

LNG Review July 2022
- Recent issues and events -
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Introduction

The world traded nearly 200 million tonnes of LNG, a 4% increase year-on-year, in the first half of 2022. The global LNG trades have shifted toward Europe as the region reduces dependence on Russian pipeline gas. LNG imports by the European Union and the United Kingdom in the first half of 2022 grew by 50% from the same period in 2021 to reach 56 million tonnes, representing 28% of the global total. The increase was essentially satisfied with the shift of LNG from the United States sent to Europe, rather than to Asia. During the period, Japan imported 37.54 million tonnes of LNG to be the largest importing country of LNG, compared to 31.26 million tonnes of LNG imported by China.

The United States exported 42 million tonnes of LNG, surpassing Australia's 40 and Qatar's 39 in the first half of 2022. However, the U.S. Energy Information Administration (EIA) revised down its estimate of LNG exports by the country in 2021 to average 10.9 bcf/d (82 million tonnes) in its July edition of the Short-Term Energy Outlook (STEO), as a result of the outage at the Freeport LNG export facility in Texas, after the fire accident in June.

European spot gas prices and Asian spot LNG prices have been sticking in high levels since their surge in the latter half of 2021, shooting up into extreme ranges from time to time. Japan's LNG import prices in its own currency were the highest in the history in April and May, also pushed up by the weaker yen, followed by another over JPY 100,000 per tonne in June. Among Japan's LNG supply sources, Sakhalin LNG has been priced in relatively competitive levels, underlining its importance in the aspect of prices.

A Russian presidential decree of 30 June unilaterally notified that operation of the Sakhalin 2 project would be transferred to a new Russian entity and that foreign partners - including two Japanese companies - should notify the Russian government of their intention to stay within a month of establishment of the new Russian entity. Japanese companies have legitimately invested in the project and procured LNG from the project with no reasons to be excluded.

The global LNG industry has observed revitalised procurement and

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investment activities, toward long-term procurement of LNG supply. Investment decisions in LNG liquefaction facilities of combined capacity of 23.33 million tonnes per year in the Gulf of Mexico region in the United States were announced - one each in May and June. Between late February and late July, long-term LNG sales contracts amounting to 40 million tonnes per year were announced, all from North American supply sources. Among them, 11 million tonnes were for Chinese companies, with no involvement by Japanese buyers.

[Asia Pacific]

Japan's INPEX CORPORATION and Sakata Natural Gas Co., Ltd. announced on 15 July 2022 an agreement on the carbon neutralization of LNG. Sakata will purchase carbon neutral LNG from INPEX and convert LNG utilized by its facilities to carbon neutral LNG.

Singapore's Pacific International Lines (PIL) announced on 05 July 2022 the award of a contract to Yangzijiang Shipbuilding for the construction of four 8,000 TEU LNG dual-fuel container vessels. These vessels will each be equipped with an ammonia intermediate ready fuel tank. The four vessels will be delivered in 2025. The contract award follows PIL's earlier contract to build four 14,000 TEU LNG dual-fuel vessels announced in March 2022.

Singapore's Eastern Pacific Shipping (EPS) announced on 6 July 2022 that it had completed its first LNG bunkering operations for its managed vessel, Greenway - the world's first dual-fuel LNG Suezmax tanker. The supply of 1,500 tonnes of LNG took place on 4 July at the Port of Pengerang in Malaysia following the vessel's delivery from China's Guangzhou Shipyard International Company Limited on 28 June 2022.

TotalEnergies announced 20 July 2022 that its withdrawal from the Yadana field and from gas transportation company MGTC in Myanmar had become effective.

China's NDRC (National Development and Reform Commission) said on 28 July 2022 that the nation's natural gas consumption in June was 28.87 bcm, 4% down from the same month in 2021. Based on the preliminary figure, gas consumption during the first half of 2022 was 2% down from the same period in 2021, compared to a 16% increase in 2021.

