

LNG Review July 2024
- Recent issues and events - #103
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Introduction

The global LNG market traded 202 million tonnes of LNG during the first half of 2024, only a slight increase from 201 during the same period of 2023 but still another record high for half a year. A notable shift of volumes from the Atlantic to the Pacific regions was observed with the share of the Asia Pacific region (excluding the Middle East) increasing to 68% in the first half of 2024 from 62% in the same period in 2023.

The European Union and the United Kingdom imported 48 million tonnes of LNG in the first half of 2024, significantly less than 59 million tonnes in the same period of 2023. Japan imported 32 million tonnes, only slightly less than the same period of 2023, while China imported 38 million tonnes, compared to 33 million tonnes in the same period of 2023 and 40 million tonnes in the same period of 2021. China's cumulative imports of natural gas - pipeline and LNG imports combined - during the first six months of 2024 were 64.65 million tonnes, increasing by 14.3% from the same period in 2023 to the highest ever recorded. The country's natural gas production was 123.6 bcm, increasing by 6.0% y-o-y, during the first 6 months of 2024. The country consumed 213.75 bcm during the first half of the year, 10.1% higher year-on-year and the highest in the history.

Spot LNG and gas prices at the end of the first half of 2024 were in the almost same ranges as at the beginning of the period, with the Asian spot LNG of USD 11.5 - 13 and the continental European spot gas prices of USD around 10.5 per million Btu equivalent, both going down by USD 2 around the end of the first quarter.

LNG production project reorganisations continue in different parts of the world. The Ruwais LNG project in Abu Dhabi, which announced its FID (final investment decision) in June, announced 10% each equity participation by four international partners in July. Australia's Woodside Energy agreed to acquire Tellurian Inc. of the United States and its Driftwood LNG project.

In the United States at the beginning of July, a federal judge in Louisiana granted a preliminary injunction ending DOE's (U.S. Department of Energy) pause on the issuance of LNG export permits, effective immediately. Implications should be closely followed.

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[Asia Pacific]

China's National Energy Administration released its 2024 natural gas market report on 23 July 2024. According to the report, China's natural-gas consumption is expected to rise by 6.5% - 7.7% to reach up to 425 bcm in 2024. China's total natural gas production is expected to be 246 bcm, an increase of 10 bcm. The country consumed 394.5 bcm of natural gas in 2023, up 7.6% year-on-year. Natural gas accounted for 8.5% of China's total primary energy consumption.

According to China's NBS (National Bureau of Statistics) on 15 July 2024, the country's natural gas production was 20.2 bcm, increasing year-on-year by 9.6%, in June 2024, and was 123.6 bcm, increasing by 6.0% y-o-y, during the first 6 months of 2024. According to China's NDRC (National Development and Reform Commission) on 24 July 2024, the country consumed 34.4 bcm of natural gas in June and 213.75 bcm during the first half of the year, 6.9% and 10.1%, respectively, higher year-on-year.

China imported 5.62 million tonnes of LNG in June 2024, 4.6% less than one year earlier. The country imported 38.00 million tonnes of LNG during the first six months of 2024, 13.9% more than the same periods in 2023, but still 4% less than the same period in 2021. China's cumulative imports of natural gas - pipeline and LNG imports combined - during the first six months of 2024 were 64.65 million tonnes, increasing by 14.3% from the same period in 2023 to the highest ever recorded.

China's Shenzhen Energy Group announced on 8 July 2024 that it signed a long-term LNG SPA (sales and purchase agreement) with commodities trader Glencore on 2 July.

CNOOC Limited announced on 15 July 2024 that it had achieved an exploration breakthrough in Mesozoic buried hill offshore Bohai Bay. Longkou 7-1 oilfield is located in eastern Bohai Bay, with an average water depth of about 26 meters. The discovery well LK7-1-1 was drilled and completed at a depth of approximately 4,400 meters and achieved a new record for gas tested productivity in Bohai Bay.

Australia's Woodside announced on 11 July 2024 that it had signed an SPA (sale and purchase agreement) with CPC Corporation, Taiwan for the long-term supply of LNG to Taiwan. Woodside will supply 6 million tonnes of LNG on a delivered basis over 10 years, commencing in July 2024. Woodside may also deliver 8.4 million tonnes of LNG to CPC for 10 years from 2034 to 2043, subject to conditions and agreement on terms for this period. LNG delivered to CPC under the SPA will be sourced from volumes across Woodside's global portfolio.

