

LNG Unlimited

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Finland moves ahead with its third terminal and first connected to grid

The Hamina project is joint venture between Hamina Energia and Estonia's Alexela Group

Our Europe editor

Finnish power project company Wartsila, which also makes propulsion and gas equipment for ships, said it was awarded the contract to give Finland its third small-scale import and regasification facility at the port of Hamina.

The Hamina terminal will be the first of the three facilities in Finland to be connected to the national gas grid, offering security of supply to gas customers.

Wartsila recently completed the second Finnish onshore terminal at Tornio, which enters commercial operations in early 2018.

Turn-key contract

The company said it was awarded a turn-key contract by Hamina LNG for the terminal at a site in southern Finland about 145 kilometres east of the capital Helsinki.

The Hamina project is a joint venture between Hamina Energia, a regional energy distribution company, and the Estonian Alexela Group, a terminal operator in the Baltic region

Alexela is also involved in developing the Paldiski LNG import project in Estonia.

Finland's first LNG import terminal at the port of Pori is owned by Nordic LNG player Skangas and its Finnish parent company Gasum, a natural gas operator.

Skangas and Gasum are also shareholders in the Tornio terminal, along with the Finnish industrial group Outokumpu, the Swedish-Finnish company Svenskt Stal AB and EPV Energy.



Hamina is latest European regas terminal to go ahead

The Tornio terminal will primarily provide natural gas to Outokumpu's Tornio steel mill.

Wartsila said the contract scope for the Hamina terminal includes civil works, infrastructure, a full containment storage tank as well as regasification, metering and boil-off gas handling systems.

The Hamina terminal, expected to be operational by August 2020 will additionally offer truck-loading and will act as a regional ship bunkering station for LNG fuel.

"We wanted to create a terminal infrastructure which would provide bunkering for vessels as well as diversify the country's sources of gas supply," said Peter van Buuren, Chief Executive of the Hamina LNG development company.

"Wartsila's technology fits our need and they have the best local knowledge and experience as an EPC provider in harsh weather conditions.

"Wartsila offered us full engineering, procurement and construction capabilities as well as a unique know-how in gas processing," added the CEO.

Timo Mahlanen, Senior Business Development Manager of Wartsila Energy Solutions, said the Hamina project was part of Finland's plans to create a network of medium-scale LNG terminals with the aim of offering gas supply to the local industry and LNG as fuel.

"The project will bring a significant reduction in CO2 emissions by providing cleaner fuel for transport and industry," said Mahlanen.

"At the same time, the LNG infrastructure will increase the security of supply in Finland with gas grid connection," he added.

The newly-completed Tornio terminal at the port of Roytta is larger than the existing Pori facility which has been in operation since 2016.

Tornio is set to become the biggest receiving terminal in the Nordic region when it begins commercial operations in 2018 with its storage capacity of 50,000 cubic metres.

The first cargo for commissioning of the Tornio terminal is expected to be delivered in November.

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US Rio Grande export project given tax incentives for \$15Bln Brownsville spending

Our North America editor in New York

NextDecade Corp, the LNG export company in Texas developing the Rio Grande liquefaction plant, has received tax incentives for its project planned for the Port of Brownsville because of its jobs and investment potential.

The LNG project is one of the largest proposed private investments in the State of Texas with the plant and associated Rio Bravo Pipeline costing more than \$15 billion to be spent in Cameron County where its site is located.

Abatement

"The tax abatement agreements are aligned with distinct phases of the project and provide for the full abatement of County property taxes for each phase's first 10 years of operations," said NextDecade.

The Rio Grande export venture, which is advancing through the Federal Energy Regulatory Commission permitting process, will produce 27 million tonnes per annum of LNG when completed.



Rio Grande venture will produce thousands of jobs in state

NextDecade organized a reverse merger transaction earlier in 2017 to obtain a stock listing on the Nasdaq global exchange to make it easier to raise finance for the liquefaction plant and its affiliated pipeline.

The Rio Grande plant will have six liquefaction Trains when completed and will be among the leading projects in the second wave of the US Gulf Coast export build-out.

"The proposed facility and pipelines are expected to create approximately 6,000 direct jobs during construction, more than 250 permanent jobs at the facility

during operations, and more than 3,000 indirect permanent jobs in the county," NextDecade explained.

"Additionally, exports from Rio Grande LNG could significantly improve the US balance of trade while supporting key allies with access to cleaner-burning natural gas," the company said.

The Chief Executive of NextDecade is Kathleen Eisbrenner, a former senior Shell LNG executive before she founded the US company based in Houston.