Pakistan LNG (PLL) issued a tender on 1 July 2022 seeking 10 spot LNG cargoes for delivery over July - September. The tender closed on 7 July. The company was seeking two cargoes for delivery in late July, five for delivery in August and three for September. Pakistan LNG didn't receive an offer in the tender, according to traders.

The Australian Department of Industry, Science and Resources announced on 5 July 2022 a proposed extension of the Australian Domestic Gas Security Mechanism (ADGSM) until 2030 to help secure domestic gas supplies. It is currently due to expire on 1 January 2023. The department announced in June a separate review of the ADGSM.

Venice Energy announced on 1 July 2022 that it had signed an MOU with Japan's Marubeni to create a joint venture for its LNG import project in South Australia. The terminal will include two berths in the Outer Harbor channel at Port Adelaide, along with a Floating Storage and Regasification Unit (FSRU).

Viva Energy Group Limited announced on 27 July 2022 commercial agreements with GeelongPort for the construction and provision of necessary pier and berthing infrastructure, for the proposed Viva Energy Gas Terminal in the Port of Geelong. The agreement involves the construction of an extension to the existing Refinery Pier to provide an additional berth for a Floating Storage and Regasification Unit (FSRU). GeelongPort will construct the extension to the existing pier. Viva Energy will construct the related infrastructure including a gas pipeline and treatment facility.

Australia's Worley announced on 12 July 2022 that Santos Limited had awarded Worley a professional services contract to support its Bayu-Undan carbon capture and storage (CCS) project. Worley will provide front-end engineering and design (FEED) services. This includes the re-purposing of the Bayu-Undan facility and the offshore section of the gas export pipeline from hydrocarbons to carbon dioxide service.

Aslan Energy Capital, Singapore and PT Agri Maritim Sulteng, Indonesia announced on 5 July 2022 a cooperation agreement, whereby Aslan Energy Capital would develop a green energy hub project in Palu Special Economic Zone (SEZ), Central Sulawesi including a solar farm and a green ammonia production facility. The agreement also includes a carbon neutral LNG import terminal within the SEZ. The Palu Green Energy Hub is set to deliver up to 400 MW of solar power production.

Singapore's Twenty20 Energy announced on 11 July 2022 that its proprietary Power Island Floating Storage Regasification & Power (FSRP) solution would be rolled out in 12 locations across Papua New Guinea (PNG) on behalf of PAWA PNG. The PAWA PNG project, a joint venture with Dirio Gas & Power and the PNG government, will provide 283 MW of electricity supply replacing diesel-based generation with modern, high efficiency LNG and heat recovery-based generation.

TotalEnergies announced on 20 July 2022 the decision of the Papua LNG joint venture to launch the first phase of front-end engineering and design (FEED) studies for the Papua LNG project's upstream production facilities. Studies for the downstream liquefaction facilities are progressing and the objective is to launch the integrated FEED in the fourth quarter of 2022, according to the announcement. The project is targeting a final investment decision (FID) around the end of 2023, and a start-up at the end of 2027. The project will incorporate a carbon capture and storage scheme for the fields' native CO₂.

[North America]

Cheniere Energy announced on 20 July 2022 that Cheniere Marketing, LLC, had entered into a long-term LNG sale and purchase agreement (SPA) with a subsidiary of PetroChina for up to 1.8 million tonnes per year on a free-on-board basis. Deliveries will begin in 2026, reach the full 1.8 million tonnes in 2028, and continue through 2050. The price is indexed to the Henry Hub price, plus a fixed liquefaction fee. Half of the volume is subject to Cheniere making a final investment decision to construct additional liquefaction capacity at the Corpus Christi LNG Terminal beyond the Corpus Christi Stage 3 Project.

Cheniere Energy announced 26 July 2022 that Corpus Christi Liquefaction, LLC (CCL) had entered into a long-term LNG sale and purchase agreement (SPA) with a subsidiary of Thailand's PTT for 1 million tonnes per year of LNG from CCL for 20 years beginning in 2026, with a combination of free-on-board (FOB) and delivered ex-ship (DES) deliveries. The price is indexed to the Henry Hub price, plus a fixed liquefaction fee.