Vitol announced on 3 July 2024 that the company had secured three LNG Bunkering Vessels (LNGBV) through its shipping company, Vitol International Shipping Pte Ltd (VIS). The vessels were secured via a time charter agreement with Avenir LNG Limited and an order for two vessels at the CIMC Sinopacific Offshore & Engineering Co. Ltd shipyard in Nantong,

China. The time charter agreement with Avenir is for one newbuild 20,000 m³ LNGBV. The time charter will commence at delivery from the shipyard in China in Q4 2026 and will serve for seven years with options to extend up to ten years in total. Vitol also ordered one 12,500 m³ and one 20,000 m³ LNGBV at the CIMC SOE shipyard in China. The vessels will be delivered in Q4 2026 and Q3 2027 respectively.

Singapore's Seatrium Limited announced on 5 July 2024 that the company had secured a Favoured Customer Contract (FCC) with Greece's Angelicoussis Group, whose fleets of 141 ships operating under Maran Gas, Maran Tankers and Maran Dry. The two-year contract with one-year renewal option includes the refit of 10 to 15 vessels per year comprising LNG carriers, tankers and bulk carriers.

According to the company's announcement on 7 July 2024, Philippines' First Gen Corporation temporarily deferred the delivery of its fifth LNG cargo scheduled in July 2024 with the availability of the indigenous Malampaya natural gas. First Gen awarded in June a contract to TG Global Trading Co. (Tokyo Gas) for the supply of one LNG cargo to be delivered in July to First Gen Singapore Pte. Ltd (FGEN Singapore).

Shell announced on 12 Jul 2024 that first gas had been achieved at the Jerun field in Malaysia, operated by SapuraOMV Upstream Sdn Bhd. An FID (final investment decision) was made on the development in 2021. The field is located around 160 kilometres (km) north-west of Bintulu in Sarawak, and 190 km north-west of Miri, Sarawak, Malaysia. Comprising an integrated central processing platform, Jerun will export gas through a new 80-km pipeline into the E11RB production hub, for onward delivery to Bintulu based customers including Malaysia LNG. The Jerun platform is designed to produce up to 0.55 bcf of gas per day, with condensate production of 15,000 barrels per day during peak production. Jerun is operated by SapuraOMV Upstream (40%) in partnership with Sarawak Shell Berhad (30%) and PETRONAS Carigali Sdn Bhd (30%).

The Australian government (Minister for Resources and Minister for Northern Australia) announced on 23 July 2024 that the government would finalise new offshore exploration permits for gas supply, including permits for Esso and Beach Energy in the Otway and Sorrell Basins, with any discovered gas to support the domestic east coast market, as well as permits for Chevron, INPEX, Melbana and Woodside Energy on Australia's west coast. In addition, 10 permits will be finalised for carbon capture and storage exploration. According to the announcement, the most recent ACCC Gas Inquiry Interim Report makes clear that the domestic east coast market may experience gas supply shortfalls as early as 2027. Supply challenges could persist into the mid-2030s unless new sources of gas supply are developed.

Australia's Venice Energy revealed on 15 July 2024 that the company had received a formal offer from an international infrastructure developer to become the balance sheet partner and fully underwrite the SA LNG receiving terminal project at Port Adelaide. Venice

Energy expects to declare an FID (final investment decision) following the signing of the deal and begin construction later in 2024. The company said its plan to complete construction and commissioning of the facility to enable delivery of first gas by the end of 2026 was on track.

Australia's Santos said on 18 July 2024 in its 2024 SECOND QUARTER REPORT that the Moomba phase one Carbon Capture and Storage (CCS) Project was 92% complete. The project achieved mechanical completion on 6 July 2024. The project is in final commissioning phase.

Australia's Woodside Energy said on 23 July 2024 in its Second Quarter 2024 Report that in June 2024, a Declaration of an Identified Greenhouse Gas Storage Formation was made by the Commonwealth Government over the Calliance Storage Formation within the G-8-AP Greenhouse Gas Assessment Permit (held by Woodside as Operator of Browse). This declaration supports the proposed carbon capture and storage solution incorporated into the Browse design.