"Subject to a positive final investment decision, Rio Grande LNG agrees to pay \$2.7 million in

payments-in-lieu-of-taxes during each year of tax abatement for all phases," the company said.

Rio Grande LNG has also agreed to provide up to \$10 million to fund community projects and to maximize the hiring of residents of the county during construction and operations.

"This marks the start of our company's formal partnership with Cameron County," said NextDecade Chief Financial Officer Ben Atkins.

"We look forward to a long collaboration to positively impact the economic wellbeing of county residents," he added.

"These tax incentives are essential to the project's competitiveness, and we are grateful to have received broad political support, evidencing our commitment to safe operations and sensitivity to the region's environment and tourist sectors.

"Rio Grande LNG is ideally located with access to a capable workforce, superb port facilities and abundant, low-cost feed gas from the Eagle Ford and Permian basins," stated Atkins.

Further approvals given to first Delfin floating LNG project planned for Gulf of Mexico

Delfin LNG, the most advanced US floating export development proposed for offshore Louisiana in the Gulf of Mexico, has had its permit approved by regulators to reactivate and construct facilities on its onshore pipeline in Cameron Parish.

The permit from the Federal Energy Regulatory Commission will enable Delfin to transport gas to its proposed deepwater port terminal to be located 30 miles offshore Louisiana.

The FERC order also authorizes High Island Offshore System to abandon from Natural Gas Act service certain offshore pipeline facilities which will be utilized by Delfin LNG.

The Delfin FLNG project is owned by a US-Asian joint venture called Fairwood Peninsula Energy and is planning to deploy a floating liquefaction facility with four moored production and storage vessels to produce up to 13 million tonnes per annum of LNG.

The Delfin developers have already been awarded a deepwater port licence by the US Maritime Administration and the venture has been approved by the US Coast Guard, clearing the way for the first US FLNG project to proceed.

Delfin purchased the UTOS pipeline, the largest natural gas pipeline in the Gulf of Mexico, and submitted its deepwater port

license application in 2015.

The US Energy Department had additionally determined that exports from the Delfin LNG terminal, jointly owned by the India and Singapore-based Fairwood Group and the US-based Peninsula Group, for a period of 20 years, were not inconsistent with the public interest.

Delfin proposes to activate the formerly abandoned offshore system pipeline for the FLNG project and construct new connecting pipelines, a compressor station and associated facilities.

The company has signed a joint development agreement with shipping company Golar LNG for

the supply of FLNG vessels to be built in South Korean shipyards.

In June 2016 it also signed a \$1.5 billion financing contract with the state-owned Korean Development Bank to help guarantee the construction of the three project vessels in Korea.

The Delfin FLNG financing contract was signed by KDB Chairman Lee Dong-Geol and Delfin founder and Chief Executive Frederick Jones.

The KDB finances overseas projects by providing industrial capital if that adds to South Korean economic development and guarantees jobs.

Flex names Kalleklev CFO as it pursues FSRU plans

Flex LNG, the Oslo-listed company whose shareholders include a fund controlled by John Fredriksen, has named Oystein Kalleklev as its new Chief Financial Officer as it plans to take its place in the floating storage and regasification market for import terminals.

Shipping tycoon Fredriksen retains a 52 percent stake in Flex, which is awaiting the delivery of six LNG carriers by 2019 and is planning joint ventures with US export and liquefaction plant developer NextDecade Corp.

The Fredriksen stake in Flex is held by Geveran Trading, a company indirectly controlled by trusts established by the billionaire for the benefit of his immediate family.

Flex said Kalleklev brought extensive experience in the shipping and energy sectors and capital markets experience to the company.

Prior to joining Flex, he served as CFO of Knutsen NYK Offshore Tankers AS from 2013 and Chairman of the General Partner of NYSE-listed Knot Offshore Partners.

Kalleklev also worked as CFO for industrial investment company, the Umoe Group, from 2006 to 2011.

In addition, Kalleklev was a partner at Nordic investment bank Clarksons Platou from 2011 to 2013. He holds an MSc degree in Business Administration from Norwegian School of Economics and a BA in Business and Finance from Heriot-Watt University in Edinburgh.

"I am pleased to announce that Oystein has joined Flex LNG," said Jonathan Cook, Flex Chief Executive. ■

Sweden's Volvo to roll out new trucks to run on LNG with power of diesel fuel

Our Europe editor

Volvo, the Sweden-based auto manufacturer, said it was introducing new heavy-duty trucks to run on liquefied natural gas and compliant with new European Union emission restrictions.

The Swedish firm said its new Volvo FH LNG and Volvo FM LNG trucks have the same performance, drivability and fuel consumption as Volvo's diesel-powered models.



