Regional Profiles

Adelaide

Total Area: 1,352 sq. km   **Population:** 1,131,022   **Working Zones:** Adelaide & surrounds[1] *(maps at end of profile)*

Region Focus Rationale

Exposure to decarbonisation

- **Carbon intensity:** 7 gas-fired power stations and 3 safeguards. As of 2023-24, safeguards in the region account for 20% of SA safeguard scope 1 emissions.
- **Urgency:** High - Torrens Island power station is expected to close in 2026, Osborne is expected to close in 2027. All other power stations are not expected to close until 2037 and beyond.
- **Adaptive capacity:** Moderate, partly driven by relatively low unemployment (4.1% as of Dec 2024). Pockets of low adaptive capacity surrounding Torrens Island.
- **Readiness:** The legislative framework for the Energy Industry Jobs Plan commenced on 11 December 2024, with the commencement of the Net Zero Economy Authority Act 2024 (the Act). In January 2025, the Authority commenced consultation to assess whether Torrens Island B power station should be included in the EIJP, in the lead-up to its scheduled closure in June 2026. These consultations are focused on understanding how workers and businesses are impacted by the closure, what support workers can already access, and what other employment opportunities exist in the region.

Carbon-Intensive Industries

Gas Fired Power Stations

Name	Owner	Closure year (AEMO NEM Gen Apr 2025[a])	Scope 1 emissions (tCO2-e) (23/24)	% of SA scope 1 emissions (23/24)	% of Aus scope 1 emissions (23/24)
Barker Inlet	AGL	2044	163,814	2%	0.1%
Bolivar	Iberdrola Australia Energy Markets Pty Ltd	2045	23,494	0.2%	0.01%
Osborne	ATCO and Origin Energy	2027	156,932	2%	0.1%
Pelican Point	ENGIE	2037	677,090	7%	0.2%
Quarantine	Origin Energy	2044-55	72,916	1%	0.02%
Snapper Point	Nexif and RATCH	2046	26,704	0.3%	0.01%
Torrens Island	AGL	2026	370,328	4%	0.1%
Total 7	7		1,491,278	15%	0.5%

a   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

1   Adelaide & surrounds comprises the 4 Adelaide statistical area level 4s (SA4s) (Central and Hills, North, South, West but excludes Adelaide Hills and Onkaparinga statistical areas level 3 (SA3s), mirroring boundaries used for the EIJP.

Safeguard Facilities (Emit 100,000+ tonnes CO2 annually - power stations connected to grid are exempt)

Type	No.	Scope 1 emissions (tCO2-e) (23/24)	% of SA scope 1 safeguard emissions (23/24)	% of AUS scope 1 safeguard emissions (23/24)
Cement, lime, plaster & concrete product manufacturing (Angaston Operations & Birkenhead Operations)	2	922,272	17%	1.6%
Glass manufacturing (Orora Glass Plant Gawler)	1	189,646	3%	0.1%
Total safeguards	3	1,111,918	20%	0.8%

Major Industries

Gross Regional Product (GRP): $97.7 billion (70.1% of SA's Gross State Product)[2]

Ranked Industries with most value	Value (m)	% of GRP
Rental, Hiring & Real Estate Services	$12,636	12.9%
Health Care & Social Assistance	$11,289	11.6%
Public Administration & Safety	$8,821	9.0%
Financial & Insurance Services	$8,327	8.5%
Construction	$7,826	8.0%

Ranked Employing Industries (by usual residence[3])	No. of employees (% of workforce)	Ranked Employing Industries (by place of work[4])	No. of employees (% of workforce)
Total labour force living in region	547,065[5]	Total labour force working in region	567,786[6]
Health Care and Social Assistance	93,374 (18%)	Health Care and Social Assistance	100,641 (18%)
Retail & Wholesale Trade	65,794 (12%)	Retail & Wholesale trade	69,489 (13%)
Education & Training	49,493 (9%)	Education & Training	52,262 (10%)
Construction	43,623 (8%)	Public Administration & Safety	44,423 (8%)
Professional, Scientific & Technical Services	40,294 (8%)	Professional, Scientific & Technical Services	43,192 (8%)

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2   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)

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

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

5   Note, for purposes of calculating shares of workforce, total of 529,019 was used (total workforce minus those workers in 'Industry of Employment' categories listed as 'inadequately described' and 'not stated').

