# LNG Review January 2024 - Recent issues and events - #97 Hiroshi Hashimoto\*

### Introduction

While the United States became the largest exporter of LNG in 2023, the eighth year of LNG export from its mainland, the government announced in late January 2024 a temporary pause on pending decisions on exports of LNG. Those LNG export projects targeting operation in late 2020s and thereafter, and under permitting processes, will be directly impacted. Although no specific length is indicated for the pause, it would last until the Department of Energy can update the underlying economic and environmental analyses for authorizations. According to the announcements, the pause is subject to exception for unanticipated and immediate national security emergency and will not impact the country's ability to continue supplying LNG to its allies in the near-term. For some of those projects under review for construction and export approvals, companies from allied countries, including Japan, had previously asked the U.S. authorities expedited authorizations. Uncertainty persists over those projects that have been permitted but have not commenced construction yet and are likely to miss the respective export commencement deadline originally set forth in the order permitting export - whether an extension of the deadline would be granted, although the announcement stated that the pause would not affect already authorized exports.

Preliminary figures suggest that the world traded 399 million tonnes of LNG by ocean transportation in 2023, up 1.7% year-on-year. While Japan, the top importer in 2022, registered a decrease of LNG import in 2023 for the third consecutive year, China returned to growth. According to the country's customs authority, China imported 71.32 million tonnes of LNG in 2023, up 12.6% year-on-year, but yet 11.65% less than the country's historical high in 2021. China imported 48.65 million tonnes of natural gas by pipeline in 2023, up 6.2% year on year, increasing its total import of natural gas by 9.9% year-on-year to 119.97 million tonnes, which was 1.14% smaller than its total import of natural gas in 2021. China consumed 394.5 bcm of natural gas in 2023, up 7.6% year-on-year.

The European Union and United Kingdom imported 111 million tonnes of LNG in 2023, almost the same as in 2022, when their LNG imports increased by 60% year-on-year. Although the total volume in the region did not change

1

<sup>\*</sup> The writer belongs to the Energy Security Unit.

much, Germany, a brand-new LNG importer, and the Netherlands increased their LNG imports significantly in 2013. On the other hand, France, Spain, and Portugal decreased their LNG imports, respectively.

The United States dominated incremental LNG trade again, exporting more than 84 million tonnes, or one fifth of the total LNG trades of the world. The country is expected to continue expanding LNG exports to surpass 100 million tonnes in 2025. Nearly 54 million tonnes of LNG produced in the United States were shipped to the European Union and United Kingdom in 2023, representing 48% of the total LNG imports in the block. Russian LNG represented 13.9 million tonnes, or 13% of the block's LNG imports. EU's import of Russian gas via pipeline in 2023 was 16 million tonnes of LNG equivalent, shrinking to one third of that in 2022. Australia and Qatar, although they were surpassed by the United States in terms of LNG export volumes, continued stable LNG exports in 2023, shipping out just shy of 80 million tonnes each.

# [Asia Pacific]

China consumed 37.65 bcm on natural gas in December 2023, up 9.5% year-on-year, and 394.53 bcm during the twelve months of the year, up 7.6% year-on-year. The country produced 20.9 bcm of natural gas in December 2023, 2.9% more than the same month in 2022. The country produced 229.7 bcm in 2023, 5.8% more than the preceding year. China imported 8.40 million tonnes of LNG in December and 71.32 million tonnes of LNG in 2023. The annual volume is 12.6% more than that of 2022, but 11.7% less than that of 2021. China imported 48.65 million tonnes of pipeline gas in 2023, 6.2% more than it did in 2022. In total China imported 120 million tonnes of natural gas in 2023, 9.9% more than it did in 2022 and 1.1% less than it did in 2021.

Tokyo Gas Co., Ltd. and Kyuden International Corporation (KIC) announced on 24 January 2024 that they had established the Thai Binh LNG Power Joint Stock Company (TBLP), together with Truong Thanh Viet Nam Group (Tập đoàn Trường Thành Việt Nam = TTVN) of Vietnam. TBLP plans to conduct a feasibility study for an LNG-to-power project in Thai Thuy District, Thai Binh Province, Vietnam, which includes an offshore LNG receiving terminal and a 1.5 GW natural gas-fired power plant. The scope of the project ranges from development, construction and operation of the power plant and LNG receiving terminal, LNG procurement to selling electricity to Vietnam Electricity. TBLP aims to start the commercial operation in 2029.

