 2025 transition scenarios and represent regional futures based on current trends and industrial structures within the region. Outputs include identification of sectors likely to decline, grow, or emerge, the timing of major structural shifts, and profiles of key workforce cohorts.

### Regional Investment Analysis



Focusing on each region's strategic position, this stream identifies comparative economic advantages, evaluates barriers to investment, and highlights opportunities to attract net zero aligned industries. It also outlines region-specific enablers such as infrastructure, workforce capability, and resource availability that could support long-term industrial development beyond what is identified in the *Regional Economic Forecasts* report.

### Worker Transition Analysis



Centred on transition-affected workers, this stream delivers occupational pathway mapping, retraining requirements, and an assessment of local training system capacity. It also provides targeted support strategies to address cohort-specific barriers and enable workforce mobility within the regional economy. The analysis considers both the likely future economic structure of the region as identified in the *Regional Economic Forecasts* report and opportunities identified in the *Regional Investment Analysis* report.

# This report provides scenario-based projections of industry composition, employment, and skills demand including profiles of priority cohorts.

## Purpose of this Report

**This report provides an integrated assessment of probable economic futures in a priority region.** It forms part of the Net Zero Economy Authority’s (NZEa) regional economic forecasting stream and supports its broader mandate to coordinate an orderly, inclusive and place-based transition to net zero. The focus is on understanding the timing, scale and nature of structural economic change at a regional level, and the resulting implications for industries, workforces and communities.

**The report draws on a wide range of data to construct detailed 5, 10 and 25-year forecasts under three energy transition scenarios\* developed by the Australian Energy Market Operator (AEMO).** These forecasts incorporate information on fossil fuel facility closures, regional industry plans, labour market dynamics, and projected demand for jobs, qualifications and skills. The analysis identifies region-specific tipping points for economic transition, and highlights industries that are likely to grow, decline, or newly emerge. The forecasts produced within the *Regional Economics Forecasts* report are underpinned by the Australian Energy Market Operator’s (AEMO’s) energy transition scenarios\* and do not include any crowding-in investment from the areas identified in the *Regional Investment Analysis* report.

**Findings from this report will help inform regional program and policy development, support strategic planning across governments and industry, and guide local engagement and communication.** The outputs are designed to help NZEA and its partners anticipate the pace and impacts of economic change, better understand the risks and opportunities facing key community cohorts, and respond with targeted supports such as workforce transition planning or infrastructure investment. These findings are intended to be validated by NZEA with regional stakeholders.

**The structure and methodology are consistent across all NZEA priority regions.** While the pace and pattern of economic transition varies by place, each report follows a shared framework to ensure comparability and provides a basis for validation with local communities. The analysis is forward-looking and designed to inform decision-making over a medium and long-term transition horizon.

## Report Structure

**The report is structured around four core components:** a high-level economic overview of Central QLD, an outlook for future labour demand based on projected industrial shifts, an assessment of the region’s future skills and qualification needs, and an analysis of impacts on priority community cohorts to inform targeted policy and program responses.

**ECONOMIC OVERVIEW OF CENTRAL QLD:** In this section, we provide a high-level economic profile of Central QLD including industry and occupation composition, recent labour market trends, income distribution and demographic characteristics.

**OUTLOOK FOR LABOUR DEMAND:** In this section, we assess the future industrial composition of Central QLD and the subsequent demand for labour over the next 25 years. This analysis includes an assessment of the outlook for current core industries in structural decline as well as existing and emerging industries which may contribute to future labour demand.

**DEMAND FOR SKILLS:** In this section, we assess the current and future skills and qualifications required to support the industry needs of Central QLD over the next 25 years.

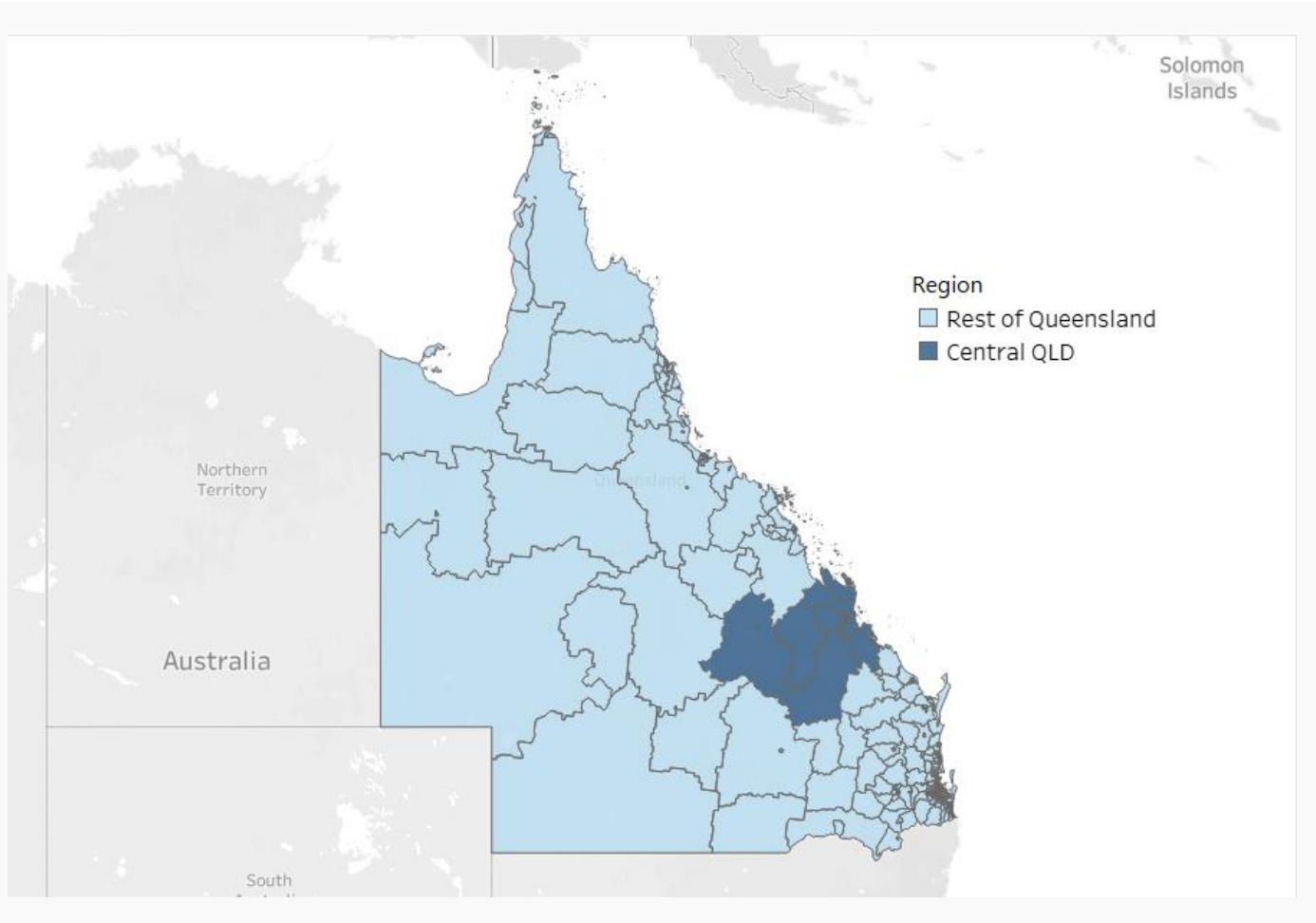
**PRIORITY COHORT PROFILES:** In this section we assess the impact of changes in the demand for labour, skills and qualifications on priority cohorts to support communications, policy and program planning/delivery in Central QLD.

**TECHNICAL APPENDICES:** Appendices include a full list of major employing businesses, forecasting approach and references.

\*The transition scenarios produced by Deloitte Access Economics as part of AEMO’s Draft 2025, Inputs, Assumptions and Scenarios Report outline possible demographic, economic and decarbonisation pathways for Australia. These scenarios focus on the pace of the transition, particularly in the energy sector, to support AEMO’s long-term energy consumption forecasts. While the forecasts do not explicitly capture the method of decarbonising, the net zero pathway constraint means that emissions-intensive industries are most affected.

The analysis in this report is focused on Central Queensland which is defined as the combination of seven working zones which cover a total of 33 SA2 regions.

Central Queensland map



Central Queensland Working Zone Listing

State	Working Zone Name
QLD	Banana
QLD	Rockhampton and surrounds
QLD	Biloela
QLD	Gladstone and surrounds
QLD	Central Highlands-East (Qld.)
QLD	Emerald and Central Highlands-West
QLD	Yeppoon and surrounds

Source: Net Zero Economy Authority, Australian Bureau of Statistics



# Central Queensland SA2 listing

## Banana

SA2 NAME	SA2 CODE
Banana	308041528

## Rockhampton and surrounds

SA2 NAME	SA2 CODE
Berserker	308031205
Bouldercombe	308031206
Emu Park	308031207
Frenchville - Mount Archer	308031208
Glenlee - Rockyview	308031209
Gracemere	308031210
Lakes Creek	308031211
Mount Morgan	308031212
Norman Gardens	308031213
Park Avenue	308031214
Parkhurst - Kawana	308031215
Rockhampton - West	308031216
Rockhampton City	308031217
Rockhampton Surrounds - East	308031218
Rockhampton Surrounds - West	308031220
The Range - Allenstown	308031222

## Biloela

SA2 NAME	SA2 CODE
Biloela	308041529

## Gladstone and surrounds

SA2 NAME	SA2 CODE
Boyne Island - Tannum Sands	308051531
Callemondah	308051532
Clinton - New Auckland	308051533
Gladstone	308051534
Gladstone Hinterland	308051535
Kin Kora - Sun Valley	308051536
South Trees	308051537
Telina - Toolooa	308051538
West Gladstone	308051539

## Central Highlands-East (Qld.)

SA2 NAME	SA2 CODE
Central Highlands - East	308011190

## Emerald and Central Highlands-West

SA2 NAME	SA2 CODE
Central Highlands - West	308011191
Emerald	308011192

## Yeppoon and surrounds

SA2 NAME	SA2 CODE
Rockhampton Surrounds - North	308031219
Shoalwater Bay	308031221
Yeppoon	308031223

# The forecasts in this report align to AEMO’s scenarios which capture key uncertainties and material drivers of a range of possible futures.

The scenarios presented in this report are grounded in the Australian Energy Market Operator’s (AEMO) *Draft 2025 Inputs, Assumptions and Scenarios Report* (IASR)<sup>2</sup>, which is currently in its final consultation phase.

The three scenarios – *Progressive Change*, *Step Change* and *Green Energy Industries* - are designed to encompass a broad spectrum of plausible futures for Australia's energy sector, capturing key uncertainties and material drivers in an internally consistent manner. They reflect the policies that Australian governments have committed to for transitioning the economy to net zero emissions by 2050. Each scenario delineates a distinct pace of transition to net zero, influenced by global, national, and sectoral factors, leading to variations in future energy system requirements while aligning with Australia's emissions reduction policy objectives. The scenarios consider the growth trajectory of the Australian economy, including population trends and economic activities across industrial, commercial, manufacturing, mining, transportation sectors, and emerging commercial loads such as data centres. They also identify opportunities for emerging energy technologies that could impact Australia's decarbonisation pathway and export economy, including hydrogen production, green iron and ammonia products, and biomethane.

AEMO's scenarios are aligned with the International Energy Agency's (IEA) 2024 World Energy Outlook (WEO) scenarios to anchor them to global narratives on developments and commitments to the Paris Agreement. This alignment ensures consistency with global economic settings and temperature goals, providing context for Australia's share in meeting various temperature outcomes and guiding multi-sectoral modelling regarding fossil fuel export projections, energy efficiency, and electrification uptake rates and limits across scenarios.




AEMO has engaged in extensive stakeholder consultation to develop these scenarios, incorporating feedback from a diverse range of sectors to ensure the scenarios are robust and reflective of various perspectives. The final 2025 IASR, incorporating insights from this consultation process, was finalised during the preparation of this research report, however as analysis was already underway this report utilises the draft scenarios.

An overview of the high-level narrative for each scenario is provided below and detailed assumptions are included in the technical appendix.




## Low scenario - Progressive Change

-  Low economic demand and industrial transformation
-  The transition proceeds more slowly and reactively under current policy settings, reflecting only existing federal and state commitments without major new initiatives.
-  Fossil fuel industries decline due to market and technological pressures rather than policy direction. There is limited economic diversification or new clean industries in regional areas, and minimal development of emerging fuels like hydrogen or biomethane.

## Central scenario - Step Change

-  Moderate economic demand and industrial transformation reflecting long term average trends
-  Australia follows a coordinated and firm transition to net zero emissions by 2050, with electricity playing a central role in decarbonisation and significant deployment of renewable energy, storage, and electrification across sectors.
-  Fossil fuel industries decline in a planned manner, with regional opportunities emerging through transmission expansion, Renewable Energy Zones (REZs), and moderate development of hydrogen to support industry and domestic use.

