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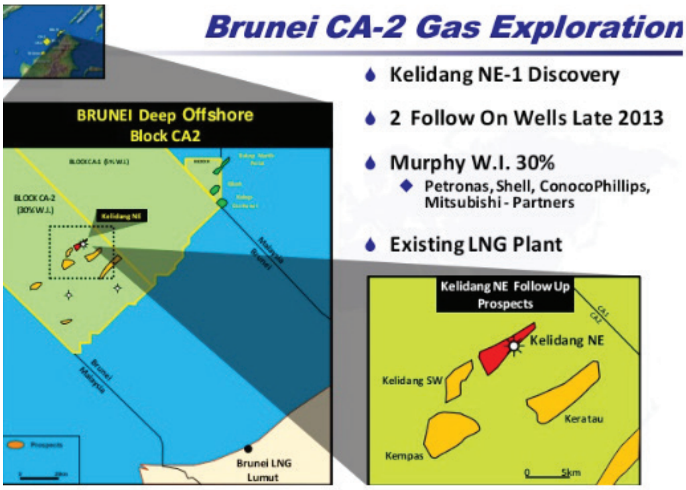
US company Murphy Oil advances LNG plans in Malaysia and Brunei

Arkansas-based oil and gas company is pursuing FLNG venture from the Rotan gas well in Malaysian waters

Our Asia editor



Murphy has made 'very big gas discovery' offshore Brunei

US company Murphy Oil is advancing with plans to produce liquefied natural gas from a floating liquefaction plant offshore Malaysia by 2020 and another of its developments will underpin more LNG output in the Asian nation of Brunei from an established onshore plant.

Murphy has just outlined its proposals for an FLNG project with Malaysian energy company Petronas, which successfully started up the world's first production hull, the "PFLNG Satu". The vessel is deployed over the stranded Kanowit gas field offshore Sarawak.

Offshore Sabah

The US company is involved in the second Malaysian FLNG venture for the deepwater Rotan gas field, about 80 miles offshore of Sabah, the Malaysian state occupying the northern part of the island of Borneo.

The Rotan gas well was discovered by Murphy in 2007 in the Block H licence in Malaysian waters of the South China Sea. The FLNG vessel will be designed to produce 1.5 million tonnes per annum.

Murphy Chief Executive Roger W. Jenkins told a recent briefing that the US company, based in Arkansas, holds half of the Block H licence for the Rotan gas field.

"We have a long-term relationship with Petronas," said Jenkins. "We've been in business in Malaysia since 1999 and Petronas is our historic partner," he added.

"We hold majority interests in eight separate production sharing contracts," the CEO said.

"Murphy provides gas to the Malaysia LNG complex at Bintulu via our gas sales contract with Petronas for gross sales volumes up to 250 million cubic feet per day," he added.

"Since the Rotan discovery in 2007 in the offshore Sabah Delta, we have had several other natural gas discoveries nearby," explained Jenkins.

"The Block H Floating LNG project has been sanctioned by both Murphy and Petronas with first production targeted in 2020," he said.

"In Brunei, we entered into two production sharing agreements in deepwater Brunei in 2010. Three successful gas wells were drilled in CA-1 in 2012 and three gas wells were successfully drilled in CA-2 in 2013.

"We are currently evaluating development options for these blocks. We have a very big gas discovery in Brunei," the company said.

Murphy said that future growth opportunities from LNG projects are in Block H for the Malaysia FLNG project and the Brunei natural gas discovery "adds additional resources through multi-field development."

Brunei is one of the world's oldest LNG producers. The sultanate's liquefaction plant at Lumut has shipped cargoes since 1972.

Brunei LNG signed a 10-year contract with Petronas of Malaysia starting in 2013, and began sending spot cargoes to other Asian consumers, including India, China, and Taiwan.

Brunei LNG produced 6.29 million tonnes of LNG in 2016 and supplied 4.2MT to Japan and the balance of cargoes to South Korea, Malaysia, Taiwan and China.

Brunei's increasing domestic demand for natural gas from the power and petrochemical sectors is likely to compete with LNG exports, and more of the country's gas production

"Brunei natural gas discoveries will add resources through these multi-field developments and will provide $300M to $400M in cash flow for the company," added Jenkins.

