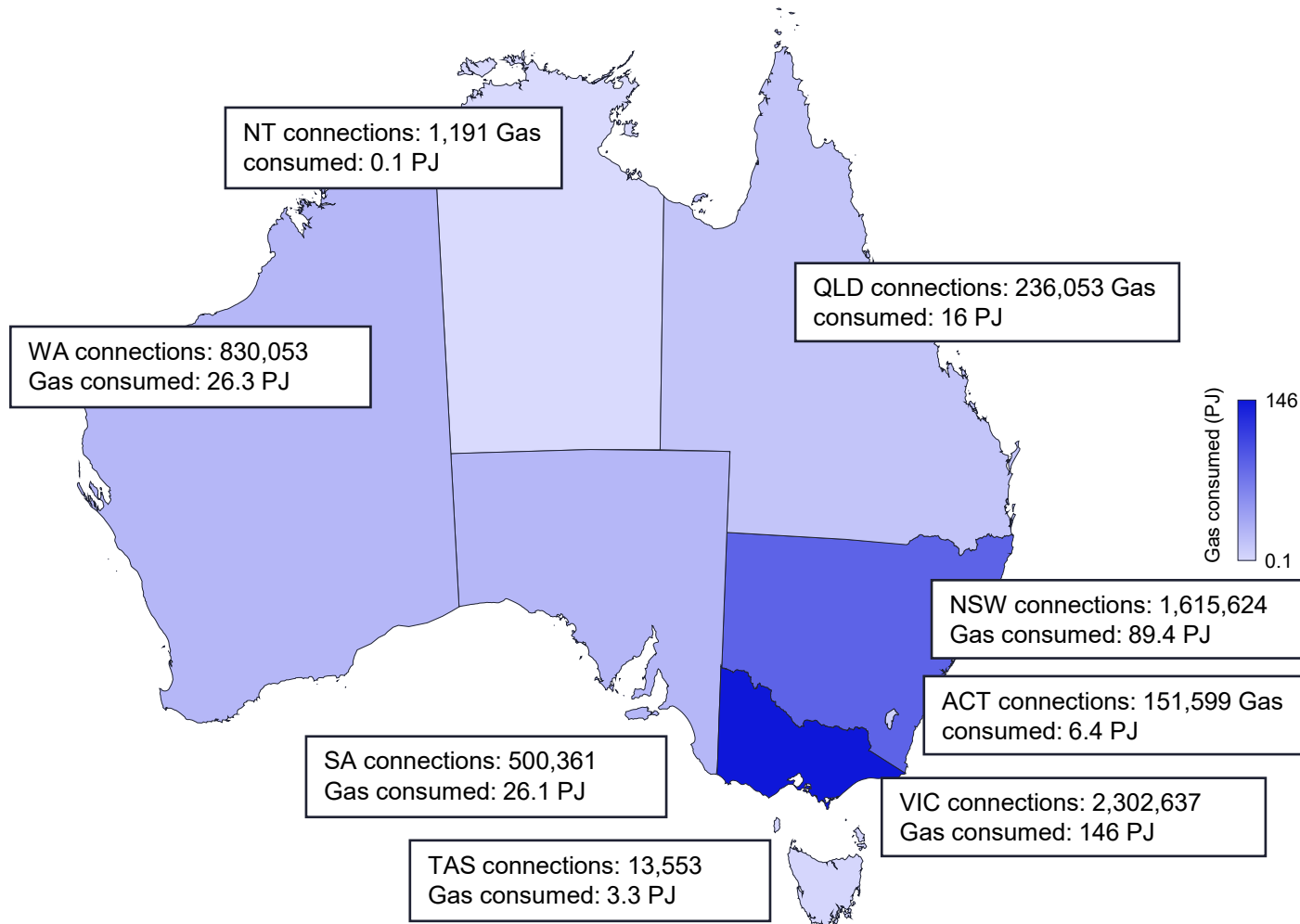


FACTSHEET:

Australia's gas distribution networks

September 2026

Gas networks serve every state and territory – 5.6 million connections, 314 PJ delivered



Delivering Energy Across Australia

Australia's gas distribution networks deliver gas to homes, businesses and industry in every state and territory in Australia.

5.6m

At the end of June 2025, there were over 5.6 million gas connections consisting of 5.5 million residential and 139,000 commercial and industrial connections.

In total, customers on Australia's gas distribution networks consumed 314 PJ in 2024/25¹.

314 PJ

Australia produces over 6,000 PJ of gas per year of which over 70 percent is used for export (including LNG compression).

Australia's gas pipelines deliver around 1,477 PJ of gas, of which 314 PJ is delivered to distribution networks, and the remaining is used directly by mining, large scale industry or for power generation.

Figure 1: Distribution network gas consumption and total connections by state².



Gas consumption varies across Australian states and territories.

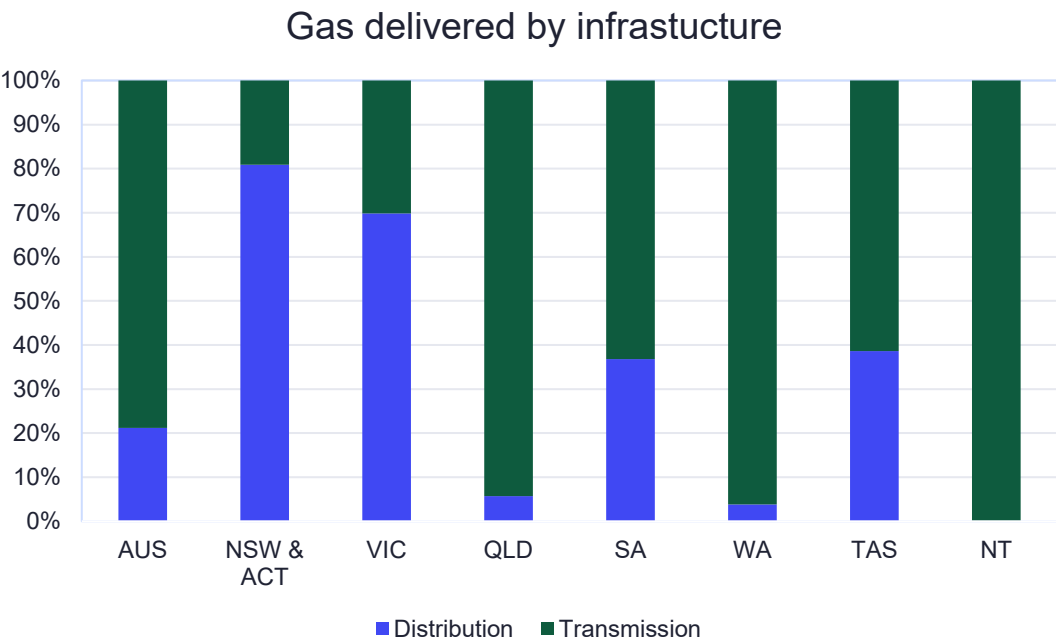


Figure 2³: Proportion of gas delivered to customers via transmission pipelines or gas distribution networks.

