

LNG Unlimited

LNG JOURNAL PUBLICATION

25 January 2022

Australian LNG producers post record earnings as benchmark

Santos and Woodside have laid their earnings marks for other LNG companies to follow
LNG News Editor

Australia's Santos and Woodside who operate four liquefied natural gas and export plants between them in Western Australia, the Northern Territory and Queensland posted record income and laid down a benchmark for other majors to follow.

Adelaide-based Santos voiced optimism for 2022 after its takeover of Papua New Guinea - based Oil Search and both Santos and Woodside have LNG development projects in the pipeline in the Barossa and Scarborough offshore natural gas fields.

High prices

Santos reported that stronger prices and higher sales volumes delivered a 34 percent increase in quarterly sales revenue to a record US\$1.5 billion and even better was expected in 2022 with completed Oil Search merger.

Santos said its annual sales revenues were also at a record level of US\$4.7 billion, an increase of 39 percent.

The company noted that the quarterly earnings period coincided with the completion in December 2021 of the Santos merger with Oil Search, the company focused on LNG and oil in Papua New Guinea, as well as oil in Alaska.

Santos reiterated that the merger created a company with strong and diversified cash flows, providing a platform to deliver shareholder returns.

The earnings report showed that the Santos-operated Glad-



Santos and Woodside now operate four LNG export plants

stone LNG plant in Queensland delivered a record 6.4 million tonnes of LNG sales in 2021.

Santos additionally reported success with the Darwin LNG plant in the Northern Territory with feed gas coming from the Bayu-Undan field in the Timor Sea.

"The field delivered higher gross gas and liquids production in 2021, which enabled Darwin LNG to produce 3.2MT of LNG, almost all of which was sold at Japan-Korea Marker spot prices," stated Santos.

The company said its portfolio average realised LNG price increased by 32 percent in the quarter to US\$13.64 per million British thermal units.

The Santos-led Barossa gas field development was 20 percent complete and progressing on schedule and budget.

A final investment decision was also taken in November 2021 on the South Australia Moomba carbon-capture and storage project and with first injection expected in 2024.

"Our disciplined, low-cost operating model continues to drive strong performance across the business and has positioned us to take full advantage of the increase in commodity prices," said Santos Chief Executive Kevin Gallagher.

Woodside, the Western Australian LNG exporter, posted a record US\$2.35 billion of LNG sales in the fourth quarter, more than tripling the results of US\$607 million in the prior-year quarter as prices sky-rocketed.

The company's three-month revenue total came to US\$2.90Bln when including other fuel sales like condensate and oil versus US\$957M in the same 2020 quarter.

Woodside, operator of the North West Shelf plant and Pluto LNG in Western Australia, also benefited from the surge in the Japan-Korea Marker price for spot LNG cargoes.

The company said its average realised JKM price was \$28.0 per million British thermal units in the last three months of 2021 compared with \$13.2 MMBtu in the third quarter of 2021 and \$5.5 per MMBtu in the fourth quarter of 2020.

Woodside said the percentage of produced LNG sold on a spot basis in 2021 was approximately 17 percent.

The Perth-based company also reported another marketing success in achieving its highest price premium to Dated Brent for a Wheatstone condensate cargo in December 2021, resulting from strengthening regional condensate demand.

UNLIMITED AGENDA

IMPORTS



Japan's LNG cargoes drop to cede top spot to China but US deliveries up

2

AGREEMENTS

Woodside completes the sale of stake in Pluto LNG Train 2 to GIP

3

FORECASTS

Wood Mackenzie issues watch list for EU's pipeline natural gas and LNG markets

5

EXPORTS

US LNG data shows price trends as China is again top buyer and Turkey follows

6

FUEL MARKET

Uniper unit signs deal to set up 16 more LNG fuel filling stations

7

SUPPLIES

Norwegian gas pipeline operator Gassco posts value rise and is expanding

9

Japan LNG imports drop 9 percent to cede top spot to China but cargoes from US up 50 percent

LNG News Editor

Japanese liquefied natural gas imports dropped almost 9 percent in December as the nation formally ceded the No. 1 spot to China as the top LNG importer for 2021, while Japan's LNG shipments from the US jumped nearly 50 percent.

