

LNG Unlimited

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India's LNG imports surge for a second month as gas output falls

Shipments to terminals near Mumbai offset domestic drop

Our Asia-Pacific editor

India's liquefied natural gas imports surged more than 43 percent in May, maintaining the level of the previous month's jump in supplies delivered to the country's four import terminals.

The Indian Ministry of Petroleum and Natural Gas said May LNG imports amounted 1.53 million tonnes of LNG compared with 1.07MT in the same month a year ago, an increase of 43.4 percent. Most of India's imports come from Qatar.

Cumulative

The cumulative imports for the current financial year that began in April 2016 amounted to 3.12MT compared with 2.16MT at the same stage of 2014, a rise of 44.4 percent.

The April imports to India amounted to 1.58MT compared with 1.09MT in April 2015.

If the current import levels are maintained India's four import terminals could bring in shipments of between 18MT and 21MT, given current regasification and other infrastructure limitations. India's 2015 LNG imports amounted to 14.6MT.

That's as India's gross production of domestic natural gas for May was 2.65 billion cubic metres, a fall of 6.9 percent compared with the 2.85 Bcm of output recorded in the corresponding month of 2015.

Once the country develops more import capacity on the east coast, where none currently ex-



Dahej regas terminal is one of three facilities near Mumbai

ists, LNG shipments will rise even higher to meet the high demand. At least four east coast LNG import ventures are planned, including the use of Floating Storage and Regasification Units.

LNG import figures from the Indian ministry also show the most widely used import terminal was the Petronet LNG facility at Dahej, north of Mumbai, with 100 percent of regasification capacity utilized in the past year.

Dahej is also the largest with 10 MTPA of capacity and a 5 MTPA expansion underway.

The Shell-operated import terminal at Hazira, also on the West Coast near Mumbai, has used 70.4 percent of its 5 MTPA of capacity in the past 12 months.

The Dabhol import facility, south of Mumbai, still only has the capacity to handle 1.7 MTPA of cargoes because of a lack of breakwater infrastructure. It has still used 80.8 percent of its capacity during 2015-2016.

The fourth West Coast terminal at Kochi in the southwest state of Kerala has used only 5.6 percent of its regasification capacity in 12 months because of inadequate pipeline connections.

The ministry said India's total

consumption of natural gas for 2016 will be around 52.45 Bcm, with the nation's own annual net production estimated at 31.13 Bcm compared with 32.69 Bcm the previous year.

The balance to meet domestic needs is made up of LNG imports, though actual natural gas demand from industries and the residential market is far higher.

Natural gas transmission network owner GAIL as well as purchasing and importing LNG cargoes is also expanding the country's pipeline system, including the connection to the Kochi terminal.

New pipelines

This Kochi-to-Mangalore pipeline will be 1,063 kilometres in length when eventually completed.

Other energy companies are also building natural gas pipelines alongside GAIL and there are 10 others under construction or being developed.

These would add about 11,500km of pipelines to the network and encourage more infrastructure developments to satisfy demand, also linked to continued economic growth.

UNLIMITED AGENDA

IMPORTS

Japanese LNG imports decline as power plants opt for more coal

2

VENTURES

US fund adds Golar LNG and power venture to Magnolia stake

3

FUEL MARKET

Skangas assists operation to supply first LNG-fueled icebreaking vessel

5

REGULATORY

Alaska LNG project files report to regulators with refined details

6

AGREEMENTS

Shell and Gazprom sign accord for more cooperation on Russian LNG

9

ACQUISITIONS



TransCanada wins approval to buy Marcellus shale and LNG project assets

10

Japanese LNG imports decline 4 percent as Asian nation opts to use more coal for power

Our Asia-Pacific editor

Japanese liquefied natural gas imports declined 4 percent in the second successive monthly drop as the world's largest LNG importer opted for coal instead, with shipments of that commodity surging 44 percent.

The May deliveries of LNG to Japan amounted to 5.52 million tonnes compared with 5.75MT in May 2015, according to the preliminary trade statistics from the Ministry of Finance.

Thermal plants

While LNG imported by Japan for gas-fired power generation and city-gas distribution dropped, the shipments into the country of thermal coal for generating electricity jumped 44 percent to 8.60MT in May compared with 5.98MT in the same month of

2015, even as coal prices were 10.7 percent higher year-on-year.

Japanese LNG imports had actually risen by a marginal amount in March 2016 for the first time since August 2015, to 8.14MT compared with 8.13MT in March last year, a rise of 0.1 percent.

