# Gas and power market analysis

October 2020

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# Market Summary

Gas prices have recovered with the Oct-20 NBP contract averaging € 11.4/MWh in September trading.

Demand has continued to recover slowly from the lows seen in the first waves of COVID-19 in 2Q, but a series of outages and shut-ins have decreased global LNG supply, supporting a rebound in gas prices in 3Q:

**LNG production outages:** In the US, hurricane season has disrupted production at liquefaction facilities. Elsewhere in the world, there have been other large unplanned LNG supply outages.

**High storage levels in Europe:** European storage levels are approaching capacity at the end of 3Q. Storage stocks in Ukraine also reached historically high levels, up 27% YoY at the end of September.

**European pipeline flows recover:** Total European pipeline flows have increased through 3Q20 and were above 2019 levels in September on a lighter Norwegian maintenance schedule.

**The EU has been taking steps to further reduce GHG emissions:** The European Parliament has voted to back a target of 60% GHG emission reduction vs 1990 by 2030. This is stronger than the previous target, which was set at a 40% reduction.

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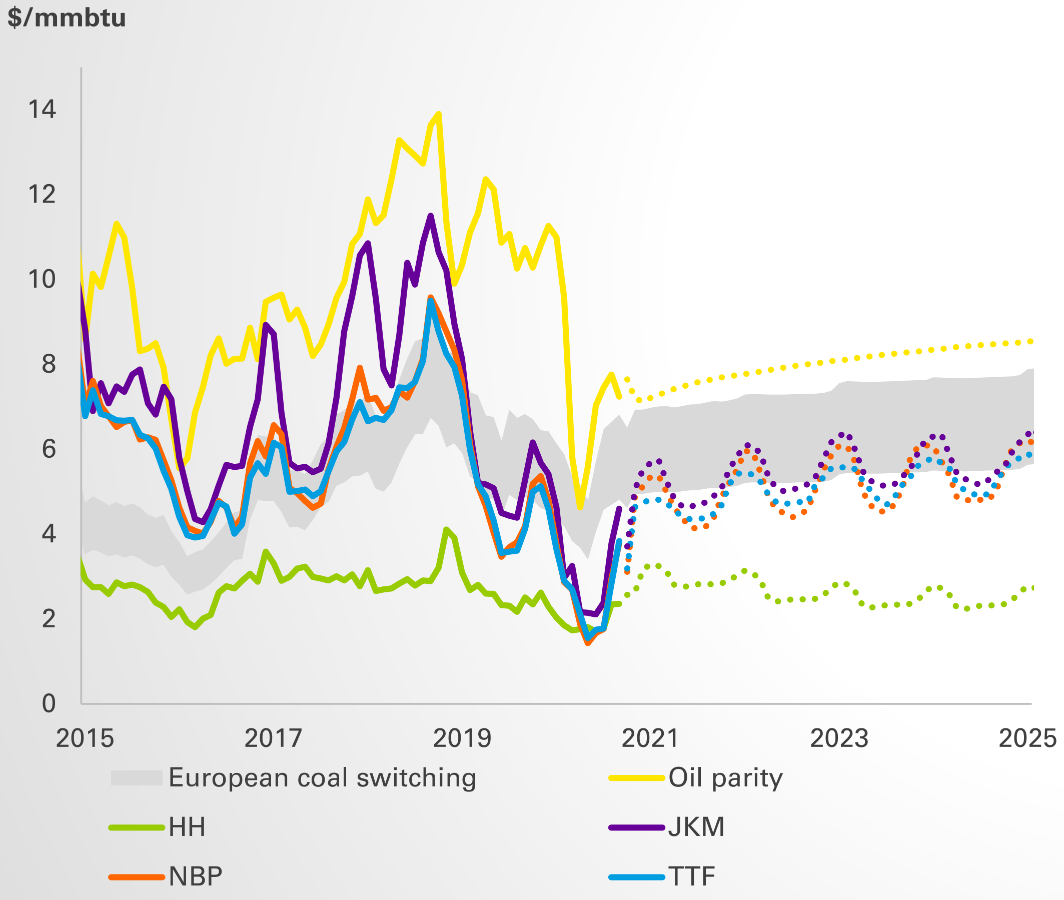
Source: BP Analysis

