

# Regional Profiles

## Central Queensland

**Total Area:** 107,744 sq. km    **Population:** 221,445    **Working Zones:** Banana, Biloela, Central Highlands-East, Emerald & Central Highlands-West, Gladstone & surrounds, Rockhampton & surrounds, Yeppoon & surrounds  
(maps at end)

### Region Selection Rationale

Exposure to decarbonisation	Potential to harness economic opportunities from decarbonisation
<ul style="list-style-type: none"> <li><b>Carbon intensity:</b> Large number of facilities (incl. 4 coal-fired power stations and 25 safeguards. As of 2023-24, safeguards in the region account for 54% of Qld's safeguard scope 1 emissions); high carbon-intensive employment</li> <li><b>Urgency:</b> 2 coal-fired power stations projected to close by 2035.</li> <li><b>Adaptive capacity:</b> Moderate with pockets of lower adaptive capacity, particularly in areas with higher concentration of coal mining.</li> <li><b>Readiness:</b> no specific regional transition planning for Central Qld (outside of Gladstone) but some regional planning in areas such as Central Highlands.</li> </ul>	<ul style="list-style-type: none"> <li><b>Natural capital:</b> Considerable green industry potential – including green aluminium and alumina, strong renewable energy resources (solar &amp; wind).</li> <li><b>Workforce compatibility:</b> High proportion of workers in Central Qld North and Gladstone in roles compatible with forecast clean energy occupations. Medium compatibility in Central Qld South.</li> <li><b>Enabling infrastructure:</b> High, including 5G presence, Gladstone airport and proposed future hydrogen port in region. Port of Gladstone has eight main wharf centres, comprising 20 wharves in total, handling export of over 30 different products. Curtis Island is home to the LNG export terminals, the only such facilities on Australia's east coast.</li> </ul>

### Carbon-Intensive Industries

#### Coal Fired Power Stations (CFPS)

Name	Owner	Public closure date (AEMO NEM Gen Apr 2025 <sup>a</sup> )	Supplying Coal Mine	Scope 1 emission (tCO <sub>2</sub> -e) (23/24)	% of Scope 1 Qld emissions (23/24)	% of Scope 1 Aus emissions (23/24)
Stanwell	Stanwell (Qld gov.)	2043	Curragh	7.0 m	8%	2%
Gladstone	Rio Tinto, NRG Energy & others	2035	Rolleston, Callide, & Ensham	6.5 m	7%	2%
Callide B	CS Energy (Qld gov.)	2031	Callide	4.0 m	5%	1%
Callide C	IG Power & CS Energy (Qld gov.)	Not provided	Callide	0.7 m	1%	0.2%
Total:	4		4	18.1 m	21%	6% <sup>1</sup>

<sup>a</sup> Access may be restricted on a secure network: <https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/nem-forecasting-and-planning/forecasting-and-planning-data/generation-information>

<sup>1</sup> Individual percentages may not add up to total due to rounding.



## Metal Manufacturing / Refineries and Smelters

Name	Owner	PPA expiry date	Power source	Scope 1 emissions (tCO <sub>2</sub> -e) (23/24)	% of Scope 1 Qld emissions (23/24)	% of Scope 1 Aus emissions (23/24)
Boyne aluminium smelter	Rio Tinto, Sumitomo, others	2029	Gladstone CFPS	0.9 m	1.0%	0.3%
Yarwun alumina refinery	Rio Tinto	N/A	Gas-fired cogeneration plant, Gladstone CFPS	2.1 m	2.4%	0.7%
Queensland alumina refinery	Rio Tinto, Rusal	N/A	Gladstone CFPS	3.1 m	3.5%	1%
Total: 3			2	6.1 m	7.0%	2.0%

## Coal mines

Type	No.
Safeguards	14
Non-safeguards	2
Total	16

## Safeguard Facilities (Emit 100,000+ tonnes CO<sub>2</sub> annually - power stations connected to grid are exempt)

Type	No.	Total scope 1 emissions (tCO <sub>2</sub> -e) (23/24)	% of Qld scope 1 safeguard emissions (23/24)	% of Aus scope 1 safeguard emissions (23/24)
Manufacturing	7	8.5 m	23%	7%
Coal mines <sup>2</sup>	14 <sup>3</sup>	5.7 m	15%	4%
Oil & gas extraction	4	5.8 m	15%	5%
Total safeguards	25 <sup>4</sup>	20.0 m	54%	16%

<sup>2</sup> Not all coal mines qualify as a safeguard facility. The total number of coal mines in Central QLD is 16 facilities.