However, the downward trend resumed in April 2016 when the shipments dropped 3.3 percent year-on-year to 6.38MT.

The latest LNG import figures also illustrated the falling price of LNG with deliveries in May 2016 costing 183 billion yen (\$1.75Bln), down 42.0 percent compared 315Bln yen (\$3.01Bln) in the year-ago period.

Fewer cargoes were imported from the Middle East while Asian imports rose.

Total shipments of LNG from the

Middle East were down 14 percent. Deliveries from countries like Qatar, the United Arab Emirates and Oman fell to 1.24MT in May.

These were partially offset by Asian deliveries from nations such as Malaysia and Indonesia, Papua New Guinea and Brunei which amounted to 1.86MT, a rise of 3.2 compared with the 2015 month.

Russian imports also rose 24 percent compared with the year before to 595,000 tonnes.

The balance of other imports in the preliminary figures amounted to 1.82MT from exporting nations such as Australia and Nigeria as well as the spot market. There were still no imports logged yet in Japan from the United States.

On June 9, Japan said the price of spot LNG cargoes imported into the country in May amounted to

\$4.30 per million British thermal units, down from \$5.10 per MMBtu in the previous month and from \$7.90 per MMBtu in the year-ago period.

The spot cargo numbers come from the commerce division of the Japanese Ministry of Economy, Trade and Industry and are only issued if a minimum number of two trades are recorded.

The ministry emphasizes that "spot LNG" refers to fuel traded on a cargo-to-cargo basis and does not mean shipments under contracts on a short-term, medium-term or long-term basis.

Prices prior to averaging are all converted into an equivalent Delivered Ex-Ship (DES) basis whereby the seller carries the cost of the shipping.

Pipeline approval allows Freeport LNG plant's Japanese and European customers to get gas

The US Federal Energy Regulatory Commission has given a permit for an extension of the Gulf South Pipeline that will allow Japanese and European customers of Freeport LNG to transport their feed-gas to the liquefaction plant being constructed at Quintana Island in Texas.

The FERC has now issued an order authorizing the construction of the Gulf South Pipeline Company's extension called the Coastal Bend Header Project.

The pipeline will provide 1.42 billion cubic feet per day of firm gas transportation to the existing Freeport import terminal currently being transformed into an export plant.

Freeport LNG customers who have already signed agreements for the pipeline capacity on the Coastal Bend Header Project include BP of the UK, Germany's Uniper Global Commodities (previously E.ON) and subsidiaries of Japanese utilities Chubu Electric and Osaka Gas.



Firms like Osaka Gas and Germany's Uniper get feed-gas

US energy tycoon Michael Smith is Chief Executive of Freeport and the project is on schedule to ship its first LNG cargo by the end of 2018.

Gulf South owns and operates around 7,240 miles of pipeline facilities extending from Texas through Louisiana, Mississippi, Alabama, and Florida.

Gulf South estimates the total cost of the Coastal Bend Header Project will be around \$545 million.

Each of the three Trains in the first phase of construction at Freeport will produce just over 5 million tonnes per annum of

LNG and 13.4 MTPA of the more than 15 MTPA of output has been contracted under use-or-pay liquefaction tolling agreements signed by the European and Japanese companies.

A fourth production Train is also planned. Construction work on the additional Train is expected to begin in 2017 and to be operational in 2021.

The existing buyers of the Freeport capacity have signed contracts for 4.4 MTPA of liquefaction capacity.

"The proposed addition of compression on Gulf South's exist-

ing Index 129 system is designed to enable Gulf South to provide up to 1.4 Bcf per day of capacity to move gas from various supply sources to a new interconnection between Index 129 and the proposed Coastal Bend Header," according to the FERC statement.

"The new capacity will be divided into two parts: 700 million cubic feet (MMcf) per day will be provided as southbound capacity on the northern portion of Gulf South's Index 129 and 700 MMcf per day will be provided as northbound capacity on the southern portion," the FERC explained.

Specifically, Gulf South proposes to construct and operate a 66-mile-long, 36-inch-diameter header pipeline located in Wharton and Brazoria Counties in Texas.

It includes new compressor stations in Texas, consisting of multiple gas-fired turbines and seven new meter and regulating stations at interconnections with various interstate and intrastate pipelines.

Economics of Australian LNG means output to remain high

Australian production of LNG is ramping up following the substantial increase in investment because some of this increase in capacity was possible due to developments in technology allowing new reserves to be accessed cost-effectively, the nation's central bank said in its latest analysis.

