LNG Unlimited

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Exelon agrees to buy Everett LNG facility from French company Engie

Facility near Boston had received 1,000 cargoes from around the world by 2010

LNG Journal editor

US utility Exelon Generation has signed an agreement to purchase the Everett LNG import terminal, located near Boston in Massachusetts and the oldest such facility operating in the US, from the North American subsidiary of French utility Engie.

"Exelon looks forward to continuing Engie's mission of providing safe, reliable LNG to gas utilities, marketers, and other market participants throughout New England," said Exelon.

Deal

"Transaction closure is dependent upon regulatory review by the US Department of Energy for LNG import authorization and, as necessary, authorization from the US Department of Justice," it added.

"The transaction is expected to close in the fourth quarter of 2018," said the US company. No financial details on the deal were provided.

The Everett terminal, also known as the Distrigas facility, is the longest-operating LNG import facility of its kind in the US.

The terminal has connections with two interstate pipeline systems, as well as a local gas utility's distribution system.

Everett was the first domestic LNG import facility to receive 1,000 cargoes and reached that landmark in 2010. The Engie facility serves nearly all of the gas utilities in New England and key power producers, including a connection to a 1,550 megawatts power plant that serves the Greater Boston area.

The terminal also has been an LNG supplier to a network of 46 utility-owned, above-ground LNG storage tanks that serve New England's gas storage needs.

Because of geological conditions in the region, underground gas storage is not feasible.

French energy major Total agreed in November 2017 to buy other major parts of Engie's global LNG portfolio in a transaction worth up to $2 billion.

In January 2018, the Everett terminal received a partial LNG shipment from the Russian Yamal export plant in Siberia on board the French-flagged LNG carrier "Gaselys".

The Yamal plant is operated by Russian natural gas company Novatek and Total has a stake in the joint venture.

Everett terminal has imported LNG to US since 1971

> "Exelon looks forward to continuing Engie's mission of providing safe, reliable LNG ...throughout New England"

Total's purchase

In connection with the Total LNG assets purchase from Engie, the French utility has asked the US Federal Energy Regulatory Commission for a temporary waiver to begin the process of releasing it from several long-term firm natural gas pipeline agreements.

The sale of Engie's upstream and midstream LNG business to Total is being accomplished in two steps, it said.

In the reorganization transaction, set to be completed in May, Engie would transfer to its subsidiary the natural gas purchase and sales agreements, financial agreements, interests in various LNG carrier vessels, LNG sales contracts, and regasification capacity in Europe.

In the second step of the transaction, expected to be completed around July 1, the ownership interests of the subsidiary Global LNG SA would be transferred to Total, giving it 100 percent ownership interest in Engie's upstream and midstream LNG business. ■

UNLIMITED AGENDA

Asia-Pacific LNG stakeholder Santos considers US$10.4Bln bid from EIG Global Energy fund

LNG Journal editor

Australian energy company Santos, a stakeholder in three Asia-Pacific LNG export ventures, has received a US$10.4-billion takeover bid from Harbour Energy whose Chief Executive is Linda Cook, a former senior executive at Royal Dutch Shell.

The bid by Harbour Energy, a subsidiary of EIG Global Energy Partners, a US private equity firm whose headquarters are in Washington DC, values Santos at A$13.5 billion, a 30 percent premium over its current market capitalization.

Third offer

Santos is Australia's second-biggest independent oil and gas producer after Woodside Petroleum and said that "in the interests of shareholders" it would engage in further discussions with Harbour, making its third takeover offer to Santos since August 2017.

The Australian company, based in Adelaide, counts two major Chinese companies among its shareholders with a combined 15 percent held by China's ENN Group and the equity fund, the Hony Group. Linda Cook, the Harbour CEO, said Santos's investments in three LNG projects, Gladstone LNG, Darwin LNG and the Papua New Guinea plant and its expansion project, were valuable assets that fitted her company's global vision and strategy.

Bid by EIG is led by former Shell executive Linda Cook

"We are pleased with the decision of the Santos board to engage further and look forward to progressing this transaction towards completion," stated Cook.

The Australian company has previously rejected a number of other takeover offers, including one from the Brunei and United Arab Emirates-backed Sceptre partners for A$6.88 per share in Santos, listed on the Australian Securities Exchange.

