Papua New Guinea LNG

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The largest project financing of all time reached financial close in March with sponsors of the pathfinder PNG LNG project including ExxonMobil and Oil Search completing a financing package of US$14 billion.

As the first large-scale oil and gas project to be developed in Papua New Guinea, PNG LNG constituted a major pathfinder not just domestically but also regionally as the first of a raft of Australasian LNG facilities to finance.

It is the second of three major international oil & gas projects to close this year with Europe's Nord Stream [Projects Database] closing the same week as PNG LNG and the Jubail oil refinery [Projects Database] looking to get away over the next month.

The fact that each of these behemoths, all with substantial state support and distinctly different geographical focus, were pushed into 2010 for various reasons indicates just how comprehensive and complicated these massive international financing arrangements are, even with firm sponsors, a committed commercial club and strong political support.

PNG LNG is a project that was always going to be successfully financed given the degree to which it was seen as strategically vital to Asian energy supplies. This is heavily reflected in the level of ECA guaranteed debt and direct lending apportioned by offtake country agencies.

The PNG LNG project proposes to commercialise the considerable undeveloped petroleum resources in the Hides, Angore and Juha fields and the associated gas resources in the currently operating oil fields of Kutubu, Agogo, Gobe and Moran in the Southern Highlands and Western provinces of Papua New Guinea.

The gas is to be conditioned for transportation by pipeline to an LNG facility 20km northwest of Port Moresby on the coast of the Gulf of Papua. There, the gas will be liquefied and the resulting LNG product, approximately 6.3 million tonnes per annum (mtpa), loaded onto ocean going tankers and shipped to gas markets in Asia [Projects Database].

Context

Originally conceived in the mid 1990's the project faced a series of initial technical obstacles with Papua New Guinea not primed for heavy infrastructure development work and the proven gas reserves difficult to access.

As early as 1998 the sponsors intended to transport Papua New Guinea's natural gas to Australia via a 2,500 mile long offshore pipeline. This initial scheme was to connect Kutubu to Bamaga at the northern tip of Queensland, Australia.

However, this plan was scrapped in 2007 with a lack of offtakers and increase in feasibility for an LNG project the main reasons given. On 22 May 2008, the government of Papua New Guinea and the working consortium of sponsors signed an agreement outlining both the fiscal and legal framework for the project.

The PNG LNG JV is now made-up of seven sponsors with both the shareholder make-up and membership developing over the course of the project with the following now involved:

- ExxonMobil (33.2 per cent)
- Oil Search (29 per cent)
- Independent Public Business Corp Papua New Guinea Government (16.6 per cent)
- Santos (13.5 per cent)
- Nippon Oil (4.7 per cent)
- a landowners interest group MRDC (2.8 per cent)
- Petromin PNG on (0.2 per cent)

Société Générale was appointed financial advisor in spring 2008 after state approval from Papua New Guinea's government was recieved.

A 16-month FEED study was then commissioned in the summer of that year coordinated by a JV of Australian engineering firms KBR and WorleyParsons.

Commercial banks then entered into talks with the project sponsors in August 2008 following a visit to the site conducted by the projects operator Esso Highlands.

Peter Botten, managing director of PNG LNG's co-lead sponsor Oil Search says: "At this time a comprehensive term sheet was negotiated by the PNG LNG project finance team with a number of export credit agencies (ECAs). Towards the end of the quarter, all key terms were agreed, including the 70:30 equity gearing ratio."

A final investment decision (FID) was then reached in late 2009 with attention turning to securing all the necessary offtake agreements. By early 2010 the sponsors finalised a series of sale and purchase agreements with Asian consumers concluding the last in March of this year:

- Tokyo Electric Power (TEPCO) - 1.8 million tonnes per annum (mtpa) over 20 years
- Japan's Osaka Gas - 1.5 mtpa over 20 years
- Taiwan's CPC Corp - 1.2 mtpa over 20 years
- China's Sinopec - 2 mtpa over 20 years

As shown, the project will supply four major Asian LNG consumers through long-term offtake agreements guaranteeing the financial viability of the project to service its debt.

