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Natural Gas Market Outlook

Osservatorio energia

REF4E

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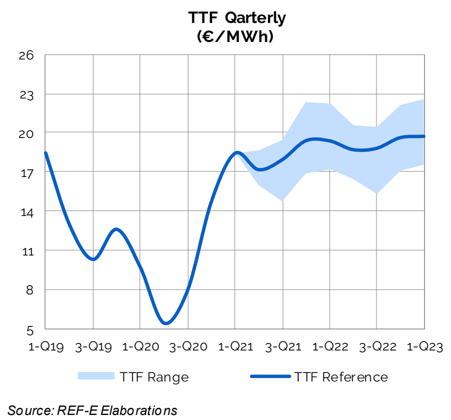
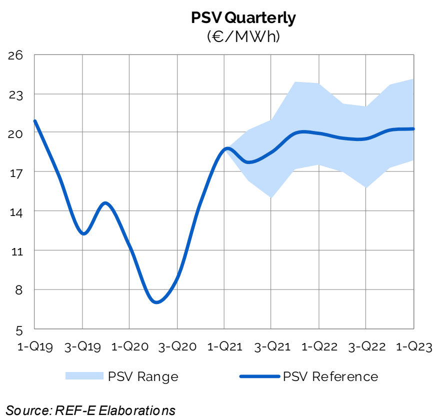
GLOBAL LNG MARKET TO LEAD EUROPEN GAS PRICES

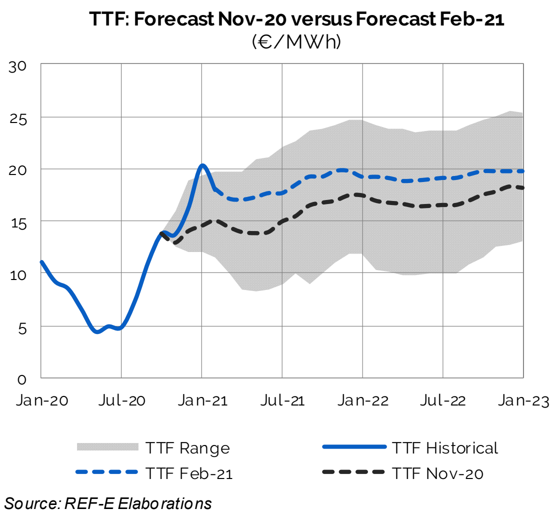
Year 2020 gas market dynamics enshrined Europe's role of balancing market for global LNG trade. On the other hand, **the global LNG market definitively took on a key role in determining the European gas prices variations**,

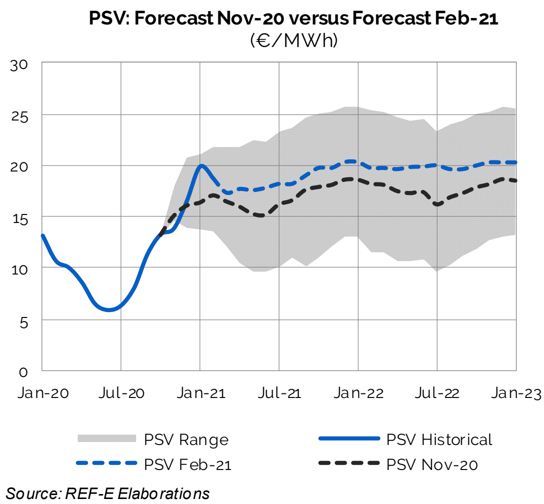




The 2021 PSV price settles near 19 €/MWh and 20 €/MWh in 2022. The TTF gains too, reaching 19 €/MWh on average by 2022.

Europe absorbed the 2019 global LNG oversupply, with a record high in spot purchases (+130% compared to 2018), overcoming Chinese demand if long term contract volumes are added (for overall 80 million tonnes of LNG). The LNG abundance combined with a mild winter having depressed demand lead prices lower. The overall demand weakness along with a still abundant supply availability avoided prices tensions in the first half of year 2020 too. A series of supply disruptions and a sharp recovery of both Asian and European winter demand pushed prices sharply higher towards last year end and the beginning of 2021 though.