Cook retired from Shell in 2010 after about 30 years of service with the Anglo-Dutch energy major and has wide LNG experience.

Harbour Energy, which already has a seat on the board at Santos, completed a transaction at the end of October 2017 to buy Shell oil and gas assets in the North Sea for around $3 billion.

The EIG equity fund has around US$17 billion under management for investors.

Santos has struggled under the burden of a heavy debt accumulated from its 30 percent investment in the GLNG coal-seam-gas-to-LNG plant joint venture on Curtis Island near Gladstone.

"Santos advises that on 29 March 2018 it received an unsolicited, non-binding, indicative and conditional proposal from a special purpose entity of Harbour Energy for it to acquire 100 percent of Santos shares," said the statement to the ASX.

"The indicative offer price is US$4.98 per share, which in Australian dollars, is equivalent to A$6.501 per share and represents a premium of: 28 percent to the last closing price of Santos of A$5.07 per share on 29 March 2018; and 30 percent to the one-month volume weighted average share price of Santos of A$5.00 per share up to 29 March 2018," it stated.

"Harbour has indicated that funding for the transaction is to be provided in the form of US$7.75Bln of debt that is to be underwritten by J.P. Morgan and Morgan Stanley (who have each provided commitment letters) and the balance in equity from Harbour, other EIG managed funds and Mercuria Global Energy," added Santos. ■

Australian LNG producer Woodside becomes the 10th signatory of industry-led plan for emission curbs

Woodside Petroleum, the operator of two liquefied natural gas plants in Western Australia, has joined nine other global oil and gas majors in signing guiding principles that commit it to further reduce methane emissions from the natural gas assets it owns.

The initiative was launched in November 2017 by ExxonMobil Corp. and Royal Dutch Shell, along with several other majors who put forward joint proposals to reduce greenhouse-gas emissions from natural gas production.

The energy companies have drawn up a road map to advance towards reducing methane emissions from natural gas wells, pipelines and consumption.

Woodside also agreed to encourage others across the natural gas value chain, from production to the final consumer, to do the same.

The Australian company is a one-sixth shareholder in the Northwest Shelf LNG plant, as well as operator, and owns the Pluto liquefaction facility on the Burrup Peninsula of Western Australia.

The new industry-led effort is targeting methane, the main component of natural gas. When natural gas is burned, it releases less carbon dioxide than oil or coal.

However, methane that is not burnt escapes into the atmosphere during the production process, for example, from leaks in pipelines.

"This commitment forms part of wider efforts by the global energy industry to ensure that natural gas continues to play a critical role in helping meet future energy demand while addressing climate change," said Woodside.

"Since natural gas consists mainly of methane, a potent greenhouse gas, its role in the transition to a low-carbon future will be influenced by the extent to which methane emissions are reduced," added the Perth, Australia-based company.

The guiding principles focus on continually reducing methane emissions; advancing strong performance across gas value chains; improving accuracy of methane emissions data; advocating sound policies and regulations on methane emissions; and increasing transparency.

In addition to ExxonMobil, Shell and now Woodside, the other signatories to the pact are BP of the UK, Italy's Eni, Russian natural gas company Gazprom, Spain's Repsol, Statoil of Norway, French major Total and German oil and gas company Wintershall.

The signatories have said that implementing all of the cost-effective methane abatement measures worldwide would have the same effect on long-term climate change as closing all existing coal-fired power plants in China. ■

Venture for off Cumbria extends its tolling accord

LNG Ltd, the developer of two North American LNG export projects, said it had agreed to extend the financial closing date for an offtake agreement with Meridian LNG Holdings Corp., the owner of an import venture proposed for offshore Cumbria in northwest England.

The developer, with fully approved plans to build the Magnolia LNG plant at Lake Charles in the US state of Louisiana and at Point Tupper in Richmond County in the Canadian Atlantic Coast province of Nova Scotia, said the Meridian binding offtake agreement would now run until June 30, 2018.

"This three-month extension allows both parties to maintain commercial flexibility," said LNG Ltd., a company listed on the Australian Securities Exchange.

"All other provisions of the governing agreements not specifically amended by this extension remain in full force and effect," the company added.

"LNG Ltd's agreement with Meridian LNG was signed on 23 July 2015 and included firm capacity rights at Magnolia for up to 2 million tonnes per annum for an initial term of 20 years with an option to extend by a further five years," the company explained.