The gas delivered to customers directly via transmission pipelines varies from nearly 100% in the NT to around 20% in NSW, with the remainder delivered to customers via gas distribution networks.

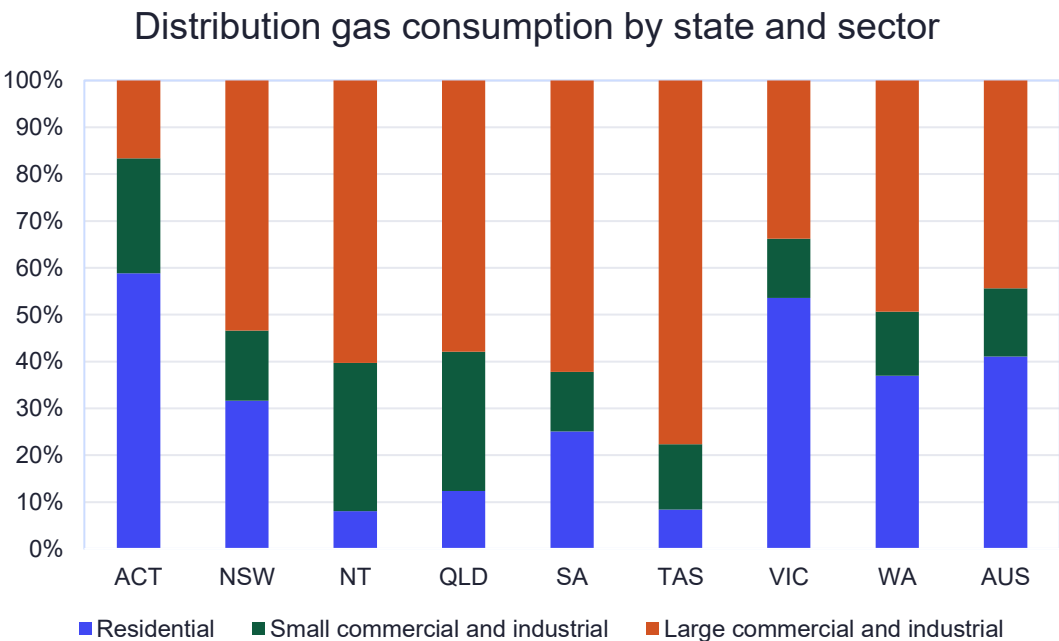


Figure 3: Proportion of consumption on distribution networks by customer types by state or territory

The consumption by customer type on gas networks also varies by state or territory. More than half of the gas for the ACT and VIC is consumed by residential customers, which represent 98% of the gas connections within those regions. On the other hand, a few large industrial customers in Tasmania account for nearly 80% of its total gas consumption.



Emissions from gas used in households represents 1.4% of Australia's total emissions.

1.4%

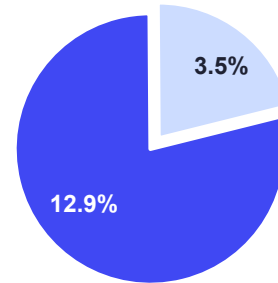
of Australia's total emissions come from gas used in households

Australia's total emissions in 2024⁴ were 466 Mt CO₂-e (most recent data).

The 1,477 PJ of natural gas consumed domestically represents 16.3% of those total emissions.

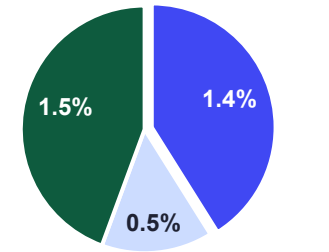
The total emissions by end users connected to the gas distribution networks was 3.5%.

Emissions from domestic gas (% of Australian total)



- Direct use by industry
- End use from network supply
- Small commercial and industrial

Emissions by sector end use from network supply



- Residential
- Small commercial and industrial
- Large commercial and industrial

Residential gas emissions by state

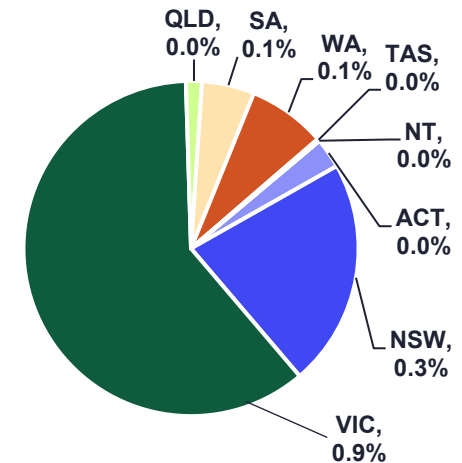


Figure 4: Relative emissions from gas use in Australia.

From the sectors connected to the distribution networks, large commercial and industrial customers were 1.6% of Australia's national emissions, residential were 1.4%, and small commercial and industrial customers were 0.5%.

Within the residential sector, Victoria's households contributed 0.9% of Australia's total emissions, followed by NSW at 0.35% and then both SA and WA at 0.1% each.



Connections grew to 5.6 million in 2025 – a net 886,000 added over the decade

5.6m

There were 5.6 million connections in 2025. Within the last decade, a net² additional 886,000 connections.

2.3m

Victoria has the highest number of total connections at 2.3 million, which is just over 40% of the national total.