Sempra and ConocoPhillips announced on 14 July 2022 a heads of agreement (HOA) to develop Sempra Infrastructure's Port Arthur LNG project, anticipating a 20-year LNG tolling arrangement for 5 million tonnes per year at Phase 1 of the Port Arthur LNG project in Jefferson County, Texas. The HOA also contemplates a 30% equity investment in Phase 1 by ConocoPhillips and the potential for ConocoPhillips to supply additional natural gas to the facility. ConocoPhillips would have the option to acquire certain LNG offtake and equity ownership from future developments of the site, including additional LNG trains as well as low-carbon hydrogen infrastructure. Sempra Infrastructure would also have the opportunity to participate in carbon capture and sequestration projects developed by ConocoPhillips. Phase 1 of the Port Arthur LNG project is expected to include two liquefaction trains and storage tanks, as well as associated facilities capable of producing up to 13.5 million tonnes per year of LNG. A similarly sized Phase 2 project is also under development. Additionally, the HOA provides for collaboration between the two companies for Phase 2 of the ECA LNG export project in Baja California, Mexico, including up to one-third of the exported LNG volumes.

Sempra Infrastructure and Entergy Texas, Inc. announced on 26 July 2022 a memorandum of understanding (MOU) to develop options designed to accelerate the deployment of new renewable energy generation resources in Entergy Texas' Southeast Texas service area, where Sempra's facilities are under development.

FERC (Federal Energy Regulatory Commission) issued a letter on 19 July 2022 notifying that its staff would conduct an inspection of Freeport LNG plant in Texas on 13 through 15 September 2022.

Tellurian Inc. announced on 13 July 2022 that its production subsidiary's

agreement to purchase natural gas assets from privately held EnSight IV Energy Partners, LLC and EnSight Haynesville Partners, LLC in the Haynesville Shale.

NextDecade Corporation announced on 5 July 2022 a 20-year sale and purchase agreement (SPA) with a subsidiary of China Gas Holdings Limited for 1 million tonnes per year of LNG indexed to Henry Hub and delivered on an FOB basis from NextDecade's Rio Grande LNG export project (RGLNG) in Brownsville, Texas. The LNG will be supplied from the second train at RGLNG, which is expected to start operations as early as 2027.

NextDecade announced on 6 July 2022 a 20-year SPA with Guangdong Energy Group (GEG) for LNG. GEG will purchase 1 million tonnes per year of LNG indexed to Henry Hub and delivered on a DES basis. The LNG will be supplied from RGLNG Train 1, which is expected to start operations as early as 2026.

NextDecade announced on 27 July 2022 the execution of a 20-year SPA with ExxonMobil LNG Asia Pacific (EMLAP) for LNG from RGLNG. EMLAP will purchase 1 million tonnes per year of LNG. The LNG will be supplied from the first two trains of RGLNG.

Delfin Midstream Inc announced on 13 July 2022 that it had finalized an LNG SPA with Vitol. Vitol has also finalized a strategic investment in Delfin. Delfin will supply 0.5 million tonnes per year on a free on-board (FOB) basis at the Delfin Deepwater Port 40 nautical miles off the coast of Louisiana to Vitol for 15 years. The SPA is indexed to Henry Hub benchmark. FERC said on 21 July 2022 that Delfin LNG had asked FERC to extend the time put the onshore part of its project off Louisiana into service until September 2023.

Fluor Corporation announced on 11 July 2022 that it had been awarded a full notice-to-proceed (FNTP) contract by New Fortress Energy Inc. (NFE), for the engineering, procurement and fabrication management of the NFE Fast LNG 2 project. The project is a 1.4 million tonne per year LNG gas treating and liquefaction plant to be placed on fixed offshore platforms. The Fast LNG 2 project is another offshore modular mid-scale LNG plant that NFE has awarded to Fluor in 2022. NFE Fast LNG 1 was awarded in the first quarter.