The Chief Executive of the UK-based Meridian LNG project is Roger Whelan who formed Liberty Natural Gas in the US in 2008 and subsequently merged it into a unit of the Canadian equity fund West Face Capital.

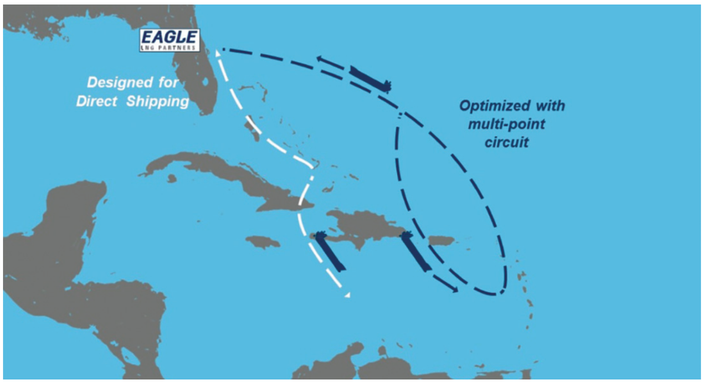
Whelan is also Project Director of Global Energy Ventures and its Atlantic compressed natural gas project announced in May 2017, aimed at securing substantial market access to the UK, a market that is increasingly reliant on imported gas from European pipelines and delivered LNG. ■

Crowley takes delivery of first LNG ISO container from Florida

LNG Journal editor

US shipping and logistics company Crowley Maritime Corp. said its liquefied natural gas subsidiary successfully completed the first loading of a commercial ISO container shipment from the new Maxville facility in Jacksonville in Florida.

The first shipment amounted to nearly 11,000 gallons of LNG and was transferred at the new liquefaction and fuel plant owned by Eagle LNG Partners.



Fuel plant will help supply US and Caribbean region

Puerto Rico

Crowley said it loaded LNG into the ISO container and delivered it to the nearby Port of Jacksonville for ocean transport to support customers in Puerto Rico.

With the addition of the new plant, Crowley and Eagle LNG have expanded the supply and availability of LNG services to customers in the US., Caribbean and Latin America.

Crowley said that with the successful LNG tank container loading at the Eagle LNG Partners' Maxville facility, Crowley will be able to offer more flexible services and sourcing locations to supply customers.

"The new plant location means LNG can be easily produced and transported to the port all within the Jacksonville area," said Crowley's Matt Jackson, Vice President of the LNG business.

"Not only will Crowley and Eagle LNG Partners provide a fuel source that decreases environmental impacts, Crowley can provide supply chain and engineering solutions that are resilient alternatives to traditional energy sources in Puerto Rico and other markets," explained the executive.

The plant, which is in the Maxville area of west Jacksonville, has the capacity to produce up to 200,000 gallons per day of LNG, offering lower emissions than other fuels.

The Maxville LNG Facility has a 1-million-gallon storage tank and a modern system to load fuel into ISO containers for quick deliver in trucks to the port.

"We are very pleased that the first commercial load of LNG from the new Maxville LNG Facility is destined for Puerto Rico via ISO container," said Sean Lalani, President of Eagle LNG Partners.

"This LNG plant is the embodiment of Crowley and Eagle LNG's commitment to the community in the North Florida region and Puerto Rico," he added. ■

US LNG fuel plant at Port Allen starts operations for Mississippi River market

US LNG distribution company NuBlu Energy has opened a small-scale liquefaction plant with a modular design along the Mississippi River at Port Allen in Louisiana to supply high-horsepower fuel users in the region, including trucks and inland waterway vessels.

NuBlu Energy said the facility was open for commercial production with an initial output of 30,000 gallons per day and 100,000 gallons of permanent storage on the west bank of the Mississippi near Baton Rouge.

The company said the plant was expandable to 90,000 gallons per day of output when the regional LNG fuel needs increase.

The NuBlu customers will include mainly long-haul trucks, marine fuel operators, peak-shaving needs at power plants and other clean-fuel users.

The building of the small-scale Port Allen liquefaction plant with modules is part of a general expansion of capacity for the US wholesale market in fuel for trucks and shipping, with bunker ships also operating on the Gulf coast.

There is also greater use of LNG as fuel for ships servicing the offshore oil and gas market.

