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The hidden costs of the LNG boom

Royalties and tax take disappoint while manufacturers and consumers struggle with sky-high domestic gas prices

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Key Findings

Queensland's LNG projects have generated relatively limited ongoing economic benefits, with returns and royalties well below expectations and negligible tax paid until FY2023-24.

LNG exports have tripled gas prices, costing households and businesses an extra AU$4.3 billion in FY2023-24. High gas prices also contributed to a doubling in electricity prices and higher inflation.

LNG exports increased Queensland's carbon emissions, comprising 5.5% of the state's emissions in FY2022-23. If Queensland achieves its 2035 emissions target, the LNG sector's share could reach 16%.

High gas prices have contributed to at least 1,240 manufacturing job losses, with 500 more under threat. This represents 70% of the Queensland LNG exporters' total workforce, and raises questions about the best uses for Australia's gas.

Executive summary

Australia's liquefied natural gas (LNG) boom has been credited with driving material investment, employment and taxation in the country. In Queensland, about AU$60 billion was invested to build three LNG export plants, with the first shipments leaving in 2015. This investment generated thousands of construction jobs and contributed to Australia regaining a trade surplus.

However, the lasting economic benefits have been limited. The LNG plants support a smaller number of ongoing jobs, and net employment in the Australian oil and gas industry has not increased since the 2010s. Each project has effectively achieved a negative net present value, earning substandard rates of return.

For almost a decade, none of the three LNG consortia in Queensland paid corporate tax. In the fiscal year (FY) 2023-24, the Australia Pacific LNG and Queensland Curtis LNG ventures began paying corporate tax. Royalties to the Queensland government were also well below expectations until the royalty regime was revised in 2022.

In contrast, the economic costs and negative impacts from Queensland's LNG sector have been felt across eastern Australia. Domestic gas prices have tripled, leading to an estimated AU$1 billion increase in residential gas costs (in FY2023-24 from FY2014-15). Manufacturers also report paying nearly 50% more for gas in 2025 than they did in 2019. Based on wholesale gas prices, IEEFA estimates the total cost of gas to Australian businesses increased by more than AU$3 billion between FY2014-15 and FY2023-24.

Higher gas prices also contributed to material increases in electricity prices due to the strong linkage between gas and electricity prices. The consequences, such as higher energy bills and food production costs, placed inflationary pressures on Australian households and the economy.

In manufacturing, high gas prices have contributed to plant closures and a subsequent significant drop in gas use. In eastern Australia, gas use in manufacturing in FY2023-24 was down 29% from its peak in FY2013-14, with recent data suggesting further declines. The fertiliser sector has been among the hardest hit, with several plants closing in eastern Australia, and another in serious doubt. Other facilities, such as plastics manufacturer Qenos, which employed 700 people, have cited high gas prices as a key factor in their closure.

Since 2021, these manufacturing closures, all in eastern Australia, have resulted in at least 1,240 job losses, with a further 500 jobs at imminent risk. The combined total is about 70% of the estimated workforce employed at Queensland's three LNG export plants – about 2,500 people.

The Australian Competition and Consumer Commission has warned of further manufacturing closures if high gas prices persist, with broader repercussions for the economy.

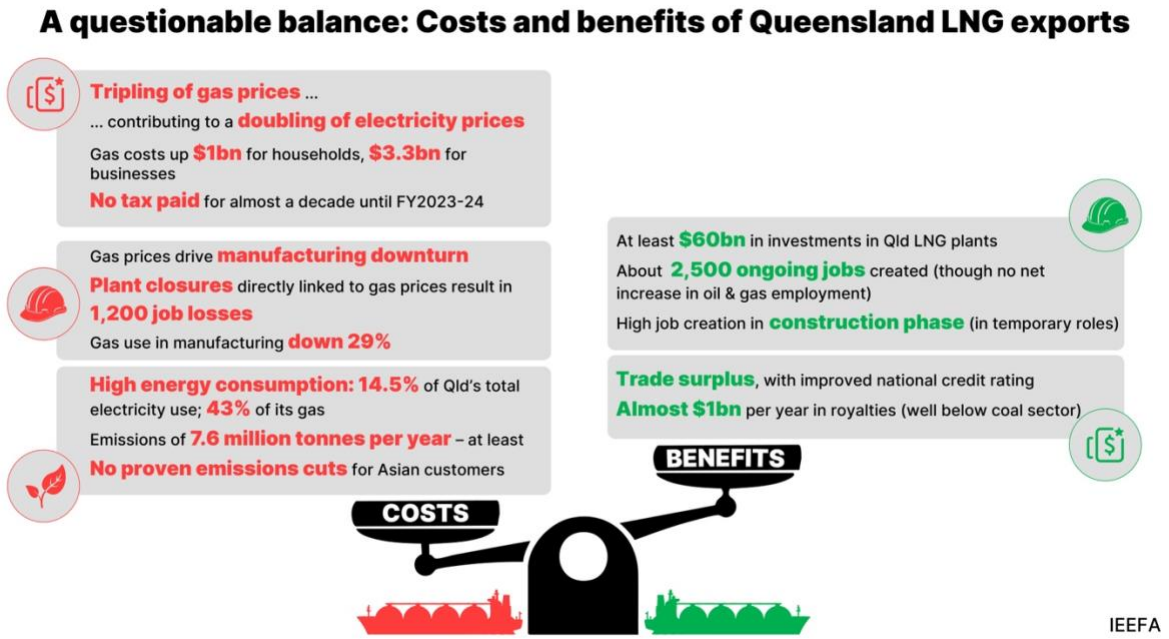
This raises the question whether LNG exports are the most valuable use of Australian gas (particularly uncontracted gas that could be supplied domestically), given about 1,500 jobs are created for each petajoule of gas used in chemicals manufacturing, while only about four jobs are created for each petajoule of gas used in the oil and gas industry.

East coast LNG exports have also materially increased Queensland's electricity demand, both on annual and peak bases, accounting for close to 15% of total electricity consumption in 2017. The surge in LNG exports also reduced gas supply to the domestic market.

The energy required to extract gas and liquefy it means the three LNG exporters are major greenhouse gas emitters, accounting for more than 5% of Queensland's total emissions in FY2022-23. Their share of emissions is likely to grow as Queensland's economy decarbonises to achieve its emissions reduction targets. IEEFA estimates the sector's FY2023-24 emissions, if maintained, would account for 16% of Queensland's carbon budget by 2035.

These emissions carry broader social costs. Based on Infrastructure Australia estimates, IEEFA calculates the social costs of the LNG sector's emissions were AU$328 million to AU$492 million in FY2023-24. This would increase to AU$1.28 billion to AU$2.1 billion in FY2034-35 if emissions levels are maintained, which is possible given LNG production forecasts are relatively stable to 2035.

Proponents of LNG exports point to the broader social and economic benefits from exports. However, assessing the net economic benefits of the industry requires a recognition of its adverse impacts and costs.



Introduction

Australia's liquefied natural gas (LNG) boom in the 2010s quadrupled the country's LNG export capacity, making it the world's largest LNG exporter.[1] It triggered AU$234 billion in capital expenditure, one of the largest investments ever in resource export capacity, boosted construction employment and improved Australia's terms of trade (once the projects started operations).[2,3]

Three of the eight LNG plants that came online in the 2010s were in Queensland, making eastern Australia an LNG export hub for the first time. This new export industry transformed the state's relatively small gas industry into a global force, among the world's top 10 LNG exporters. It also created employment opportunities and boosted economic activity in regional areas. LNG became one of Queensland's largest export revenue earners behind coal and helped the state boast a healthy trade surplus with its international trading partners.[4]

While the investment flows into Australia's gas sector were seen as a success, there have been significant costs associated with the start of LNG exports in Queensland. This report explores both the positive and negative economic impacts of LNG exports to provide a more complete picture of the costs and benefits of the industry to eastern Australia's economy.

