

# **Integrated Gas-to-Liquefied Natural Gas Projects:**

## **Government revenues in Australia and industry concerns**

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### **Overview**

The global expansion in liquefied natural gas (LNG) export projects raises questions about the real contribution of this activity to the host country's economic growth. In the case of Australia, positive economic outcomes have been promoted from the A\$200 billion invested in LNG infrastructure. Seven large plants for LNG export, totalling 63 mtpa, are coming online or under construction in Australia, with some production having commenced. Thus the stage has been set in the community for an expectation of significant amounts of taxes to be raised from these mega projects.

However despite industry investment in these LNG projects, the Australian Budget 2016 figures show resource tax revenues of A\$1.8 billion in 2014-15, and due to lower oil prices, the forecast was reduced to A\$800million per annum to 2020. This suggests that the community could wait decades for benefits from resource taxation. Thus this research aims to investigate how the current 'low oil price shock' is a disruptor to federal government fiscal policies for integrated natural gas-to-liquids projects in Australia and to pose some solutions. The aim extends to determining how international oil companies, which operate large but conventional gas extraction projects in Australia, are impacted by the downturn in world prices. A minor comparison will be made to the US gas industry. For instance, in the United States, where LNG export licences are few, Cheniere Energy Inc. is developing two liquefaction projects, one at the Sabine Pass LNG terminal where there is construction and the operation of LNG facilities which are expected to have production capacity by the year 2020 of around 4.5 mtpa for each of the six LNG trains. The other Cheniere LNG project is near Corpus Christi, Texas, has 4.5 mtpa in operation of the proposed production capacity of 22.5 mtpa.

In phase one of this research project, and in the context of 'low oil price shock', the question asked is: If Australia's petroleum taxation regime for integrated natural gas-to-liquids (GTL) projects were to be modified to generate higher government revenue, what might be the economic outcomes? In the next phase, the research will pose a questions about industry responses to oil price shocks and how Australia's gas extraction industry compares to that of the US.

Phase one of this research is significant for its unique review of Australia's petroleum resource taxation since both the fall in oil prices from mid-2014 and the commencement of natural gas projects for LNG export. There is a need by the Australian Government for a more immediate flow of revenue from natural gas (a petroleum mineral resource) used as feedstock for liquefaction plants. Additional natural gas revenues from reform would contribute toward balancing the Australia's budget deficit and benefit the wider Australian community. This research has implications for other jurisdictions to consider a review of the taxation outcomes from the extraction of non-renewables, given the current low prices and grass-roots political change that is calling for, inter alia, the application of public funds to ageing infrastructure.

### **Methods**

For the first phase of the project, the methodology is to use data from one GTL project as a *case study* to model alternative tax regimes for application to other GTL projects. A suite of economic indicators are adopted for the discussion of results. The International Monetary Fund's (IMF) Fiscal Analysis of Resource Industries (FARI) excel model is used for modelling the case study data. FARI is a tool for comparing taxation regimes. Chevron's Gorgon LNG project is the case study for fiscal modelling to the year 2030. The case study project is subject to Australia's

Petroleum Resource Rent Tax (PRRT), and the entity (Chevron) is also liable to company income tax (CIT) and dividend withholding tax (DWT). This is the current tax regime, which forms the base case. The Gorgon data was used to model four fiscal designs: (1) Gorgon's current tax regime (base case); (2) PRRT and Royalties; (3) a modified version of the PRRT, where the uplift rates are set to zero for undeducted expenditure; and (4) Royalties and no PRRT.

## Results

Three alternative resource tax regimes were modelled against the Gorgon case study's current fiscal design. All scenarios included company tax and withholding tax. The modelling revealed:

1. The base case shows no PRRT revenue from production start-up in 2016 through to the year 2030.
2. The PRRT and royalties scenario shows no PRRT revenue, but US\$4,847 million in royalty revenue to 2030.
3. The modification of the PRRT, where the uplift rates are set to zero (an extreme scenario), shows PRRT revenues commence from 2017, yielding US\$12,692 million in revenue to 2030.
4. The royalty only regime shows US\$4,847 million in royalty revenue to 2030.

## Conclusions

The modelling of alternative resource tax regimes using case study data indicates flaws in the current fiscal system for offshore GTL projects in Australia, such as zero PRRT collections to 2030. This suggests the overall performance of the PRRT is not operating as intended, in terms of an equitable return to the community. The author's recommendations for further modelling and legislative change should be given due consideration by government.

**Key words:** fiscal policy, Australia, petroleum, gas, taxation, resource rent tax, tax reform, royalty

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