The single load-out is designed to accommodate the loading of trucks and ISO storage tanks. The plant itself uses patented technologies.

NuBlu spokesman Josh Payne said the company aimed to make "local" supplies more available to the emerging retail and wholesale markets.

"Completion of the Port Allen project represents the successful commercialization of the NuBlu technology," said Payne.

"We are also bringing another option to the LNG market. This plant lays the foundation for efficient LNG production on a modular level preserving the efficiencies recognized by larger production facilities," he added. ■

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NEWS NUDGES

Hoegh takes eighth FSRU

Hoegh LNG, the Norwegian shipping and project company, has taken delivery of its eighth floating storage and regasification unit (FSRU), the "Hoegh Esperanza". It was constructed at Hyundai Heavy Industries in South Korea and designed for open, combined and closed-loop regasification operations. It has a storage capacity of 170 000 cubic metres of LNG and regasification throughput of 750 million standard cubic feet per day.

Eni $2Bln bond plan

Kuwait Petroleum Corp. (KPC) has signed a new long-term agreement for supplies of liquefied natural gas, said the Kuwaiti state news agency. It said the LNG volumes would help the Gulf nation meet rising natural gas demand for the power generation sector. The agreement was signed with Shell International Trading and will start in 2020. According to a previous provisional agreement, it would involve volumes of up to 3 million tonnes per annum for 15 years.

Mitsui AWE takeover

Mitsui & Co., the Japanese conglomerate and LNG market participant in the shipping and project sectors, is close to gaining majority control of Australian natural gas operator AWE and its Perth Basin joint venture in Western Australia. Mitsui said that as part of its US$460 million takeover bid for AWE it had now been accorded 48 percent of the shares. Once the conglomerate reaches 50.1 percent of the shares in the Australian Securities Exchange-listed company its takeover offer becomes unconditional. ■

Qatargas signs accord to boost future LNG supplies to Thailand

LNG Journal editor

Qatargas, the leading liquefied natural gas producer, has signed an accord to cooperate in the LNG business with the main electric power generating company of Thailand, including being a future supplier of additional volumes to the Asian nation.

A memorandum of understanding was signed between the Qatar Petroleum LNG production company and the Electricity Generating Authority of Thailand (Egat) covering procurement, transportation and floating storage and regasification units (FSRUs).

Scope

"In addition, the MoU includes a scope for the possible supply of LNG to the Kingdom of Thailand," said Qatargas on the agreement signed in the Qatari capital Doha.

Qatargas is already a regular supplier of LNG to the nation's only import facility at Map Ta Phut in the Rayong Province of Thailand, operated by the Thai energy company PTT.

The Qatari company has supplied shipments amounting to 2 million tonnes per annum since 2015 under a 20-year supply agreement.

Thailand's sole LNG import facility is at Map Ta Phut

However, Thailand is exploring the expansion of its LNG import network, including the use of FSRUs.

"Qatargas is delighted to enhance our relationship with the Kingdom of Thailand, and to share our expertise with EGAT, Thailand's leading power utility," said Saad Sherida Al Kaabi, President and Chief Executive of Qatar Petroleum and Chairman of the Qatargas board.

"Qatargas has a rich history of collaborating with world-class organizations, and we look forward to working with Egat to identify and evaluate future opportunities to supply Egat with Qatari LNG," added Al Kaabi.

Kornrasit Pakchotanon, Chairman of Egat, said the Thai company was pleased to collaborate with Qatargas, the world-leading LNG supplier.

"We look forward to learning from their expertise and developing the best business solution together," said Pakchotanon.

As part of the MoU, a committee of representatives from both companies will be formed to execute the terms of the MoU.

Khalid bin Khalifa Al Thani, Chief Executive of Qatargas, said the global LNG supplier was pleased to sign the Thai accord.

"On behalf of the team, I would like to convey our deep commitment to working with Egat and identifying world-class LNG solutions which meet their business needs," stated Al Thani. ■

Fluxys Belgium benefits from UK gas closure and wider LNG use

Fluxys Belgium, the transmission network company and operator of the Zeebrugge LNG terminal, posted a rise in profits of around 45 percent, boosted by tax reforms while also benefiting from the closure of the main UK gas storage expansion of its own LNG offerings of truck fuel and small-scale cargo loadings.