Imports of LNG to Japan in December amounted to 7.03 million tonnes, or around 103 cargoes, compared with 7.72MT, or about 113 cargoes, in December 2020, according to the preliminary trade figures from Japan's Ministry of Finance.

China data

Shipments to Chinese terminals in 2021 had amounted to 78.93MT which was 18.3 percent more than in 2020, according to the January 2022 data from China's General Administration of Customs.

Japan's Finance Ministry additionally confirmed the preliminary annual cargo deliveries to Japan as 74.31MT, down 0.2 percent on 2020 and 4.62MT less than the



Japan's LNG imports from US soared almost 50 percent

Chinese total for 2021.

Shipments of LNG from Asian countries to Japan dropped 2.3 percent came to 16.42MT for all of 2021.

Middle East cargo numbers for the year declined by 0.2 percent to 12.20MT.

However, LNG imports to Japan from the US soared by 49.7 percent to 7.07MT, overtaking Russian deliveries amounting to 6.56M, though those were still up 6.9 percent versus 2020.

The balance of the country's LNG imports in 2021 came from Australia, African nations and the

spot market and dropped to 32.06MT from 34.58MT in 2020.

The cost of Japanese imports of LNG in 2021 jumped by 33.1 percent to 4,265 Trillion yen (\$37.27Bln) versus 3,205Tln yen (\$28.00Bln) for all of 2020.

The December data showed that the Japanese imports of thermal coal continued to increase in 2021. Coal for power shipments rose 7 percent last month to 9.91MT.

The almost parity levels between thermal coal imports and LNG shipments disappeared in 2021 with thermal coal deliveries jumping to disappeared 112.92MT,

an increase of 7.7 percent.

Nuclear power generation in Japan is still much reduced with only five plants with nine reactors from a total of 16 plants with 50-plus reactors having gained the agreement of local authorities to resume operations.

Deliveries to Japan during December 2021 from Asian nations such as Malaysia, Indonesia and Brunei dropped by 18.9 percent to 1.44MT versus December 2020.

Middle East shipments from countries like Qatar tumbled by 18.2 percent to 1.11MT.

December numbers

Cargo deliveries in December from the US rose by 2.1 percent to 688,000 tonnes compared with 646,000 delivered by Russia, which was down 14 percent on December 2020.

Annual LNG deliveries to the Japanese import network of 37 facilities came to 74.46MT in 2020, down 3.7 percent compared with the 77.32MT received in 2019.

Korean orders for LNG-powered vessels and LNG carriers keep piling after EU merger veto

Korea Shipbuilding and Offshore Engineering Co. (KSOE) the world's biggest shipbuilder by order backlog, has secured deals to build five vessels, including LNG-powered containerships, a week after the European Commission vetoed the nation's huge shipbuilding merger between Hyundai and Daewoo.

KSOE said the orders for the five cargo vessels were valued in total at 511 billion Korean won (\$428.5M).

KSOE, whose affiliates include Hyundai Heavy Industries, Hyundai Mipo Dockyard Co. and Hyundai Samho Heavy Industries, has now (\$1.83Bln) worth of ship orders for the first half of January 2022.

The previous orders included building six 15,000 20-foot equiv-

alent unit (TEU) LNG-powered containerships.

Under the most recent two separate deals, KSOE will build three 7,900 TEU LNG-powered container ships and two 50,000-ton petrochemical carriers owners in Asia who didn't want to be named by KSOE.

The container ships will be delivered to the ship owner from the first half of 2024, and the petrochemical carriers will be delivered in the second half of 2023.

Sales target

KSOE said it aimed to win \$17.5Bln worth of orders in 2022, higher than last year's target of \$14.9Bln. In 2021, the company achieved \$22.8Bln worth of orders.

Daewoo Shipbuilding & Marine Engineering (DSME), a smaller rival to KSOE, has also issued a statement saying it had won an order worth over \$200M to build a large LNG carrier to be delivered by the end of 2024 and giving no other details.

The European Union antitrust regulator on January 13, 2022, vetoed the proposed acquisition by Hyundai Heavy Industries of DSME, saying the transaction could create a monopoly in the LNG carrier market.

"The merger between the two South Korean shipbuilders would have created a dominant position by the new merged company and reduced competition in the worldwide market for the construction of LNG," said Commission Executive

Vice-President Margrethe Vestager, in charge of EU competition policy.

