

**LNG Review December 2024**  
**- Recent issues and events - #108**  
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**Introduction**

Two LNG production projects under construction on the Gulf Coast of the United States are moving forward toward their respective LNG exports. Cheniere Energy's Corpus Christi Stage 3 project in Texas and Venture Global's Plaquemines LNG in Louisiana made first LNG production in December. Plaquemines LNG shipped out its first LNG cargo destined for Germany. Gas production also started for an FLNG (floating LNG) project offshore Mauritania and Senegal.

There have been some moves to consolidate the portfolios of LNG and gas production assets. Australia's Woodside Energy and Chevron Australia announced that the companies would exchange minority holdings in assets operated by the respective companies, streamlining asset holding. Equinor ASA and Shell plc announced that their subsidiaries were to combine their offshore oil and gas assets in the United Kingdom to form a new company.

The promotion of LNG production project development activities is gaining momentum in Argentina. Pampa Energía and Britain's Harbour Energy respectively announced their agreements to participate in the FLNG project led by Pan American Energy (PAE), following a similar move by state-owned YPF. The project is supposed to utilise Golar LNG's existing FLNG vessel. YPF also announced a PDA (Project Development Agreement) with Shell for the first phase of the onshore Argentina LNG Project.

QatarEnergy announced in December another long-term LNG sales agreement to supply the Chinese market and ship time-charter agreement for 6 QC-Max LNG carriers.

European natural gas prices are expensive as of the beginning of the year 2025. NBP and TTF for next month delivery are over £125 / therm and €50 / MWh respectively (USD 15s / million Btu equivalent) for the first time since the end of October 2023. Volumes of Russian gas entering Ukraine for transit fell to zero on 1 January 2025, according to the entsog data.

DOE (U.S. Department of Energy) on 17 December 2024 released an updated study of LNG exports. The study will have a 60-day comment period.

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\* The writer belongs to the Energy Security Unit.

Submitted comments should inform how DOE may apply the study findings to its public interest analysis of export applications, according to the announcement.

### **[Asia Pacific]**

The e-NG Coalition, an international alliance committed to accelerate the global development of e-NG industry and value chain, announced on 16 December 2024 its official establishment. The e-NG Coalition was launched in March 2024 with 9 founding members: Engie, Mitsubishi Corporation, Osaka Gas, RWE, Sempra Infrastructure, TES, Toho Gas, Tokyo Gas, TotalEnergies.

INPEX CORPORATION announced on 9 December 2024 that through its subsidiary INPEX JAPAN, LTD., it had completed the fifth stage extension of the Shin Tokyo Line natural gas trunk pipeline. The existing Shin Tokyo Line, which links Joetsu City in Niigata Prefecture to Fujioka City in Gunma Prefecture, was extended by 16 km in the direction of Tokyo, making the total length of the pipeline 229 km. The extension connects to the Tokyo Line in Honjo City, Saitama Prefecture. The Tokyo Line, which runs parallel to the Shin Tokyo Line and links Joetsu City in Niigata Prefecture and Adachi Ward in Tokyo Metropolis, is 324 km long.

NYK Group announced on 2 December 2024 that an LNG carrier that NYK ordered from Samsung Heavy Industries Co., Ltd. (SHI) was delivered at the SHI Geoje Shipyard on 2 December. The vessel, Quest Kirishima, will be deployed under a time-charter contract with Q United Energy Supply & Trading Co., a subsidiary of Kyushu Electric Power Co., Inc.

According to China's National Bureau of Statistics (NBS), the country's natural gas production increased by 6.4% year-on-year to 224.6 bcm in the first eleven months of 2024. Natural gas production in November rose 3.1% to 20.7 bcm. According to NDRC (National Development and Reform Commission), China consumed 34.86 bcm of natural gas in November, 0.5% less than the same month in 2023, and 388.57 bcm during the first eleven months of 2024, 8.9% more than the same period in 2023. China imported 120.24 million tonnes of natural gas during the first eleven months of 2024, 12.0% more than the same period in 2023, according to data from the General Administration of Customs. LNG import during the eleven-month period in 2024 was 69.61 million tonnes, an increase of 10.7% year-on-year but 2.4% smaller than the same period of 2021.

Hong Kong's CLP Group announced on 27 November 2024 that CLPe Holdings Ltd. (CLPe) signed a Cooperation Framework Agreement with China National Offshore Oil Company Guangdong Water Transport Clean Energy Company Limited (CNOOC) on the formation of a joint venture to provide LNG fuel bunkering services in the port of Hong Kong.

CPC Corporation, Taiwan, announced on 11 December 2024 that the Ministry of Environment approved the environmental impact assessment for the LNG receiving terminal in the southern port city of Kaohsiung. CPC said that the terminal could help Taipower's Dalin Power Plant increase gas and reduce coal. CPC said that the terminal was estimated to be able to handle 6 million tonnes per year of LNG, supported by six 180,000 cubic meter

LNG storage tanks.

The Philippine Competition Commission (PCC) announced on 23 December 2024 that it had approved the joint acquisition of power facilities and an LNG terminal by Meralco PowerGen Corp. (MGen), Therma Natgas Power Inc. and San Miguel Global Power Holdings. MGen and Therma, through their 60/40 joint venture Chromite Gas Holdings Inc., acquire a 67% equity interest in South Premiere Power Corp. (SPPC), Excellent Energy Resources Inc. (EERI), and Ilijan Primeline Industrial Estate Corp., while San Miguel Power will retain the remaining 33% share in South Premiere, Excellent Energy, and Ilijan Primeline. Chromite and San Miguel Power will acquire 100% (67/33) of Linseed Field Corporation (LFC), which operates the LNG terminal in Batangas City.

