LNG Review June 2024 - Recent issues and events - #102 Hiroshi Hashimoto*

Introduction

Two FIDs (final investment decisions) on LNG production projects were announced in June 2024 for the first time since July 2023 - one each in the United Arab Emirates and Canada. The two projects respectively plan to use clean power and claim to be among the lowest GHG-intensity projects. The two projects have secured long-term LNG offtake and liquefaction capacity use commitments.

Abu Dhabi's Ruwais LNG project will be the first LNG export facility in the Middle East and North Africa region to utilise clean power with two 4.8 million-tonne-per-year liquefaction trains, according to its announcement. Canada's Cedar LNG led by a first nation and a pipeline company plans to install an FLNG (floating LNG) facility with capacity of 3.3 million tonnes per year.

Saudi Arabia's Aramco was notably active in June to expand its LNG business. The company executed a non-binding HOA (Heads of Agreement) with NextDecade Corporation of the United States to offtake 1.2 million tonnes per year of LNG for 20 years from Train 4 at the Rio Grande LNG project in Texas. Aramco also executed another non-binding HOA with Sempra to offtake 5 million tonnes per year of LNG for 20 years from the Port Arthur LNG Phase 2 expansion project. The Port Arthur HoA also contemplates Aramco's 25% participation. The companies had a similar HOA for the Phase 1 of the project in 2019.

In the United States, Venture Global LNG Inc. received approval from FERC (U.S. Federal Energy Regulatory Commission) to establish the CP2 LNG project - the company's third - in Louisiana, with planned capacity of 20 million tonnes per year. The ensuing DOE (Department of Energy) non-FTA authorization process should attract much attention.

Shell announced an agreement with Singapore's Pavilion Energy to acquire 100% of the shares in the latter. Pavilion's LNG portfolio comprises 6.5 million tonnes per year of long-term contracts, receiving terminal access in Singapore, Spain, and the United Kingdom, as well as LNG bunkering activities.

CPC Corporation, Taiwan (CPC) executed agreements to procure 4 million tonnes per year of LNG for 27 years and secure equity participation in Qatar's North Field East (NFE) LNG expansion project.

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[Asia Pacific]

Kawasaki Kisen Kaisha, Ltd. ("K" LINE) and Tree Energy Solutions (TES) announced on 12 June 2024 that they would explore collaboration opportunities, including broadening the scope of e-NG (electric natural gas derived from green hydrogen) partnerships to accelerate the adoption of cleaner fuels to lead the transition towards net-zero greenhouse gas emissions in the maritime sector by 2050.

According to China's NBS (National Bureau of Statistics) on 17 June 2024, the country produced 20.3 bcm and 103.3 bcm of natural gas in May and in the first five months of 2024, respectively, which were 6.3% and 5.2% more than one year earlier, respectively. According to China's NDRC (National Development and Reform Commission) on 27 June, the country consumed 35.58 bcm of natural gas in May and 179.31 bcm during the first five months of the year, 6.8% and 10.8%, respectively, higher year-on-year.

China imported 6.57 million tonnes and 32.42 million tonnes of LNG in May and the first five months of 2024, respectively, 3.5% and 18.0% more than the same periods in 2023, but still 4.2% and 1.9% less than the same periods in 2021. China's cumulative imports of natural gas - pipeline and LNG imports combined - during the first five months of 2024 were 54.28 million tonnes, increasing by 17.4% and 9.4% from the same periods in 2023 of 46.23 million tonnes and 2021 of 49.61 million tonnes, respectively, to the highest ever recorded.

CNOOC Limited announced on 6 June 2024 that it had achieved a major exploration breakthrough in ultra-shallow gas play in ultra-deep water South China Sea. Lingshui 36-1 gas field is located in western South China Sea, with an average water depth of approximately 1,500 meters. The main gas-bearing play is the Ledong Formation of Quaternary, with an average burial depth of 210 meters. The field has been tested to produce over 10 million cubic meters per day of open flow natural gas.