"The parties did not formally offer remedies to address the Commission's concerns," she added.

"Large vessels are an essential element in the supply chain of LNG and enable the transport of this source of energy around the globe," explained Vestager.

"LNG contributes to the diversification of Europe's source of energy and therefore improves energy security. The merger between HHI and DSME would have led to a dominant position in the global market for the construction of large LNG vessels, for which there is significant demand from European carriers," she stated.

NFE signals distribution of cash at ship affiliate

New Fortress Energy has announced a cash distribution by Golar LNG Partners, an indirect subsidiary of New Fortress, the New York-based LNG-for-power company.

New Fortress, which is listed on the Nasdaq global exchange, said Golar LNG Partners had declared a cash distribution of \$0.546875 per unit of 8.75 per cent Series A Cumulative Redeemable Preferred Units for the period from November 13, 2021 through February 14, 2022.

"This will be payable on February 15, 2022 to all Series A preferred unitholders of record as of February 8, 2022," it added.

New Fortress has LNG import and power projects in South America, the Caribbean and Sri Lanka in Asia.

IT has new terminal facilities in Nicaragua and Mexico in the state of Baja California Sur.

The terminal in Nicaragua is located at Puerto Sandino. The fully operational Mexican Pacific Coast facility is at the port of Pichilingue near La Paz.

New Fortress uses what it calls its "ISO Flex System", explained as a large ship offloading ISO containers onto small offshore support vessels (OSVs), for its newest terminals.

New Fortress in December 2021 also signed its first African deal with the northwest African nation of Mauritania.

The NFE agreement is for the development of an energy hub, including natural gas, power and LNG, utilizing existing offshore gas reserves owned by Mauritania as well as neighbouring Senegal.

UK major BP and Dallas-based Kosmos Energy are already currently working on floating LNG projects offshore the African nations of Mauritania and Senegal.

Woodside completes the sale of Pluto LNG Train stake to GIP

LNG News Editor

Woodside, the Australian LNG plant operator, has completed the sale of a 49 per cent non-operating participating interest in the second Pluto LNG train under development to Global Infrastructure Partners (GIP), one of the world's leading specialist energy infrastructure investors.

The estimated capital expenditure for the development of Pluto Train 2 is US\$5.6 billion.

Funding

The joint venture arrangements require GIP to fund its 49 per cent share of capital expenditure and an additional amount of construction capital expenditure of approximately US\$822 million.

Woodside's capital expenditure will be reduced accordingly. The Perth-based company had previously entered into a sale and purchase agreement with GIP in November 2021.

Woodside later announced its final investment decision for the Pluto LNG expansion at the same time as the investment decision for the Scarborough natural gas



Global fund will share cost of developing Pluto Train 2

development offshore Western Australia.

Pluto Train 2 is a key component of the Scarborough development and includes a new liquefaction Train and domestic gas facilities to be constructed at the existing Pluto LNG onshore facility.

The first LNG cargo from Pluto Train 2 is targeted for 2026.

Woodside Chief Executive Meg O'Neill said she looked forward to developing Pluto Train 2 in close collaboration with GIP.

"GIP brings established, global capabilities to the Pluto Train 2 joint venture which will support

delivery of a world-class project," added O'Neill.

"The development of Scarborough gas through Pluto Train 2 is expected to deliver significant value to our shareholders, create thousands of jobs and deliver energy to domestic and international customers for decades to come," she stated.

Pluto LNG is an onshore LNG processing facility located near Karratha in the northwest of Western Australia. The first cargo from the single-Train facility was delivered in 2012.

Trading arm of Woodside signs deal to receive Louisiana LNG

Woodside Energy Trading Singapore, a unit of the Western Australian LNG plant operator, has signed a heads of agreement with Commonwealth LNG of the US to negotiate a sale and purchase agreement for the supply of cargoes from the proposed development in Cameron Parish in Louisiana.

The accord contemplates the purchase by Woodside of 2 million tonnes per annum of LNG over a period of 20 years, scheduled to begin in the second quarter of 2026.

Woodside would also have an option to purchase an additional 500,000 tonnes per annum.

