LNG Unlimited
LNG JOURNAL PUBLICATION 4 April 2017

Japanese LNG importers benefit from liberalization and $30Bln market

JX Nippon and Hokkaido Gas are latest companies to take advantage of the deregulation process

Our Asia-Pacific editor

Japan is centre of discussions at Gastech 2017 this week

The Japanese city-gas retail market, involving some of the largest LNG importers such as Tokyo Gas and Osaka Gas, is now almost fully liberalized and has already become a market worth up to US$30 billion a year.

Annual gas sales by Japanese gas utilities, of which there are 206 nationwide, were 37.2 billion cubic metres in 2016, up by 1.2 percent from 2015.

Sales

The sales to around 26 million residential, business and industrial customers amount to the equivalent of 27.5 million tonnes of LNG from Japan's yearly imports of around 85MT.

JX Nippon Oil & Energy, a shareholder in the Papua New Guinea LNG plant and with supply agreements with Malaysia and Indonesia, is the latest company to team up with a utility for LNG and gas cooperation.

JX Nippon has started collaboration with Hokkaido Gas Co., including joint use of JX Nippon's Kushiro regasification terminal and the establishment of a separate natural gas joint venture.

"Through this business alliance, we will seek to improve the operational efficiency of the Kushiro LNG terminal and aim to further strengthen and expand the supply system of natural gas and LNG in Hokkaido," said JX Nippon President Tsutomu Sugimo.

"In future, we will also consider further strengthening alliances in energy, including natural gas and LNG, based on the diversifying needs of our customers," added Sugimo.

For Hokkaido Gas, the addition of the Kushiro terminal will help stabilize its energy supply during winter when demand soars on the north island.

The gas company was previously supplying its eastern Hokkaido customers with gas delivered by tanker trucks from its own Ishikari LNG terminal in western Hokkaido.

The two companies will also begin mutually supplying LNG to other parts of northern Japan.

JX Nippon also operates an LNG terminal in Hachinohe in Aomori Prefecture and which started up in 2015.

The Kushiro facility receives LNG from the Hachinohe terminal and then supplies the gas to the eastern part of Hokkaido.

"The scope of liberalization has expanded in stages," said a report on the deregulation process just released by the Japan Gas Association.

"Following full liberalization, a city-gas business is divided into gas production (LNG terminals), gas distribution (gas pipelines) and gas retail," the JGA explained.

"In gas retail, the local monopolies on the sale of gas accepted until now will disappear, as will price regulations, in principle," the JGA added.

"To that end, the separation of pipeline divisions and other divisions into legally independent entities will be mandatory from 2022," it added.

The report also gave the annual breakdown of annual natural gas sales, with residential sales falling by 1.8 percent to 9.27 Bcm and commercial sector sales down by 0.3 percent to 4.26 Bcm.

However, industrial sector gas sales increased by 2.7 percent to 20.67 Bcm and various other sectors such as wholesale recorded an increase of 3.2 percent to 3.00 Bcm.

■

UNLIMITED AGENDA

Zeebrugge LNG terminal operator experiences rising trend for small-scale activities in Europe

Our Europe editor

While the Zeebrugge LNG import terminal in Belgium again saw a decline in the utilisation rate with fewer large carriers unloading in 2016, there was a surge in small-scale activities including re-loadings by smaller LNG carriers and more truck distribution.

Fluxys Belgium, the terminal operator, said small-scale activities were boosted by the second jetty being in operation at the regasification terminal since December 2016.

Loading slots

It was designed to receive LNG carriers ranging from the smallest ships with a capacity of 2,000 cubic metres up to the size of large Qatari vessels with a capacity of 217,000 cubic metres.

Fluxys said that around 200 loading slots for small LNG carriers at the second jetty have already been booked under long-term contracts.

The number of ship-loading operations involving small-scale LNG vessels grew again in 2016 and after finding positive market demand, Fluxys is examining ways of expanding the range of small-scale services.

Jetty was designed for increased loading by small carriers

The number of LNG tanker-truck loading operations also continued to increase.