In addition to its southeast Asian resources, Murphy is also a sizeable player in North America. ■

UNLIMITED AGENDA

Global clearing house Intercontinental Exchange takes full control of Dutch TTF gas trading

Our Europe editor

The Intercontinental Exchange (ICE), the operator of global pricing and clearing for energy and commodities, has made the ICE Endex European pricing and trading platform a fully-owned subsidiary after acquiring the remaining shares held by Dutch natural gas transmission company Gasunie.

ICE bought a 20 percent shareholding for an undisclosed sum from the Dutch network operator and joint owner of the Gate LNG terminal in Rotterdam.

Future role

"In addition, ICE and Gasunie have signed a memorandum of understanding which sets out the basis for further cooperation between the two parties in relation to the operation of the Dutch gas and power markets following ICE's acquisition of the Gasunie shares," a statement said.

ICE's full ownership of ICE Endex comes at a time when the Dutch Transfer Title Facility (TTF) price is growing in importance as a continental European rival to the UK National Balancing Point (NBP), previously the dominant benchmark price.

The Dutch TTF is a virtual trading point for natural gas in the Netherlands, set up by Gasunie in 2003.

Since then the Dutch TTF has become the leading continental European benchmark and trading hub for spot, forward and futures gas trades. It will grow in importance as the UK leaves the European Union.

As the leading energy exchange in continental Europe, ICE Endex provides widely accessible continental European markets for trading natural gas and power derivatives, gas balancing markets and gas storage services.

"Gasunie have been terrific partners in building ICE Endex and in growing the Dutch TTF gas futures and options complex to help customers manage their price risk," said ICE, based in the US city of Atlanta and which also owns the New York Stock Exchange.

Gasunie set up Dutch TTF trading point for natural gas in 2003

"Our acquisition of the remaining shares in ICE Endex along with further cooperation with Gasunie will allow us to further develop these markets and to serve the needs of our European gas and power customers," said David Peniket, President and Chief Operating Officer of ICE Futures Europe.

"We look forward to continuing to work with Gasunie as we collaborate in support of the growth of both the European and global natural gas markets," added Peniket.

Ulco Vermeulen, a member of the Gasunie board and a Business Development executive, pointed out that it was only three years ago that Gasunie decided to join forces with ICE for a period of time to develop a secure and efficient continental European platform for trading gas and power.

"By bringing the expertise of both companies together we have been able to deliver this initiative. Trade is now flourishing and the 100 percent ownership by ICE is the most logical step for the ICE Endex business," added Vermeulen. ■

Norwegian shipping company Stolt-Nielsen is still on course with small-scale LNG joint ventures

Stolt-Nielsen, the Norwegian-listed shipping and storage company with small-scale LNG project plans on the Italian Island of Sardinia and in Scotland, posted a second-quarter drop in net profit of around 60 percent to $15.6 million compared with $38.0M in the year-ago quarter.

The company listed on the Oslo stock exchange reported higher revenue for the three months of $500.8 million versus $478.9M in the same quarter of 2016.

Stolt-Neilsen revealed in May 2017 that it had ordered two 7,500 cubic metres capacity LNG carriers with options for three similar ships as it builds a small-scale portfolio to serve ventures without supplies from the pipeline grid.

The contract for the initial two ships is valued at around $80M, including site-team costs and capitalised interest during construction.

The ships are to be built at Keppel Singmarine's shipyard in Nantong, China, with deliveries scheduled in the second and third quarters of 2019.

They will be able to run on either diesel fuel or LNG, with a class notation and technical capability for ship-to-ship bunkering to enhance their versatility.

The Stolt-Nielsen Gas (SNG) unit has established a wholly owned subsidiary called Avenir LNG to focus mainly on the development of small-scale LNG supply chains.

SNG's current projects include plans to build and operate an LNG terminal and distribution facility in the port of Oristano in Sardinia and a venture to provide LNG to areas of Scotland not served by the existing natural gas grid.

Stolt-Nielsen and Flogas Britain said in November 2016 they had signed an accord to work on a joint project to bring small LNG shipments to the eastern Scottish Port of Rosyth.

The shipments are scheduled to start by 2019 in small-scale LNG carriers and will supply off-grid customers with LNG.

"SNG continues to focus on the development of small-scale LNG storage and distribution supply chains to serve locations lacking access to LNG pipelines," the company said in its earnings statement.

Stolt-Nielsen attributed its profit falls to continued challenges in its various divisions.