GAIL (India) Limited and Vitol Asia Pte Ltd announced on 5 January 2024 a longterm LNG deal into India for 1 million tonnes per year for 10 years from 2026. GAIL announced on 29 January 2024 that the company had concluded a long-term agreement for purchase of around 0.5 million tonnes per year of LNG from Abu Dhabi's ADNOC Gas. The deliveries will commence in 2026 for 10 years across India.

QatarEnergy and Excelerate Energy 29 January 2024 signed a long-term SPA (sale and purchase agreement) for supply of LNG from Qatar to Bangladesh. Excelerate will purchase up to 1 million tonnes per year of LNG from QatarEnergy to be delivered to FSRUs (floating storage and regasification units) in Bangladesh for 15 years starting in January 2026. Excelerate will purchase 0.85 million tonnes per year of LNG in 2026 and 2027, and 1 million tonnes per year from 2028 to 2040.

The Australian government announced on 22 January 2024 that over 260 PJ of gas would be made available between now and 2033 through two new enforceable supply commitments with Esso and Woodside under the Gas Code of Conduct exemptions framework.

Australia Pacific LNG announced on 8 January 2024 that it had signed a contract to extend the supply of gas to mining and infrastructure solutions provider Orica to 2025. Under the contract Australia Pacific LNG will supply an additional 2.92PJ (53,655 tonnes) of gas in 2025.

Woodside announced on 31 January 2024 that it had joined OGMP2.0 (United Nations Environment Programme (UNEP) Oil & Gas Methane Partnership 2.0).

Woodside said on 24 January 2024 in its Fourth Quarter 2023 Report that the Scarborough project received secondary environmental approvals for Commonwealth waters in December 2023 and commenced all relevant offshore activities.

Woodside expressed on 11 January 2024 its views on the Australian Government's development of a Future Gas Strategy. Woodside has recommended the appointment of an Energy Envoy who can support existing engagement with trading partners and reinforce Australia's ongoing efforts to maintain regional energy security while reducing emissions.

Japan's INPEX CORPORATION announced on 11 January 2024 an agreement with Tokyo Gas Co., Ltd. in relation to the acquisition of the participating interests (1.575%) held by Tokyo Gas in the Ichthys LNG Project in Australia through subsidiaries. INPEX's subsidiaries will increase their participating interests in the project from 66.245% to 67.82%.

Santos welcomed the decision of the Federal Court of Australia on 15 January 2024 in the case of Munkara v Santos NA Barossa Pty Ltd (No.3). The decision was in favour of Santos, with the Court dismissing the application and discharging the injunction that prevented pipelay activities south of the kilometre 86 (KP86) point along the Barossa Gas Export Pipeline. Santos said on 25 January 2024 that it had revised cost and schedule for the Barossa project. Santos said that the company expected an additional USD 200 - USD 300 million in capital expenditure and first gas in the third quarter of 2025.

### [North America]

The U.S. Administration announced on 26 January 2024 a temporary pause on pending decisions on exports of LNG to non-FTA countries until the Department of Energy updated the underlying analyses for authorizations. The announcement says that current economic and environmental analyses DOE uses to underpin its LNG export authorizations are roughly five years old and no longer adequately account for considerations like potential energy cost increases for American consumers and manufacturers beyond current authorizations or the latest assessment of the impact of greenhouse gas emissions. The pause is subject to exception for unanticipated and immediate national security emergencies. The announcement notes that it will not impact the country's ability to continue supplying LNG to its allies in the near-term. No timeframe is noted for when the "pause" will be lifted.

The U.S. Chamber of Commerce, Business Europe, and Keidanren Japan Business Federation sent a letter to the White House on 26 January 2024, expressing major concerns with the recent announcement pausing the Department of Energy's (DOE) review and approval of LNG export license applications to non-free trade agreement (FTA) countries.