Economic contributions have been below expectations

Australia's LNG growth wave, which brought eight new LNG projects online, massively increased the nation's LNG exports, which accounted for 13% of merchandise goods exports in 2024 (AU$67.46 billion of a total AU$516.45 billion).[5]

When the first of the eight new projects started LNG shipments in March 2012, Australia was running a deficit on its merchandise goods trade, and LNG export revenue accounted for 4.7% of national goods exports (excluding services). By the time the eighth project started shipments in October 2018, Australia had a healthy trade surplus, and LNG export revenue accounted for 14.8% of its goods exports.

In fiscal year (FY) 2024-25, the oil and gas industry accounted for 3.61% of Australia's gross domestic product, up from 2.78% in FY2014-15, but down from its peak of 4.51% in FY2019-20.[6]

[1] Department of Industry, Science and Resources (DISR). Resource and Energy Quarterly: June 2025. Historical data. Table 1, LNG data 19Mt in FY2011-12 to 81Mt in FY2023-24.
[2] The Australasian Centre for Corporate Responsibility (ACCR). Australia's LNG growth wave – did it wash for shareholders. November 2023. Page 3.
[3] Australian Bureau of Statistics (ABS). International Trade in Goods. July 2025. Released 4 September 2025.
[4] Queensland Treasury. Queensland Government Statistics Office. Exports of Queensland goods overseas, May 2025. 3 July 2025.
[5] ABS. International Trade in Goods. July 2025. Released 4 September 2025.
[6] ABS. Australian National Accounts: National Income, Expenditure and Product up to June 2025. Released 3 September 2025. Annual data and oil and gas share of Australian GDP compiled by IEEFA.

In eastern Australia, it is estimated that at least AU$60 billion was invested in developing the three LNG plants, generating revenues of AU$50 billion since they commenced operations.[7,8] Despite this, profits have been relatively low. The Australasian Centre for Corporate Responsibility (ACCR) found each project has effectively achieved a negative net present value, earning rates of return below standard hurdles. Beyond Queensland, the ACCR also noted: "While Australia's LNG growth wave is currently generating strong cash flows, it does not appear to have generated value for shareholders, since returns do not meet the cost of capital."[9]

Gas sector a modest contributor to employment

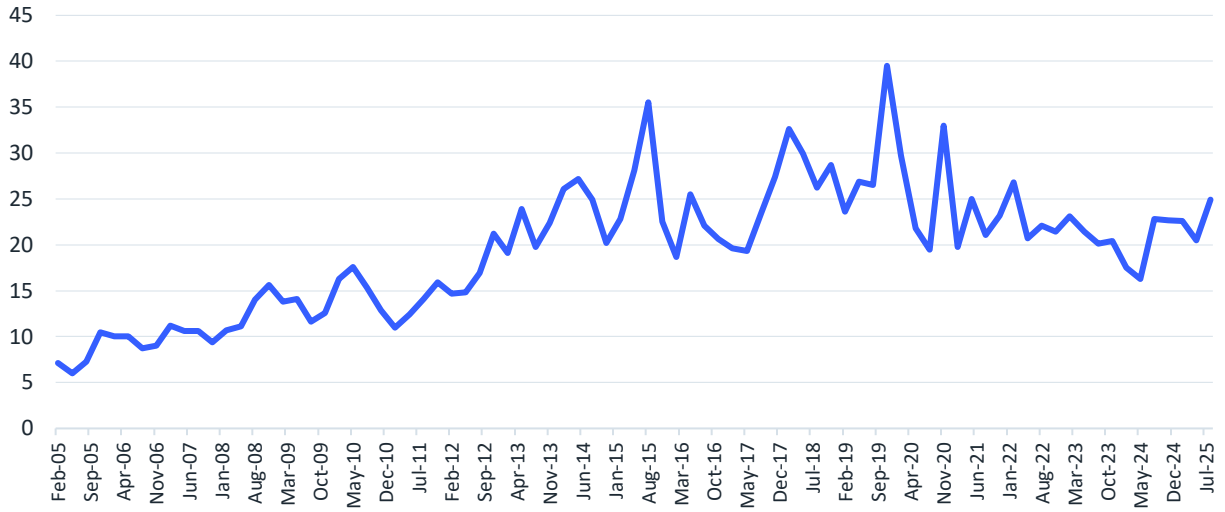
Despite its status as a major exporting industry, Australia's gas sector is a relatively minor contributor to employment. Data from the Australian Bureau of Statistics (ABS) showed that Australia's oil and gas combined employed just 24,900 people in August 2025, or just 0.17% of Australia's total workforce (Figure 1).[10] This is a fraction of the domestic gas-using manufacturing sector's workforce, which is estimated to employ at least 10 times as many people.

Notably, there has been no net increase in oil and gas employment since FY2014-15 when LNG exports ramped up materially (Figure 1). While there were spikes in employment in the following years, total employment levels in 2025 remain as they were in 2014. Oil and gas also have a low share of resource industry employment, with 282,200 workers at the end of August 2025 (of which 41% were in metal ore mining).[11]

Generally, employment in the LNG sector peaked during the LNG plant construction phase, with much lower levels of ongoing employment. For example, the Gladstone LNG (GLNG) project generated more than 6,000 jobs during the construction phase, but in 2025 it employs only about 130-140 people at the plant.[12] Queensland Curtis LNG (QCLNG) reports employing about 1,400 workers directly.[13] No recent estimates exist for Australia Pacific LNG (APLNG), with 2012 forecasts that the project would employ about 1,000 people ongoing.[14] In total, it is estimated the three projects employ about 2,500 people.

[7] The Australian Financial Review (AFR). LNG exports underway from Gladstone. 11 August 2015.
[8] Business Queensland. Petroleum and coal seam gas.
[9] ACCR. Australia's LNG growth wave – did it wash for shareholders. November 2023. Page 3.
[10] ABS. Labour Force, Australia, Detailed. August 2025. Table 6. Released 25 September 2025.
[11] Ibid.
[12] Santos GLNG. About us. Accessed 21 August 2025.
[13] Shell. QCG: About Us. Accessed 21 August 2025.
[14] Offshore Energy. Australia: Energy Industry Skills Program Expands with APLNG Support. Accessed 2 September 2025.

Figure 1: Oil and gas sector employment (000s)



Source: ABS.[15]

Queensland LNG exporters paid no tax for almost a decade

Despite the first LNG shipments leaving Queensland in January 2015, it took until FY2023-24 before any of three Queensland LNG projects started paying corporate tax. Both APLNG and QCLNG started paying tax in FY2023-24.

The APLNG venture partners paid AU$551.57 million in tax in FY2023-24, rising to AU$1.19 billion in FY2024-25 on revenue of AU$9.89 billion.[16,17,18,19] The latest Corporate Tax Transparency report from the Australian Tax Office (ATO) showed QGC Upstream Holdings Pty Ltd (which operates QCLNG) paid tax of AU$549.24 million on revenue of AU$6.28 billion in FY2023-24, almost 10 years after it started gas production in late 2014.[20,21]

In contrast, GLNG did not pay corporate tax in FY2023-24 or any of the preceding years.[22] The report showed GLNG operator Santos paid no tax in FY2022-23 despite total income of

[15] ABS. Labour Force, Australia, Detailed. August 2025. Table 6. Released 25 September 2025.
[16] Origin Energy. 2024 Annual Report. Page 36, and 2023 Annual Report. Page 38.
[17] Queensland Government. State Development, Infrastructure and Planning. Australia Pacific LNG. December 2023.
[18] Origin Energy. 2025 Annual Report. Page 39.
[19] Ibid. Page 38.
[20] Australian Taxation Office (ATO). Corporate Tax Transparency. 2023-24 Report of Entity Information. October 2025.
[21] ABC. Queensland company to be first in the world to export LNG from coal seam gas. 23 December 2014.
[22] ATO. Corporate Tax Transparency. 2023-24 Report of Entity Information. October 2025. This was the latest tax data for QGC.

AU$6.26 billion. Similarly, Petronas, Kogas and TotalEnergies, which collectively own the remaining 70% of GLNG, paid no tax in Australia in FY2023-24.[23]

The LNG sector may also be subject to the Petroleum Resources Rent Tax for gas extracted in Commonwealth waters, but this does not apply to the three Queensland LNG projects given they source their gas feedstock from onshore fields.