## High scenario - Green Energy Industries

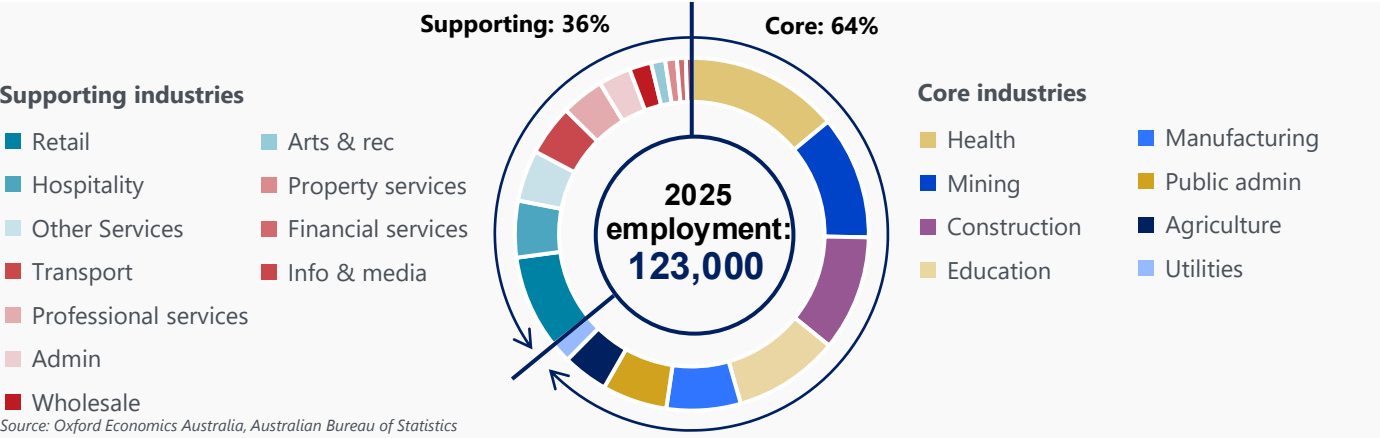
-  High economic demand and industrial transformation.
-  Australia undergoes a rapid and coordinated transformation to become a clean energy economy, underpinned by strong global and domestic climate ambition aligned with a 1.5°C pathway.
-  Large-scale renewable energy and hydrogen production are co-located in regional Renewable Energy Zones, supported by major transmission investment and value-added clean exports (such as green iron and ammonia), though this shift brings significant disruption for fossil fuel communities.

# ECONOMIC OVERVIEW OF CENTRAL QLD

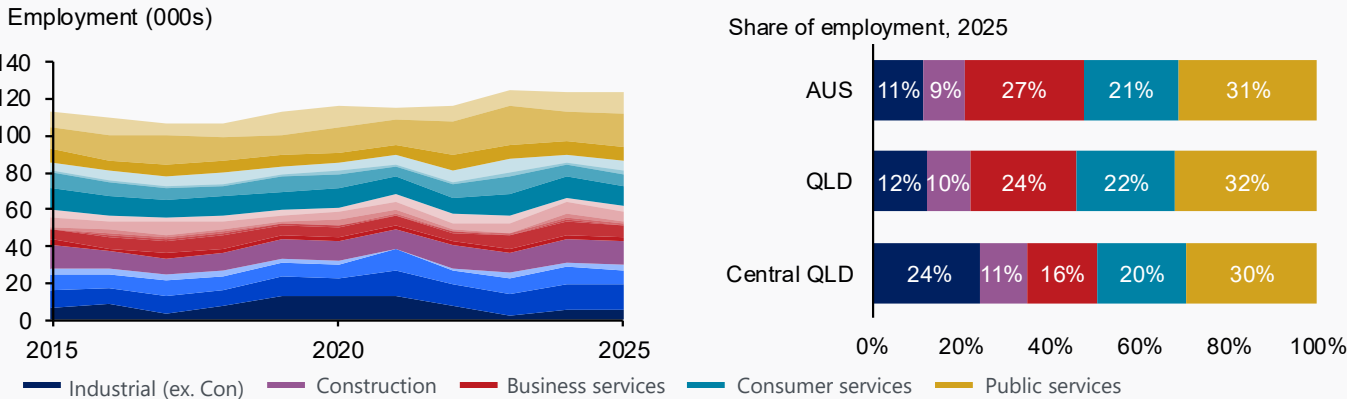
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# Central Queensland is twice as exposed to heavy industry as broader Australia, making the region more susceptible to the transition.

## Central Queensland current employment makeup, 2025



## Central Queensland employment share and makeup relative to Australia, 2025



\*Core sectors refers to Mining, Agriculture, Construction, Manufacturing, Utilities, Health, Education and Public Admin  
Public services includes Health, Education & Public Administration & Safety  
Consumer services includes Retail Trade, Accommodation & Food Services, Arts & Recreation and Other Services.  
Business Services includes Wholesale Trade, Transport & Warehousing, Information & Media, Financial Services, Property Services, Professional Services and Administration Services.

## Central Queensland economic structure

The Central Queensland workforce is highly concentrated in core\* industries compared to wider Australia. Core industries represent 64% of total employment with supporting sectors, those interconnected with the core industries, representing the remaining 36%.

The Central Queensland workforce is twice as exposed to heavy industry compared to wider Queensland and Australia. The vast majority of this is mining, but agriculture also represents twice as much of the Central Queensland workforce compared to QLD as a whole. This makes the regions workforce and population much more susceptible to potential shocks to the industrial base from the transition.

Health, mining, construction and education are the largest employing industries. Both health and education have steadily increased their share of employment over the last decade, in line with government investment, the aging population and increased educational attainment.

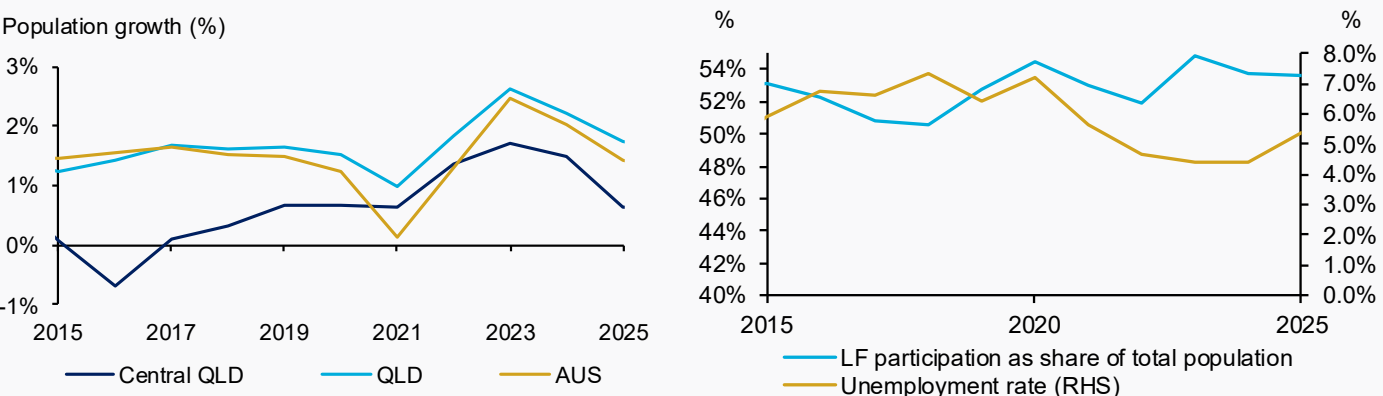
Mining has also increased employment share, albeit following a different path, growing rapidly from 8% of employment in 2015 to 11% by 2021. This was driven by growing coal demand from the Asia, particularly India, as well as the expansion at Meteor Downs South and the restart of Baralaba North. However, since 2021, employment growth has slowed and the share of employment has levelled off as both domestic consumption and exports of coal reached a turning point with demand beginning to decline.

Employment in agriculture, manufacturing and utilities has declined from a combined 17% of employment in 2015 to 13% in 2025 This reflects the economy wide shift towards the service sector and the productivity gains, particularly in agriculture and manufacturing, from technological development and advanced machinery. Key consumer services, retail and hospitality, have also struggled over the last decade from slow population and income growth coming off the end of the mining boom hitting demand in these key employing sector.

Industrials excluding Construction includes Agriculture, Mining, Manufacturing & Electricity, Gas, Water & Waste Services.  
**Note:** Figures rounded to the nearest thousand  
**Note:** Gini coefficients are sourced from Australian Bureau of statistics Personal Income in Australia and should not be directly compared with other ABS published Gini coefficients. Methodology available [here](#).

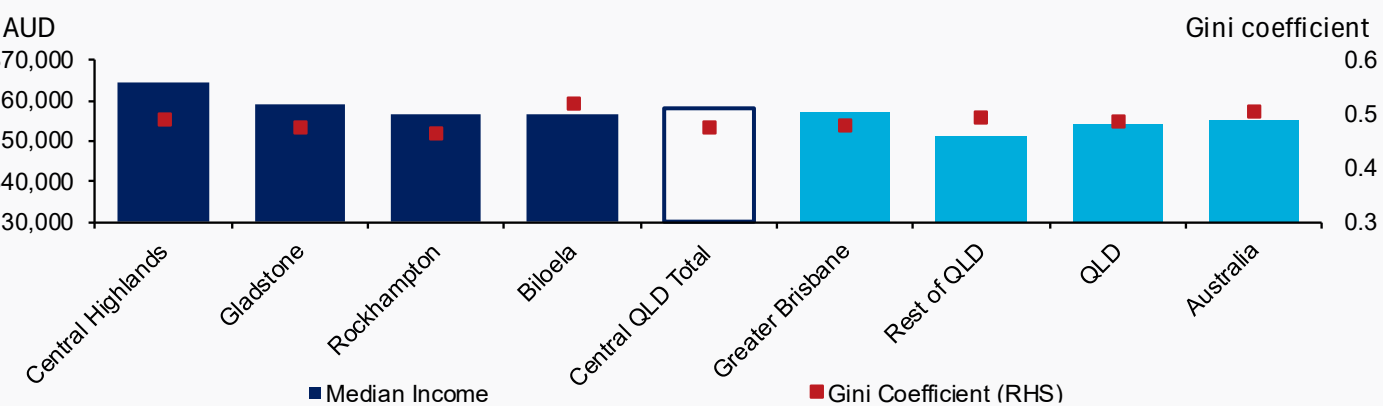
# Income in Central Queensland is above both wider QLD and Australia but income inequality is lower, reflecting the more concentrated industry make-up.

## Population growth, unemployment and labour force participation



Source: Australian Bureau of Statistics

## Median income and Gini coefficient, Relevant SA3s, QLD and Australia, 2022



Source: Australian Bureau of Statistics, Oxford Economics

## Central Queensland labour market and income

The Central Queensland population has grown at a third of the rate of wider Queensland since 2015. Much of this was due to a significant slowdown in the five years following the mining boom. There was an uptick in growth over 2022 and 2023, driven by strong overseas and internal migration post-pandemic. But this growth, experienced by many regional areas, has trended back down over the last few years.

Around 54% of the population are active in the labour force. This share has increased marginally over the last decade in line with trends across Queensland and Australia. The unemployment rate held relatively flat over the 5 years pre-pandemic, but steadily declined from 2020 to 2024 to reach a low of 4.4%. Since then, employment growth has slowed and the tight labour market has unwound across Australia. This has pushed unemployment in Central Queensland back up to an estimated 5.4% in 2025, still well below the pre-pandemic base of around 7%.

Headline unemployment hides sub-regional differences, with the unemployment rate significantly lower at 3-4% in some areas including Banana and the Central Highlands and above 6% in Gladstone and Rockhampton.

The median total income in the Central Queensland as of the latest available data in 2022 was \$58,000, around 8% above the wider Queensland median and 13% higher than the median of regional QLD. This is likely driven by the significant overrepresentation of the high-income mining sector relative to other areas of QLD. There is fairly large dispersion of incomes across the sub-regions ranging from \$64,000 in the Central Highlands, where the vast majority of coal mines are, to \$56,000 in Biloela.

Inequality, as measured by the Gini coefficient, sits between 0.46 - 0.49 across most sub-regions, relatively similar to total QLD and below the Australian average.<sup>2</sup> The outlier is Biloela, which sits at 0.52. This is likely driven by the relatively low median income, the handful of coal mines in the region which support some higher income earners and the relative low population.

<sup>1</sup> This figure represents the labour force as a share of total population rather than as a share of working age population due to data availability.

<sup>2</sup> The Gini coefficient measures inequality in the distribution of incomes across people, with 0 representing perfect equality where each person has the same income and 1 representing perfect inequality with one person receiving all the income.

**Note:** Gini coefficients are sourced from Australian Bureau of statistics Personal Income in Australia and should not be directly compared with other ABS published Gini coefficients. Methodology available [here](#).

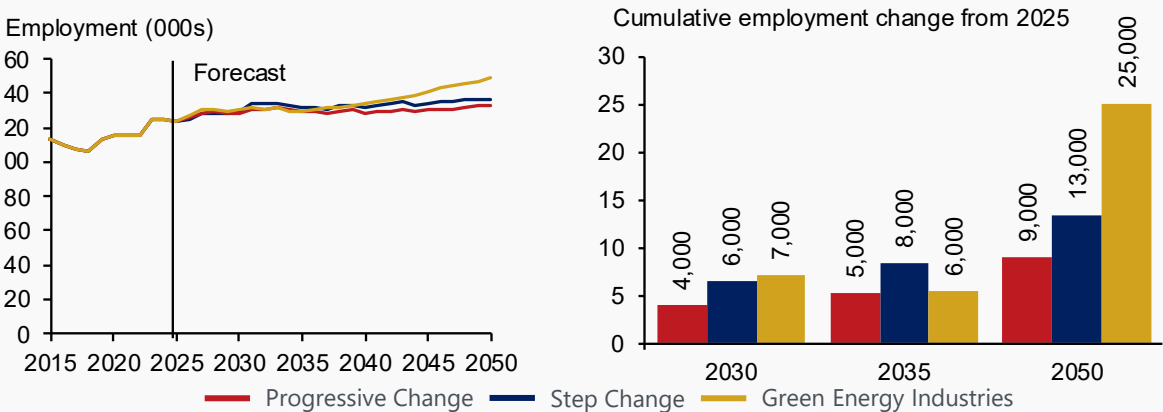


# OUTLOOK FOR LABOUR DEMAND

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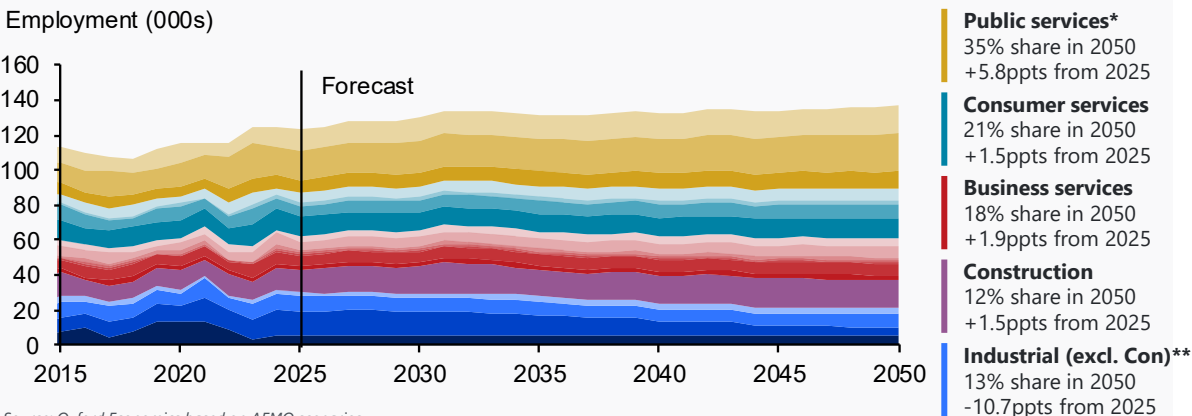
# The growing public services and utilities sector will be key sources of employment growth and economic activity in Central Queensland.

