LNG Unlimited

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Exmar continues talks to sell LNG FSRU division to Vopak

Dutch company has earmarked LNG storage as a strategic focus

Our Europe editor

Vopak already has LNG assets in Holland and Mexico

Belgian shipping company Exmar said it was continuing to discuss the acquisition by Royal Vopak of the Netherlands, the global petroleum storage company, of its LNG Floating Storage and Regasification Unit (FSRU) business.

The Belgian company has been a pioneer in the FSRU and floating liquefaction markets and is currently co-owner and/or operator of 10 FSRUs. It also has one FSRU and one FLNG facility under construction.

Significant

Vopak has earmarked storage and handling of LNG-gas as one of its strategic focus areas. Therefore Vopak is looking for strategic opportunities to strengthen its presence as a service provider in the LNG infrastructure market," Exmar and Vopak said.

Vopak jointly owns and operates two land-based storage and regasification terminals, the Gate terminal in the Port of Rotterdam and the Mexican Altamira import facility on the coast of the Gulf of Mexico.

"It is foreseen that new LNG production capacity will significantly influence the energy mix in the coming years," the two companies added.

"These LNG streams will need to find new demand centers to be connected to national grids serving growing deficit markets and to serve as gas supply for gas-powered electricity production," they said.

"In connection with jetty or mooring infrastructure, these FSRU's provide entry points to distribute LNG in new and existing markets," the statement explained.

Vopak as one of the world's leading independent tank storage provider for the oil and chemical industry operates 67 terminals in 25 countries with a combined storage capacity of 34.6 million cubic metres with another 3.6 million cubic metres under development and to be added by 2019.

"In addition, a foothold in LNG infrastructure with a floating solution creates a strategic position to leverage on future LNG flow developments of land-based LNG regasification terminal solutions once markets have matured.

"Vopak's global network and local presence supports these opportunities," it stated.

The majority of its customers are companies operating in the oil, chemicals and gas sector, for which Vopak stores a large variety of products destined for a wide range of industries.

Vopak's strategic focus is on four categories of terminals: major hubs supporting intercontinental products flows, terminals facilitating growth in global gas markets, import distribution terminals in major markets with structural deficits and global industrial and chemicals terminals.

Exmar confirmed the ongoing talks with Vopak as it published the final version of its first-half results, showing increased net earnings of $31.4 million compared with $21.8M in the first six months of 2015.

Exmar operates in the LNG and liquefied petroleum gas ship transport businesses as well as the offshore sector. Exmar said it logged cash flow from operations of $72.3M compared with $54.8M in the first half last year.

The company's latest earnings showed the LNG division's operating result was $24.7M for the first half versus $15.8M for the same six months of 2015.

This figure included a payment of part of the termination fee payable by Pacific Exploration for the floating LNG production project cancelled for offshore the South American nation of Colombia.

It also included costs related to the commissioning of the "Caribbean FLNG" production hull built at the Wison shipyard in China.

Exmar said several "joint development agreements" and "exclusivity agreements" have been signed for Exmar's FSRU barge and FSRU ship newbuilds.

However, it said a final investment decision had not yet been declared for the Swan LNG import project in India. Discussions are still ongoing for the leasing of an FSRU. ■

UNLIMITED AGENDA

Australia Pacific LNG to access main east coast hub with new APA Group pipeline

Our Asia-Pacific editor

Australia Pacific LNG project in Queensland, owned by ConocoPhillips, China's Sinopec and Origin Energy, has signed an agreement for APA Group, the nation's biggest gas transporter, to build and operate a feed-gas pipeline connected to a key supply hub.

APLNG, one of three coal-seam-gas-to-LNG plants built in Queensland, also signed a 20-year gas transportation agreement with APA.

APLNG is one of three plants located on Curtis Island

Locations

The 50-kilometres bi-directional pipeline, starting from APLNG's Reedy Creek site, is the shortest distance between the facilities and the Wallumbilla Gas Supply Hub, securing firm, direct access to the market.

The Wallumbilla Hub is also the centre of a gas trading exchange opened in April 2014 to facilitate the wholesale trading of natural gas in eastern Australia.

APLNG is the largest producer of natural gas in eastern Australia, currently providing around 25 per cent of domestic supply to the east coast market.