The EIA (U.S. Energy Information Administration) said on 9 January 2024 that it expected the spot price of natural gas to average USD 2.70 per million Btu in 2024 and rise to an average of about USD 3.00 in 2025, up from an average of USD 2.54 in 2023. Prices increase because of slowing growth in natural gas production and increasing U.S. LNG exports, particularly in 2025 following the addition of new export capacity in late 2024. However, the EIA expects upward price pressures will be limited by relatively flat consumption of natural gas in the electric power sector and persistently high inventories.

The U.S. Environmental Protection Agency (EPA) announced on 12 January 2024 a proposed rule to tackle wasteful methane emissions from the oil and gas sector. The proposed rule will assess a charge on certain large emitters of waste methane from the oil and gas sector that exceed emissions intensity levels set by Congress.

Cheniere Energy, Inc. and Cheniere Energy Partners, L.P. announced on 31 January 2024 that each company had been approved for uplisting to the Nw York Stock Exchange (NYSE) from the NYSE American. The common stock of Cheniere and the common units of Cheniere Partners will cease trading on the NYSE American after market close on 2 February and will commence trading on the NYSE effective at the opening of trading on 5 February.

According to Tellurian's letter to shareholders of 29 January 2024, Tellurian's commercial activities are moving well and at pace. Tellurian has its license to export LNG to Non-FTA Countries valid through 2050. According to the letter, as Tellurian gets closer to completing construction, the company intends to adjust the in-service date condition under the license to accommodate the construction timeline. The company said that it appointed Lazard as a financial advisor to ask advice on unlocking the value of Tellurian's asset base

and to help expand thinking.

NextDecade Corporation announced on 4 January 2024 that its subsidiary NextDecade LNG, LLC, had entered into a credit agreement with MUFG Bank, Ltd. as lender and administrative agent that provides for a USD 50 million senior secured revolving credit facility and a USD 12.5 million interest term loan. The Revolving Credit Facility and the Interest Term Loan mature at the earlier of two years from the closing date or 10 business days after a positive Final Investment Decision (FID) on Train 4 at the Rio Grande LNG facility.

Venture Global submitted with FERC (Federal Energy Regulatory Commission) on 2 January 2024 its response to the complaint filed by BP Gas Marketing Limited on 11 December 2023. Shell NA LNG LLC submitted with FERC on 2 January 2024 comments in support of BP Gas Marketing Limited's complaint against Venture Global. bp claims in its answer on 17 January 2024 to the answer by Venture Global on 2 January to bp's complaint that bp addresses one issue alone in its complaint - FERC regulations require VG to disclose what it is telling FERC to justify the situation.

In its Pre-Filing Status Report to FERC on 12 January 2024, Venture Global Delta LNG, LLC reported that Delta LNG was updating the design and plot plan to include carbon capture and sequestration facilities. Delta LNG also said that it was analyzing new onsite power equipment options to meet the project's electricity requirements and result in lower air emissions. Delta LNG also said that it and its engineering contractors were also evaluating an increase in the nameplate production capacity of the liquefaction facilities. On 17 April 2019, Delta LNG filed with FERC a Request to Initiate National Environmental Policy Act (NEPA) Pre-filing Review Process for the project. Delta LNG received approval from FERC Staff to commence the pre-filing review on 30 April 2019.

EQT Corporation announced on 11 January 2024 an HoA (Heads of Agreement) for liquefaction services from Texas LNG's facility in Brownsville, Texas to produce 0.5 million tonnes per year of LNG under a 15-year tolling agreement. Texas LNG, a subsidiary of Glenfarne Energy Transition, LLC, anticipates an FID (final investment decision) on the project in 2024, with first cargo deliveries expected in 2028.

Glenfarne Energy Transition announced on 25 January 2024 that Texas LNG, an LNG export project in the Port of Brownsville, Texas, and a subsidiary of Glenfarne Energy Transition, LLC had received its permits from the U.S. Army Corps of Engineers (USACE) and Texas state-level approval, completing the project's permitting efforts required for a final investment decision (FID). The first LNG exports from Texas LNG are expected to be shipped in 2028.

Chesapeake Energy Corporation and Southwestern Energy Company announced on 11 January 2024 an agreement to merge in an all-stock transaction valued at USD 7.4 billion.