GTT announced on 24 June 2024 that it had received an order from Hudong-Zhonghua Shipbuilding (Group) Co. Ltd. for the tank design of ten LNG carriers. Each ship will have five tanks with a total capacity of 271,000 m³. The tanks will be fitted with the NO96 Super+ membrane containment system. Delivery is scheduled between the first quarter of 2030 and the fourth quarter of 2031.

Shell plc and Singapore's Pavilion Energy Pte. Ltd. announced on 18 June 2024 an agreement between Shell Eastern Trading Pte. Ltd. and Carne Investments Pte. Ltd., an indirect wholly-owned subsidiary of Temasek, for Shell to acquire 100% of the shares in Pavilion Energy. Pavilion Energy's portfolio comprises about 6.5 million tonnes per year of long-term sale and supply LNG contracts. It also includes long-term regasification capacity of approximately 2 million tonnes per year at the Isle Grain LNG terminal (United Kingdom), regasification access in Singapore and Spain, as well as the time-charter of three M-type, Electronically Controlled Gas Injection (MEGI) LNG vessels and two Tri-Fuel Diesel Electric

(TFDE) vessels. It also has an LNG bunkering business with its first vessel deployed in early 2024. Pavilion Energy's pipeline gas business is not included as part of the transaction and will be transferred to Gas Supply Pte Ltd (GSPL), a subsidiary of Temasek, prior to completion. Pavilion Energy's 20% shareholding in block 1 and 4 in Tanzania are not included in the transaction.

PV Gas (PetroVietnam Gas) announced on 12 June 2024, the *AMANI* LNG ship had docked at the Thị Vải LNG Terminal Vũng Tàu province, carrying the fifth LNG cargo in the country. The cargo was from Brunei, provided by PetroChina International (Singapore) Pte. Ltd.

Philippines' First Gen Corporation (FGEN) announced on 13 June 2024 that FGEN had concluded its international tender for an LNG cargo by awarding a contract to TG Global Trading Co., (Tokyo Gas). Tokyo Gas will supply one (1) LNG cargo with delivery in July 2024 on a DES (Delivered Ex Ship) basis to FGEN's subsidiary, First Gen Singapore Pte. Ltd. The LNG cargo will be unloaded into the *BW Batangas* FSRU (floating storage and regasification unit) at the First Gen Clean Energy Complex (FGCEC) in Batangas City.

TotalEnergies announced on 14 June 2024 that the company has entered into an agreement to sell its subsidiary TotalEnergies EP (Brunei) B.V. to Hibiscus Petroleum Berhad, a Malaysian independent exploration and production company. The transaction is expected to close in the fourth quarter 2024. TotalEnergies EP (Brunei) B.V. owns and operates a 37.5% interest in Block B, alongside Shell Deepwater Borneo (35%) and Brunei Energy Exploration (27.5%). Block B, located 85 kilometers off the coast of Brunei, contains the Maharaja Lela/Jamalulam (MLJ) field, which started producing gas and condensate in 1999 and represented a net production for TotalEnergies of approximately 9,000 barrels of oil equivalent per day in 2023.

Malaysia's Genting Berhad announced on 20 June 2024 that its wholly owned indirect subsidiary Genting Oil & Gas Sdn Bhd and another 95%-owned indirect subsidiary PT Layar Nusantara Gas (PTLNG) had entered into an EPCIC (Engineering, Procurement, Construction, Installation and Commissioning) Contract with Wison New Energies Co., Ltd. for an FLNG (Floating Liquefied Natural Gas) Facility with capacity of 1.2 million tonnes per year. Wison will construct the FLNG facility at its shipyards in Nantong and ZhouShan in China. After passing the yard performance test, the FLNG Facility shall be towed to its final destination located at Teluk Bintuni, West Papua, Indonesia, where the final commissioning test will be carried out. The target sail away date from ZhouShan shipyard will be in second quarter of 2026 with the planned schedule of achieving first LNG in third quarter of 2026. The feedgas for the FLNG Facility shall be supplied from the Asap, Merah and Kido structures within the concession area of the Kasuri Block in West Papua, Indonesia, awarded to Genting Oil Kasuri Pte Ltd (GOKPL), another 95% indirect subsidiary of Genting Berhad pursuant to

a production sharing contract signed in May 2008 between GOKPL and BP MIGAS, the Indonesian oil and gas regulator (which had since been succeeded by SKK MIGAS). The Government of Indonesia approved the Revised First Phase Plan of Development for the Asap, Merah and Kido structures on 9 February 2023.