## Central Queensland workforce outlook by scenario



Source: Oxford Economics based on AEMO scenarios

## Central Queensland employment make-up under Step Change



Source: Oxford Economics based on AEMO scenarios

Public services includes Health, Education & Public Administration & Safety. Consumer services includes Retail Trade, Accommodation & Food Services, Arts & Recreation and Other Services. Business Services includes Wholesale Trade, Transport & Warehousing, Information & Media, Financial Services, Property Services, Professional Services and Administration Services. \*\*Industrials excluding Construction includes Agriculture, Mining, Manufacturing & Electricity, Gas, Water & Waste Services.

Note: Figures rounded to the nearest thousand

## Central Queensland workforce outlook

Central Queensland's significant exposure to heavy industry, particularly coal mining, is expected to drive a significant workforce transition over the next 25 years. While total employment is still expected to increase, the dispersion of growth across industries is very diverse depending on the pace of the transition pathway. This outlook does not include future industrial growth opportunities identified in the *Regional Investment Analysis* report.

Over the next 10 years across all scenarios, total employment is expected to grow, from 123,000 today to 132,000 the central Step Change scenario and 129,000 under both the Progressive Change and Green Energy Industries scenarios. This difference is due to the timing on coal asset closures and the rollout of renewables. Relative to Step Change, coal mining performs better under Progressive Change and worse under Green Energy Industries but the opposite is true for renewables.

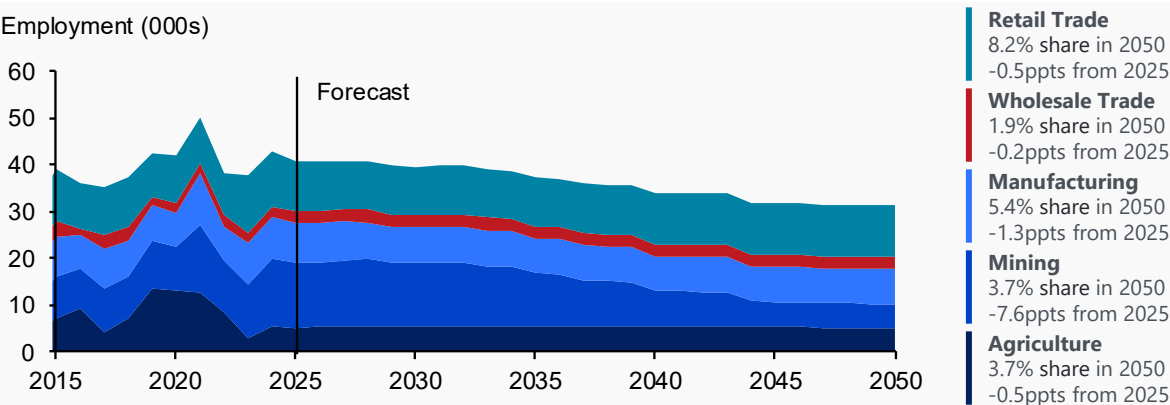
Over this period, the unemployment rate is expected to mimic the wider Australian economy, slowly increasing off the relatively low base towards 6.5% by 2035. Economic growth is expected to underperform employment across all scenarios, particularly Green Energy Industries. The rapid shift away from high value-added coal mining means that even while total employment increases under Green Energy Industries, the contribution to economic growth of service-oriented industries is not enough to fully offset the declines in mining.

Beyond 2035, industrial sectors excluding construction\*\* share of employment is expected to contract, reaching 13% by 2050, down 11 percentage points (ppt) from today with the majority of this decline due to mining as demand for coal falls. Manufacturing and agricultural employment is expected to continue contracting, mines will reach their planned closure or end of life date and demand for coal is expected to continue falling, although at varying speeds by scenario. Construction is expected to remain a major industrial employer, holding close to 9% of total jobs in 2035 under Step Change, fueled by ongoing infrastructure, housing and renewable energy developments. The number of jobs in utilities is expected to increase significantly across all scenarios, from 2,300 today to 2,500 under Progressive Change, 3,000 under Step Change and 4,600 under Green Energy Industries.

The sources of employment growth in Central Queensland will be increasingly driven by public services, the currently underrepresented business service sector and the renewable rollout. Public services, including health, education and public admin, are expected to increase their share of employment from 30% to about 35%, reflecting the influence of the aging population, higher participation in education, and elevated government spending on social programs.

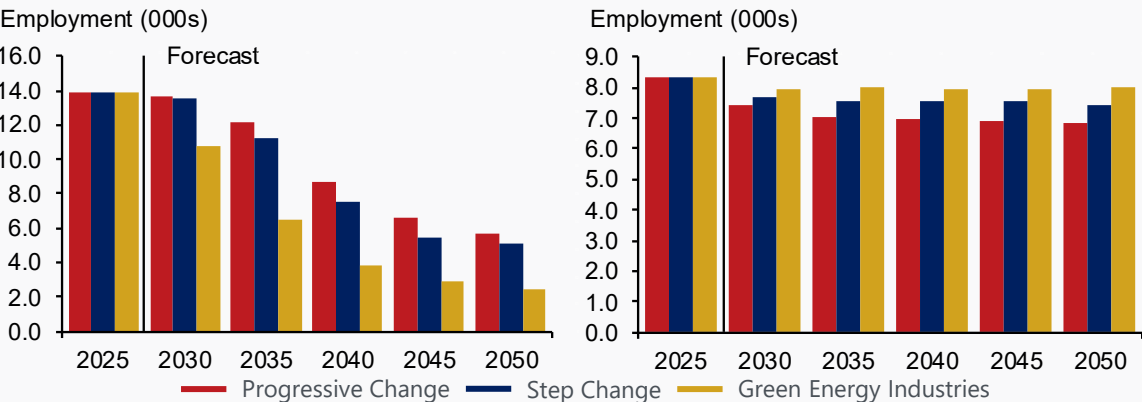
# Mining will dominate the direct declines in employment, but manufacturing will perform relatively better than state and national averages.

## Industries in decline under Step Change



Source: Oxford Economics based on AEMO scenarios

## Mining workforce outlook



Source: Oxford Economics based on AEMO scenarios

Utilities includes electricity and gas supply activities as well as water and waste services.  
Note: Figures rounded to the nearest thousand

## Industrial workforce outlook

Central Queensland is one of the most dominant coal mining regions in Australia. There are currently an estimated 11,000 people working in the industry, representing 9% of the total workforce. Under all scenarios the primary driver of the coal mining contraction is announced planned closures and closure due to end of mine life within the forecast period. Additionally, those coal mines without explicit closure plans are expected to face slowing global demand for coal under all scenarios to varying degrees.

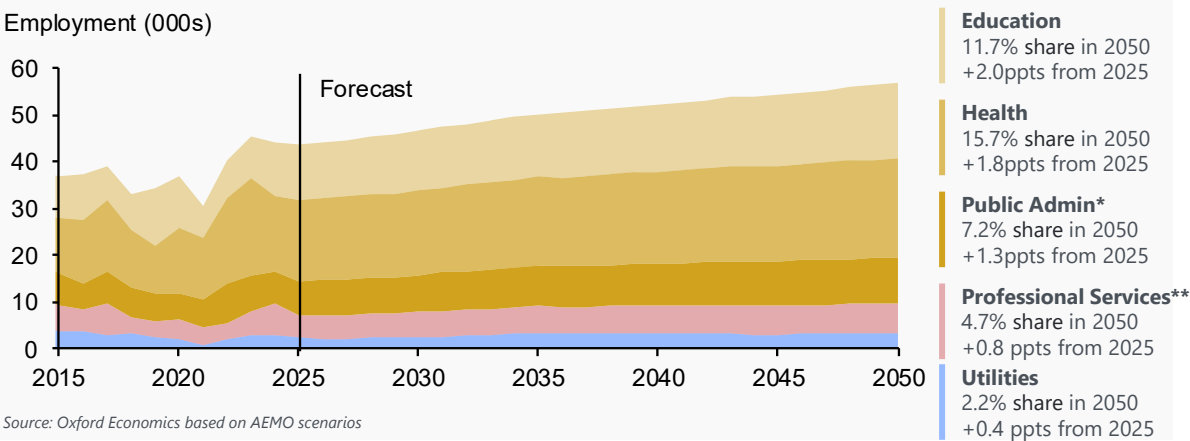
Non-coal mining currently employs around 2,900 people split across gas extraction, metal ore mining, non-metal minerals and exploration. These sub-sectors are expected to perform better than coal mining, with metal ore mining particularly benefiting from the regions deposits of gold, alumina and magnesium. Overall, total mining employment is expected to decline from 14,000 in 2025 to 5,000 by 2050 under Step Change and just 2,000, under Green Energy Industries as the more aggressive global transition weighs more heavily on coal demand after 2035. This is the major driver of industrial job losses, particularly under the Step Change scenario.

The region is twice as exposed to agriculture compared to wider Australia and the largest manufacturing sub-sector by far is food product manufacturing. While the level of employment is expected to stay relatively similar to today, both of these sectors are expected to decrease their share of employment over the long-run. Both industries will continue to gain productivity benefits from the integration of advanced technologies, albeit at a slowing rate compared to the rapid impact over the last two decades. Compared to the state and national outlook, manufacturing in Central Queensland is expected to perform relatively well with project support in minerals processing at Mount Morgan, Mt Chalmers and from the second stage of the HPA First Project, as well as some early signs of a developing hydrogen industry despite some mixed results from pilot projects.

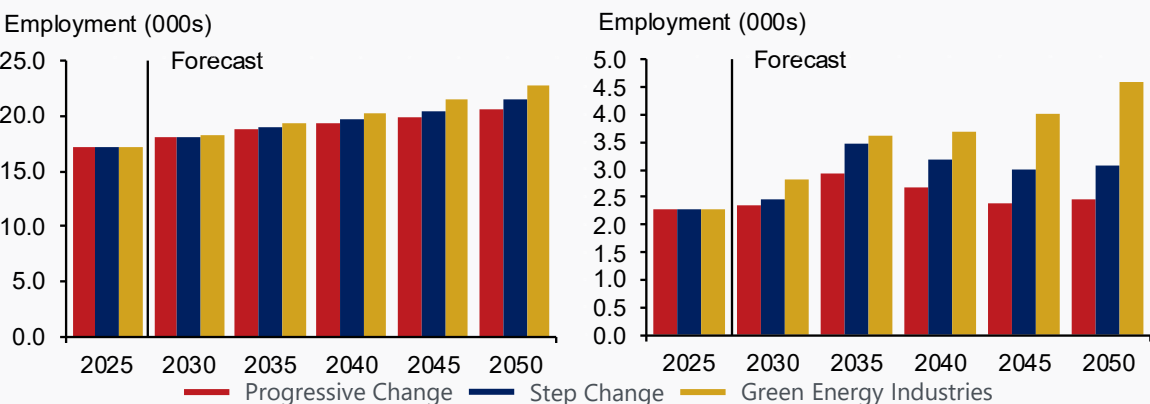
Retail and wholesale trade employment has been relatively stable over the last decade. Employment levels are expected to remain relatively stable but retail and wholesale trade are expected to decrease their share of employment. The slow post mining boom population growth is expected to continue over the long-term, weighing on underlying demand for retail. Additionally, the shift away from high income mining to a more service-oriented economy may slow household income growth in the region, further impacting retail demand. Activity in key industrials including manufacturing, agriculture and mining, which are all expected to decline as a share of employment, will have flow on effects to wholesale trade.

# The renewable rollout and significant grid investment planned in Central Queensland is expected to offset the employment losses from fossil fuel generator closures.

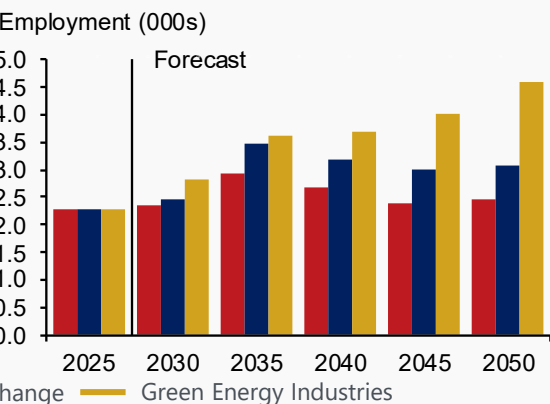
## Growth industries under Step Change



## Health workforce outlook



## Utilities workforce outlook



## Growth industries workforce outlook

The utilities, professional services, and public services\* sectors are expected to be the key drivers of employment growth long-term. There is a strong employment base in the health, public administration and education which is expected to grow with Australia's aging population, increasing education rates and investment in support services. Public services are expected to add a combined 5,000 jobs over the next 10 years and professional services is also expected to significantly increase its share of employment under the central Step Change scenario driven by strong growth at the national and state levels.