BlackRock, Inc. and Global Infrastructure Partners (GIP), a leading independent infrastructure fund manager, announced on 12 January 2024 that they had entered into an agreement for BlackRock to acquire GIP.

The Haisla Nation and Pembina Pipeline Corporation, partners in the development of the proposed Cedar LNG Project, announced on 4 January 2024 that Samsung Heavy Industries (SHI) and Black & Veatch had been selected to provide engineering, procurement and construction for the design, fabrication and delivery of the Project's floating LNG production unit (FLNG), subject to a Final Investment Decision (FID) which is expected by the end of the first quarter 2024. The delivery of the FLNG and substantial completion are expected in 2028.

Ksi Lisims LNG Limited Partnership, a co-development of the Nisga'a Nation, Rockies LNG Limited Partnership, and Western LNG LLC, announced on 8 January 2024 that Ksi Lisims LNG and Shell Eastern Trading Pte Ltd had signed a 20-year LNG SPA (sale and purchase agreement). Shell will purchase 2 million tonnes per year of LNG on an FOB (free-on-board) basis. This is the first LNG offtake agreement executed by Ksi Lisims LNG. Ksi Lisims LNG claims that, utilizing FLNG (floating LNG production) units built by Samsung Heavy Industries (SHI), an all-electric process technology developed by Black & Veatch, and powered by renewable hydroelectricity, the project will be the lowest emitting LNG liquefaction facility in the world, and net-zero ready by 2030. The facility will produce 12 million tonnes per year of LNG from two floating LNG production and storage facilities. Ksi Lisims LNG filed an application with the B.C. government for an environmental certificate on 16 October 2023.

Canada's Tourmaline Oil Corporation and Commodity trader Trafigura announced on 15 and 16 January 2024 that they had signed a long-term LNG agreement. Tourmaline has increased its exposure to JKM by entering into a netback agreement with Trafigura based on 62,500 million btu/d of LNG (~0.5 million tonnes per year) for a seven-year term starting January 2027, with the potential for extension up to December 2039. Tourmaline has also expanded its international exposure to include a physical netback agreement with Trafigura Canada Limited which will receive Dutch TTF index pricing. Starting in March 2024, Tourmaline will deliver 50,000 mmbtu/d of natural gas at AB-NIT and receive a Dutch TTF index price (less associated deductions) until December 2026.

New Fortress Energy Inc. (NFE) announced on 29 January 2024 that U.S. Customs and Border Protection had issued a ruling confirming that the transportation of LNG produced at the Company's FLNG facility located offshore Altamira, Mexico by non-U.S. qualified vessels would not violate the Jones Act. NFE says that it is now able to deliver LNG produced at its FLNG facility located offshore Altamira, Mexico to U.S. locations, including Puerto Rico.

Mexico Pacific announced on 16 January 2024 that it had signed a third long-term SPA (Sales and Purchase Agreement) with ExxonMobil LNG Asia Pacific (EMLAP) for an additional 1.2 million tonnes per year of LNG from Train 3 of Mexico Pacific's Saguaro Energía project located on the west coast of Mexico. The volume originates from the option under the separate LNG SPAs executed in January 2023, covering volumes from Trains 1 and 2. Under the Train 3 LNG SPA, EMLAP will purchase LNG on an FOB (free-on-board) basis for 20 years. There is also an option for another 1 million tonnes per year from Train 4.

## [Middle East]

Abu Dhabi Future Energy Company PJSC - Masdar, INPEX CORPORATION, Tokyo Gas Co., Ltd. and Osaka Gas Co., Ltd. announced on 23 January 2024 that they had signed a collaboration agreement to conduct a joint feasibility study on e-methane1 production in Abu Dhabi in the United Arab Emirates (UAE). Masdar and INPEX have been conducting a joint study to produce e-methane in Abu Dhabi based on an agreement signed on 17 July 2023. Tokyo Gas and Osaka Gas have newly joined this initiative, and through it plan to offtake e-methane in volumes equivalent to 1% of each company's annual city gas demand.