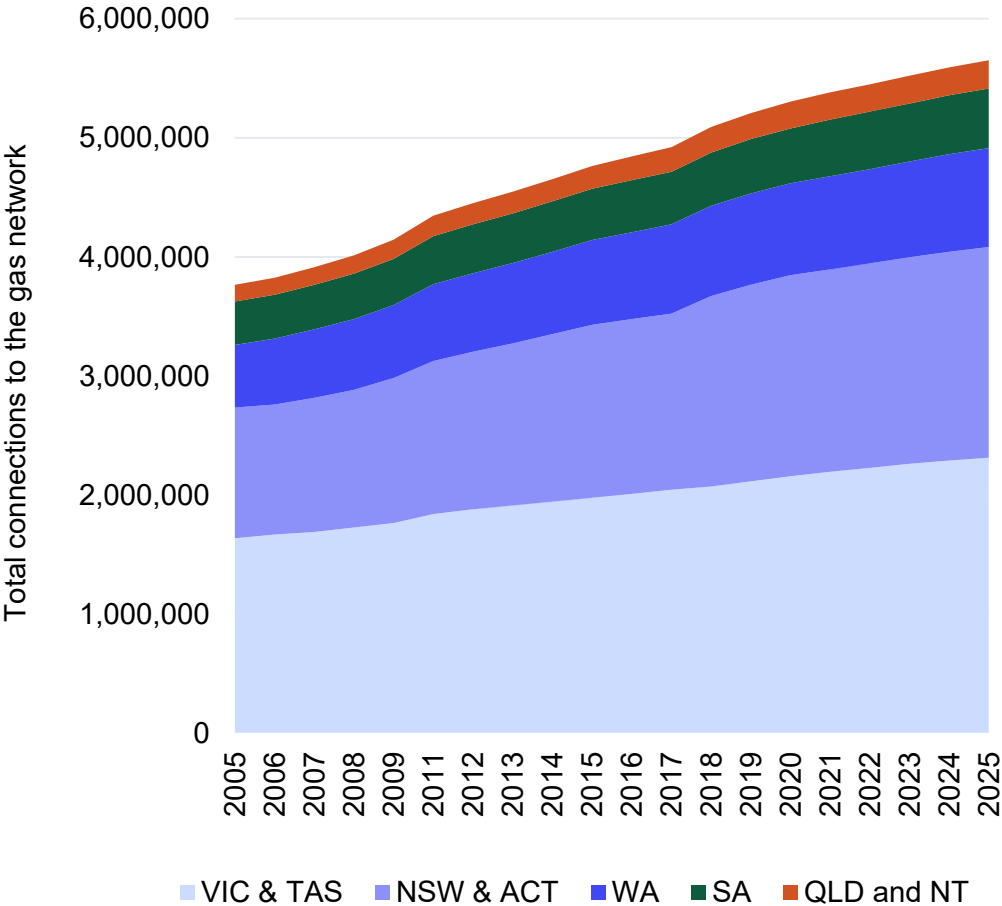


Table 1: Total number of connections

Region	2015	2020	2025
ACT	139,410	155,889	151,599
NSW	1,343,409	1,530,148	1,615,624
NT	1,136	1,147	1,191
QLD	197,135	223,013	236,053
SA	435,938	461,068	500,361
TAS	12,188	13,632	13,553
VIC	1,998,845	2,147,036	2,302,637
WA	734,345	771,264	830,053
AUS	4,862,406	5,303,197	5,651,071

Figure 5: Connections to gas distribution networks by state.



Just under half of Australian homes are connected to the gas network

Table 2: Natural gas in Australian homes (data as end June 2025)

Region	Residential connections	Per cent homes with gas	Average consumption (GJ pa)
ACT	148,589	73.4%	25.3
NSW	1,578,342	45.1%	17.9
NT	1,089	1.2%	10.1
QLD	223,605	9.8%	8.9
SA	488,398	58.4%	13.4
TAS	12,492	4.7%	22.4
VIC	2,244,961	75.1%	34.9
WA	814,508	68.6%	11.9
Australia	5,511,984	48.5%	23.4

Residential connections

5.5m

Australia’s residential gas connections reached over 5.5m in 2024/25. All jurisdictions grew over the reported period except for the ACT.

48.5%

Just under half (48.5%) of all households in Australia are connected to the gas network.



Household gas use has softened over the decade

Residential consumption

23.4 GJ

Australian average per residential connection, 2024/25 (Table 2)

Australian households have reduced their gas consumption in all regions over the decade.

The reduction is larger in ACT, TAS and VIC and is less pronounced in other regions.

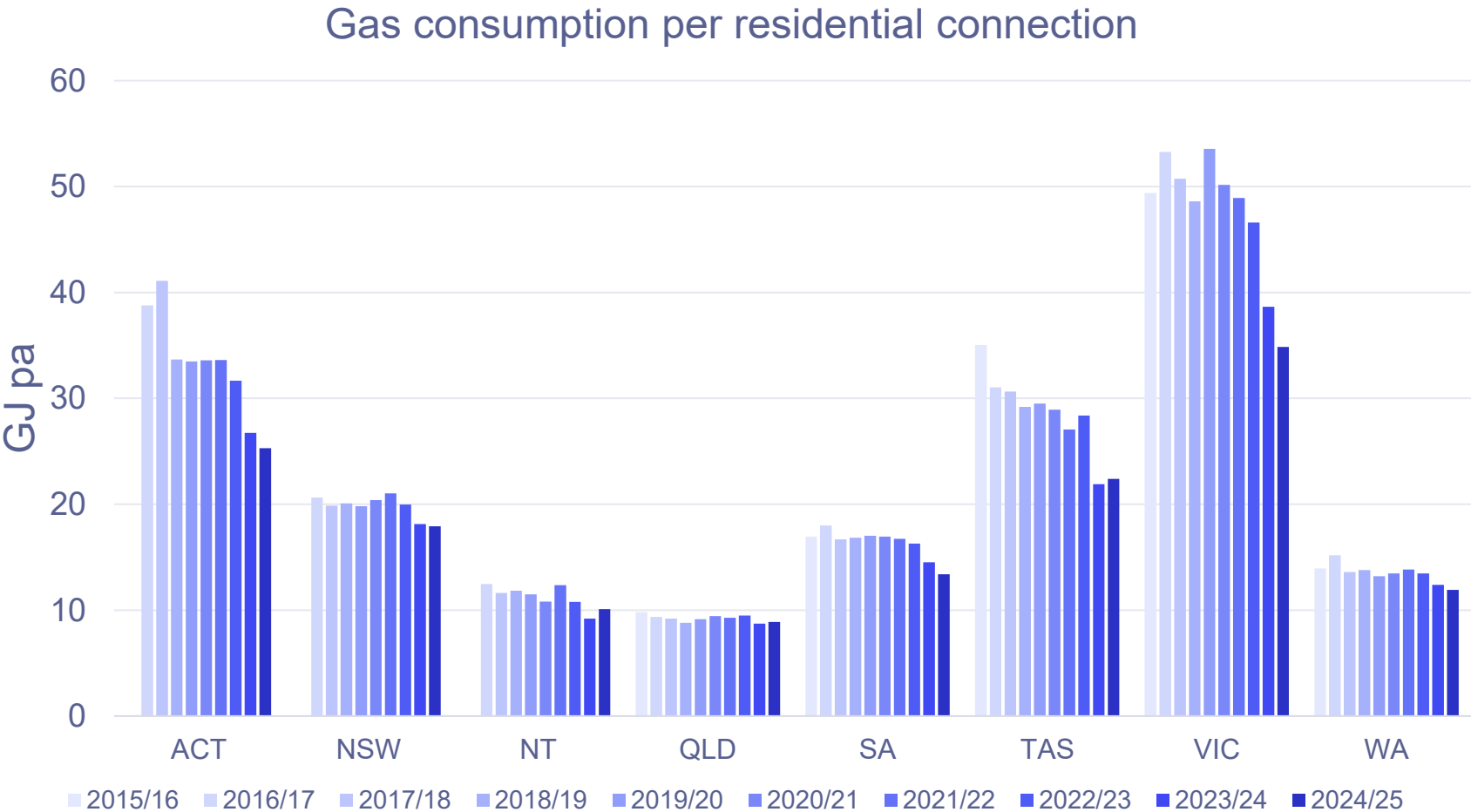


Figure 6: Change in residential consumption (2015/16 to 2024/25).