"This HOA with Commonwealth

secures access to competitive LNG in the Atlantic Basin and provides Woodside with the ability to build market scale through acquiring low cost supply," said Woodside Chief Executive Meg O'Neill.

The proposed Commonwealth LNG development is an 8.4MTPA liquefaction and export facility to be located on the west bank of the Calcasieu Ship Channel at the mouth of the Gulf of Mexico near Cameron in Louisiana.

Commonwealth LNG is targeting start of commercial operations at the facility by the second quarter of 2026.

Woodside CEO Meg O'Neill said

she was pleased to sign the HOA with Commonwealth, which shared Woodside's commitment to cost-effective and optimised solutions in an evolving global market.

Commonwealth LNG Founder and CEO Paul Varello said he was very pleased to have Woodside involved in the project.

"Woodside is known throughout the industry for its keen technical oversight and commercial agility. This HOA is testament that Commonwealth's approach to lowering the cost of LNG produced in the US is gaining prominent support," he said.



Calling for Tenders!

**Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah
(LNG) Terminal Development Project
Floating Storage Unit (FSU), Aqaba, Jordan**

Soliciting Expression of Interest (EOI) Letter from Parties/Ship-Owners to participate in the Prequalification Stage

All interested parties/ship-owners who have the technical and financial capabilities with appropriate and relevant experience to visit ADC's website (<https://www.adc.jo/>) to download the EOI form or submit a request to receive the EOI form to the below email addresses. Request for Qualification documents and questionnaire will be provided to all interested parties who submitted fully filled and signed EOI form to newIngru@adc.jo copying MDardasawi@adc.jo, oalbdour@adc.jo, and AGharram@adc.jo

Deadline for receiving the prequalification documents in the manner described in the RFQ is C.O.B. January 31st, 2022.

For further details and questions please do not hesitate to contact us via the aforementioned email addresses or via phone to +962-3-2039100 ext. 279

NEWS BRIEFS

CoolCo LNG progress

Golar LNG said progress had been made in the formation of Cool Company Ltd along with Eastern Pacific Shipping. The Singapore-based shipping line and Golar LNG have agreed to join forces to run a Golar spin-off initially comprising eight tri-fuel, diesel-electric LNG carriers in a firm called CoolCo. Eastern Pacific currently operates a fleet of 19 million deadweight-tonnes across three core segments and will now invest an initial US\$150 million in CoolCo. The spin-off would have an initial market capitalization of \$375M and Golar would retain a shareholding of a minimum of \$125M.

TotalEnergies pull-out

French major TotalEnergies has decided to initiate the contractual process of withdrawing from the Yadana natural gas field in Myanmar, also known as Burma, both as operator and as shareholder, without any financial compensation for TotalEnergies. "Following the coup of 1st February 2021 in Myanmar, TotalEnergies has firmly condemned on several occasions the abuses and human rights violations taking place there.

Three cargoes for the UK

The UK port of Milford Haven will be receiving three cargoes this week from the US, Peru and Qatar delivered to the South Hook and Dragon LNG import terminals, according to the port authorities. The 154,950 cubic metres capacity carrier "Golar Penguin" will discharge a shipment on January 28 at the South Hook facility from the QatarEnergy plant at Ras Laffan. The 170,200 cubic metres capacity "SCF Mitre" will arrive at the terminal on the same day with a shipment from the Pacific Coast of Peru. ■

Wood Mackenzie issues watch list for the EU's pipeline natural gas and LNG markets issues in 2022

LNG News Editor

UK energy consultant Wood Mackenzie has issued a watch list for pipeline natural gas and LNG markets in 2022 and warning of uncertainty around pipeline imports and low gas inventories.

The report said these issues along with uncertain weather forecasts have set the scene across Europe for another volatile year ahead, with the potential for gas prices to soar further and energy shortages to bite.

Crisis time

"The continent has been at the centre of a supply and demand crisis since last year, placing the security and flexibility of gas supply as well as its role in the energy transition top of the European Union agenda," explained Wood Mackenzie, a unit of the US Verisk business, which is listed on the Nasdaq global exchange.

Wood Mackenzie gave a list of five things to look out for in 2022 which it said would "shape the European and global gas markets for decades" to come.

First on the list is the dispute over the Nord Stream II Gazprom-operated pipeline from Russia to Germany.