### [Africa]

China's Wison New Energies announced on 22 January 2024 that it would work on two FLNG (floating LNG production) projects in Nigeria. The design validation and pre-FEED phase for two 3 million tonnes per year FLNG projects of Ace Gas & FLNG, and Transoceanic Gas & Power officially started. According to Transoceanic Gas & Power's separate statement, the project is designed to supply 3 million tonnes per year of LNG to the international market, 150,000 tonnes per year of LPG to the domestic market, 25,000 barrels of oil per day (bopd) of condensates, and 75,000 tonnes per year of propane. Transoceanic said that Wilson would also design a floating power barge. Transoceanic said that upstream gathering facilities would be managed by Samsung Heavy Industry Nigeria, while Siemens Energy would provide the power and compression Systems. Transoceanic said that it had offtake assurances for the LNG from Socar, Vitol, and Karpowership of Turkey.

Golar LNG Limited announced on 10 January 2024 that FLNG Gimi had arrived at the GTA field offshore Mauritania and Senegal.

South Africa's Transnet National Ports Authority (TNPA) announced on 10 January 2024 that it had appointed the Vopak Terminal Durban & Transnet Pipelines (TPL) Consortium Venture as the preferred bidder for the LNG terminal at the Port of Richards Bay for 25 years. The terminal is a partnership between the private and public sectors, with the private sector as the lead investor. The commercial operation is expected during 2027.

### [Europe / Surrounding regions]

Lithuania's KN (KN Energies AB starting 10 January 2024) announced on 8 January 2024 that it had secured the public tender for the commercial management of four LNG terminals in Germany on the North Sea coast. The company has signed contract with Deutsche Energy Terminal GmbH (DET), the German state-owned company that operates state-controlled LNG terminals. DET operates Germany's first LNG terminals on the North Sea coast, the Wilhelmshaven 1 LNG Terminal and the Brunsbüttel LNG Terminal. Additionally, DET will operate two upcoming terminals: the second LNG terminal in Wilhelmshaven and the LNG terminal in Stade on the Lower Elbe River.

Energos Infrastructure, an international marine LNG infrastructure company, majority-controlled by Apollo-managed funds and minority shareholder New Fortress Energy Inc. (NFE), announced on 8 January 2024 that the company had completed the acquisition of two FSRUs (Floating Storage and Regasification Units) from Dynagas. The two 174,000 m³ FSRUs, built in 2021, will be renamed Energos Force and Energos Power. In 2023, the FSRUs commenced long-term charter contracts with the German Federal Ministry of Economic Affairs and Climate Change. The Energos Force is planned to operate in the port of Stade under direction of Deutsche Energy Terminals, while the Energos Power is planned to operate in the port of Mukran and has been sub-chartered to Deutsche Regas.

Finland's Gasum announced on 9 January 2024 that it had signed a long-term sales and purchase agreement with Nordic Ren-Gas whereby Gasum will buy all of the e-methane produced by Nordic Ren-Gas at its Tampere plant from 2026. Nordic Ren-Gas's Power-to-Gas plant in Tampere will produce annually 160 GWh (10,584 tonnes) of renewable e-methane. The Tampere Power-to-Gas plant produces e-methane using renewable electricity from Finnish wind power and biogenic carbon dioxide captured from existing power plants.

Russia's NOVATEK reported on 17 January 2024 preliminary operating data for 2023. Hydrocarbon production totalled 644.7 million barrels of oil equivalent (mboe), including 82.39 bcm of natural gas and 12.37 million tonnes of liquids, resulting in an increase in total hydrocarbons produced by 6.0 mboe, or by 0.9% as compared with 2022. Preliminary 2023 total natural gas sales volumes, including volumes of LNG sold, aggregated 78.63 bcm, an increase of 2.7% as compared with 2022.

Russia's Gazprom said on 3 January 2024 that it set a new daily record on 2 January for gas supplies to China through the Power of Siberia pipeline. Gazprom said total gas exports to China via the pipeline amounted to 22.7 bcm in 2023, compared to 15.4 bcm in 2022. The company added that in 2025 the Power of Siberia gas pipeline would reach its full export capacity of 38 bcm per year.

Reference: Company announcements, Cedigaz News Report.

Contact: report@tky.ieej.or.jp