

WA gas market strategic development key points.



The report, WA Gas Market Development, commissioned by DomGas Alliance, was written by Wood Mackenzie to provide an independent overview on the evolving dynamics of the WA domestic gas market.

WA's domestic gas market near-term demand growth is likely to become the pathway to reducing carbon intensity in the WA economy.

Near-term gas demand growth (2021-2030) remains compatible with the State Government's 2050 net zero emissions goal.

Gas powered generation (GPG) can operate at varying utilisation levels to respond to demand fluctuations, supporting the changing energy mix as renewable energy displaces coal generation in the SWIS.

Scenario analysis of GPG indicates gas demand's greatest decline will be from 2030 to 2040.

58% of all gas consumed in WA is for industrial and heat processes, and only 42% is for GPG.

These Industrial processes will require continued gas long-term; this demand may grow as new developments occur.

Several large-scale projects requiring additional gas have been proposed: lithium hydroxide refineries, ammonia, urea and methanol projects, as well as expansion of existing projects.

These projects, if fully developed, could increase WA's gas demand by more than ~690 TJ/d (~250PJ/a) by 2030 (~65% increase on 2020 gas demand).

These projects in conjunction with existing industrial and mining demand will contribute to a lower carbon future by supporting key export mineral production and displacing higher emissions products or imports.

WA industrial gas demand anticipated to decline significantly slower than GPG.

WA will see growth in gas demand from 2025 to 2030 before a demand decline thereafter.

Gas needs to be developed and marketed now or risk remaining in the ground long term or risk never be commercialised.

The potential demand growth period will provide the opportunity for new gas supply developments supported by industrial demand projects with operational lives of 20 years.

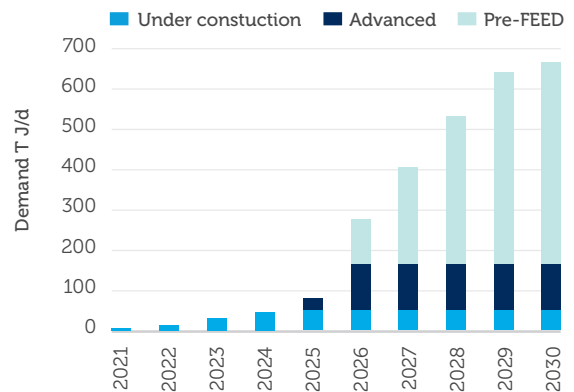
Over the last two decades, domestic gas commitments (DGC) from LNG export projects have delivered ~50 to 60% of the WA domestic gas supply. North West Shelf has ample spare processing capacity for DGC, providing an opportunity to toll third party domestic gas production.

New gas supply development will reduce coal demand, support renewable energy growth, displace high emissions imports, and support jobs within the domestic gas industries.

Indicative Domestic Gas Demand Growth Potential 2021 to 2030

TJ/d	Under Construction	Advanced	Pre-FEED
2021	0.7	0.0	0.0
2022	12.4	0.0	0.0
2023	31.4	0.0	0.0
2024	44.3	0.0	0.0
2025	49.4	29.7	0.0
2026	51.1	115.7	1186
2027	54.5	146.9	217.7
2028	54.5	146.9	349.7
2029	54.5	146.9	460.7
2030	54.5	146.9	488.3

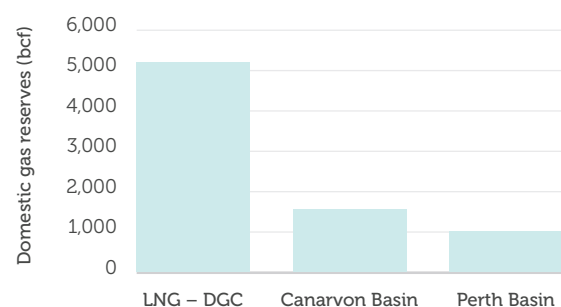
Project Status New Projects



Domestic Gas Developments Remaining Reserves as of 01 | 01 | 2021 (bcf)