The Stolt Tankers unit posted an operating profit of $27.6M compared with $28.5M in the previous three months "reflecting continued softness in the chemical tanker market, as rates overall edged lower and bunker prices continued to rise."

Stolthaven Terminals reported an operating profit of $16.1M, down from $16.7M, primarily reflecting lower utilisation at the Singapore terminal.

The Stolt Tank Containers division had an operating profit of $13.7M, up from $9.0M as markets firmed after the seasonally weak first quarter.

"Stolt-Nielsen Ltd's second-quarter results were disappointing overall, but in line with both our expectations and our results in the first quarter, as the fundamentals of our markets remained largely unchanged," said Niels G. Stolt-Nielsen, Chief Executive.

"Our outlook remains cautious. We do not expect a significant improvement in the chemical tanker market until most of the current orderbook has been delivered, which, barring any new orders, is expected to be in the second half of 2018," the company added. ■

CEO Mullen recognizes challenges facing CB&I

CB&I, the US energy engineering company currently working on projects such as the liquefaction export plants on the US Gulf Coast, Cameron LNG and Freeport LNG, said that Patrick K. Mullen had formally assumed his roles as President and Chief Executive.

The company announced in May that Philip K. Asherman would be retiring, aged 66, from his positions after 12 years in the posts of President and CEO to be replaced by Mullen.

Mullen, aged 52, had been named Chief Operating Officer in 2016 after previously serving as Executive Vice President and President of CB&I's Engineering and Construction unit where he was responsible for worldwide operations.

"It is an honor to have been chosen to lead CB&I," said Mullen after taking over the helm.

"While I recognize this is a challenging cycle for our industry, I have a great deal of confidence in CB&I's employees and capabilities and in our ability to create long-term value for all of our stakeholders," he added.

"To best position CB&I going forward as we maintain our relentless focus on safety and sound execution of our backlog, we will be taking decisive action in several areas," he explained.

Mullen pledged to take action for the "strengthening of our balance sheet" while "streamlining the company's cost profile and further enhancing the company's risk management and execution standards.

"Actions in these areas will build on CB&I's many existing strengths. We look forward to sharing more detail on these actions and CB&I's strategic direction in the coming months," said the new CEO. ■

GE's oil and gas and Baker Hughes complete their merger agreement

Our Europe editor

US energy services company Baker Hughes and GE's oil and gas business, which provides LNG equipment from gas turbines to pumps and gearing technology, have completed their transaction to form a new company called BHGE to offer services across the full value chain of the oil and gas sector.

"No other company brings together capabilities across the full value chain of oil and gas activities, from upstream to midstream to downstream," said BHGE.

BHGE's global organization will employee 70,000 people in four product companies. These are Oilfield Services, Oilfield Equipment, Turbomachinery and Process Solutions and Digital Solutions.

London-Houston HQs

The combination will have dual headquarters in Houston and London and the merged company is listed on the New York Stock Exchange under the BHGE ticker.

GE Chairman and Chief Executive Jeffrey Immelt is serving as Chairman of Baker Hughes and Martin Craighead, former Chairman and CEO at Baker Hughes, is Vice Chairman of the BHGE board.

"This portfolio positions BHGE to create new sources of value, improving productivity and project economics through integrated equipment and service offerings," the combined company said.

"BHGE will use cloud-based software, advanced manufacturing and brilliant factory solutions to help its customers capture some of this opportunity - reducing risk and improving productivity in their operations as well as its own," added BHGE.

Lorenzo Simonelli, President and Chief Executive of Baker Hughes, said his focus was on integrating the businesses "quickly and seamlessly" to drive long-term value for stakeholders.

"We created BHGE because oil and gas customers need to withstand volatility, work smarter and bring energy to more people," said Simonelli.

Chairman Immelt said BHGE can help the company's customers be more productive in any business cycle.

"It's a smart deal for our combined customers, shareholders and employees. Lorenzo and his team are world-class leaders and will focus on accelerating the company's capability to extend the digital framework in ways oil and gas customers have never seen before," said Immelt.

"The completion of the transaction marks a new era in the industry, and I am extremely proud of our team's focus, dedication and diligence, which resulted in the completion of this combination in just eight months," stated Immelt. ■

Martin Craighead (left) is Vice Chairman of the BHGE board and Lorenzo Simonelli of GE is CEO of Baker Hughes

Venture Global LNG awards contract to CB&I for tanks at Louisiana project

CB&I, the US energy engineering company, was awarded a contract valued at nearly $200 million by Venture Global LNG, a US-based project developer based in Washington DC, to construct two LNG storage tanks for the company's proposed Calcasieu Pass export facility in southwest Louisiana.