"With a view to making sure it can keep responding to the growing level of demand, Fluxys LNG is set to construct a second loading bay at the terminal in 2017," the company said.

"The ability to receive the smallest LNG vessels means that bunker ships can now berth as well and is a milestone in the development of small-scale LNG and in particular the development of LNG as a ship fuel.

"The second jetty also enables the terminal to respond flexibly to demand for simultaneous or consecutive berthings, as using both jetties allows two LNG carriers to be unloaded and/or loaded at the same time," Fluxys explained.

The Fluxys Belgium company gave its overview of the LNG business in 2016 as it posted a 5.3 percent drop in annual regulated turnover to 509.5 million euros ($547M), mainly as a result of the decrease in a number of authorised costs and additional financial and operating expenses.

"This decrease in costs enabled Fluxys Belgium to maintain the tariffs charged to customers at their 2015 level, including a 7 percent reduction vis-à-vis the previous tariffs," the company explained.

"The combination of fewer unloaded vessels and more loaded ships led to less gas being sent out from the terminal into the pipeline network," Fluxys explained.

Most of Fluxys' activities are regulated. The profit from these activities is determined by several regulatory parameters, including investment, financial structure and the interest rates.

"The tariff proposal for the 2016-2019 regulatory period sets out a new reference framework for Fluxys Belgium, in particular in terms of authorised manageable costs. By controlling its operating costs and through its ongoing efficiency drive, the Group has managed to achieve the new regulatory objectives and to reap the benefits of the relevant incentives," it added. ■

Indian importer Petronet and Japanese bunker fuel firm Toyota Tsusho are new members of body

A multi-sector industry coalition aimed at accelerating the widespread adoption of liquefied natural gas as a marine fuel has added three new member companies from the US, India and Japan.

The group called SEA\LNG said its membership was boosted by the joining up of Florida-based bunkering company JAX LNG, India's largest LNG importer Petronet and Japanese firm Toyota Tsusho Corp. to support more use of the fuel by shipping lines.

Peter Keller, SEA\LNG Chairman and Executive Vice President and representing the US shipping company TOTE, said: "As a coalition, SEA\LNG is expanding, which continues to illustrate the support for and momentum behind the use of LNG as a marine fuel. "Toyota Tsusho Corp, JAX LNG and Petronet LNG are the latest to join and we welcome their addition to our membership.

"SEA/LNG members span the entire LNG value chain and recognise that by pooling knowledge and working together, we can help drive the change needed across the marine transportation system," said Keller.

Among the new members of the LNG-for-shipping coalition is Petronet, owner of India's first LNG receiving and regasification terminal at Dahej near Mumbai and at Kochi in the southwest state of Kerala.

Prabhat Singh, Chief Executive of Petronet, commented: "Petronet LNG is at the forefront of India's all-out national drive to ensure the country's clean energy security in the years to come.

"As such, we have signed MoUs with the Indian Ports Association and the Inland Waterways Authority of India to set up LNG bunkering facilities along the coast of India, and in National Waterways."

Another new member, Toyota Tsusho, is the sole fuel trading company of Toyota Group. Toyota Tsusho is a supplier and trader of bunker fuel worldwide with a presence in over 150 ports, supplying over five million tonnes of bunker fuel every year.

US firm JAX LNG, the third new member, is a partnership created to secure LNG fuel supplies for Florida. The partnership was formed in 2015 and brought together Pivotal LNG, a wholly owned subsidiary of Southern Company Gas and NorthStar Midstream, backed by funds managed by Oaktree Capital Management.

The JAX LNG project is constructing a liquefaction and LNG storage facility with marine and trucking loading capabilities in Jacksonville, Florida.

The new facility is expected to be operational in the fourth quarter of 2017. The project includes an initial liquefaction capacity of 120,000 gallons of LNG per day and 2 million gallons of on-site LNG storage. ■

Dutch study starts on potential for LNG made from bio-methane

The Port of Rotterdam and a Dutch energy body called the National LNG Platform plans to start a joint study that focuses on opportunities to develop liquefied natural gas from bio-methane extracted from waste for use in the port itself.