Singapore's Sembcorp Industries announced on 5 December 2024 that Sembcorp Fuels (Singapore) Pte Ltd had signed an SPA (Sale and Purchase Agreement) with Chevron U.S.A. Inc. (Singapore Branch) to import up to 0.6 million tonnes of LNG per year. The delivery is expected to commence in 2028 for 10 years.

Singapore's Maritime and Port Authority (MPA) announced on 12 December 2024 that it had launched an Expression of Interest (EOI) process to explore scalable solutions for sea-based LNG reloading to complement the existing onshore LNG bunkering storage and jetty capacities and the supply of e/bio-methane as marine fuel in the Port of Singapore. According to the announcement, LNG bunkering in Singapore has grown from 16,000 tonnes delivered in 2022 to over 385,000 tonnes delivered from January to October 2024. The EOI seeks to gather proposals on three areas: to scale up sea-based reloading operations, including ship-to-bunker barge LNG operations; to facilitate the supply of LNG alternatives such as liquefied bio-methane; and to develop floating platform concepts to enhance bunkering safety and efficiency. The EOI proposals should also include mitigation measures to address the issue of methane slip on a well-to-wake basis. Proposals must be submitted by 28 February 2025, 1:00 pm (Singapore time).

Singapore's Seatrium Limited announced on 17 December 2024 that following Golar LNG's sale of the 1977-built *Golar Gandria* for demolition in 2023, Seatrium and Golar LNG had decided to let their third LNG-carrier-to floating liquefaction conversion contract lapse on 16 December 2024. Seatrium referred to the announcement made on 22 July 2015, in relation to a contract for the conversion of *Golar Gandria*. The first two floating liquefaction vessels delivered by Seatrium to Golar LNG are *Hilli Episeyo* deployed in the Kribi gas field located offshore Cameroon, and *Golar Gimi* FLNG deployed in the Greater Tortue Ahmeyim field located offshore Mauritania and Senegal.

Singapore's FuelNG Private Limited and Eastern Pacific Shipping Pte. Ltd. (EPS) announced on 23 December 2024 that the *FuelNG Venosa* completed FuelNG's 300th LNG ship-to-ship (STS) bunkering in Singapore, fuelling the *Lake Shirasagi* on 22 December, at

the Raffles Reserve Anchorage. This achievement coincides with EPS reaching its 300th LNG bunkering operation globally.

INPEX CORPORATION announced on 2 December 2024 that it had executed an agreement with Seascap Energy Asia plc to acquire 100% of the shares in Longboat Energy (2A) Limited, a subsidiary of Seascap that will own a 42.5% participating interest in the Block 2A Production Sharing Contract off the coast of Sarawak, Malaysia. INPEX will assume operatorship of the block where it will engage in hydrocarbon exploration activities alongside partners Topaz Number One Limited, a subsidiary of Seascap, PETRONAS Carigali Sdn. Bhd. (PCSB) and Petroleum Sarawak Exploration & Production Sdn. Bhd. (PSEP).

TotalEnergies announced on 10 December 2024 that the company finalized the acquisition of the interests of OMV (50%) and Sapura Upstream Assets (50%) in SapuraOMV Upstream, an independent gas producer in Malaysia. SapuraOMV's main assets are its 40% operated interest in block SK408 and 30% operated interest in block SK310, offshore Sarawak in Malaysia.

Tokyo Gas Co., Ltd. announced on 20 December 2024 that the company signed an MoU (Memorandum of Understanding) with Malaysia's PETRONAS to explore carbon neutral related technologies.

PT Energos Indonesia on 11 December 2024 celebrated its 400th cargo on the FSRU *Nusantara Regas Satu*, according to Energos Infrastructure.

Kawasaki Kisen Kaisha, Ltd. ("K" LINE) announced on 2 December 2024 the execution of a long-term time charter contract through the ship-owning company established in Singapore with GAIL (India) Limited, as well as a shipbuilding contract with Samsung Heavy Industries Co., Ltd. for a 174,000 m<sup>3</sup> LNG carrier. This is the first long-term time charter contract between GAIL and "K" LINE involving a newly built vessel. The plan is for the new vessel to be engaged in LNG transportation for GAIL beginning in 2027.

India's Swan Energy Limited (SEL) said on 20 December 2024 that it had signed an HOA (Heads of Agreement) with AG&P Terminals & Logistics (SINGAPORE) PTE. LTD. (AG&P LNG) for the following purposes: 1. Incorporating a Joint Venture Company (LNG Supply Company) for the purpose of supplying LNG in India or any other jurisdiction. SEL shall hold 51% equity stake and balance 49% equity stake shall be held by AG&P LNG. 2. AG&P LNG will collaborate with SEL for Swan LNG's Private Limited (SLPL) Terminal. There is also an option with AG&P LNG to have equity participation in the Terminal. 3. Incorporating a Joint Venture Company (Vessel Company) for the purpose of providing FSRU (Floating storage and regasification unit) and FSU (Floating Storage Unit) to operate the Terminal. AG&P LNG will hold 51% equity stake and SEL will hold 49% equity stake.