Queensland's gas royalties failed to deliver expected windfall

Queensland's LNG projects are subject to the state's royalty regime, and the state collects most of its gas royalties from these projects. However, gas royalties paid to the Queensland government were poor in the first seven years of LNG operations, in contrast to earlier expectations.

One of the first Queensland budget estimates for LNG royalties forecast petroleum (gas) royalties to rise from AU$68 million in FY2013-14 to AU$660 million by FY2016-17 due to the boom in coal-seam gas extraction.[24] However, actual royalties were a fraction of that at AU$98 million.[25] Royalty revenue continues to fall short of forecasts, with AU$298 million collected by FY2020-21, still less than half that year's budget estimate of AU$620 million.[26,27]

Low gas royalties, in part, prompted the Queensland government to amend its royalty scheme in October 2020. The changes came into force in FY2021-22, coinciding with the surge in global oil and gas prices following Russia's expanded invasion of Ukraine. These two events combined appear to have led to higher royalties, with the Queensland government collecting about AU$5.25 billion in royalties between FY2021-22 and FY2023-24.[28] In total, AU$6.83 billion in petroleum (gas) royalty revenue was collected between FY2014-15 and FY2023-24.

The average gas royalty income in Queensland was about 2.27% of LNG export revenue in the first seven years of the industry. Following the royalty regime changes and the increase in gas prices, the royalty take has more than doubled to almost 5% of LNG export revenue.[29]

Despite the change in the royalty regime, actual royalties paid by the gas industry in Queensland remain low relative to those of the coal industry. Of all states, Queensland is Australia's second largest energy and minerals extractor, after Western Australia, and receives royalties from coal, metals production and gas. In FY2023-24, coal royalties amounted to AU$10.52 billion, or about 16%

[23] ATO. Corporate Tax Transparency. 2022-23 Report of Entity Tax Information. Last updated 2 October 2025.
[24] Queensland Treasury. State Budget 2014-15. Budget Strategy and Outlook. Pages 71 and 176
[25] Queensland Treasury. State Budget 2018-19. Budget Strategy and Outlook. Page 181.
[26] Queensland Treasury. Queensland Budget 2022–23, Budget Strategy and Outlook. Page 103.
[27] Queensland Treasury. State Budget 2019-20. Budget Strategy and Outlook. Page 86.
[28] IEEFA. Queensland LNG exports: A decade of high domestic prices, falling demand. February 2025. Page 4.
[29] Ibid.

of coal export revenue and about 81% of the Queensland government's total royalty receipts. In contrast, gas royalties accounted for only 13% of state royalty income in FY2023-24.[30,31]

Skyrocketing gas costs flow through the economy

Wholesale prices tripled in first decade of Queensland exports

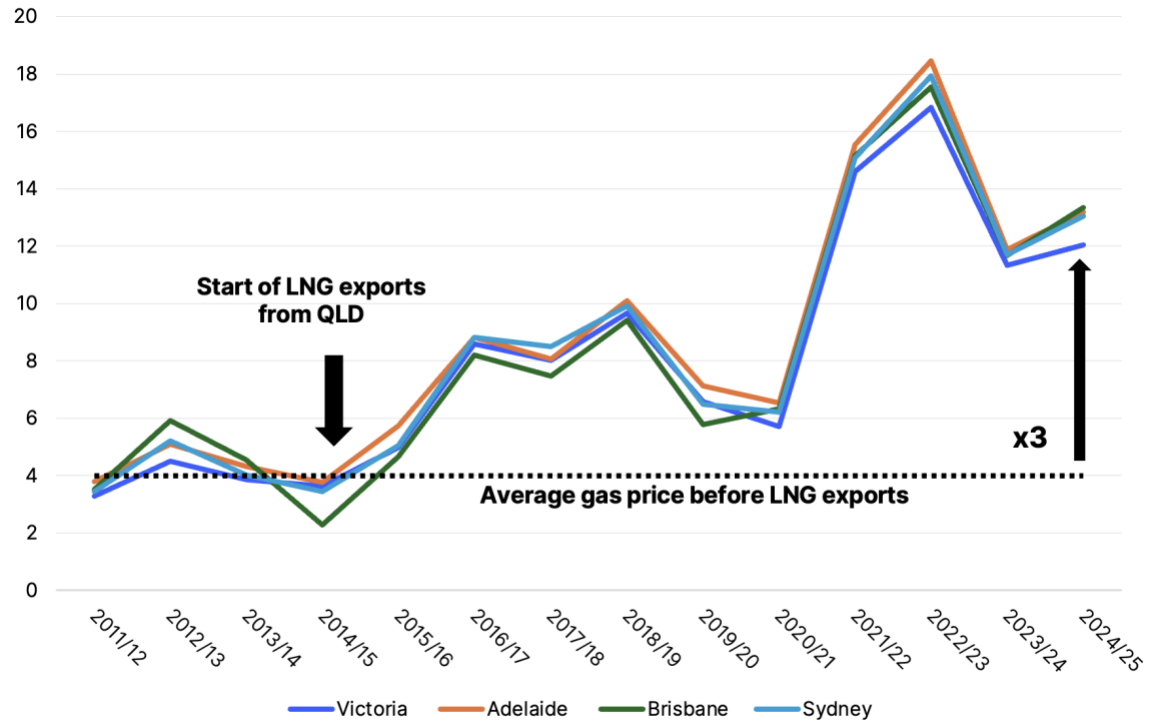
Most of eastern Australia's gas production, and Australia's gas production more broadly, is exported as LNG, exposing eastern Australia's gas market to international LNG market prices.[32]

In FY2020-21, the Australian Competition and Consumer Commission (ACCC) highlighted the influence of LNG export prices in setting a floor on domestic gas prices, with other gas producers using these LNG "netback prices" to inform their domestic pricing, for wholesale and some industrial consumers. Put simply, LNG and non-LNG producers will reference LNG netback prices when determining fixed prices they offer to domestic gas buyers.[33] The ACCC also found domestic contracts can include pricing explicitly linked to international oil and LNG benchmarks.[34] In June 2025, the ACCC's Gas Inquiry interim report again found that international LNG prices, alongside market concentration, were influencing domestic prices in eastern Australia's gas market.[35]

Since LNG exports started in Queensland in January 2015, prices in eastern Australia's gas markets have tripled (Figure 2), with average wholesale gas prices in Victoria, Adelaide, Brisbane and Sydney increasing from AU$4.19 per gigajoule (GJ) in FY2013-14 to AU$12.90/GJ in FY2024-25.[36]

[30] DISR. Resources and Energy Quarterly (REQ): June 2025. Historical data. Queensland coal export revenue based on REQ data and Queensland Government Open Data Portal. Coal sales and export data to calculate proportion of thermal and coking coal exported from Queensland.
[31] Queensland Treasury. Queensland Budget 2025-26. Budget Strategy and Outlook. Page 64.
[32] Department of Climate Change, Energy, the Environment and Water (DCCEEW). Australian Energy Update 2025. Australian Energy Statistics – Update Report 2025. Page 9. Figure 3. Australian Natural Gas Flows, 2023-24. August 2025.
[33] ACCC. Gas Inquiry 2017-2025 Interim report. July 2021. Page 45.
[34] ACCC. Gas Inquiry 2017-2030 Interim report. December 2024. Page 27.
[35] ACCC. Gas Inquiry 2017-2030 Interim report. June 2025. Page 6.
[36] Australian Energy Regulator (AER). Gas Market Prices. 1 July 2025. There are separate gas prices for Victoria, and for the city demand markets in Adelaide, Brisbane and Sydney, due to local supply and demand factors, pipeline transport costs from production to consumption points.