Venture Global's Calcasieu Pass is expected to produce 10 million tonnes per annum of LNG when the plant is completed.

The facility's design will use a liquefaction system with 18 mid-scale modular Trains driven by electric motors to achieve optimum efficiency and reliability.

CB&I will provide, on a turn-key basis, two single-containment LNG storage tanks.

Construction of the tanks is expected to begin in 2018.

"CB&I has an established track record of successfully executing LNG storage projects both in the US Gulf Coast region and around the world," said Luke V. Scorsone, Executive Vice President of CB&I's Fabrication Services operating group.

"Our ability to deliver certainty of outcome provides Venture Global with a cost-effective, low-risk solution for the Calcasieu Pass facility," added Scorsone.

Venture Global is developing two LNG export plants in Louisiana, with the second called Plaquemines LNG and located on 630 acres near river mile-marker 55.

The Mississippi river project will produce 20 MTPA and will include small-scale liquefaction Trains. ■

NEWS NUDGES

SNC-Lavalin buys WS Atkins

SNC-Lavalin Group Inc., the Canadian energy and LNG engineering company based in Montreal, has completed its 2.1 billion pounds (US$2.8Bln) acquisition of WS Atkins, the UK-based engineering consultancy. "SNC-Lavalin is continuing to deliver on its strategy of establishing itself in the top 3 in our industry globally," said Neil Bruce, President and Chief Executive of SNC-Lavalin. "By combining our two highly complementary businesses, we are solidifying SNC-Lavalin's position as one of the largest fully integrated professional services firms in the world, while improving our margins and balancing our business portfolio," added Bruce. SNC-Lavalin in 2014 bought UK company Kentz Group.

Gazprom-China gas agreement

Gazprom Chairman Alexey Miller and Wang Yilin, Chairman of China National Petroleum Corp., signed a supplementary sales and purchase agreement for Russian natural gas to be supplied via the eastern route, known as the Power of Siberia gas pipeline scheduled to start in December 2019. "The signing of this document is a crucial step in the implementation of the project, a step achieved by Gazprom and CNPC thanks to clear and concerted action on both sides of the border," said Miller. "Our work is strictly on schedule, even ahead of schedule regarding Power of Siberia," he added.

LNG importers plan meeting

Belgian company Fluxys, owner of the Zeebrugge LNG import terminal, will host the 2017 General Assembly in Brussel from October 8-11 of the International Group of Liquefied Natural Gas Importers (GIIGNL).

Singapore shipyard moves closer to finishing FLNG vessel for Cameroon

Our Asia editor

Singapore shipyard Keppel Offshore and Marine said it would soon deliver the world's first converted Floating Liquefaction Vessel (FLNGV) owned by Norwegian project company Golar LNG and set to be deployed offshore the West African nation of Cameroon.

The vessel has just been named "Hilli Episeyo" at a ceremony held at the Keppel shipyard.

Naming ceremony was held at Keppel yard for 'Hilli Episeyo'

African project

The Golar FLNG vessel will be put into operation offshore the port of Kribi in Cameroon in a joint venture also involving the state energy company, Société Nationale des Hydrocarbures and European oil and gas company Perenco.

"We are proud to be able to deliver the world's first FLNGV conversion in partnership with Golar LNG within three years and with a commendable safety record," said Mr Chris Ong, Chief Executive of Keppel Offshore.

"By combining our expertise from a variety of complex offshore conversion projects and our capabilities in executing LNG-related engineering, procurement and construction projects, we are able to offer innovative and reliable floating liquefaction solutions to meet the growing midstream needs of the LNG industry," stated Ong.

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

"With the experience gained from this first FLNGV conversion project, we are in a unique position to provide customers with reliable end-to-end solutions for the EPC and commissioning of FLNGV as well as FSRU (floating storage and regasification unit) conversions," added the Singaporean shipyard CEO.

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

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

The "Hilli Episeyo" is designed for a liquefaction capacity of about 2.4 million tonnes of LNG per annum.