Bangladesh's RPGCL (Rupantarita Prakritik Gas Company Limited, a subsidiary of Petrobangla) has been trying to secure spot LNG cargoes for several weeks, issuing purchase

tenders multiple times in December 2024.

Australia's Woodside Energy announced on 11 December 2024 the completion of its Expression of Interest (EOI) process for sales of gas into the domestic market across 2025 and 2026. The EOI process resulted in executed sales of 77 petajoules of gas (1.415 million tonnes) across 14 customers in the manufacturing and energy sectors. Woodside undertook the EOI process in accordance with the Australian Government's Gas Market Code. Woodside launched the EOI process in the first quarter of 2024.

Australia's Squadron Energy announced on 12 December 2024 that the company's Port Kembla Energy Terminal (PKET) - Australia's first LNG import terminal had completed construction. Commissioning of the onshore receiving facility is underway, which is to ensure the functionality of all equipment at the import terminal including the control system, marine loading arms and fire system. The terminal has the capacity to supply 500TJ a day (3.35 million tonnes per year).

Australia's Woodside Energy announced on 12 December 2024 that the North West Shelf (NWS) Joint Venture had received the Western Australian Government's environmental approval for the NWS Project Extension. The State's decision recommences the Federal environmental approvals process. As part of the approval, the NWS committed to a range of environmental management measures, including a significant reduction in air emissions such as Oxides of Nitrogen and Volatile Organic Compounds as well as greenhouse gas emissions management measures to reduce emissions over time.

Australia's Woodside Energy and Chevron Australia announced on 19 December 2024 that Woodside would acquire Chevron's interest in the North West Shelf (NWS) LNG project (16.67%) and the Angel Carbon Capture and Storage (CCS) project (20%) and transfer all of its interest in the Wheatstone (13%) and Julimar-Brunello (65%) Projects to Chevron. Chevron would also make a cash payment to Woodside of up to USD 400 million, the companies said. Chevron Australia said that it would acquire Woodside's 13% non-operated interest in the Wheatstone project and 65% operated interest in the Julimar-Brunello project.

Australia's Woodside Energy Group Ltd announced on 23 December 2024 that the final Pluto Train 2 modules had arrived at the Pluto LNG facility in Karratha, Western Australia. The completion of the Pluto Train 2 module program advances the Scarborough Energy Project towards the targeted delivery of first LNG in 2026, according to the announcement. Since February 2024, a total of 51 modules, weighing a combined 56,000 metric tonnes, have been shipped to Karratha from the module yard in Batam, Indonesia. Pluto Train 2 will have capacity to process 5 million tonnes of LNG per year. The expanded Pluto facility includes new domestic gas infrastructure and will have the capacity to supply up to 225 terajoules per day (1.5 million tonnes per year) to the Western Australian market. Woodside selected Bechtel to execute EPC (engineering, procurement and construction) of

Pluto Train 2, with construction activities at the Karratha site commencing in August 2022.

INPEX CORPORATION announced on 6 December 2024 that through its group company INPEX Cash Maple Pty Ltd it had signed a sales and purchase agreement to transfer 2.625%, 1.20% and 0.42% of its participating interest in the AC/RL7 block in Australia to OPIC Australia Pty Ltd (a subsidiary of CPC Corporation, Taiwan), Osaka Gas Ichthys Pty Ltd (a subsidiary of Osaka Gas Co., Ltd.) and Toho Gas Ichthys Development Pty Ltd (a subsidiary of Toho Gas Co., Ltd.), respectively. The AC/RL7 block is located off the northern coast of Western Australia, approximately 250 km northeast of the Ichthys Field.

Japan's Shizuoka Gas Co., Ltd. announced on 13 December 2024 that the company signed an LNG SPA (Sale and Purchase Agreement) with Santos SG Trading Pte. Ltd., a subsidiary of Australia's Santos, on 12 December. Shizuoka Gas will receive 0.35 million tonnes per year of LNG commencing in the early 2030s, according to the announcement. Santos announced on 12 December 2024 the same SPA, adding that it would supply 0.35 - 0.4 million tonnes per year of LNG at plateau for 12 years, commencing in 2032.

TIMOR GAP, E.P. announced on 12 December 2024 that TIMOR GAP, E.P. (parent to TIMOR GAP Chuditch Unipessoal Lda- Joint Venture (JV) partner in the TL-SO-19-16 Production Sharing Contract ("Chuditch PSC") and SundaGas Banda Unipessoal, Lda (subsidiary of Sunda Energy Plc), the Operator of the Chuditch PSC, had entered into an MOU (Memorandum of Understanding) with the Timor-Leste Ministry of Petroleum and Mineral Resources (MPMR). The MOU sets out the framework for joint evaluation of a development concept for gas resources on the Chuditch PSC, including pipeline export to the Bayu-Undan field and on to planned LNG facilities on the south coast of Timor-Leste.

### **[North America]**

A ranking member of the U.S. Senate Committee on Energy and Natural Resources, released on 23 December 2024 a report documenting how the International Energy Agency had "moved away from its energy security mission" to become an "energy transition" cheerleader.