Figure 2: Gas prices in eastern Australia (AU$/GJ)



Source: Australian Energy Regulator (AER).[37]

However, warnings about the possible impacts of higher gas prices and constrained availability of gas for domestic customers, from both the Queensland government and academics, went unheeded.[38,39]

Higher gas prices have pushed up household gas bills

Even though gas prices make up only a portion of the average gas bill (retail gas prices comprise commodity gas, distribution, transmission and other costs, as well as retailer margins), rising domestic gas prices have had an impact on gas prices paid by households in eastern Australia.

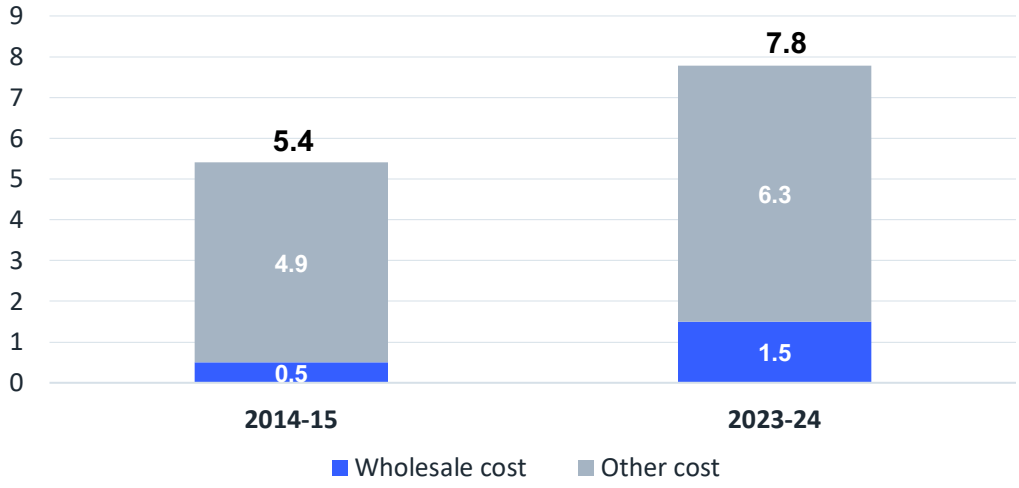
[37] Australian Energy Regulator (AER). Gas Market Prices. 1 July 2025.
[38] Queensland government. Blueprint for Queensland's LNG Industry. Page 5.
[39] Australian Journal of Agricultural and Resource Economics. Australia's coal seam gas boom and the LNG entry result. 12 May 2015. *Simshauser P., Nelson T.*

IEEFA estimates the total annual residential gas bill increased 44% to AU$7.8 billion in eastern Australia from FY2014-15 to FY2023-24, with this partly attributable to increases in the wholesale gas cost component, which rose by AU$1 billion over this period (Figure 3).[40,41]

Victorian households were most affected, as they account for about two thirds of the total residential gas bill (AU$5 billion in FY2023-24) in eastern Australia, followed by New South Wales (NSW) households (AU$2 billion).

Higher gas prices, along with increasing residential electrification, have also reversed the long-term trend of rising household gas consumption. Despite increasing from 2012 to 2022, residential gas consumption fell in 2023 and 2024.[42] Notably, gas consumption per residential connection in Victoria (which has the largest residential gas load) fell 33% in just five years.[43]

Figure 3: Eastern Australia's total estimated residential gas costs (AU$bn)



Sources: Australian Energy Statistics, St Vincent de Paul, AER, IEEFA.

Gas costs for businesses have also increased

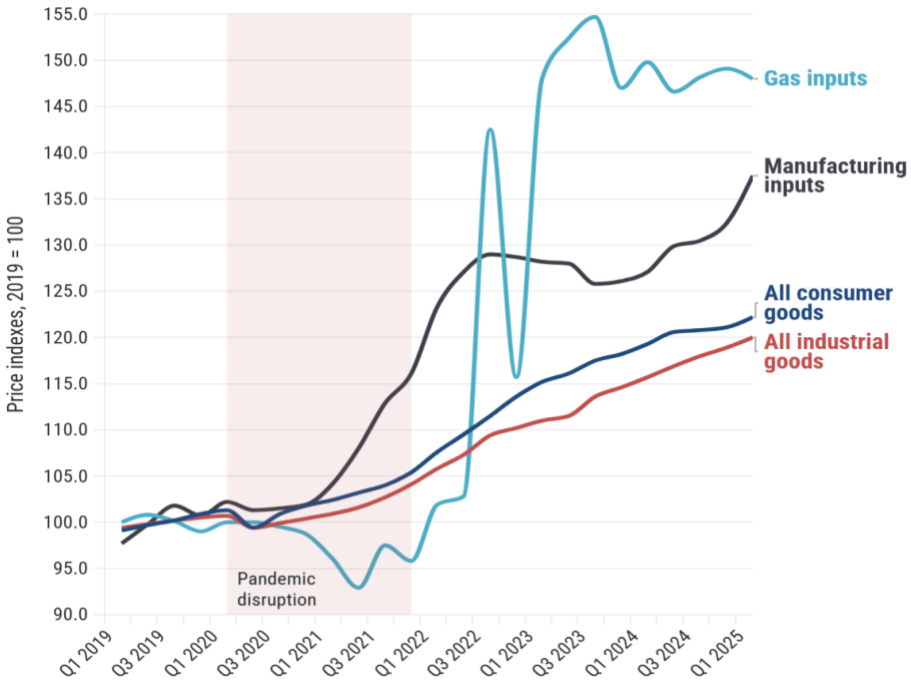
Gas input costs for commercial and industrial (C&I) users have increased materially over the decade since Queensland began exporting LNG. For smaller C&I gas users, gas bills have likely increased broadly in line with residential bills, given that they are likely to be on standard retail gas offers (akin

[40] The total estimated gas bill is calculated based on residential gas consumption from the Australian Energy Statistics and the estimated gas price by state, from St Vincent de Paul's tariff tracking data as shown in The NEM. A digital foundation delivering analog outcomes. Page 7.
[41] The wholesale component of bills is calculated by multiplying residential gas consumption by the wholesale gas price in each state.
[42] IEEFA. Slump in eastern Australia gas demand shows no signs of easing. 11 September 2025.
[43] Ibid.

to residential gas offers). Larger users, which purchase gas directly from producers or retailers under bespoke agreements, or from markets facilitated by the Australian Energy Market Operator (AEMO), have likely faced larger increases given the gas commodity cost is likely to make up a larger portion of their gas input costs.

For instance, the Australian Industry (AI) Group, which represents more than 60,000 businesses employing over a million people, estimates Australian manufacturers are paying 48% more for gas in 2025 than they were in 2019 (Figure 4).[44]

Figure 4: Australian manufacturing input prices



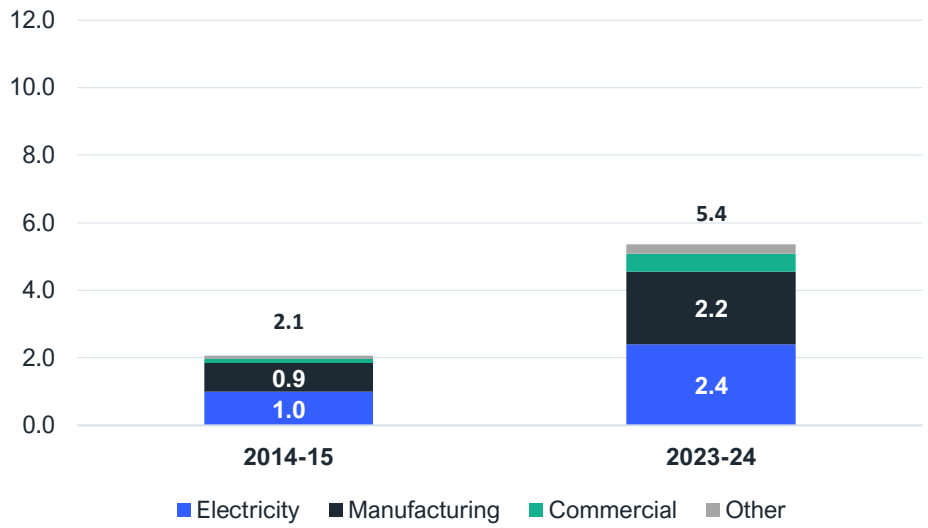
Source: AI Group.[45]

To gauge the impact on business more broadly, IEEFA estimated the changes in gas bills for businesses using wholesale gas prices as a proxy for gas input costs for eastern Australian businesses. While this may understate gas input costs, given businesses may also face other costs such as transmission and distribution charges, and retailer margins, it still provides a basis for understanding how gas input costs may have changed. That said, legacy contracts signed when prices were lower may also mean IEEFA's estimates overstate total gas input costs for businesses (as fixed-price legacy contracts would limit average industry price increases).