The report was presented in a speech in Sydney by Alexandra Heath, Head of the Economic Analysis Department at the Reserve Bank of Australia (RBA).

"For example, of the eight large-scale liquefaction projects that received approval and began construction over the past decade, three are unconventional coal-seam gas projects in Queensland and one is among the world's first floating LNG vessels, to be located offshore in the Western Australian Browse Basin.

"These developments mean that Australia is expected to become the largest producer of LNG in the world with a total capacity of around 85 million tonnes per annum," she said.

"Geographically, Australia is well positioned to supply LNG to the Asian region, which is expected to drive much of the increase in demand in coming years.

"However, the viability of future projects, at least in the short-term, has been challenged by the fact that LNG prices in the Asian market have fallen in line with the price of oil, which is a close substitute, and potential Australian projects are generally considered to be higher cost than competing projects in other countries" Heath added.

That said she stated that the decline in prices was unlikely to lead to a significant reduction in output from existing producers "because the high fixed costs of building the infrastructure have been paid and marginal production costs are relatively low".

US fund adds Golar LNG and power venture to Magnolia stake

Our North America editor in New York

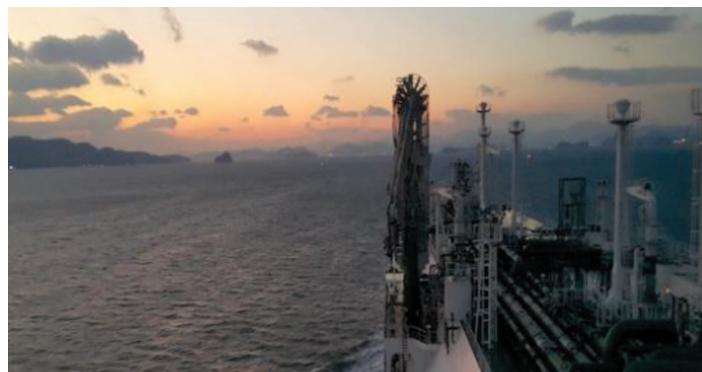
Stonepeak Infrastructure Partners, the New York-based equity fund, has made its second major liquefied natural gas investment by starting a joint venture with Golar LNG, the LNG fleet owner and project developer after previously taking a stake in Magnolia LNG in Louisiana.

Stonepeak is making an initial commitment of \$290 million in new funding for the venture called Golar Power that will focus Floating Storage and Regasification Units (FSRUs) linked to gas-fired power projects for new and existing LNG importers.

Share boost

Golar's US-listed shares rose to \$17.88, or 13 percent, their highest since early March 2016 after the Stonepeak-Golar agreement was signed.

In April, Golar was downgraded and its shares tumbled after negotiations between energy services company Schlumberger and Ophir Energy of the UK ended and Schlumberger's intended purchase of a stake in the Fortuna Floating LNG



Golar Power's initial assets will include FSRU for Brazil

production project offshore Equatorial Guinea, in which Golar is the midstream partner, was cancelled.

The UK-owned Nordic investment bank Clarksons Platou Securities AS acted as Golar's sole financial advisor in the Golar Power deal.

Golar Power's initial assets will include an FSRU under construction, two LNG carriers that can be converted and the right to invest as much as 25 percent in the Sergipe Power project Golar is involved in and located in northern Brazil.

The joint venture will also have a one-year option to acquire two additional LNG carriers from Golar.

Stonepeak said it could invest up to \$500 million in the Golar

Power venture in the coming years after taking a stake in the US Magnolia LNG export project of Australian developer LNG Ltd.

Magnolia LNG proposes to produce an initial 8 million tonnes per annum at a liquefaction plant near Lake Charles on the US Gulf Coast, though progress in that venture has been delayed because of a lack of firm offtake agreements.

Luke Taylor, senior managing director at Stonepeak, said the US equity fund's initial investment includes \$11m in cash to acquire a 50 percent stake in the partnership, \$100m in preference shares on the deal's close and a commitment for \$75m in additional equity.

Monaco-based Greek fleet owner GasLog raises \$1.05Bln in loans

GasLog Ltd, the Monaco-based owner and operator of a fleet of 23 LNG carriers, is seeking to finalize \$1.05 billion in re-financed loans for eight of its operating vessels.

The Greek-owned shipping line, listed on the New York Stock Exchange, has 11 of its owned fleet in operation and is still awaiting delivery of seven other LNG carriers.

