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Expert Commentary

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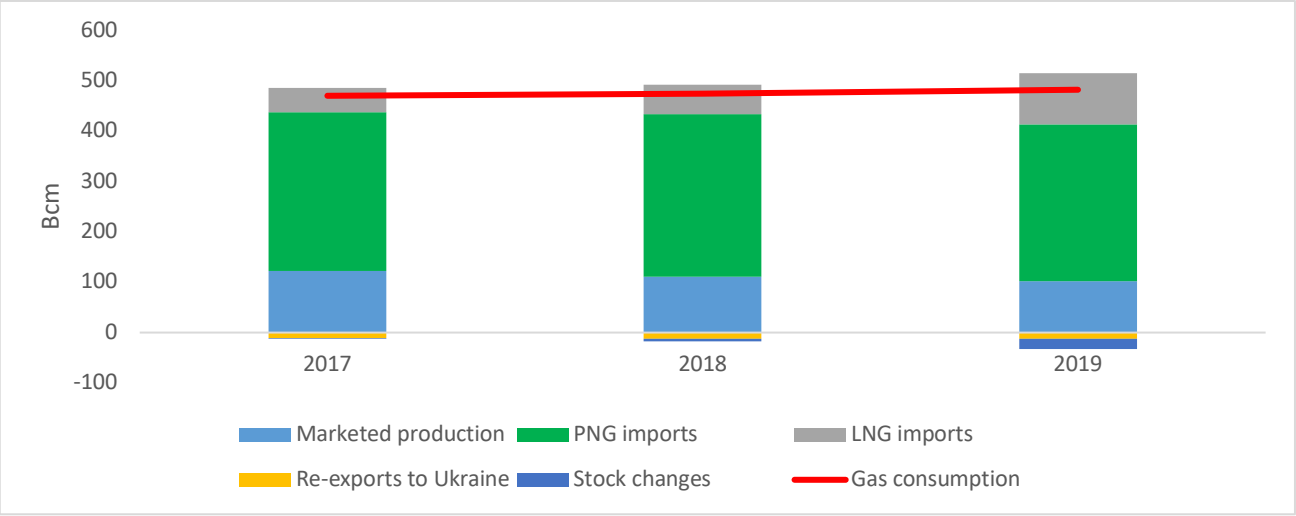
The European Union plays a crucial role on the global gas market, with 55% share in the global net pipeline natural gas (PNG) imports and 20% share in the global liquefied natural gas (LNG) imports. In this context, the latest developments on the EU gas market have huge impact on the global gas industry in general and on the GECF Member Countries (MCs) in particular. It is remarkable that most of the EU gas imports come from the GECF MCs, which have adequate gas infrastructure to supply both PNG and LNG.

Over the last four years, gas consumption in the EU remained stable in the range of 470 to 490 billion cubic meters (bcm).[1] In the meantime, indigenous gas production decreased by more than 40% over the last decade, driven by natural depletion of gas reserves and regulatory restrictions. Speaking about the latter, it is worth noting the gradual phase-out of gas production at the Groningen field in the Netherlands. This field played a great role on the regional market, with annual production at 50 bcm in the early 2010s. However, the production dropped to 11 bcm in 2019, and it is expected to be phased out by mid-2022. Driven by these trends, the EU marketed gas production fell to 102 bcm in 2019, with its share in gas supply dropping to below 20%. A steady decline in indigenous gas production, coupled with the growing energy demand, has led to the increasing gas import dependency.

Until recently, PNG imports tended to fill the gas supply gap, created by the falling indigenous gas production. The share of PNG supply in total EU gas imports traditionally exceeded 80%. However, starting from 2019 the competition between PNG and LNG supplies has intensified, driven by the growing LNG imports (Figure 1). Starting from 2020, the competition has been exacerbated by the shrinking gas demand, driven by mild winter weather, imposition of lockdown measures to prevent the Covid-19, and high level of gas in storage.

[1] The UK, which withdrew from the EU on 31 January 2020, is considered to be a part of the EU for the purpose of this article

Figure 1. EU gas supply and consumption in 2017-2019.