Commercial connections hold steady at roughly 138,000 nationally

Commercial connections

138k

Commercial connections are those for small businesses or industry that consume less than 10 TJ pa.

This is a diverse group of customers including restaurant owners, laundries, breweries, apartment buildings with centralised water heating and small manufacturing businesses.

Over the 10-year period reported, commercial connections have decreased in NSW and VIC and increased in QLD, SA and WA.

Total connections Australia-wide have remained constant at approximately 138,000.

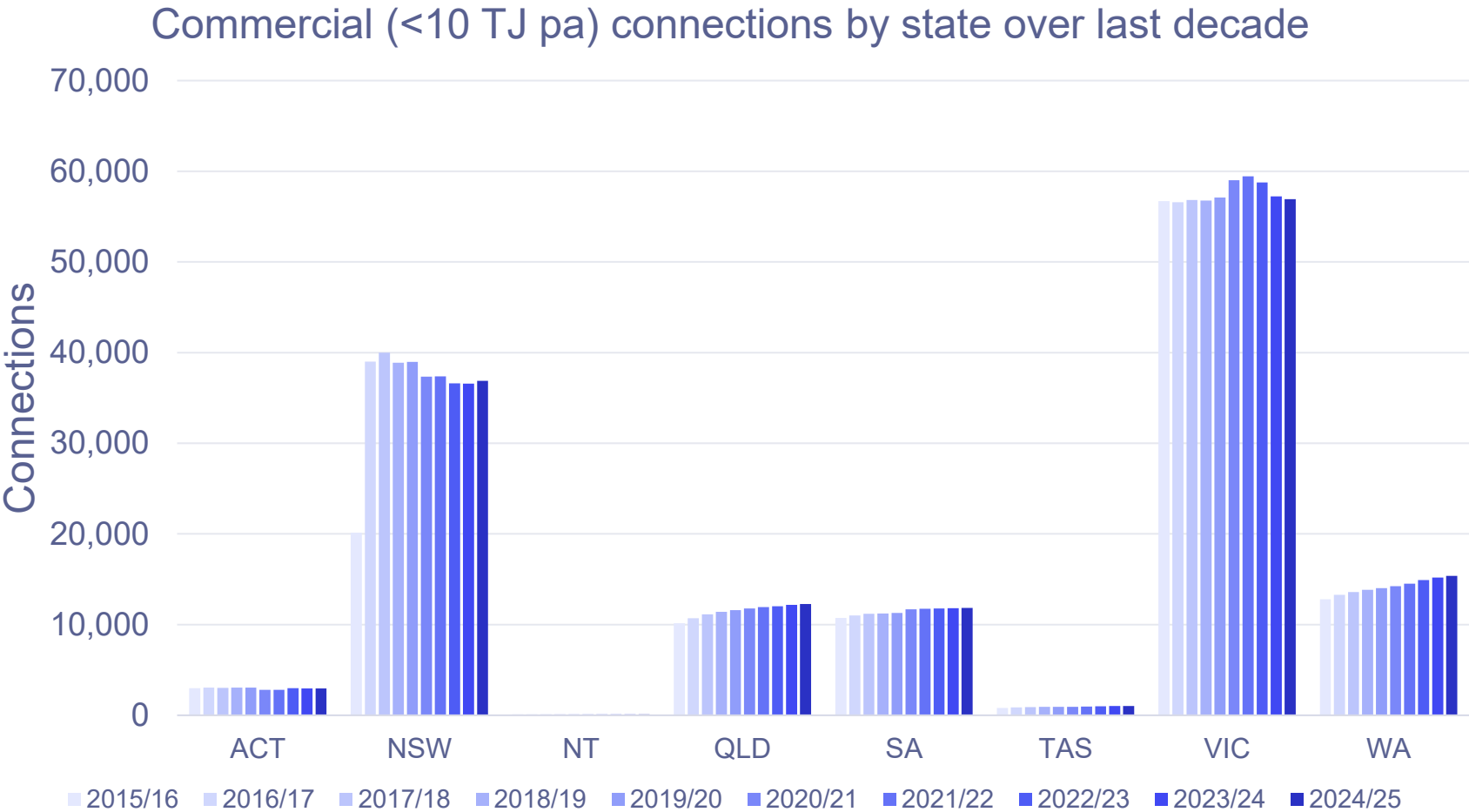


Figure 7: Change in commercial connections (2015/16 to 2024/25).



No clear national trend – business gas use diverges by region

There is no discernible trend in consumption for commercial connections and the trends within each region do not appear to follow the corresponding trends seen in residential customer gas use.

Businesses connected in ACT, NT and TAS are using less gas than 10 years ago, in QLD, SA, VIC and WA are using about the same, and in NSW businesses are using more.