TotalEnergies announced on 4 June 2024 two new LNG medium- and long-term contracts in Asia: an SPA (sales and purchase agreement) with Indian Oil Corporation (IOCL) for the delivery to India of up to 800,000 tonnes per year of LNG for ten years from 2026; and an HoA (heads of agreement) with Korea South-East Power for the delivery to Korea of up to around 500,000 tonnes per year of LNG for five years from 2027.

The Indian Petroleum and Natural Gas Regulatory Board (PNGRB) issued on 5 June 2024 a draft proposal of new regulations which include certification of registration by PNGRB for LNG import projects. All entities would be required to submit information including tariffs.

Australia's Venice Energy announced on 6 June 2024 that its search for development partners for the proposed LNG import terminal in Port Adelaide, South Australia, had moved to formal negotiations with several international companies. Venice Energy aims to reach an FID (Final Investment Decision) by August.

Australia's Worley announced on 24 June 2024 that the company had been awarded FEED (front end engineering and design) on a new natural gas compression facility in Queensland, by Origin, as Upstream Operator of Australia Pacific LNG (APLNG). The Angry Jungle gas field is a joint venture gas field run by multiple producers within the Surat Basin. During the FEED phase Worley will support the engineering design of the infrastructure needed to allow APLNG to capitalize on its share of coal seam gas produced within the Angry Jungle gas field. The overall project infrastructure includes an in-field compression facility, low pressure gathering pipeline, and ancillary services.

Chevron Australia suspended operations on the Wheatstone offshore platform on 10 June 2024, according to "Medium Term Capacity Outlook" data on AEMO's (Australian Energy Market Operator) Gas Bulletin Board. Chevron restarted operations at the Wheatstone LNG along with domestic supplies on 23 June.

The New Zealand's government said on 9 June 2024 removing the ban on petroleum exploration beyond onshore Taranaki was part of a suite of proposed amendments to the Crown Minerals Act to deal with the energy security challenges posed by rapidly declining natural gas reserves. The Bill will be introduced to Parliament in the second half of 2024.

[North America]

DOE (U.S. Department of Energy) and EPA (U.S. Environmental Protection Agency) announced on 21 June 2024 that applications were open for USD 850 million in federal

funding for projects that would help monitor, measure, quantify, and reduce methane emissions from the oil and gas sectors. The funding is expected to help small oil and natural gas operators reduce methane emissions and transition to available and innovative methane emissions reduction technologies, while also supporting partnerships that improve emissions measurement and provide accurate, transparent data to impacted communities.

FERC (U.S. Federal Energy Regulatory Commission) issued on 21 June 2024 an environmental assessment of Cheniere's CCL Midscale Trains 8 and 9. Cheniere intends to take an FID (final investment decision) on the project in 2025.

Mitsui & Co., Ltd. announced on 24 June 2024 that its subsidiary Mitsui E&P USA LLC (MEPUSA) had completed acquisition of an unconventional Takonka gas asset in Texas from Sabana, LLC and Vanna, LLC. MEPUSA will drill wells to evaluate the well performance and develop and operate the asset aiming for full-scale development in 2027 or thereafter.

Saudi Arabia's Aramco and Sempra announced on 26 June 2024 that their subsidiaries had executed a non-binding HOA (Heads of Agreement) for a 20-year SPA (sale and purchase agreement) for LNG offtake of 5 million tonnes per year from the Port Arthur LNG Phase 2 expansion project. The HoA also contemplates Aramco's 25% participation in the project-level equity of Phase 2.