Volvo trucks available in 420 or 460 horsepower versions

Emissions

However, it said the carbon-dioxide emissions are 20 percent to 100 percent lower compared with diesel, depending on choice of fuel.

The new Volvo FH LNG and Volvo FM LNG trucks are available with 420 horsepower or 460 horsepower for heavy regional and long-haul operations.

Volvo said its LNG trucks were Euro 6-compliant, meaning they qualify for the latest EU directive to reduce harmful pollutants from vehicle exhausts.

The Euro 6 standard was introduced in September 2015 and all mass-produced vehicles sold in the EU from that date need to meet

these emissions requirements to reduce pollution.

In its announcement, Volvo said it would start selling the vehicles during the second quarter of 2018 in the European market.

"With our new trucks running on liquefied natural gas or biogas, we can offer an alternative with low climate impact that also meets high demands on performance, fuel efficiency and operating range," said Lars Martensson, director of environment and innovation at Volvo Trucks.

"This is a combination that our customers in regional and long haulage require," added Martensson. ■

Volvo said that instead of an Otto cycle engine, which is the conventional solution for gas-powered vehicles, the Volvo FH LNG and Volvo FM LNG are powered by gas engines using diesel cycle technology.

The company said its 460 hp gas engine delivered maximum torque of 2300 Newton metres while the 420 hp version produces 2100 Nm, the same as Volvo's corresponding diesel engines.

"What is more, fuel consumption is on par with Volvo's diesel engines, but 15 percent to 25 percent lower than for conventional gas engines," added Volvo. ■

Gothenburg bunkering helps Sweden develop LNG guidelines for its ports

Nordic LNG supplier and infrastructure operator Skangas is advancing its re-fueling operations in the region's largest port, Gothenburg, as it expands the activities of its new bunkering vessel "Coralius" and regional ports also gain more operational knowledge.

The latest ship-to-ship operation supplied LNG to the tanker "Ternsund" in the Swedish port.

It was the first time the 5,800 cubic metres capacity LNG bunkering and distribution vessel "Coralius" had operated in Gothenburg.

In September 2016, Skangas had re-fueled the "Ternsund" for the first time in Gothenburg using a

small-scale vessel it had on short-term charter, the "Coral Energy".

The "Coralius" is now on a long-term charter to Skangas and is also used for distribution.

"We work closely with ports and authorities to serve an increasing number of European vessels with LNG," said Skangas marine division executive Gunnar Helmen.

"In this case the Swedish authorities, the Transport Board, oversaw the operation as they are currently developing LNG guidelines for Swedish ports.

"Soon, the fleet of LNG driven vessels only with Swedish shipowners will double. Up to now we have

bunkered LNG by trucks in the Port of Gothenburg," added Helmen.

"Our bunkering vessel is yet another manner to meet the demand," he stated.

The "Coralius" was commissioned for Dutch shipping company Anthony Veder and Sirius Shipping in 2015 and built at the Royal Bodewes shipyard in the Netherlands.

The bunkering of the "Ternsund" a year ago was the first ship-to-ship bunkering to be executed by Skangas and Anthony Veder and the first to take place in the Gothenburg area. ■