<sup>3</sup> Ensham's underground coal mine is listed as separate coal mine, meaning Ensham is listed twice.

<sup>4</sup> Per above, for purposes of calculating total safeguard number for the region, total is 22 (treating Ensham's two mines as one mine).



# Major Industries

Gross Regional Product (GRP): \$34.6 billion (7.2% of Qld's Gross State Product)<sup>5</sup>

Ranked Industries with most value	Value (m)	% of GRP
Mining	\$18,017	52.1%
Rental, Hiring & Real Estate Services	\$2,459	7.1%
Construction	\$1,949	5.6%
Health Care & Social Assistance	\$1,593	4.6%
Manufacturing	\$1,473	4.3%

Ranked Employing Industries (by <u>usual residence</u> <sup>6</sup> )	No. of employees (% of workforce)	Ranked Employing Industries (by <u>place of work</u> <sup>7</sup> )	No. of employees (% of workforce)
Total labour force living in region	102,177 <sup>8</sup>	Total labour force working in region	100,852 <sup>9</sup>
Health Care and Social Services	13,144 (13%)	Health Care and Social Services	12,930 (13%)
Retail & Wholesale Trade	11,395 (12%)	Retail & Wholesale Trade	11,533 (12%)
Education & Training	9,344 (10%)	Educating & Training	9,334 (10%)
Construction	8,764 (9%)	Mining	9,251 (10%)
Mining	8,691 (9%)	Construction	7,929 (8%)

5 Data sourced using REMPLAN (incorporating ABS 2021 Census Place of Work Employment (Scaled); 2022 / 2023 National Input Output Tables; June 2024 Gross State Product figures)

6 Data by usual residence means only employees living in Central QLD region would be captured (regardless of whether or not they actually work in Central QLD).

7 Data by place of work means only employees working in Central QLD region would be captured (regardless of whether or not they actually reside in Central QLD).

8 Note, for purposes of calculating shares of workforce, total of 98,203 was used (total workforce minus those workers in 'Industry of Employment' categories listed as 'inadequately described' and 'not stated').

9 Note, for purposes of calculating shares of workforce, total of 96,943 was used (total workforce minus those workers in 'Industry of Employment' categories listed as 'inadequately described' and 'not stated').



## Major Investments

### Major clean energy and heavy industry projects (top 5 by value)

Project	Description	Category	Status <sup>10</sup>	Value
H2-Hub(TM) Gladstone	An industrial-scale green hydrogen and ammonia production complex	Green hydrogen	Under development	\$4,700 m
Brigalow Peaking Power Plant	The Brigalow Peaking Power Plant is proposed to feature up to 12 modular turbines, supplied by GE Verona, which are capable of using a blend of renewable hydrogen and natural gas. The power plant is forecast to be operational in 2027.	Green hydrogen	Under development	\$642 m
Aldoga Solar Farm	A flagship renewable energy project which will be directly connected to the electricity grid	Renewable energy	Under Construction	\$550 m
Gladstone PEM50 Project	A new electrolysis plant in Gladstone to manufacture renewable hydrogen with production targeted for 2025	Green hydrogen	Under Construction	\$150 m
Green Methanol Feasibility Study	Cement Australia and Mitsubishi Gas Chemical Company (MGC) signed a Memorandum of Understanding in October 2022 to conduct a feasibility study on green methanol production.	Non-Green Hydrogen	Under Construction	\$150 m

## Transmission Infrastructure Projects

### AEMO Final 2024 Integrated System Plan transmission infrastructure projects

Name	Description	Status (Draft 2024 ISP Status)	Timing (Draft 2024 ISP Timing)	Costs
Gladstone Grid Reinforcement	Increase network capacity from Central Qld into the Gladstone area to support the area's industry once Gladstone Power Station retires and add capacity between Northern and Southern Qld.	Actionable (unchanged)	Mar 2029 (Sep 2029)	\$1,300 m (±50%)
Queensland SuperGrid South	Stage 2 of the SuperGrid, under the Qld Energy and Jobs Plan, to greatly increase the transfer limit between Central and Southern Qld and connect to the Borumba Pumped Hydro project.	Actionable (unchanged)	Sep 2031 (June 2031)	\$3,300 m (±50%)
Queensland SuperGrid North	Add transfer capacity between Central and North Qld, and enable capacity in northern Qld REZs.	Future (unchanged)	2032-33 (unchanged)	\$4,200 m (±50%)