"Prices will fall from Spring if more Russian gas is available, but get ready for another unsettling year. The start-up of the controversial Nord Stream II pipeline might now go past the first quarter of 2022, meaning limited additional Russian supplies through the winter period," said the report.

"Without additional Russian imports, the ability to refill depleted storage and to avoid a repeat of last year's crisis will be limited," it warned.

Secondly, there is the issue of natural gas storage in Europe and while an EU strategic storage policy will support progress, it may take several years to implement.



Polish LNG import terminal at Swinoujscie on Baltic coast

"Over the last two years the importance of gas storage in Europe has been demonstrated to the full. In 2020, storage was able to absorb a large excess in supply whereas in 2021, extremely high gas pricing discouraged the injection of gas through summer leaving the region with historically low inventories for the winter," said the report.

"Exceptionally cold weather in the Northern Hemisphere could again leave Europe with a supply deficit. Questions are being raised about the importance of having gas storage in the overall mix of sources, and how storage operators and owners should be rewarded in the future," it added.

Thirdly, Wood Mackenzie believes natural gas supply contracts need to be long term to deliver energy security.

"In the last decade, Europe has been moving away from long-term oil-linked contracts towards hub pricing and spot market. But the current crisis has shown that this path can have drawbacks - security and affordability of supply foremost among those which could impact the region," explained the firm's analysts.

About 49 billion cubic metres of import contracts into Europe will expire this year.

Russian contracts

Out of these, 21 Bcm will be Russian pipeline contracts. Some of these will not be extended such as Poland Oil and Gas Company's 10 Bcm con-

tract with Gazprom as Poland moves away from Russian gas.

"Potential concerns over the long-term exposure to Russia, coupled with the crisis-driven worries over supply security and diversification, may push more players towards LNG contracting," said the report.

"Both oil-indexed and Henry Hub plus long-term LNG contracts will be at a considerable discount to local spot prices through to 2025-2026, making them an attractive option for European players," it stated.

Fourthly, there is expected to be an increase in locally produced supply with record high gas prices supporting strong production and new investments.

The energy crisis has drawn attention to the importance of domestic production and the prospect of Europe requiring gas for decades to come.

Record prices pushed gas producers to prioritise gas developments that can provide immediate flexibility, and the prospect of tight gas market in the coming years may revive investments into new gas supply options.

Gas-fired power

Fifth and last, gas-fired power generation is to be considered as a transitional investment in the EU economy, though some limitations on future natural gas use will remain. ■

US LNG data shows price trends as China is again top buyer and followed by Turkey

LNG News Editor

The US Department of Energy has just published its latest liquefied natural gas monthly export data showing rising prices for the six plants and with China again being the top monthly destination followed by a surge of shipments to Turkey in the East Mediterranean.

The DoE data just published for November showed 99 US cargoes were delivered versus 98 in the previous month and 87 shipments in November 2020.

3,000 cargoes

The total number of US cargoes delivered worldwide to 42 nations since February 2016 now amounts to 2,914 shipments, or 9,388.3 billion cubic feet of natural gas.

A further 849 ISO containers have been shipped to nations in the Caribbean and Latin America from ports in Florida.

The average price at the export points of the six US plants came to \$9.85 per million British thermal units in November versus \$9.61 per MMBtu in the previous month, according to the DoE November 2021 LNG report.

The Sabine Pass plant remained the volume leader in November 2021 with five Trains on stream and supplying 35 cargoes, followed by Corpus Christi 21, Cameron 17, Freeport 16, Cove Point eight and Elba Island two.

Shipments from the Cheniere Energy's Corpus Christi plant in Texas cost the most for November



There is growing flow of LNG ISO tanks to Caribbean

2021, averaging \$10.34 per MMBtu versus \$10.85 per MMBtu in October 2021 and for the year-to-date the Corpus Christi shipments fetched an average of \$6.34 per MMBtu from the point of export.

The average prices for each of the five other plants (from the export point) from highest to lowest in November 2021 were: Cove Point (Maryland) \$10.18 per MMBtu (\$9.64, October); Freeport LNG (Texas) \$9.85 per MMBtu (\$9.29, October); Cameron LNG (Louisiana) \$9.36 per MMBtu (\$8.93, October); Sabine Pass (Louisiana) \$9.81 (\$9.43, October); and Elba Island in Georgia \$9.17 per MMBtu (\$8.65 October).