At the Core of LNG

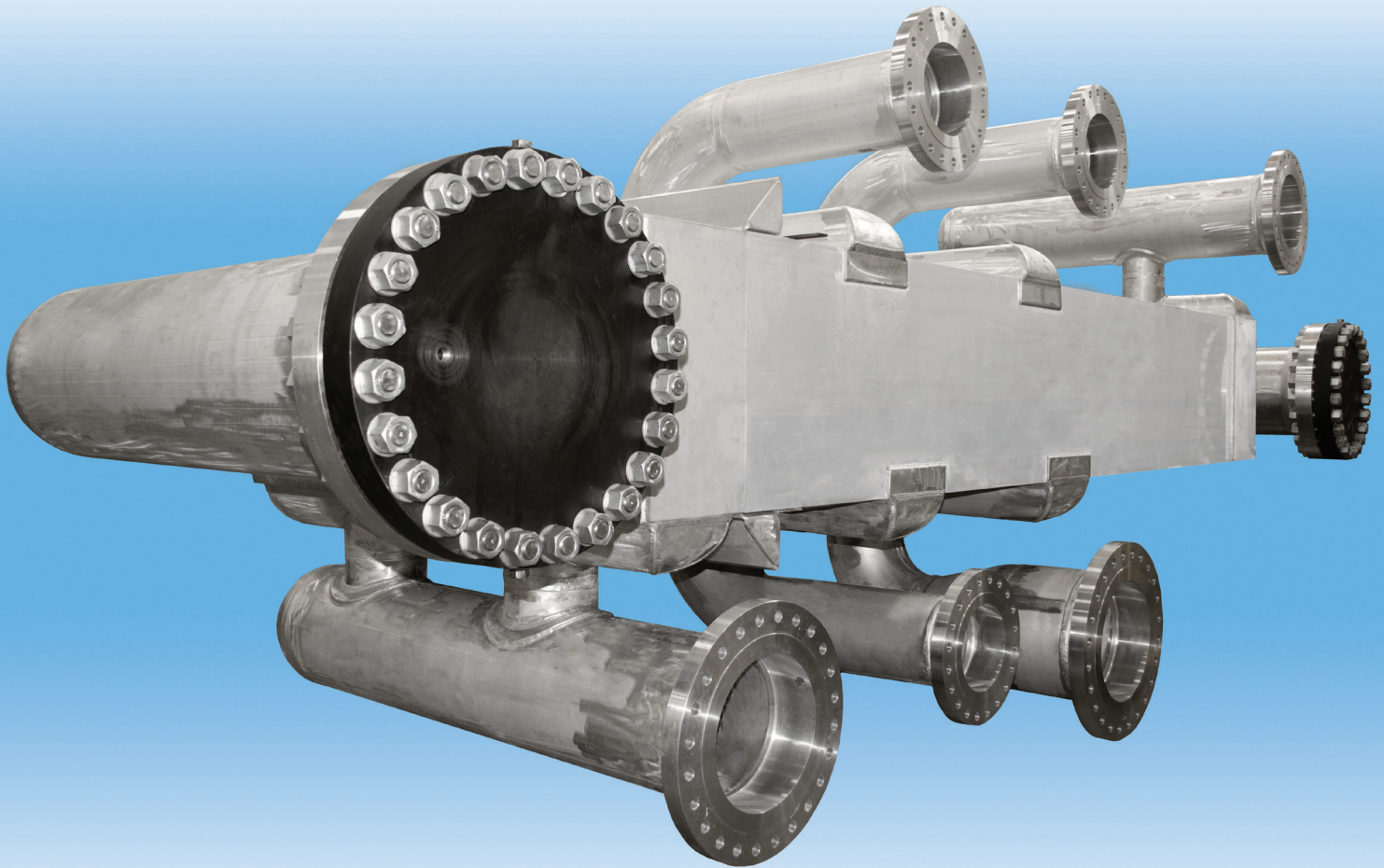


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NEWS NUDGES

Sengkang LNG advances

Energy World Corp., the LNG project developer, said its Indonesian Sengkang liquefaction venture was well advanced, with key equipment, including four cold-boxes, compressors and ancillary equipment, already installed on site. "The LNG storage tank has been fully slip-formed and is now subject to fit out," said the Australian-listed company. "Jetty works have been finalised and loading arms have been installed. The inter-connecting pipe work and the installation of the control and instrumentation systems are being completed," added EWC.

LNG firm in HQ rethink

LNG Ltd, the Australian-based company developing two LNG export projects in North America, the Magnolia project in Louisiana and the Bear Head venture in Nova Scotia, Canada, has suspended moves to redomicile the company in the US. "The board's decision allows management to maintain its focus on marketing the offtake at Magnolia LNG and Bear Head LNG, to concentrate on opportunities to create additional long-term value for shareholders and to strengthen liquidity," said Chief Executive Greg Vesey. "The board and the company's management team are continuing to monitor market conditions to potentially re-engage on the redomiciling efforts at an optimal time for the company," added the CEO.

Delek-Gazprom vehicle plans

Israeli energy company Delek, a stakeholder in the Tamar and Leviathan gas fields in the East Mediterranean, has signed a memorandum of understanding with Gazprom of Russia to jointly examine the possibilities of using natural gas as a fuel for vehicles in the Israeli market. ■

African state of Cameroon on track for FLNG as hull leaves Singapore yard

Our Asia-Pacific editor

Golar LNG, the project and shipping company, said the floating LNG production vessel, the "Hilli Episeyo", has moved to a deep-water anchorage offshore Singapore where Keppel Shipyard will complete final commissioning before the vessel is deployed for a joint venture in the West African state of Cameroon.

The "Hilli Episeyo" is currently expected to leave Singapore waters between October 15 and October 20.

Mooring

The mooring system has already been installed offshore Cameroon and is ready for hook up to the "Hilli Episeyo".

"All going well, the voyage between Singapore and Cameroon is expected to take 32 to 40 days, allowing Golar to tender its notice of readiness during November," Golar has said.