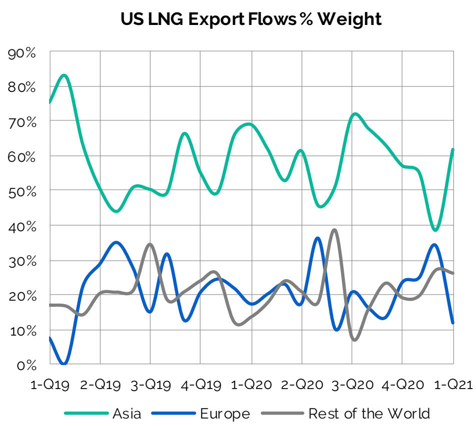




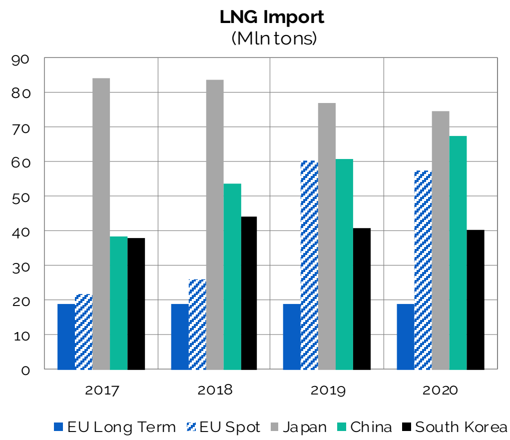
The TTF followed the South West Europe LNG reference, testing just above 5 €/MWh last spring and bouncing more sharply than expected higher, nearing 20 €/MWh, in winter. The LNG global market is still in balance (*Global LNG Outlook Feb21*) and the latter winter dynamic is not seen as structural. The world LNG supply remains higher than demand in year 2021 and able to satisfy both the European and the Chinese growing demand, However, a **stronger competition between destinations** and a **higher Brent indexed price** (amid Oil prices recovery) supports both the LNG South West Europe reference and the TTF. **The TTF and the PSV prices targets have consequently been revised higher**, with winter 2019 highs over the next 2021 and 2022 cold seasons nearing the 2020 ones. The risk for higher-than-normal demand and/or supply disruptions pushing the LNG reference and the European gas prices under pressure becomes particularly high in 2022, when the world LNG supply growth suffers last year low prices induced delays in new capacity investments and Asian demand erodes availability to Europe.

Russian and Norwegian Flows Rose, but LNG arrivals are set to recover

The rally in Asian LNG spot prices (beating the January record high and reaching almost 50 €/MWh) opened arbitrage opportunities making **exports to the Asian continent more profitable than to Europe** (*Global LNG Outlook Feb21*). The European demand attracts higher pipeline gas import, supporting a positive outlook for prices.



Source: REF-E Elaborations on Reuters data



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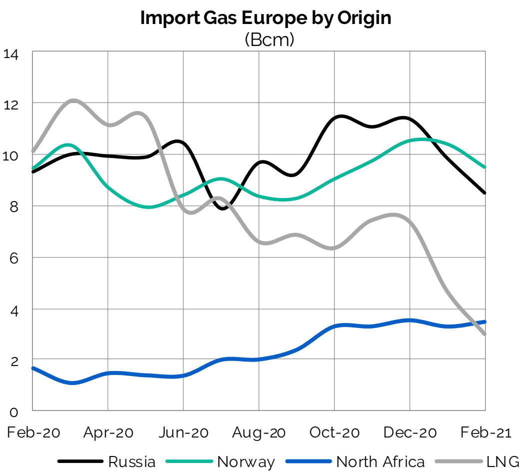

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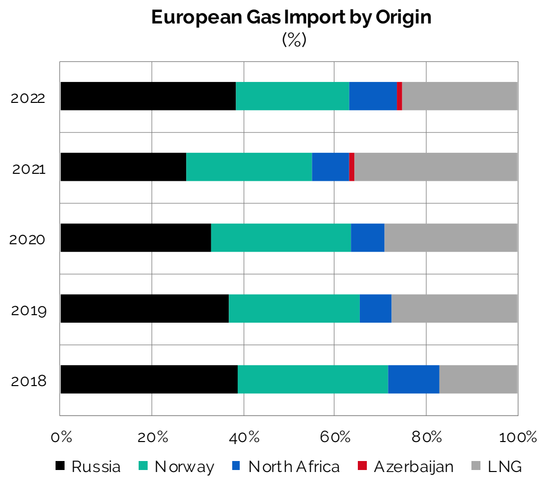


