

1 October 2024

## Notable Issues in LNG Transportation in 2024

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### **Introduction**

The world traded 202 million tonnes of LNG in the first half of 2024, a slight increase of 0.5% year-on-year. Japanese import was barely unchanged. A 16% increase in China and an increase of more than 20% in both Southeast Asia and South Asia offset reduced imports by the European Union and the United Kingdom of combined 11 million tonnes. However, the supply and demand balance remained stable on the surface. Behind the scenes, concerns about LNG maritime transportation have become apparent.

### **1. More apparent bottlenecks of transportation routes involving certain canals**

Large LNG carrier vessels have been able to pass through the Panama Canal since the expansion of the canal in June 2016. The expanded canal has opened a new route for transportation of LNG to Northeast Asia from the Atlantic side of the United States which had begun exporting LNG. The first vessel traversed through the canal carrying LNG from the United States to China at the end of July that year.

According to data from the Canal Authority, the number of cargoes and volume of LNG transiting from the Atlantic to the Pacific increased from 7 vessels and 0.43 million tonnes in FY2016 (until September 2016), the first year after expansion, to 272 vessels and 18.60 million tonnes in FY2021. Thereafter, as destinations of LNG from the United States shifted significantly to Europe, cargoes and volumes of LNG decreased to 195 vessels and 12.47 million tonnes in FY2022 and 168 vessels and 11.22 million tonnes in FY2023, respectively. As exports of LPG also increased significantly from the United States, the number of cargoes and the volume of LPG transported thorough the canal from the Atlantic to the Pacific increased to 906 and 34.85 million tonnes respectively in FY2023.

In the meantime, the shipping industry has been working with the Canal Authority to improve the convenience of the canal's reservation and fee systems, while the Canal Authority has often expressed its intention to improve the convenience and efficiency of navigation, including that for LNG carrier vessels. During the surge in LNG demand in Northeast Asia around the beginning of 2021, there were many cases where the waiting time for LNG cargo to pass through the canal was extended to 3 - 5 days, and the need to improve the operation of the canal was recognized.

The Canal Authority is expected to continue efforts to improve operation by promoting dialogue with the shipping and shipper industry, but in addition to the current maximum passage capacity, the number of vessels that can pass through is further restricted due to drought. The route around the Cape of Good Hope at the southern tip of Africa has become the norm to transport LNG from the Atlantic to the Pacific regions in the first half of 2024. The number of LNG cargoes transiting through the Panama Canal represented only 22% of the total number of LNG cargoes transported from the United States to Japan during the period compared to 76% during the period from 2017 to 2023. While it takes 30 - 32 days for an LNG cargo from the Gulf of Mexico in the United States through the canal to reach Japan, it takes 40 - 44 days by taking an alternative route around the Cape of Good Hope or

in a rare case traversing through the Suez Canal.

For the first half of the 2024 calendar year, due to the instability in the Middle East, the Red Sea and Suez routes has also been effectively blocked as a normal LNG shipping route. Commercial ships, including LNG carriers, have been avoiding the Suez Canal primarily due to security concerns, especially around the Bab al-Mandab strait at the southern end of the Red Sea, between Yemen in the Southwest of the Arabian Peninsula and Djibouti and Eritrea in the Horn of Africa.

While the number of cargoes transported via the Red Sea and Suez Canal accounted for 80% - 90% of the total Qatari LNG cargoes exported to Spain and Italy on the Mediterranean coast in the 2017 - 2023 calendar years on a cumulative basis, the number represented only 10% - 20% in the first half of the 2024 calendar year. It takes 33 - 40 days to transport LNG from Qatar to the two Mediterranean countries around the Cape of Good Hope, compared to 13 - 17 days through the Suez Canal.

As the constraints on LNG transportation across oceans become apparent in 2024, the need to develop a long-term LNG transportation rationalization strategy is evident. The upcoming expansion of LNG export capacities on the west coasts of Canada and Mexico, as well as in East Africa, is expected to support such a strategy.

## **2. Uncertainty over LNG cargo shipment from Russian Arctic**

The second uncertainty emerging in 2024 is about LNG shipments from the Arctic LNG 2 project in the Russian Arctic. Six cargoes were shipped from the project in August and September, of which five have been destined for the transshipment storage terminals in Murmansk and Kamchatka, and the one is in floating storage as of the time of writing. With the storage capacity limits of those terminals the operation of the LNG production project is likely slowing down again unless final destinations of those cargoes are designated.

The vessels that are involved in those cargo loadings are older steam-turbine ones and, with 140,000 m<sup>3</sup> cargo capacity, they are smaller compared to the current new-built standard. The identities of the shipowner companies are unknown. The ships are now covered under the sanction by the government of the United States.

According to Russia's NOVATEK's statement on 10 September, while the company is one of the participants in Arctic LNG 2 LLC, employees of the company are not employed by the project, and the project's activities are controlled solely by the management of Arctic LNG 2. The company effectively claimed a distance from the project's activities by stating that the company is not involved in the establishment and management of the shadow fleet, as well as in loading LNG from the project. The statement sounds strange as if saying that there is a gap between the actions of the project and the intentions of the largest shareholder of the project. It is necessary to pay close attention to what the intention behind is.

Those LNG carrier ships are suspected to have deactivated AIS (automatic identification system) signals while traveling to the Arctic LNG 2 project that is under sanctions of the United States and Europe. Ships are required to activate AIS signals under the SOLAS convention (International Convention for Safety of Life at Sea). Such a deviating behaviour by LNG carrier ships, which should conduct thorough safe operation, is risky and could undermine the credibility of the global LNG industry as a whole in the event of a problem caused by such a behaviour.

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