Australia's Woodside Energy said on 23 July 2024 in its Second Quarter 2024 Report that a cost and schedule review was performed for the integrated Scarborough Energy Project during the quarter. The schedule remains unchanged, with first LNG cargo targeted for 2026. The revised total project cost estimate is USD 12.5 billion (USD 8.2 billion Woodside share), a 4% increase from the previous cost estimate at FID of USD 12 billion. The cost increase is significantly driven by scope maturation of the Pluto Train 1 modifications project. The total project cost includes the cost for the Scarborough project, the Pluto Train 2 project and the Pluto Train 1 modifications project. The Scarborough Energy Project was 67% complete at the end of the quarter, with first LNG cargo expected in 2026. 29 Pluto Train 2 modules have been delivered to site, with 25 modules set in position at the end of the quarter and site works continuing to ramp up. Fabrication of the floating production unit (FPU) hull and topsides progressed. The living quarters module was installed on the topsides, which has achieved structural completion. Trunkline installation has transitioned from the 36" to 32" pipe and is now more than 50% complete. Two development wells have been drilled, with one well completed and the other planned to be completed in H2 2024. Reservoir quality is aligned with pre-drill estimates. Installation and testing of the three flowlines were completed. All major engineering reviews for Pluto Train 1 modifications have been completed and approximately 80% of materials and equipment have been ordered.

Australia's engineering company Monadelphous Group Limited announced on 26 July 2024 that it had been awarded a construction contract with Woodside Burrup Pty Ltd. Activities to be performed under the contract include mechanical, electrical, instrumentation and commissioning works required for the modifications to the existing Pluto LNG Train 1 facility and associated infrastructure near Karratha in Western Australia. This will enable gas

from the Scarborough Energy Project to be processed at the Pluto Train 1 facilities.

Wood plc announced on 9 July 2024 that it had secured a six-year contract to provide brownfield EPCm (engineering, procurement, and construction management) solutions for Shell's Prelude FLNG (Floating Liquefied Natural Gas) facility in Western Australia.

Wood Group announced on 2 July 2024 that the company had been selected as the lead specialist consultant for an independent study for the Sunrise Joint Venture's (SJV) Greater Sunrise Development. The study, on target for completion by no later than Q4 2024, will support the SJV to advance the development to the next stage. SJV comprises TIMOR GAP (56.56%), Woodside Energy (33.44% and Operator) and Osaka Gas (10.00%). The development project is located between Timor-Leste and Australia's Northern Territory and comprises the Sunrise and Troubadour gas and condensate fields.

Australia's Woodside Energy said on 23 July 2024 in its Second Quarter 2024 Report that the Sunrise Joint Venture participants continued to work with the Australian and Timor Leste governments to progress a new Production Sharing Contract, Petroleum Mining Code and fiscal regime.

Australia's Santos said on 18 July 2024 in its 2024 SECOND QUARTER REPORT that the Barossa gas project was 77% complete. The gas export pipeline pipelay has been completed. The third well of the six well drill program was spudded in May. All 16 modules have been installed onto the FPSO. Construction activities for the Darwin Pipeline Duplication have commenced.

[North America]

Two U.S. Senators released on 22 July 2024 the Energy Permitting Reform Act of 2024. The bill would set a 90-day deadline for the Secretary of Energy to grant or deny LNG export applications following environmental reviews, with applications deemed approved if the Secretary fails to meet the deadline. The bill would ensure fact-based decision-making by requiring the Secretary to base decisions on DOE's existing LNG economic and emissions studies, unless and until new studies are completed.

A federal judge in Louisiana granted on 1 July 2024 a preliminary injunction ending DOE's (U.S. Department of Energy) pause on the issuance of LNG export permits in a case brought by 16 Republican state Attorneys-Generals against the pause of authorizations for LNG exports to non-free trade agreement (non-FTA) nations. Plaintiff States had reiterated that the Export Ban was a complete reversal of DOE's July 2023 Decision, without explanation or reason and thus was politically motivated. The judge said that the Court had been confused as to Defendant's decision to halt the approval process considering its July 2023 Decision and past history on how it handled updates and the approval process, as well as the NGA's express language that applications are to be processed expeditiously.

Accordingly, the judge said that the Court would grant Plaintiffs' Motion for Preliminary Injunction, and order that the LNG Export Ban be stayed in its entirety, effective immediately.