Source: REF-E Elaborations

The US LNG exports to Europe weight, historically averaging around 20%, fell by 65% in January 2021 compared to the previous month and is overall lower than the average 2019 and 2020 weight. U.S. producers are meeting the growing demand from emerging markets too, especially Latin America, reducing the margin supply for Europe further over the coming years.

January and February LNG arrivals weighted only 10% of the total supply mix for Europe (counting almost 5 Bcm), about one third compared to the same period in 2020. Natural gas exports via pipeline from Norway mainly flow to the UK and Germany, while **Russia remains the major EU supplier**. North African gas exporters gained market shares too, with the Algerian and Libyan gas flows mainly destinated to the southern Europe countries.

However, the Asian LNG price pulled back, following a normalization of demand, and is now aligned to the European reference. which is expected to bring arrivals back too. In our *Reference* scenario, **2020 LNG arrivals cover in fact a higher portion than 2020 of the European import mix. The LNG weight declines significantly to 25% in year 2022 though, which is lower than 2020,** rising the risk for winter prices coming under pressure.

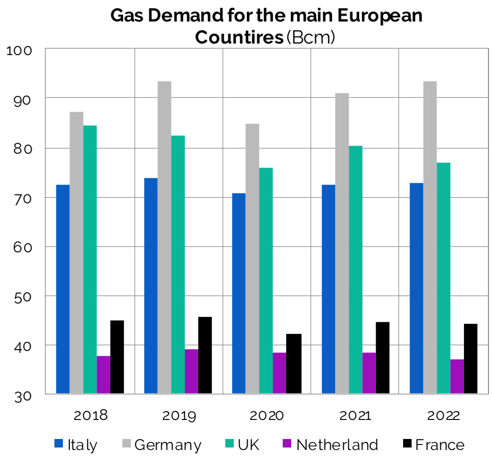
The **Egyptian liquefaction facility *Damietta*** will resume to full capacity by the second half of this year, after being idle since 2012 due to the lack of feed gas. *Damietta* LNG facility has a capacity of 5 Mtpa and its resumption represents a potential source of supply for Italy and southern Europe.

The **Norwegian production remains strong** despite the *Hammerfest* plant shutdown, which was hit by a fire in September 2020 and should not resume earlier than Q4 2021. This leaves Norway without 4.2 Mtpa of liquefaction capacity (about 90% of the total). Pipeline deliveries to Europe remained resilient though, with 2020 flows, in line with 2019 levels (almost 110 Bcm),

According to the *Norwegian Petroleum Directorate* only about a third of Norway's estimated gas resources have been extracted so far and production levels are expected to remain high for the next 15-20 years.

The Dutch gas production at the Groninghen filed is set to drop progressively at 9 Bcm starting next October and then run out completely by the end of 2022 to limit seismic risks in the region.

European Gas Demand Recovers Most of the 2020 Losses in 2021



Source: REF-E Elaborations on Jodigas, Snam and Entso-e data

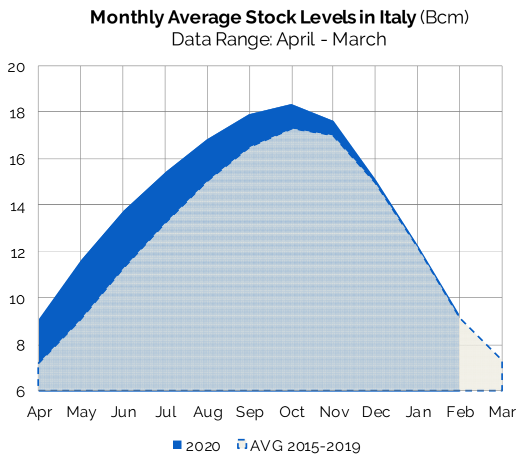
European gas demand fell by roughly 5% in 2020 compared to 2019, settling around 470 Bcm. Based on *Entso-e* data and economic recovery assumptions, gas consumption in Europe grows by nearly 3% in 2021, recovering approximately 60% of the loss recorded in 2020 and exceeding 480 Bcm. Germany and France gas consumption increases to bridge the gap left by the progressive phasing out of nuclear and coal power production, while The Netherlands see a slight downward trend supported by a rapid and ambitious energy and climate policy.