DOE (U.S. Department of Energy) on 17 December 2024 released an updated study of LNG exports. The study will have a 60-day comment period that will begin once published in the Federal Register. DOE encourages the public to submit comments, which should inform how DOE may apply the study's findings to its public interest analysis of export applications going forward. U.S. Energy Secretary released a Statement outlining departmental leadership's perspective on the final study. 'DOE analysis exposes a triple-cost increase to U.S. consumers from increasing LNG exports - the increasing domestic price of the natural gas itself, increases in electricity prices, and the increased costs for consumers from the pass-through of higher costs to U.S. manufacturers. 'Special scrutiny needs to be

applied toward very large LNG projects. . . considering. . . direct life cycle emissions' . . . sound and durable approach for considering additional authorizations should consider where those LNG exports are headed, and whether targeted guardrails may be utilized

U.S. House Energy and Commerce Committee Chair issued on 17 December 2024 the following statement after DOE released its LNG study. "Let's call this 'study' what it is: A clear attempt to cement Joe Biden's rush-to-green agenda. The administration's de facto ban on LNG exports and this rushed climate driven study are politically motivated decisions to appease radical environmental activists. This is unacceptable. By trying to shut down American LNG, DOE is threatening hardworking Americans' jobs and economic development, weakening the energy security of our allies, and strengthening our adversaries. That's why House Republicans are committed to reversing this ban and unleashing America's abundant natural gas resources to help lower costs across the board."

U.S. Chamber of Commerce issued on 17 December 2024 the following statement regarding the report on LNG exports and a new Chamber-supported S&P Global study of the benefits of LNG. "LNG exports are not only in America's national interest, but also in the world's interest, including our European allies seeking to break free from dependence on Russian gas. From the beginning, the White House moratorium on new LNG export facilities was a politically-driven exercise with harmful impacts on the U.S. economy and the energy security of America's allies. It should end immediately. "We will thoroughly review the DOE report, but it appears to rely on questionable methodology and puts a thumb on the scale to downplay the clear economic, environmental and security benefits of U.S. LNG. This contradicts many other analyses that detail the benefits of LNG exports-including Phase 1 of the Chamber-supported study released today by S&P Global. "The research conducted by S&P Global's team of world class experts stands in stark contrast to the DOE report. It projects that LNG will add \$1.3 trillion to the U.S. economy through 2040, creating nearly 500,000 new jobs and contributing \$166 billion in tax revenues, all while America's energy producers help keep our manufacturing sector competitive with some of the lowest natural gas input prices in the world. The results further illustrate the economic, environmental, and geopolitical harm of blocking new LNG exports, which, if continued, would see LNG replaced overwhelmingly by fossil fuel resources from other countries.

ANGEA (Asia Natural Gas & Energy Association) said on 2 December 2024 that coal use and emissions from power generation in Asia would surge in coming decades unless there was significant new supply of U.S. LNG based on a new study by Wood Mackenzie.

DOE (U.S. Department of Energy) said on 10 December 2024 that over the past several months, DOE had received questions regarding the status of applications to export LNG to non-Free Trade Agreement (FTA) countries and recently, in particular, about the status of the Venture Global CP2 LNG, LLC (CP2) and Commonwealth LNG, LLC



(Commonwealth) applications. DOE cannot complete its review of these two applications - CP2 and Commonwealth - until after FERC's completion of the environmental reviews and issuance of final merits orders. Nor DOE can complete its own review until those other agency processes are completed: Venture Global Plaquemines LNG, LLC (0.45 billion cubic feet per day (Bcf/d)); Commonwealth LNG, LLC (1.21 Bcf/d); Venture Global CP2 LNG, LLC (3.96 Bcf/d); New Fortress Energy Louisiana FLNG LLC (0.4 Bcf/d); Gulfstream LNG Development, LLC (0.46 Bcf/d); Corpus Christi Liquefaction, LLC, CCL Midscale 8-9, LLC, and Cheniere Marketing, LLC (0.47 Bcf/d); Sabine Pass Liquefaction, LLC and Sabine Pass Liquefaction Stage V, LLC (2.46 Bcf/d).

Cheniere Energy, Inc. announced on 30 December 2024 that LNG was produced for the first time from Train 1 of the Corpus Christi Stage 3 Liquefaction Project (CCL Stage 3). Cheniere expects substantial completion of Train 1 to be achieved at the end of the first quarter of 2025, over six months ahead of the guaranteed completion date. Upon substantial completion, Bechtel Energy, Inc. will transfer care, custody and control of the completed train to Cheniere. CCL Stage 3 consists of seven midscale trains, with an expected total production capacity of over 10 million tonnes per year of LNG. Upon substantial completion of all seven trains of CCL Stage 3, the expected total production capacity of the Corpus Christi liquefaction facility will be over 25 million tonnes per year of LNG.

Train 2 of Freeport LNG tripped and required a restart on 12 December 2024, due to an issue with the compressor system, according to a filing with the Texas Commission on Environmental Quality (TCEQ).

ExxonMobil has four world-class LNG projects under development and expects to surpass 40 million tonnes per year of LNG sales by 2030, according to the company on 11 December 2024. The company expects to achieve first LNG sales from the Golden Pass development in the United States and from the Qatar North Field East expansion project near the end of 2025. It also is targeting FIDs (final investment decisions) at Papua New Guinea's Papua project in 2025 and at Mozambique's Rovuma development in 2026. ExxonMobil said on 9 December 2024 that the company's LNG portfolio was on track to double by 2030.