[44] AI Group. Manufacturing must be a clear focus of the August economic roundtable. 15 July 2025.
[45] AI Group. Manufacturing in Australia. Performance and outlook report 2025. July 2025.

Nonetheless, IEEFA estimates that total gas input costs increased from AU$2.1 billion in FY2014-15, before LNG exports from Queensland, to AU$5.4 billion in FY2023-24 (Figure 5). Industrial users and electricity generators felt the greatest impact due to their relatively higher gas consumption, with gas input costs for each group rising by about AU$1.3 billion and AU$1.4 billion respectively between FY2014-15 and FY2023-24.

Figure 5: Estimated cost to supply gas to businesses (AU$bn)



Sources: Department of Climate Change, Energy, the Environment and Water (DCCEEW) Australian Energy Statistics, AER, IEEFA.

In addition to higher prices, industrial users face increasingly challenging market conditions, including being offered much shorter-term contracts and smaller volumes by gas producers. The ACCC noted in its recent Gas Inquiry interim report that "the shift to shorter-term intra-year contracting is posing a number of challenges for gas buyers that want longer term contracting certainty, as well as investment across the market."[46]

Tightening domestic supply conditions are a likely factor, with supply of 513 petajoules (PJ) in 2024 5PJ lower than in 2023, while LNG exports increased by about 70PJ year-on-year. Discretionary additional LNG and spot LNG sales accounted for just under half of this increase. As noted by the ACCC, "The lower volumes of gas supplied into the domestic market in 2024 may help to explain some gas buyers' views that while contracting has resumed, supply remains tight."[47]

[46] ACCC. Gas inquiry June 2025 interim report. June 2025. Page 89.
[47] Ibid.

Electricity prices have risen alongside gas prices

Electricity prices in the National Electricity Market (NEM) have increased over the decade of LNG exports from Queensland, with average prices tripling from AU$41.60 per megawatt hour (MWh) in FY2014-15 to AU$127.60/MWh in FY2024-25.[48]

While several factors contributed to this increase in price, including the increasing unreliability of ageing coal power generators, higher gas prices made a material contribution because gas plays a disproportionate role in setting electricity prices.[49] This reflects two issues: firstly that gas is one of the most costly generation fuels in the NEM (with prices bid by gas generators generally higher than those from coal and renewable energy generation); and that gas generation bidding behaviour affects other power generators.[50]

This is why gas prices and prices in the NEM have been historically highly correlated despite gas only fuelling about 5% of power generation in the NEM in 2024.[51] A Griffith University study published in 2022 found that "Over the past 11 years, there has been a near-perfect correlation between natural gas prices and electricity prices in Australia's NEM, regardless of the underlying supply-demand balance and despite gas plant only operating for a small percentage of the year."[52]

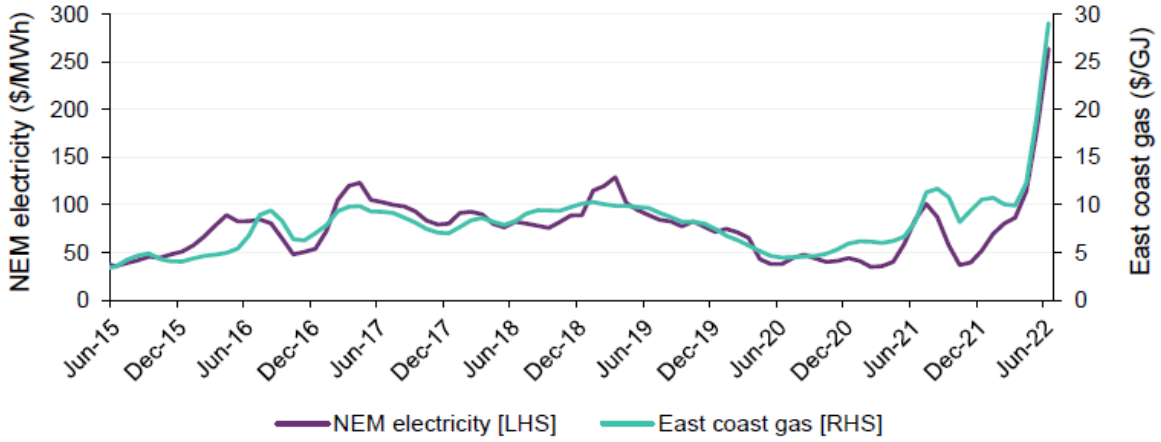
AEMO also highlighted the correlation between gas and electricity prices (Figure 6), noting its analysis "illustrates in particular the strong relationship across time between movements in east coast gas market prices and NEM wholesale spot prices, reflecting the role of gas-fired generation as a key marginal supply source in the NEM".[53]

The influence of gas on electricity prices has reduced slightly in recent years, but it remains significant, with gas setting the price across all regions 10% of the time between 2022 and 2024.[54]

The impact of gas prices on higher wholesale electricity prices has flowed through to household energy bills. Each year, the Australian Energy Regulator (AER) sets a Default Market Offer (DMO), the maximum price a customer on a standing retail electricity offer can be charged. The DMO increased significantly in FY2022-23 and FY2023-24, with the AER citing higher wholesale gas prices as a contributing factor.[55,56]

[48] AER. Annual volume weighted average 30-minute prices – regions. 1 July 2025. The average price is taken from the average price of the five Australian states in the NEM.
[49] IEEFA. What's really driving higher power bills (hint, it's not renewables) and how can we reduce them? 25 March 2025.
[50] IEEFA. Why are power bills higher now than they used to be? March 2025. Pages 4-5.
[51] Open Electricity. NEM. 2024
[52] Griffith University. The role of gas price in wholesale electricity price outcomes in the Australian National Electricity Market. September 2022. Page 1.
[53] AEMO. Quarterly Energy Dynamics Q2 2022. July 2022. Page 16.
[54] Parliament of Australia. Australian Budget Estimates committee meeting, response to a Senate question on notice by the Department of Climate Change, Energy, the Environment, and Water (DCCEEW). 31 March 2025.
[55] AER. Final determination – Default market offer prices 2022–23 – Fact sheet. 26 May 2022. Page 2.
[56] AER. Final determination – Default market offer prices 2023-24. 25 May 2023. Page 2.

Figure 6: NEM wholesale spot electricity prices and east coast wholesale gas prices



Source: AEMO.[57]
Note: NEM wholesale spot price, average all regions; Average of Victorian DWGM and STTM hub gas prices.