FERC (U.S. Federal Energy Regulatory Commission) said on 12 June 2024 in an inspection report that the anticipated in-service timing for the Golden Pass Pipeline expansion project is expected "sometime in the first half of 2025". The lead construction contractor for the export project declared bankruptcy on 21 May 2024, "which may impact completion timelines," it said. The regulator said in a previous report that the anticipated inservice timing for the pipeline expansion project "is expected sometime prior to the second half of 2024". The latest report did not mention the timing for the liquefaction trains.

Japan's Chiyoda Corporation said on 19 June 2024 that Golden Pass LNG Terminal LLC filed motions on 18 June requesting Zachry's withdrawal from the project and for lifting the automatic stay to resume construction work of the first train. The court would make a final decision regarding Zachry's withdrawal from the project after hearings, Chiyoda said.

Golden Pass LNG Pipeline LLC (GPPL) asked on 6 June 2024 FERC (U.S. Federal Energy Regulatory Commission) to temporarily allow a 24/7 work schedule at its MP 69 CS (compressor station) site in Starks, Louisiana "due to the flooded site conditions causing unsafe work conditions and potential off-site turbidity concerns caused by excessive rainfall."

FERC (U.S. Federal Energy Regulatory Commission) ordered on 10 June 2024 Venture Global LNG to provide a copy of the requested documents to customers within 5 days of receiving an executed protective agreement that is either agreed to by the parties or issued by an administrative law judge. FERC said Venture Global LNG had failed to demonstrate why the "highly confidential" documents requested by customers cannot be

adequately protected by a protective agreement governing the documents' use and disclosure. On 15 February 2024, Venture Global Calcasieu Pass, LLC filed a request for an extension of time to place into service its LNG terminal in Cameron Parish, Louisiana (Calcasieu Pass LNG Terminal). Venture Global LNG requested a one-year extension on FERC's five-year deadline, pushing the completion date to 21 February 2025, stating that reliability issues with the plant's heat recovery steam generators require the facilities to remain in the commissioning phase. Venture Global LNG filed on 21 June 2024 with FERC a proposed change to the protective order directed at governing the use of all material and documents that FERC had ordered the company to provide to LNG term-contract customers at the company's Calcasieu Pass LNG.

Venture Global LNG announced on 25 June 2024 the launch of its first LNG vessel, the *Venture Gator* at a ceremony which took place at the Samsung Heavy Industries shipyard in Korea. The Venture Gator is the first of nine LNG carriers in the Venture Global fleet to be completed across three shipyards in Korea over the coming 24 months. The ship will be primarily fuelled by Venture Global's LNG. The ship features a new hull design; onboard reliquefication; air-lubrication systems (ejecting air bubbles from the hull to reduce friction through the water); an auxiliary shaft generator (reducing the number of auxiliary generators running at sea) and exhaust gas recirculation systems (to reduce methane).

Venture Global LNG submitted on 3 June 2024 a response to FERC's (Federal Energy Regulatory Commission) request of 29 May 2024 for additional information regarding air pollutant emissions from the Calcasieu Pass LNG project, in relation to the company's CP2 LNG project application.

Venture Global and Ukraine's D. TRADING (commercial arm of DTEK Group) announced on 13 June 2024 an HOA (Heads of Agreement) for supply of LNG to Ukraine and Eastern Europe. The HOA provides that D. TRADING will purchase cargoes from Venture Global's Plaquemines LNG facility beginning in 2024 through the end of 2026. The HOA also provides that D. TRADING will purchase up to 2 million tonnes per year of LNG from Venture Global's third facility, CP2 LNG, for 20 years. The HOA also calls for cooperation on opportunities to access regasification terminal capacity and gas pipeline capacity. The initial phase of CP2 has been sold through 20-year SPAs (sales and purchase agreements) with ExxonMobil, Chevron, JERA, New Fortress Energy, INPEX, China Gas, SEFE and EnBW. Venture Global has launched offsite construction of the project while it awaits project authorizations from regulators.