The Belgian company said annual net profits increased to 70.32 million euros compared with the 48.48M euros in 2016 as regulated turnover remained stable and it benefited from tax reform.

The majority of the Fluxys Belgium group's activities are regulated. The profit from these activities is determined by different regulatory parameters, in particular equity invested and its financial structures and tariff levels.

Fluxys said the commissioning of the second jetty at the Zeebrugge terminal more than a year ago marked another major step forward in the development of LNG as a marine fuel.

"Thanks to the second jetty, the terminal can now also welcome small LNG bunkering vessels that load LNG in order to supply other ships," it said.

The company said the Belgian network continued to play a key role as a natural gas crossroads in Europe with border-to-border transmission volumes up 20 percent.

"The discontinuation of the UK's largest storage facility (Rough offshore) has triggered a major shift in the provision of flexibility on the Northwest European market," said Fluxys. ■

South Korea to order 200 ships from own yards and including several LNG-powered vessels

LNG Journal editor

South Korea will place orders for about 200 vessels in the next three years to help its shipping and shipbuilding industries suffering from a slump in global demand and losses that forced restructuring at the largest companies.

These government-backed orders will include eco-friendly, energy-efficiency container ships to comply with the International Maritime Organization's sulfur cap on fuel set to be enforced in 2020.

Korean Minister Kim Young-Choon announcing orders

LNG plans

"LNG-powered ships are considered an eco-friendly option to meet strengthened international regulations, but high costs have presented challenges for ship owners," said the nation's Ministry of Oceans and Fisheries.

South Korea's three largest shipyards, Daewoo Shipbuilding and Marine Engineering, Hyundai Heavy Industries and Samsung Heavy Industries have been forced to undergo rescue programmes worth some $10.3 billion since 2016.

The Ministry said it will seek a new owner of Daewoo Shipbuilding, which is currently undergoing an overhaul led by the state-run Korea Development Bank as part of the reshaping of the nation's shipbuilding sector.

The statement came as orders for LNG carriers are still being received. Samsung said an order was recently placed for two newbuilds with 174,000 cubic metres of capacity worth $368 million and to be completed by October 2020.

Samsung said it has received $1.58 billion worth of ship orders so far in 2018, amounting to 14 vessels.

However, the Ministry's plan is to press ahead with the orders for 200 vessels, including some powered by LNG to meet stricter emission control regulations in Europe and North America and spreading to other parts of the world.

"Following the bankruptcy of Hanjin Shipping, sales of South Korea's shipping industry were cut and the tonnage of the deepsea containers has been reduced by half," said Oceans Minister Kim Young-Choon.

"We have prepared a set of comprehensive measures to support the shipping and shipbuilding industries grappling with a protracted slump, intense competition and environmental regulations," said Kim.

The minister said that the plan was to build 140 bulk carriers and 60 containers, which include 20,000 twenty-foot equivalent units (TEU) mega vessels and eight 140,000 TEU ships.

The ministry said it will establish a maritime industry promotion agency in July to support placing orders for new ships in the form of investment or guaranteeing the ship purchase programme.

The government along with shipbuilders and port authorities signed an agreement in December 2017 to place orders for vessels powered by LNG as part of the development plan for the shipping industry and for LNG fuel infrastructure.

Under the agreement, several LNG-powered vessels will be ordered before the end of the year.

The Ministry added that it would also consider a Daewoo Shipbuilding sales plan in the medium-term, based on market conditions.

It will also seek ways to consolidate medium-sized shipyards through mergers and acquisitions or strategic partnerships to raise their competitiveness in the global market. ■

Gassco to expand details of maintenance and incidents

Gassco, the Norwegian natural gas pipeline operator and one of the main competitors to LNG, said it would in future provide more details on planned maintenance, unplanned incidents and the flow of gas in and out of the transport system.

"We want to enhance what we report about the Norwegian gas transport system," explains Kristin Kinn Kaste, Executive Vice President for system operation at Gassco.

Gassco boosted supplies by 8 percent last year, sending a record 117.4 billion cubic metres of gas through the pipeline system from the Norwegian Continental Shelf to mainland Europe and the UK.

The Norwegian company's pipeline volumes last year set a clear record for the four decades since Norwegian gas exports began and it now aims to improve information flow for customers.

"Among other steps, we'll be lowering the threshold for providing information about transport reductions related to planned maintenance," said Gassco.