ConocoPhillips and Australian utility Origin each own 37.5 percent of the APLNG project and Sinopec holds the remaining 25 percent.

APLNG shipped its first LNG cargo from Train 1 on January 9, 2016, and the project's Train 2 is scheduled to commence production by the fourth quarter of 2016.

Shareholder Sinopec has itself signed up for 7.7 million tonnes per annum of LNG from APLNG for 20 years from the two processing Trains.

Pipeline group APA previously purchased the main supply pipeline to the Queensland Curtis LNG plant, previously owned by BG of the UK before it was taken over by Royal Dutch Shell.

APA agreed in December 2014 to pay US$5 billion for the 543-kilometre pipeline that runs between CSG fields in the Surat Basin to the QCLNG liquefaction plant on Curtis Island in Gladstone.

APLNG Chief Executive Page Maxson said he was pleased with his pipeline deal with the company that was already a significant owner of east coast gas transportation infrastructure.

"Australia Pacific LNG's strong reserve position provides flexibility and, given Wallumbilla Hub's position as a strategic point in the east coast gas market, this new pipeline will provide us the opportunity to participate flexibly and fully in Australia's dynamic gas market," Maxson explained.

Maxson said as one of country's main suppliers of domestic gas, APLNG supports the work that the Council of Australian Governments energy group, the Australian Energy Market Commission and the Australian Energy Market Operator (AEMO) have done in establishing the hub and working with the industry to ensure its success.

US Rio Grande project in Brownsville is awarded 30-year export permit for free-trade nations

The US Rio Grande LNG export project In Texas being developed by former Royal Dutch Shell LNG executive Kathleen Eisbrenner and her NextDecade company has received authorization from the Department of Energy to export cargoes to Free Trade Agreement countries.

NextDecade, which is currently seeking permits from the Federal Energy Regulatory Commission to build the plant in the port of Brownsville, plans to export 27 million tonnes per annum of cargoes, the equivalent of 3.6 billion cubic feet per day of natural gas.

Eisbrenner's company applied for the DoE export licence in December 2015 and it was granted for a 30-year term.

It covers the near neighbours of the US such as the Caribbean and Latin American countries and other nations such as Asian LNG consumers South Korea and Singapore.

"NextDecade is well-positioned to meet international demand, and FTA export authorization is an important milestone towards making a final investment decision in 2017," said Alfonso Puga, NextDecade Chief Commercial Officer.

"The U.S. has an abundant supply of natural gas and we have found a robust appetite for LNG," Puga added.

In November 2015, NextDecade announced it had signed non-binding agreements for 14 MTPA of LNG with customers across Asia and Europe.

"Since then, that number has grown to 30 MTPA, demonstrating a continued desire for US-produced LNG from customers around the world, and specifically, a desire for LNG from NextDecade," the company said, without naming any of its potential customers.

NextDecade expects to receive FERC approval for Rio Grande LNG in 2017 with initial LNG exports shipping by the end of 2020.

As proposed, the Rio Bravo project would also include a 137-mile pipeline with multiple receipt points in the vicinity of the Agua Dulce market hub area of South Texas.

The Rio Grande ventures is expected to construct six liquefaction Trains over time and plans four 180,000 cubic metres capacity full-containment storage tanks.

The site for the plant is located on the northern shore of the Brownsville Ship Channel.

When completed Rio Grande LNG will be as big as the Sabine Pass plant, the first operating US export facility, owned by Houston-based Cheniere Energy and which began commercial operations in February 2016.

Eisbrenner's role at Shell before founding NextDecade was as Executive Vice President for Global LNG Development.

She also worked in senior management in the US with El Paso Energy Corp. and was one of the founders of Excelerate Energy, the US floating LNG project developer.

US cruise line Carnival orders three more ships fuelled with LNG

Carnival Corporation, the US cruise ship operator, has signed an agreement with the German and Finnish shipbuilders, Meyer Werft and Meyer Turku, to deliver three additional cruise vessels that will be fully powered by liquefied natural gas.

Carnival said two of the new LNG-powered ships are designated for its Carnival Cruise Line and will be built by Meyer Turku at its shipyard in Turku, Finland, with delivery dates expected in 2020 and 2022.