<sup>10</sup> Excluding projects that are archived, completed and paused



## Employment

Indicator (2021 Census unless otherwise stated)	Central Queensland	Queensland
Average working age	39	38
Median income (annual gross, exc. super)	\$33.8K - \$41.6K	\$33.8K - \$41.6K
Participation in workforce	62%	62%
Female participation in workforce	59%	59%
Unemployment rate (Dec 2024)	4.8%	3.9%
Regional Labour Market Index (Dec 2024)	Average	N/A

## Demographics

Indicator (2021 Census)	Central Queensland	Queensland
Median age	37	38
First Nations (% of population)	7%	5%
Population growth (2016 – 2021)	3%	10%
Educational attainment (% of population aged 15 & above)*		
• Below Y12	51%	41%
• Y12 or equivalent	49%	59%
• Cert III & IV	26%	21%
• Bachelor and above	14%	24%

\* Excludes 'not stated' and categories are not cumulative

## Housing

Indicator (2021 Census unless otherwise stated)	Central Queensland	Queensland
Homelessness <sup>11</sup>	0.4%	0.4%
Commonwealth Rent Assistance (Dec 2024) <sup>12</sup>	6%	6.6%
Mortgage stress <sup>13</sup>	9%	12%
Rental stress <sup>14</sup>	24%	32%