"Being on its final leg towards completion, the 'Hilli Episeyo' represents a game-changer in the LNG industry with its fast-track, low-cost project execution," said Mr Oscar Spieler, CEO of Golar LNG.

"The development of this FLNGV positions us as front-runners in providing offshore liquefaction solutions to meet the growing demand for LNG," added Spieler. ■

Norwegian firm wins BP contract to help bring feed-gas toTrinidad LNG

Norwegian-based consultancy and services company Add Energy was awarded a contract as part of the development of the Angelin natural gas field by BP in Trinidad to supply more feed-gas for the Atlantic LNG liquefaction and export plant at Point Fortin.

The Angelin gas field is located 60 kilometres offshore the east coast of the Caribbean nation.

Add Energy said its contract, valued at around $645,000, is to carry out the development of a full asset maintenance build and will include the delivery of an asset register.

The Angelin project is a dry gas development in the northern Columbus Basin of the Caribbean in over 210 feet (65 metres) of water.

With a design throughput of 600 million standard cubic feet of gas per day, production will be sent to the Cassia platform for processing.

The feed-gas from the venture will be transported by pipeline to the Atlantic LNG plant at Point Fortin and the liquids produced will go to Galeota terminal via a new 13-mile pipeline.

BP is also currently completing the construction of the Juniper project to supply more feed-gas to the LNG plant from 50 miles off the southeast coast of Trinidad.

The four processing Trains at Atlantic LNG are running below capacity. Last year they produced 10.46 million tonnes of LNG compared with 11.81MT the previous year

The Add Energy contract involves the development of maintenance strategies for critical and non-critical equipment, job plans and procedures for the gas field work.

It is expected to last eight months and will be led by Add Energy's Technical Manager, Julio Monsalve and will cover 6,500 equipment tags.

Add Energy is headquartered in Stavanger, Norway, and has offices in seven other countries, including the US. ■

Open season for Alaska project gains early result with formal expression of interest from Korea Gas

Our North America editor in New York

Alaska LNG project leader, Alaska Gasline Development Corp. (AGDC), signed a memorandum of understanding with Korea Gas Corp. in Washington DC to cooperate on several aspects of the liquefaction and export venture.

The Alaskans said the memorandum of understanding signed at a government-run conference establishes a framework for AGDC and Kogas to work together on Alaska LNG, including project investment, development, operations and other arrangements.

Alaska LNG is an integrated gas pipeline and LNG infrastructure project that will link the US state's huge conventional natural gas resource on Alaska's North Slope with the growing LNG markets in Asia.

State-run Kogas has a network of LNG terminals in Korea and is the world's second-largest corporate buyer of LNG, recently overtaken by the merged Japanese company Jera Co. Inc., combining Tokyo Electric Power and Chubu Electric.

Kogas has four regasification terminals and thousands of miles of natural gas pipelines in the country and is a stakeholder in other LNG developments from Australia to Mozambique in southeast Africa.

"The MOU lays the groundwork for a significant relationship between the State of Alaska and the Republic of Korea," said AGDC President Keith Meyer.

"Kogas is in the market for the development of a vast natural gas resource base. Alaska LNG, anchored by the enormous proven natural gas resources of Alaska's North Slope, is well-positioned to satisfy Kogas's needs for generations," added Meyer.

Alaska Gasline President Keith Meyer and Korea Gas counterpart Seung-hoon Lee signed a memorandum of understanding in Washington DC

The AGDC-Kogas accord establishes a joint committee with decision-making authority and sets the framework for collaboration on the potential of Kogas participating in all aspects of the development.

"AGDC gains the opportunity to move Alaska LNG forward with an internationally recognized natural gas infrastructure company.

"Kogas gains the prospect of investing in Alaska LNG as well as participating in all aspects of project development and financing.

"The MOU is not exclusive and recognizes AGDC is in discussions with other parties to ensure timely development of Alaska's energy infrastructure and export project," stated Meyer.

AGDC is currently running a non-binding open season until the end of August for companies to express an interest in volumes or to book capacity to transport feed-gas from the North Slope to the planned liquefaction plant in the south.

The capacity solicitation presents an opportunity for North Slope gas resource owners and other qualified parties to subscribe to capacity on the Alaska LNG system.

Dutch company Rolande LNG acquires stations in Netherlands

Dutch company Rolande LNG has taken over ENN Clean Fuels, a small European unit of the huge Chinese operator ENN Energy Holdings, to expand its network of liquefied natural gas fueling stations for trucks.