6   Note, for purposes of calculating shares of workforce, total of 549,304 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 (excluding cancelled and completed) (top projects by value)

Project	Description	Category	Status	Value
Neoen Big Battery (Blyth) Deployment Project	Neoen will procure the construction of a Grid-Forming Battery with a minimum size of 200 MW / 400MWh at Blyth in South Australia.	Battery storage	Under construction	$337.5m
Green Hydrogen and Battery Energy Storage System	Consists of demonstrator scale hydrogen production and battery storage system located at Bolivar and provides proof of concept for the transport of hydrogen absorbed in a metal hydride tank for safe handling and further utilisation in Indonesia.	Renewable energy	Under construction	$17.5 m
Hydrogen Park Adelaide	Will deliver a renewable hydrogen blend to customers on the existing gas network.	Green hydrogen	Under construction	N/A
HILT CRC - upgrading iron ore for DRI production using seawater	HILT CRC will lead the development of a scalable hydrometallurgical caustic leaching process to upgrade iron ore using the reagents derived from seawater reverse osmosis (RO) brines.	Research & Development	Feasibility	$5.73 m

Transmission Infrastructure Projects

AEMO Final 2024 Integrated System Plan (ISP)

Name	Description	Status	Timing	Costs
Mid North SA REZ Expansion	New 275kV and 132kV transmission lines to connect renewable generation to Adelaide and to supply increasing industrial load.	Actionable (progressed from Future in Draft 2024 ISP)	Jul 2029 (previously 2027-28)	$389 m (±50%) (in 2023 $ terms)

Employment

Indicator (2021 Census unless otherwise stated)[7]	Adelaide	SA
Average working age	38	39
Median income (annual gross, exc. super)	$33.8K - $41.6K	$33.8K - $41.6K
Participation in workforce	62%	60%
Female participation in workforce	58%	57%
Unemployment rate (Dec 2024)	4.1%	4.0%
Regional Labour Market Index (Dec 2024)	Poor – Above average[8]	N/A

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7   Census data used here is based on 'usual residence' and not 'place of work'

8   This range ('Poor' – 'Above average') applies to the four Adelaide SA4s (noting Adelaide Hills and Onkaparinga SA3s are excluded from NZEA's Adelaide regional definition). Adelaide – North (Poor); Adelaide – West (Average); Adelaide – Central & Hills and Adelaide – South (Above average)

Demographics

Indicator (2021 Census)	Adelaide	SA
Median age	38	40
First Nations (% of population)	2%	2%
Population growth (2016-2021)	5%	6%
Educational attainment (% of population aged 15 & above):[9]		
• Below Y12	39%	44%
• Y12 or equivalent	61%	56%
• Cert III & IV	17%	19%
• Bachelor and above	29%	24%

Housing

Indicator (2021 Census unless otherwise stated)	Adelaide	SA
Homelessness[10]	0.4%	0.4%
Commonwealth Rent Assistance (Dec 2024)[11]	5%	5%
Mortgage stress[12]	13%	12%
Rental stress[13]	31%	31%