Infrastructure company WhiteWater announced on 12 July 2024 that the ADCC Pipeline entered commercial service on 1 July, and was capable of providing approximately 1.7 Bcf/d of natural gas transportation capacity to the Cheniere Corpus Christi Liquefaction facility from markets on Whistler Pipeline's Agua Dulce Header in South Texas. The receipt points in Agua Dulce provide Cheniere direct access to Permian and Eagle Ford volumes in addition to volumes sourced along the Gulf Coast. The ADCC Pipeline is a joint venture owned 70% by Whistler Pipeline LLC, which is a joint venture between WhiteWater (50.6%), MPLX LP (30.4%), and Enbridge (19.0%), and 30% by a wholly-owned subsidiary of Cheniere Energy, Inc.

Sempra Infrastructure announced on 18 July 2024 that Port Arthur LNG Phase 2 and Bechtel Energy had signed a fixed-price EPC (engineering, procurement and construction) contract for the Port Arthur LNG Phase 2 project in Port Arthur, Texas. The scope of the agreement includes the ability to conduct pre-FID (final investment decision) work to better assure project cost and schedule certainty. The Phase 2 project received authorization from FERC (Federal Energy Regulatory Commission) in September 2023 and is expected to include two liquefaction trains capable of producing approximately 13 million tonnes per year of LNG. The Port Arthur LNG Phase 1 project is under construction and consists of trains 1 and 2, as well as two LNG storage tanks and associated facilities. The expected commercial operation dates for train 1 and train 2 are 2027 and 2028, respectively. In June, Sempra Infrastructure and a subsidiary of Aramco signed a non-binding HOA (heads of agreement) contemplating the purchase of 5 million tonnes per year of LNG and a 25% equity investment in the Port Arthur LNG Phase 2 project. In December 2022, Port Arthur LNG Phase 2 and INEOS also entered into a non-binding agreement for an offtake capacity of 2 million tonnes per year.

Freeport LNG restarted all three liquefaction units in late July 2024. The plant ramped down production on 7 July, ahead of Hurricane Beryl making landfall. Freeport LNG shipped its first cargo after the hurricane on 22 July.

Chiyoda Corporation, an EPC (engineering, procurement and construction) contractor for the Golden Pass LNG project, said on 26 July 2024 that the company would take responsibility for finishing construction along with CB&I. Following an interim order from a U.S. bankruptcy judge on 25 July, Zachry Industrial will be removed from the Golden Pass EPC joint venture. Chiyoda and CB&I will take responsibility for separate portions of what was under Zachry's scope of the project, Chiyoda said. The two companies would soon start discussions with Golden Pass and would revise the EPC contract "at an early date," Chiyoda said.

Tellurian Inc. announced on 1 July 2024 that it had closed the previously reported sale of its integrated upstream assets to affiliates of Aethon Energy Management LLC. Aethon Energy continues to work with Tellurian on a long-term SPA (sale and purchase agreement) for 2 million tonnes per year of LNG.

Australia's Woodside Energy and Tellurian Inc. of the United States announced on 22 July 2024 that they had entered into an agreement pursuant to which Woodside would acquire all issued and outstanding common stock of Tellurian including its Driftwood LNG project. Woodside pointed to its relationship with Bechtel as the EPC contractor for both Driftwood LNG and the Pluto Train 2 project in Australia.

According to the June 2024 construction report filed on 22 July 2024 by Tellurian, Inc. with FERC (the U.S. Federal Energy Regulatory Commission), the Driftwood project continued construction activities including site preparation, excavation and backfill, storm water management, and pile driving activities in June. On 27 June, Driftwood LNG and Bechtel finalized and executed LNTP (Limited Notice to Proceed) 3.

Venture Global Plaquemines LNG, LLC requested permission to introduce gas to a gas turbine generator, according to a 3 July 2024 filing with FERC (U.S. Federal Energy Regulatory Commission). Plaquemines LNG could start producing LNG as early as August, Venture Global said in an earlier regulatory filing.

Texas LNG Brownsville LLC, a subsidiary of Glenfarne Energy Transition, LLC, announced on 2 July 2024 that Texas LNG had signed a non-binding HOA (Heads of Agreement) with an anonymous party for a long-term LNG FOB (free-on-board) SPA (sale and purchase agreement) for 0.5 million tonnes per year of LNG. Texas LNG plans to begin construction in 2024 and commence commercial operations in 2028. The Glenfarne Energy Transition LNG portfolio also includes the 8.8 million tonnes per year Magnolia LNG export facility under development in Lake Charles, Louisiana.