Australia's Woodside announced on 5 December 2024 that it had signed a revised lump sum turnkey EPC (engineering, procurement and construction) contract with Bechtel for the development of the three train 16.5 million tonnes per year foundation development of Louisiana LNG. Bechtel has worked on site since the acquisition and will continue work under a limited notice to proceed (LNTP) executed under the revised EPC contract. Woodside continues to target FID (final investment decision) readiness from the first quarter of 2025.

Baker Hughes announced on 30 December 2024 an order from Bechtel Energy Inc. to supply gas technology equipment for two liquefaction plants with a total capacity of approximately 11 million tonnes per year for Phase 1 of Woodside Energy Group Ltd's

Louisiana LNG development opportunity. The award includes eight main refrigeration compressors driven by LM6000PF+ gas turbines and eight expander-compressors. In addition to this award, Baker Hughes was previously selected to supply Woodside electric-powered Integrated Compressor Line (ICL) packages and other turbomachinery equipment for the associated pipeline serving the LNG export terminal.

Chart Industries, Inc. announced on 31 December 2024 that it had received the order from Bechtel for Chart's Integrated Pre-Cooled Single Mixed Refrigerant (IPSMR®) liquefaction technology and cold boxes for Phase 1 of Woodside Energy Group Ltd's Louisiana LNG development opportunity. Chart will support Phase 1 of Louisiana LNG by providing two LNG plants comprising 16 cold boxes in total for 11 million tonnes per year of production. Each LNG plant includes four Heavies Removal Cold Boxes and four LNG Liquefaction Cold Boxes.

Venture Global LNG announced on 14 December 2024 that it had reached first LNG production at the company's second facility, Plaquemines LNG, in Port Sulphur, Louisiana. The company said that the project reached the milestone 30 months from its FID (Final Investment Decision). Plaquemines LNG reached an FID on Phase One in May 2022, and on Phase Two in March 2023. According to the announcement, Plaquemines will produce and export LNG while construction and commissioning continues for the remainder of the project's 36 trains and associated facilities.

Venture Global LNG announced on 26 December 2024 the loading and departure of the first LNG cargo produced from the Plaquemines LNG facility. The inaugural commissioning cargo was loaded onto the *Venture Global Bayou* - one vessel in Venture Global LNG's fleet of nine new LNG ships - and is being shipped to EnBW in Germany.

FERC (U.S. Federal Energy Regulatory Commission) set aside a portion of its prior authorization for Venture Global's CP2 LNG project in Louisiana on 27 November 2024. The revised review schedule contemplates a final supplemental EIS being made available on 9 May with a final order to be issued on 24 July 2025.

Venture Global Inc. filed on 20 December 2024 a registration statement with SEC (U.S. Securities and Exchange Commission) for an IPO (initial public offering), seeking to trade on NYSE (New York Stock Exchange) under the symbol VG. According to the filing, Venture Global recorded USD 1.169 billion in income from operations during the first three quarters of 2024, down from USD 4.113 billion over the same period of 2023. Long and short-term customers of the company's Calcasieu project are seeking damages through international arbitration, according to the filing.

Energy Transfer LP announced on 19 December 2024 Energy Transfer LNG Export, LLC had entered into a 20-year LNG SPA (Sale and Purchase Agreement) with Chevron U.S.A. Inc. related to ET's Lake Charles LNG project. Energy Transfer LNG will supply 2 million

tonnes of LNG per year to Chevron on an FOB (free-on-board) basis and the purchase price will consist of a fixed liquefaction charge and a gas supply component indexed to the Henry Hub benchmark.

The Alaska Gasline Development Corporation (AGDC) released on 4 December 2024 the following statement regarding the AIDEA resolution supporting the development of Alaska LNG Phase 1, the in-state pipeline portion of Alaska LNG designed to bring North Slope natural gas to Interior and Southcentral Alaska. "Today's resolution authorizes AIDEA to negotiate and sign a letter of credit to backstop front-end engineering and design (FEED) for the Alaska LNG pipeline, bringing Alaska a critical step closer toward a privately funded in-state natural gas pipeline. The letter of credit will allow AGDC to unlock up to USD 50 million in private investment needed to move the Alaska LNG pipeline through FEED, the remaining development stage that must be completed before a final investment decision can be made. AGDC is in advanced discussions with potential project partners to privately fund and complete FEED and will announce updates when new developments occur. The letter of credit for FEED will only be utilized if a final investment decision is not reached, at which time AGDC will own the completed pipeline engineering and design work." "The State of Alaska is facing a looming energy crisis and Alaska LNG represents the best long-term energy solution for our state. . ."

### **[Middle East]**

Abu Dhabi's ADNOC announced on 5 December 2024 that it had signed a second SPA (Sales and Purchase Agreement) for the Ruwais LNG project, with Malaysia's PETRONAS. The 15-year SPA for supplying 1 million tonnes per year of LNG converts a previous HOA (Heads of Agreement) into a definitive agreement. Deliveries are expected to start in 2028 upon commencement of its commercial operations.

Abu Dhabi's ADNOC and Germany's EnBW (EnBW Energie Baden-Württemberg AG) announced on 16 December 2024 that they had signed an SPA (Sales and Purchase Agreement) for the Ruwais LNG project - a third for the project. The 15-year SPA for 0.6 million tonnes per year of LNG converts a previous HOA (Heads of Agreement) into a definitive agreement. Deliveries are expected to start in 2028 upon commencement of its commercial operations. To date, over 8 million tonnes per year of the project's 9.6 million tonne per year production capacity has been committed to international customers through long-term agreements.