Despite the expected closure of the Callide B and Gladstone power stations over the next decade, overall utilities employment is expected to grow quite significantly under all scenarios. This will be driven by the renewable rollout in the Fitzroy Renewable Energy Zone (REZ) and grid related investment from the Queensland Supergrid and the Gladstone Grid Reinforcement. There is 1700MW of known renewable generation expected to be added by 2027 under Step Change and a further 1800MW in battery storage, adding an expected 1,200 jobs in the region by 2035.

Beyond 2030, the renewable rollout is expected to continue to add significant capacity, reaching 11GW by 2050. However, further closures of fossil fuel generators will offset some of this growth. By 2050, utilities employment is expected to sit at 2,500 (+200), 3,100 (+800) and 4,600 (+2,300) under the Progressive Change, Step Change and Green Energy Industries scenarios respectively. The location of currently known projects suggests the early stages of the renewable rollout will be centred around the central and southern parts of Central Queensland, particularly Gladstone and Biloela.

Although not currently included in any of the baseline economic scenarios due to insufficient project certainty, there is upside potential in the defence industry. There are several significant defence proposals in the early stages of planning. These projects propose adding an RAAF base at Rockhampton and an associated barracks, the Shoalwater Bay School of Armour, and a fleet base at Gladstone. Together, these proposals could add over 10,000 defence roles to the region as well as stimulate supporting industries like professional services and manufacturing. The role of defence for Central Queensland is explored further in the 'Regional Investment Analysis' report.

\*The Public Administration industry includes government legislative, executive and judicial activities as well as military defence.

\*\* Professional Services includes scientific research, architecture, engineering, computer systems design, law, accountancy, advertising, market research, management and other consultancy, veterinary science and professional photography

Note: Figures rounded to the nearest thousand

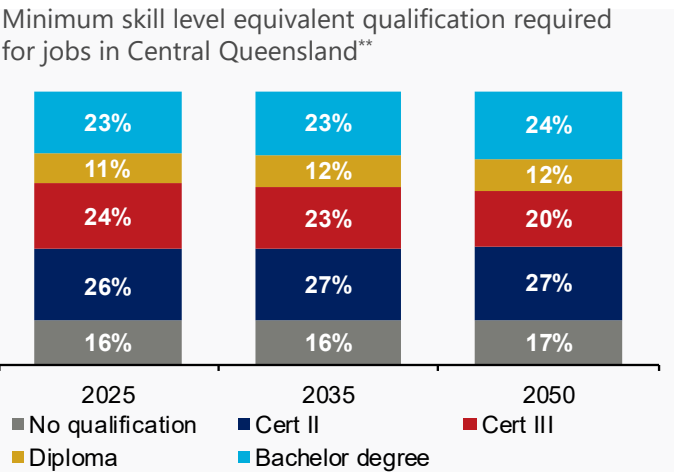
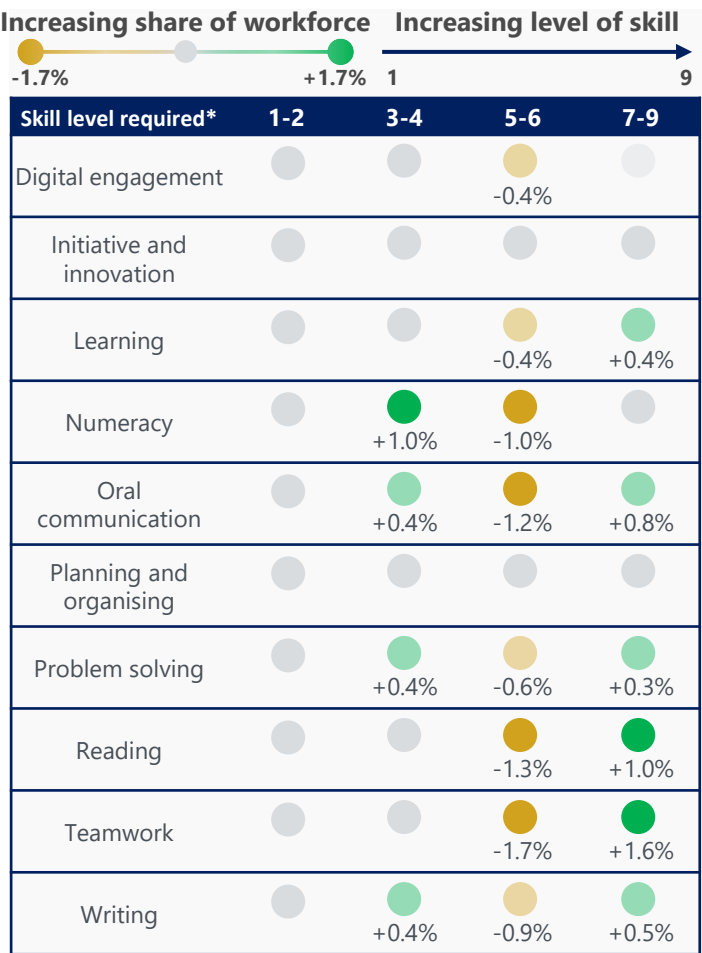
# OUTLOOK FOR SKILLS DEMAND

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# The significant shift in industry make up is expected to drive a divergence of competency across key skills and a shift away from Certificate III qualifications.

## Additional skill and qualification demand by 2035 under Step Change



Most common field of education in additional jobs by 2035		
1	Electrical and Electronic Engineering and Technology	1,050
2	Teacher Education	900
3	Human Welfare Studies and Services	650
4	Business and Management	550
5	Building	550
6	Nursing	350
7	Accounting	200
8	Justice and Law Enforcement	200
9	Other Education	150
10	Computer Science	150

## Skill and qualification demand outlook

Due to the high concentration of mining jobs in the current workforce that are expected to decline over the forecast, the share of the workforce requiring a skill level equivalent to a Cert III qualification is also expected to decline. Contrastingly, the majority of growing demand is expected to go into higher qualifications including diplomas and bachelor and above. However, there is also expected to be an increase in the proportion of jobs requiring Cert II or no Qualification.

An additional 8,400 jobs are expected to be added in Central Queensland over the next decade, including 1,400 that do not require a qualification and 7,000 that do. Of the qualified roles, 2,500 will require a Certificate II, 1,500 a diploma, and 3,000 a bachelor degree or higher. The total number of jobs requiring a Cert III is expected to remain the same between 2025 and 2035, reflecting the drop off in mining roles that overwhelmingly require these qualifications.\*\*

A similar trend can be seen for competency levels across most key generalist and foundational skills. The workforce will increasingly demand roles requiring higher-order competencies across nearly all skill types, but will also demand a higher proportion of workers with lower competency levels. The majority of the shift will be towards higher competency levels across almost all skills. with numeracy the only exception. There is expected to be significant increases in teamwork and reading requirements, where 1.6% and 1.0% more of the workforce will require advanced capabilities, compared with a decline in roles with more middling competency levels.

The most common fields of education within these additional qualified roles are expected to be electrical and electronic engineering (+1,050 jobs), teacher (+900 jobs), welfare studies and services (+650), business and management (+550), and building (+500). These fields of education reflect the continuing shift toward services and the impact of the renewable rollout both on operational and construction roles. The challenges of transitioning workers across roles is examined in detail in the *Regional Economic Transition Analysis – Worker Transitions in Central Queensland study*.

Source: Oxford Economics

\*The Australian Skills Classification (ASC) provides a common framework for describing skills across jobs, categorising them into core competencies, specialist tasks, and technology use.  
\*\* These qualifications refer to the minimum qualification equivalent to skill levels 1-5 required to perform a role rather than the qualification levels that are actually held by the workforce and so not all qualification levels are shown. E.g. Cert III is equivalent to skill level 3 and bachelor degree is equivalent to skill level 7. The correspondence of skill level to AQF level can be accessed [here](#).  
**Note:** Figures rounded to the nearest fifty

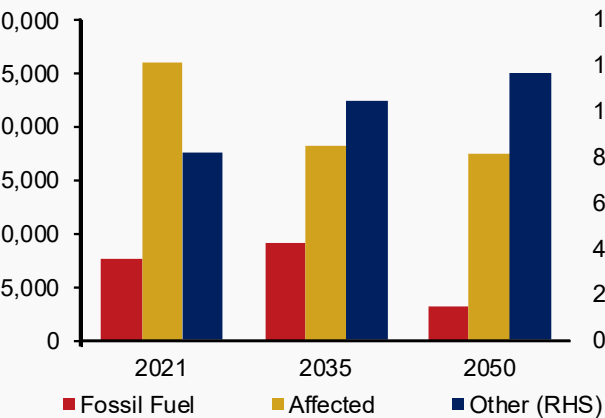
# PRIORITY COHORT PROFILES

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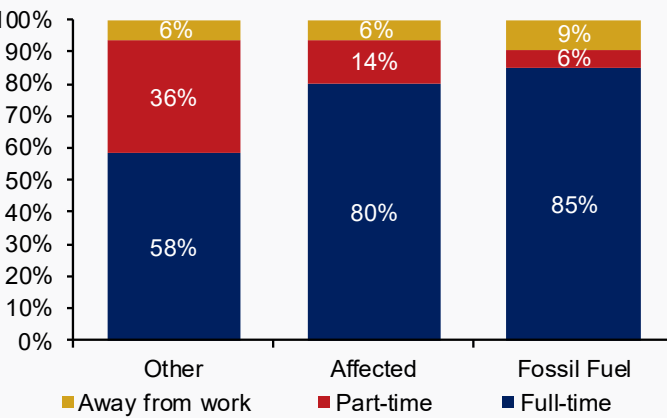
# Fossil fuel workers are mostly prime working-aged, significantly more concentrated in higher income brackets and are overwhelmingly educated through vocational pathways.

## Central Queensland worker cohort profile

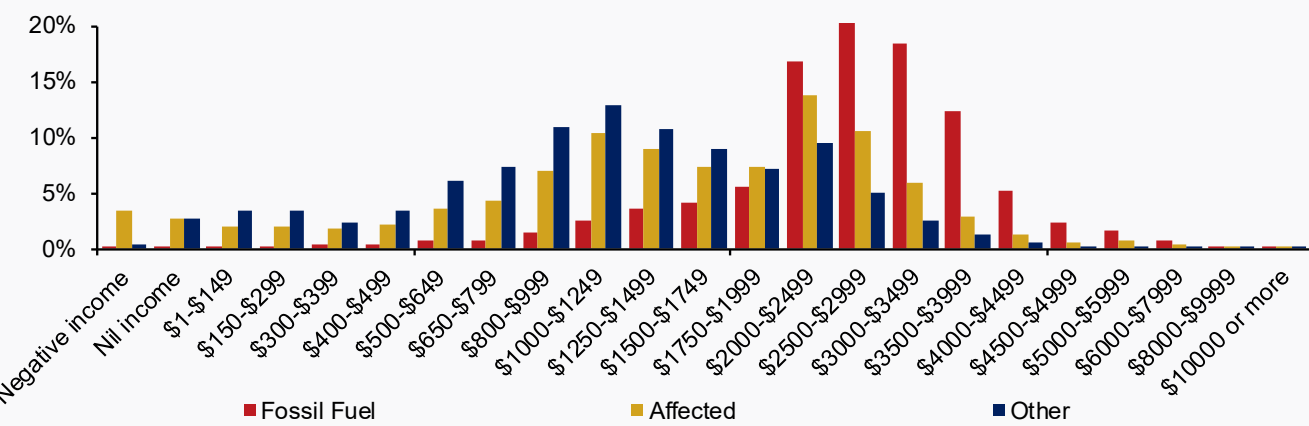
Employment outlook



Employment status



Total personal weekly gross income



Source: Australian Bureau of Statistics

Note: Figures rounded to the nearest hundred

Central Queensland is estimated to employ 12,400 fossil fuels workers as of 2024, noting the 2021 census and labour force detail recorded a lower number of fossil fuel workers (7,700) likely driven by pandemic disruptions and the relatively large fluctuations in employment numbers in small area data. This cohort makes up 10% of the local workforce and is highly concentrated coal mining, followed by electricity supply, with very few in gas supply.

Beyond the fossil fuel sector, other industries with noted exposure to the transition or in structural decline include agriculture, forestry and fishing, non-coal mining, manufacturing and electricity, gas, water and waste services. While utilities and non-coal mining are expected to perform well going forward, these industries are interconnected with the transition so it is important to understand the characteristics of this cohort.

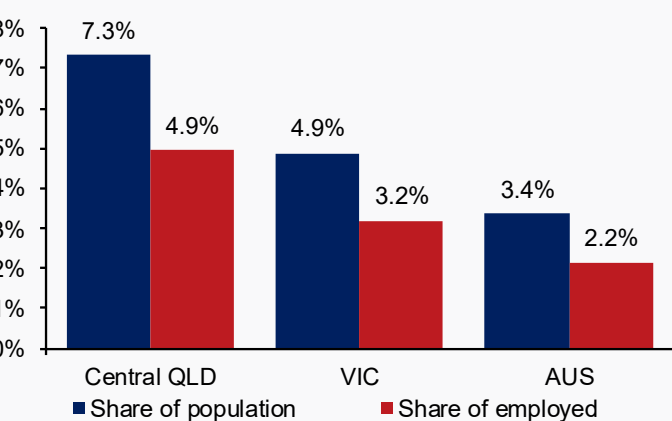
Workers in the fossil fuel sector have an age distribution distorted towards the 25-34 and 35-44 age groups, but there are fewer young individuals are entering this sector. Affected industries have a marginally older cohort compared to the overall regional workforce. As a result, a significant share may naturally retire in the coming decades, softening the impact of the transition.