The new ship for another Carnival subsidiary, P&O Cruises UK, will be built by Meyer Werft at its shipyard in Papenburg, Germany, with an expected delivery date in 2020.

In total, the company now has agreements in place to build seven LNG-powered cruise ships across four of its 10 global cruise brands in coming years.

Carnival and other commercial shipping companies are opting for LNG propulsion to comply with stricter Emission Control Areas currently in place in Northwest Europe, North America and the Caribbean and to apply in other regions at later dates.

Bernard Meyer, managing partner of Meyer Werft shipyard, said: "We are excited to welcome P&O Cruises back to Meyer Werft in Germany and Carnival Cruise Line back to Meyer Turku in Finland.

"These new ships will be built in our most modern and environmentally friendly facilities, and we are very proud to design, build and deliver these ships that provide breakthroughs in innovation and for the environment."

As previously announced, Carnival said the first of these LNG ships is expected to be in service for AIDA Cruises and Costa Cruises in 2019.

Based on Carnival Corp.'s "green cruising" ship design, these new vessels will be part of a first generation of cruise ships to be fully powered by LNG.

"We are proud to be at the forefront of introducing LNG-powered ships to the cruise industry," Carnival said. ■

France's Engie and Japanese partners to start bunkering project soon from Zeebrugge

Our Europe editor

French energy company Engie and two Japanese partners have advanced their bunkering joint venture plans by launching Gas4Sea, a new brand to market liquefied natural gas as a marine fuel, starting soon in the Belgian port of Zeebrugge.

Engie along with Mitsubishi Corp. and shipping company Nippon Yusen Kabushiki Kaisha (NYK Line) said they would begin operations in the fourth quarter of 2016, using a purpose-built LNG bunkering vessel with 5,000 cubic metres of capacity.

Multi-port plan

"Designed to adapt to the largest range of customers, it will be able to bunker vessels at Zeebrugge, as well as other nearby ports," a statement said.

The partners plan to expand their LNG bunkering services under Gas4Sea to meet more customers' needs into other regions, in collaboration with other stakeholders, including shipping companies, port authorities, terminal operators, regional suppliers and local governments and regulators.

"Continuing Engie's long history of innovation, we are proud to launch this first global LNG bunkering service together with our long-standing partners," said Philip Olivier, Chief executive of Engie Global LNG.

"In the general framework of energy transition, we believe LNG has a key role to play in developing a more sustainable shipping activity.

"In the coming months, we will start supplying United European Car Carriers' new dual-fuel car carriers operating in the North Sea and Baltic Sea," Olivier explained. Engie is one of Europe's main LNG players with affiliates operating import terminal, shipping and trading businesses from a global portfolio.

Engie, Mitsubishi and NYK Line first outlined their LNG bunkering plans back in 2014 when they concluded a framework agreement for a partnership to develop the service.

"By combining NYK's shipping expertise with Engie and Mitsubishi's LNG supply portfolios and terminal access under the brand Gas4Sea, the partners will offer a cleaner, reliable, safe, and cost-effective service to shipping customers worldwide," the partners added.

Hitoshi Nagasawa, Senior Managing Corporate Officer of NYK, said that as a leading global shipping line, his company was striving to find reliable and environmentally sustainable solutions to help reduce harmful emissions. NYK operates a fleet of more than 800 sea-going vessels, including 68 LNG carriers.

"We believe that the use of LNG as a marine fuel is a key innovation in this search and through Gas4Sea, using the world's first purpose-built LNG bunkering vessel, we and our partners will offer ship owners and operators the opportunity to participate in this innovation," Nagasawa said.

"The development of LNG bunkering is steadily progressing because of LNG's proven safety record and its widespread availability as a key alternative marine fuel," he added.

Jun Nishizawa, Deputy Chief Operating Officer at Mitsubishi's Natural Gas Business Division, said the Japanese trading house was always looking for ways to leverage its 50 years in LNG to contribute to the reduction of environmental impacts.

Investments

Mitsubishi has investments in more than a dozen LNG production plants worldwide and also has LNG trading and shipping interests.

"We are at the juncture of achieving substantial emissions reductions in the maritime sector," said Nishizawa.