Wood Mackenzie, Inc. and Ball Corporation announced on 13 July 2022 the launch of Global LNG Liquefaction Monitoring. The Global LNG Liquefaction Monitoring product provides near real-time market intelligence on liquefaction train statuses. The tool is a combination of Ball's satellite expertise and remote sensing data analytics capabilities and Wood Mackenzie's proprietary ground-based monitoring of U.S. liquefaction sites.

Pioneer Natural Resources Company, Devon Energy Corporation and ConocoPhillips announced on 14 July 2022 that they had joined the Oil and Gas Methane Partnership (OGMP) 2.0 Initiative.

New Fortress Energy (NFE) and Apollo announced on 5 July 2022 that they had entered into an Equity Purchase and Contribution Agreement to sell 11 LNG infrastructure

vessels owned by NFE to a newly formed joint venture (JV) between funds managed by Apollo and NFE. The JV will be owned approximately 80% by Apollo funds and 20% by NFE. In addition to serving NFE's projects around the world, the JV also serves utilities and energy companies worldwide under third-party charters. The 11-vessel portfolio consists of 6 Floating Storage and Regasification Units (FSRUs), 2 LNG carriers, and 3 Floating Storage Units (FSUs). NFE has agreed to charter 10 of the 11 of the vessels from the JV for a period of up to 20 years upon either close of the transaction or expiration of the vessels' existing third-party charter agreements.

Vanguard Renewables announced on 20 July 2022 that a fund managed by BlackRock Real Assets had acquired the company from Vision Ridge Partners. Vanguard Renewables plans to commission more than 100 anaerobic digesters to produce renewable natural gas across the country by 2026.

Marathon Petroleum Corporation's subsidiary Trans-Foreland Pipeline Company LLC asked on 7 July 2022 the Federal Energy Regulatory Commission (FERC) additional three years to bring the closed Kenai LNG export plant in Alaska back online as an import facility. FERC authorized Trans-Foreland on 17 December 2020 to commission the LNG import facility in two years.

Siemens Energy announced on 12 July 2022 that it had been selected as the single solution supplier for the all-electric Woodfibre LNG project near Squamish, in British Columbia, Canada. The LNG facility will be located at the site of a former pulp and paper operation. It will be sized for 2.1 million tonnes per year and utilize renewable hydroelectricity. Siemens' scope includes all equipment associated with the refrigeration trains. The project is expected to begin commercial operation by September 2027.

TC Energy announced on 28 July 2022 that Coastal GasLink LP had executed revised project agreements with LNG Canada that incorporated a revised cost estimate for the project of CAD 11.2 billion (up from previous CAD 6.6 billion). The company said that the 670-km project was 70% complete, with two of eight sections finished and expected mechanical in-service by the end of 2023.

Buckeye Partners, L.P. (part of the IFM Global Infrastructure Fund (IFM GIF)) announced on 13 July 2022 that it had closed on the previously announced acquisition of Bear Head Energy, Inc., which is developing a green hydrogen and ammonia project in Point Tupper, Nova Scotia with hydrogen electrolyzer capacity of over two gigawatts.

New Fortress Energy (NFE) announced on 5 July 2022 an agreement with Mexico's Comisión Federal de Electricidad (CFE). The agreement involves (i) expanding NFE's supply of natural gas to multiple CFE power generation facilities in Baja California Sur, (ii) selling NFE's 135 MW La Paz power plant to CFE, and (iii) creating a new LNG (production) hub off

the coast of Altamira, Tamaulipas, with CFE supplying the feedgas to two NFE FLNG units. In July 2021, NFE commenced operations of an LNG regasification terminal in the port of Pichilingue, La Paz, Baja California Sur. The terminal, featuring NFE's proprietary ISOFlex system, is positioned to supply gas to CFE's generation facilities.

NFE also announced on 5 July 2022 an agreement with Petróleos Mexicanos (Pemex) to form a long-term strategic partnership. The agreement involves the joint development of the Lakach deepwater natural gas field for Pemex to supply gas to Mexico's domestic market and for NFE to produce LNG for export. NFE will invest in the continued development of the field over two years by completing seven offshore wells. NFE will deploy a 1.4 million-tonne-per-year FLNG unit to liquefy the majority of the gas. Remaining gas and associated condensate volumes would be utilized by Pemex in Mexico's domestic market.

