

UNBUILT AND BUILD LNG PROJECTS – WHO DECIDES AND HOW?

Author

Andrew Pickford, Research Affiliate, Positive Energy, University of Ottawa

Study in Brief

Over the last forty years the liquefied natural gas (LNG) industry has attracted project proposals across the globe to mixed success: some never obtained adequate funding or permits, others proceeded to a final investment decision (FID) and then commissioning. The global LNG market is extremely competitive and operates on long timeframes. Very few project proposals ever reach FID and even fewer receive a positive FID. It can take several years or even decades from a gas discovery to the FID.

This study examines the LNG sectors in Western Australia and British Columbia during two key periods: the 1980s and the 2010s. Western Australia is now the world's second largest LNG exporter, but only one project in British Columbia has begun construction (LNG Canada). What explains this difference in track records between the two jurisdictions? This study aims to answer this question and provide an overview of the commercial considerations of the private companies that propose and sanction LNG investments.

Drawing on data from six project proposals from Western Australia and British Columbia, this report unpacks some of the factors that may drive a positive final investment decision. The findings are also applicable to major energy investments beyond the LNG sector, including hydrogen and renewable energy technologies. Investments in these technologies include multi-decade long investments, a large geographical footprint, off-take agreements with foreign businesses, significant impacts on local energy systems, Indigenous engagement and employment considerations, and a complex interplay between local, state and international governments.

Key Findings

The analysis suggests that there are important commonalities between the projects that succeeded and those that failed across Western Australia and British Columbia. Each project proposal is unique, so it is impossible to create a checklist for successful FIDs.

However, findings indicate that the following factors tend to influence the fate of LNG project proposals:

- the specific requirements related to project location, siting, and infrastructure placement with regards to environmental impacts and Indigenous rights;
- the extent to which proponents are able to sign sale purchase agreements with domestic or international customers early on in the process;
- the degree of public support for/opposition to LNG development;
- the level of policy and regulatory certainty in the jurisdiction where the project is located; and relatedly,
- cross-partisan political support for the project and the industry.

The analysis also reveals some important, more structural differences between Australia and Canada that may have contributed to the countries' varying experiences with attracting LNG investments. For instance, Australia's states all have access to the ocean, while Canada must rely on British Columbia to provide access to many markets. Further, so-called 'State Agreements' that are common practice in Australian jurisdictions provide investors with a high degree of political certainty; such agreements do not exist in Canadian provinces. Finally, Australia also enjoys the first-mover advantage. By entering the global LNG market early, Australia has been able to build important relationships with customers and gain valuable experience.

Discussion and Implications

Even in a policy environment focused on achieving net-zero greenhouse gas emissions by 2050, natural gas and blue hydrogen will likely be in the global market fuel mix. Therefore, a new pipeline of projects for FID consideration may be emerging. The comparative analysis may help Canadian policymakers gain insights from the Australian example.

While this analysis is historical in nature, it is important to note that the LNG investment environment is in constant flux. Future trends that may alter companies' decision criteria and practices include innovations that may significantly reduce the emissions profile of LNG projects such as new offset mechanisms, carbon capture and storage technologies, and unexpected international crises. Moreover, ESG investment practices may significantly alter LNG proponents' access to capital markets, and we may see a shift from 'greenfield' to 'brownfield' project development.

Relevance for Decision-Makers

In a 'net-zero by 2050' policy environment, a new pipeline of projects for FID consideration may be emerging. As energy demand for natural gas intensifies, new proposals will likely resurface for LNG projects in Canada. They may have a different ownership mix, with a more prominent role of state-owned companies, incorporate hydrogen, and have a lower carbon footprint. Should a Canadian jurisdiction decide to actively pursue developing an LNG sector, Western Australia, with its use of 'State Agreements', is a useful model. This analysis may help Canadian policymakers gain insights from the Australian example.

All Canadian provinces and Australian states are considering their future energy mix and drivers of growth for the 2020s and beyond. In doing so they will make decisions on the optimal policy and regulatory framework to facilitate investment according to local priorities. Findings from this study aim to inform decision-making by policymakers, the business community, as well as scholars examining the future of energy in Canada.

Next Steps for Positive Energy

In the coming months, Positive Energy will release additional studies on how Canada can strengthen public and investor confidence in infrastructure project decisions, and effectively clarify and strengthen the relationships among policymakers, regulators and the courts on energy and environmental decisions.

[**Link to the full report**](#)