Venture Global LNG Inc. received approval from FERC (U.S. Federal Energy Regulatory Commission) to site, construct and operate the proposed CP2 project in Cameron Parish, Louisiana on 27 June 2024. The project will have 18 liquefaction blocks, each with a capacity of about 1.1 million tonnes per year of LNG, and also four 200,000-cbm full

containment LNG storage tanks. The commission also approved the CP Express pipeline project. CP2 has a 10-year contract with CP Express for all the line's firm capacity. The companies are both subsidiaries of Venture Global. The ensuing DOE (Department of Energy) non-FTA authorization process should attract much attention.

Saudi Arabia's Aramco and NextDecade Corporation announced on 13 June 2024 that their respective subsidiaries had executed a non-binding HOA (Heads of Agreement) for a 20-year LNG SPA (sale and purchase agreement) for offtake from Train 4 at the Rio Grande LNG Facility at the Port of Brownsville, Texas, United States. Aramco expects to purchase 1.2 million tonnes per year of LNG for 20 years on an FOB (free on board) basis, at a price indexed to Henry Hub.

DOE (U.S. Department of Energy) noticed on 31 May 2024 that it had ordered that Fourchon LNG's FTA authorization was vacated and Fourchon LNG's pending non-FTA application was dismissed.

Glenfarne Energy Transition announced on 6 June 2024 that Texas LNG had been approved for a Texas tax abatement from Cameron County. Texas LNG is expected to start construction later in the year. Texas LNG is a 4 million-tonne-per-year LNG export facility to be constructed in the Port of Brownsville, Texas.

DOE (U.S. Department of Energy) said on 31 May 2024 that it had "tolled," or suspended, the expiration date of 1 June of Delfin LNG's permit to export to non-free trade agreement (non-FTA) countries "in light of" Marad's (Maritime Administration) refusal in April to authorize the offshore development's construction over "substantial changes" in the original application. The DOE's move does not grant Delfin's request to extend its permit another five years, but it does allow the existing permit to stay in place until it can decide on the extension.

Kimmeridge announced on 25 June 2024 the closing of 90% investment in Commonwealth LNG. Commonwealth LNG is a 9.5 million tonne per year LNG export project on the Calcasieu River at the Gulf of Mexico near Cameron, Louisiana with an anticipated FID (final investment decision) in 1H 2025, targeting delivery in 2028.

Argent LNG announced on 26 June 2024 its strategic decision to select Chart Industries' mid-scale modular liquefaction solution for its upcoming 20 million-tonne-per-year LNG facility in Port Fourchon, Louisiana. Chart Industries' IPSMR® (Integrated Pre-Cooled Single Mixed Refrigerant) process technology is designed to optimize the matching of gas turbine power with single cold box capacity to ensure maximum operational efficiency. The facility is scheduled to come online in 2029/2030.

Pantheon Resources plc, owner of 100% working interest in the Kodiak and Ahpun oil and gas fields, and the Alaska Gasline Development Corporation (AGDC), a state-owned entity leading the development of the Alaska LNG Project, announced on 4 June 2024 that

Pantheon's subsidiary, Great Bear Pantheon LLC, had entered into a Gas Sales Precedent Agreement (GSPA) with AGDC subsidiary 8 Star Alaska LLC for up to 0.5 bcfd for 20 years. AGDC is pursuing an option to phase Alaska LNG by prioritising the in-state pipeline portion of Alaska LNG consisting of the 42-inch pipeline from the North Slope to Southcentral Alaska to provide natural gas to avert the looming energy crisis facing the region (Phase 1). Phase 1 of Alaska LNG does not involve construction of an LNG plant, and as a result has a materially lower capex requirement and construction timeframe, allowing gas transportation as early as 2029. AGDC is aiming to undertake FEED (Front End Engineering and Design) ahead of an FID (Final Investment Decision) planned for the middle of 2025. The initial term of the GSPA is until June 2025 or until the definitive GSA is executed, whichever comes first. It will automatically renew for additional one-year terms until either party provides notice of termination, effective at the next expiration date.