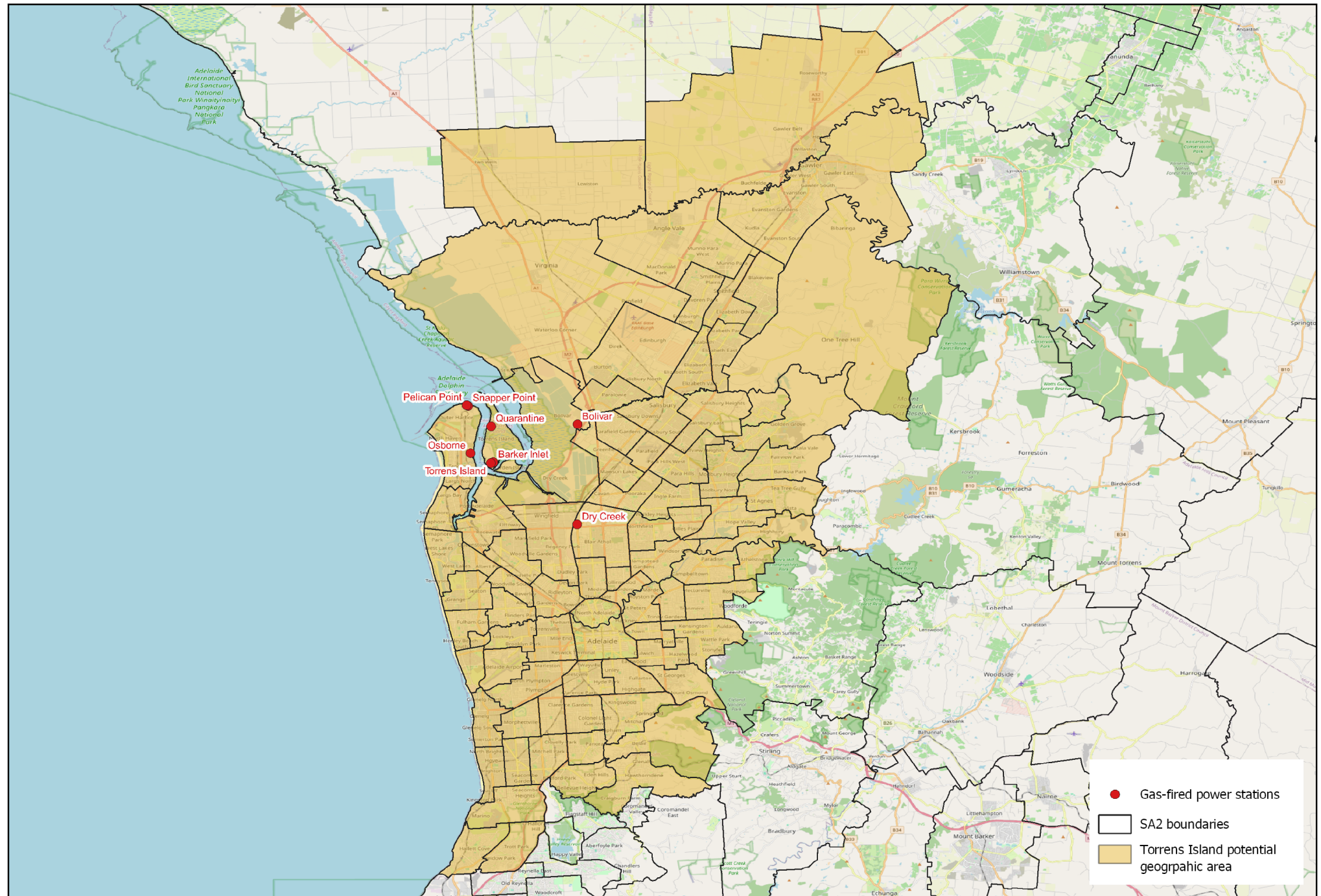9 Excludes 'not stated' and categories are not cumulative
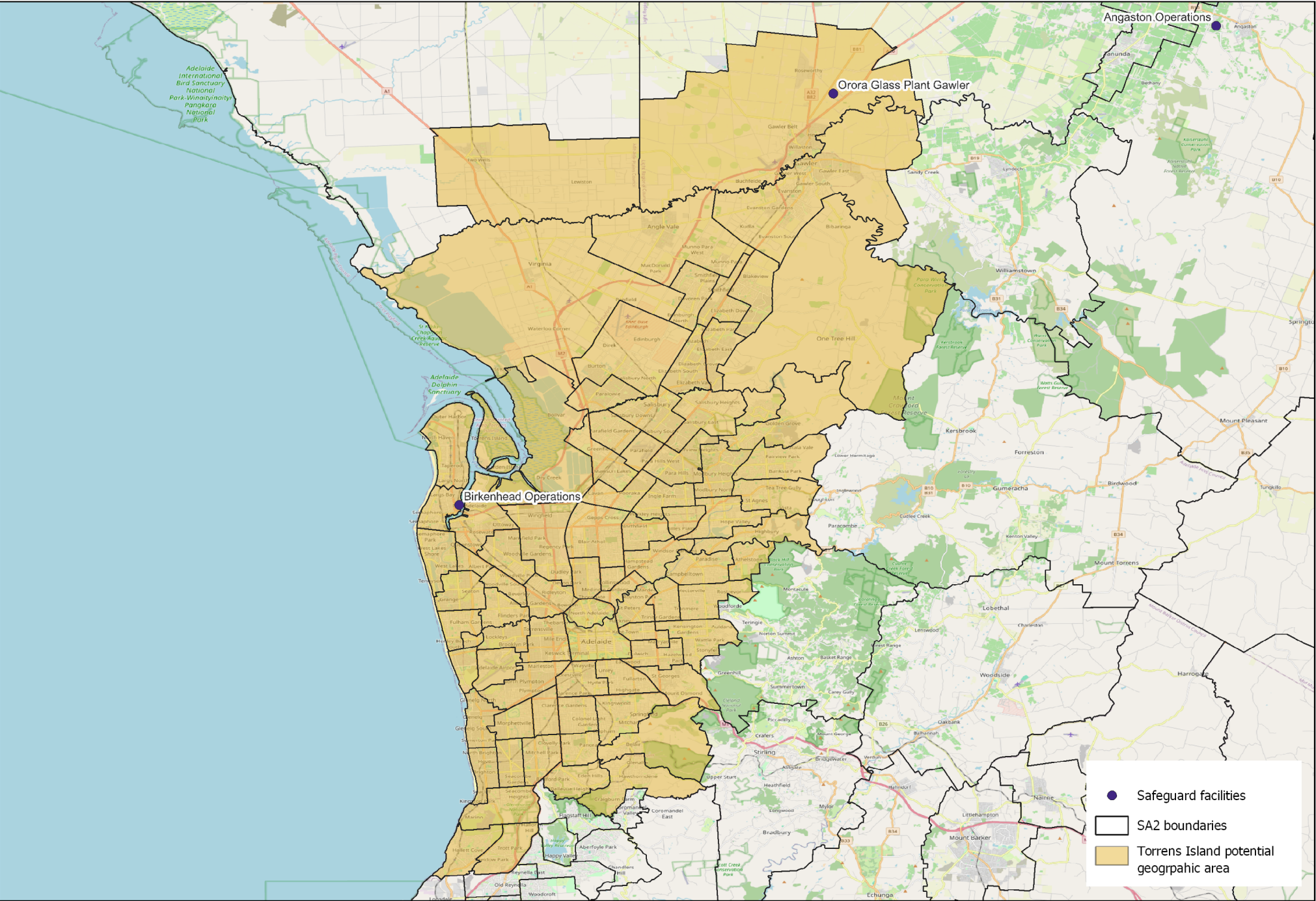10 Share of population
11 Share of population
12 Share of households where repayments are >30% of household income
13 Share of households where rent payments are >30% of household income