Workers in fossil fuel industries are predominantly employed full time, with nearly 85% in full-time roles, significantly higher than the broader workforce where only around 58% are employed full-time. These workers are significantly more concentrated in higher income brackets and are overwhelmingly educated through vocational pathways. This suggests that transitioning workers out of this sector may result in reduced income and should focus on building from existing competencies of the highly technically skilled workforce. Affected industries share similar characteristics, including high full-time employment rates, a greater concentration in higher income brackets and a significant role of vocational education. Although, the contrast to the average of the region is less stark than it is for fossil fuel industries.

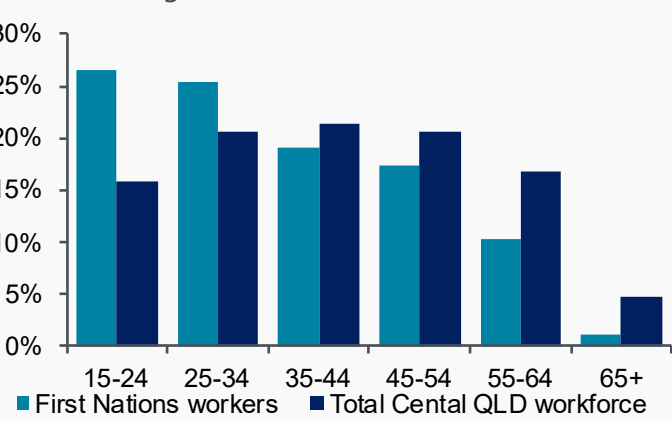
# Central Queensland's First Nations workers are significantly younger and will require support to upskill and transition into other industries

## Central Queensland's First Nations worker profile

First Nations people in Central Queensland



Workforce age distribution

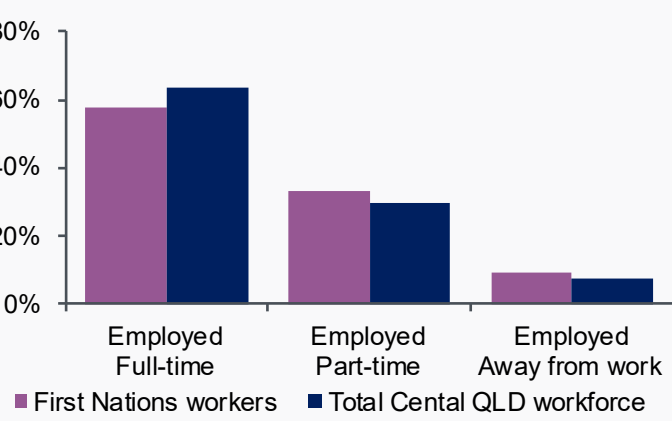


There are more First Nations people living and working in Central Queensland than in wider Queensland or Australia on a per capita basis. The First Nations workforce is less likely to be employed full-time and is significantly younger than the region overall with more than half of workers 34 years or younger.

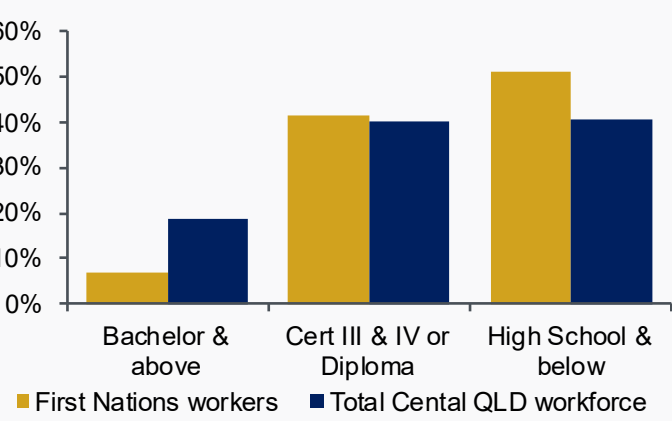
Central Queensland's 5,000 First Nations workers are relatively more concentrated in consumer services and public services and are less likely to work in the industrial sector. However, they are just as likely to be employed in coal mining specifically, suggesting they are as exposed to industrial shifts from the transition as the workforce overall.

Half of all First Nations workers in Central Queensland have high school or below as their highest level of qualification and are much less likely to have a Bachelor's degree or above – 7% of First Nations workers compared to 19% of the workforce overall.

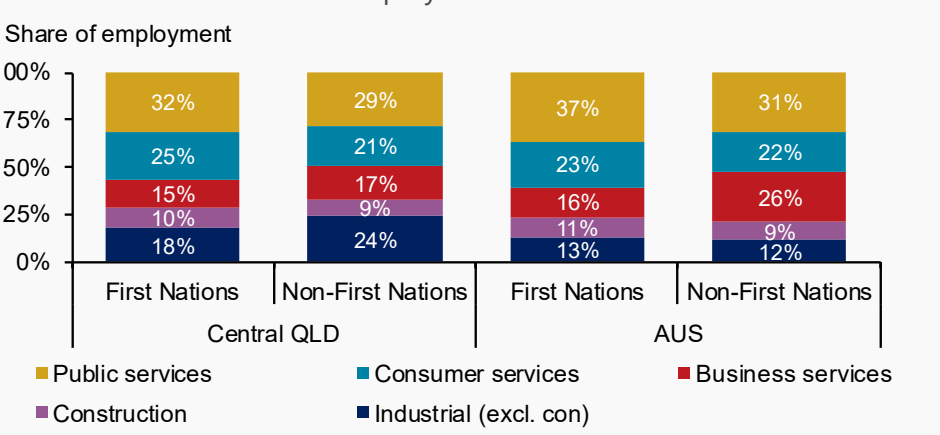
Employment status



Educational attainment (% highest level)



First Nations Industries of employment\*



Source: Australian Bureau of Statistics

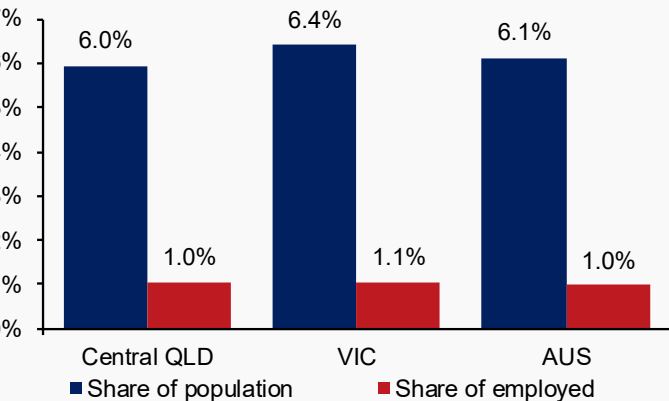
\*Public services includes Health, Education & Public Administration & Safety  
Consumer services includes Retail Trade, Accommodation & Food Services, Arts & Recreation and Other Services.  
Business Services includes Wholesale Trade, Transport & Warehousing, Information & Media, Financial Services, Property Services, Professional Services and Administration Services.

Industrials excluding Construction includes Agriculture, Mining, Manufacturing & Electricity, Gas, Water & Waste Services.  
Note: Figures rounded to the nearest hundred

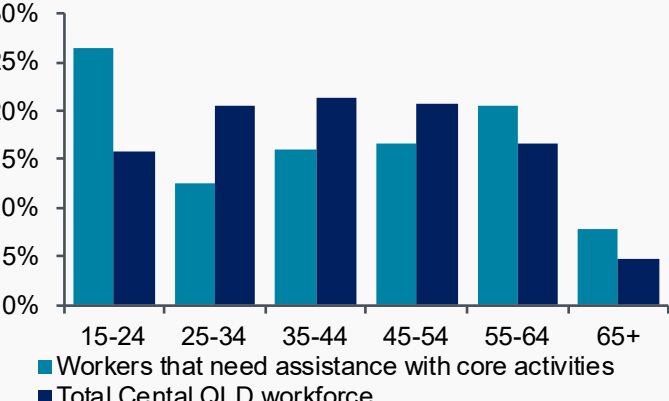
# Disabled workers are much less likely to work full-time roles and hold a non-school qualification but are only a quarter as exposed to the coal mining industry.

## Central Queensland profile of workers with a disability

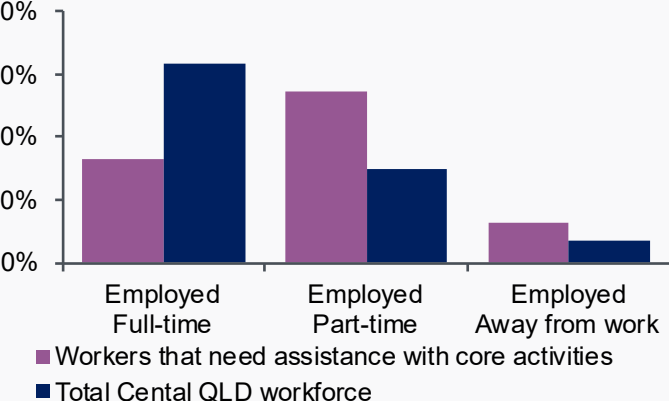
People with a disability in Central Queensland



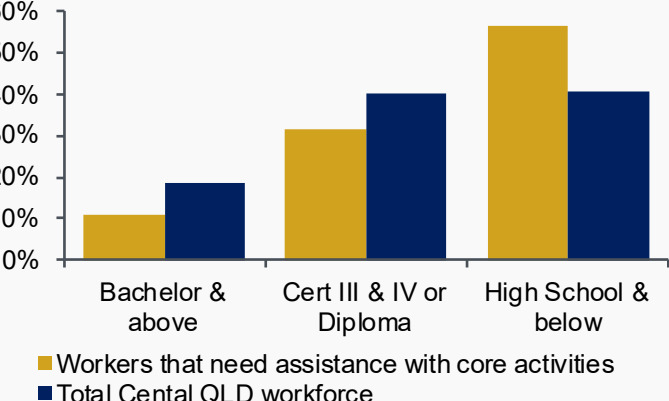
Workforce age distribution



Employment status



Educational attainment (% highest level)

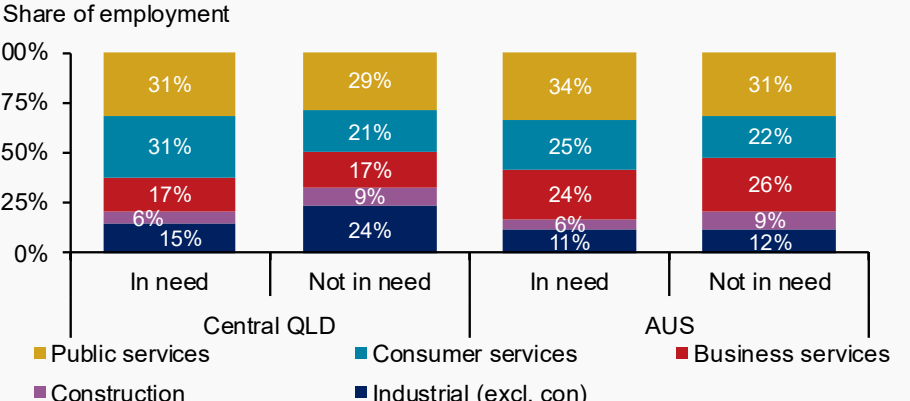


Central Queensland has a similar proportion of the population and workforce with a disability as wider Queensland and Australia. However, they have quite significantly different characteristics to the rest of the Central Queensland workforce.

This cohort is significantly less likely to be employed in a full-time role and are overrepresented in the youngest and the oldest age cohorts of 15-24 and 65+. Around 1,000 people with a disability are employed in the region. Their employment is more heavily concentrated in consumer and public services, while they are underrepresented in construction and industrial sectors. Particularly, this cohort is only a quarter as likely to be employed in coal mining as the broader Central Queensland workforce.

Educational attainment levels also differ from the broader workforce. Workers with disabilities are half as likely to hold a bachelor degree or higher and less than three-quarters as likely to hold any non-school qualification.

Workers in need of assistance by industry of employment\*



Source: Australian Bureau of Statistics  
\*Public services includes Health, Education & Public Administration & Safety  
Consumer services includes Retail Trade, Accommodation & Food Services, Arts & Recreation and Other Services.  
Business Services includes Wholesale Trade, Transport & Warehousing, Information & Media, Financial Services, Property Services, Professional

Services and Administration Services.  
Industrials excluding Construction includes Agriculture, Mining, Manufacturing & Electricity, Gas, Water & Waste Services.  
Note: Figures rounded to the nearest hundred



# TECHNICAL APPENDICES

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# MAJOR EMPLOYING BUSINESSES

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# Central QLD - Largest employing businesses.