Abu Dhabi's ADNOC revealed on 24 December 2024 that ADNOC Trading had signed trading supply agreement to Thailand with Gulf LNG Company Limited. The first cargo of LNG under the agreement, which was sourced from ADNOC Gas, marks the first direct LNG from ADNOC Trading to Thailand, although LNG had been supplied to Thailand

from Abu Dhabi.

QatarEnergy announced on 2 December 2024 that QatarEnergy and Shell had entered into a new long-term SPA (sale and purchase agreement) for the supply of three million tonnes per year of LNG to China. Deliveries will commence in January 2025. The SPA marks the 11th LNG supply contract between the two companies, according to the announcement.

QatarEnergy LNG celebrated on 8 December 2024 the 10th anniversary of its Jetty Boil-Off Gas (JBOG) facility. The JBOG facility was designed to capture gas that would otherwise be flared during the LNG ship loading process. Since its inception, it has recovered approximately 5.8 million tonnes of BOG, achieving a 93% recovery rate of BOG. The facility has contributed to approximately 60% of the company's overall flaring reductions since its commissioning. QatarEnergy LNG is preparing for the future expansion of the JBOG facility with the commissioning of a third train scheduled for 2025.

The Qatari Energy Minister and CEO of QatarEnergy on 7 December 2024 criticised the European Union's (EU) Corporate Sustainability Due Diligence Directive (CS3D). He said that QatarEnergy could not meet Net Zero as a company.

QatarEnergy announced on 11 December 2024 that it had selected the joint venture of Japan's Mitsui O.S.K Lines Ltd. (MOL) and China's COSCO Shipping LNG Investment (Shanghai) Co. Ltd. (CSLNG) to own and operate 6 QC-Max size LNG vessels. The 6 vessels will be built in China by Hudong-Zhonghua Shipbuilding Group, a subsidiary of China State Shipbuilding Corporation (CSSC). These vessels are the last batch of the 128 LNG vessels in QatarEnergy's ship building program, made up of 104 conventional and 24 QC-Max size ultra-modern vessels. The MOL-CSLNG joint venture has already entered long-term TCP agreements with QatarEnergy for 7 conventional LNG vessels, executed in 2022, giving the joint venture a total of 13 long-term TCPs under QatarEnergy's LNG fleet expansion program.

## **[Africa]**

Jordan's ministry of energy said on 2 December 2024 that Egypt and Jordan had signed an agreement to allow Jordan to use Egyptian LNG import infrastructure until 2026. The statement said that Jordan would use Egypt's FSRUs (floating storage and regasification units) over the next two years. The deal is aimed at securing emergency LNG supplies to Jordan until the completion of the new LNG import project in Aqaba, Jordan, expected by the end of 2026.

The Egyptian government said on 6 December 2024 that EGAS had signed a deal for a second FSRU (floating storage and regasification unit) with New Fortress Energy (NFE). Operations of the second FSRU are expected to start in the second half of 2025, according to the statement.

bp and XRG, ADNOC's international energy investment company, announced on 16 December 2024 that they had reached financial close and completed formation of their new joint venture and international natural gas platform - Arcius Energy. Announced in February 2024, Arcius Energy is 51% owned by bp and 49% by XRG. Arcius Energy, initially to operate in Egypt, includes interests assigned by bp across two development concessions, as well as exploration agreements.

China's Wison New Energies announced on 19 December 2024 the FEED contract with Ace Gas & FLNG for an FLNG and Power Barge project in Nigeria. The project aims to develop an FLNG with a liquefaction capacity of 3 million tonnes per year, planned to be moored 10 km offshore in waters with a depth of about 20 meters. A stream of natural gas will be delivered from FLNG to the 230 MW Power Barge.

Germany's SEFE (Securing Energy for Europe) announced on 6 December 2024 that it and Angola LNG agreed on supply of half a million tonnes of LNG, equivalent to eight LNG cargoes scheduled for 2026. The LNG sourced from Angola can be delivered to a wide range of destinations at SEFE's discretion.

The Ministries of Energy in Mauritania and Senegal, Senegal's Petrosen and Mauritania's SMH (la Société Mauritanienne des Hydrocarbures) announced on 31 December 2024 the opening of the first well of the GTA project. bp announced on 2 January 2025 that the company had begun flowing gas from wells at the GTA Phase1 LNG project to its FPSO (floating production storage and offloading) vessel. GTA Phase 1 is expected to produce around 2.3 million tonnes of LNG per year, while partner Kosmos Energy mentioned the FLNG (floating LNG) vessel nameplate capacity of approximately 2.7 million tonnes per year. Kosmos Energy said the first LNG cargo was expected in the first quarter of 2025. bp is operator of GTA with a 56% working interest, alongside Kosmos Energy (27%), PETROSEN (10%) and SMH (7%).

### **[Europe / Surrounding regions]**

United European Car Carriers (UECC) and Titan Clean Fuels (Titan) announced on 2 December 2024 that the companies had signed a new agreement that would see the majority of Liquefied Gas supplied by Titan to UECC's multi-fuel ships to have them run on biomethane (LBM/bio-LNG) for the remainder of 2024 and then most of 2025. Since July 2024, over 95% of the fuel delivered to UECC's pure car and truck carriers (PCTCs) by Titan has been LBM.