# Gas prices rebound as we enter winter season

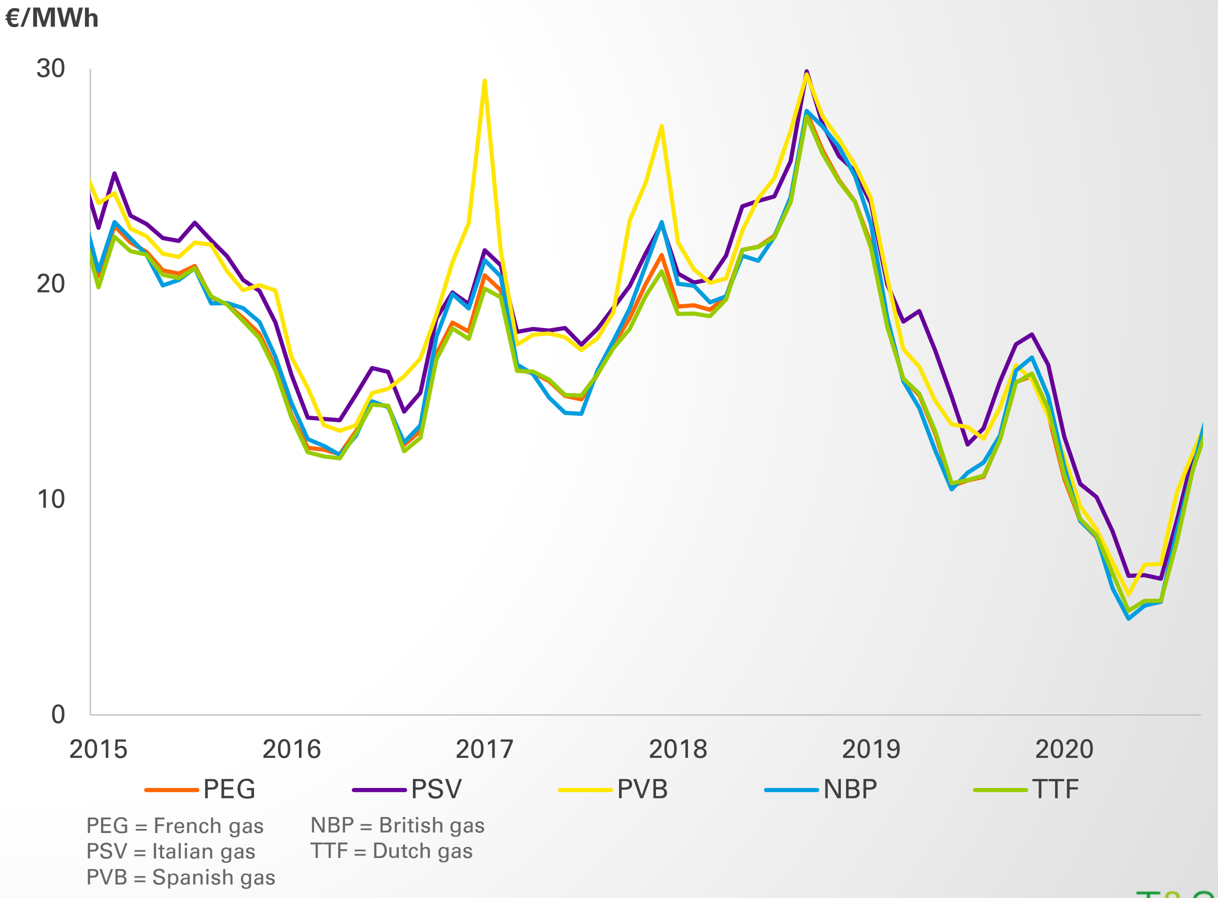
- Prices have rebounded, with the Oct-20 NBP contract averaging €11.4/MWh in Sep-20, in contrast to the historic lows seen in 2Q20 when the Jun-20 contract averaged €4.5/MWh in May-20. The increase stems from recovering demand from less stringent COVID-19 control measures, a seasonal ramp up in heating demand, as well as lower supply from numerous LNG plant shut-ins.
- However, prices remain lower YoY. TTF averaged **€8.14/MWh** in 3Q20, down **25%** compared to 3Q19.