With the addition of the two LNG stations, one in the town of Zaandam and one in Oss, Rolande LNG extended its network from six to eight stations.

Jolon van der Schuit, the company's Chief Executive, said the acquisition of the two ENN stations was in line with the company's plan to strengthen its market position in the Netherlands.

"The LNG market in the Netherlands is still relatively small and more focus is needed to make LNG and bio-LNG stronger," added Van der Schuit.

Roland's six other truck fuel stations are at Rotterdam Botlek, Tilburg, Veghel, on the Utrecht-Heldinnenlaan road, on the Geldermalsen-Plettenburglaan route and Nieuwegein to Inundatiedok.

Rolande LNG is based in Giessen and is one of the companies building out its fuel capacity in northwest Europe.

The LNG for the market is mostly imported for truck-loading at the Gate terminal in Rotterdam and at Zeebrugge in Belgium for distribution to the truck retail market.

For rolling or acquiring its chain of stations and its distribution network, Rolande receives a subsidy from the Dutch Ministry of Economic Affairs and is also backed by the European Union's clean fuel initiative.

Port of Dunkirk signs agreement to develop LNG fueling station

Our Europe editor

The French Channel port of Dunkirk and the Dunkirk LNG terminal have signed an agreement to jointly develop a bunkering station for LNG as part of the build-out of clean-fuel infrastructure in Northwest Europe for ships and trucks.

"The use of liquefied natural gas by shipping and road vehicles has grown significantly with new projects," the companies said.

"Dunkirk Port and Dunkirk LNG are convinced of the role that LNG will play both at sea and on land in reducing greenhouse gas and particle emissions," they added.

Initial plan

The initial project is for a loading station to supply tanker trucks with LNG at the import terminal.

"Under this agreement the Port will support Dunkirk LNG in its undertaking to build and then operate the supply station, as part of a larger project to set up an LNG provisioning service by land and sea in the port, so making LNG available on the market," the statement explained.

Commercial operations formally started at Dunkirk, France's fourth LNG import terminal, in January 2017.

The Dunkirk terminal is the second-largest in mainland Europe after the Barcelona terminal in Spain and is the only one in Europe to be directly connected to two natural gas markets, France and Belgium.

Europe's largest LNG terminal is the Isle of Grain facility near London, owned by National Grid.

Dunkirk's annual regasification capacity is 13 billion cubic metres, equivalent to more than 20 percent of French and Belgian natural gas consumption.

The Dunkirk facility was developed by the European utility company Electricte de France (EDF). Other shareholders in the facility include Fluxys of Belgian, owner of the Zeebrugge LNG terminal, and French energy major Total.

Pipelines from Dunkirk lead to the French and Belgian gas transmission networks.

The French terminal cost 1 billion euros ($1.13Bln) to build and is managed by the project affiliate company Dunkerque LNG.

It is located within the enclosure of the Dunkirk harbour on a site of 56 hectares and has a jetty that can accommodate the largest LNG carriers.

Five articulated arms have been installed to unload the ships at a maximum flow rate of 14,000 cubic metres per hour.

The terminal also has three LNG storage tanks, each with capacity of 200,000 cubic metres.

The regasification equipment comprises 10 heat exchangers, supplied with tepid water by the neighbouring nuclear power plant in Gravelines with an underwater tunnel 5 kilometres long.

Dunkirk port and LNG terminal executives sign bunkering deal

Swedish natural gas company plans LNG quayside bunkering

Sweden's natural gas transmission company Swedegas said it was investing in liquefied natural gas bunkering facilities at the quayside of the Port of Gothenburg, where vessels will be able to refuel with LNG while loading or unloading their cargoes.

The Gothenburg LNG fuel facility will comprise a discharge station, a cryogenic pipeline and bunkering equipment.

The LNG will be brought to the station using trailers or containers. LNG will then be distributed via a 450-metre vacuum-insulated pipeline to the quays in the Skarvik area at Gothenburg.

"This is the first LNG facility in Gothenburg, the largest port in Scandinavia, making it possible for vessels to bunker LNG at the quaysides. It is expected to be fully operational in 2018," stated Swedegas.

Swedegas is the national infrastructure company whose gas transmission grid extends from Dragor in Denmark to the city of Stenungsund in Sweden.