Additionally, GasLog has four LNG carriers operating under its technical management for third parties and a vessel secured under a long-term charter from Lepta Shipping, a subsidiary of Japan's Mitsui.

Gaslog's re-financing is being sought for eight on-the-water ves-

sels delivered between 2010 and 2015. "I am delighted to announce this re-financing, which simplifies GasLog's bank facilities," said Simon Crowe, Chief Financial Officer.

"The facility further extends GasLog's maturities, strengthens the balance sheet and creates additional liquidity for the company as we look to pursue a number of interesting growth opportunities in the LNG carrier and Floating Storage and Regasification Unit (FSRUs) sectors," the CFO added.

The banks arranging the loans are Citibank of the US, Credit Suisse AG and Sweden's Nordea Bank.

GasLog said the new loans mean it will have four debt facili-

ties in total instead of nine covering its fleet financing. The LNG fleet owner said the willingness of banks to take part in the re-financing demonstrates "the banks' strong appetite to lend to leading companies in the LNG industry."

In March 2016, GasLog named Bruno Larsen as Head of FSRU Development, saying the company was hoping to extend its activities into the FSRU market.

GasLog said it was evaluating a number of FSRU opportunities as well as undertaking a front-end engineering and design study on FSRU conversion at the Keppel shipyard in Singapore.



ENERGY for life

Energy powers our world, it enriches our lives.
Italian artist Nicol Vizioli uses energy as an inspiration for her art.
It fuels her imagination.
RasGas provides clean, reliable energy for Qatar and the world.
Energy for Life.



"My camera lens captures the energy of the city"
Nicol Vizioli - Artist

the power of the drop
THE ENERGY TO TRANSFORM

NEWS NUDGES

GTT-Endel in LNG accord

Gaztransport and Technigaz (GTT), the French owner of liquefied natural gas maritime and other storage technologies, and Turkey's Endel Group reaffirmed their collaboration in the area of LNG as a marine fuel, following the recent signature of a Technical Assistance and License Agreement (TALA) for the construction of GTT membrane containment systems. In the framework of this agreement, Endel created a mock-up of a Mark III type GTT membrane system. "This partnership reinforces GTT's and Endel's product offering, and benefits clients wishing to equip their vessels with LNG membrane tanks adapted to all types of vessels, such as liners, container vessels, bulk carriers, and RO/RO vessels," a statement said.

Hong Kong deal for Itochu Corp.

Itochu Corp., the Japanese trading house and LNG player, signed a memorandum of understanding for collaboration in oil and natural gas exploration and production with Hong Kong-based CITIC Resources, whose shareholders include Singapore wealth fund and LNG asset owner Temasek. Itochu is one of the Japanese companies that has signed an agreement to examine the realization of the Vladivostok LNG export project in the Russian Far East with Japan Petroleum Exploration Co., Marubeni Corp., Inpex Corp. and Russia's Gazprom.

Gladstone keeps up LNG traffic

The port of Gladstone in eastern Australia is continuing to have steady carrier traffic for shipments to Asia from the three coal-seam-gas-to-LNG plants on Curtis Island.

Skangas assists operation to fuel first LNG-powered icebreaking vessel

Our Europe editor

The Finnish LNG-powered icebreaker "Polaris", the first of its kind in the world, is continuing its sea trials after taking on fuel in a truck-to-ship bunkering operation organized by Norwegian company Skangas at Vuosaari harbour in Finland.

The icebreaker is powered by both diesel and LNG, which will enable its compliances with new ship propulsion emission regulations in Northwest Europe.

Suited

"This is the world's first LNG-powered icebreaker and LNG is excellently suited for use as a marine fuel as it's a great alternative to oil, and being environmentally friendly is one of its strengths," said Skangas Sales and Marketing Director Tommy Mattila.

"Once Finland's first LNG terminal is opened in August, the vessel can also be bunkered directly from the terminal, or bunkering can take place from road tankers at ports around the country," Mattila explained.

Norway-based Skangas is a unit



'Polaris' received its fuel in a truck-to-ship bunkering

of Finland's natural gas company Gasum and is building a leading position in small-scale LNG supplies and bunkering in the North Sea and Baltic regions.

Jarkko Toivola, head of the Winter Navigation Unit at the Finnish Transport Agency, said the "Polaris" will provide a major increase in security for Finland's winter navigation.

"We're determined to ensure the efficient and reliable year-round operability of shipping for Finland's businesses," said Toivola.