"Through our partnership with Engie and NYK, we hope to expedite shipping companies' transition to LNG by placing ourselves as a key piece in the global marine LNG supply chain," he stated. ■

How bunkering ship will operate in northwest Europe

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NEWS NUDGES

Baker Botts London event

Baker Botts, a leading international law firm, hosted an LNG debate at its first Oil and Gas Lawyer School in London for leading in-house counsel. The firm said that during the event, partners from its energy practice were joined by 38 industry professionals to examine a range of issues facing the oil and gas industry, with participants also able to discuss the current LNG industry and value chain. In-house lawyers from various energy companies including BP, Cheniere, Italy's Eni, ExxonMobil and Gazprom Marketing and Trading also attended. "Baker Botts has a strong commitment to the professional development and advancement of our clients' in-house legal teams. Although the downturn in oil prices continues to impact the industry, it's important that we continue to work with our clients to share knowledge," said Mark Rowley, Partner-in-Charge of Baker Botts in London.

Texas slump Is now receding

The Texas Alliance of Energy Producers said the monthly upstream oil and gas employment figures have risen for the first time in 19 months. "The reversal of the employment-loss trend is an encouraging sign that the deep contraction in the Texas upstream oil and gas economy is in the process of coming to an end," said Karr Ingham, the economist who created and maintains the Texas Petro Index. Estimated Texas natural gas output was more than 708.9 billion cubic feet, a year-on-year monthly decline of about 5.2 percent. However, the number of active drilling rigs in Texas surpassed 200 units for the first time since March and the price of crude oil continued a four-month rally.

US class society approves GE system for joint China newbuild project

Our Asia-Pacific editor

General Electric Marine Solutions and China's Hudong-Zhonghua Shipbuilding have received approval in principle from US classification society, the America Bureau of Shipping, for a jointly developed liquefied natural gas carrier to be powered by a GE propulsion system.

The combined gas turbine electric and steam (Coges) system from the US company will power the Chinese-built LNG carrier of 178,000 cubic metres capacity.

Offered

"With AIP in hand from ABS, customers can now procure this LNG carrier that is capable of meeting Tier III International Maritime Organization and Tier 4 United States Environmental Protection Agency emissions requirements today," said GE's Brien Bolsinger, Vice President of Marine Operations.

The propulsion system for the Chinese yard's HZ LNG carrier will feature one GE LM2500 gas turbine generator, one heat recovery steam generator and one steam turbine generator.

GE said the LM2500 gas turbine used in the LNG carrier is derived from its proven CF6 aircraft engines.

"The compact Coges arrangement, fully 80 percent lighter and 30 percent smaller than comparable two-stroke diesels, will allow for increased container carrying capability.

China's Hudong-Zhonghua yard to construct carrier

"The system also offers customers lower life-cycle costs, negligible lubricating oil consumption, no methane slip and no pilot fuel or exhaust treatment required," GE explained.

GE added that annual maintenance takes about 300 man-hours while the ship is underway.

The US company explained that when more extensive maintenance is required, the entire turbine can be removed and replaced within 24 hours, reducing downtime and enabling maintenance to be carried out with minimal interruption to ship operations.

"Thanks to the compact and lightweight attributes of GE's Coges arrangement, customers can realize an additional 4,000 cubic metres of LNG cargo space versus a traditional 174,000-cubic metres capacity LNG carrier powered by dual fuel diesel engines," said HZ President Chen Jun.

"Also, since the GE gas turbine is dual-fuel capable, it can operate either on the carrier's cargo of boil-off gas or on marine gas oil to provide for all power and propulsion," Chen said.

Bill Shi, ABS Vice President of Engineering in the China region, said new technologies and innovations were essential ingredients for sustainable growth of the marine industry and protection of the environment.

"By evaluating this new design concept jointly developed by Hudong-Zhonghua and GE and granting this milestone Approval In Principle, we have acknowledged that the eco-friendly propulsion system is in compliance in principle with the requirements of the ABS standards and international regulations," Shi stated. ■

Lloyd's Register given key role to advise Cyprus on LNG and natural gas plans

UK maritime classification society Lloyd's Register has been awarded a crucial role in oil and gas development strategies in Cyprus, where liquefied natural gas production is being considered onshore and offshore as well as pipeline exports.