Shell Eastern Trading (Pte) Ltd (Shell) and a subsidiary of Mexico Pacific Limited (Mexico Pacific) announced on 12 July 2022 that they had signed a sales and purchase agreement for Shell to offtake 2.6 million tonnes per year of LNG from the first two trains of Mexico Pacific's anchor LNG export facility located in Puerto Libertad, Sonora, Mexico. Shell will purchase LNG on an FOB basis for 20 years. When fully operational, the facility will have three trains and a combined capacity of 14.1 million tonnes per year. The facility is expected to commence operations in 2026.

Sempra and CFE announced on 21 July 2022 several agreements to advance the joint development of energy infrastructure projects in Mexico, including the rerouting of the Guaymas-El Oro pipeline in Sonora, the proposed Vista Pacífico LNG project in Topolobampo, Sinaloa, and a potential LNG project in Salina Cruz, Oaxaca.

[Middle East]

QatarEnergy and Shell announced on 5 July 2022 the selection of Shell as a partner in the North Field East (NFE) project. QatarEnergy and Shell will become partners in a new joint venture company (JV), in which QatarEnergy will hold a 75% interest while Shell will hold the remaining 25% interest. In turn, the JV will own 25% of the entire NFE project.

Russia's Gazprom announced on 19 July 2022 that the company and NIOC (National Iranian Oil Company) had signed a Memorandum of Understanding (MOU) on strategic cooperation. Possible cooperation includes development of gas and oil fields in Iran, large- and small-scale LNG projects, gas pipelines, as well as technological cooperation.

[Africa]

Eni and its Partners in the New Gas Consortium (NGC), Chevron's affiliate in Angola, Sonangol P&P, bp and TotalEnergies, together with Angola's National Agency for Oil, Gas

and Biofuels ANPG, announced on 27 July 2022 the Final Investment Decision (FID) for development of the Quiluma and Maboqueiro (Q&M) fields. This is Angola's first non-associated gas development and includes two offshore wellhead platforms, an onshore gas processing plant and a connection to Angola LNG plant. Project execution activities will start in 2022 with a first gas planned in 2026 and an expected production of 4 bcm per year. The consortium partners include Eni (25.6%, operator), Chevron affiliate (31%), Sonangol P&P (19.8%), bp (11.8%) and TotalEnergies (11.8%).

Saipem said during its Q2 2022 Results call that in Mozambique the project work was still suspended and that the company did not expect any restart of operation within 2022. The company further said a full restart of the project would be on a renegotiated basis with the client accommodating additional costs, because of the inflation of the raw materials starting at the end of 2021.

[Europe / Russia]

The Energy Council of European Union on 26 July 2022 reached a political agreement on a voluntary reduction of natural gas demand by 15% in the coming winter. The Council regulation also foresees the possibility to trigger a 'Union alert' on security of supply, in which case the gas demand reduction would become mandatory. Member states agreed to reduce their gas demand by 15% compared to their average consumption in the past five years, between 1 August 2022 and 31 March 2023, with measures of their own choice. The Council specified some exemptions and possibilities to request a derogation from the mandatory reduction target, in order to reflect the particular situations of member states.

The European Parliament on 6 July 2022 did not object to the Commission's Taxonomy Delegated Act to include specific nuclear and gas energy activities, under certain conditions, in the list of environmentally sustainable economic activities covered by the so-called EU Taxonomy.

The North Sea Transition Authority of the United Kingdom (NSTA) on 21 July 2022 awarded a gas storage licence to Centrica offshore UK Ltd (COUK) for the Rough site off the East Coast of England. The award allows COUK to progress with seeking the further regulatory approvals required before gas storage operations can commence.