Gas prices contribute to inflationary pressures

Higher gas and energy prices also had a key impact on inflation, with the Reserve Bank of Australia (RBA) noting: "These higher wholesale [gas] prices will be passed through to retail electricity and gas prices for households and businesses over time, adding to Consumer Price Index (CPI) inflation. Such price increases directly affect inflation because these two items account for about 3½ per cent of the CPI basket. They also indirectly affect inflation, as businesses gradually pass these higher costs onto consumers via higher prices for goods and services."[58]

Higher gas prices also contributed to higher food prices, in part reflecting that energy use accounts for at least 15% of the total operational costs in the food and beverage manufacturing sector.[59] Gas is also used as a feedstock to produce ammonia, which is a key ingredient for nitrogen fertilisers and an important input for agricultural production.[60] Global fertiliser prices peaked following Russia's widened invasion of Ukraine in 2022, and in turn triggered a rise in global food prices.[61]

Higher gas and electricity prices and increased food prices were important drivers in the spike in Australia's inflation rates to a 32-year high of 7.8% in 2022.[62] Although gas prices have eased since the price spike in 2022, energy costs still contributed to rising inflation in the March 2025 quarter and have been a factor in higher housing costs. Housing was the third largest contributor to the rise in inflation of 0.7% in the three months to 30 June 2025.[63] As the ABS noted: "The main contributors to

[57] AEMO. Quarterly Energy Dynamics Q2 2022. July 2022.
[58] RBA. Statement on Monetary Policy, August 2022. Box A: Recent Developments in Energy Prices. August 2022.
[59] DCCEEW. Food and beverage manufacturing. 2024.
[60] International Energy Agency (IEA). Ammonia Technology Roadmap. October 2021.
[61] International Food Policy Research Institute. High fertilizer prices contribute to rising global food security concerns. 25 April 2022.
[62] RBA. Statement On Monetary Policy. February 2023. Page 70.
[63] ABS. Consumer Price Index, Australia. June quarter 2025. Released 30 July 2025.

the rise [in housing] were electricity (8.1%) and rents (+1.0%)."[64] The RBA said in its interest rate decision on 30 September 2025 that it was still concerned about inflationary pressures, despite inflation being within its targeted rate of 2% to 3% in the June quarter.[65] In November 2023, higher inflation in Australia pushed interest rates to their highest level in more than a decade (4.35%), directly pushing up household borrowing costs.[66,67]

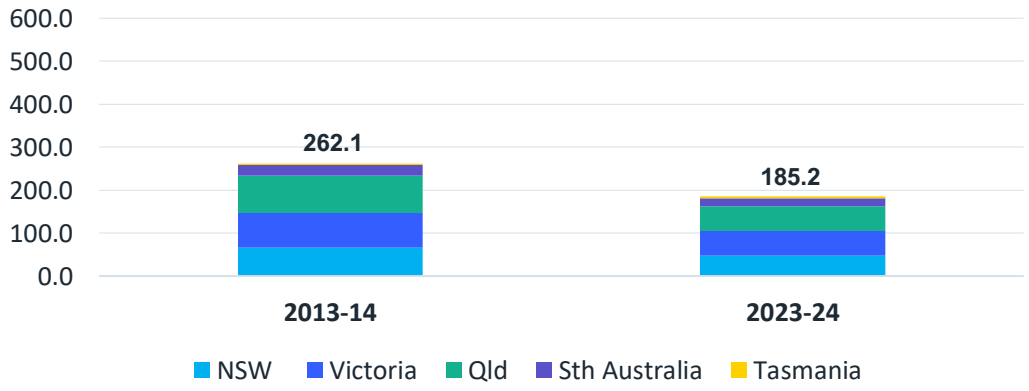
Gas prices a key factor in manufacturing downturn

Rising costs drive drastic fall in manufacturing gas use

While the impacts of increasing gas prices have been felt across the economy, gas-intensive manufacturers, particularly in eastern Australia, have been more affected. Increasing gas input costs, among other factors, contributed to manufacturing gas demand falling by 29% between FY2013-14 and FY2023-24, to the lowest level in 30 years (Figure 7).[68]

AEMO's Quarterly Energy Dynamics (QED) report for the second quarter of 2025 shows gas demand for industrial, commercial and residential consumers continues to fall, dropping a further 4% from FY2023-24 to FY2024-25.[69] In the first half of 2025, gas demand for large industrial and commercial users in Victoria experienced the steepest quarterly decreases since March 1999.[70]

Figure 7: Eastern Australia's manufacturing gas demand (PJ)



Source: DCCEEW.[71]

[64] ABS. Consumer Price Index, Australia. June quarter 2025. Released 30 July 2025.
[65] RBA. Statement by the Monetary Policy Board: Monetary Policy Decision. 30 September 2025.
[66] RBA. Cash rate target. 2025.
[67] RBA. Cash rate target – the key monetary policy decision. 2025.
[68] DCCEEW. Australian Energy Update 2024. August 2024.
[69] AEMO. Quarterly Energy Dynamics (QED) Q2 2025. July 2025. Page 57. IEEFA compiled industrial, commercial and residential gas demand from QED reports from 2022 to 2025 to calculate totals for FY2023-24 and FY2024-25.
[70] AEMO. QED Q2 2025. July 2025. Page 59, and QED Q1 2025. May 2025.
[71] DCCEEW. Australian Energy Statistics, Table F: Australian energy consumption by industry, fuel type. 22 August 2025.

Gas prices a key factor in the closure of heavy gas users

The decadal decline in industrial gas demand largely reflects the closure of large gas-intensive facilities, resulting in at least 1,240 job losses, equivalent to about 5% of the gas and LNG industry's total employment.

The price-sensitive fertiliser sector is among the most affected manufacturing sectors in eastern Australia, with several plants forced to close and others to reduce production levels to stem losses. For example, Dyno Nobel (one of Australia's largest fertiliser producers) incurred asset impairments of AU$1.07 billion in FY2023-24 (to 30 September), following the closure of two fertiliser plants.[72,73,74] At the time, Incitec Pivot (since rebranded as Dyno Nobel) blamed high gas prices for the closures.[75] The loss of its Gibson Island plant also meant Australia became entirely dependent on imports for urea, the most widely used fertiliser in the world.[76,77] Dyno Nobel has warned that its Phosphate Hill fertiliser plant, near Mount Isa, will close by 30 September 2026 if it cannot be sold by 31 March 2026.[78] The plant, which employs about 500 workers, has been placed under strategic review as high gas prices make fertiliser production increasingly uneconomical.[79]

Several other manufacturing facilities have closed in eastern Australia since early 2024, largely around the Melbourne area and in NSW, with high gas prices a contributing factor.

For example, the closures of Qenos's plastics manufacturing operations in Altona in Melbourne and Botany in Sydney were directly attributed to gas prices, with the company stating: "As a result of failures in the east coast gas market and the market power of producers, Qenos were in the position where they had to go into voluntary receivership. The failure of the east coast gas market is not the sole cause; but it's a significant driver."[80] The closures will likely lead to job losses for about 700 workers employed by Qenos, and will have wider impact on other industries, ranging from insulation, ducting, synthetic rubber, food packaging, and moulded and engineered plastic goods.[81]

Australia's largest toilet paper manufacturer, Sorbent, announced in 2023 it was scaling back its operations at Box Hill in Melbourne, partly due to high gas prices, threatening the jobs of about 70 people.[82] Sorbent was joined by Australia's only architectural glass manufacturer, Oceania Glass, which collapsed after 169 years of operation amid soaring gas costs.[83]

[72] Incitec Pivot. Annual Report 2024. Page 85.
[73] Incitec Pivot. Full Year Financial Results Presentation 2024. Page 17.
[74] Incitec Pivot. Gibson Island manufacturing operations to cease at end of 2022. 8 November 2021.
[75] The Sydney Morning Herald. Incitec to shut down manufacturing plant in 2022 as gas prices bite. 8 November 2021.
[76] Argus Media. Australia's Jan-Aug urea imports beat 2023 record high. 24 October 2024.
[77] Impact Fertilisers. Products. Urea.
[78] Dyno Nobel. Fertilisers Distribution sale completes Dyno Nobel closes FY25 with a strong performance. 1 October 2025.
[79] @AuManufacturing. Queensland fertiliser plant at risk as high energy costs threaten closure. 14 May 2025.
[80] ACCC. Gas Inquiry 2017-2030. Interim update on east coast gas market. December 2024. Page 38.
[81] News.com.au. 700 jobs at risk as Australia's biggest plastic and chemical manufacturer goes bust. 18 April 2024.
[82] Wood Central. Sorbent Australia Pushed Partly Offshore: 300% Gas Price Surge. 12 August 2023.
[83] Macrobusiness. Australia can no longer manufacture windows for homes. 13 March 2025.