Cyprus Hydrocarbons Company (CHC), the national oil and gas company of Cyprus, has named Lloyd's Register as independent commercial advisor for its commercial exploitation of hydrocarbons in the Exclusive Economic Zone (EEZ) of the Republic of Cyprus.

As the Eastern Mediterranean emerges as a new exploration region, companies such as Noble Energy of the US have already been successful in Cypriot waters with the Aphrodite natural gas discovery and a related preliminary plan by Cyprus to build an onshore LNG liquefaction plant at Vasilikos.

"We are delighted to be working with CHC and the emerging Cyprus oil and gas industry on this prestigious and critical development," said Phil Edwards, Consulting Director of Lloyd's Register's energy business.

"Our work includes a number of activities such as assisting CHC in realising its options and strategies for successful development of the EEZ, and crucially assisting in hydrocarbon sale discussions and agreements with upstream operators and partners active in Cyprus," Edwards added.

Currently, Cyprus's 15,000 square kilometre EEZ has 13 exploration blocks located to the south of the island.

Some estimates suggest that Cyprus could be sitting on 60 trillion cubic feet of natural gas and it is well placed for exports. ■

EWC puts finishing touches to first LNG terminal for Philippines and Indonesia plant

Our Asia-Pacific editor

Energy World Corp., the Australian-listed Asia-Pacific natural gas and power company based in Hong Kong, said the first LNG import terminal in the Philippines is almost complete as it posted record earnings ahead of the hub facility coming on line at Pagbilao in Quezon province.

"The Philippines LNG hub terminal is 99.75 percent complete," stated EWC in its earnings statement.

Gas and power

The LNG import terminal will have initial throughput capacity of 3 million tonnes per annum.

Adjacent to the facility, EWC is also developing a 600 megawatts gas-fired power plant to sell electricity into the main regional power grid.

The 130,000 cubic metres capacity LNG storage tank for the Philippines terminal is already complete along with the carrier-loading jetty.

The Philippines LNG hub will primarily be used to facilitate the distribution of LNG and natural gas, including receipt, storage and dispatch of small-scale LNG cargoes to four main markets.

EWC is also developing an LNG liquefaction plant in Indonesia at Sengkang in South Sulawesi.

"The Sengkang LNG project is 95 percent complete," EWC said in its latest statement to the Australian Securities Exchange.

The Sengkang plant has one modular LNG Train and related infrastructure almost built.

It will have capacity to produce 500,000 tonnes per annum, with three additional Trains planned of the same capacity depending on gas field development, giving a potential total output of 2 MTPA.

Philippines import terminal takes shape at Pagbilao

EWC said fiscal 2016 was a record year for the company in terms of incoming revenue which amounted to $187.4 million compared with $177M in fiscal 2015.

Consolidated net profit for after income tax was $28.7 million compared with $25.7M in fiscal 2015, a rise of 11.6 percent.

The company said the revenue increase was mainly due to the performance of the Indonesian Power division which had a full year of an additional 5 megawatts capacity from the Sengkang Power Plant.

Another growth area was the Indonesian Gas unit which showed an 8 percent rise in revenues, with 3 percent coming from annual price rises and 4 percent from higher production.

Italy's Eni tests its fifth gas well in Egypt field

Italian energy company Eni has successfully tested a fifth well in the world-class Zohr Field offshore the East Mediterranean coast of Egypt and confirmed resources in place of 30 trillion cubic feet.

Eni said the fifth well on the Zohr structure was drilled to the final total depth of 14,271 feet. The well is located in 1,538 metres of water depth and is 12 kilometres southwest of Zohr's first discovery well.

"The well proved the presence of a carbonatic reservoir and gas accumulation also in the South-Western part of the Zohr mega-structure encountering about 590 ft (180 metres) of continuous hydrocarbon column in the carbonate sequence with excellent reservoir characteristics," Eni said.

"The results are confirming the potential of the Zohr Field at 30 Tcf," the Italian company stated.

Eni was given the go-ahead in February 2016 by the Egyptian Ministry of Petroleum and Mineral Resources to develop the Zohr field, discovered in its Shorouk block licence area.