The Haisla Nation and Pembina Pipeline Corporation announced on 25 June 2024 an FID (Final Investment Decision) on the Cedar LNG Project, an FLNG (floating LNG) facility with a nameplate capacity of 3.3 million tonnes per year, to be located in the traditional territory of the Haisla Nation, on Canada's West Coast. Cedar LNG is majority-owned by the Haisla Nation, in partnership with Pembina Pipeline Corporation, with 50.1% and 49.9% ownership, respectively. Cedar LNG is to power the facility with renewable electricity from BC Hydro. The project leverages existing LNG infrastructure, including the Coastal GasLink pipeline, a deep-water port, roads, and other infrastructure. The FLNG facility is being designed and constructed by Samsung Heavy Industries and Black & Veatch. The project is anticipated to be in service in late 2028. Cedar LNG has secured 20-year take-or-pay liquefaction tolling services agreements with ARC Resources Ltd. and Pembina for 1.5 million tonnes per year each.

New Fortress Energy Inc. (NFE) announced on 14 June 2024 that the company expected to produce LNG in the next 10 days, and then expects to be able to deliver its first cargo in July for its first Fast LNG unit offshore Altamira, Mexico.

[Middle East]

Abu Dhabi's ADNOC announced on 12 June 2024 an FID (final investment decision) on the Ruwais LNG project and the award of an EPC (Engineering, Procurement and Construction) contract for the project. According to the announcement, the project in Al Ruwais Industrial City will be the first LNG export facility in the Middle East and North Africa (MENA) region to run on clean power, making it one of the world's lowest-carbon intensity LNG plants. The project will see 55% of the EPC award value flow back into the UAE's economy under ADNOC's In-Country Value (ICV) program. The EPC contract was awarded to a joint venture led by Technip Energies, with JGC Corporation and NMDC Energy. The

Ruwais LNG project will consist of two 4.8 million-tonne-per-year LNG liquefaction trains. The facility will leverage artificial intelligence (AI) and the latest technologies to enhance safety, minimize emissions and drive efficiency.

JGC Holdings Corporation and Technip Energies announced on 13 June 2024 that JGC Corporation, Technip Energies, and Abu Dhabi's NMDC Energy, had been awarded a contract by ADNOC for EPC (engineering, procurement and construction) of the lower-carbon Ruwais LNG project, located in Al Ruwais Industrial City, Abu Dhabi. The project will consist of two natural gas liquefaction trains with a total LNG production capacity of 9.6 million tonnes per year. The plant will use electric-driven motors instead of conventional gas turbines and will be powered by clean energy. The plant is set to be the first LNG export facility in the Middle East and North Africa (MENA) region to run on clean power, making it one of the lowest-carbon intensity LNG plants in the world.

QatarEnergy announced on 4 June 2024 that it had entered into a long-term agreement to supply Idemitsu Kosan Co. Ltd with a total of up to six million tonnes of naphtha to be delivered to Japan over 10 years starting in July 2024.

QatarEnergy announced on 5 June 2024 agreements with CPC Corporation, Taiwan (CPC) covering the long-term supply of LNG to CPC and partnership in the North Field East LNG expansion project (NFE). The parties signed an LNG SPA (Sales and Purchase Agreement) for the delivery of 4 million tonnes per year of LNG from the NFE project to CPC over a period of 27 years. The two sides also signed a share sale and purchase agreement pursuant to which QatarEnergy will transfer to CPC a 5% interest in the equivalent of one NFE train with a capacity of 8 million tonnes per year.