Equinor ASA and Shell plc announced on 05 December 2024 that Equinor UK Ltd and Shell UK Limited were to combine their offshore oil & gas assets in the United Kingdom to form a new company. The new independent producer will be jointly owned by Equinor (50%) and Shell (50%). With the once prolific basin now maturing and production naturally

declining, the combination of portfolios and expertise will allow continued economic recovery of the resource, according to the announcement. The transaction has economic effect on 1 January 2025. Completion of the transaction remains subject to approvals and is expected by the end of 2025.

The Bundestag (Germany's parliament) on 20 December 2024 approved the Federal Government's draft for a third law amending the Energy Industry Act (EnWG). The draft law proposes amending the law so that from January 2025 the gas storage levy will only be levied on domestic withdrawal points. Border crossing points and virtual interconnection points, via which gas quantities exported abroad were previously subject to the levy, will no longer be subject to the levy. By limiting the collection of the levy to domestic withdrawal points, the European Commission's doubts about the compatibility of Section 35e EnWG with the EU Gas Storage Regulation are to be dispelled.

The European Commission announced on 20 December 2024 that it had approved, under EU State aid rules, an estimated €4.06 billion German measure to support the operation of four FSRUs (floating storage and regassification units) for the import of LNG by Deutsche Energy Terminal (DET). The measure contributes to the achievement of the objectives of the REPowerEU Plan, by enabling the diversification of energy supplies and ensuring security of gas supply. In December 2022, Germany had chartered four FSRUs and created the State-owned company DET, tasked with operating the terminals. The FSRUs are located in Brunsbüttel, Wilhelmshaven (two locations) and Stade. The FSRUs, two of which started operating quickly, provide an additional import route to replace part of the lost Russian gas. The FSRUs are a temporary solution until permanent onshore LNG terminals are completed in Germany to ensure long-term gas supply. The aid, in form of a direct grant, covers the losses incurred by DET for operating the FSRUs until the end of their charter period. As they were chartered at the peak of the energy crisis when demand and costs were very high and their limited operating time frame does not allow for full cost recovery, these terminals were expected to operate at a loss from the outset. The total net contribution between 2023 and 2033 is expected to amount to €4.06 billion. In case of higher losses than expected, the total net contribution could amount to €4.96 billion. Germany has committed to stop operating the Brunsbüttel and Stade terminals once the planned onshore LNG terminal at those locations become operational, preventing market overlap. Once the onshore LNG terminals are active, the FSRUs will be sub-let at market rates.

Germany's state-owned terminal operating company DET (Deutsche Energy Terminal GmbH) is offering short-term regasification capacity at its BBÜ01 (Brunsbüttel) and WHV01 (Wilhelmshaven I) LNG terminals, according to a 19 December 2024 announcement. A limited number of slots in January, February, and March 2025 are offered on 23 December 2024 in a descending clock auction, DET added. The slots will include

"obligation to deliver" (OTD). DET intends to market further capacities at the BBÜ01 and WHVO1 terminals for the remainder of 2025 and beyond, according to a 20 December 2024 announcement. The offering will be made in a descending price auction taking place between end of January and beginning of February. The Slots offered will include both "Obligation to Deliver" (OTD) and "No Obligation to Deliver" (NOTD) types.

According to a notice on Norway's transportation operator Gassco website on 2 January 2025, the Hammerfest LNG export plant will be shut down for a week following a compressor failure.

Italy's Snam announced on 30 December 2024 that the *BW Singapore* FSRU (Floating Storage and Regasification Unit) had arrived in Italy and would start operation in Ravenna in spring 2025. The FSRU, coming from the Dubai shipyards, has reached the Fincantieri shipyard in Palermo, where it will stay for just over a month for technical finishing operations, specifically mechanical, instrumental and electrical work and fine-tuning of some equipment. These activities are aimed at preparing the regasification unit for following gassing and cooling operations planned at the terminal in Cartagena, Spain. Then, the FSRU is expected to arrive in Ravenna in February for connection to the mooring deck, which was completed and installed in November, for receiving of additional amounts of LNG, and the final verification activities before commissioning scheduled for early April 2025.

Ukraine's largest private energy company DTEK announced on 27 December 2024 that it had took delivery of its first cargo of LNG from the United States. The cargo onboard the *Gaslog Savannah* arrived at the Revithoussa LNG terminal.

The Russian government said on 5 December 2024 that it had lifted the restriction on payment for exported natural gas in only Russian roubles via Gazprombank. Foreign buyers can exchange foreign currencies into Russian roubles elsewhere and "credit funds in roubles to the rouble account opened by the Russian supplier in an authorized bank."

On 20 December 2024 Hungarian Foreign Minister said in a video posted to social media that the United States had granted Hungary an exemption for gas payments on from sanctions it had imposed on Russia's Gazprombank.

Austria's OMV announced on 11 December 2024 the termination of its long-term natural gas supply contract with Gazprom Export in reference to multiple fundamental breaches of contractual obligations by Gazprom Export. This termination takes immediate effect. The subject contract originates from 2006 and stipulates a term until 2040. Since 16 November 2024, Gazprom Export has halted gas deliveries to OMV, according to the announcement. Prior, OMV received approximately 7,400 MWh per hour, corresponding to approximately 5 TWh (0.45 bcm) per month, at the Austrian Slovakian border, according to the announcement.