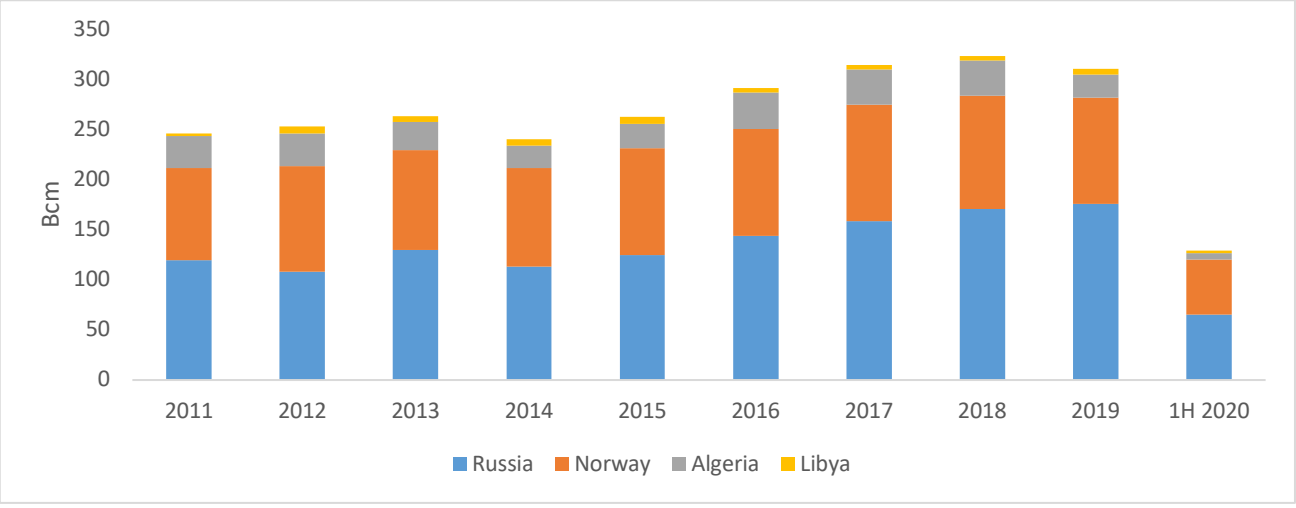


Source: GECF Secretariat, based on data from Cedigaz, AGSI+, ICIS, and McKinsey & Company

Extra-EU PNG imports, which started in late 1960s from Russia (then USSR), rely on traditional suppliers, such as Russia, Norway, Algeria, and Libya, with Azerbaijan joining the club in near future.[2] It implies that 100% of extra-EU PNG imports comes from the GECF MCs.

All EU countries, except Cyprus and Malta, import PNG. In 2019, extra-EU PNG imports dropped by 4% y-o-y to 311 bcm. Among top six regional PNG importers, only Germany increased PNG offtake, while Italy, France, UK, Spain, and Belgium decreased their imports. Among these countries, only Germany does not have LNG regasification terminals. Against the backdrop of the Covid-19 outbreak, the first half of 2020 witnessed a continuous reduction in extra-EU PNG imports, with supply shrinking by 19% y-o-y to 129 bcm (Figure 2).

Figure 2. Extra-EU PNG Imports by Exporting Country.



Source: GECF Secretariat, based on data from Cedigaz and McKinsey & Company

[2] Extra-EU PNG imports include imports from outside the EU and do not include intraregional flows