2020 Italian gas demand was 71 Bcm (-4.2% compared to 2019), with the pandemic effects having weighed mainly in the first half of the year. Overall gas consumption will gain +3% in 2021 (reaching 72 Bcm) and +0.5% in 2022 (*Macroeconomic and Energy Demand Outlook Feb21*).

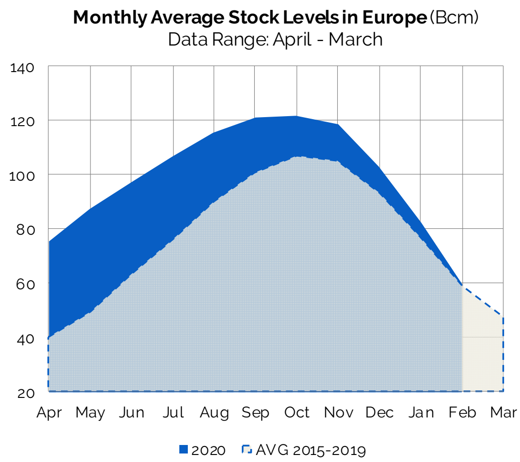
Storage Levels Are Back to Normal

Both the European and Italian stocks were quickly withdrawn between Oct-20 and Feb-21, Last injection season ended with storage levels significantly higher than normal, with the low summer demand and prices having favored their build-up. Last winter strong demand and high prices brought the stocks level back to normal though, neutralising their impact on the short-term outlook for prices.

Storage-value wise, the PSV time spread, now at 1.3 €/MWh (Q4 trades at 18.1 €/MWh and Q3 at 16.8 €/MWh) favours buying capacity at the next 2021-2022 Italian auctions.



Source: Reuters data

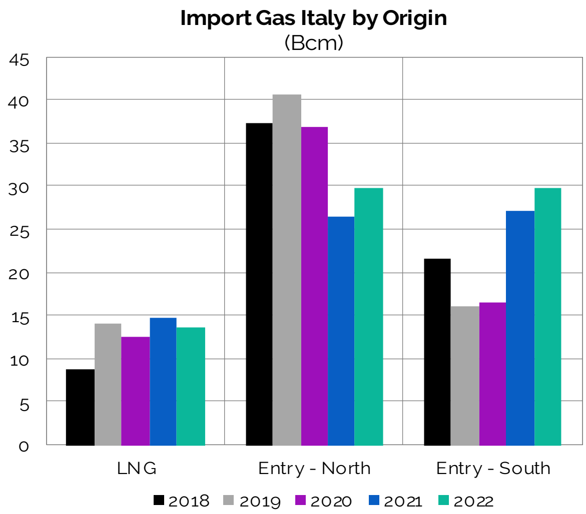


Source: Reuters data

Italian Imports: Mix Variations and Spread

In 2020, the overall Italian natural gas imports decreased by 7% coherently with the decline in demand, with all-time high storages supportive. The import mix saw a reduction in all suppliers' market share, except for Algeria, whose exports to Italy increased by 16% compared to those of 2019.