Texas LNG Brownsville LLC announced on 23 July 2024 that the company and EQT Corporation had executed a 20-year tolling agreement for natural gas liquefaction services for 2 million tonnes per year of LNG. Texas LNG also announced an agreement for 0.5 million tonnes per year earlier in the month. Texas LNG plans to begin construction in 2024 and commence commercial operations in 2028.

Argent LNG, LLC announced on 22 July 2024 that it had selected GTT Onshore Tank Technology to develop its liquefaction facility at Port Fourchon, Louisiana.

Eagle LNG Partners Jacksonville LLC submitted on 29 July 2024 a request to FERC (Federal Energy Regulatory Commission) for extension of time until 19 September 2029 to complete construction at the Jacksonville Project.

Honeywell and Air Products announced on 10 July 2024 that Honeywell had agreed to acquire Air Products' LNG process technology and equipment business. According to the

announcement, the new holistic offering will encompass natural gas pre-treatment and liquefaction. Currently, Honeywell provides a pre-treatment solution. Air Products' LNG process technology and equipment business consists of a comprehensive portfolio, including in-house design and manufacturing of coil-wound heat exchangers (CWHE).

Spain's Enagás announced on 10 July 2024 that it had reached an agreement to sell its 30.2% shareholding in Tallgrass Energy of the United States to Blackstone Infrastructure Partners.

SFL Corporation Ltd. announced on 3 July 2024 that it had agreed to build five 16,800 TEU container vessels with scheduled delivery in 2028 at an aggregate construction cost of approximately USD 1 billion. The vessels will have LNG dual-fuel propulsion and the latest features in fuel efficiency and cargo intake optimization.

Fluor Corporation announced on 8 July 2024 completion of the final weld on the first production train at the LNG Canada project, in Kitimat, British Columbia, Canada. The first shipment is expected by the middle of 2025.

GTT announced on 15 July 2024 that it had received, during the second quarter of 2024, an order from Korea's Samsung Heavy Industries (SHI) for the tank design of a new FLNG (Floating Liquefied Natural Gas Unit), on behalf of the ship-owner Cedar LNG. The FLNG will have a total capacity of 180,000 m³, and will incorporate the Mark III Flex membrane containment system developed by GTT. The delivery of the FLNG is scheduled for the first quarter of 2028.

Canada's TC Energy Corporation announced on 30 July 2024 an equity interest purchase agreement with an Indigenous-owned investment partnership for an equity interest of 5.34% in the NGTL System and the Foothills Pipeline assets. The Agreement is backed by the Alberta Indigenous Opportunities Corporation (AIOC) and was negotiated by a consortium committee representing specific Indigenous Communities across Alberta, British Columbia and Saskatchewan.

New Fortress Energy Inc. (NFE) announced on 19 July 2024 that it had achieved First LNG for its initial Fast LNG asset located offshore Altamira, Mexico. NFE's proprietary Fast LNG design pairs modular liquefaction technology with jack up rigs or similar offshore infrastructure. The facility has a production capacity of 1.4 million tonnes per year.

Chart Industries announced on 22 July 2024 that its IPSMR® process technology had delivered first LNG at the New Fortress Energy Fast LNG asset offshore Altamira, Mexico. According to Chart, New Fortress Energy's proprietary Fast LNG design is the first of its kind, pairing Chart's modular liquefaction technology with jack up rigs or similar offshore infrastructure with a production capacity of 1.4 million tonnes per year in a single train.

[Middle East]

The Japan Bank for International Cooperation (JBIC) announced on 4 July 2024 that it had signed a general agreement with Abu Dhabi National Oil Company (ADNOC) to provide a credit line with ADNOC amounting to up to USD 3 billion, of which JBIC's portion is USD1.8 billion, under JBIC's GREEN operations. The credit line is intended to provide the funds necessary for projects related to decarbonization and the energy transitions implemented by ADNOC in the United Arab Emirates (UAE) or internationally.

Abu Dhabi's ADNOC Logistics and Services plc (ADNOC L&S) announced on 1 July 2024 that it had awarded Korea's shipyards Samsung Heavy Industries and Hanwha Ocean up to USD 2.5 billion (AED 9.2 billion) shipbuilding contracts for the construction of new LNG Carriers. Each was awarded shipbuilding contracts for the construction of four firm vessels with the option for an additional one. The vessels are expected to be delivered from 2028 and will be time chartered to ADNOC Group subsidiaries for a period of 20 years. The LNG Carriers will each have a capacity of 174,000 m³ and feature MEGA and XDF2.2 engines. The vessels will feature cutting-edge sustainability technologies including a cargo conditioning system designed to reduce LNG cargo evaporation while in transit, systems to direct cargo boil off gasses to the engines that will increase fuel efficiency and decrease fuel consumption, a real-time emissions monitoring system, and pioneering cargo containment systems to reduce methane emissions.