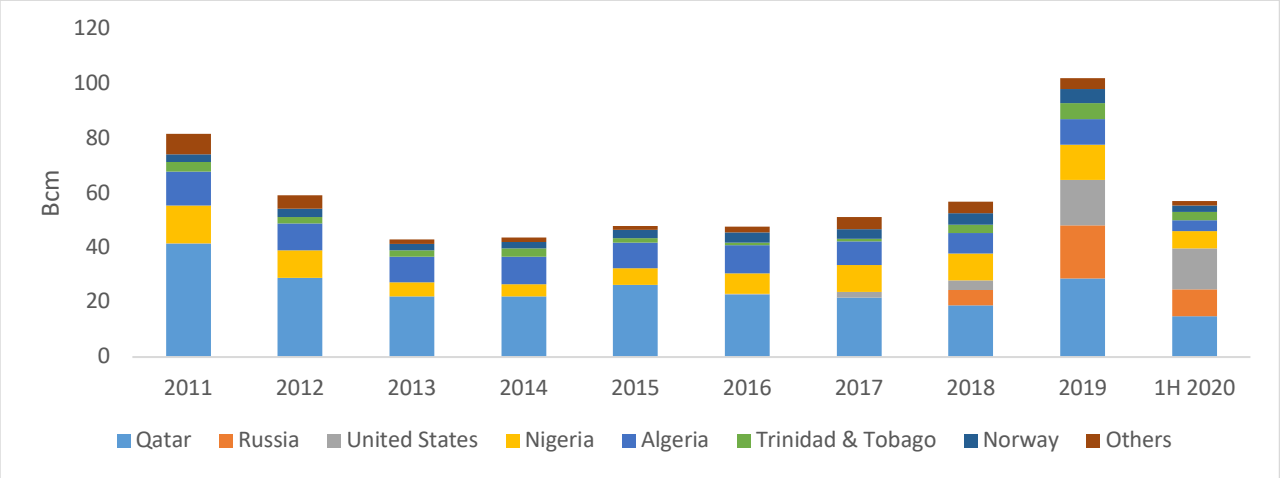
LNG imports, which started in mid-1960s from Algeria, played rather a complementary role in most of the EU gas importing countries until recently.

The year 2019 turned out to be a milestone one for the regional LNG imports, which increased by 48 bcm to the record highs of 102 bcm and to a certain degree displaced PNG imports, while reaching 24% in the total EU gas imports. A total of 13 EU countries imported LNG, with all of them, except Malta, expanding their imports. Spain, France, the UK, and Italy accounted for 72% of the regional LNG imports. Despite the Covid-19 outbreak and subsequent decline in gas demand, the EU LNG imports continued to soar, rising by 12% y-o-y to 57 Bcm in the first half of 2020.

A new recent trend in the regional LNG imports is the emergence of the U.S. as one of the major suppliers, which has contributed to the strengthening competition between PNG and LNG supplies. Since February 2016, the U.S. has commissioned 100 bcm of LNG liquefaction capacity. The U.S. LNG exports to the EU grew steadily to reach 16.5 bcm in 2019, which equaled to 16% of EU LNG imports, 4% of EU total gas imports, and 3% of EU gas consumption. In the first half of 2020, the U.S. continued to ramp up LNG supply to the EU, with its share in the regional LNG imports reaching 26% (Figure 3).

Meanwhile, the GECF remains the largest LNG supplier to the region in both pipeline gas and LNG forms. The share of the GECF MCs in the EU LNG imports was over 99% until 2017, after which it started falling due to the commencement of the U.S. LNG supply. As a result, the share of the GECF MCs declined to 84% in 2019 and to 74% in the first half of 2020, with Algeria, Angola, Egypt, Equatorial Guinea, Nigeria, Norway, Peru, Qatar, Russia, and Trinidad and Tobago supplying LNG to the region.