The "Polaris" was built at the Arctech Helsinki Shipyard.

The main purpose of the dual-fuel vessel is icebreaking and assist-

ing vessels in ice conditions at sea.

Designed for a 50-year service life it will operate for Finland's state-owned Arctia Shipping. Arctia already has eight ice-breaking ships in its fleet.

The shipping company's business is the provision of icebreaking services and charters.

According to Arctech, the LNG-fueled "Polaris" will be able to move continuously through ice that is up to 1.6 metres thick.

It can also break a 25-metre wide channel in 1.2 metre-thick ice at speed of 6 knots, as well as to reach 9-11 knots of average assistance speed in the Baltic Sea.

European LNG sees truck-loading as vital but US export plants cancel plans

While European import terminals are opting for value-adding trucking facilities to transport LNG fuel to the retail and wholesale markets, US export terminals are cancelling their proposed truck-loading bays, with Sabine Pass in Louisiana being the latest.

Sabine Pass Liquefaction has filed a letter with the US Federal Energy Regulatory Commission withdrawing its application for authorization to construct and operate LNG truck-loading at the first export plant to come into operation on the US Gulf Coast.

Cheniere Energy, the owner of Sabine Pass, told the FERC it was cancelling its permit request be-

cause "Sabine Pass and its customers are focused primarily on the completion of construction and placement in service of the liquefaction Trains" at the export facility.

The Elba Island export project near Savannah in Georgia, being developed by subsidiaries of US pipeline and terminal company Kinder Morgan, cancelled its truck-loading, citing possible opposition to increased road traffic.

Both Elba Island and Sabine Pass were originally built as import terminals and the truck-loading was added at an early point in the design phase.

Sabine Pass began export operations in February 2016 while Elba

Island is being transformed into an export plant for a start-up by 2019.

The Elba liquefaction project will include the installation of 10 small-scale liquefaction units for an output capacity of around 2.5 million tonnes per annum of LNG and modifications to the terminal.

Other LNG export projects such as Magnolia LNG in Lake Charles, Louisiana, have kept truck-loading in their plans.

At European import terminals where LNG demand for power generation has fallen for economic reasons, truck-loading is seen as a success in supply fuel stations for long-haul trucking.

Alaska LNG project files report to regulator envisaging larger storage and 2025 start-up

Our North America editor
in New York

Alaska LNG has given US regulators a second round of draft resource reports and details of alternatives routes and sites it had previously examined as part of the preliminary environmental review process, with start-up now expected in 2025 and estimated costs still at \$45-\$65 billion.

The facilities near Nikiski in south-central Alaska will produce 20 million tonnes per annum of LNG from three liquefaction Trains with two huge LNG storage tanks of 240,000 cubic metre capacity instead of three 160,000 cubic metres capacity tanks originally envisaged.

Partners

The project's four development companies told the Federal Energy



Existing Kenai LNG plant owned by ConocoPhillips

Regulatory Commission that the proposals include delivering the gas from the North Slope region using an 804-mile, 42-inches diameter pipeline with up to eight compressor stations along the way.

The state's Alaska Gasline Development Corp. (AGDC) will own a 25 percent interest in Alaska LNG, along with equal shareholders ExxonMobil, ConocoPhillips and

BP of the UK. "The new liquefaction facility would be constructed on the eastern shore of Cook Inlet just south of the existing Agrium fertilizer plant on the Kenai Peninsula, approximately 3 miles southwest of Nikiski and 8.5 miles north of Kenai," Alaska LNG said in its FERC filing.

Along the main pipeline route from the North Slope to near

Nikiski there would also be associated infrastructure facilities.

These would include at least five gas interconnection points to allow for future deliveries of natural gas to towns and communities along the route.

The approximate locations of three of the gas interconnection points along the 804-mile route have been tentatively identified in the latest report to the FERC.

Mile-post 441 will serve the city of Fairbanks, mile-post 763 will enable the provision of gas to the Matanuska-Susitna Valley and the city of Anchorage and mile-post 804 will be near Nikiski and serve the Kenai Peninsula.

"The size and location of the other interconnection points are unknown at this time," Alaska LNG told the FERC.

