# New LNG Projects Face Long Lead Time to Arrange Financing 

Whether it is a greentield liquplaction plant of ncw LNG receiving temminak, large numbers of new players are trying to get into the I.NG walue chain.

When it comes to putting up the
money for these multi-million and ewen büllion-dollar invesaments. worlilwide financlers are scrudimizinu every project before making an investumend decision. The project process itself can take:
seven or eight ycars - or limper.
"Because of the various and cant plex marketing requirememus, multiple price releremmes, and the need to have capacity to supplement the pruduction

2

(Article continues on the following page)

of a sole LNG project, project sponsors and financiers cannot look at a project in isolation and will request strong marketing commitments, as well as production management strategies," said Claude Devillers, a banker for LNG projects and financial consultant.
"In a world where growing demand for gas is assumed and in the expanding world of LNG to merchant markets. the marketing capacity and strengths of the marketer(s) become instrumental to the strength of a project.
"This is an important difference with past projects and financiers will articulate facilities along these lines," he noted in a white paper he wrote on "Considerations on the Financing of LNG Projects."
"It is a very long process," he told an LNG Express editor. "The most difficult issue is signing a marketing agreement."

For a company seeking to do a project in a well-established market such as Japan or Korea, the marketing organization is already in place and offtake agreements can be readily negotiated.

In a developing country like India, the marketing infrastructure is not as
well established and that can delay
financing.
"New projects in Australia or Indonesia where there is experience with offtakes with established partners, financing could take one to two years. For markets not so well organized, it will take even longer," he emphasized.

When some of the first new projects began to be proposed, such as Nigeria LNG, it took almost 20 years for those projects from conception to first production.

Now, the markets are better organized, and people are more knowledgeable, so projectscould be completed in six to seven years.
"For brownfield projects, such as Nigeria LNG, which is adding two new trains, it would likely take one to two years to arrange financing," Devillers pointed out.
"Bankers who will provide the requested financial leverage to the sponsors, need to have multiple expertise in the gas upstream, understanding of the process and issues relating to transportation.
"Last but not least, they need

| Banks and Financial firms with an interest in LNG |  | Multi-Lateral Agencies (MLA) and Export Credit Agencies (ECA) |
| :---: | :---: | :---: |
| ABB Finance <br> ABN Amro <br> ANZ Bank <br> Apicor <br> Arab Banking Corporation <br> Asian Development Bank <br> Banesto <br> Bank of America <br> BankBoston <br> Bank of Tokyo-Mitsubishi <br> Bayerische Landesbank <br> BBVA <br> Banco Popolare di Milano <br> Barclays <br> BNP Paribas <br> Credit Lyonnais <br> CIC <br> Citigroup <br> Credit Agricole Indosuez CSFB <br> Deutsche Bank | Dexia <br> DKB <br> Dresdner <br> Fuil Bank <br> Gulf International Bank (GIB) <br> HSBC <br> Hypo Vereinsbank <br> ING Barings <br> (JP Morgan Chase) <br> KBC <br> Mizuho <br> NAB <br> Nord LB <br> RBS <br> RBC <br> San Paolo IMI Bank <br> Santander Central Hispano SG <br> Taylor deJongh <br> West LB <br> Waterous \& Co. | ```COFACE ECGD EFIC EximBank (US) Hermes IFC Inter-American Development Bank JBIC SACE``` |

expertise in the market and marketing challenges in various countries that have different gas market organizations and philosophies," he added.

There are few banks that can demonstrate the following:

- LNG track record;
- Producing country limits (usually sub-investment grade emerging markets), and expertise (track record, on-the-ground presence);
- Understanding of the risks in the target markets (Europe, North America, Asia and Latin America), and capacity to build competitive structures to mitigate merchant risks or risks on trading groups;
- Relationships with international E\&P companies, national producers, domestic offtakers, trading groups;
- Understanding of the requirements of AA to AAA-rated sponsors, and offering adequate structures to such highly rated groups;
- Understanding of the shipping risks;
- Capacity to source and manage multiple expertise teams that are likely to be located in more than one country; and
- Global and strategic recognition of LNG as a business.
"Actually, the restructuring of the banking world has left very few banks with the capacity to arrange such projects.
"The capital markets have some capacity to on take these challenges although investment banks have not yet assembled all the pieces of the puzzle," he continued.