LNG is already supplied as a transport fuel to shipping and heavy road transport from the Gate Terminal in Rotterdam, operated by utility Gasunie and storage company Vopak.

The Port Authority and the National LNG Platform will now be jointly examining the opportunities there are to develop bio LNG as a transport fuel in the port of Rotterdam.

The study will focus on the fact that bio LNG made from waste can be used both as a stand-alone fuel or mixed with LNG made from fossil fuel.

"The study can be broken down into three key elements. In the first place, the existing and expected availability of production technologies and processes in the period until 2030," it said.

"Secondly, a market study that includes scenarios that go into the availability of sustainable feedstock and the future development of demand.

"And finally, business cases for the production, transport and transhipment of bio LNG in Rotterdam's port area," it added.

A total of eight companies that are members of the National LNG Platform will be supporting the study with their technical, legal and financial expertise and knowledge of the market.

"The partners aim to round off the study by the second half of 2017. Based on the research findings, it will be decided whether - and if so, in which form - Rotterdam will be developing a bio LNG programme," it said.

International Group of LNG Importers says trade back to pre-2011 levels

Our Europe editor

The France-based International Group of Liquefied Natural Gas Importers (GIIGNL) said global LNG trade last year recorded a growth rate of around 7.5 percent, returning to a robust pace experienced before 2011.

"Primarily driven by new Australian volumes, additional supply was not as abundant as expected due to production delays, slower ramp-ups and lower exports from historical suppliers," said GIIGNL President Jean-Marie Dauger

"As a result, the expected 'wave' of LNG has not materialized yet, and some signs of market tightness have even been observed towards year-end due to colder weather than usual in Europe and North East Asia," Dauger said in his overview of the GNL Annual report 2017.

On the import side the year was marked by soaring deliveries to the Middle East, confirming the region's status as a rising star amongst importers.

The report found that after a moderate growth performance in 2015, China and India came back onto the front stage and confirmed their strong appetite for competitively priced LNG.

GIIGNL President Jean-Marie Dauger gave overview

"Sluggish oil prices have continued to exert downward pressure on LNG contract prices," Dauger noted in explaining the report.

In the Pacific Basin, a combination of more than adequate supply and of slow demand growth also pushed spot prices to a seven-year low.

"This situation and the looming supply overhang are causing a slow-down in investment with several FIDs being cancelled or deferred," the report said.

"Despite the addition of new supply sources in 2016 (APLNG, GLNG, Gorgon, Sabine Pass, Malaysia LNG train 9), import patterns remain largely regional," Dauger added. "We observed a slight shift in trade towards Asia Pacific, as additional volumes from Australia and Indonesia went into Asia and kept more Qatari LNG into the Middle East.

"Shipping costs have become a determining factor of LNG trade. While the general consensus predicted that US exports would essentially end-up in Asia and transit through the newly-expanded Panama Canal, more than two thirds of the cargoes leaving Sabine Pass in 2016 eventually remained in the Atlantic Basin," he stated.

Origin Energy and French firm Engie sign deals on South Australian gas

Origin Energy, the Australian utility and stakeholder in the Australia Pacific LNG plant in Queensland, has signed an agreement with France-based multinational utility and energy company Engie to make more natural gas available for their customers in the states of South Australia and Victoria.

In addition to the South Australia and Victoria gas sales agreements, the details of which were not disclosed, Origin said it would sell 8 petajoules of natural gas to Engie.

"I'm delighted Origin has been able to work with Engie in Australia to help address South Australia's energy security challenges," said Origin Chief Executive Frank Calabria.

"The power outages in South Australia reinforce the need for sufficient gas-fired power generation to be readily available, especially when wind and solar energy is not available," stated Calabria.

"Energy security is critical to our customers and the state. These agreements are examples of immediate steps industry is taking to safeguard electricity supply and make sure more natural gas will be available to meet the needs of customers," added the Origin CEO.