"Furthermore, the initial notification of incidents will be brought forward so that the general public is informed at the same time as the gas sellers," the company added.

The threshold for reporting planned incidents on flow.gassco.no is being lowered from 20 to five million standard cubic metres of gas per day.

This limit also applies for notifying unplanned incidents.

Newest Japanese LNG terminal near Fukushima disaster starts operations

LNG Journal editor

Japan Petroleum Exploration Co. (Japex) said it began commercial operations at Japan's newest LNG import terminal at Soma Port, located in Fukushima Prefecture in eastern Japan, near where the nuclear disaster happened seven years ago this month.

Japex's Soma terminal gives Japan 35 regasification facilities and satellite terminals in its network as it consolidates its position as the world's biggest LNG importer.

Malaysia link

Commissioning at the terminal had begun in December 2017 with the receipt of a cargo from Petronas of Malaysia.

Japex had been a shareholder in the cancelled Canadian LNG export project, the Pacific Northwest venture planned for British Columbia and in which Petronas was the largest shareholder.

The Soma terminal was constructed by the leading LNG engineering company JGC Corp., better known for building overseas export plants. It has a single storage tank with 137,000 cubic metres of capacity and two berths to accommodate imports as well as shipments from small-scale domestic LNG carriers. A contract has also been awarded for an additional storage tank.

Soma terminal and port are on Japan's eastern coast

The LNG terminal is part of a venture that will include a gas-fired power station for Fukushima.

Soma is a coastal city located in the Hamadori area of Fukushima and partially destroyed by the tsunami caused by an earthquake in 2011 that led to fires and explosions at the nuclear plant owned by Tokyo Electric Power Co.

The city of Soma is 45 kilometres from the destroyed Fukushima nuclear plant.

The LNG facility is located at the No.4 wharf of Soma Port and is in one of the important areas for Japex's domestic natural gas supply network.

"Over 60 years since its establishment, Japex has been conducting exploration and production of natural gas domestically and has been supplying natural gas and LNG to our clients such as local gas distribution companies, business consumers and fuel for power generation," said the company.

UK company Calor grows LNG station capability and fuels the Volvo trucks

Calor, the UK provider of LNG and of liquefied petroleum gas (LPG), has carried out the first fill-up for Swedish automaker Volvo's new LNG-powered truck at one of its stations in central England.

The UK company re-fueled the Volvo truck from its supplies at the Donington Park Services off the M1 motorway in Derbyshire.

Calor is a leading supplier of LNG and also the sole supplier of new BioLPG and delivers gases and fuel in bulk and by cylinder loads to over 350,000 commercial premises across the UK.

The fueling operation came as Volvo began shipping its new LNG-powered trucks to the UK where Calor operates seven stations with LNG capability, including the Donington Park Services facility.

"This network is set to play a vital role in supporting the growth of sustainable transports, such as Volvo Truck's new gas-powered vehicle," said Calor.

The new Volvo FH LNG is a gas-powered truck with a powertrain based on Volvo's diesel-engine technology.

With the 460 horse-power engine running on LNG, it is capable of delivering 20 percent less carbon-dioxide than a regular Volvo FH truck.

"A fuel choice steadily growing in demand for companies operating long-haul heavy goods vehicles (HGVs), LNG offers significantly less CO_2 emissions than conventional fuels such as diesel," said Calor.

Martin Tomlinson, Head of Product Demonstration in the UK and Ireland at Volvo Group Trucks, stated that LNG was the fuel best positioned to quickly become a competitive and globally available alternative to diesel.

"The development of our new FH LNG truck is the result of our commitment to transportation that is sustainable in the long term, through energy-efficient, competitive and future-proof solutions with a low climate and environmental impact," said Tomlinson.

Sembcorp of Singapore to build latest Israeli East Med platform as projects replace LNG

LNG Journal editor

Sembcorp Marine of Singapore has secured a contract from energy and LNG engineer TechnipFMC for a floating production, storage and offloading (FPSO) unit for offshore Israel's latest East Mediterranean natural gas and oil development.

Scheduled for completion in the fourth quarter of 2020, the FPSO will be deployed at the Energean-operated Karish and Tanin deepwater field developments, about 90 kilometres from the Israeli coast.