Peter Botten: "Finalising all sales and purchase agreements with LNG buyers and completing the financing arrangements with lenders are the major milestones for the project.

"Securing this financing during one of the most difficult financial markets seen in modern history was a major achievement" he continued.

With the final offtake agreements falling into place at the end of February 2010 the sponsors reached financial close in mid-March.

Risks

The most obvious risk that had to be overcome in the financing arrangement for PNG LNG was the unprecedented collapse in market appetite for projects during the key financing period of 2008 and 2009. However, the commercial debt financing stage of the deal was delay free with the banks running to a financing timetable.

Like Nord Stream, a project closely linked through participant banks and financial adviser, PNG LNG was always going to get away given the level of investment pumped in since its inception and its increasing strategic importance to the Asian gas consumer market.

It was originally intended for the project to reach financial close in 2009 but as banks became less willing to lend so too did the sponsors ability to quickly tie up commercial debt allocations. As a result of both this and Asia's increasing demand the project was largely covered by ECAs and direct lending organisations.

These factors undoubtably mitigated the political risk attached to such a project and although the fiscal conditions called for greater guarantees there was a whole package of political insurance that was identified as key to full financing from an early stage in the project.

Japan's NEXI supplied a 100 per cent political guarantee to one portion of the debt to ensure commercial investment in to what was initially perceived as being a particularly precarious market to invest in.

PNG LNG was very much a regional pathfinder with the sponsors having to overcome unique risks associated with any project of this kind in a developing country without precedent for an energy related infrastructure development of this size but which is eager to monetise its reserves.

Fierce local opposition to the project sparked strong debate among the country's leading politicians with accusations that many of the important details were withheld and deals were essentially agreed 'in secret'.

In the build up to financial close work was later halted in February 2010 following the death of four people in an incident linked to land ownership in areas affected by gas production and construction of the project. With the project framework transporting gas over twenty kilometres from its production point for export there are inevitable issues of land ownership to contend with.

Finally, the project faced considerable competition from a cast of LNG export terminals set to come onstream over the coming years. However, given that many of the Australian projects are still some way from financial close and the PNG LNG follow up project led by InterOil is yet to establish itself the sponsors were able to tie up long term offtake agreements ensuring the projects financial viability.

Financing

As IJ reported in late 2009 the US$14 billion financing comprises:

- US$8.3 billion in ECA direct lending and guarantees
- US$1.95 billion in uncovered commercial debt
- US$3.75 billion of co-lending from sponsor ExxonMobil

While the largest sums involved came from the China Development Bank and ECA direct loans, commercial banks also made significant commitments.

Seventeen banks took tickets on both the uncovered and ECA-guaranteed tranches. Leading the pack was Société Générale as financial adviser. Its commitments totalled US$535 million, with a US$135 million ticket in the uncovered tranche and the remainder split across the ECA-guaranteed tranches.

Next up Italian bank Intesa Sanpaolo made commitments of US$455 million with a US$100 million ticket in the uncovered tranche and US$355 million split across the ECA tranches.

BNP Paribas is in for US$440 million, also taking a US$100 million ticket in the uncovered tranche, while Australia & New Zealand Bank made commitments of US$400 million across all tranches, taking a US$165 million uncovered ticket.

Credit Agricole, Standard Chartered and SMBC have total commitments ranging from between US$200 million and US$300 million, while several other lenders including Natixis and Westpac have each committed between US$100 million and US$200 million.

The majority of these commitments are scaled back from banks' original offers, as the project was oversubscribed by almost 50 per cent. Almost US$1 billion of debt on offer was surplus to requirements with the lead financial adviser describing the debt selection process as 'painstakingly democratic.'

The direct lending and guaranteed tranche is partly financed through a US$3 billion contribution from US-EXIM and a US1.8 billion loan from the Japanese Bank for International Cooperation (JBIC).

Australian direct lending group EFIC then contributed US500 million in financing with Japan's NEXI providing 100 per cent political risk and 97.5 per cent commercial cover on US$950 million of the commercial loan.

Pricing on the uncovered commercial tranche was staggered at Libor +325bp between the issue of debt and the conclusion of construction after five-and-a-half years, then Libor +400bp until the tenth year. For the final five years of this tranche pricing then moves up to Libor +425bp.