"Right now there's a national need for the industry and government to work together to make sensible - and swift - decisions to provide energy security, for the benefit of all Australians," he said.

"To do this, we need to give some certainty to investment, so we can achieve the equally important objectives of making energy affordable, and moving Australia towards a cleaner supply.

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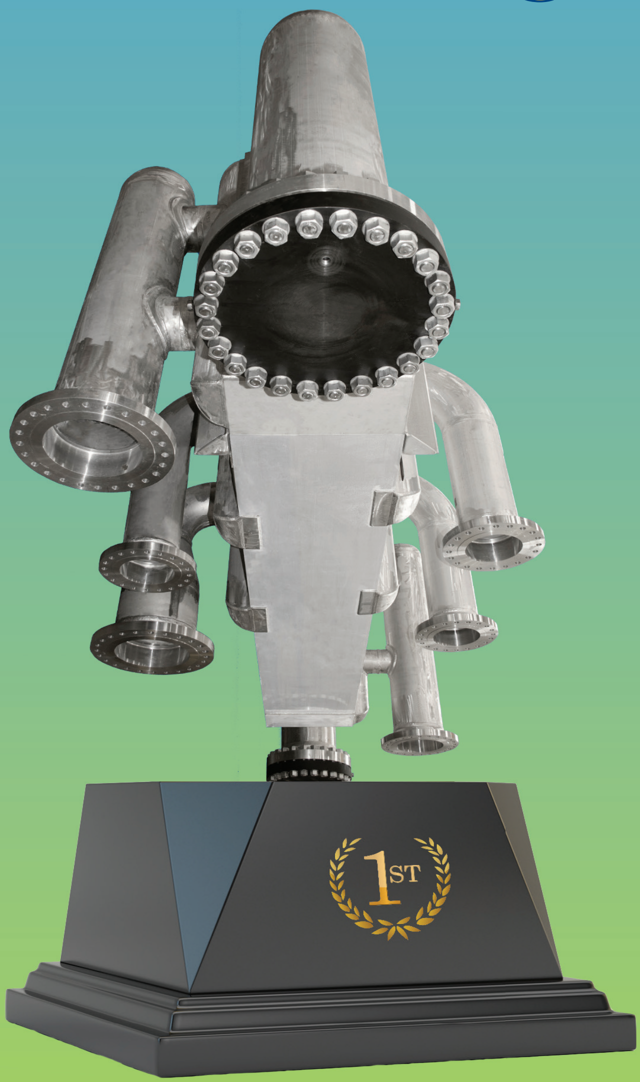

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NEWS NUDGES

Law firm hires LNG stars

Global law firm Orrick said leading energy regulatory practitioners Lisa Tonery and Erik Swenson have joined the firm as partners. They join Orrick from Norton Rose Fulbright, where Tonery led the US LNG Regulatory practice and co-chaired the LNG International Business Group. Tonery joins the New York office and Swenson will be based in Washington DC.

US revision is praised

Two energy industry groups in Washington DC, the US Natural Gas Supply Association (NGSA) and the US Center for Liquefied Natural Gas (CLNG), released statements on the rescinding by a White House order of speculative estimates on environmental issues limiting energy projects. Dena E. Wiggins, President and Chief Executive of the NGSA, said: "The existing National Environmental Policy Act project review process is already stringent, extensive and thorough. By attempting to include unquantifiable and speculative upstream impacts in an expanded guidance, the Council on Environmental Quality risked hindering development of the very infrastructure that has enabled natural gas to reduce emissions."

ABB deal on FSRU

Swiss-based ABB said it would supply the power and electric propulsion system to a new Floating Storage and Regasification Unit for BW Group, which will also be remotely connected to ABB operations centres. The equipment onboard will provide data to the shore-side centres allowing ABB and the vessel owner to take a proactive approach to maintenance throughout the lifetime of the vessel. ■

Maritime Administration approves first US FLNG export venture to be off Louisiana

Our North American editor in New York

The US Delfin LNG export venture planned for 50 miles offshore Cameron Parish, Louisiana, has been awarded a deepwater port licence by the US Maritime Administration, clearing the way for the first North American FLNG project to proceed.