Grain LNG announced on 4 July 2022 that the company had invited market participants to express an interest in capacity at the facility from 2029. Applicants will have until 15 August to submit a non-binding declaration of their interest. Grain LNG has a series of existing capacity contracts coming to an end over the course of 2029. The company says that, as a result, Grain LNG expects to be able to offer at least 360,000 m³ of storage and 300 GWh/d of regasification capacity for start-up in 2029.

Australia's Wooley announced on 14 July 2022 that the company's consortium with Mitsubishi Heavy Industries Group and Tecnicas Reunidas had been awarded a development contract by SSE Thermal and Equinor for one of the United Kingdom's first power stations with carbon capture and storage (CCS) capabilities in Peterhead. It aims to remove up to 1.5 million tonnes of CO₂ emissions annually.

Gasunie subsidiary EemsEnergyTerminal announced on 7 July 2022 that it had signed the first suppliers that will supply LNG via the port of Eemshaven in the Netherlands. ČEZ a.s. and Shell Western LNG B.V. have jointly contracted 7 bcm of capacity. The LNG terminal in the port of Eemshaven will consist of two floating FSRUs (floating storage and regasification units), the Exmar S188 and the Golar Igloo. The S188 recently arrived at the Port of Rotterdam. Both FSRUs are expected to arrive at the port of Eemshaven at the end of August. The Golar Igloo will be the first to be connected to the Dutch natural gas grid. The two FSRUs have a combined throughput capacity of approximately 8 bcm per year.

Shell announced on 6 July 2022 that its subsidiaries had taken the final investment decision (FID) to build Holland Hydrogen I to be Europe's largest renewable hydrogen plant once operational in 2025. The 200 MW electrolyser will be constructed on the Tweede Maasvlakte in the port of Rotterdam and will produce up to 60,000 kilograms of renewable hydrogen per day. The renewable power for the electrolyser will come from the offshore wind farm Hollandse Kust (noord), which is partly owned by Shell.

The European Commission announced on 12 July 2022 that it had approved an up to €406.4 million Dutch scheme to support the filling of the gas storage facility Bergermeer in the context of Russia's invasion of Ukraine. The aid will take the form of insurance against negative winter-summer gas price spreads.

Dutch LNG supplier Titan said on 15 July 2022 that it had chartered the 6000-cbm LNG bunkering vessel Optimus, from Estonia's Elenger.

Technip Energies announced on 26 July 2022 that Technip Energies Loading Systems would supply a Marine Loading Arm to TotalEnergies as part of the Floating Storage and Regasification Unit (FSRU) project in Le Havre, France. The project was initiated by TotalEnergies and the French Minister of Ecological Transition.

Germany's Uniper announced on 4 July 2022 that the State Trade Supervisory Authority Oldenburg had given its approval for an early start of the construction work for the Wilhelmshaven LNG terminal and for the onshore and port infrastructure. Up to 7.5 bcm of natural gas per year is to be handled. The German Federal Ministry for Economic Affairs and Climate Protection and Uniper aim for commissioning in winter 2022/2023.

FRIEDRICH VORWERK announced on 12 July 2022 that it had won a contract for the connecting pipelines for the Brunsbüttel LNG terminal. The contract will be implemented

by an equal joint venture consisting of the FRIEDRICH VORWERK and the Austrian HABAU Group. This is FRIEDRICH VORWERK's second major project in connection with the planned LNG terminals in Germany after the Wilhelmshaven connection (WAL). The first floating LNG terminal at the Brunsbüttel site is to be commissioned by the end of 2022.

German LNG Terminal GmbH (GLNG) said on 22 July 2022 that it was in the process of concluding final commercial contracts with its customers for whom an expression of interest procedure was executed in 2019. Additional terminal capacity of 1.8 bcm per year is on offer available from mid-2026. Interested Parties need to register to participate in the procedure by registering before 5 August 2022.

Germany's Deutsche ReGas, which is developing an LNG import terminal at the port of Lubmin, said on 13 July 2022 that it had signed a term sheet with France's TotalEnergies under which the latter would provide an FSRU for the project. Deutsche ReGas said the FSRU "Deutsche Ostsee" would start delivering about 4.5 bcm per year from 1 December 2022.