Abu Dhabi's ADNOC, and international partners announced on 10 July 2024 the latter's participation in the Ruwais LNG project. bp, Mitsui & Co., Shell and TotalEnergies are to be awarded a 10% equity stake each with ADNOC retaining a 60% majority stake. Separately, ADNOC has signed several new long-term LNG sales commitments with the international partners, including for the delivery of 1 million tonnes per year with Shell and 0.6 million tonnes per year with Mitsui & Co., taking the committed Ruwais LNG production capacity to 70%.

ADNOC Gas plc announced on 15 July 2024 the award of EPC (engineering, procurement & construction) contracts for the next phase of the UAE sales gas pipeline network enhancement ESTIDAMA Project. Separately, ownership of ESTIDAMA is being transferred from ADNOC Gas to ADNOC. ESTIDAMA will extend the UAE's natural gas pipeline network operated by ADNOC Gas from approximately 3,200 kilometers to over 3,500 kilometers, enabling the transportation of higher volumes of natural gas to customers in the Northern Emirates of the UAE. ADNOC Gas will continue to manage ESTIDAMA, with ADNOC covering the capital expenditures for the infrastructure project.

Kuwait Oil Company (KOC) announced on 14 July 2024 a discovery of light oil and gas in the Noukhada offshore field, located east of Failaka Island within Kuwait's economic waters. According to the announcement, the field has initial estimates indicating around 2.1

billion barrels of light oil and 5.1 trillion standard cubic feet of gas, which equates to about 3.2 billion barrels of oil.

Energean plc announced on 23 July 2024 that it had taken an FID (Final Investment Decision) for the Katlan development project in Israel. The Katlan area will be developed in a phased approach through a subsea tieback to the existing Energean Power FPSO. The development will extend the production plateau from the FPSO. Production will underpin Energean's existing gas sales agreements plus target international markets. First gas is planned for H1 2027. The EPCI contract for the subsea scope has been awarded to TechnipFMC.

[Africa]

Egyptian Natural Gas Holding Company (EGAS) said on 16 July 2024 that Egypt had received at the Ain Sokhna and Aqaba ports five international shipments of LNG out of 21 contracted cargoes.

Eni said on 20 July 2024 that the Congo LNG project started exporting LNG in February 2024. With the second phase of the project to start at the end of 2025, gas exports from Congo will rise to 4.5 bcm per year, according to the announcement.

TotalEnergies said on 25 July that the company should be able to move forward with the Mozambique LNG by the end of the year. The company said "everything has been set" with all the contractors on the project, adding that discussions with contractors were revolving more around costs. The company said in February that it had restarted financing talks with existing partners, with the aim then to restart construction work by mid-2024.

[Europe / Surrounding regions]

Swiss-based MET Group announced on 9 July 2024 that it had entered into a 10-year FOB (Free-On-Board) LNG purchase agreement with Shell. MET's primary objective is to supply LNG from the United States to its European customers, ranging from its own gas-fired power plant demand to energy-intensive industrial companies and SMEs and households. MET has long-term regasification capacity bookings in Germany, Croatia and Spain. In 2023, MET delivered more than 30 cargoes of LNG to Europe.

Crown LNG Holdings Limited announced on 25 July 2024 that it had selected IKM Engineering & Environmental Consultants, as its partner for the design and engineering of its Grangemouth floating LNG import terminal in the Firth of Forth, Scotland. IKM's mandate will include the Pre-FEED and FEED (front end engineering and design) phases.

Germany's Uniper announced on 30 July 2024 that the company had become the first shipper to start using the BioLNG production capacity to convert biomethane into BioLNG at the Gate terminal in Rotterdam. The underlying commodity is biogas produced in

one of the EU member states. At the Gate exit point, the LNG terminal takes over the biomethane and liquefies it using the terminal's existing infrastructure. The capacity is 100,000 tonnes per year.