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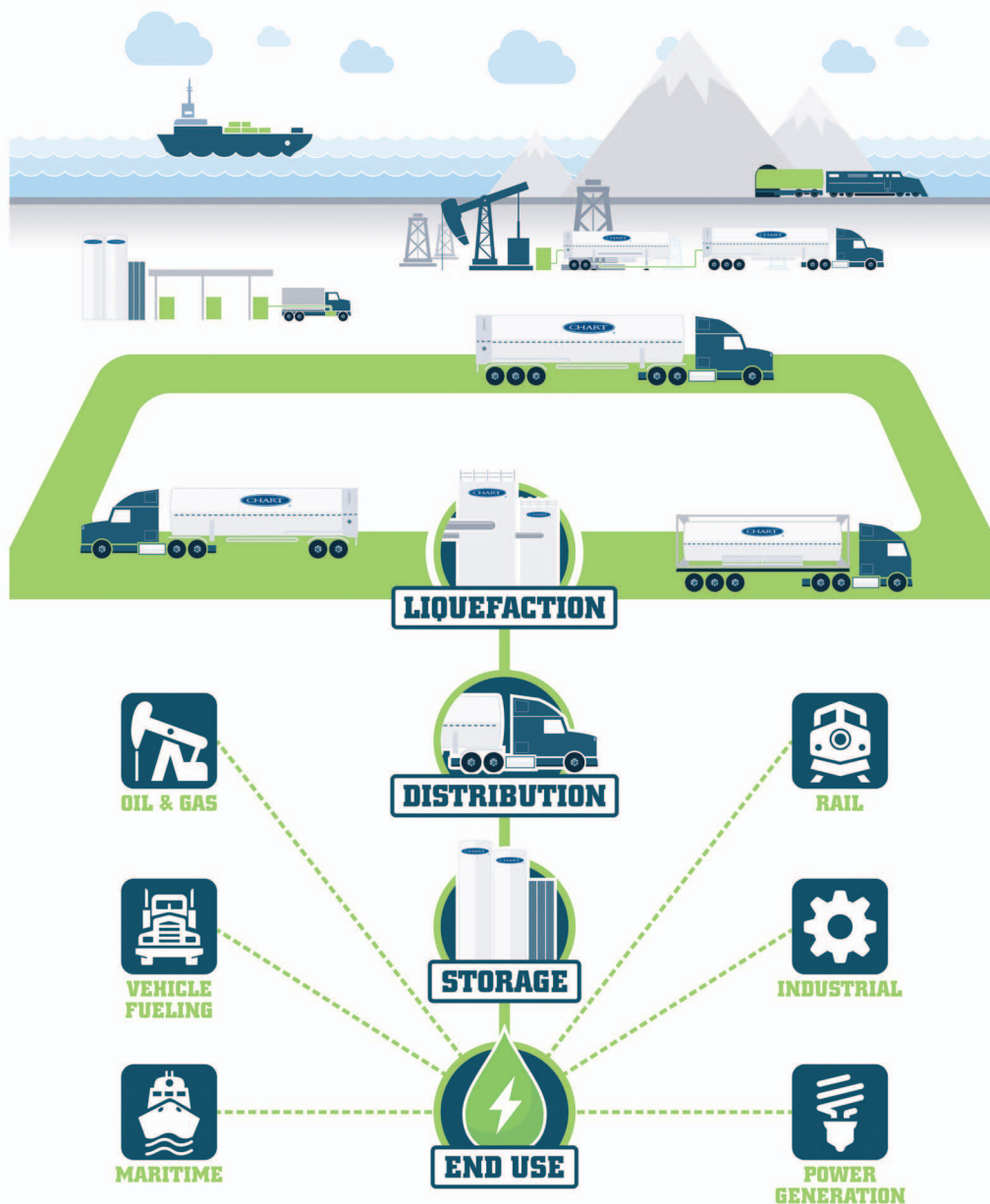
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East Med gas partners in Leviathan field prepare FEED

Delek Group of Israel and Noble Energy of the US are ready to sign a firm agreement to receive front-end engineering design services for the initial phase of the Leviathan natural gas project, the largest current energy venture in the Eastern Mediterranean.

The FEED contract concerns the Leviathan production platform that will have capacity starting at 1.2 billion cubic feet of natural gas per day and be expandable to 2.1 Bcf/d.

The Leviathan field offshore Israel has estimated recoverable natural gas resources of around 22 trillion cubic feet.

Delek said the partnership had authorized Noble Energy Mediterranean Ltd., the operating company for the Leviathan project, to enter into an agreement valued at \$120 million for the platform FEED under the Israeli government-approved development plan.