The Eni discovery will go some way to satisfying Egypt's domestic natural gas needs, while possibly helping to revitalize its two liquefied natural gas export plants and ending the need for LNG imports.

Egypt has two Floating Storage and Regasification Units deployed at the port of Ain Sokhna in the Gulf of Suez to satisfy natural gas demand.

Eni has said the Zohr development plan envisages the start of production in just over a year, just two years after the discovery.

Eni holds 100 percent of the Shorouk licence and operations are also being conducted by Petrobel, a joint venture between Eni and Egyptian state energy company Egyptian General Petroleum Corp.

Bahrain plans to cooperate with Gazprom on LNG developments

Our Europe editor

Bahrain Oil and Gas Holding Co. and Russia's Gazprom have signed a memorandum of understanding to cooperate on energy and liquefied natural gas during a visit to Moscow by the King of Bahrain and key ministers.

The accord was signed by Sheikh Mohammed bin Ahmed Al Khalifa, the Bahrain Minister of Oil, and Gazprom Board Chairman Viktor Zubkov, the company board chairman.

Accords signed before King Hamad and President Putin

Accord

A Bahrain statement said an additional agreement was signed to help the Gulf state improve its oil and natural gas exploration techniques.

This pact was between Bahrain's Oil and Gas Holding Co., Russia's Rosgeologia and covers a partnership in geophysical surveys for oil and gas.

The signatories were the Minister of Oil for the Bahrainis and Rosgeologia senior executive Roman Panov.

"King Hamad and President Vladimir Putin lauded the signing of the agreements and Memoranda of Understanding that will contribute to the consolidation and development of the relations between the two countries," a Bahrain statement said.

Bahrain has awarded the contracts for its first LNG facility, with Teekay LNG chosen to provide the LNG carrier that will be deployed as a floating storage unit.

In addition to working with a unit of Canadian shipping company Teekay, Bahrain said South Korean construction firm Samsung Construction & Trading Corp. would build the onshore infrastructure.

Samsung C&T has previous experience, having completed the onshore LNG import terminal at Manzanillo on the Pacific Coast of Mexico in 2012.

The Bahrain terminal design envisages an LNG carrier acting as storage and with output capacity of 800 million cubic feet per day.

Arab nations have favoured floating LNG solutions. Previously Kuwait began importing LNG through a port-side Floating Storage and Regasification Unit (FSRU) terminal in 2009 and Dubai's FSRU started imports to the United Arab Emirates in late 2010.

The Emirate of Abu Dhabi also inaugurated an FLNG import facility in July 2016 at the port of Ruwais.

The FSRU loaded LNG from the UAE's own production plant on Das Island and delivered it to the port.

Japanese export-import credit agency pledges loan to Yamal LNG project

The Japan Bank for International Cooperation, the nation's export-import credit agency, said it planned to lend $400 million to the Yamal LNG project in Arctic Russia because some of the production will be taken by Japanese buyers.

The Yamal LNG project is currently under construction in the Yamal Peninsula and when the first phase is complete will comprise three liquefaction Trains, each producing 5.5 million tonnes per annum for total output of 16.5 MTPA.

However, the $27-billion Russian Yamal venture's funding had been affected by international financial sanctions, mainly from the US and Europe, against Moscow over the Ukraine issue.

Funding so far has only been forthcoming from Russian and Chinese banks.

The Japanese bank revealed its Yamal LNG loan plans during a speech in the Russian Far East city of Vladivostok by its Chief Executive Tadashi Maeda.

The CEO said Japan had almost finalized the agreement with the project and planned to sign a memorandum of understanding with Russian natural gas company Novatek, which will be the operator and owns a 50.1 percent stake in Yamal LNG.

The Yamal venture's other shareholders are French energy company Total and China National Petroleum Corp., with each holding 20 percent stakes, and the Chinese Silk Road Fund, which holds 9.9 percent.

The Japanese loan pledge follows $12 billion in previous financing pledges.

Woodside to acquire half of BHP Billiton gas assets in key offshore area of West Australia

Our Asia-Pacific editor

Woodside, operator of two liquefied natural gas production plans in Western Australia, has entered into a binding sale and purchase agreements with Australian resources company BHP Billiton to acquire half of its gas assets in the offshore Scarborough field and the Carnarvon Basin for future LNG production.