## Central QLD - Largest employing businesses – 1 to 5

Business name	Description	Location	Est. Employment	Type of roles	Top Recent Job Postings
Central Queensland Hospital and Health Service (CQHHS)	Provides public healthcare services across Central Queensland, including hospitals, aged care, and community health. <a href="#">Website</a>	Central QLD	~4,000	Registered nurses and midwives, medical officers and specialists, allied health clinicians, community and mental health, administration and patient services	Clinical nurse, administration officer, registered nurse, mental health clinician, staff specialist
Teys Australia Pty Ltd	One of Australia's largest beef processors and exporters, operating feedlots and processing facilities nationwide. <a href="#">Website</a>	Rockhampton	~3,550	Meat processing and boning, maintenance and refrigeration, quality assurance and food safety, supply chain and logistics, production and packaging	Meat process worker, maintenance electrician, maintenance fitter, electrical supervisor, occupational nurse
Department of Education	Delivers state schooling and early childhood regulation across the state, supporting state schools through regional offices. <a href="#">Website</a>	Central QLD	~3,500	Teachers primary and secondary, school leadership, education support staff, school counsellors and psychologists, policy and program officers	Head of department, principal, head of special education services, assistant principal, occupational therapist
Rio Tinto	Global mining and materials company with significant aluminium operations in Central Queensland. <a href="#">Website</a>	Gladstone Region	~3,000	Process and production operators, maintenance electrical and mechanical, engineering and asset management, health safety and environment, supply chain and logistics	Diesel fitter, drill and blast operator, heavy duty fitter, locomotive driver
Coronado Global Resources	Operates the Curragh coal mine near Blackwater, producing metallurgical coal for export. <a href="#">Website</a>	Central QLD	~2,500	Mine operations and production, maintenance trades, mining engineers and planners, health safety and environment, supply chain and logistics	Human resources business partner, technical manager

Source: Oxford Economics estimates based on Seek data

# Central QLD - Largest employing businesses.

## Central QLD - Largest employing businesses – 6 to 10

Business name	Description	Location	Est. Employment	Type of roles	Top Recent Job Postings
Glencore	A global mining and commodities company with coal, copper, and zinc operations across Queensland and Australia. <a href="#">Website</a>	Central QLD	~2,250	Operators open cut and underground, maintenance trades, engineering and technical services, geology and surveying, health safety and environment	Excavator operator, machine operator, supervisor, mining operator, multi skilled plant operator
Anglo American	An international mining company with major metallurgical coal operations in Central Queensland, including Dawson and Capcoal. <a href="#">Website</a>	Central QLD	~2,050	Underground and open cut operations, maintenance trades, mining engineers and planners, health safety and environment, geology and surveying	Dragline operator, diesel fitter, mining engineer, automotive electrician, mine technician
Whitehaven Coal	A leading Australian coal mining company with operations in NSW and Central Queensland producing metallurgical and thermal coal. <a href="#">Website</a>	Central QLD	~2,000	Mine operations and production, maintenance trades, engineering and technical services, health safety and environment, supply chain and logistics	Underground fitter, operator, business partner, environmental superintendent, fitter
CQUniversity	A major regional university based in Rockhampton, offering higher education, research, and vocational training across Central Queensland and beyond. <a href="#">Website</a>	Rockhampton	~1,900	Academic teaching staff, research and laboratories, student services and admissions, campus operations and facilities, corporate services and administration	TAFE teacher, administration officer, lecturer, teacher, project manager
Bravus Mining	A coal mining company operating the Carmichael Mine in the Galilee Basin, focused on thermal coal exports. <a href="#">Website</a>	Central QLD	~1,200	Mine operations and production, maintenance and workshops, engineering and planning, health safety and environment, logistics and supply	Superintendent, open cut examiner, mine surveyor, mine planning engineer, contracts administrator

Source: Oxford Economics estimates based on Seek data

# Central QLD - Largest employing businesses.

## Central QLD - Largest employing businesses – 11 to 16

Business name	Description	Location	Est. Employment	Type of roles	Top Recent Job Postings
Mackellar Group	A mining and civil earthmoving contractor providing fleet and workforce solutions to open-cut mining operations. <a href="#">Website</a>	Central QLD	~1,050	Mobile plant and haul truck operators, maintenance trades diesel fitters and auto electricians, project engineers and schedulers, health safety and environment, supply chain logistics and procurement	Diesel fitter, automotive electrician, dump truck operator, multi skilled plant operator, high voltage electrician
NRW Pty Ltd	A diversified contracting services group delivering mining, civil, and urban infrastructure services across Australia. <a href="#">Website</a>	Central QLD	~1,000	Civil and mining operators, maintenance trades, project engineers and supervisors, planning estimating and contracts, health safety and environment	Mining engineer, mining supervisor, specialist, drill fitter, geologist
Macmahon	A mining services company providing open-cut and underground mining, civil construction, and equipment maintenance solutions. <a href="#">Website</a>	Central QLD	~1,000	Mine operators and supervisors, maintenance trades, mining engineers and planners, survey and technical services, health safety and environment	Water cart operator, All-Round operator, maintenance role, excavator operator, automotive electrician
BUMA	A mining contractor providing open-cut mining services across coal operations in Queensland, including pre-strip and haulage. <a href="#">Website</a>	Central QLD	~1,000	Open cut operators, maintenance trades, drill and blast crews, engineers and mine planning, health safety and environment	Production operator, digger operator, dozer operator, dump truck operator, automotive electrician
Rockhampton Regional Council	The local government authority delivering infrastructure, planning, and community services across the Rockhampton region. <a href="#">Website</a>	Rockhampton	~950	Civil works and road crews, town planning and development assessment, water waste and sewer operations, community and customer services, corporate services finance HR and IT	Operator labourer, gardener, team leader, labourer, administration officer
Kestrel Coal	One of the world's largest producing underground coking-coal mines, located about 40 km north-east of Emerald in Bowen Basin. <a href="#">Website</a>	Central QLD	~900	Underground operators and longwall crews, maintenance trades electrical and mechanical, mining engineers and production planners, geology and surveying	ERZ controller, coordinator, mechanical engineer, electrical engineer, mining engineer

Source: Oxford Economics estimates based on Seek data



# Central QLD - Largest employing businesses.

## Central QLD - Largest employing businesses – 17 to 21

Business name	Description	Location	Est. Employment	Type of roles	Top Recent Job Postings
Gladstone Regional Council	Local government authority for the Gladstone region, providing services, infrastructure, planning and community programs. <a href="#">Website</a>	Gladstone Region	~800	Civil works and road crews, planning development and building services, water waste and environmental services, community libraries and events, corporate services finance HR and IT	N/A
Gladstone Ports Corporation	A Queensland Government-owned multi-commodity port operator managing the Port of Gladstone, Port of Rockhampton and Port of Bundaberg. <a href="#">Website</a>	Gladstone Region	~750	Port operations and stevedoring, marine services and vessel traffic, maintenance trades, asset and project engineers, safety and operations planning	Terminal supervisor, worker
Yancoal	One of Australia's largest pure-play coal producers, operating both open-cut and underground mines including Yarrabee and Middlemount. <a href="#">Website</a>	Central QLD	~750	Mine operators, maintenance trades, engineering and technical services, geology and surveying, health safety and environment	Administration officer, diesel fitter, engineering tradesperson, mining engineer, dispatch coordinator
Thiess Ltd	A global mining services provider offering full-scope contract mining, equipment, and workforce solutions across open-cut operations. <a href="#">Website</a>	Central QLD	~750	Mine operators and supervisors, maintenance trades diesel fitters electricians boilermakers, project engineers and technical services, health safety and environment, survey and scheduling	Production operator, diesel fitter, automotive electrician, workshop diesel fitter, dozer operator
Energy Queensland Group	A government-owned corporation delivering electricity across regional Queensland through Ergon Energy and Energex. <a href="#">Website</a>	Central QLD	~700	Distribution lineworkers and cable jointers, electrical technicians and field crews, network planning and engineering, customer service and metering, control room and asset operations	Electrical fitter mechanic, linesperson, design engineer, live line linesperson, technical officer

Source: Oxford Economics estimates based on Seek data

# FORECASTING APPROACH

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# The regional forecasting approach aligns to AEMO's scenario assumptions.

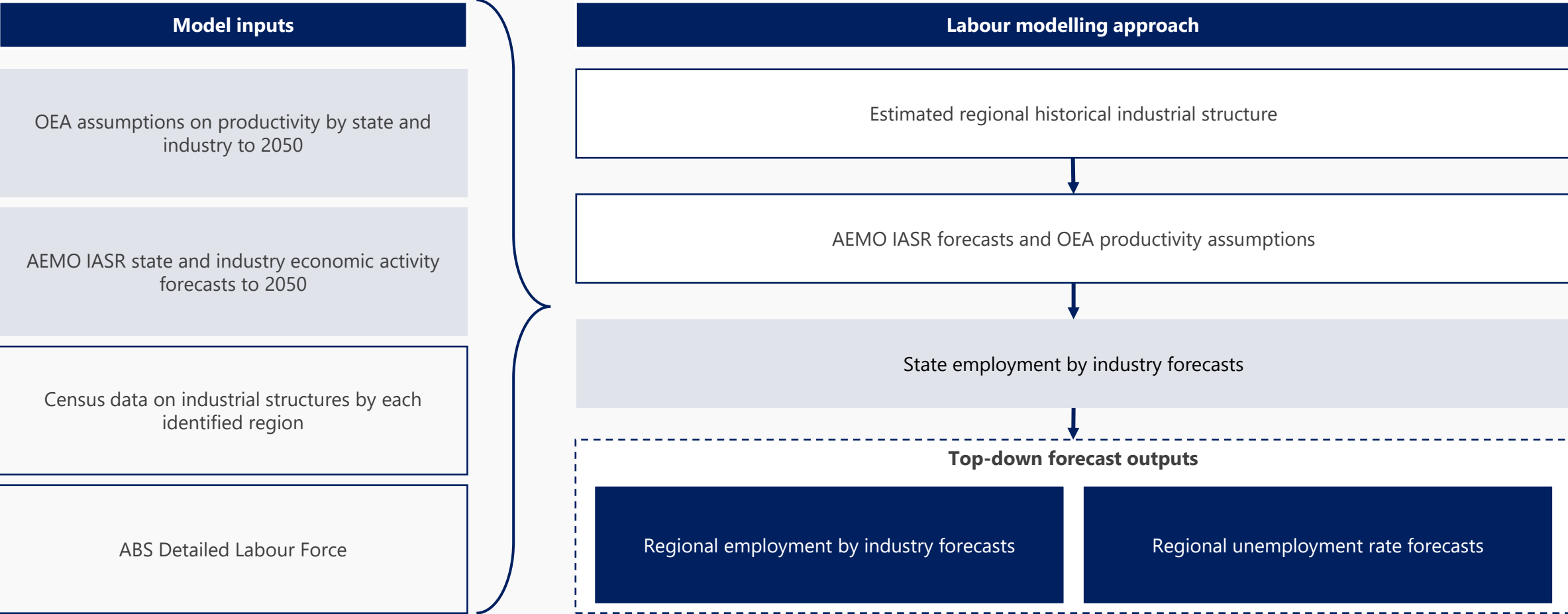
## AEMO Scenario Features

	Progressive Change	Step Change	Green Energy Industries
<b>Global export demand</b>	<ul style="list-style-type: none"> <li>Aligned to IEA STEPS (Stated Policies).</li> <li>Slower economic growth, less climate coordination.</li> </ul>	<ul style="list-style-type: none"> <li>Aligned to IEA APS (Announced Pledges).</li> <li>Moderate economic growth, stronger climate coordination.</li> </ul>	<ul style="list-style-type: none"> <li>Aligned to IEA NZE (Net Zero).</li> <li>High economic growth, stronger climate coordination.</li> </ul>
<b>Domestic demand for high emission industries</b>	<ul style="list-style-type: none"> <li>Slowest pace of fossil fuel phaseout.</li> <li>Weak economy forces closures of costlier energy and industrial loads.</li> </ul>	<ul style="list-style-type: none"> <li>Moderate pace.</li> <li>Coal/gas retirements follow announced schedules.</li> </ul>	<ul style="list-style-type: none"> <li>Fastest pace.</li> </ul>
<b>Emerging industries</b>	<ul style="list-style-type: none"> <li>Limited new industries.</li> <li>Minimal hydrogen uptake, slower renewables rollout; energy- and mining-related industries struggle under weaker demand.</li> </ul>	<ul style="list-style-type: none"> <li>Strong growth of renewables (wind/solar, storage) and consumer energy resources</li> <li>Some domestic hydrogen use largely in the transport sector</li> </ul>	<ul style="list-style-type: none"> <li>Development of a hydrogen industry, focusing on transport and value-add hydrogen products such as green iron and steel, for domestic use.</li> </ul>
<b>Renewables &amp; major projects</b>	<ul style="list-style-type: none"> <li>Only committed or financially close projects proceed. Renewable projects slow due to policy uncertainty and limited investor confidence.</li> <li>Little new infrastructure beyond current plans.</li> </ul>	<ul style="list-style-type: none"> <li>Committed and anticipated projects go ahead leading to large-scale deployment of solar, onshore wind, and storage proceeds rapidly to meet 82% renewables by 2030 target.</li> </ul>	<ul style="list-style-type: none"> <li>High growth leads to development of more speculative pipeline projects.</li> <li>Processing hubs for green commodities.</li> </ul>
<b>Government policy</b>	<ul style="list-style-type: none"> <li>All sufficiently developed government policies.</li> <li>IASR economic forecasts exclude the Future Made in Australia policy.</li> </ul>	<ul style="list-style-type: none"> <li>All sufficiently developed government policies</li> <li>IASR economic forecasts include some impacts of Future Made in Australia.</li> </ul>	<ul style="list-style-type: none"> <li>All sufficiently developed government policies</li> <li>IASR economic forecasts include moderate impacts of Future Made in Australia.</li> </ul>

Source: AEMO (2025)

# AEMO’s headline forecasts are downscaled to a regional level to give a high-level top-down view that serves as a base for the detailed bottom-up forecasting.

## Downscaling approach



Source: Oxford Economics

# AEMO's scenario assumptions are supplemented by Census, ABS data and OE's regional productivity assumptions to generate regional forecasts aligned to AEMO's scenarios.