"It should be noted that the Leviathan partners are working to close other agreements for the purchase of equipment and services related to the development plan and they expect to sign off on them in the near future," Delek said.

"In this way, the Leviathan partners are continuing to work to complete the required actions in order to obtain a final investment decision (FID), based on the development plan in the fourth quarter of 2016 and for that purpose are advancing negotiations at various stages with potential customers, both in the local market and for export, to sign contracts," Delek added.

"Based on the planned timetable, receipt of the FID within the said timeframe will allow commencement of gas production from the Leviathan project in the fourth quarter of 2019," Delek said.

Shell and Gazprom sign accord for more cooperation on Russian LNG

Our Europe editor

Royal Dutch Shell Chief Executive Ben van Beurden and Russian Gazprom Chairman Alexei Miller signed an agreement at the St. Petersburg International Economic Forum to further their cooperation in the liquefied natural gas market and the Nord Stream pipeline project.

Gazprom said Van Beurden and Miller discussed "progress of and prospects for strategic cooperation" in the LNG sector, paying particular attention to the construction of the third production Train of the LNG plant on Sakhalin Island liquefaction plant in the Russian far east in which both are shareholders.

Pipeline

"An emphasis was placed on the issues related to the ongoing Nord Stream 2 pipeline project," Gazprom added.

In addition, Miller and Van Beurden signed an accord on the Baltic LNG project as a follow-up to the agreed "strategic cooperation" on that long-standing venture.



Shell CEO Van Beurden and Gazprom Chairman Miller

"The companies will explore the possibilities and prospects for building an LNG plant with an annual capacity of 10 million tons in the port of Ust-Luga, Leningrad Region," the Russian company said.

"We continue to expand our successful cooperation with Shell. An LNG plant oriented toward Asia-Pacific is efficiently operating on Sakhalin Island in eastern Russia. We are working to enhance its capacity. "We will now explore the possibilities for joining our efforts

in the promising Baltic LNG project in western Russia. The new project will greatly diversify Gazprom's sales markets and strengthen our LNG portfolio," said Gazprom's Miller.

Van Beurden said Shell and Gazprom were convinced that LNG and natural gas in general have great prospects.

"Over the past year, we made great efforts to advance our strategic cooperation," the Shell CEO said.

Sovcomflot continues LNG carrier fleet build-up with ice-class vessel financing

Sovcomflot, the Russian shipping line building up a fleet of LNG carriers, has signed a \$260 million loan agreement with Russia's VTB Bank to purchase an additional carrier to deliver cargoes for the Yamal liquefaction and export plant being built in the Arctic region.

The financing for the LNG vessel with Arctic capabilities is over a period of 13 years and was signed in the Russian city of St Petersburg by Sergei Frank, President and Chief Executive Sovcomflot, and Andrei Kostin, President and Chairman of VTB Bank.

SCF said the newbuild will be able to carry up to 172,600 cubic metres of LNG and has an Arc7 enhanced ice class, enabling inde-

pendent navigation in ice fields of up to 2.1 metres thick. The LNG project is currently under construction in the Yamal Peninsula, led by Russian natural gas company Novatek, and when completed the first phase will comprise three liquefaction Trains each producing 5.5 million tonnes per annum for total output of 16.5 MTPA.

Other investors in the Yamal LNG plant include France's Total and China National Petroleum Corp.

The Russian shipping company currently has eight LNG carriers in its fleet with one other vessel under construction that has been the subject of the financing.

SCF said the vessel will have a 45 megawatts propulsion system, which is comparable to that of the

nuclear-powered ice-breakers. The vessel is due to be delivered in the first quarter of 2017.

"We are delighted to expand our cooperation with VTB, our long-standing partner and one of the Russian banking market leaders," said SCF CEO Frank.

"We are completing the construction of an innovative vessel, which has no analogues in the world to date, and we have concluded a unique transaction to finance this project," Frank explained.

"This is one of the first such agreements ever signed in Russia, to finance a vessel construction, which is traditionally a very capital-intensive and long-term investment project."

TransCanada wins approval to acquire assets at heart of Marcellus and US LNG markets

Our North America editor in New York

TransCanada Corp., the expanding Canadian pipeline company building feed-gas links for LNG export plants, is advancing with its expansion into the US after shareholders approved its takeover of Columbia Pipeline Group.

At a special meeting held in Houston, Texas, Columbia's stockholders voted to adopt the previously announced merger agreement, with 95.33 percent of votes in favour.