The Golar FLNG vessel will be put into operation offshore the port of Kribi in Cameroon in a joint venture also involving the



Production vessel will be deployed offshore Kribi port

state energy company, Société Nationale des Hydrocarbures (SNH) and European oil and gas company Perenco.

The project being completed by Keppel is the world's first FLNG hull conversion.

The "Hilli Episeyo" was converted from a 1975-built, Moss-type LNG carrier with a storage capacity of 125,000 cubic metres.

The topside equipment includes a pre-treatment system, four single mixed-refrigerant liquefaction Trains using PRICO technology from US company Black & Veatch and boil-off gas compression and offloading equipment.

The "Hilli Episeyo" is designed

for a liquefaction capacity of about 2.4 million tonnes of LNG per annum.

"Compared to newbuilds, converted FLNGVs are significantly more cost-effective and faster to market, without compromising safety and processing capabilities," said Keppel.

The decision to proceed with the "Hilli Episeyo" came in 2015 when Russia's Gazprom, through its Singapore-based Marketing & Trading unit, won the tender to be the sole off-taker from the Cameroon FLNG venture, clearing the way for the project financing to go ahead. ■

Equatorial Guinea project upstream work goes to Schlumberger and Subsea 7

Ophir Energy, the UK exploration and production company with assets in Africa and Asia, said it awarded the upstream contract for the Fortuna floating LNG project offshore Equatorial Guinea to a joint venture comprising a subsidiary of oil and gas services firm Schlumberger and UK-based company Subsea 7.

The joint venture is called Subsea Integration Alliance, which is a partnership between Schlumberger's Houston, Texas-based firm OneSubsea and Subsea 7.

Ophir said the contract is structured as an engineering, procurement, construction, installation and commissioning (EPCIC)

contract for the subsea umbilicals, risers and flowlines and for the subsea production systems scope of work.

A final investment decision on Equatorial Guinea Fortuna FLNG is expected before the end of 2017 once project funding is complete.

As well as Ophir, the Fortuna partners include shipping and project company Golar LNG, Schlumberger and the Equatorial Guinea government and state energy firm.

The project partners have also signed an agreement nominating global commodities company, the Gunvor Group, as the main LNG buyer for the offtake.

They have ordered a floating production hull, the former Golar vessel, the 126,000 cubic metres capacity "Gandria", to be converted at Keppel Shipyard in Singapore.

Ophir said the scope of the subsea contract just awarded is to deliver 440 million standard cubic feet per day of gas through infrastructure comprising four wells in the Fortuna field and the Viscata field located at an average water depth of 1,790 metres.

"The EPCIC schedule is consistent with the planned delivery of first gas in 2020," said Ophir. ■

Baker Hughes-GE elects Simonelli as overall supremo at merged LNG and services firm

Our Southeast Asia editor

The merged Baker Hughes-GE Oil and Gas (BHGE) company, a key supplier of services and equipment to the LNG industry, said its board of directors had elected President and Chief Executive Lorenzo Simonelli as Chairman of the BHGE board.

Simonelli will continue in his President and CEO role, which he has held since the closing of the merger between oil and gas services company Baker Hughes Inc. and General Electric's GE Oil and Gas business in July 2017.

Retirement

"Simonelli replaces former GE Chairman and CEO Jeff Immelt, who retired from the BHGE board effective October 2," said BHGE.

BHGE is a maker of LNG equip-



BHGE CEO and President is now Chairman as well

ment from gas turbines to pumps and gearing technology, while before the merger GE Oil & Gas was lined up by several large US LNG export projects as a supplier.

It also became an initial investor in some of the development companies with sites on the US

Gulf Coast. BHGE's global organization now employs around 70,000 people in four product divisions. These are Oilfield Services, Oilfield Equipment, Turbomachinery and Process Solutions and Digital Solutions.

"I am honored to take on the

added role of chairman and further help BHGE win in the market and deliver for our shareholders," said new Chairman Simonelli.

"We have a differentiated full-stream portfolio, a great team and valued customers," said Simonelli.

"We are making the right moves to compete in the down cycle and position the company for long-term value creation. I look forward to serving the board, the company and shareholders," he added.

BHGE noted that in addition to Immelt's departure, BHGE board member Larry Nichols announced his decision to resign from the board.

"Nichols served as a member of the legacy Baker Hughes Inc. board, and for the past 16 years has provided valuable counsel and board leadership," BHGE added.

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Lloyd's Register gives approval to Hyundai bunker system design

UK maritime classification Lloyd's Register has given approval in principle to Hyundai Mipo Dockyard of South Korea for a cargo-handling system design for a 6,600 cubic metres capacity LNG bunkering vessel.