[Africa]

TotalEnergies announced on 20 June 2024 that the company as operator of OML 58 onshore license in Nigeria with a 40% interest, and the Nigerian National Petroleum Corporation Ltd (NNPCL, 60%), had taken an FID (Final Investment Decision) for the development of the Ubeta gas field. Located about 80 km northwest of Port Harcourt in Rivers state, the OML 58 license contains two fields currently in production, the Obagi oil field and the Ibewa gas and condensate field. OML58 gas production is processed in the Obite treatment center and supplied to both the Nigerian domestic gas market and to Nigeria LNG (NLNG) plant. The Ubeta gas condensate field will be developed with a new 6-well cluster connected to the existing Obite facilities through a 11 km buried pipeline. Production startup is expected in 2027, with a plateau of 300 million cubic feet per day (about 70,000 barrels of oil equivalent per day including condensates). Gas from Ubeta will be supplied to the NLNG liquefaction plant in Bonny Island with an on-going capacity expansion from 22 to 30 million tonnes per year, in which TotalEnergies holds a 15% interest. Ubeta is a low-emission

and low-cost development, leveraging on OML58 existing gas processing facilities. The carbon intensity of the project will be further reduced through a 5 MW solar plant currently under construction at the Obite site and the electrification of the drilling rig.

bp announced on 4 June 2024 that the FPSO (floating production storage and offloading) vessel of the Greater Tortue Ahmeyim (GTA) Phase 1 LNG development had arrived at its final location offshore on the maritime border of Mauritania and Senegal. The vessel is being moored at the site 40 km offshore in a water depth of 120 m. It will be operated by bp, on behalf of the project's partners: bp, Kosmos Energy, PETROSEN and SMH. The project will produce gas from reservoirs in deep water, approximately 120 km offshore, through a subsea system. The GTA Phase 1 development is expected to produce around 2.3 million tonnes per year of LNG for more than 20 years. The FPSO will remove water, condensate and impurities from the gas before transferring it via pipeline to the FLNG (Floating Liquified Natural Gas) vessel at the Hub Terminal approximately 10 km offshore.

[Europe / Surrounding regions]

The European Court of Auditors warned on 25 June 2024 that significant challenges still needed to be addressed if the EU was to be fully prepared for a new gas crisis. The auditors also pointed to several new challenges the EU needed to tackle if it wanted to secure its gas supplies in the long-term, such as greater dependence on imported LNG and the need to decarbonise some of its gas consumption.

Netherlands' EemsEnergyTerminal said on 24 June 2024 that its partners Gasunie and Vopak had started market consultations on possibilities for LNG, hydrogen and CO2 infrastructure at EemsEnergyTerminal in Eemshaven. In partnership with the Ministry of Economic Affairs and Climate Policy, Gasunie and Vopak are exploring options to keep operating the EemsEnergyTerminal for longer than initially planned at the port of Eemshaven (Groningen). The survey will not only look at LNG beyond 2027 but is also intended to explore ways to bring about a future, rapid transition to a sustainable energy system; one where hydrogen and carbon capture and storage play key roles.

Germany's ECOnnect Energy announced on 12 June 2024 that it had signed a contract with FSRU Wilhelmshaven GmbH, a joint venture between Tree Energy Solution (TES) and ENGIE, for the installation of the jettyless ready IQuay solution for LNG import to Wilhelmshaven, Germany. State-owned DET (Deutsche Energy Terminal GmbH) is the general client for all works. ECOnnect is in the final phase of delivering the jettyless ready IQuay solution for the new offshore jetty at Wilhelmshaven. The DET project is on the list of priority projects supported by Germany's LNG Acceleration Law, passed in May 2022, to strengthen Germany's energy security by 2025. The Germany's Federal Ministry of Economics and Climate Protection selected TES and ENGIE in September 2022 to develop

and implement a second LNG FSRU (Floating Storage Regasification Unit) in Wilhelmshaven to address energy security needs in Germany and Europe. ECOnnect's delivery enables the transfer between FSRU *Excelerate Excelsior* and shore. The FSRU is expected to be moored at DET's new island-jetty in the Jade Bay during second half of 2024.