Transaction

The takeover will see TransCanada acquire Columbia for US\$25.50 per share of common stock in cash, resulting in a purchase price of around US\$13 billion, including the assumption of US\$2.8Bln of debt.

"We are very pleased with the support of Columbia's stockholders"



One Columbia project includes link to Cameron

said Russ Girling, TransCanada's President and Chief Executive.

"We are moving closer to completing this acquisition and creating one of North America's leading natural gas transportation and storage companies," added Girling.

Columbia has gathering and pipeline projects and assets at the heart of the Pennsylvania Marcellus shale play.

TransCanada is also acquiring the proposed Cameron Access

Project near Lake Arthur, Louisiana, including the installation of a new pipeline in Cameron Parish to provide additional market access to the Cameron LNG export terminal to be operated by Semptra Energy of California.

The Cameron LNG feed-gas supply line will match TransCanada's supply projects to link the shale-gas resources of north-east British Columbia to LNG export plants planned for the Pacific Coast of Canada.

"This acquisition provides TransCanada with a unique opportunity to invest in a proven, growth focused company with a competitively positioned and growing network of regulated natural gas pipelines and storage assets in the Appalachian region, the fastest growing production basin in North America," stated Girling.

"Together, we bring greater options for our customers to get their products to markets through one of North America's largest natural gas transmission networks," he said.

"Columbia's assets and development projects are managed by a dedicated employee base with experience and a commitment to operating safely, and we look forward to working with them," he added.

In May 2016, TransCanada and Columbia announced other regulatory conditions necessary to close the deal had been satisfied.

Eni renews Algerian production licences with struggling LNG producer Sonatrach

Italian energy company Eni said its Chief Executive Claudio Descalzi has held talks in Algeria and signed an agreement on the extension of oil and natural gas production licenses as the North African nation aims to boost production of liquefied natural gas and pipeline gas to Europe.

The Eni licences cover the key Rhourde Oulad Djemma (ROD) fields, its satellite fields and three fields in Block 403.

Eni's exploration and production activities are concentrated in the Bir Rebaa region and Block 403 in the Algerian desert.

Blocks 403a and 403d are located in the prolific Berkine sub-basin in southeast Algeria. Nine fields are included in these two blocks.

The Italian company said that supplies of Algerian natural gas to Italy last year totalled more than 7.5 billion cubic metres, mostly

from the Trans-Mediterranean pipeline linking the two countries.

However, only 20,000 tonnes of LNG was delivered to Italy in 2015, less than one full Med-sized carrier cargo.

Algeria exported a total of 12.13 million tonnes of LNG in 2015, up from 10.8MT in 2013.

The main LNG customers of state-owned energy company Sonatrach were France with 3.29 million tonnes of imports, followed by Turkey with 2.81MT and Spain with 2.74MT.

In November 2014, Algeria inaugurated its newest LNG production Train near to the existing Arzew liquefaction plant on the Mediterranean coast.

The new Train at Arzew, located 385 kilometres (240 miles) west of the capital Algiers, follows completion of another at the North African country's second plant at Skikda, giving it a combined boost

of 9.2 million tonnes per annum of additional liquefaction capacity.

Together the two Trains give Sonatrach, which was the world's first cargo exporter in 1964, renewed traction for LNG production amid continued feed-gas shortages and insecurity outside the main cities.

During his meeting in Algiers, Eni's CEO Descalzi and Sonatrach Chairman and CEO Amine Mazouzi signed an agreement on "particularly important assets as their discovery led to the establishment in 1995" of the first strong partnership between Eni and Sonatrach.

Descalzi also held talks with the Algerian Minister of Energy Nouredine Bouterfa.

"The renewal of the partnership between Eni and Sonatrach, enshrined in the agreement, will bring about an ambitious programme of activities that will include advanced techniques for

hydrocarbon recovery," they said.

In addition to producing LNG at its two plants, Algeria has three natural gas export pipelines to Europe, two transporting natural gas to Spain and the one linked to Italy.

The Italian Pipeline Enrico Mattei (GEM) came online in 1983 and runs 1,025 miles from Algeria to Italy via Tunisia.

"The agreement also lays the foundations for the completion of the unitisation process between the SF field, where Sonatrach has a 100 percent stake, and the SFNE field, which is jointly operated by Eni and Sonatrach," it explained.

"With this visit, Eni CEO Claudio Descalzi has renewed the hope of a cooperation ever more fruitful by re-launching gas development activities in existing concessions in the country and by embarking on new renewable energy activities," Eni said.