Woodside operates the Northwest Shelf LNG production plant at Karratha in Western Australia, where BHP is one of five other shareholders, also including BP of the UK, Chevron Corp., Royal Dutch Shell and Japan-Australia LNG.

Pluto LNG

The nearby Pluto LNG liquefaction plant is 90-percent owned by Woodside with Japanese utilities Kansai Electric and Tokyo Gas each holding five percent.

Woodside will pay BHP Billiton US$250 million on completion of the transaction and a contingent payment of US$150M on a positive final investment decision to develop the Scarborough field.

The Woodside resource estimate for the Scarborough area resources, including the Scarborough, Thebe and Jupiter gas fields is 8.7 trillion cubic feet. On completion of the BHP sale, Woodside's net share will be 2.6 Tcf.

The Woodside contingent resource estimate for the Scarborough area resources are based on a potential development involving Floating LNG.

The Carnarvon, Browse and Bonaparte basins offshore Western Australia have proven resources of around 133 Tcf.

The Browse Basin, offshore the northwest coast of Western Australia, is the subject of the Woodside-led Browse FLNG project, which is currently on hold.

The Woodside acquisition from BHP includes a 25 percent interest in WA-1-R and a 50 percent interest in WA-62-R, which together contain the Scarborough gas field.

Woodside will also acquire a 50 percent interest in WA-61-R and WA-63-R which contain the Jupiter and Thebe gas fields.

Woodside will operate WA-61-R, WA-62-R and WA-63-R. ExxonMobil is the operator of WA-1-R.

Woodside Chief Executive Peter Coleman said that adding Carnarvon Basin volumes to the Australian portfolio would complement Woodside's growth strategy and leverage the company's deepwater and LNG capabilities.

"We look forward to working with ExxonMobil and BHP Billiton following completion of the transaction to progress commercialisation of these world-class resources," he said.

Woodside said completion of the deal was subject to pre-emption rights and customary regulatory approvals and is targeted by year-end 2016. ■

Woodside buying Scarborough and Carnarvon stakes

MEO says Tassie Shoal LNG plant could be matched to feed-gas from the Greater Sunrise gas fields

MEO Australia, the exploration and production company with retained liquefied natural gas project plans in the Tassie Shoal offshore northwest Australia and oil interests in Cuba, said its LNG project could be suitable for feed-gas from the Greater Sunrise fields.

The suggestion came in its annual report as it pledged to continue with farm-out and partial sale opportunities and pursue attractive opportunities during 2017 as it posted an annual loss of $10.4 million.

Strategy

MEO's strategy is the commercialisation of any oil and gas discoveries in offshore Australian exploration permits and onshore overseas acreage and the development or sale of the group's methanol and LNG projects.

As regards its two Tassie Shoal gas processing projects, MEO has Australian Government environmental approvals to construct, install and operate a single plant known as the Tassie Shoal LNG project with 3 million tonnes per annum capacity and two separate small methanol plants with 1.75 MTPA of capacity.

Tassie Shoal is an area of shallow water in the Australian waters of the Timor Sea about 275 kilometres north-west of Darwin in the Northern Territory.

Environmental approvals for the projects are valid until 2052.

"During the year MEO maintained dialogue with industry and regulatory stakeholders regarding the projects.

"As the regional gas supply market consolidates over the medium term and industry participants rationalise their global exploration portfolio, there is the potential for suitable discovered undeveloped gas to become available. MEO continues to work with prospective partners to secure gas," it said.

The Tassie Shoal LNG project requires around 3 trillion cubic feet of low carbon-dioxide gas to operate for 20 years.

"Gas supply for the LNG plant could come from one or more of the neighbouring undeveloped gas fields confronting economic challenges imposed by long distances from land, high domestic construction costs and/or high FLNG development costs," MEO said.

"The Greater Sunrise resource represents the most obvious source of gas for the LNG project," MEO stated.

Original MEO plans for LNG venture envisaged a liquefaction plant being towed or carried to the site by a heavy-lift vessel and ballasted directly in place, thus avoiding Floating LNG complexities.