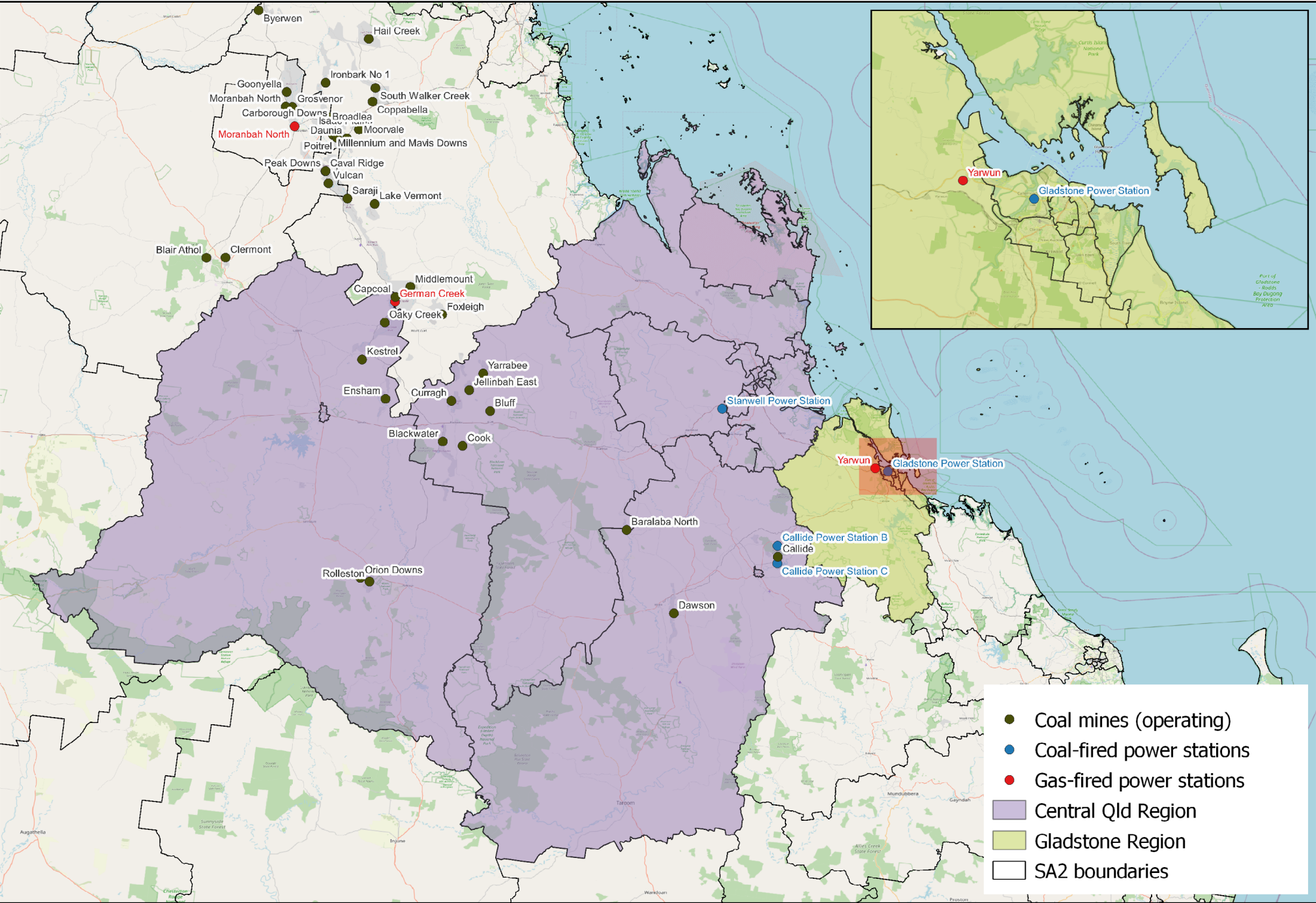
11 Share of population

12 Share of population

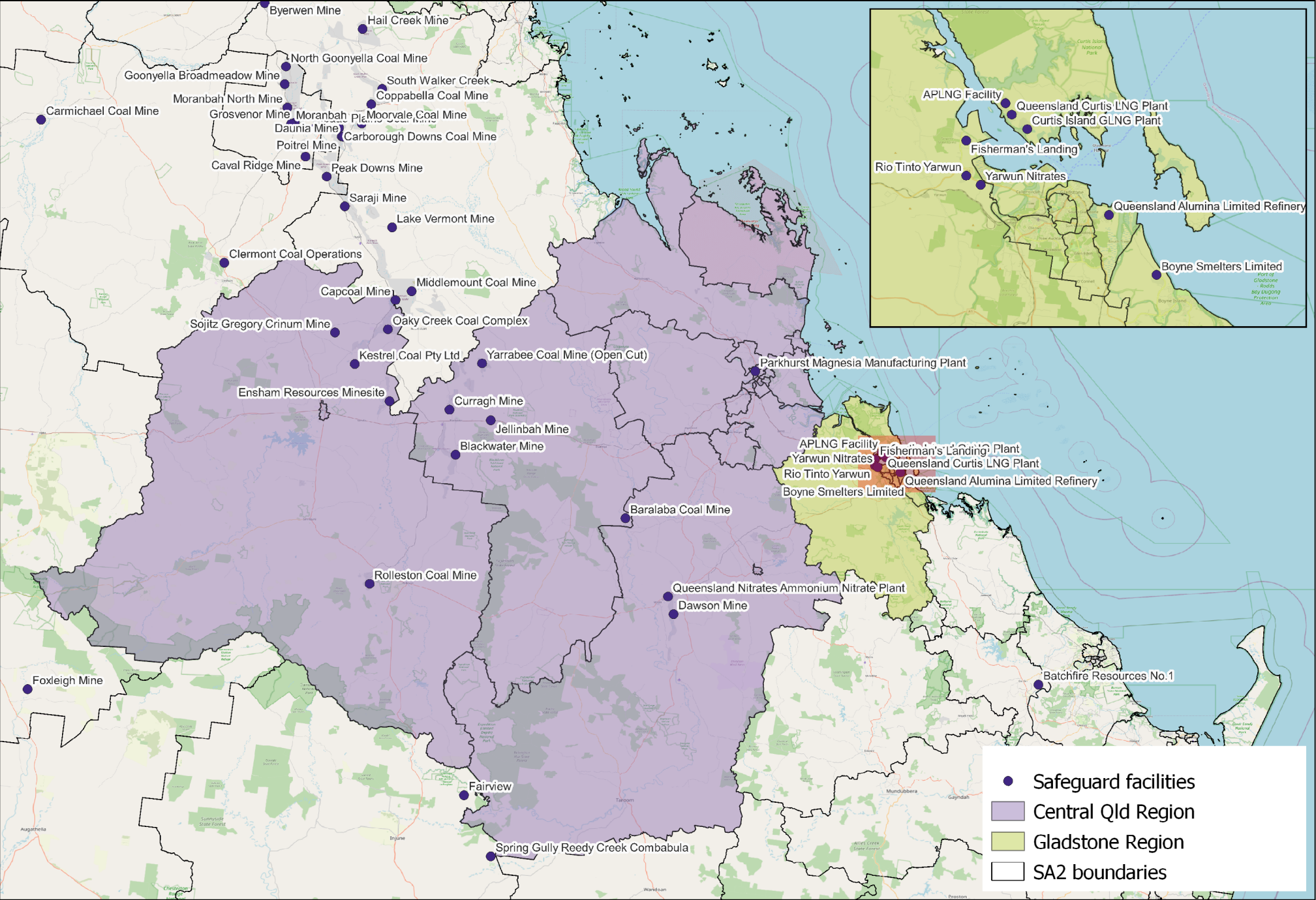
13 Share of households where repayments are >30% of household income