The shutdown of these manufacturing plants across four years resulted in at least 1,240 job losses, with a further 500 jobs at risk by the end of September 2026 (Table 1). This combined total represents about 27% of the 6,500 jobs in Queensland's gas and petroleum industry, and a sizeable portion of the nation's total oil and gas sector employment of about 24,900.[84,85] It is also about 70% of the estimated workforce (about 2,500 people) at Queensland's three LNG export plants. Total job losses are likely to be even higher given the lack of visibility of smaller facility closures or instances where companies have scaled back their operations and employment.

Table 1: High gas prices contribute to job losses

Plant	Jobs lost	Location	Date	Company
Fertiliser	170	Gibson Island, Qld	8/11/2021	Incitec Pivot (Dyno Nobel)
Toilet paper	70	Box Hill, Vic	12/08/2023	Sorbent
Plastics	700	Botany NSW; Altona, Vic	18/04/2024	Qenos
Fertiliser	40	Geelong, Vic	12/11/2024	Incitec Pivot (Dyno Nobel)
Glass	260	Dandenong, Vic	4/02/2025	Oceanic Glass
Fertiliser	500	Phosphate Hill, Qld	1/10/2025	Dyno Nobel (warning may close by Sept 2026)
Total	**1,740**			

Sources: DCCEEW,[86] ABS.[87]

These job losses raise an important question about the impact on employment from east coast LNG exports, particularly given LNG export volumes have historically been higher than required to meet long-term contracts.[88] Assessment of employment data clearly shows gas-using industries create more jobs than the LNG export sector, with many more jobs created per petajoule of gas for domestic gas using manufacturing (Table 2).

Table 2: Jobs per petajoule of gas consumed in manufacturing and LNG exports

FY2022-23	Chemicals	Non-metallic mineral product manufacturing	Total manufacturing	LNG
Jobs (000s)	50	44	893	20
Gas use (PJ)	32	47	369	4,541
Jobs/PJ	1,547	932	2,421	4.4

Sources: DCCEEW,[89] ABS.[90]

[84] Business Queensland. Petroleum and coal seam gas. May 2025.
[85] ABS. Labour Force, Australia time-series 6291.0.55.001. 19 June 2025.
[86] DCCEEW. Australian Energy Statistics. 28 August 2024.
[87] ABS. Australian Industry.
[88] IEEFA. Australian Gas and LNG tracker. June 2025.
[89] DCCEEW. Australian Energy Statistics. 28 August 2024.
[90] ABS. Australian Industry.

The risks of further industrial closures remain, with the ACCC noting: "A number of C&I users and industry associations told us that if high gas prices persist, it could result in further closures of Australian manufacturing, which they noted could have broader reaching implications for the economy and employment, including in regional areas where some manufacturers are located."[91]

AI Group issued similar warnings, noting that a study it conducted following the 2022 global energy price spike showed a majority (62%) of Australian manufacturers consulted had suffered significant negative impacts from rising energy prices: "They are paying 48% more for gas than they were in 2019, threatening the viability of energy-intensive branches of manufacturing. We are seeing an increase in plant closures or reduced activity in key economic sectors due to energy cost pressures."[92]

Chemistry Australia, the peak industry body for the chemicals industry, said Australia would struggle to realise its net zero ambitions without addressing barriers to investment, such as soaring energy costs and declining productivity, which are affecting the AU$48 billion industry.[93]

Put simply, the Queensland LNG export sector's prioritisation of LNG exports over domestic gas supply has hurt eastern Australia's manufacturing sector.

Large energy users and emitters

The development of the Queensland LNG plants altered energy market dynamics in eastern Australia while adding to Queensland and Australia's emissions.

Queensland's LNG export sector is a major gas user

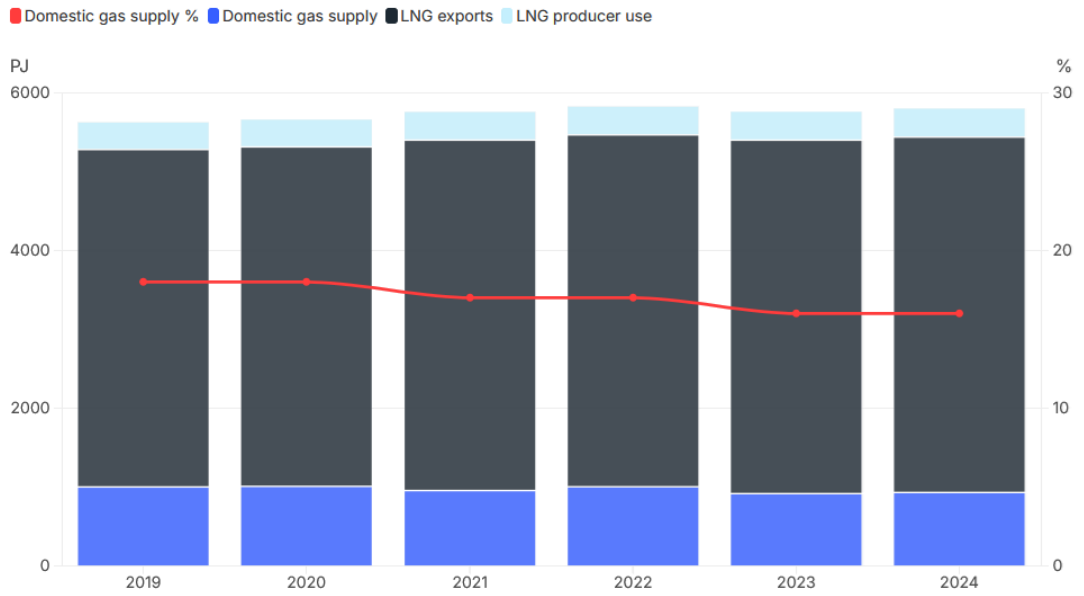
Gas demand in eastern Australia increased rapidly and significantly following the start of LNG exports from Queensland, rising almost 300% from an average of about 1,780TJ/day before 2015 to about 5,000TJ/day in 2017.[94]

While much of this gas is exported, the LNG plants themselves consume material volumes of gas to run their operations, making them a major source of domestic gas demand in eastern Australia (Figure 8). Specifically, IEEFA estimates that, with the exception of 2023, Queensland's LNG exporters used in excess of 100PJ to power their operations each year between 2019 and 2024. To put this in context, the volume of gas made available to other gas users in 2024 was about 500PJ

[91] ACCC. Gas Inquiry 2017-2030. Interim update on east coast gas market. December 2024. Page 37.
[92] AI Group. Manufacturing must be a clear focus of the August economic roundtable. 15 July 2025.
[93] Chemistry Australia. High energy costs and productivity barriers threaten business transition to net zero. 16 December 2024.
[94] Current Sustainable/Renewable Energy Reports. Impacts of LNG Export and Market Power on Australian Electricity Market Dynamics, 2016–2019. November 2020. Page 178. *McConnell D. and Sandiford M*.

(about one quarter of eastern Australia's total gas production), meaning LNG exporters consumed nearly 20% of 2024 eastern Australia's gas demand just to run their plants.