Table 1 lists financial institutions that have participated in the LNG market.

Political risk. In most cases, financiers are requested to take a
political risk when financing a liquefaction plant.
"Except to a certain extent for Shell's announced floating LNG plant, the LNG plant is still onshore and exposed to political risk," he emphasized.
"Political risk insurance is available for most producing countries, and financiers can concentrate on the project quality," he added.

Some companies building and operating LNG plants - Nigeria LNG and Oman LNG, for example - have higher credit ratings than the country itself.
"You can pierce the sovereign rating because LNG projects are export oriented, the project revenues are denominated in hard currencies and can remain in 'safe' jurisdiction," he said.
"Because of the financial requirements of some of the sponsors as well as the expected return on equity of certain assets in the LNG chain, external financing is sought, notably in the form of bank debt and probably public debt," he explained.

Past teaches greater caution. Even though there is a mad rush to announce new plans for both liquefaction plants and receiving terminals, there have been few projects that have actually pulled the trigger.

Lessons from the early 1970 s and 1980s have tempered how financial institutions approach LNG projects. The current fiasco with the Dabhol project in India has further dampened the investment enthusiasm.
"The first impact is that financiers are now focusing on projects developed by strategic players. Their mindset now is that they want companies with a real strategic interest in the country.
"That does not help the efforts of diversified gas companies to expand their share of this growing industry," he pointed out.

When Dabhol was first introduced, the financing firms agreed to provide
funds to a project sponsored by a diversified gas company. With the fall of Enron, that's out of the question today, he emphasized.
"The second impact is in terms of offtake. Dabhol was built on a scheme from the 1960s, which relied on government guarantees. That scheme has not worked in India," he continued.
"This has been a warning bell for the industry - the strength of the offtaker must be determined.
"They are moving more and more to private offtakers whose quality is assessed on a stand-alone basis," he added.

One aspect of financing that Dabhol has not affected is in combining an LNG import facility with a power plant.
"That's still a good thing. If you can anchor the offtake to a power plant, you can pass the analysis of the risk onto the power plant, a risk that financiers know well" Devillers said. "Anchoring could be a comfort for financiers."

Gas market deregulation. Gas and electricity markets are being deregulated and that is impacting the industry as well.
"A few lessons have been already drawn from the deregulation of electricity generation in the United States.
"First, in a competitive environment, gas price volatility can be extreme. Second, strategic companies to the gas chain can face bankruptcy PG\&E, Southern California Edison or Enron.
"Third, in an efficient gas market, the market prices of gas are the reference for contracts, and their evolution may differ significantly from the ones of oil replacement products.
"Fourth, despite the gas futures market, most price anticipations have proved wrong. And, finally, there is not one U.S. market but rather multiple regional markets," he explained.
"The market anticipates that in
the medium term Canadian gas reserves will deplete, that Mexican imports will be delayed, and that LNG imports will make up for the growing imbalance.
"It is also anticipated that Europe and Asia will rely increasingly on imports of gas, with the decommissioning of nuclear plants and the growing demand for 'clean' energy sources, including in China," he emphasized.

Gas prices are the benchmark for LNG competitiveness in the U.S., since LNG is just another way to deliver natural gas. This will also happen in the other markets as gas usage progresses.
"At current production and transportations costs, LNG is the least expensive of the least economical solutions to provide the U.S. with the balance of its growing demand for gas," he noted. "Many existing and greenfield LNG projects are competing to supply the same markets."

Receiving terminals. "LNG terminals are basically pass-through facilities. For financiers, the question becomes. 'When you have one, will it be utilized or not?" he stated.
"Only very few of the current 20 or so projects in North America will come to fruition, because of market anticipation and tight regulatory constraints in the United States.
"Terminals or the expansion of existing terminals are limited investments, but their cost is sufficient to support financing. Sponsors are likely to seek financing in order to enhance their limited return on equity," he explained.

Financiers will scrutinize location and connectivity, operations, regulations and contracts.

For more information on the white paper from which this article was written, contact Devillers by e-mail at cdeville@optonline.net.