Hyundai Mipo and the Hyundai Heavy Industries (HHI) Corporate Research Centre jointly developed the cargo-handling system based on their extensive experience of building gas carriers.

The Dockyard chose to develop the LNG bunkering vessel design because of the potential for growth in the LNG-fuelled ship sector.

The cargo-handling system is designed for LNG bunkering to an LNG-fuelled ship, as well as to supply fuel-gas to the dual-fuel main engine and manage boil-off gas (BOG).

"The cargo pumps are capable of bunkering at a maximum of 1,100 m³/h to an LNG-fuelled ship and fuel-gas to a dual-fuel main engine can be supplied by BOG compression or LNG vaporizing," said Lloyd's Register.

"BOG returned from the LNG-fuelled ship during bunkering can be burnt in the dual-fuel engine or collected inside the Type C cargo tank," explained the UK class society.

"Insulation for the cargo tank is designed for lower BOG generation. BOG generated from the cargo tank is less than the fuel-gas consumption of the main engine at the normal continuous rating.

"This means that all BOG can be utilised by burning in the main engine so that the cargo-tank pressure and temperature can be managed in a stable manner," LR added.

Zeebrugge LNG terminal operator Fluxys sees appetite for bond sale

Our Europe editor

Fluxys Belgium, the operator of the Zeebrugge LNG import terminal and the Belgian gas transmission network, said it completed transactions for the sale of 350 million euros (\$410M) of bonds with an offering that was subscribed twice over in a show of confidence by investors in the European LNG and natural gas industry.

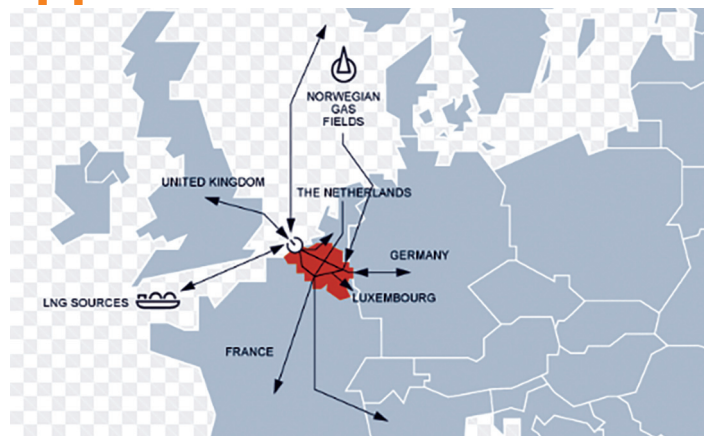
Fluxys said the bonds were sold at "historically low" credit spreads and for long-term maturities.

Over-subscribed

"The total market appetite reached 880 million euros, which reconfirms the confidence of European institutional investors in Fluxys Belgium's credit quality and the key role of the Belgian natural gas grid as the crossroads for Northwestern Europe," said Fluxys.

The company said that Belgium successfully captured post-summer investor interest during roadshow presentations in Brussels, Paris, London, Frankfurt and Munich.

Fluxys said the company met more than 40 institutional investors and the subsequent bond issuance



Fluxys impressed investors with 'gas crossroads' role

was split into two tranches.

The company's activities involve the Zeebrugge Trading Point, the transmission network and the import terminal.

In gas trading Fluxys sells capacity to its customers to transmit to distribution system operators, power stations and major industrial end-users in Belgium, or to move natural gas to a border point for transmission to other end-user markets in Europe.

Among its LNG activities Fluxys sells capacity for loading and unloading LNG carriers, storing LNG and regasifying it for transmission in the grid.

At the Zeebrugge facility, cus-

tomers can also load LNG trucks to supply industrial sites in Europe where pipeline supplies are not available. They can also supply filling stations for trucks that use LNG as a fuel or refuel LNG-powered ships.

The new Fluxys bonds will be settled through the securities system of the National Bank of Belgium and will be listed on Euronext Brussels exchange from 5 October 2017.

The 300M euros 10-year tranche was priced at a coupon of 1.75 percent (87 basis points over mid-swap) and maturing in October 2027.

Pegas platform backs Fluxys over simplifying Zeebrugge Trading Point

Fluxys Belgium, the natural gas network operator as well as owner of the Zeebrugge Trading Point and the LNG import terminal, said it was simplifying services for physical trading with the France-based Pegas trading platform also agreeing to enhance its services.

Fluxys Belgium plans to simplify the services for Zeebrugge physical trading by harmonizing the operational rules with those for the ZTP notional trading.

Pegas gives customers access to European natural gas products on its trading platform for Belgian, French, Dutch and German natural gas products.