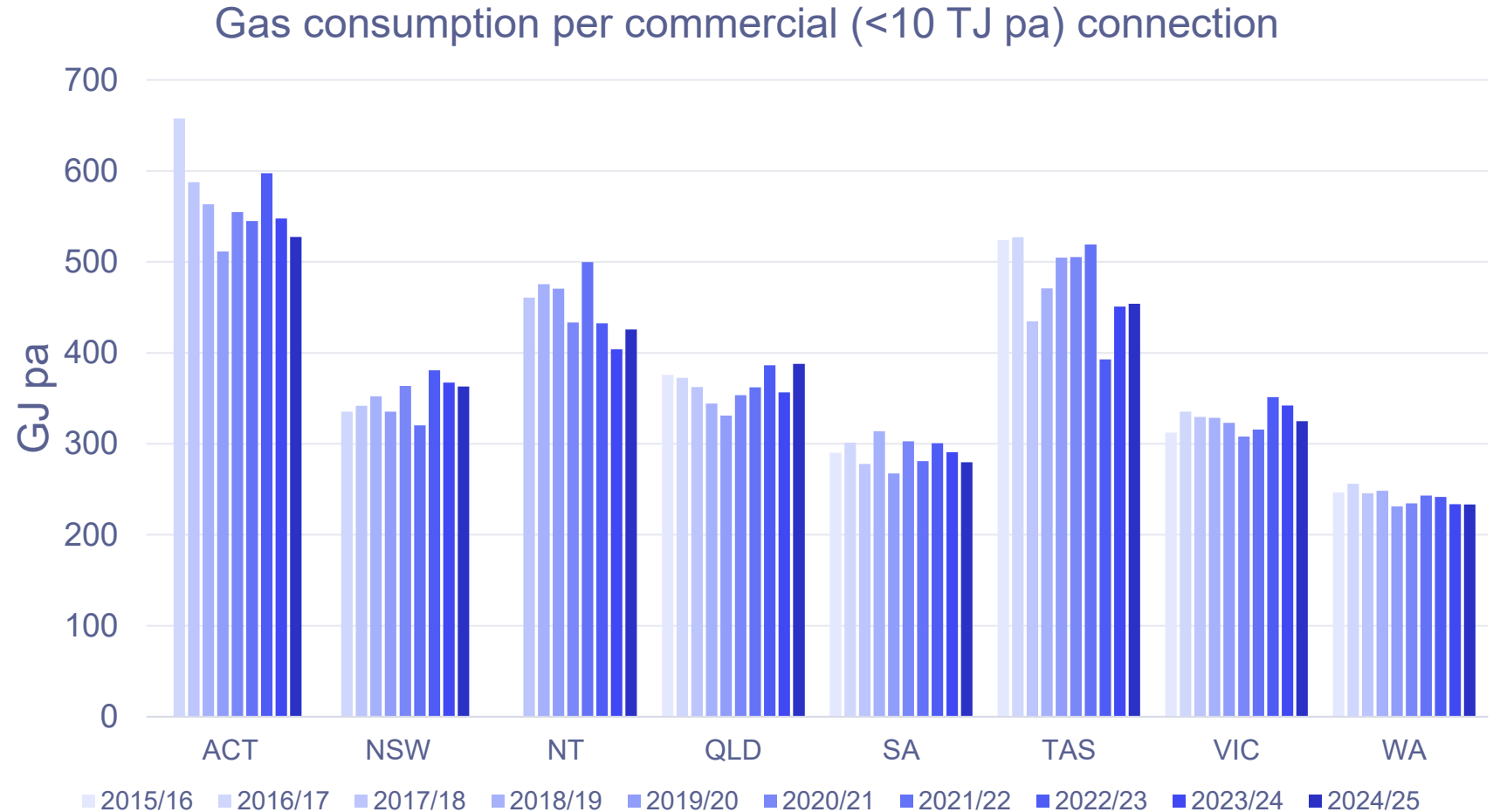


Figure 8: Change in commercial consumption (<10 TJ pa)(2015/16 to 2024/25).



Australia has 1,726 industrial customers connected to the gas network

1,726

Australia has 1,726 industrial customers connected to the gas distribution network. Connections have decreased from 1,865 in 2021/22.

Industrial customers consume more than 10 TJ pa – these customers can include cement and glass manufacturers, and even distributed power generators.

Very large industrial customers and gas-powered generation plants can be connected to either the distribution network or directly to the high-pressure transmission network.

Those connected directly to the transmission network are **not** covered in this factsheet.

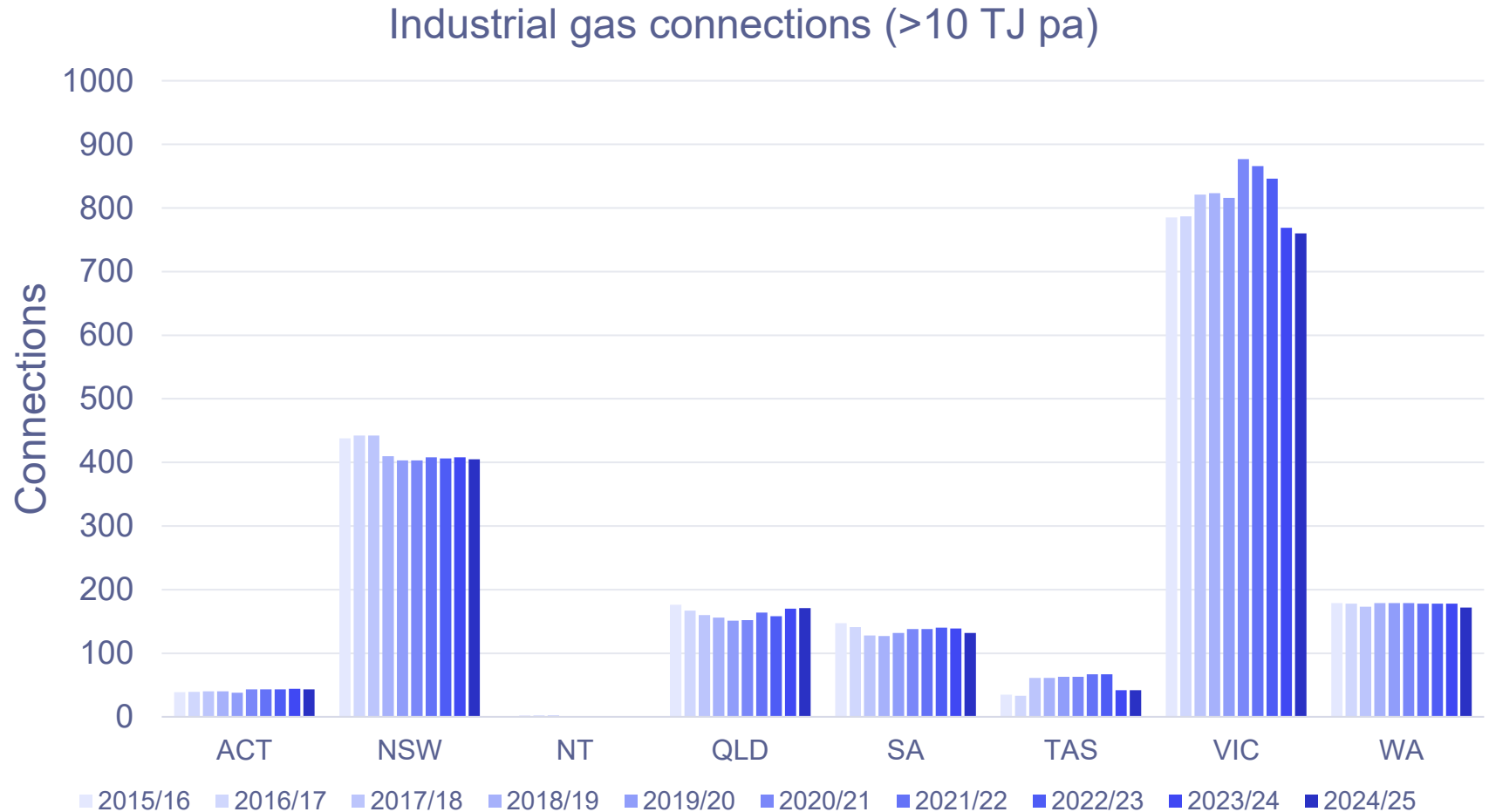


Figure 9: Change in industrial gas connections(>10 TJ pa) (2015/16 to 2024/25).



The network has grown to 102,603km, adding around 950km a year

102,603

Gas networks have grown in the last decade to a total of 102,603km across Australia in FY25, increasing at an average of 950km per year.

This expansion of the network connects new residential and industrial precincts to gas.