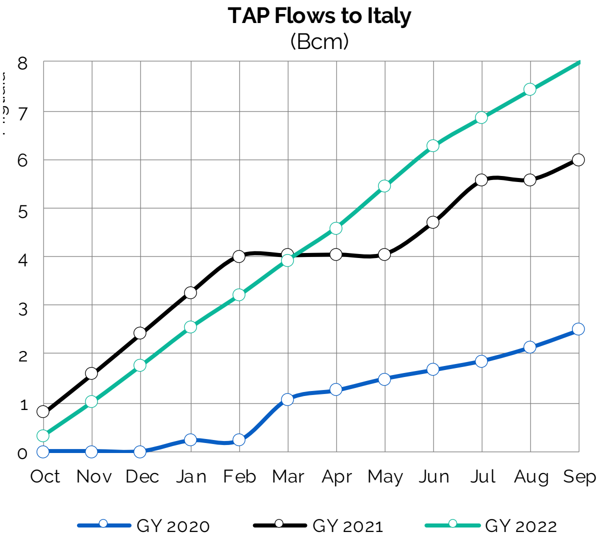
Arrivals from the northern area are supported by the predominance of Russian flows though (compensating for the scarce Norwegian flows entering Passo Gries) and will continue to represent the main supply for Italy with almost 40% of market share between 2021 and 2022 and natural gas sales just below 30 Bcm over the same period.



Source: REF-E Elaborations

Gas flows from North Africa should increase too in 2021, to then leave more space for the Azerbaijani ones.

In our *Reference* scenario, flows arriving from Azerbaijan via *Trans Adriatic Pipeline* (TAP) will take advantage along with substantially stable LNG arrivals (around 13 Bcm between 2021 and 2022). The change in the import mix with the progressive increase of arrivals from the southern area to Italy **confirm our hypothesis of a gradual closure of the PSV-TTF spread**, which **could average around 0.5 €/MWh by 2022**.



Source: REF-E Elaborations

TAP flows to Italy are so far in line with our estimates, with an average of 10 Mcm/day. In our *Reference* scenario, the TAP gradually reaches full capacity. 2021 flows are at 2.5 Bcm, which should become 6 Bcm in 2022 and 8 Bcm of fully operational capacity between 2022 and 2023, as shown in the chart, where cumulated flows per month in the next gas-years are shown.

Meanwhile, **the timeline for completing the controversial Nord Stream 2 pipeline remains uncertain.** The Trump administration radically expanded the set of companies involved in the project that are exposed to American sanctions, including insurers, certifiers and any entity supporting "pipe-laying activities". Joe Biden opposes the pipeline too, but he also willing to rebiuld diplomatic and commercial relations, which may force him in finding a compromise. An automatic mechanism sanctioning Gazprom linked to gas flowing across Ukraine is a possibility. However, given the high diplomatic uncertainty, 150 km of Nord Stream 2 to be laid in Danish and German waters and the following certification process may still take a long time. In this perspective, Nord Strem 2 is not taken as an input in modelling the European flows for now

DIRETTORE RESPONSABILE
Virginia Canazza

DIRETTORE OSSERVATORIO ENERGIA
Claudia Checchi

COORDINAMENTO
Simona Soci

GRUPPO DI LAVORO
Silvia Checola, Giacomo Ciapponi, Paolo Ciliento, Federico Clementi, Antonio De Paola, Elena Ferri, Tommaso Franci, Ana Georgieva, Valeria Ghirardi, Paolo Marino, Marco Pellegrino, Giorgio Perico, Alejandro Sanchez Ben, Ralph Sassun

EDITORE
REF-E srl
Via Gioberti 5 - 20123 Milano
www.ref-e.com - info@ref-e.com

PRESIDENTE
Pia Saraceno

SEGRETERIA, EDITING E GRAFICI
Dalia Imperatori
Tel. +39 02 43441022- Fax +39 02 43441027
E-mail: dalia.imperatori@ref-e.com

SOTTOSCRITTORI
A2A Spa, Acea Energia SpA, Acegas Aps Amga, AET Azienda Elettrica Ticinese, Axpo Italia SpA, CSEA Cassa per i Servizi Energetici e Ambientali, CVA Trading Srl, Dolomiti Energia SpA, E.ON Italia SpA, Edison SpA, Engie Italia, EP Produzione SpA, Erg Power Generation, Hera Trading Srl, Innogy Italia SpA, Iren SpA, Repower Italia SpA, Shell Energy Europe, Sorgenia SpA, Siram SpA, Tenaris Dalmine, Terna SpA, Tirreno Power SpA

REF-E SRL
Via Vincenzo Gioberti 5 – 20123 Milano
info@ref-e.com – www.ref-e.com