14 Share of households where rent payments are >30% of household income

# Map of Region – Power Stations and Mines



# Map of Region – Safeguards







## Data Sources

Section	Source	Date
<b>Overview</b>		
Total Population	<a href="#">Census</a> , ABS	2021
Area	<a href="#">Mesh Blocks - SA2 Allocation Files</a> , ABS	2021
<b>Priority Region Selection Rationale</b>		
All	<a href="#">Regional identification framework</a>	February 2025
<b>Carbon Intensive Industries</b>		
Coal Fired Power Stations	<a href="#">Greenhouse and energy information by designated generation facility</a> , CER (Gladstone & CQLD) <a href="#">Greenhouse and energy information - published data highlights</a> (QLD)	2023-24
Metal Manufacturing / Smelters & Refineries	<a href="#">Safeguard facilities data</a> , CER	2023-24
Coal mines	<a href="#">Safeguard facilities data</a> , CER	2023-24
Safeguard facilities	<a href="#">Safeguard facilities data</a> , CER	2023-24
<b>Major Investments</b>		
All	<a href="#">Funded projects</a> , ARENA	2025
	<a href="#">HyResource<sup>a</sup></a> , CSIRO	2025
	<a href="#">Resources and Energy Major Projects</a> , DISR	2024
<b>Major Industries</b>		
Ranked Industries by value	<a href="#">Growing the Gladstone Region</a> , Gladstone Regional Council	2021
	<a href="#">Economic data<sup>b</sup></a> , REMPLAN	2025
Ranked Employing Industries	<a href="#">Census</a> , ABS	2021

a Access may be restricted on a secure network: <https://research.csiro.au/hyresource/projects/projects-spreadsheet/>

b Access may be restricted on a secure network: <https://www.remplan.com.au>





Section	Source	Date
<b>Transmission Infrastructure Projects</b>		
All	<a href="#">Integrated System Plan<sup>c</sup></a> , AEMO	June 2024
<b>Employment</b>		
Average working age, median income, labour force participation	<a href="#">Census</a> , ABS	2021
Regional Labour Market Index	<a href="#">Regional Labour Market Indicator</a> , Jobs and Skills Australia (Central Qld SA4)	December 2024
Unemployment rate:		
• Gladstone & CQLD	<a href="#">Small Area Labour Markets</a> , Jobs and Skills Australia	December 2024
• Queensland	<a href="#">Labour Force</a> , Australia, ABS	December 2024
<b>Demographics</b>		
All	<a href="#">Census</a> , ABS	2016 & 2021
<b>Housing</b>		
Homelessness, mortgage stress, rental stress	<a href="#">Census</a> , ABS	2021
Commonwealth Rental Assistance	<a href="#">Benefit and Payment Recipient Demographics - quarterly data</a> , DSS	December 2024
<b>Maps</b>		
All	Produced using data from <a href="#">Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)</a> , DAFF	December 2023

Note: All datasets maintained by third party providers listed above and date reflects most recent data available.

<sup>c</sup> Access may be restricted on a secure network: <https://aemo.com.au/en/energy-systems/major-publications/integrated-system-plan-isp/2024-integrated-system-plan-isp>