Germany's Uniper announced on 12 June 2024 that it had decided to terminate its long-term Russian gas supply contracts and legally ended the gas supply relationship with Gazprom Export. The decision was made possible after an arbitration tribunal on 7 June awarded Uniper the right to terminate the contracts and awarded it an amount of more than €13 billion in damages for the gas volumes not supplied by Gazprom Export since mid-2022. Although only limited gas volumes had been delivered since June 2022 and no gas volumes since the end of August 2022, the term gas supply contracts between the two companies were still legally in force and individual contracts would have continued to exist until the mid-2030s. After Uniper suffered substantial losses due to the Russian gas supply restrictions, the company initiated arbitration proceedings against Gazprom Export at the end of 2022. The option of dispute resolution via an arbitration tribunal was contractually agreed and had in the past in respect of other disputes been invoked repeatedly by both sides. The tribunal, seated in Stockholm, ruled in accordance with Swiss law. The arbitration ruling is legally binding and final.

Norway's Hammerfest LNG plant operated by Equinor halted output after an unplanned outage on 23 June 2024 for two days because of a loss of power, according to a GASSCO notice.

Finland's Gasum announced on 25 June 2024 that the company would not purchase or import Russian LNG as of 26 July, complying with all sanctions imposed by the EU. The 14th sanctions package against Russia that was approved the Council of the European Union on 24 June included a prohibition to purchase or import LNG originating from Russia through European Union terminals that were not connected to the EU gas network. The prohibition included in the sanctions package will come into force 26 July. Although the sanctions do not allow Gasum to terminate its agreement with Gazprom Export, they constitute a force majeure on the purchase or import of Russian LNG to off-grid terminals.

Italy's Adriatic LNG, the company that operates the regasification terminal off the Veneto coast, launched the accreditation phase for Open Season 2024 on 21 June, for medium to long-term regasification capacity.

Poland's GAZ-SYSTEM, Finland's Gasgrid, and Germany's GASCADE announced on 17 June 2024 an MoU (Memorandum of Understanding) was signed by them and other six gas transmission system operators (TSOs) to coordinate and facilitate hydrogen infrastructure and to foster hydrogen market development in the Baltic Sea region.

The Council of European Union (ministerial level) adopted on 24 June 2024 a 14th

package of economic and individual restrictive measures against Russia. The EU will forbid

reloading services of Russian LNG in EU territory for the purpose of transshipment

operations to third countries. This covers both ship-to-ship transfers and ship-to-shore

transfers, as well as re-loading operations, and does not affect import but only re-export to

third countries via the EU. A derogation can be requested for transshipment of LNG when

the destination of the cargo is another Member State. The measure includes a 9-month wind-

down. The European Commission will monitor the implementation and development of this

decision and may propose mitigating measures if necessary. Furthermore, the EU will

prohibit new investments, as well as the provision of goods, technology and services for the

completion of LNG projects under construction, such as Arctic LNG 2 and Murmansk LNG.

Import restrictions are introduced on Russian LNG into specific terminals which are not

connected to the EU gas pipeline network.

The U.S. Department of the Treasury announced on 12 June 2024 additional

sanctions against Russia that target its future energy production. Treasury is targeting

entities involved in the Obsky LNG, Arctic LNG 1, and Arctic LNG 3 projects. The action also

includes designations of three entities involved in either construction of natural gas-related

projects or manufacturing specialized equipment for LNG transportation, as well as the

identification of seven under-construction LNG vessels.

China's Wison New Energies announced on 21 June 2024 that it had decided to

discontinue all ongoing Russian projects and would immediately and indefinitely stop taking

any new Russian business. The Arctic LNG 2 had planned to build a gas turbine power station

for the project using equipment from Wison.

[South America]

Guyana's Ministry of Natural Resources said on 25 June 2024 that Fulcrum LNG was

the most responsive and compliant bidder from a list of 17, to help Guyana develop its gas

resources. The ministry said that Fulcrum LNG would be supporting the government and the

Stabroek Block operator, ExxonMobil Guyana, to utilise the non-associated gas.

[Global issues]

The World Bank's Global Gas Flaring Tracker Report reveals that global gas flaring

volumes rose by 7% to 148 bcm in 2023 from 139 bcm in 2022.

Reference: Company announcements, Cedigaz News Report.

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