Map of Region – Power Stations

Legend:
- ● Gas-fired power stations
- ☐ SA2 boundaries
- Torrens Island potential geogrpahic area

Map of Region – Safeguards

Legend:
- Safeguard facilities
- SA2 boundaries
- Torrens Island potential geogrpahic area

Data Sources

Section	Source	Date
Overview		
Total Population	Census, ABS	2021
Area	Mesh Blocks - SA2 Allocation Files, ABS	2021
Region Focus Rationale		
All	Regional identification framework	Feb 2025
Emissions	Safeguard facilities data, CER	2023-24
Carbon Intensive Industries		
Gas Fired Power Stations	Greenhouse and energy information by designated generation facility, CER Greenhouse and energy information - published data highlights (SA)	2023-24
Power station closure dates	Generation Information[a], AEMO	January 2025
Safeguard facilities	Safeguard facilities data, CER	2023-24
Major Industries		
Ranked Industries by most value	Economic data[b], REMPLAN	2025
Ranked Employing Industries	Census, ABS	2021
Major Investments		
All	Funded projects, ARENA	2025
	HyResource[c], CSIRO	2025
	Resources and Energy Major Projects, DISR	2024

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

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

Section	Source	Date
Transmission Infrastructure Projects		
All	Integrated System Plan[d], AEMO	June 2024
Employment		
Average working age, median income, labour force participation	Census, ABS	2021
Regional Labour Market Index	Regional Labour Market Indicator, Jobs and Skills Australia	December 2024
Unemployment rate: • Adelaide • SA	Small Area Labour Markets, Jobs and Skills Australia Labour Force, Australia, ABS	December 2024 December 2024
Demographics		
All	Census, ABS	2021
Housing		
Homelessness, mortgage stress, rental stress	Census, ABS	2021
Commonwealth Rental Assistance	Benefit and Payment Recipient Demographics - quarterly data, DSS	December 2024
Maps		
All	Produced using data from Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), DAFF	December 2023

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

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d   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