ConocoPhillips announced on 24 July 2024 two new agreements to supply LNG to Europe and Asia - a long-term capacity booking at Fluxys' terminal in Zeebrugge, Belgium to import and regasify 0.75 million tonnes per year of LNG from April 2027 and a long-term LNG SPA (sales and purchase agreement) to supply the Asian market from the same year.

Germany's Deutsche ReGas announced on 3 July 2024 that the regasification vessel Neptune had arrived at the energy terminal 'Deutsche Ostsee' in the industrial port of Mukran. Over the next few days, the second regasification vessel, Energos Power, will also be stationed outside the Neptune, completing the terminal. The terminal will offer a regasification capacity of up to 13.5 bcm per year of natural gas with connection to the EUGAL/OPAL and NEL gas transmission networks.

Spain's Iberdrola said on 24 July 2024 that on 19 April 2024, Pavilion Energy Spain, S.A.U. (PESSA), initiated arbitration proceedings against Iberdrola Energía España S.A.U. regarding the contract between PESSA and Iberdrola in 2019 whereby PESSA was to supply natural gas to Iberdrola. Although the contract at issue in the arbitration does not contain a price review clause, PESSA made a claim in reliance on the exceptional doctrine of *clausula rebus sic stantibus*, arguing that the presence of exceptional circumstances warrant the application of the Spanish Supreme Court's special doctrine on this matter. Iberdrola argues that such doctrine does not apply and that the agreement between the parties as set out in the contract must prevail. In its statement of claim, PESSA seeks compensation from Iberdrola in an amount equivalent to the estimated loss, which it establishes at between USD 233.4 million and USD 534.9 million, to be specified during the evidentiary phase of the proceedings, plus interest. The arbitration is ongoing in Madrid.

Italy's Edison announced on 30 July 2024 that it had completed LNG refuelling in the port of Trieste. The first ship-to-ship LNG bunkering operation in the Adriatic Sea was carried out through the use of the LNG carrier Ravenna Knutsen, which has been supplying the Ravenna LNG coastal depot (DIG). The Ravenna Knutsen small LNG carrier is available to Edison under a contract with Norwegian shipowner Knutsen OAS Shipping.

Austria's Climate Protection Ministry announced on 9 July 2024 that it had a plan to set up a commission to examine the gas supply contract between Russia's Gazprom and Austria's OMV. The ministry said that the commission should examine the political circumstances surrounding the extension of the gas supply contract by twelve years from 2028 to 2040 in 2018.

[South America]

Golar LNG Limited announced on 5 July 2024 that it had entered into agreements with Pan American Energy (PAE) for a 20-year deployment of an FLNG (Floating Liquefied Natural Gas) vessel in Argentina. The FLNG project will monetize resources from the Vaca Muerta shale formation in the Neuquina Basin. The project is expected to start LNG exports in 2027. The venture is built on a commercial foundation, featuring: (i) a Gas Sales Agreement from PAE for the supply of gas; and (ii) an FLNG charter agreement with Golar which includes a base tariff and commodity exposure to LNG sales prices. The project aims to utilize Golar's FLNG Hilli, with a nameplate capacity of 2.45 million tonnes per year, providing an equivalent net tariff of USD 2.6/million Btu (based on 90% capacity utilization) with an additional commodity-linked pricing element. Golar has flexibility to consider a swap alternative for another suitable Golar FLNG unit. As part of the agreements, Golar will hold a 10% stake in Southern Energy S.A., a dedicated joint venture with PAE, responsible for the purchase of domestic natural gas, operations, and sale and marketing of LNG volumes from Argentina. The initiative is envisaged to be the first phase of a potential multi-vessel project and it is anticipated that other natural gas producers in Argentina will join.

Argentina's YPF and Malaysia's Petronas announced on 31 July 2024 that they had decided to locate the Argentine LNG export project with a production capacity of 30 million tonnes per year in the Sierra Grande section of Río Negro province.

Shell Trinidad and Tobago Ltd. announced on 9 July 2024 that it had taken an FID (Final Investment Decision) on the Manatee gas field project in the East Coast Marine Area (ECMA) in Trinidad and Tobago. The ECMA is home to the gas-producing Dolphin, Starfish, Bounty and Endeavour fields. The Manatee field will provide backfill for the Atlantic LNG facility. Manatee is slated to start production in 2027. Manatee is expected to reach peak production of approximately 104,000 barrels of oil equivalent per day (boe/d) (0.604 bscf/d).

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