Germany's Federal Ministry of Economics (Die Bundesregierung) announced on 19 July 2022 the third and fourth locations for the planned floating LNG terminals (FSRU). The latest two should be moored in Stade and Lubmin. The federal government has leased four FSRUs. Two of them are already available in 2022 and are to be used in Wilhelmshaven and Brunsbüttel at the turn of the year 2022/23. The Stade location is expected to be available from the end of 2023. According to the operator, the facility off Lubmin will not be available until the end of 2023 at the earliest. In Lubmin, yet another FSRU terminal will be built by a private consortium by the end of 2022 (see the previous paragraph). The Hanseatic Energy Hub (HEH) said on 20 July 2022 that the expansion of the existing industrial port of Stade for a land-based terminal, for which NPorts, the Lower Saxony port authority, is responsible, is already in the approval phase and is expected to be completed by the end of 2023.

Germany's Uniper announced on 22 July 2022 that the German federal government, Uniper and Fortum agreed on a package of measures to stabilize Uniper financially and Uniper's system-critical role for Germany's energy supply. The German Government informed Uniper during the negotiations that it intends to introduce a general mechanism for all gas importers to pass through 90% of the replacement costs for missing Russian gas as of 1 October 2022.

IVECO announced on 14 July 2022 that Germany's Hegelmann Group had placed an order for 150 IVECO S-WAY LNG and 10 IVECO S-WAY CNG tractor units. Hegelmann's fleet already includes 20 LNG-powered IVECO trucks.

Norway's Ministry of Petroleum and Energy announced on 4 July 2022 that it had approved applications from operators to boost production from the Troll, Gina Krog, Duva, Oseberg, Åsgard, and Mikkjel fields. The Ministry has also granted a production permit for

the Nova gas field, which is expected to start up in the near future. The total sale of gas from the fields on the shelf is expected to reach 122 bcm in 2022.

Norway's industry association Norwegian Oil and Gas (Norsk olje & gass) said on 5 July 2022 that the government had resolved to propose compulsory arbitration of the pay dispute at the root of the strike by members of the Norwegian Organisation of Managers and Executives (Lederne).

Equinor announced on 12 July 2022 that a gas leak in a contained area related to a turbine on Sleipner A was reported in the morning of 11 July. During the process of resuming production and depressurisation, an additional gas leak occurred on the Sleipner R riser platform late on the night.

Spain's Enagás presented on 12 July 2022 its 2022-2030 Strategic Plan. The company plans to invest €2.775 billion by 2030. If the company adds the interconnection projects included in the European REPowerEU document, this figure increases to €4.755 billion, the company said. By 2030, Spain could supply 21 billion cubic metres - equivalent to 2 million tonnes of hydrogen per year - to Europe.

Enagás announced on 8 July 2022 that the El Musel Regasification Plant had received the Authorisation from the Ministry for Ecological Transition and Demographic Challenge. The process continues with the processing of the recognition by the CNMC (market regulator) of a special regime for the LNG logistics services, with the start-up order by the Ministry. The terminal allows for the unloading of LNG carriers and the fast loading of ships to different European destinations, the company said.

Italy's Snam announced on 6 July 2022 that Snam and BW LNG had signed an agreement for the acquisition by Snam Group of 100% of the share capital of FSRU I Limited, which upon closing would own the floating storage and regasification unit (FSRU) "BW Singapore" as its sole asset. The FSRU can also operate as a carrier for the transport of LNG. The FSRU, which is currently bound by a charter agreement with a third party until November 2023, is expected to be installed in the upper Adriatic Sea, close to the coast of Ravenna. Operations are scheduled to commence in the third quarter of 2024.

According to a decree of 15 July 2022 from Italy's Ministry of Ecological Transition, Gestore dei Servizi Energetici GSE S.p.A. (the Energy Services Operator = GSE) provides a last resort filling service through the purchase of natural gas, for the purposes of its storage and subsequent sale by December 2022, within the limit of an equivalent value of €4 billion.