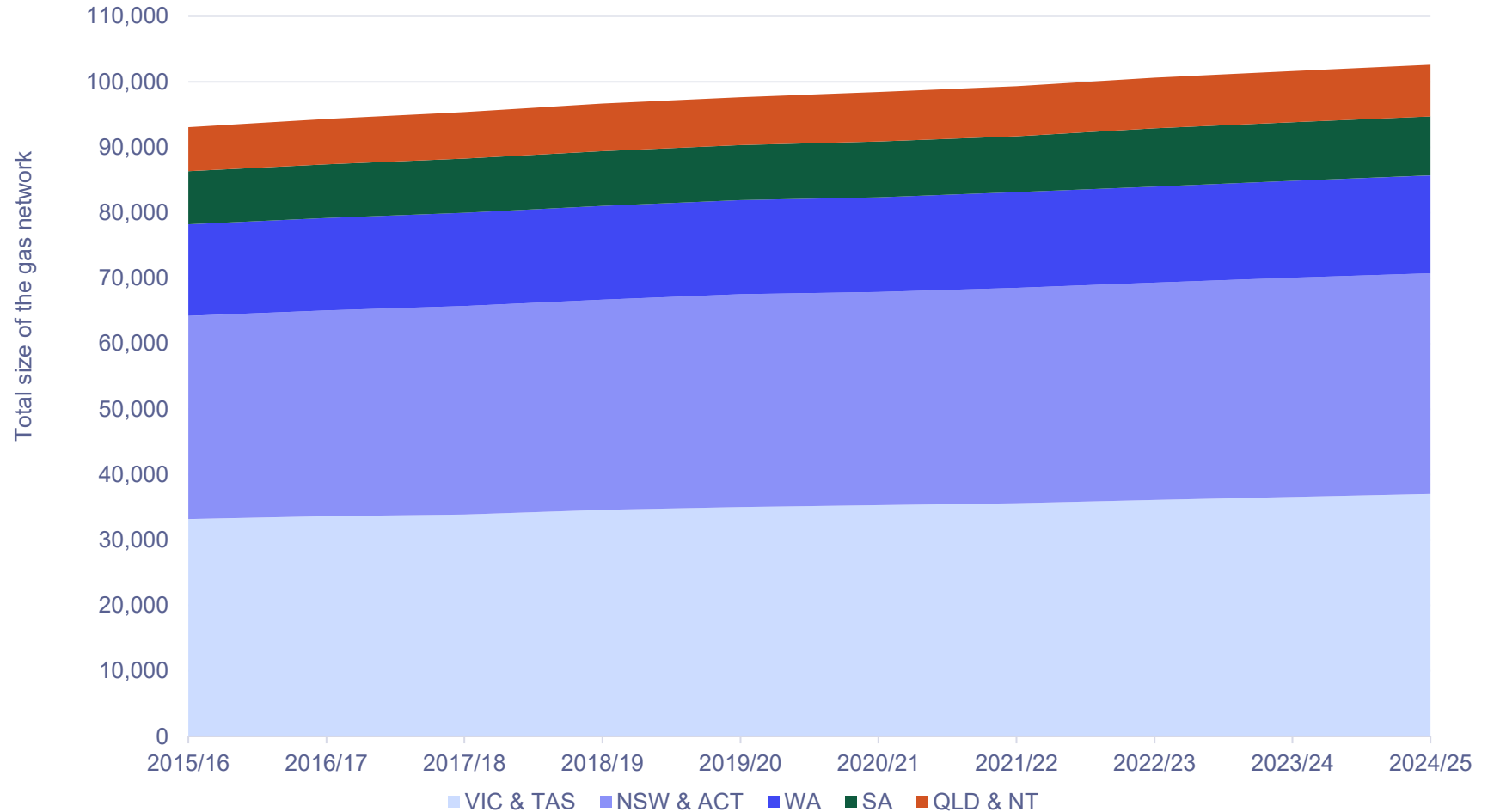


Figure 10: Growth in gas network size (2015/16 to 2024/25).



Network density is rising almost everywhere

Network density

In most regions, the number of connections per kilometre of network has increased.

The decreasing numbers of connections per km in the ACT is due to customers disconnecting from the network while the same length of network is still required to service the remaining customers.