Another company, Powernext, manages the natural gas activities of the European Energy Exchange (EEX) Group under the Pegas brand throughout Europe.

"Our new approach for ZTP physical trading marks a clear step forward in solving flow reductions at the border or unmatched flow nominations no longer requiring back-up services and a financial guarantee," explained Huberte Bettonville, Director of Commercial Regulated activities of Fluxys Belgium.

"Pegas now can offer automatic nomination processes to ensure complete trade firmness,"

added Bettonville. Richard Katz, Director of Sales of Powernext, said the new set-up allows his company's clearing house to lower the level of margin requirements towards market participants.

"Pegas will also support the new approach by extending the trading hours to 24/7, giving more flexibility to the market participants with a continuously running platform," added Katz.

Contracts for ZTP physical trading on Pegas include spot and futures instruments, ranging from intraday to next calendar year.

Driftwood LNG firm charters carrier to start trading five years before liquefaction plant is built

Our North America editor in New York

Tellurian Inc., the developer of the Driftwood LNG project on the Gulf Coast of Louisiana has entered into a six-month time charter for a modern LNG carrier to start gaining market exposure by trading during the coming Northern Hemisphere winter.

Tellurian, founded by former Cheniere Energy Chief Executive Charif Souki and by Martin Houston, who ran the operations of the LNG portfolio company, BG of the UK, has already purchased shale-gas assets while its project is going through the regulatory process.

Maran ship

The company now has a six-month charter on the "Maran Gas Mystras", a tri-fuel diesel electric (TFDE) propulsion vessel with 160,000 cubic metres of storage capacity.

The vessel was delivered in 2015 to owner Maran Gas, the LNG shipping unit of the Angelicoussis Shipping Group, a private company based in Athens, Greece.

Tellurian took over the carrier for the short-term charter at the port of Galle in Sri Lanka on October 1. No details of the rates were



Tellurian hired 160,000 cbm capacity 'Maran Gas Mystras'

disclosed, though vessels like the "Maran Gas Mystras" have during 2017 cost between \$25,000 and \$30,000 per day to hire.

"At Tellurian, we are building a global natural gas business and proactively shaping the company to build long term value amid a robust and dynamic market," said Tellurian CEO Meg Gentle, also a former Cheniere executive.

"As winter approaches, we will begin buying and delivering LNG on the 'Maran Gas Mystras', one of the most efficient vessels in the Maran Gas fleet," explained Gentle.

"Developing our LNG marketing capabilities now prepares us to be one of the most flexible, competitive, and reliable LNG suppliers when Driftwood LNG begins operations in 2022," she added.

Analysts said Tellurian was

likely to become a regular trader in the Northern Hemisphere winter when LNG demand is highest in Europe and Northeast-Asia and arbitrage windows can open up.

Tellurian has previously submitted applications to the Federal Energy Regulatory Commission to construct and operate the Driftwood liquefaction plant on a 1,000-acre site on the west bank of the Calcasieu River near the town of Carlyss in Calcasieu Parish.

Souki's project involves constructing a liquefaction and export plant near Lake Charles to match the nearby Sabine Pass venture of Cheniere with 27 million tonnes per annum of output.

Tellurian recently agreed to acquire acreage in Haynesville Shale play in the northwest of the state of Louisiana to add potential gas

assets to its portfolio for future export.

It entered into an agreement with a private seller to acquire natural gas producing assets and undeveloped acreage in northern Louisiana for \$85.1 million.

The transaction by Nasdaq-listed Tellurian is scheduled to close by the end of November 2017.

The seller was described in Tellurian's Securities and Exchange Commission documents as an unrelated third party.

Analysts pointed out that Tellurian's new gas assets in addition to providing future feed-gas from shale at competitive prices will also require investment funds for the development of the plays located in Red River, DeSoto and Natchitoches Parishes of Louisiana.

The company said the 9,200 net acres have 138 operated Haynesville and Bossier drilling locations.

Tellurian added that the Haynesville plays had around 1.3 trillion cubic feet of potential gas resources from 19 producing and operated wells with net current production of 4 million cubic feet per day.

KBR wins engineering and project services contract for two largest Algerian gas ventures

KBR, the US LNG and energy engineering company, was awarded an engineering and project management services contract for the biggest natural gas joint ventures currently under way in Algeria at In Salah and In Amenas.

The contract was awarded by Algerian state energy company Sonatrach, also operator of the nation's two LNG export plants on the Mediterranean coast, and by partners Statoil of Norway and BP of the UK.

