

The last LNG train home

Australia's LNG outlook in a demand-constrained world

1. Overview

The outlook for energy markets is shifting. Climate targets submitted by around 130 countries since late 2024 alter projections for fossil fuel demand. Full implementation of current commitments implies a best estimate of 2100 warming of 1.8°C to 2°C, providing a practical baseline for planning by governments and investors. For LNG exporters such as Australia, this is relevant. Although geopolitical events are driving short-term price volatility, long-term demand will be shaped by decarbonisation. The outlook to 2040 is the central scenario for investment decisions in long-lived LNG infrastructure and policy.

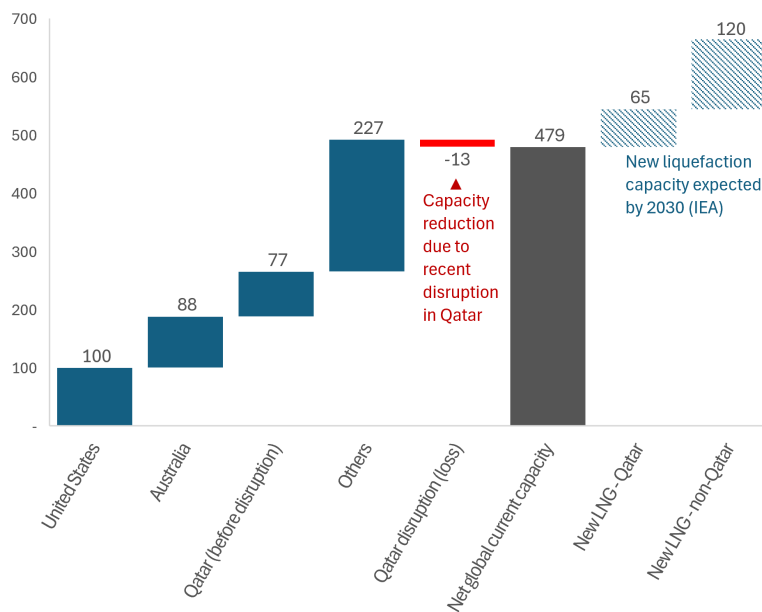
2. A demand-led view of LNG markets

This analysis focuses on total gas demand, and on how much this translates into LNG. It applies a demand-led framework using climate scenarios consistent with peak warming of 1.6°C, 1.8°C and 2°C. Across our scenarios, LNG plays a marginal role after domestic production and pipeline imports, making it more exposed to decline than total gas demand. The key metric of analysis is ‘uncontracted LNG demand’, which is the portion of LNG demand not already met by existing contracts: a measure of market opportunity.

3. Impact of geopolitical disruptions

Damage to infrastructure in Qatar has reduced available capacity in the near term and is expected to delay some new capacity additions. However, even given the scale of disruptions experienced in recent weeks, by the early-mid 2030s there is a significant oversupply of uncontracted LNG capacity in the scenarios explored.

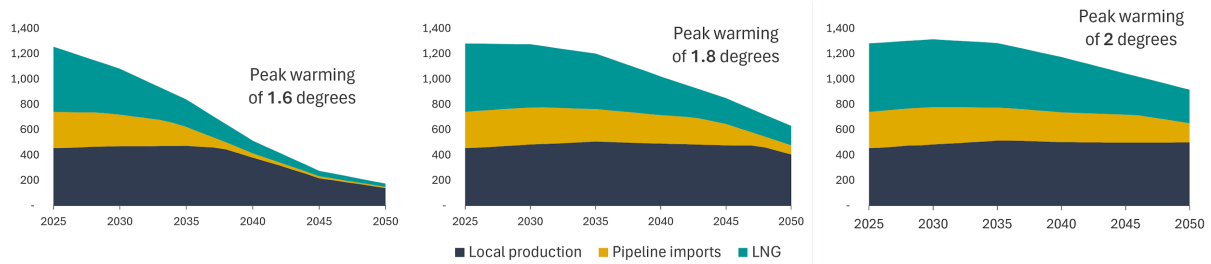
Global liquefaction capacity - current and under construction (Mt LNG)