The Swedegas pipelines directly connect customers in 33 municipal areas as well as supplying industrial enterprises, power plants and vehicle filling stations.

"The need in the shipping industry for a viable alternative to heavy oil and diesel is being driven by increasingly stringent emission controls," said Swedegas.

"LNG is the cleanest marine fuel available and is the foremost alternative for large-scale shipping," it added. Emissions of sulphur dioxide and nitrogen oxides are a major problem, affecting both the air and environment," it added.

Hudson Products becomes part of Chart Industries as LNG equipment maker makes $410M cash buy

Our North America editor in New York

Chart Industries, the US maker of liquefied natural gas liquefaction and storage equipment, has entered into an agreement to acquire its smaller US sector rival Hudson Products Corp. for $410 million in cash to boost its core business.

Hudson, based in Beasley, Texas, makes a range of heat-transfer equipment for the refining, petrochemical, natural gas and other industrial markets.

Heat exchangers

"Hudson is a North American leader in air-cooled heat exchangers (ACHXs) and a global leader in axial flow cooling fans," said Chart.

The Texas company was majority-owned by equity funds managed by Riverstone Holdings.

Chart said that Hudson's installed base of over 20,000 ACHXs and 200,000 fans globally provides stable aftermarket revenue streams and accounts for 37 percent of Hudson's net sales.

The air-cooled heat exchangers will widen the product range for Chart and improve its offerings as it makes a place for itself in the small-scale and medium-sized LNG plant sector.

"Hudson is a proven, high-performing business with an impressive set of products, customers, processes, and people, all of which we see as being highly synergistic and consistent with our strategic growth initiatives," said Chart President and Chief Executive Bill Johnson.

"We welcome Hudson employees to Chart and look forward to jointly creating valuable solutions for our customers.

"We see this acquisition and the expected synergies as enhancing shareholder value as we move forward," added Johnson.

Hudson CEO Grady Walker said the company was very pleased to be joining the Chart team.

"The combination will enhance the breadth of our product and service offerings and will greatly enhance our ability to offer valuable solutions to our customers worldwide," added Walker.

Chart said the Hudson business was expected to generate net sales of around $205 million in 2017.

"The transaction will be funded by Chart's available cash on hand and debt under its current credit facility," Chart stated.

Product offerings of Chart Industries has just become wider

The acquisition comes as Chart continues with the moving of its corporate headquarters from Garfield Heights in Ohio to the town of Canton in the state of Georgia, expected to be completed by the end of 2017.

Chart has also restructured to concentrate on its energy and LNG businesses as it has sold non-core assets and cut costs across the group.

The restructuring was initiated under the previous leadership of Sam Thomas who has now handed over to new chief Bill Johnson.

Chart said the acquisition of Hudson was expected to be completed by the end of the third quarter of 2017.

"Management expects the transaction to be accretive to adjusted earnings per share in the first full year after closing.

"Annual cost synergies of approximately $7 million are expected to be realized within two years," added Chart.

Emas Chiyoda Subsea is moved on by LNG engineer Chiyoda after US bankruptcy court ruling

A US bankruptcy court has confirmed a reorganization plan for the Emas Chiyoda Subsea venture partly owned by Japanese engineering and construction company Chiyoda, the main competitor to Bechtel of the US in building LNG liquefaction and export plants.

Chiyoda, which owns 35 percent of Emas Chiyoda Subsea, said it had obtained confirmation from the US Bankruptcy Court in the Southern District of Texas under Chapter 11 bankruptcy protection legislation, that it could overhaul the subsea venture by having it taken over by London-based international operator Subsea 7 SA.

Reliable

"With this reorganization, the reorganized Emas Chiyoda Subsea is now wholly owned by Subsea 7 SA," stated Chiyoda.

"Chiyoda will proceed to discuss with reliable partners, such as Subsea 7, the development of its offshore and upstream business by using experiences gained to date through ECS," the Japanese company explained.

In addition to the overhaul of Emas, Yokohama-based Chiyoda said it would continue to provide offshore and upstream consulting services through its UK subsidiary company, Xodus Group Ltd.

"The impact on Chiyoda's financial status will be given as soon as it is finalized," said Chiyoda.

Chiyoda has been severely impacted by its Emas investment that led to large losses and an overhaul of the company's senior management as it continued to work on liquefaction projects such as Yamal LNG in Russia and the US Cameron LNG project in Louisiana.