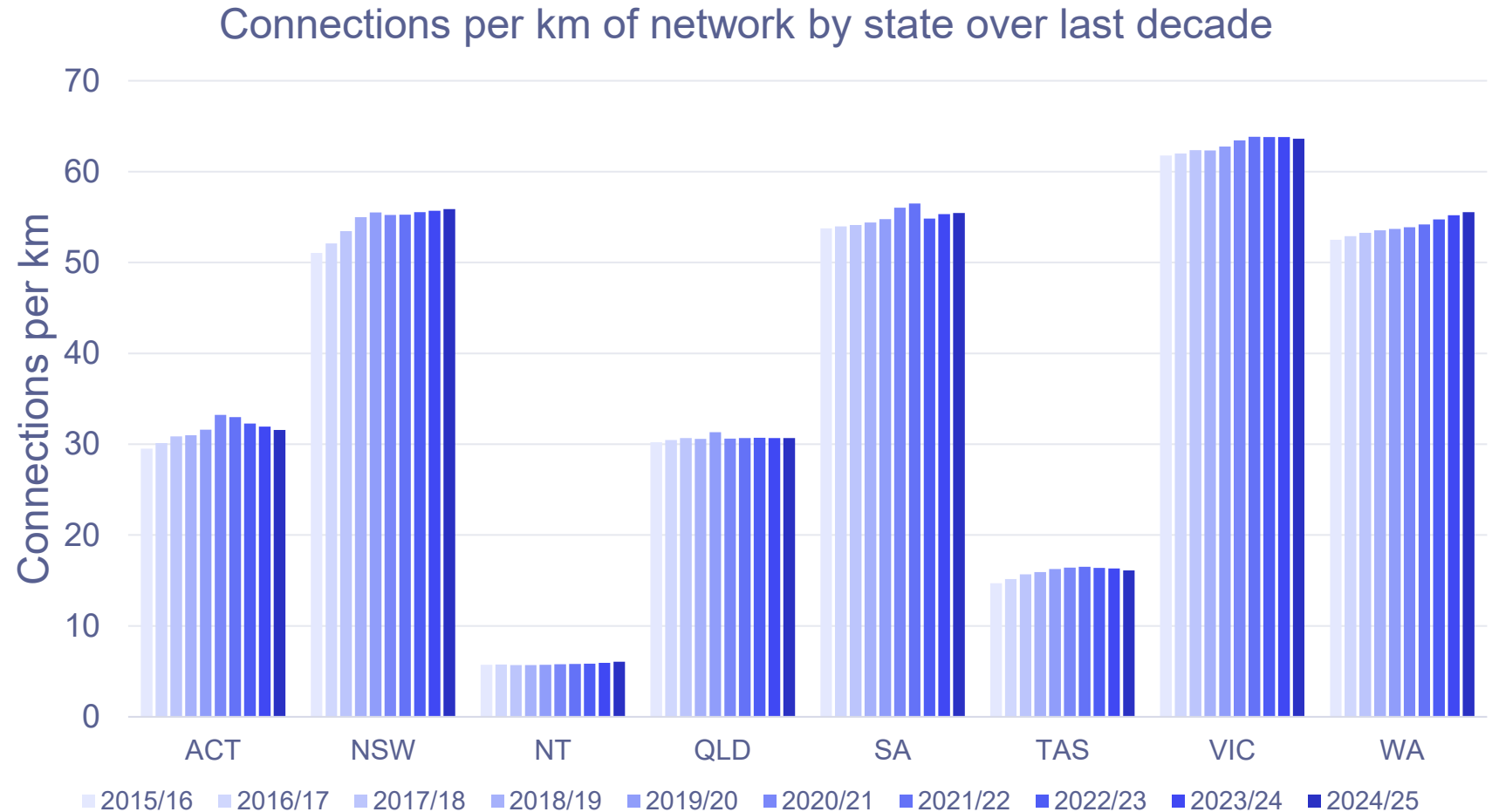
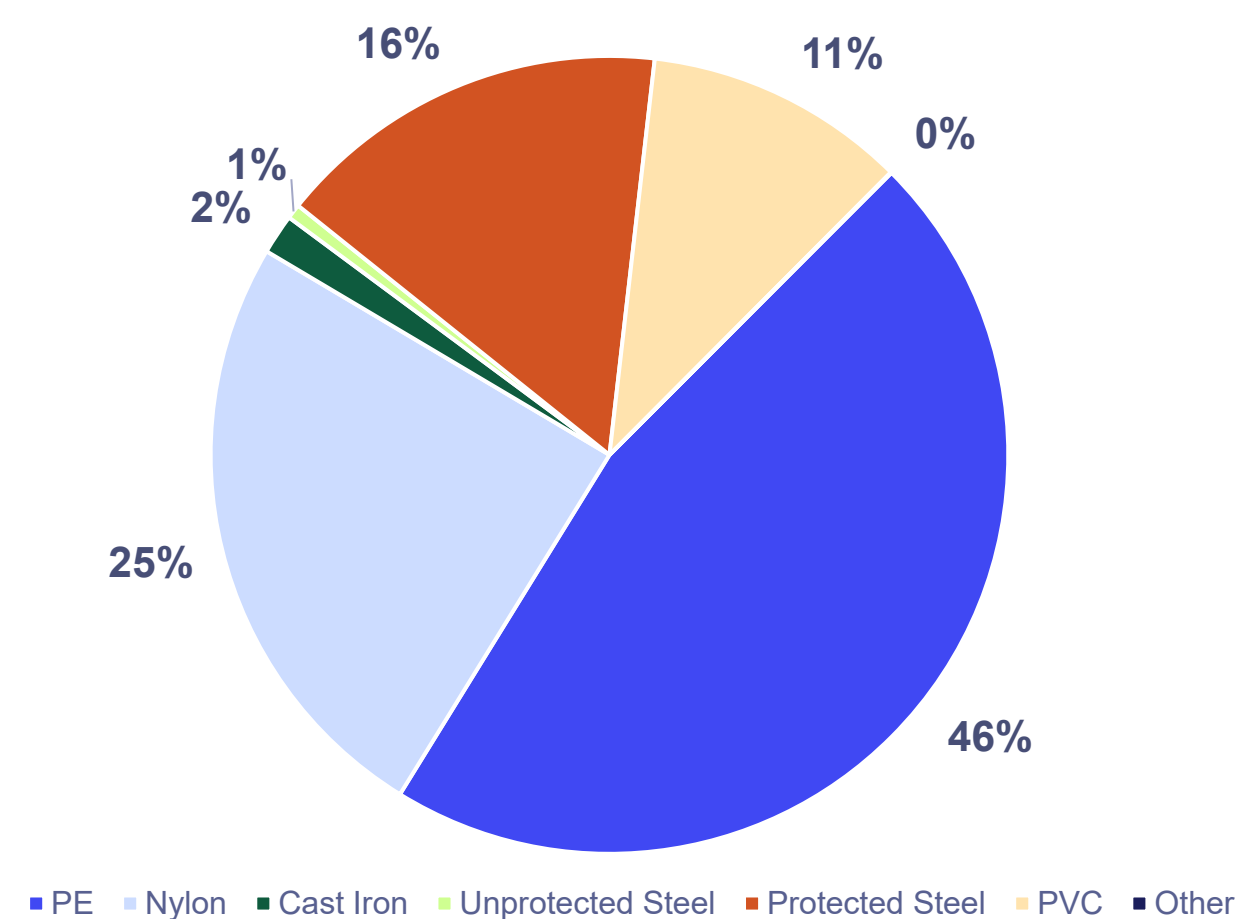


Figure 11: Connections per km of mains(2015/16 to 2024/25).



Polyethylene is the dominant material, at 46% of the network



Materials used for gas delivery

A range of materials have been used to build Australia’s gas networks.

The predominant material used is polyethylene, followed by nylon, protected steel, and PVC. Each material type requires different construction and maintenance process, so each network has focussed on using a single material. Over time, the newer parts of the network are being constructed using polyethylene.

Main materials by region

Region	Main materials
ACT	Nylon, Polyethylene
NSW	Nylon, Polyethylene
NT	Protected steel, Polyethylene
QLD	Polyethylene, Protected steel
SA	Polyethylene, Protected steel
TAS	Polyethylene, Protected steel
VIC	Polyethylene, Protected steel
WA	PVC, Polyethylene
AUS	Polyethylene, Nylon

Figure 12: Materials used across Australia’s gas networks.



Polyethylene the material of choice for new networks

Cast iron and unprotected steel is being replaced over time with polyethylene.

This increases operational efficiency, improves safety and reduces emissions from networks.

Renewable gases can and do flow safely through the pipes already in use⁵.