4. Key findings

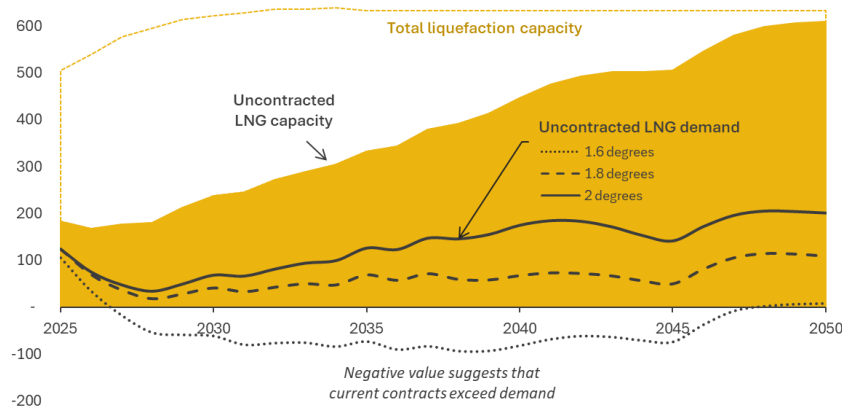
→ **LNG demand is constrained:** in major importing economies, gas demand stabilises or declines as climate policies take effect. LNG demand falls faster, as countries prioritise lower-cost domestic and pipeline supply.

Gas demand for major LNG importing countries by supply source (bcm)



→ **Oversupply emerges in the late 2020s:** A wave of new liquefaction capacity led by the US and Qatar was expected by 2028. Damage to infrastructure in Qatar may delay some additions to around 2030, with full restoration at Ras Laffan taking potentially up to 3–5 years. This does not materially alter the long-term balance: under 1.8°C–2°C pathways, only limited additional LNG is required.

Uncontracted LNG supply and demand (Mt LNG)

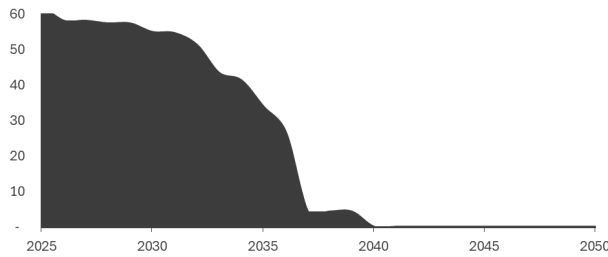


5. Implications for Australia

In an oversupplied market, prices converge toward the marginal cost of the lowest-cost suppliers needed to supply the market (around US\$3–5/MMBtu in Asia), placing pressure on high-cost exporters. Australia sits high on the global LNG cost curve. Long-term contracts have historically supported the sector, but expire by 2040.

As these contracts roll off, Australian projects are exposed to a competitive, oversupplied system. Lower-cost producers are likely to capture remaining demand. The analysis suggests that existing contracts may represent close to the upper bound of Australia’s future LNG exports in a demand-constrained world.

Australian LNG export contracts (Mt LNG)



This challenges the assumption that rising Asian demand will sustain long-term growth. Across key Asian markets gas demand generally plateaus or declines under climate-aligned scenarios, limiting LNG import growth beyond the 2030s.

6. Planning for a demand-constrained future

The conditions that supported Australia’s LNG expansion will likely not return.

In a world aligned with countries fully implementing their current climate commitments, global LNG demand weakens while low-cost supply expands. This narrows the market for higher-cost exporters and increases risks of underutilisation and declining revenues.

Recent geopolitical tensions in major producing regions highlight a key uncertainty. While prolonged disruptions to LNG supply could have material short-term impacts on markets, analysis suggests that the structural imbalance between constrained demand and a large wave of new liquefaction capacity remains intact.

For Australian policymakers and investors, this underscores the need to:

- Stress-test LNG investments against demand-constrained scenarios, rather than making decisions regarding investment in long-lived infrastructure in response to the current supply disruptions
- Plan for export decline aligned with contract expiry
- Strengthen economic diversification and clean energy industries
- Ensure domestic energy policy remains robust

The key question is whether Australia is prepared for a potentially rapid decline in export demand from the 2030s onward. Further acceleration needed.

Full analysis and report: A.Talberg, K. Spiller, R. Burdon, A. Self, M. Pflüger, J. Jiang. (2026). *The last LNG train home - Australia’s LNG outlook in a demand-constrained world*. Climate Resource.
www.climate-resource.com/reports/decarb-futures/The_last_LNG_train_home.pdf