Chiyoda most recently recorded an annual loss of more than $360 million as it installed a new management team to recover from its Emas problems.

Annual revenues held up amid the subsea losses, though came in 1.3 percent lower than the previous fiscal year at 603.7Bln yen ($5.30Bln).

"The new medium-term management plan will focus on not only the business development strategy looking at 2025-2030, but the reinforcement plan for risk management and operations for group companies," said Chiyoda.

The company blamed its losses on the problems at Emas. The venture was established in late 2015 as a procurement and construction service provider in the form of a 50-50 joint venture between Singapore-based Ezra Holdings, the offshore contractor, and Chiyoda.

Having thoroughly re-valued the subsea business, the Chiyoda group recorded non-operating expenses and extraordinary losses of $355M in the fiscal third-quarter.

This then led to a management overhaul. Under the changes Senior Executive Vice President Masaji Santo was named as President and Chief Executive and Katsuo Nagasaka, a director and Senior Vice President, has been named executive Chairman.

Pipeline company Energy Transfer Equity gets Lake Charles terminal on track for LNG exports

Our North America editor in New York

Lake Charles LNG terminal, the US facility in Louisiana that once brought in shipments from Trinidad and Equatorial Guinea to fill the US gas supply deficit, is now getting back on track with its proposal to transform into a liquefaction and export plant.

LNG export proposals appeared to be in suspension under the current owner of Lake Charles Energy Transfer Equity, the US pipeline and infrastructure company based in Dallas, but plans are again moving forward.

Export permit

Energy Transfer Equity (ETE) has just announced that it had signed a memorandum of understanding with South Korea-based Korea Gas Corp. to study the feasibility of joint participation in the Lake Charles LNG liquefaction project.

Additionally, The US Department of Energy has just authorized Lake Charles to export the equivalent of 2 billion cubic feet per day of natural gas to any country in the world.

"Now, with further engineering of the planned project, additional design capacity has been realized and the Energy Department is authorizing an additional 0.33 Bcf/d of exports from the Lake Charles LNG Liquefaction Project," said the DoE.

Royal Dutch Shell is also participating in the study of the project. Shell gained a stake in the Lake Charles facility's reserved capacity from its takeover of BG Group of the UK.

Lake Charles LNG is in the port of Lake Charles on the Calcasieu Ship Channel leading to the Gulf of Mexico and is 60 percent owned by ETE and 40 percent by its affiliate Energy Transfer Partners.

The liquefaction project under consideration by the parties will use ETE's existing regasification import facility to accommodate the development of the liquefaction project.

The accord with Kogas "will allow the parties to study the economics of the project, the engineering, procurement and construction agreement and the feasibility of sourcing and marketing domestically produced natural gas to export as LNG."

The 440-acre site is located close to the Henry Hub in Erath, Louisiana, with access to many of the largest natural gas production areas in the US.

These include a connection to ETP's Trunkline Gas Pipeline System, a more than 2,200-mile natural gas pipeline system that interconnects with over a dozen interstate and intrastate pipelines.

The Federal Energy Regulatory Commission issued a draft environmental impact statement in September 2015 for the Lake Charles export venture to produce 16.5 million tonnes per annum of LNG.

The proposed project facilities include the construction, modification, and operation of terminal and pipeline facilities in Louisiana, Arkansas and Mississippi.

The planned Lake Charles liquefaction plant was first awarded a permit by the DoE in August 2013 to ship cargoes to countries without a US Free Trade Agreement. Now the volumes for that permit has been increased.

Before the shale-gas boom Lake Charles was one of the centres of US LNG imports, with BG bringing in cargoes from nations such as Trinidad and Equatorial Guinea.

BG and Energy Transfer had previously scheduled a commercial start-up for the plant in 2019.

The project will include the construction of three liquefaction Trains and will use the existing LNG storage and marine berthing facilities owned by Trunkline LNG, the operator of the Lake Charles facility and now a subsidiary of ETE after its takeover of Southern Union Co. more than four years ago for over $5 billion.

Energy Transfer began in 1995 as a small intra-state natural gas pipeline operator and is now one of the largest investment-grade energy partnerships in the US.

It has grown from holding 200 miles of natural gas pipelines in 2002 to about 56,000 miles of natural gas pipelines now. ■

Authorization given to export 2 billion cubic feet per day