"Any LNG project proposed for gas in the region of Tassie Shoal has the potential to utilise the TSLNG development path as an alternative to FLNG or piping gas to an onshore LNG facility," MEO said in its earnings statement.

"Due to its proximity to the resource and modularised construction, TSLNG has a significant cost advantage," it added. ■

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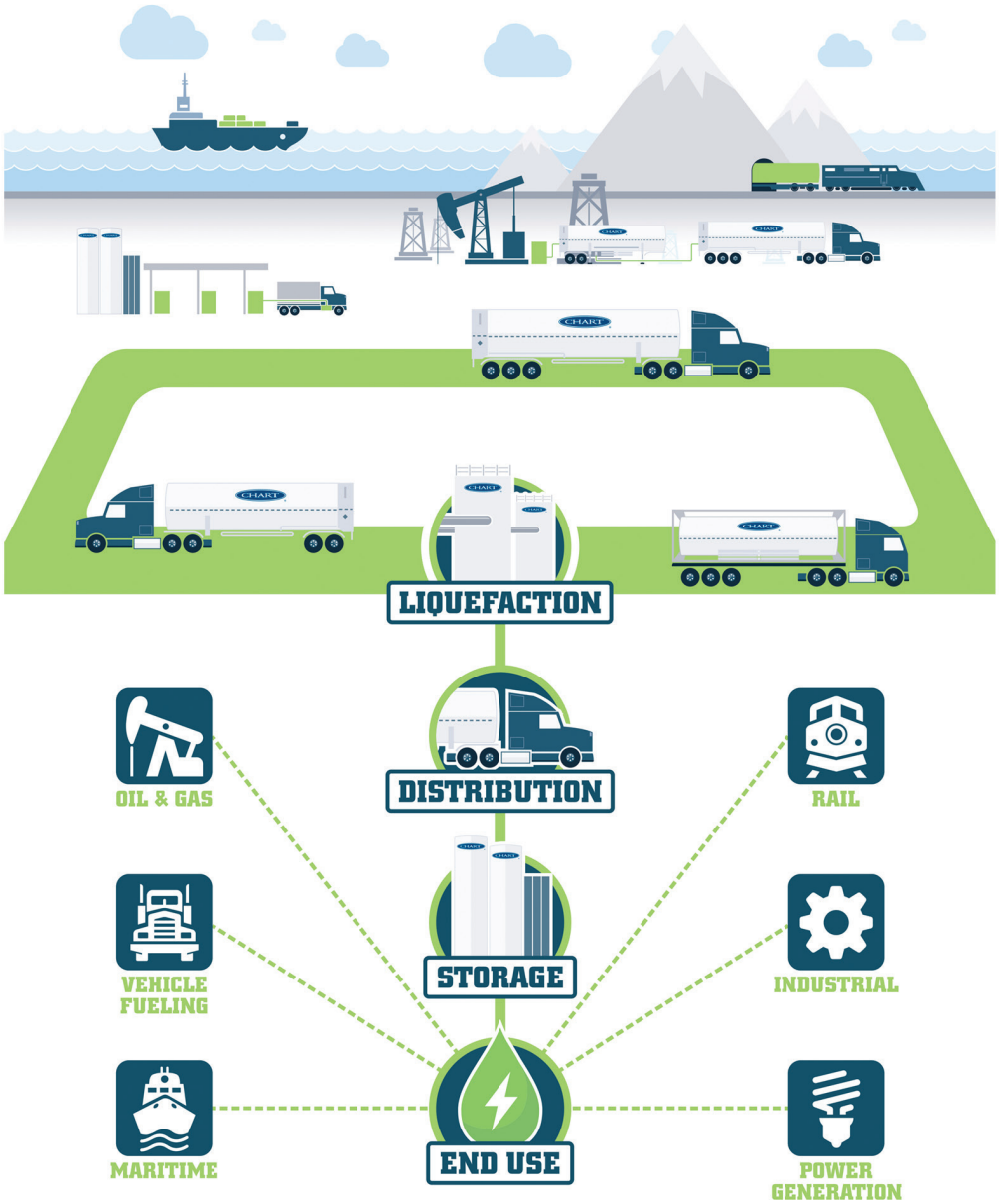

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