Liftings

Notable cargoes shipped from the facilities on the Gulf Coast included five delivered to Turkey by Cheniere Energy's Sabine Pass plant.

The delivering vessels to the

East Med included the 174,000 cubic metres capacity carrier "Minerva Chios" and the 174,250 cubic metres capacity vessel "SCF La Perouse".

Cheniere's Corpus Christi plant sent a large proportion of November cargoes to Europe, including Croatia, Spain, Poland, Turkey, Portugal and the UK.

The 145,000 cubic metres capacity carrier "Methane Nile Eagle" delivered to Croatia and the 174,000 cubic metres capacity vessel "Kinisis" to Poland.

The two shipments from Elba Island in November were carried on the "SCF Melampus" to the Dominican Republic and on the "Arctic Discoverer" to the Netherlands.

Leading recipients

The top five countries of destination, representing 63.0 percent of total US LNG exports, in November 2021, were: China

(50.2 Bcf - 15 cargoes), Turkey (47.3 Bcf - 14 cargoes), Japan (33.9 Bcm - 10 cargoes), South Korea 30.9 Bcf - 8 cargoes), UK (30.6 Bcf - 8 cargoes).

The list of the Top 10 countries of destination overall since 2016 through November 2021 showed three Asian nations, South Korea, Japan and China filling the top three spots, while Spain was shown to overtake Mexico into fourth place.

The Top 10 recipients of US LNG by overall numbers of cargoes at the end of November 2021 were: 1) South Korea 400 cargoes. 2) Japan 293. 3) China 252; 4) Spain 188. 5) Brazil 182 (includes split cargoes) 6) Mexico 162. 7) India 149. 8) UK 141. 9). Chile 122 and 10) France 109.

Other vessel-borne delivery price data showed that imported shipments to the US territory of Puerto Rico cost an average of \$12.24 per MMBtu in November versus \$10.53 per MMBtu in the previous month.

US LNG had been received in vessels by 42 different countries through November 2021, with Antigua and Barbuda in the Caribbean as well as Nicaragua now being added to the ISO containers list.

The US also sends regular ISO containers by cargo ship to the Caribbean nations of Jamaica, Barbados, the Bahamas and Haiti.

The islands of Antigua and Barbuda in the Caribbean as well as Nicaragua have also now been added to the ISO containers list.

In November 2021, a total of 25 containers were delivered. The recipients were the Bahamas 13, Barbados four, Haiti three, Jamaica three and Antigua and Barbuda two.

The main Caribbean volumes were in containers shipped by American LNG Marketing from Fort Lauderdale in Florida. Antigua and Barbuda received ISO deliveries from Eagle LNG Partners.

LNG Journal Subscription Package

LNG Journal is a ten-in-one subscription product with end-to-end insight into liquefied natural gas.

For new subscriptions or general subscription queries, contact:

Stephan Venter | venter@lngjournal.com
+44 207 017 3407

To renew an existing subscription or to upgrade your package, contact:

Gabi Weck | gabi@lngjournal.com

Sign up now for an Online Subscription at only US\$1095; €835 or £755 | Discount options are available for multi-users. | Contact us for more information or to arrange a free trial

Shipbroker SSY buys Greek-based business

Simpson Spence Young (SSY), the world's largest independent shipbroker established in London in 1880 and a key participant in the LNG business, has acquired Piraeus, Greece-based Anchor Shipbroking.

SSY already has 400 employees covering each major market, including LNG chartering and projects, dry cargo chartering and tanker chartering, as well as ship sale and purchase, consultancy and research, derivatives and towage.

"Anchor Shipbroking are specialists in sale and purchase, offering a full range of services to their global network of clients," said SSY without giving details of the value of the transaction.

The UK firm explained that the acquisition further strengthened SSY's S&P offering and is part of a long-term investment strategy to build out their forward order book, combining newbuilding and S&P with long-term period and projects.

Expanding their S&P division has been a key focus for the organisation and in 2021 SSY announced that Toby English would be joining the firm to head up the global S&P department which has teams based across the world including London, Singapore, Shanghai, and Hong Kong.

"We are very excited to be growing our global S&P presence with the addition of the Anchor team. Said Global Head of S&P English.