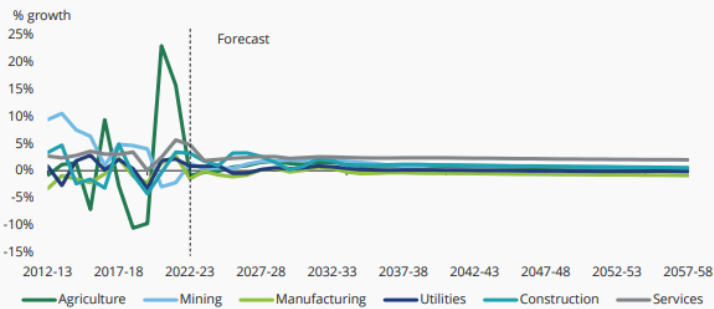
## 1. Compile AEMO average CAGRs to produce a full time series for state & national industry GVA

Industry	Scenario	Agriculture	Mining	Manufacturing	Utilities	Construction	Services
New South Wales	Progressive Change	0.3%	0.2%	-1.8%	-0.4%	0.8%	1.7%
	Step Change	0.6%	0.5%	-1.4%	-0.2%	1.1%	2.3%
	Exportless 1.5 Degrees	1.3%	0.8%	-1.1%	0.4%	1.8%	3.1%
	Green Energy Exports	1.3%	0.8%	-0.6%	0.4%	1.8%	3.1%

Table 3.1: Forecast summary for the Step Change scenario

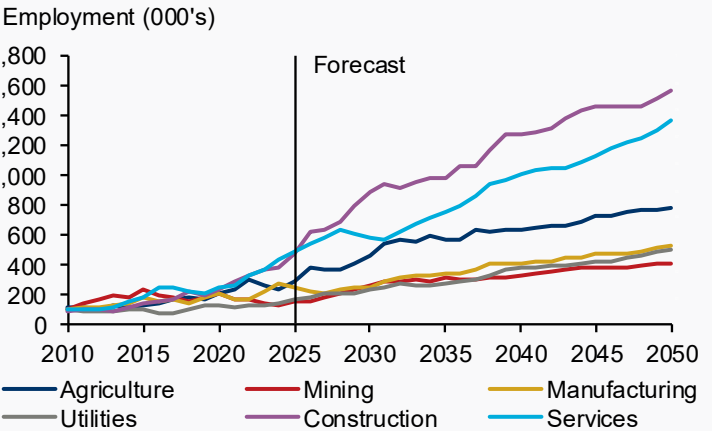
	History 2022-23	Forecast 2027-28	2037-38	2047-48	2057-58	Forecast period*
<b>GVA by industry</b>						
Agriculture (\$ billion)	\$61.9	\$63.6	\$71.8	\$77.3	\$80.8	-
CAGR over previous decade	1.4%	1.6%	1.2%	0.7%	0.5%	0.8%
Mining (\$ billion)	\$321.0	\$334.9	\$394.3	\$430.9	\$459.9	-
CAGR over previous decade	3.4%	0.9%	1.6%	0.9%	0.7%	1.0%
Manufacturing (\$ billion)	\$124.0	\$120.8	\$120.1	\$113.7	\$105.1	-
CAGR over previous decade	-0.4%	-0.3%	-0.1%	-0.5%	-0.8%	-0.5%
Utilities (\$ billions)	\$45.2	\$45.7	\$47.6	\$47.8	\$47.4	-
CAGR over previous decade	0.6%	0.3%	0.4%	0.1%	-0.1%	0.1%
Construction (\$ billion)	\$158.6	\$178.3	\$200.5	\$220.8	\$236.2	-
CAGR over previous decade	0.3%	1.3%	1.2%	1.0%	0.7%	1.1%
Services (\$ billion)	\$1,345	\$1,504	\$1,909	\$2,395	\$2,942	-
CAGR over previous decade	3.1%	2.8%	2.4%	2.3%	2.1%	2.3%

Chart B.1: Step Change industry GVA growth, Australia

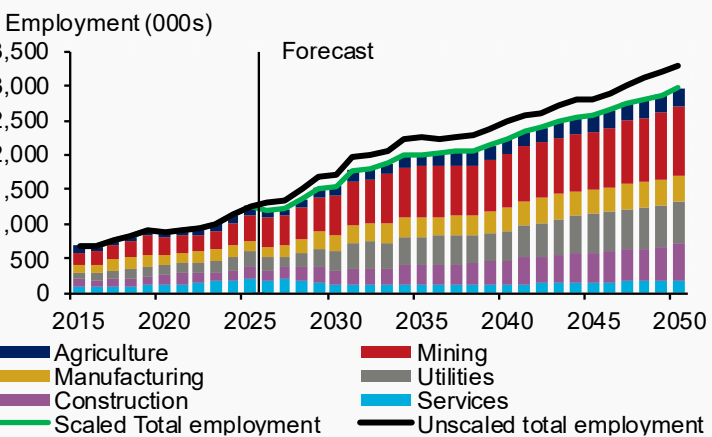


Source: Deloitte Access Economics (2024), AEMO (2025)

## 2. For each state industry pair, OE productivity growth is used to produce employment forecasts

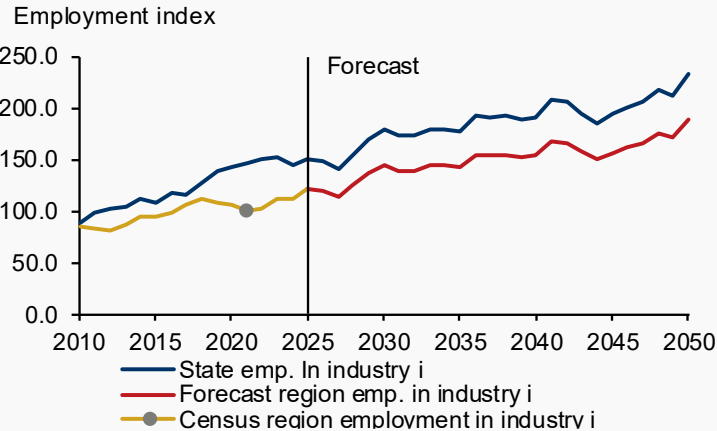


## 3. These employment forecasts are then scaled to align to AEMO's national productivity assumptions

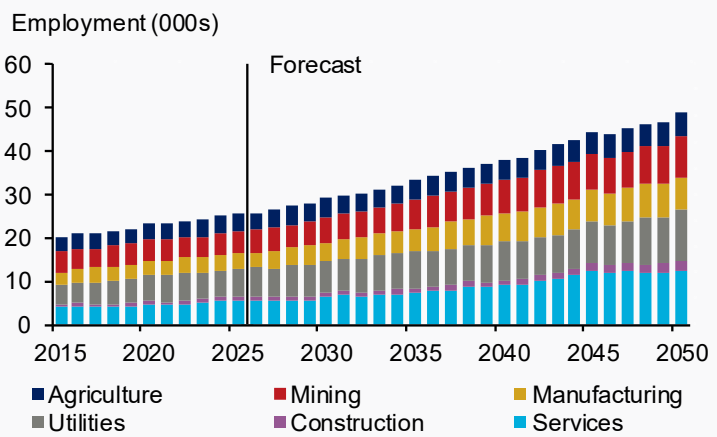


Please note these charts contain illustrative dummy data

## 4. Regional employment by industry (Census interpolated by ABS LF) grows with state industry

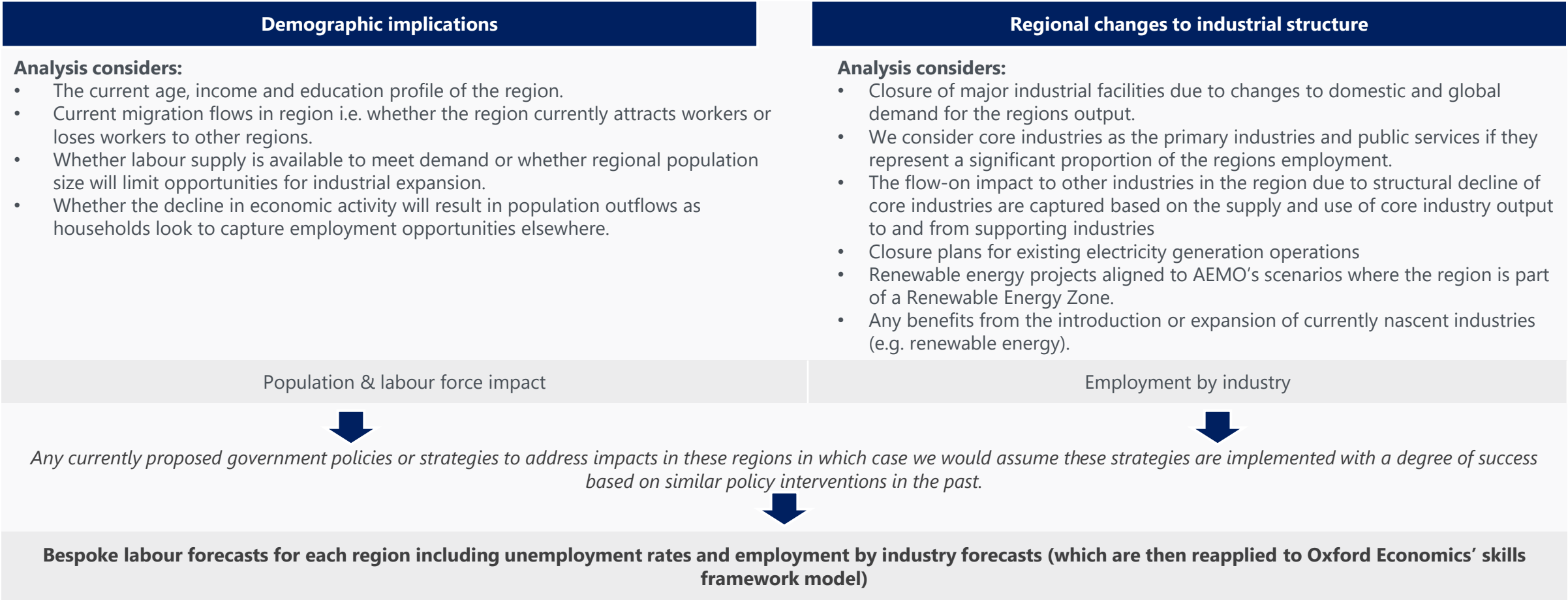


## Regional industry employment forecasts are used to produce total employment & UR by region



# The top-down downscaled forecasts are supplemented with detailed bottom-up regional analysis to produce the final forecasts.

## Bottom-up forecasting approach



Source: Oxford Economics



# Explicit assumptions are made for the closure date of existing sites, completion date of proposed sites and the affected employment of major projects in the region

## Mining

- Assumed mine closure dates are based on government documentation, mine operator disclosure and desktop research.
- Under the Progressive Change Scenario, unless an explicit closure date is listed by mine operators, the explicit closure date is assumed to be when economically and technically extractable coal resources will deplete based on current rates of production.
- Beyond explicit mine closures, coal demand is expected to decline over the forecast period driven by declining domestic and global demand. Under all scenarios, employment in operating mines (those that have not hit their assumed closure date) responds to global demand for coal, decreasing over the forecast period.

## Electricity supply

- Assumed closure dates of operating assets are based on AEMO 2025 Draft IASR *'Generator Summary - Existing, Committed and Anticipated generators'*.
- Proposed projects and completion dates are based on a combination of AEMO *'General Information'* and desktop research. Proposed projects are assigned to scenarios based on AEMO commitment status whereby committed projects are included in all three scenarios, anticipated projects are included only in Step Change and Green Energy Industries and a subset of proposed projects are included in Green Energy Industries for projects that are further along the development pathway.
- Beyond explicit project assumptions, electricity supply additions are assumed to follow the pathway from AEMO's Installed Generator Capacity by REZ from the 2024 ISP from 2030 through to 2050.

- Ongoing employment assumptions for each new entrant are estimated based on a combination of public employment disclosures where possible, estimates based on similar projects and AEMO's 2024 ISP employment factors.

## Other major projects

- Other major projects that are expected to break ground over the near-term and are likely to drive an increase in employment above business-as-usual activity, are explicitly included in the regional economic modelling.
- These projects are identified from various sources including:
  - OEA Non-Residential and Engineering Construction Masterplans
  - RenewMap
  - Resources and Energy major projects
  - HyResource CSIRO
  - Critical minerals prospectus
  - NZEA regional profiles
  - Regional development strategies
  - Council project pipelines

## Construction

- Employment in heavy & civil engineering construction is aligned to identified projects in mining, utilities and other key sectors.
- Employment numbers are based on a combination of public employment disclosures, OE estimates based on similar projects and AEMO's 2024 ISP employment factors for energy supply assets.

# Central QLD – Explicit coal mining assumptions (1)

## Operating sites – Mining – Within region

Site	Assumed closure date			Employment	Notes
	PC	SC	GEI		
Baralaba Coal Mine	BFP*	BFP	BFP	441	Expected closure date calculated based on reserves and production.
Blackwater Coal Mine	2039	2039	2039	2,190	Expected closure date calculated based on reserves and production.
Callide Coal Mine	BFP	BFP	BFP	914	Linked to Callide power station - Callide B planned closing in 2028 and Callide C planned closing in 2051.
Curragh Coal Mine	2043	2043	2043	2,084	Linked to Stanwell power station with planned closure in 2043.
Dawson Complex	2034	2034	2034	1,555	Expected closure date calculated based on reserves and production.
Ensham Coal Mine	BFP	2037	2037	170	Approval granted to 2037. Expected closure date calculated based on reserves and production under Progressive Change and Step Change
Gregory Crinum Coal Mines	2035	2035	2035	266	Approval granted to 2035.
Jellinbah Coal Mine	BFP	BFP	BFP	955	Expected closure date calculated based on reserves and production.
Kestrel Coal Mine	2046	2032	2032	912	Extension to 2046 in approval process, assumed to go ahead under Progressive Change.
Meteor Downs South Coal Mine (MDS)	2027	2027	2027	141	Sojitz (Owners) expect end of mine life in mid 2027.
Oaky Creek Coal Mine	2028	2028	2028	1,038	Expected closure date calculated based on reserves and production.
Rolleston Coal Mine	2036	2036	2036	1,183	Linked to Gladstone power station. However, three-quarters of coal goes to export. Expected closure date calculated based on reserves and production.
Yarrabee Coal Mine	BFP	BFP	BFP	545	Expected closure date calculated based on reserves and production.
Cook Colliery Coal Mine	BFP	2046	2046	186	Initial mining lease to 2046. Expected closure date calculated based on reserves and production under Progressive Change.
Bluff Coal Mine	BFP	2023	2023	315	Currently under care & maintenance, assumed to remain closed under Step Change and Green Energy Industries and Expected closure date calculated based on reserves and production under Progressive Change.