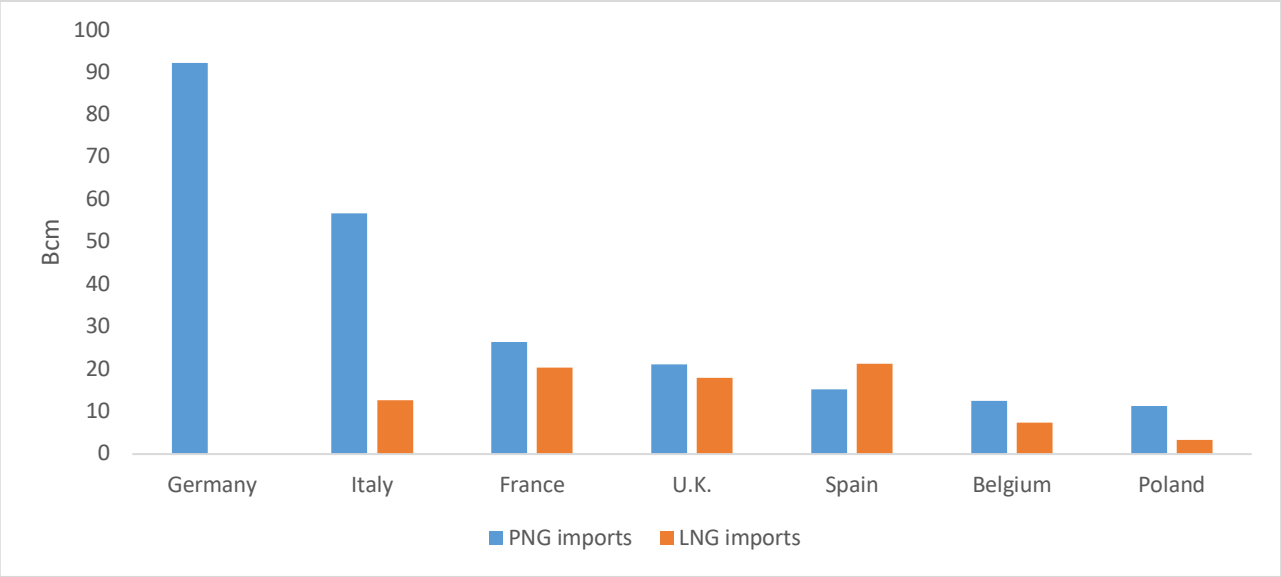
Figure 3. EU Net LNG Imports by Exporting Country.



Source: GECF Secretariat, based on data from Cedigaz and ICIS

Among top seven EU gas importers, only Spain imported more LNG than PNG in 2019, while Germany, Italy, France, the UK, Belgium, and Poland had PNG imports exceeding their LNG imports (Figure 4). The true competition between PNG and LNG supplies happens mainly in 12 EU countries, which have the capacity to import both PNG and LNG.

Figure 4. Extra-EU PNG and LNG Imports in Major EU Countries in 2019.



Source: GECF Secretariat, based on data from Cedigaz, McKinsey & Company, and ICIS

There are numerous factors, which have direct and indirect impact on the growing competition between PNG and LNG in the EU, and some of them have gained prominence recently.

High competitiveness of PNG imports has been driven by various factors:

- The EU boasts of huge gas pipeline infrastructure to import PNG from major suppliers, such as Russia, Norway, Algeria, Libya, and Azerbaijan, with export capacity of gas pipelines from these countries exceeding 450 bcm per year equaling to over 93% of the regional gas consumption
- PNG supply usually has lower transportation costs, while LNG supply is notable for high liquefaction, transportation, and regasification costs, especially in newer LNG projects
- Long-term contracts, signed by PNG importers and exporters, usually guarantee a high minimum level of PNG supply under a take-or-pay clause, which ensures the security of gas supply
- Various PNG suppliers have diversified the pricing mechanisms in long-term contracts by adding mechanisms based on gas hub and hybrid indexation
- A few PNG suppliers have diversified supply opportunities to embrace spot gas trade, with its share in PNG supply of some exporters reaching almost 10%
- Some PNG exporters have completed or are going to commission new gas pipelines, with TurkStream, Nord Stream 2, and Southern Gas Corridor as stand out examples, which increases security of gas supply and decreases gas transportation cost

The growth of LNG imports has been based on various factors:

- An increase in global LNG liquefaction capacity by 24 mtpa to 444 mtpa and growth in global LNG trade by 37 mtpa to 352 mtpa in 2019 laid the foundation for global LNG oversupply and incremental LNG supply to the EU as the market of last resort

- The EU possesses large LNG infrastructure, including 23 large-scale LNG regasification terminals with total sendout capacity of 209 bcm, with Spain (61 bcm), the UK (49 bcm), France (35 bcm), and Italy (15 bcm) representing 77% of the regional capacity