The FLNG venture is a wholly-owned subsidiary of Fairwood Peninsula Energy and is proposing to develop a floating liquefaction facility with four moored production and storage vessels in the Gulf of Mexico to produce up to 13 million tonnes per annum of LNG.

Delfin has accords with partners in Asia and Europe

Decision

"I recognize that the export of natural gas from the Port will not jeopardize the Nation's environmental security or the commodity's availability to domestic markets," said the decision statement given by Joel Szabat, Executive Director of MARAD in Washington DC.

"I conclude that construction and operation of the Delfin LNG deepwater port will be in the national interest and consistent with national security and other national policy goals and objectives, including energy sufficiency and environmental quality.

"Pursuant to issuance of an Operating License, and compliance with all conditions set forth therein, I hereby approve the application to construct and operate the Delfin LNG deepwater port," MARAD stated.

The overview of the project by MARAD noted that it also had onshore components to be reviewed by the Federal Energy Regulatory Commission under a separate authorization process.

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

Delfin told the FERC that the majority of the onshore facilities would be within the Cameron Meadows Gas Plant and adjacent Transcontinental Gas Pipe Line (Transco) Station 44 in Cameron Parish. ■

State hosting first US East Coast LNG export plant bans fracking for shale gas

The US state of Maryland, where the first East Coast LNG export plant is scheduled to come on stream by late 2017 or early 2018, is caught up in a fierce political debate on energy after the state legislature banned hydraulic fracturing for shale gas.

Dominion Energy, the US utility and power company whose assets include 14,400 miles of natural gas pipelines, is transforming its existing Cove Point LNG terminal on Chesapeake Bay into an export plant.

The Cove Point plant is more than 80 percent complete and will use pipeline gas brought in from other states to make LNG for export to India and Japan.

While the fracking ban will have little impact on the Cove Point plant, the Maryland Petroleum Council Executive Director Drew Cobbs said the Maryland General Assembly's decision to approve a statewide ban on fracking would hurt jobs, investment and energy security.

"This politically motivated decision moves Maryland further away from the state's economic and environmental goals," said Cobbs.

"Maryland depends year-round on natural gas that is safely produced in neighboring states. Innovations in hydraulic fracturing and horizontal drilling happening across the country have led to increased US natural gas production.

"Since 2006, natural gas use in Maryland has increased by nearly 18 percent as the price of natural gas for residential consumers fell 26 percent," he noted.

The controversy arises as Dominion currently has around 2,500 construction workers on site at the Cove Point facility completing the liquefaction plant.

The Cove Point plant will ship around 5.25 million tonnes per annum of LNG to Asia and elsewhere when it starts up.

Dominion has fully subscribed the capacity of the project with 20-year service agreements with a Japanese joint venture comprising Sumitomo Corp., one of the world's leading trading companies, and the utility Tokyo Gas. ■

Chevron reaches landmark in Australian LNG development with start-up of third Gorgon Train

Our Asia-Pacific editor

Chevron Corp. reached a landmark in its Australian LNG developments by starting up the third processing Train of its US$54-billion Gorgon plant on Barrow Island in Western Australia, just one year after the first cargo was shipped.

Chevron is the operator of the project and now has three production Trains running with a combined capacity of 15.6 million tonnes per annum.

All systems go at Australian Barrow Island liquefaction plant

Reliability

The Train 3 start-up coincides with a scheduled temporary shutdown of Train 2 for planned work to improve its reliability.

While the Gorgon LNG project has experienced several production interruptions since it shipped its first cargo on 21 March 2016, it has continued with steady production and has managed to deliver 50 cargoes to customers.

The Gorgon venture was a year behind the original schedule and well over budget because of its complexity as a construction project and the environmental challenges.

The original budget for Gorgon was $US37Bln when it was first given the go-ahead and costs then rose by US$17Bln to US$54Bln.

The Gorgon joint venture partners also have a permit for a fourth Train expansion, though this is unlikely to be taken up in the near future.