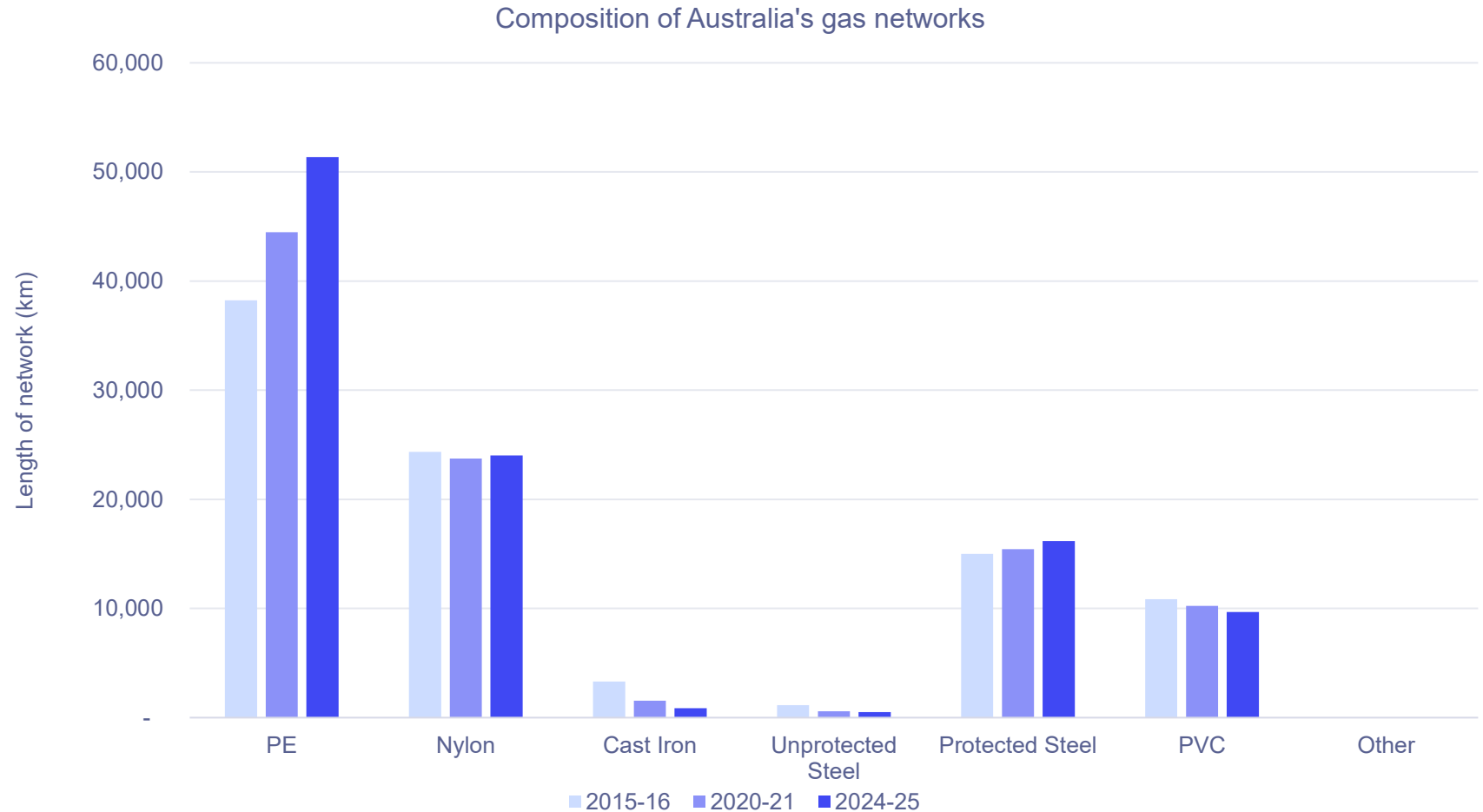


Figure 13: Change in network material (2015/16 to 2024/25).



Incidents are trending down across most jurisdictions

Incident occurrence

Incidents mainly occur as third party strikes on underground assets or leakage detection at gas meter sets.

The number of incidents in Australia's gas networks is decreasing over time in most regions.



Figure 14: Reported incidents by jurisdiction (2015/16 to 2024/25).



Appendix



Appendix: data tables – networks and gas consumption

	Gas network connections (2024/25)				Gas network consumption (2024/25) PJ			
Region	Resi	Comm	Ind	Total	Resi	Comm	Ind	Total
ACT	148,589	2,967	43	151,599	3.76	1.57	1.06	6.39
NSW	1,578,342	36,877	405	1,615,624	28.29	13.39	47.73	89.41
NT	1,089	101	1	1,191	0.01	0.04	0.08	0.14
QLD	223,605	12,277	171	236,053	1.98	4.76	9.28	16.03
SA	488,398	11,831	132	500,361	6.54	3.31	16.22	26.07
TAS	12,492	1,019	42	13,553	0.28	0.46	2.58	3.32
VIC	2,244,961	56,916	760	2,302,637	78.24	18.49	49.28	146.01
WA	814,508	15,373	172	830,053	9.71	3.59	12.96	26.25
Australia	5,511,984	137,361	1,726	5,651,071	128.81	45.61	139.19	313.62

NOTES: Resi = residential connections, Comm = commercial and small industrial connections consuming less than 10 TJ pa, Ind = industrial connections consuming more than 10 TJ pa.



Appendix: data tables – emissions from gas use

Item	PJ gas used	Emissions (Mt CO2-e)	% national emission
Natural gas used in Australia	1477.7	75.95	17.38
Gas used directly by industry & GPG (supplied by transmission pipelines)	1164.1	59.83	13.69
Gas supplied via distribution networks	313.6	16.12	3.69
Of which			
- industrial	139.2	7.15	1.64
- commercial and small industrial	45.6	2.34	0.54
- residential	128.8	6.62	1.51

NOTES: Resi = residential connections, Comm = commercial and small industrial connections consuming less than 10 TJ pa, Ind = industrial connections consuming more than 10 TJ pa.



Appendix: data tables – emissions from households

Region	PJ gas used	Emissions (Mt CO2-e)	% national emission
ACT	3.76	0.19	0.04
NSW	28.29	1.45	0.33
NT	0.01	0.00	0.00
QLD	1.98	0.10	0.02
SA	6.54	0.34	0.08
TAS	0.28	0.01	0.00
VIC	78.24	4.02	0.92
WA	9.71	0.50	0.11
AUSTRALIA	128.8	6.62	1.51



Appendix - footnotes

- 1 Based on data collected by ENA from its gas network distribution members. Networks covered include: AGIG (NSW), AGIG (NT), AGIG (QLD), AGIG (SA), AGIG (VIC-AGN), AGIG (VIC-MGN), AllGas (QLD), ATCO (WA), AusNet (VIC), Evoenergy (ACT), Jemena (NSW), TasGas (TAS).

- 2 Net connections reflect the total connections at the end of the year and includes new connections made throughout the year as well as disconnections from the network.

- 3 Percentage of gas delivered by distribution networks based on gas consumed by states from ENA gas networks data for 2024/25 divide by the total gas consumption by state from the Australian Energy Statistics for year ending June 2024.

- 4 Emissions from gas use were calculated by multiplying the PJ of gas consumed by sector with the emission intensity of natural gas of 0.0514 Mt/ PJ from the DCCEE Emissions Factors handbook.

- 5 Biomethane is being injected into the network at Malabar (NSW). Hydrogen blended gas is being injected in QLD, SA, and WA.