Snam and Edison announced on 25 July 2022 that they had signed a Memorandum of Understanding (MOU) aimed at co-operating in the Small-Scale LNG market in Italy. According to the announcement, LNG market for heavy goods transport in Italy already accounts for approximately 4,000 trucks, around 130 filling stations and an annual

consumption of 200,000 tonnes.

Excelerate Energy and Bulgaria's Overgas announced on 18 July 2022 that they signed a Memorandum of Understanding (MOU) 14 on July relating to the sale of regasified LNG downstream of Excelerate's planned Vlora LNG terminal in Albania.

Hungary's government declared a state of energy emergency and approved seven measures on 13 July 2022 that will include limiting the price caps on gas and electricity to average consumption levels from August and an export ban on energy carriers and firewood, as well as increasing domestic gas production, coal mining and coal-fired power generation, and initiation on extension of nuclear plant life. The European Commissioner for Energy commented on 14 July on Hungary's announcement of its intention to introduce an energy emergency plan that would apparently include measures restricting the cross-border flows of gas and other energy carriers in the EU Single Market. Hungary had not notified the Commission of these planned measures. According to the statement, individual national restrictions affecting gas cross-border flows are unwarranted and can only exacerbate problems in the current gas market situation.

ICGB (Interconnector Greece-Bulgaria) announced on 8 July 2022 the end of construction activities. The pipeline connects to the gas transmission network of Greece and to the Trans-Adriatic pipeline at the gas measuring station near the city of Komotini. At the beginning of July, ICGB was certified as an independent transmission operator.

Finland's Hamina LNG Oy announced on 1 July 2022 its open season, offering terminal capacity and related services, as it looks to launch commercial operations at its LNG import terminal in the Hamina port in October.

Estonia's Eesti Gaas announced on 12 July 2022 that it had signed a contract with Norway's Equinor for 2 TWh (132 thousand tonnes) of LNG. Gas will arrive at the Klaipėda LNG terminal in Lithuania in October and November. Eesti Gaas has acquired three LNG cargoes from Poland's PGNiG. In early May and early June, tankers arrived at Klaipėda with LNG from the United States and at the end of June from Norway.

Russia's Gazprom announced on 1 July 2022 that the company produced 238.4 bcm of gas during the first six months of 2022, 8.6% (22.4 bcm) less than the same period in 2021. Exports to non-CIS countries amounted to 68.9 bcm, 31% (31 bcm) less than the same period in 2021. Pipeline gas supplies to China increased by 63.4% in the first six months of 2022, according to the company.

Canada's Natural Resources Minister said on 9 July 2022 that the Canada's government would grant a time-limited and revocable permit for Siemens Canada to allow the return of repaired Nordstream 1 turbines to Germany. Ukraine's Ministries of Foreign Affairs and Energy expressed their discontent on the decision of the Canadian government.

The European Commission welcomed on 12 July 2022 the decision by Canada's government.

Russia's Gazprom said on 13 July 2022 on the twitter that it did not possess any documents that would enable Siemens to get the gas turbine engine for the Portovaya CS out of Canada. Gazprom said on 15 July that it had requested Siemens to provide documents required for retrieval of the gas turbine engine.

Gazprom said on 25 July 2022 that it planned to stop the operation of another Siemens gas turbine engine at the Portovaya CS. As a result, the company said, the daily throughput at the Portovaya CS from 07:00 Moscow time on July 27 would be up to 33 million cubic meters.

The European Court of Justice declared on 12 July 2022 that the action brought by Nord Stream 2 AG against the directive extending certain rules of the internal market in natural gas to pipelines from third countries was partially admissible.

[South America]

Fluxys announced on 21 July 2022 that the company and institutional investor EIG had completed the acquisition of Enagás and OMERS Infrastructure's respective stakes, representing 80% of the GNL Quintero share capital.

Osaka Gas Co. Ltd., Marubeni Corporation, and Peru LNG S.R.L. announced on 14 July 2022 that they had signed a study agreement to evaluate the feasibility of synthetic methane production in Peru and its sales.

Reference: Company announcements, Cedigaz News Report.

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