KBR said the scope of the work included providing design engineer-

ing, procurement services as well as construction management at the major ongoing gas developments at In Salah Gas and In Amenas.

The gas processing facility at In Amenas was the scene of a terrorist attack in January 2013 during which 40 workers were killed.

The In Amenas joint venture is one of the largest wet gas projects in Algeria and involves the development and production of natural gas and gas liquids from fields in the Illizi Basin in south-eastern Algeria.

It is called wet gas because it contains ethane, propane, butane

and the heavier hydrocarbons.

First gas was produced at In Amenas in 2006. Its compression project is the final stage of planned development.

The In Salah project is a dry gas venture of mainly methane and involves the development of seven proven gas fields in the southern Sahara, 745 miles south of the capital Algiers.

The first phase of development came on stream in July 2004 covering the largest three gas fields.

The second phase, the In Salah southern fields project, came on

stream in February 2016 and involved the remaining four fields. Other construction phases are still continuing and being planned.

"This work, which is expected to be performed over 48 months, will be a KBR collaboration with engineering and the procurement services being performed from the UK and Chennai offices in partnership with the local, in-country, engineering office," said KBR.

KBR pointed out that it was proud of its long history in Algeria where it has been present for 45 years.

Filipino LNG infrastructure firm progresses on projects and hires senior Indian executive

Our Southeast Asia editor

Atlantic, Gulf and Pacific Co. of the Philippines, the LNG infrastructure and fabricated modules supply company, said it was making progress in its plans to building up its own LNG project portfolio of small-scale ventures in the Asian and South East Asian regions as it also strengthened its executive team.

AG&P's current plans involve India, Bangladesh, Sri Lanka and Indonesia, according to Abhilesh Gupta, the company's recently-appointed, Indian-born Chief Financial Officer and head of the commercial division.

Market

"We aim to provide access to LNG for an enormous number of off-grid, energy-hungry end-users that are currently without access to a reliable supply of gas," said Gupta, a former senior executive at India's main LNG company Petronet.

"This will lay the foundations for a viable LNG supply network connecting hundreds of smaller end-users through milk-run, shuttle vessels that potentially allow doorstep delivery of gas on regular routes," Gupta explained.

Gupta said he had been appointed to help lead the expansion of the company in India and beyond, with a focus on connecting off-grid customers across the country to affordable gas supply.



AG&P eyes India, Bangladesh, Sri Lanka and Indonesia

AG&P, which was one of the main providers of fabrication units and modules for LNG export projects in countries such as Australia, is now also a growing player specializing in delivering standardized, LNG solutions that are commercially competitive. It has additionally signed a string of technology agreement with other players to enable the execution of projects.

AG&P Chairman Jose. P Leviste Jr. announced the appointment of Gupta in September 2017 to strengthen the LNG expertise at the top of the company.

"Abhilesh is one of India's most recognized experts in commercializing LNG projects with over 22 years' experience in leading and managing international finance and commercial portfolios in LNG/natural gas and power in India and Singapore.

"AG&P's singular objective is to optimize the quantity of LNG

through its terminals, underpinned by our scalable designs. Abhilesh will help out global leadership team to drive our LNG vision forward," he added.

Prior to joining AG&P, Gupta was General Manager of Finance at Petronet in India and then served as Group CFO for Asia Genco, where he oversaw the commercial, regulatory and treasury functions of their Asian power plant build-out.

During his tenure at Petronet, he played a pivotal role in the financing of two of India's existing LNG receiving and regasification terminals at Dahej, north of Mumbai, and at Kochi in the state of Kerala.

Gupta said that AG&P's streamlined solution reduces costs and is faster to implement than current business models that require building very large-scale operations with guaranteed large off-

takers secured with long-term contracts.

AG&P itself signed an accord in January 2017 to supply an import terminal as well as cargoes for power stations in the East Godavari region of the state of Andhra Pradesh on the East Coast of India.

The agreement is between AG&P and Hindustan LNG, a Hyderabad-based LNG import terminal development company.

In India, AG&P has also signed an agreement with Konaseema Power, a private power plant owner, to develop an integrated LNG supply and gas distribution solution to serve three currently idled power facilities in the East Godavari region.

It has additionally embarked on a joint venture with Gas Entec of South Korea to design and make small-scale and mid-scale LNG facilities.

AG&P signed a further accord in March 2017 to cooperate with the engineering unit of French industrial gases company Air Liquide to develop its small-scale LNG infrastructure and distribution across Asia.

The Filipino company and Air Liquide said they planned to offer fully integrated units for LNG entrants with a focus on liquefaction, transportation and downstream infrastructure to deliver LNG for power, bunkering, ground transport and other industrial applications.

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