

23 July 2019

The 432nd Forum on Research Works

## **International Gas Market Outlook**

### **Executive Summary**

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#### Demand and Supply of LNG and Natural Gas, as well as Prices

1. The global LNG demand is expected to be 340 million tonnes in 2019 and 360 million tonnes (or 12% of the total natural gas demand) in 2020, respectively, while the supply capacity is expected to be 350 million tonnes per year at the end of 2019 and 390 million tonnes at the end of 2020, respectively. Demand has slowed down in Northeast Asia, the largest LNG market region, except for China. Supply capacity tends to be larger than actual demand at least until 2020.
2. Japan's average LNG import price is expected to slightly go down from USD 9.97 per million Btu in 2018 and USD 10.35 in the first half of 2019 to USD 9.9 in the latter half of the year and USD 9.6 - 9.1 in 2020. Spot LNG prices in Northeast Asia are expected to be traded at USD 5.5 - 6 on average in 2019 - 2020 due to expected ongoing supply capacity expansions, although they are subject to weather conditions.
3. Although Japan's average LNG import price went down to USD 9.35 in June, it was 1.6 - 2 times as expensive as assessed spot LNG prices on average during the second quarter of the year, representing the largest relative gap between the two since 2011. LNG buyers need to secure better terms and conditions in LNG purchase contracts - including diversification of pricing and flexibility in volumes and destinations - in order to take advantage of the improved short-term LNG market, such as more competitive LNG prices caused by abundant supply capacity.
4. The combined natural gas consumption in the OECD countries, China and India grew by 110 bcm or 6% year-on-year to 2,112 bcm in 2018, and by 18 bcm or 3% from the same period in 2018 to 652 bcm during the first quarter of 2019, respectively. The United States and China are expected to continue driving further demand growth in 2019 as they did in the previous years, albeit at slower growth rates compared to 2018.

### Developments in Major Producing and Consuming Countries

5. Natural gas production in the United States grew year-on-year for 24 straight months by April 2019. The country produced 304 bcm, or 13% more than the same period last year, during the first four months of 2019, compared to a 12% increase in the year 2018. Meanwhile, the country consumed 323 bcm during the first four months in 2019, 3% more than the same period last year, compared to a 10% increase in the whole year 2018. Since September 2017, the United States has been a net exporter of natural gas on monthly basis.
6. The United States exported 13.15 million tonnes of LNG during the first five months of 2019, or 51% more than it did one year earlier, after exporting 22.52 million tonnes in the twelve months of 2018, or 53% more than it did in 2017. At the end of May, Cameron LNG as the fourth bulk LNG export project in the mainland of the United States shipped out its first cargo. As two additional LNG export projects are at commissioning stages, the United States is expected to increase its LNG export capacity to 56 million tonnes per year by the end of this year.
7. Australia exported 37 million tonnes of LNG, or 17.5% more than one year earlier, during the first half of 2019. The country is coming closer to the title of No. 1 LNG exporter in the world after it shipped out 70 million tonnes in 2018, or 22% more than it did in 2017. While the Ichthys project continues ramping up production since late 2018, Prelude FLNG shipped out its first LNG cargo in June from the country's first floating LNG production unit.
8. China continues expanding steadily its natural gas market, consuming 126 bcm and producing 73 bcm during the first five months of 2019, 13 bcm, or 12%, and 7 bcm, or 10%, more than it did one year earlier, respectively. China also increased LNG imports by 4 million tonnes, or 20%, to nearly 24 million tonnes during the first five months of the year. The country is expected to import 64 million tonnes during the year. As the country needed to cope with seasonal gas demand fluctuation, it became the largest spot and short-term LNG importer in the world, replacing Japan in 2018.
9. Russia's natural gas exports by pipeline increased modestly by 4.4 bcm, or 1.6%, from one year earlier to 281 bcm in 2018. A pipeline to China is expected to be completed in 2019. LNG exports have increased significantly since the Yamal LNG project in the Arctic area in late 2017.
10. Natural gas consumption in OECD Europe decreased by 22 bcm, or 4%, in 2018 to 507 bcm and by 5 bcm, or 3%, in the first quarter of 2019 to 175 bcm, respectively, from one year earlier. As natural gas production in the region

continues decreasing, the region continues absorbing excess LNG cargoes that are not received in other parts of the world, especially after the last quarter of 2018.

### LNG Market Liquidity and Project Investment Developments

11. Volumes of LNG traded on spot basis reached 78.70 million tonnes in 2018, representing 25% of the total global LNG trades. Spot and short-term transactions of LNG are expected to grow further driven by secondary sales by portfolio players to take care of seasonal fluctuation of gas demand in China and emerging demand in Southeast and South Asia. As increasing exports of LNG from the United States encourage optimisation of transportation, flexibility of terms and conditions in LNG sale and purchase contracts will be more important.
12. Final investment decisions have been made on three new LNG production projects so far in 2019, representing cumulative annual capacity of 34 million tonnes. With additional projects approaching the milestone in the United States and Russia, this year is expected to be a record year of LNG FIDs. While the top-tier major players in the global LNG industry further enhance their presences in those projects, Japanese companies should also play proactive roles in the new projects, including offtake commitments, equity participations in the projects, and demand creation in emerging markets in Southeast and South Asia.