- Huge underutilisation of regasification capacity in the EU, with utilisation rate reaching only 49% in 2019 and 55% in the first half of 2020, implies that there is a potential to increase LNG imports in the short term

- A sharp fall in spot prices at the European gas hubs, with the average TTF price dropping from US$7.90 mmBtu in 2018 to US$4.79 mmBtu in 2019 and to US$1.83 mmBtu as of 1 July 2020, has boosted spot LNG imports with hub-based indexation

- A fall in spot LNG price spread between Asia and Europe to below US$1 mmBtu in 2019 and 2020 has dislodged Asia from the status of a premium market, with supply to Europe becoming more profitable for various exporters

- The imposition of import duties on the U.S. LNG by China, as a result of the bilateral trade war, has diverted much of the U.S. LNG from China to the EU, with the prospects of resumption of large-scale LNG exports from the U.S. to China still being uncertain

- A fall in LNG shipping cost, driven by a decrease in charter rates and shipping fuels prices, has raised the competitiveness of long-haul LNG supply from remote regions, with the average LNG shipping cost for spot cargoes from the U.S. to the UK declining to US$0.85 mmBtu in 2019 and to US$0.47 mmBtu in June 2020

- LNG has been gaining momentum in the EU transportation sector, specifically as a fuel for LNG-fuelled trucks and as bunkering fuel, which boosts its demand

- European major oil and gas companies, holding long-term offtake contracts with LNG plants all around the world and acting as global portfolio players, have recently had an incentive to supply LNG to Europe as a market with higher margins

- The expanding practice of supplying regasified LNG to landlocked and isolated EU countries creates new market opportunities for LNG suppliers

- The existing spreads in spot prices at different European gas hubs encourage market operators to deliver LNG to one country and then re-export regasified LNG by gas pipelines to other countries

Meanwhile, there is one factor that has eased the competition between PNG and LNG supplies. In 2019, underground storage (UGS) facilities absorbed excess gas supply, with large injections balancing the regional gas market. As of 1 July 2020, the volume of gas in storage in the EU reached 82 bcm, or 80% of UGS capacity. That represents a very different picture to 74 bcm on the same date of 2019 and the five-year historical average at 57 bcm. As such, UGS facilities might be almost full by September 2020. In this context, demand for imported PNG and LNG supplies tends to decrease.

In the short term, volumes of PNG and LNG supplies to the EU will largely depend on the pace of the recovery of gas demand after lockdown measures are lifted in the region. By the end of 2020, PNG imports are likely to remain below the 2019 level, with all PNG exporting countries impacted. PNG imports could be continuously pushed out of the supply mix by LNG imports. However, the contractual obligations of the EU importers under take-or-pay clauses will prevent PNG supply from a larger drop.

Unlike PNG imports, LNG imports may stay flat or even increase slightly by the end of 2020 because of the global LNG oversupply and narrow price spread between Europe and Asia, with the EU remaining the market of last resort. Despite the cancellation of multiple U.S. LNG cargoes with due deliveries in summer 2020, LNG supply may approach a 30% share in the EU total gas imports across the full year.

In any case, global LNG oversupply, combined with high level of gas in storage in the region, will continue to have huge downward pressure on spot prices. Under this scenario, the biggest winners from the increasing competition between PNG and LNG supplies will be the EU gas importing countries, which will benefit from the plunging gas prices, improved security of gas supply, and enhanced diversification of gas sources and routes.

The GECF MCs will definitely remain the largest suppliers of both PNG and LNG to the EU market. Their share in the EU total gas imports reached 96% in 2019, and it is expected to remain over 92% in the short term, despite the growing LNG supply from non-GECF countries. The GECF MCs have competitive advantages over other gas suppliers and long-term energy relations with the EU. The GECF MCs are determined to strengthen global energy security as reliable suppliers of natural gas to meet the world's energy demand, as echoed in the Declaration of Malabo, which was the outcome of the Fifth GECF Summit of Heads of State and Government in Equatorial Guinea in November 2019.

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