Russia's Gazprom said on 1 January 2025 that from 8:00 Moscow time, the supply

of Russian gas for its transportation through the territory of Ukraine was not carried out. Gazprom said, "due to the repeated and explicit refusal of the Ukrainian side to extend these agreements, Gazprom was deprived of the technical and legal ability to supply gas for transit through the territory of Ukraine." ". . .the validity of the documents signed on December 30, 2019 expired: the agreement between PJSC Gazprom and NJSC Naftogaz of Ukraine on the organization of Russian gas transportation through the territory of Ukraine and the agreement on cooperation between the operators."

The Council of the European Union announced on 16 December 2024 Council Regulation (EU) 2024/3912 amending Regulation (EU) No 833/2014, where EU sanctioned a vessel associated with the Yamal LNG project for the first time - the Christophe De Margerie, one of the 15 ice-class Arc-7 vessels of the project. Other LNG vessels sanctioned in the package include North Way, North Sky, North Air and North Mountain, associated with the Arctic LNG 2 project. The Koryak and Saam FSUs were already sanctioned on 25 June 2024.

Russia's Gazprom said on 2 December 2024 that daily deliveries of gas to China via its Power of Siberia pipeline had been brought to "maximum contractual level" as of 1 December. The company also said that gas supplies via the pipe was expected to exceed Gazprom's contractual obligations for 2024.

### **[South America]**

The next President of the United States said on 22 December 2024 that the fees being charged by (the) Panama (Canal) were ridiculous. (The U.S.) Navy and Commerce have been treated in a very unfair and injudicious way, according to the next president.

Pampa Energía S.A. announced on 27 November 2024 the participation in the FLNG Project, led by Pan American Energy S.A. (PAE). The FLNG Project involves deploying Golar LNG's FLNG (floating liquefaction) vessel "*Hilli Episeyo*" in the San Matías Gulf, Río Negro province. The vessel will have a production capacity of 2.45 million tonnes per year of LNG. Operations are expected to begin in the second half of 2027. Pampa will initially hold a 20% stake in Southern Energy S.A. (SESA), the entity established by PAE and Golar to undertake the Project, becoming its second-largest shareholder. During the FLNG Project's initial stage, Pampa has committed to supplying up to 3 mcm natural gas per day from its Neuquina Basin blocks.

Harbour Energy confirmed on 2 December 2024 that it had signed a participation agreement with Pan American Energy and Golar LNG to acquire a 15% interest in Southern Energy SA, a company which is planning to develop an FLNG (floating liquefied natural gas) export project in Argentina. The project involves deploying Golar's existing '*Hilli Episeyo*' FLNG vessel off the coast of the Río Negro province. The vessel will have production and export capacity of 2.45 million tonnes per year of LNG. It is anticipated that the upstream



partners in Southern Energy will supply the natural gas for the FLNG project, enabling Harbour's Vaca Muerta natural gas to access global LNG export markets.

Golar LNG Limited announced on 24 December 2024 that the company had acquired Seatrrium's and Black & Veatch's minority ownership interests in the FLNG *Hilli*. The FLNG *Hilli* is contracted to Perenco in Cameroon, until contract expiry in July 2026. The asset is then intended to relocate to Argentina to start a 20-year contract for Southern Energy.

Argentina's YPF announced on 19 December 2024 a PDA (Project Development Agreement) with Shell for the first phase of the Argentina LNG Project. The parties commit to mature the development towards a decision to enter the FEED (Front-End Engineering and Design) stage. The first phase should have a liquefaction capacity of 10 million tonnes per year. Petronas' participation as a partner has come to an end, according to the announcement. The Argentina LNG Project includes gas production from dedicated blocks in Vaca Muerta and its transportation through dedicated pipelines extending 580 km to a processing and liquefaction plant in Sierra Grande, Rio Negro, on the Atlantic coast.

WFW (Watson Farley & Williams) said on 12 December 2024 that WFW had advised Genesis Energias, S.A on the chartering of the '*BILBAO KNUTSEN*' which shall be used as an FSU (LNG floating storage unit) for the loading, storage and discharging of LNG as part of an LNG-to-power project in Honduras. The '*BILBAO KNUTSEN*' is an LNG carrier built in 2004 and owned by Norway's Knutsen Group. The vessel is to be converted into an FSU for the project by HD Hyundai Marine Solution, a subsidiary of HD Hyundai Group. Genesis plans to import LNG through the LNG terminal that it is constructing in Puerto Cortes on Honduras' Caribbean coast using the "*BILBAO KNUTSEN*" as an FSU for the onward transmission of LNG to the Brassavola Thermal Power Plant.

## **[Global]**

Morgan Stanley Investment Management (MSIM), through investment funds managed by Morgan Stanley Infrastructure Partners (MSIP), announced on 13 December 2024 that it had entered an agreement to sell its 50% ownership stake in Larus Holding Limited, the 100% owner of Höegh Evi Ltd. to funds managed by Igneo Infrastructure Partners. Aequitas Limited, indirectly controlled by Leif O. Høegh and family trusts will retain its 50% ownership stake. Höegh Evi is one of the leading owner-operators of FSRUs (Floating Storage and Regasification Units) and LNG Carrier vessels globally. Höegh Evi initiated the development of floating solutions for CCS (Carbon Capture and Storage), ammonia and hydrogen segments. Notably, Höegh Evi is on track to convert to the first hybrid FSRUs by 2028, enabling parallel imports of LNG and hydrogen. In September 2024, the company rebranded itself from Höegh LNG to Höegh Evi (Energy Vector Infrastructure).

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