The main shareholder in Gorgon is Chevron with just over 47 percent, while Royal Dutch Shell and ExxonMobil each have a 25 percent stake. Japanese utilities and customers Osaka Gas, Tokyo Gas and Chubu Electric each hold micro-stakes of around 1 percent or less.

Chevron is also developing the Wheatstone LNG project and a domestic gas plant near Onslow, in the Pilbara region of Western Australia, scheduled to come on stream by the end of 2017.

Chevron Chief Executive John Watson has said the Gorgon plant had performed well during the ramp up of Trains to capacity and Wheatstone was progressing.

“Lessons from Train 1 were applied to Train 2 and, consequently, Train 2 ramped up over 90 percent of capacity within a week,” Watson said recently.

The Chevron CEO said he was optimistic about the LNG market going forward in the Asia-Pacific region.

IGU calls for more LNG fuel use to avoid port pollution

The International Gas Union (IGU) released a report on the crucial role of liquefied natural gas for cleaner marine transport, saying that in Hong Kong for example ship traffic was responsible for half of the city's emissions of pollutants.

The IGU findings were released at the G20 Energy Sustainability Working Group of leading economies and highlighted the detrimental impact of marine transport on air quality levels.

As urban air pollution has become a priority for governments, marine transportation is an often overlooked contributor to negative air quality levels.

"In Hong Kong, ship traffic is responsible for half of the city's total toxic pollutants, more so than those produced by the power generation and transportation sectors. In the world's top 100 ports, roughly 230 million people are exposed directly to the harmful emissions produced by shipping," the IGU report said.

It noted that the use of LNG in marine transport can deliver significant environmental, economic and social benefits.

"These include reductions in emissions of harmful pollutants, including up to 90 percent reductions in sulfur-oxide emissions, and 29 percent reductions in carbon-dioxide emissions," the IGU said.

In addition, a switch to LNG fuel can generate substantial monetary savings for operators through fuel costs, as well as benefiting local infrastructure through investments and jobs.

"The case for using LNG fuel for shipping is clear," said David C. Carroll, the US President of the IGU.

BP CEO says Egyptian discovery turns Nile Delta into world-class basin

Our Middle East editor

UK major BP has made another natural gas discovery in the North Damietta offshore concession in the East Nile Delta of Egypt where it recently bought into the huge Zohr gas field licence in the East Mediterranean controlled by Italian energy company Eni.

BP said the Qattameya Shallow-1 exploration well was drilled to a total depth of 1,961 metres in water depth of around 108 metres using the El Qaher II jack-up rig.

Dudley is optimistic about Egypt operations

Third find

"Qattameya marks our third discovery in the block where we are already developing the Atoll field and appraising the Salamat discovery," stated Bob Dudley, BP Group Chief Executive.

"This latest discovery confirms our belief that the Nile Delta is a world-class basin," added the BP CEO.

It comes after BP in February 2017 concluded a deal to buy 10 percent of the "supergiant" Zohr field of Eni that will impact regional LNG trading when it comes on stream in late 2017.

Talking about its one latest find, BP said the data and fluid samples confirmed the presence of 37 metres of net gas pay in high quality. Options to tie the discovery back to nearby infrastructure are being studied.

"We believe development of Qattameya could help unlock the resources in other nearby discoveries with similar shallow low pressure characteristics," said Hesham Mekawi, BP North Africa Regional President.

"This is part of our long-standing commitment to Egypt and to unlocking Egypt's energy potential," he added.

Qattameya Shallow-1 well is located 60 kilometres north of Damietta city, 30 kilometres southwest of Salamat and only 35 kilometres to the west of offshore facilities. BP has 100 percent equity in the discovery.

BP has a long and successful track record in Egypt stretching back almost 55 years with investments close to $30 billion, making BP one of the largest foreign investors in the country.

Delek posts record revenue as LNG faces East Med natural gas challenge

Delek Group, the Israeli company with growing income from its share of 33 trillion cubic feet of natural gas in the East Mediterranean, posted record revenues and net profits in 2016 as the Tamar field reached peak output and the Leviathan field is on track for first gas in 2019.