Figure 8: Eastern Australia's annual LNG exports and domestic gas consumption

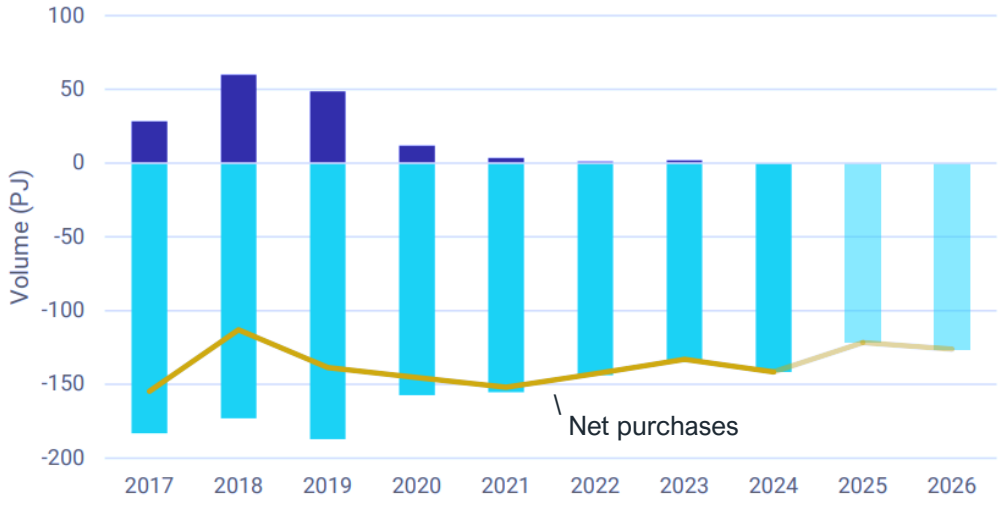


Source: IEEFA.[95]

While LNG exporters have accounted for most of the gas demand in eastern Australia, they have also generally been net suppliers of gas to the domestic market on an aggregate basis. However, Santos's GLNG plant has siphoned large volumes of gas out of the domestic market by purchasing gas from third parties to meet its LNG export contracts (Figure 9). GLNG purchases third-party gas despite having sufficient proven and probable (2P) reserves in its own right.[96] Shell's QCLNG project has largely been a net supplier since 2017, but in 2024 purchased more gas from third parties than it sold to the domestic market (albeit much of QCLNG's third-party purchases are likely from Arrow Energy, a Shell-PetroChina joint venture).[97]

[95] IEEFA. Australian Gas and LNG Tracker. June 2025.
[96] ACCC. Gas Inquiry June 2025 interim report. June 2025. Pages 62 and 68.
[97] Ibid. Page 69.

Figure 9: GLNG's domestic sales (positive values) and purchases (negative values)



Source: ACCC.[98]

Electricity demand materially increased due to LNG exports

Queensland's LNG sector is also a major electricity consumer, both at the LNG plants and in upstream gas production areas. By 2017, when the LNG plants had reached full operation, their average demand exceeded 600 megawatts, with average daily consumption of almost 15 gigawatt hours (GWh) or more than 5,000GWh per year – close to 10% of Queensland's total electricity consumption in FY2017-18.[99,100] By FY2023-24, oil and gas extraction in Queensland (including by non-LNG exporters) accounted for 14.5% of Queensland total electricity consumption.[101] Most of this is likely to be related to LNG exports, given LNG exporters accounted for 1,439PJ of Queensland's 1,575PJ of gas production in 2024.[102]

Energy market analysis also suggests Queensland LNG exports "contributed to effect a doubling of wholesale electricity prices" due to lower gas availability for power generation.[103]

[98] ACCC. Gas Inquiry 2017-2030: Interim update on east coast gas market. June 2025.
[99] Lewis Gray Advisory. Projections of Gas and Electricity Used in LNG. December 2017. Page 39.
[100] AER. Annual electricity consumption – NEM. Accessed 2 September 2025.
[101] DCCEEW. Australian Energy Update 2025. Table F. August 2025.
[102] ACCC. Gas Inquiry 2017-2030. Interim update on east coast gas market. June 2025. Pages 111-112.
[103] Current Sustainable/Renewable Energy Reports. Impacts of LNG Export and Market Power on Australian Electricity Market Dynamics, 2016–2019. *McConnell D. and Sandiford M*. November 2020. Page 176.

Queensland LNG exports have added to state's emissions

Gas and LNG production is highly energy-intensive, with material associated emissions both for the LNG plants and upstream gas operations (Table 3).

Table 3: Queensland's annual LNG emissions, FY2023-24 (Mt)

	Carbon dioxide	Methane - CO_2 equivalent (CO_2-e)	Total emissions (CO_2-e)	Baseline
APLNG				
Plant	2.084	0.034	2.121	2.034
Upstream	0.356	0.210	0.567	0.753
GLNG				
Plant	1.575	0.060	1.635	1.696
Upstream	0.370	0.080	0.452	0.455
QCLNG / QGC				
Plant	1.915	0.020	1.936	1.864
Upstream	0.651	0.220	0.868	0.912
Total				
Plant	5.574	0.114	5.692	-
Upstream	1.377	0.510	1.887	-

Source: Clean Energy Regulator[104]; IEEFA. Note: Mt = million tonnes.

Based on emissions data reported under the federal Safeguard Mechanism, Queensland's LNG plants had estimated total emissions (of CO_2e) of more than 5.5Mt in FY2023-24, with upstream operations pushing their emissions to 7.58Mt. The sector's FY2022-23 emissions accounted for more than 5.5% of Queensland's total emissions and could grow to 16% if sectoral emissions remain stable and Queensland achieves its target to reduce CO_2e emissions by 75% by 2035.

Emissions by the Queensland LNG ventures could be higher due to potential for methane emission underreporting. There is a growing body of evidence that Australia's oil and gas methane emissions are likely underreported due to the use of emission factors, rather than direct measurement, to estimate them.[105] Fugitive methane emissions also represent a lost opportunity to capture and use methane that otherwise enters the atmosphere, where it traps heat at 80 times the rate of carbon dioxide over a short term. IEEFA estimates Queensland's total methane emissions from gas production exceeded 5PJ, with an estimated value of AU$80 million a year (based on 2024 LNG netback prices). The lost value could be higher due to the potential for underreporting.

The sector's emissions also have broader social costs. Infrastructure Australia has published forward estimates of carbon values for use in infrastructure cost-benefit analysis, noting: "The monetary

[104] Clean Energy Regulator. 2023-24 baselines and emissions data.
[105] IEEFA. Prioritising methane abatement makes economic sense. December 2024. Page 35.

value of emissions represents the value society places on each tonne of carbon dioxide equivalent ($/tCO$_2$e) produced or avoided".[106] Its estimates suggest emissions from LNG exporters had a social cost of AU$328 million to AU$492 million in FY2023-24. If emissions in FY2034-35 are in line with those levels, this would imply social costs ranging from about AU$1.28 billion to almost AU$2.1 billion in that year alone.

LNG from Queensland is also not likely to reduce emissions internationally despite often repeated claims that Australian LNG will displace coal in other countries. IEEFA's analysis has found that renewable energy, rather than LNG, is displacing coal in China.[107] In India, the high cost of LNG and a lack of supply of cheaper domestically produced gas has led to gas generation falling (below 2% of the electricity mix in FY2024-25) while coal generation has increased.[108]

In emerging markets generally, the International Energy Agency notes LNG prices would need to fall to US$3-$5 per million British thermal units (MMBtu) to spur material coal-to-gas switching, but this is well below the estimated US$8/MMBtu price required by new LNG suppliers.[109] In the absence of a material fall in LNG demand, IEEFA anticipates LNG prices are highly unlikely to fall to US$3-$5/MMBtu, particularly on a sustained basis. IEEFA is also unaware of any evidence that demonstrates imported LNG, which is generally more costly than domestically produced gas, displaces coal.

Conclusion

The expansion of Australia's LNG export sector in the 2010s was the largest ever investment in the country's oil or gas sector, attracting many billions. This investment drove a corresponding increase in Australia's LNG exports and export revenues, adding to government taxation revenue. While the oil and gas sector's employment is relatively limited, the Queensland LNG industry nonetheless directly employs about 2,500 people.

However, the LNG export sector has also had a range of negative impacts, particularly in eastern Australia, due to LNG prices pushing up domestic gas prices (which have tripled since Queensland LNG exports started in 2015). The impacts include higher gas and electricity prices for households and businesses, which in turn have adversely affected the viability of gas-intensive manufacturing, leading to material job losses. The potential for further job losses remains.

The LNG sector in Queensland has also added to electricity demand and emissions, with the latter estimated to have social costs in the hundreds of millions, projected to reach billions in the next decade.

[106] Infrastructure Australia. Valuing emissions for economic analysis: Guidance note. February 2024. Pages 2 and 4.
[107] IEEFA. LNG is not displacing coal in China's power mix. June 2024. Page 3.
[108] IEEFA. Can LNG displace coal demand in India? June 2025. Page 4.
[109] IEA. World Energy Outlook 2024. October 2024. Page 19.

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

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