"The Greek market is a crucial part of our S&P activities, and Anchor will be an invaluable addition to this, enabling us to provide a more dynamic service to our clients across a number of sectors," added English.

Uniper unit signs deal to set up 16 more LNG fuel filling stations

LNG News Editor

Liqvis GmbH, the liquefied natural gas fuel subsidiary of German utility Uniper, has signed another contract with its Dutch cryogenic systems designer to establish 16 skid-mounted public LNG fuelling stations in Germany and France.

The Dutch firm Cryonorm Systems BV signed the deal with Liqvis and the Germany company's French subsidiary Liqvis France SAS.

Openings

The LNG fuelling stations will be open to the public and will be set up in the next two or so years.

Cryonorm has already built 12 LNG-fuelling stations for Liqvis between 2017 and 2021.

The new contract is called Mercury II and is an extension of the "Mercury 1" engineering, procurement and construction accord which was negotiated between the partners in 2018 and resulted in the 16 existing stations.

Liqvis said the scaling up of the European Union network of LNG



Dutch firm helped build German filling station network

filling stations is based on growing demand from the long-haul trucking sector.

"We are looking forward to continuing our business partnership with Cryonorm," said Sebastian Gröbblinghoff, Managing Director of Liqvis, which is based in the German city of Essen.

"Expanding the LNG fuelling station network across Europe requires the co-operation with a strong, reliable and competent equipment manufacturer," explained Gröbblinghoff.

"We are happy that with Cryonorm we have found such a part-

ner that also shares our vision of driving the promotion of alternative fuels as well as the decarbonisation of heavy-duty transport," he stated.

Piet Tel, the owner and Chief Executive of Cryonorm said he "highly appreciate" the good collaboration with Liqvis.

"Based on the operational feedback and open discussions between the teams, both companies contributed to the current station design offering highest availability and optimized design to fit several plots," added Tel.

Society for Gas as a Marine Fuel provides updated bunkering guide

The Society for Gas as a Marine Fuel (SGMF) has released its most detailed version yet of a publication of operational guidelines to enhance safety during the marine bunkering of LNG fuel.

The SGMF said this third revision of "LNG as a marine fuel - Safety and Operational Guidelines - Bunkering" is the most comprehensive coverage of all aspects related to LNG bunkering operations.

"The maritime industry is increasingly adopting LNG as the fuel of choice for newbuild vessels," said the Society.

"Together with the environmental performance LNG use provides, this growing trend is also

the result of the considerable expansion of the LNG bunkering supply infrastructure," it added.

"Facilities are now well established in most parts of the world, and there are more operational LNG bunkering vessels serving the industry than ever before," stated the SGMF.

In anticipation of this growth and beyond, the safe use of LNG as a marine fuel has been a priority issue for SGMF.

"The information contained in this publication is gold dust for anyone bunkering an LNG fuelled ship," said the Chairman of the SGMF Samir Bailouni, who is also Chief Operating Officer of Qatari

gas shipping line Nakilat.

"These practices and insights are collated from the best the industry has to offer, and I extend my thanks to our members for providing this invaluable information not only for the benefit of the industry, but for society as a whole," stated Bailouni.

The first published version of the SGMF's LNG bunkering guidelines was in 2014 and it has now been "significantly updated and revised for 2022".

The SGMF said the guidelines are recommended by the society as a "must have" for anyone engaged with any aspect of LNG bunkering.



CLEAN & SUSTAINABLE COOLER BY DESIGN®

Chart is at the forefront of the transition

to a low carbon future through technology, equipment and services delivering hydrogen, LNG and biogas for energy and transportation. Our carbon capture technology also removes harmful pollutants including SO_x, NO_x and mercury.

www.ChartIndustries.com
LNG@ChartIndustries.com

CHART
Cooler By Design.®

Norwegian gas pipeline operator Gassco sets value record and will soon supply Poland

Gassco, the Norwegian pipeline natural gas operator and one of the main competitors to LNG in Europe, said it transported its third-largest amount of gas to the Continent, though European gas sales, measured by export value, set a solid new record in 2021 as a result of the high prices.

The company said that pipeline gas from the Norwegian Continental Shelf (NCS) continued to play an important role in Europe's energy security.