Source: Oxford Economics

\*BFP refers to Beyond Forecast Period

## Central QLD – Explicit coal mining assumptions (2)

### Proposed projects – Mining - Within region

Site	Assumed completion date			Employment impact	Notes
	PC	SC	GEI		
Gemini Coal Mine – New	2026	2026	-	330	Close to reaching approval.
Star Coal Mine – New	2026	-	-	100	Has received approval but there has been limited detail over the last two years. Assumed to only go ahead under Progressive Change.
Rolleston Stage 2 – Expansion	2027	2027		175	Strong development details and contract out for construction work.
Ensham Coal Mine – Extension	2037	2037	2037	-	Received approval to extend mine life to 2037.
Gregory Crinum Coal Mines – Extension	2035	2035	2035	-	Received approval to extend mine like to 2035
Kestrel Coal Mine - Extension	2046	-	-	-	Not yet approved but strong development detail. Assumed to go ahead under Progressive Change.
Karin Coal Mine - New	-	-	-	-	Not enough public information and no formal date from Department of Industry, Science and Resources
Springsure Project - New	-	-	-	-	Not expected to go ahead – Insufficient development information
Minyango Project - New	-	-	-	-	Not expected to go ahead – Insufficient development information
Washpool Project - New	-	-	-	-	Not expected to go ahead – Insufficient development information
Taraborah - New	-	-	-	-	Not expected to go ahead – Insufficient development information
Blackwater South – Expansion	-	-	-	-	Not expected to go ahead – under approval process since 2022
Baralaba Coal Mine - Expansion	-	-	-	-	Not expected to go ahead. There has been several changes of project proponent and EIS cut-off date has been extended several times.

Source: Oxford Economics

# Central QLD – Explicit other mining assumptions

## Operating sites – Other Mining

Site	Assumed closure date			Employment	Notes
	PC	SC	GEI		
Kunwarara	BFP	BFP	BFP	200	80 year mine life.
Cracow	2033	2033	2033	265	Draft closure plans have been drafted although dates are uncertain. Roughly 500kt mined per year and 4500 is grand total measured, indicated and inferred gives mine life max of 9 years - conservatively included given significant exploration investment.

## Proposed projects – Other Mining

Site	Assumed completion date			Employment impact	Notes
	PC	SC	GEI		
HPA First Project - Stage 2	2026	2026	2026	120	Committed project assumed to go ahead under all scenarios
Mt Chalmers	-	-	2030	63	Strong development information but still in early stages of development. Assumed to go ahead under Green Energy Industries.
Mount Morgan Tailings Project	2025	2025	2025	150	Committed project assumed to go ahead under all scenarios
Mahalo Gas project	2029	2029	2029	50	Very strong development information although still in pilot phase, Contracts being awarded.
Gladstone Green Iron Project	-	-	-	-	Not enough development information. Assumed not to go ahead

Source: Oxford Economics

# Central QLD – Explicit electricity supply assumptions (1)

## Operating sites – electricity supply

Site	Assumed closure date			Type	Employment	Notes
	PC	SC	GEI			
Gladstone power station	2035	2035	2035	Coal	320	AEMO indicate planned closure in 2035.
Middlemount solar farm	2050	2050	2050	Solar	3	AEMO indicate planned closure in 2050.
Lilyvale solar farm	2048	2048	2048	Solar	14	AEMO indicate planned closure in 2048.
Emerald Solar Park	2048	2048	2048	Solar	9	AEMO indicate planned closure in 2048.
Clermont solar farm	2049	2049	2049	Solar	10	AEMO indicate planned closure in 2049.
Stanwell power station	2043	2043	2043	Coal	321	AEMO indicate planned closure in 2043.
Yarwun power station	2050	2050	2050	Gas	25	AEMO indicate planned closure in 2050.
Callide power station B	2031	2031	2031	Coal	120	AEMO indicate planned closure in 2028 but has recently been announced that it will extend to 2031.
Callide power station C	BFP	BFP	BFP	Coal	143	AEMO indicate planned closure in 2051.
Moura solar farm	BFP	BFP	BFP	Solar	12	AEMO indicate planned closure in 2070.

Source: Oxford Economics

## Central QLD – Explicit electricity supply assumptions (2)

### Proposed projects – electricity supply

Site	Assumed completion date			Type	Employment impact	Notes
	PC	SC	GEI			
Clarke Creek wind farm	2025	2025	2025	Wind	15	AEMO Committed status.
Broadsound Solar Farm	2026	2026	2026	Solar	4	AEMO Committed status.
Tarong BESS - Stanwell	2025	2025	2025	BESS	12	AEMO Committed status.
Lotus Creek Wind Farm	2027	2027	2027	Onshore wind	15	AEMO Committed status.
Woolooga BESS	2026	2026	2026	BESS	5	AEMO Committed status.
Boulder Creek Wind Farm (Stage 1)	-	2026	2026	Onshore wind	12	AEMO Anticipated status.
Aldoga Solar Farm	2026	2026	2026	Solar	10	AEMO Anticipated status, but has been completed in 2025, to complete final connection by the end of 2025 (Financial year 2026).
Aldoga BESS Stage 1	-	2027	2027	BESS	28	AEMO Anticipated status.
Stanwell BESS	-	2027	2027	BESS	12	AEMO Anticipated status.
Broadsound BESS	-	2026	2026	BESS	1	AEMO Anticipated status.
Big-G Pumped Hydro Project	-	-	2033	Pumped Hydro	64	AEMO Proposed-Development status.
Kariboe Wind Farm	-	-	2030	Onshore wind	15	AEMO Proposed-Development status.
Raglan BESS	-	-	2027	BESS	7	AEMO Proposed-Development status.
Wurdong BESS	-	-	2027	BESS	16	AEMO Proposed-Development status.
Moah Creek Solar Farm	-	-	2028	Solar	39	AEMO Proposed-Development status.

Source: Oxford Economics



# Central QLD – Explicit electricity supply assumptions (3)

## Proposed projects – electricity supply

Site	Assumed completion date			Type	Employment impact	Notes
	PC	SC	GEI			
Blackwater Hybrid System	-	-	2029	Solar	19	AEMO Proposed status with approvals.
Dingo Solar Farm	-	-	2026	Solar	9	AEMO Proposed status with approvals.
Moah Creek Wind Farm	-	-	2028	Onshore Wind	15	AEMO Proposed status with approvals.
Raglan Solar Farm	-	-	2026	Solar	33	AEMO Proposed status with approvals.
Mount Hopeful BESS	-	-	2029	BESS	12	AEMO Proposed status with approvals.
Mount Hopeful Wind Farm	-	-	2029	Onshore Wind	10	AEMO Proposed status with approvals.
Smoky Creek Hybrid Facility - BESS	-	-	2028	BESS	24	AEMO Proposed status with approvals.
Smoky Creek Hybrid Facility - Solar	-	-	2029	Solar	30	AEMO Proposed status with approvals.
Callide wind farm	-	-	2026	Onshore Wind	20	AEMO Proposed status with approvals.
Upper Calliope solar farm	-	-	2028	Solar	100	AEMO Proposed status with approvals.
Eurimbula Hybrid Facility - Battery Storage	-	-	2026	BESS	27	AEMO Proposed status with approvals.
Eurimbula Solar Farm	-	-	2026	Solar	77	AEMO Proposed status with approvals.
Specimen Hill BESS - Storage - KCI	-	-	2029	BESS	12	AEMO Proposed status with approvals.
Specimen Hill Wind Farm	-	-	2026	Onshore Wind	30	AEMO Proposed status with approvals.
Banana Range Wind Farm	-	-	2026	Onshore Wind	15	AEMO Proposed status with approvals.

Source: Oxford Economics

# Central QLD – Explicit electricity supply assumptions (4)

## Proposed projects – electricity supply

Site	Assumed completion date			Type	Employment impact	Notes
	PC	SC	GEI			
Callide Gas Peaker - KCI	-	-	-	Gas	-	AEMO Proposed status with less public detail or approval.
Clarke Creek Wind Farm Stage 2	-	-	-	Onshore wind	-	AEMO Proposed status with less public detail or approval.
Clarke Creek 2 BESS - KCI	-	-	-	BESS	-	AEMO Proposed status with less public detail or approval.
Three Rivers BESS	-	-	-	BESS	-	AEMO Proposed status with less public detail or approval.
Three Rivers Solar Farm	-	-	-	Solar	-	AEMO Proposed status with less public detail or approval.
Bouldercombe North BESS - Quintas	-	-	-	BESS	-	AEMO Proposed status with less public detail or approval.
Capricorn BESS - KCI	-	-	-	BESS	-	AEMO Proposed status with less public detail or approval.
Lilyvale BESS - KCI	-	-	-	BESS	-	AEMO Proposed status with less public detail or approval.
Callide Power Station Solar Farm	-	-	-	Solar	-	AEMO Proposed status with less public detail or approval.
Callide Energy Hub - KCI	-	-	-	BESS	-	AEMO Proposed status with less public detail or approval.
Callide Solar Power Station BESS	-	-	-	BESS	-	AEMO Proposed status with less public detail or approval.
Callide Wind Farm	-	-	-	Onshore Wind	-	AEMO Proposed status with less public detail or approval.
Theodore BESS	-	-	-	BESS	-	AEMO Proposed status with less public detail or approval.
Theodore Solar Farm	-	-	-	Solar	-	AEMO Proposed status with less public detail or approval.
Theodore Wind Farm	-	-	-	Onshore Wind	-	AEMO Proposed status with less public detail or approval.

Source: Oxford Economics

# Central QLD – Other explicit major project assumptions (1)

## Proposed projects – Other

Site	Assumed completion date			Type	Employment impact	Notes
	PC	SC	GEI			
Mount Morgan Tailings Project	2025	2025	2025	Minerals processing	150	Under Construction
HPA First Project (Stage 2)	2026	2026	2026	Minerals processing	120	Under Construction
Gladstone Grid Reinforcement	2029	2029	2029	Energy transmission	228	Project was included in the Federal Government's Renewable Energy Priority List.
Queensland SuperGrid South	2031	2031	2031	Energy transmission	410	Project was included in the Federal Government's Renewable Energy Priority List.
Queensland SuperGrid North	2033	2033	2033	Energy transmission	522	Project was included in the Federal Government's Renewable Energy Priority List.
Fitzroy to Gladstone Pipeline Project - Water Treatment Plant	2027	2027	2027	Water utilities	26	Under Construction
Kestrel Coal Mine Waste Gas Generator	2026	2026	2026	Energy from waste facilities	4	Under Construction
Euroa Hydrogen Project Phase 1	-	2030	2030	Hydrogen	40	Front-Engineering Design (FEED) under development.
Sumitomo Green Hydrogen Production and Rio Tinto Decarbonisation Pilot Project	-	2026	2026	Hydrogen	5	Under Construction
Euroa Hydrogen Project Phase 2	-	-	2033	Hydrogen	40	Front-Engineering Design (FEED) under development but dependant on phase 1.
Gladstone MCH Project	-	-	2029	Hydrogen	9	Under development – Feasibility studies complete

Source: Oxford Economics

## Central QLD – Other explicit major project assumptions (2)

### Proposed projects – Other

Site	Assumed completion date			Type	Employment impact	Notes
	PC	SC	GEI			
Green Methanol Feasibility Study	-	-	2028	Hydrogen	49	Undergoing feasibility study.
H2-Hub Gladstone	-	-	2030	Hydrogen	140	Draft EIS being prepared by proponent.
Sumitomo Gladstone Green Hydrogen Project	-	-	2030	Hydrogen	43	Undergoing feasibility study.
Mt Chalmers mineral processing facility	-	-	2032	Minerals processing	63	Pre-Feasibility Study completed
Shoalwater Bay School of Armour	-	-	-	Defence	-	
RAAF Rockhampton	-	-	-	Defence	-	
Rockhampton Army Barracks	-	-	-	Defence	-	
Fleet Base North (Gladstone)	-	-	-	Defence	-	

Source: Oxford Economics

# REFERENCES

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# REFERENCES

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1. NZEA (2025) Identifying the Net Zero Economy Authority's regions of focus. Available [here](#).
2. AEMO (2025) Draft Inputs, Assumptions and Scenarios Report Stage 2. Available [here](#).



# SOURCES

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- AEMO (2025) Draft Inputs, Assumptions and Scenarios Report Stage 2. Available [here](#).
- ABS (2001) Australian Standard Classification of Education (ASCED). Available [here](#).
- ABS (2013) Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006 (Revision 2.0). Available [here](#).
- ABS (2021) Census. Available [here](#).
- ABS (2024) Personal Income in Australia. Available [here](#).
- ABS (2025) Detailed Labour force. Available [here](#).
- Deloitte Access Economics (2024) 2024 Economic Forecast. Available [here](#).
- Jobs & Skills Australia (2023) Australian Skills Classification. Available [here](#).
- National Pollutant Inventory. Available [here](#).
- Oxford Economics (2025) Engineering Construction Masterplan.
- Oxford Economics (2025) Non-Residential Building Masterplan.

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