Shipyard is a specialist in offshore platform fabrication

Modules

"The contract includes fabrication and integration of various topside modules, as well as installation of owner-furnished equipment," said Sembcorp.

The FPSO's hull will be 227 metres in length and 50 metres wide, with a total oil storage capacity of 800,000 barrels and gas production capacity of 8 billion cubic metres per annum.

Independent oil and gas company Energean, with operations offshore Greece and Egypt, has also signed a contract with Stena Drilling of Sweden for the development of the Karish field.

The Karish development programme, which targets supplying gas to the growing Israeli market, includes the drilling of three development wells.

Energean bought rights to the Karish and Tanin fields from Israel's Delek Group in 2016 for $148 million and has signed a contract to supply up to 1.5 billion cubic metres of gas annually to Dalia Power Energies, a private concern that plans to compete with Israel Electric Corp.

However, it is still seeking customers for a further 1.5 Bcm of pipeline natural gas.

Energean had to submit a field development plan for the Karish and Tanin gas fields to the Israeli Petroleum Commissioner.

Energean's Israeli subsidiary holds 100 percent of Karish and Tanin, which combined have 2.7 trillion cubic feet of natural gas and 41 million barrels of oil equivalent of light hydrocarbon liquids in place.

The Tanin gas field, located about 120km offshore Israel, will follow the development of Karish, with a total of six wells that will be connected to the same FPSO.

Both Noble Energy of the US and Israel's Delek are currently developing the larger Leviathan field, which has around 22 trillion cubic feet of reserves compared with the onstream Tamar field they control with 11.25 Tcf of reserves.

Another East Med natural gas player Egypt is on its way to ending LNG imports and possibly restarting exports after the start-up at the end of 2017 of the Zhor gas field, fast-tracked into production by licence holder Eni of Italy.

Egyptian Minister of Petroleum Tarek El Molla said recently that the increasing production from the Zhor field meant Egypt would have no need of LNG imports by the start of 2019.

Royal Dutch Shell exits gas field offshore Gaza and leaves Palestinians to pursue project

Royal Dutch Shell has formally exited a natural gas project offshore the Gaza Strip and handed over control to the Palestine Investment Fund (PIF), the Palestinian Authority's investment arm, to seek its own energy success in an East Mediterranean field with proven reserves.

The Palestinians reached an agreement with Shell and its subsidiary acquired in 2016 as part of the BG Group takeover.

The acquired Shell unit, BG Great Britain Ltd, discovered the Gaza Marine natural gas field in the year 2000 and estimated reserves at around 1 trillion cubic feet.

The Gaza Marine Field, located about 20 miles offshore the Gaza coast, has been regarded as a prime opportunity for the Palestinian Authority to join the East Med gas bonanza and receive a major source of income to reduce reliance on foreign aid and hand-outs.

Natural gas fields in the region have been so prolific that Egypt and eventually Jordan will soon be able to halt LNG imports.

The Israeli Leviathan and Tamar gas fields in the same area hold a combined 40 Tcf of reserves and already supply pipeline supplies to Jordan and one of their other customers will soon be the Palestinian Authority.

The Tamar field already produces gas for Israel and Jordan and the Leviathan project is currently under development. The main shareholders in the Israeli fields are Noble Energy of the US and Israel's Delek Group.

Egypt, a former supplier of natural gas to Israel, has also recently brought on steam large natural gas fields such as the Zohr block offshore the East Med.

"Shell's divestment is related to its corporate strategy and global portfolio management priorities," said a Palestinian statement.

"Following completion of this transaction with Shell, the Palestine Investment Fund received rights for 90 percent of the Gaza Marine licence," it added.

The Palestinians said that together with its investment partner, the Arab project development company CCC Oil and Gas Ltd., a subsidiary of the Consolidated Contractors Co. (CCC), they would focus their efforts on advancing gas sales agreements and preparing a field development plan with the selected operator.

"Under the new structure approved by the (Palestinian) cabinet for the Gaza Marine License, PIF and CCC will each hold 27.5 percent of the development rights pursuant to existing options under the license agreement, and an international operator will hold 45 percent following its approval by the Palestinian government," explained the statement.

The Palestinians said that the new structure gave momentum to the development of one of Palestine's most vital, strategic assets.

The Gaza Marine gas project is central to the Palestine Authority's vision for domestic energy security backed by a thriving energy sector.

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