Delek said that following four years of successful production, the Tamar field project sold a record 9.4 billion cubic metres of natural gas to make electricity in Israel and to displace coal use in power generation.

The company, whose subsidiaries own the Tamar and Leviathan stakes along with US-based partner Noble Energy, said its revenues in 2016 amounted to 5.8 billion Israeli shekels ($1.6Bln) compared with 6.3Bln shekels in 2015.

Analysts said the growth of pipeline natural gas flowing from discoveries in the East Med to Israel and its Arab neighbours Egypt and Jordan will affect future LNG demand.

"The increase in (Israeli) demand was due to the gradual replacement of coal by natural gas as the main energy source for domestic electricity production," Delek said.

"According to the Israel Electric Corporation, 49.9 percent of domestic electricity production in 2016 was from natural gas and Independent Power Plants using natural gas contributed 25 percent of total domestic production, an increase from 21 percent in 2015," Delek added.

Among the annual highlights was the final investment decision taken to proceed with the Leviathan project for an initial capacity of 12 Bcm in the first year.

The Leviathan field has an estimated 22 Tcf of resources and the first phase of development has a budget of $3.75Bln. First gas is scheduled to flow onshore by the end of 2019.

Dallas-based Kosmos begins drilling as part of two LNG ventures with BP offshore two West African nations

Our North America editor in New York

Kosmos Energy, the Dallas-based exploration and production company, has begun the second phase of its multi-well drilling programme offshore the West African countries of Mauritania and Senegal where it is planning two floating LNG projects with BP of the UK.

Kosmos said the "Atwood Achiever" drillship is now on location offshore Senegal in the Cayar Offshore Profond block and has started drilling operations on the first exploration well in the programme targeting the Yakaar prospect, formerly referred to as Teranga West.

The Yakaar prospect is located around 40 kilometres west of the large Teranga natural gas discovery.

Complex

The Kosmos planned production operations and two FLNG projects are based on a gross resource estimate for the Greater Tortue Complex offshore both African nations of more than 25 trillion cubic feet of gas.

'Atwood Achiever' drillship is on location offshore Senegal

First gas from Kosmos-BP FLNG Train 1 is scheduled for 2021 and the start of FLNG Train 2 is set for 2023.

The US company had drilled the successful Teranga-1 exploration well in 2016 and this will deliver some of the feed-gas for the planned FLNG developments.

Kosmos also later appraised the Greater Tortue field successfully with the Guembeul-1 and Ahmeyim-2 wells. The BP agreement to buy stakes from Kosmos in the West African licenses for $916 million was completed in February 2017, helping to deliver the Greater Tortue gas development and accelerating the second phase of exploration.

According to the US company, the Mauritania-Senegal FLNG projects are aiming to produce free-on-board LNG cargoes at a break-even price of less than $5 per million British thermal units.

Kosmos has stated that the natural gas resources for LNG production in the Mauritania-Senegal Basin can potentially surpass those offshore the southeast African nation of Mozambique, where onshore and floating LNG ventures are planned.

BP's stake purchase would effectively fund 100 percent of Kosmos's portion of the Mauritania and Senegal exploration expenditures for the next several years.

Under the Kosmos-BP partnership, the UK major acquired a 62 percent participating interest in four Mauritania licenses, listed as C6, C8, C12 and C13.

In Senegal, BP bought a 49.99 percent interest in Kosmos BP Senegal Ltd, the affiliate company which holds a 65 percent participating interest in the Cayar Offshore Profond and the Saint Louis Offshore Profond blocks offshore Senegal.

Kosmos is also producing oil in another of its ventures offshore the West African state of Ghana.

Sinopec raises shale-gas output amid new LNG import capacity and gas fuel station network construction

China Petroleum and Chemical Corp (Sinopec) said it would accelerate shale-gas output amid construction of new LNG import capacity and natural gas fuel stations for vehicles as it reported a jump in annual net income.