Projects	LNG – DGC	Canarvon Basin	Perth Basin
Commercial	5,169	1,607	968

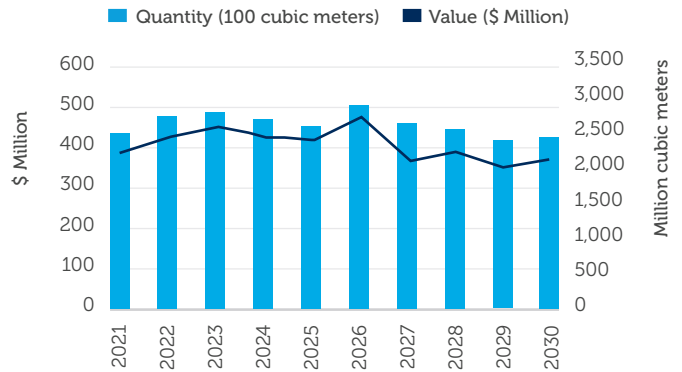
Domestic Projects



These first two graphs show the value of gas production and sales to WA – both as LNG exports but also as domestic gas sales, which then underpins our main industries of mining, mineral processing and production of fertilisers and chemicals. Most of WA's economy is dependent on gas either directly or indirectly, and that also means jobs.

Natural Gas

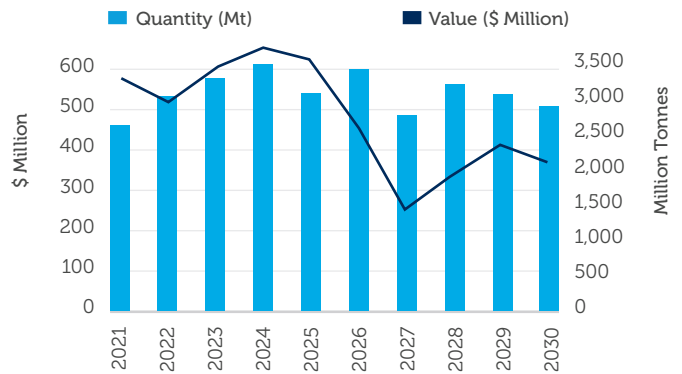
Quantity and value by quarter



Source: DMIRS and EnergyQuest

LNG

Quantity and value by quarter

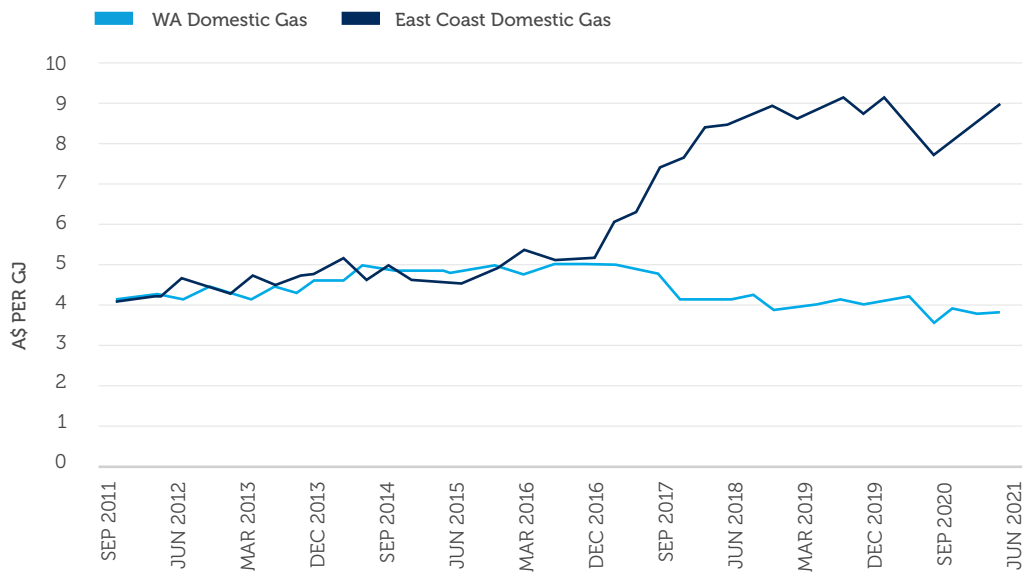


Source: DMIRS, EnergyQuest and Woodside

The price graph shows how WA's Domestic Gas Policy has kept gas prices relatively stable and competitive in WA compared to the eastern states, by ensuring a good supply of gas to the domestic market. This price advantage translates into more investment in mining, mineral processing and industrial production, and more jobs. Ensuring that supply is there to meet growing demand this decade is critical to our mining and downstream industries.

Natural Gas

Average quarterly natural gas prices



Source: DMIRS and EnergyQuest