The US$3 billion commercial debt tranche covered by US-EXIM is priced at between Libor +150-165bp with the SACE covered debt priced slightly higher at Libor +165-185bp. Finally the pricing on NEXI's US$950 million cover is Libor +175-190bp.

Future

A US7 billion follow up project sponsored by InterOil [Projects Database] is set to begin commercial financing this year with Indian energy company GAIL said to be joining as co-sponsor.

InterOil's vice president for capital markets Wayne Andrews confirmed at a speech in London during March 2010 that the company is actively seeking investors and negotiations are nearing close.

Andrews was keen to emphasize the advantage the ExxonMobil PNG LNG project has given InterOil project as it supplied a pathfinder for energy development in Papua New Guinea and it cannot be denied that such a project would not be either financially, or logistically viable had it not been for the work already completed by ExxonMobil and co.

With such long-term offtake agreements secured the financial viability of the PNG project is not in question. However, with four-years of construction on the horizon high dividends may not be returned soon and further political ruptions may be waiting.

However, as a project PNG LNG has shown many of the characteristics present in the oil & gas financing sector over the last two years. It has relied heavily on ECA guaranteed debt to attract commercial finance and has kept its pricing low and tenor long to help facilitate a low average repayment rate.

In a global infrastructure market that is seeing increasing investment across the developing world PNG LNG provides a landmark transaction for projects built to monetise gas deposits in developing countries.

Having successfully funded the largest project finance deal ever those involved in PNG LNG have illustrated that this model of debt financing can be applicable to any deal and is largely versatile.

The project at a glance:

<table>
<tr><td>Project Name</td><td>Papua New Guinea LNG (PNG LNG)</td></tr>
<tr><td>Location</td><td>Papua New Guinea</td></tr>
<tr><td>Description</td><td>Liquefaction terminal with supporting exploration and export infrastructure</td></tr>
<tr><td>Sponsors</td><td>ExxonMobil (33.2 per cent)
Oil Search (29 per cent)
Santos (13.5 per cent)
Nippon Oil Corp (4.7 per cent)
MRDC (2.8 per cent)
Petromin PNG (0.2 per cent)
Independent Public Business Corp (16.6 per cent)</td></tr>
<tr><td>Operator</td><td>Esso Highlands</td></tr>
<tr><td>EPC Contractor</td><td>Chiyoda - LNG Plant</td></tr>
<tr><td>EPC Contractor 2</td><td>JGC Corp - LNG Plant</td></tr>
<tr><td>Project Duration (Including construction)</td><td>Set to come onstream in 2014 the project has agreed supply for</td></tr>
<tr><td>Construction Stage</td><td>Four-years</td></tr>
<tr><td>Total Project Value</td><td>US$15 billion</td></tr>
<tr><td>Total senior debt</td><td>US$14 billion</td></tr>
<tr><td>Senior debt breakdown</td><td>US$8.3 billion in ECA direct lending and guarantees
US$1.95 billion in uncovered commercial debt
US$3.75 billion of co-lending from sponsor ExxonMobil</td></tr>
<tr><td>Senior debt pricing</td><td>Uncovered debt tranche - Construction Years 1-5.5 - Libor +325bp, Years 5.5-10 - Libor +400bp, Years 10-15 - Libor +425bp
US-EXIM covered tranche - Libor +150-165bp
SACE covered tranche - Libor +165-185bp
NEXI covered tranche - Libor +175-190bp</td></tr>
<tr><td>Export credit agency support</td><td>SACE
NEXI
US-EXIM
China Development Bank
EFIC</td></tr>
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Participant banks	• Société Générale • Credit Agcricole CIB • Intesa Sanpaola • BNP Paribas • Australia & New Zealand Bank • SMBC • Standard Chartered • Natixis • Westpac
Legal Adviser to sponsor	• Sullivan & Cromwell • Blake Dawson • Latham & Watkins • Allens Arthur Robinson
Financial Adviser to sponsor	Société Générale
Legal adviser to government	Allen & Overy
Date of financial close	15 March, 2010