Deliveries

The year 2022 also marks the start of Norwegian pipeline natural gas supplies to Poland.

In total, Gassco delivered 113.2 billion cubic metres through the pipeline network in 2021, up by 6.2 Bcm from the year before when the total was 107.0 Bcm.

Norwegian deliveries of natural gas now meet roughly a quarter of Europe's energy consumption, and make an important contribution to the continent's overall commitment to reducing greenhouse-gas emissions.

"The year 2021 was characterised by a high level of activity



Norwegian deliveries meet a quarter of Europe's needs

and a large number of enquiries concerning the assessment of new tie-ins to the transport system," said Frode Leversund, Chief Executive of Gassco.

"This tells us with all clarity how great the need for natural gas is in Europe, and how important this commodity is as a reliable energy source on the road to emission-free alternatives," added the CEO.

Gassco declared that it continued to operate and develop one of the world's most efficient and reliable gas transport systems.

It added that supplying continental Europe and the UK with natural gas allows the company to maximise value creation from the gas resources on the NCS.

"Availability, or the ability to meet contractual delivery terms, was 99.7 percent in 2021," said Gassco.

CEO Leversund explained that to be able to deliver at this level, particularly in a Covid-19 pandemic year, was dependent on good collaboration throughout the value chain.

"More than 60 fields on the NCS produce gas, and the full-year results for 2021 show that all the players in the gas value chain have delivered in an impressive way," said Leversund.

Gassco added that demand in 2022 was expected to remain at a high level.

"A number of optimisations

were also implemented in the transport network during 2022. These make it possible to increase delivery capacity both in 2022 and in subsequent years," said the Norwegian company.

"We also expect a high level of activity in 2022, both around new projects and with regard to gas demand," it added.

Among other developments, Gassco will be opening a new exit point in the transport system which allows Norwegian gas to be delivered to the Polish market.

"Access to Norwegian gas could help Poland to reduce CO2 emissions by 70 million tonnes per annum, assuming that deliveries from Norway replace coal-fired electricity generation," stated Leversund.

"By comparison, total annual Norwegian emissions are 50 million tonnes," he added.

Gassco's deliveries to Europe in 2020 had amounted to 107.0 Bcm, a marginal increase from 106.9 Bcm in the previous year.

Pipeline gas deliveries to Germany had risen from 47.6 Bcm in 2019 to 49.9 Bcm in 2020.

Equinor awarded 26 new licences on Norwegian Continental Shelf ahead of LNG plant reopening

Norwegian energy and LNG producer Equinor has been awarded 26 new production licences by Norway's Ministry of Petroleum and Energy in the latest award in predefined areas (APA) with 12 licences as operator and 14 licences as partner.

"Exploration is essential to secure continued value creation on the Norwegian Continental Shelf (NCS)," said Jez Averty, Equinor's senior vice president for subsurface in Exploration and Production.

"The APA rounds are very important to us and we are pleased about the award of new production licences," added Averty.

Equinor's Hammerfest LNG plant on Melkoya island in northern Norway is currently closed after a fire occurred on September 28 2020.

The facility, which supplies European LNG terminals, is expected to re-open in the current first quarter of 2022 after repairs have been completed.

Equinor said that the 26 production licences are divided as follows: 12 in the North Sea, 10 in the Norwegian Sea and four in the Barents Sea, from where Hammerfest LNG receives its feed gas for processing.

"Equinor's ambition is to transform the NCS from an oil and gas province to a low-carbon energy

province," the company explained.

"In this transformation, oil and gas play a crucial role, both in delivering energy that is critical to society, but also through the expertise, technology and capital needed to realise the transformation," added Equinor.

Averty said he believed in the NCS and that there is still substantial value to find and develop.

"A good example is our latest discovery, Toppand, which was awarded in the 2011 APA," he added.

"This discovery shows the potential for value creation on the NCS, even in mature areas, through

use of new information and modern exploration technology," he stated.

"At least 80 per cent of our exploration resources and investments will be concentrated around existing infrastructure - so-called near-field or infrastructure-led exploration," declared the Equinor executive.

During 2022, Equinor plans to take part in around 25 exploration wells, mainly near existing infrastructure.

Most of the wells will be drilled in the North Sea, some in the Norwegian Sea and a few in the Barents Sea.