Net income in 2016 rose 44 percent to 46.7 billion yuan (US$6.8 billion), giving the company its first profit in three years as it traversed the oil industry downturn.

The company said in a statement to the Shanghai stock exchange that its overall revenues declined by 4 percent to 1.93 trillion yuan ($28 billion), with most of the income flow coming from its main business as one of the world's largest oil refiners.

However, Sinopec is also a growing participant in LNG and shale-gas and gave updates on its activities in these markets.

Sinopec's natural gas sales volume for last year amounted to 20.56 billion cubic metres, representing an increase of 3.7 percent.

"Average realised prices of crude oil and natural gas were 1,734 yuan per tonne and 1,267 yuan per thousand cubic metres respectively, representing decreases of 13.9 percent and 17.5 percent over 2015," the company said.

One of Sinopec's main domestic gas projects is the Fuling shale-gas venture in the Chongqing region of southwest China.

"According to the current plan, by the end of 2017, the total production capacity will be 10 billion cubic metres per year," Sinopec said. Sinopec also imports LNG from the Australia Pacific LNG export plant in Queensland where it is a shareholder with ConocoPhillips and Australian company Origin Energy.

The Chinese company also owns and operates two LNG import terminals, the Qingdao facility in eastern province of Shandong and the Beihai terminal in the southern autonomous region of Guangxi, bordering Vietnam.

The company is additionally making progress in building its third onshore import terminal at Tianjin in northeast China.

"The Tianjin LNG project is designed to receiving 3 million tonnes per year and consists mainly of the construction of a wharf, the terminal and transportation pipelines. It is expected to be completed and operational in December 2017," stated Sinopec.

Sinopec said that by the end of 2016 the cumulative investment in the Tianjin terminal was 8.2 billion yuan ($1.2Bln).

As regards the LNG fuel market, the company continued to build its nationwide station network.

"We expanded the natural gas retail business for automobiles by expediting the construction and operation of CNG-LNG stations, achieving 25 percent growth in the sales volumes of natural gas for automobiles," the company said.

Looking ahead in 2017, Sinopec said it expected even more uncertainty in the global economy while China's economy maintains its steady growth.

Norway-owned shipyard in Philadelphia delivers 'American Freedom' ship with LNG capability

Our North American editor in New York

Philly Shipyard Inc. has delivered an LNG-ready vessel named the "American Freedom", the second of four 50,000 deadweight-ton product tankers ordered by a subsidiary of US energy company Kinder Morgan and constructed at the facility in Philadelphia in the state of Pennsylvania.

The Philadelphia shipyard, owned by Norwegian company Aker ASA, is a leading US commercial builder of vessels for operation in the Jones Act market of domestic US trade where ships must be built in the US and crewed by American citizens.

Tankers

This delivery to the Kinder shipping unit American Petroleum Tankers is

Aker is a leading shipbuilder for domestic US trade

the 26th vessel built by the Philly Shipyard, formerly known as Aker Philadelphia Shipyard.

The next-generation 50,000 dwt product tankers are based on a proven design from South Korean Hyundai Mipo Dockyards (HMD) and also incorporates numerous fuel-efficiency features.

The vessel has received LNG Ready Level 1 approval from the American Bureau of Shipping.

Tougher environmental legislation has been enacted in North America and Northern Europe, creating Emission Control Areas.

These have prompted a shift towards alternative fuels in the shipping industry and a rise in the number of ships ordered to take LNG as a fuel, sometimes on a dual-fuel basis, or to be made ready for conversion, as in the case of the "American Freedom" newbuild.

This new LNG-ready notation enables shipping lines to ensure that a future LNG-fueled version of the vessel complies with the relevant safety and operational requirements

The 600-foot tanker has a carrying capacity of 14.5 million gallons of crude oil or refined products.

"We are proud to deliver another vessel to our partners at American Petroleum Tankers," remarked Steinar Nerbovik, Philly Shipyard's President and Chief Executive.

"This vessel, like its predecessor, is delivered [on time], and with the same resolute focus on quality and safety that our customers depend on," said Nerbovik. ■