## Global gas benchmarks




Futures as of 21/07/2020

## European gas benchmarks




Source: NYMEX, ICE, Heren, S&P Global Platts ®

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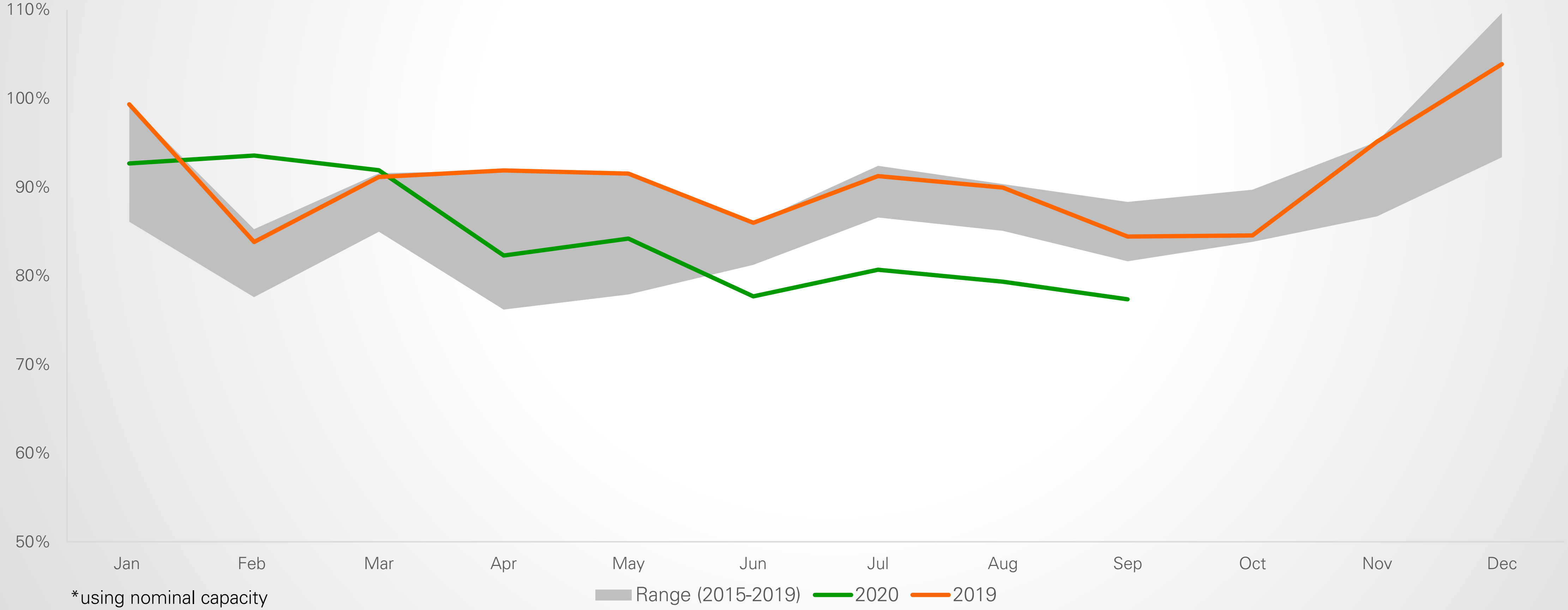
# Unplanned outages curtail LNG supply, reducing cargo availability and European sendouts

- 3Q20 has seen a particularly active hurricane season in the US, causing LNG shut-ins, particularly at the Cameron facility which was hit by Hurricane Laura in August. This comes on top of reported economic shut-ins this summer.
- A fire at the Snohvit facility in Norway, as well as an outage at Gorgon in Australia have also lowered global LNG exports in 3Q20.

## Global LNG production capacity utilisation*




*using nominal capacity

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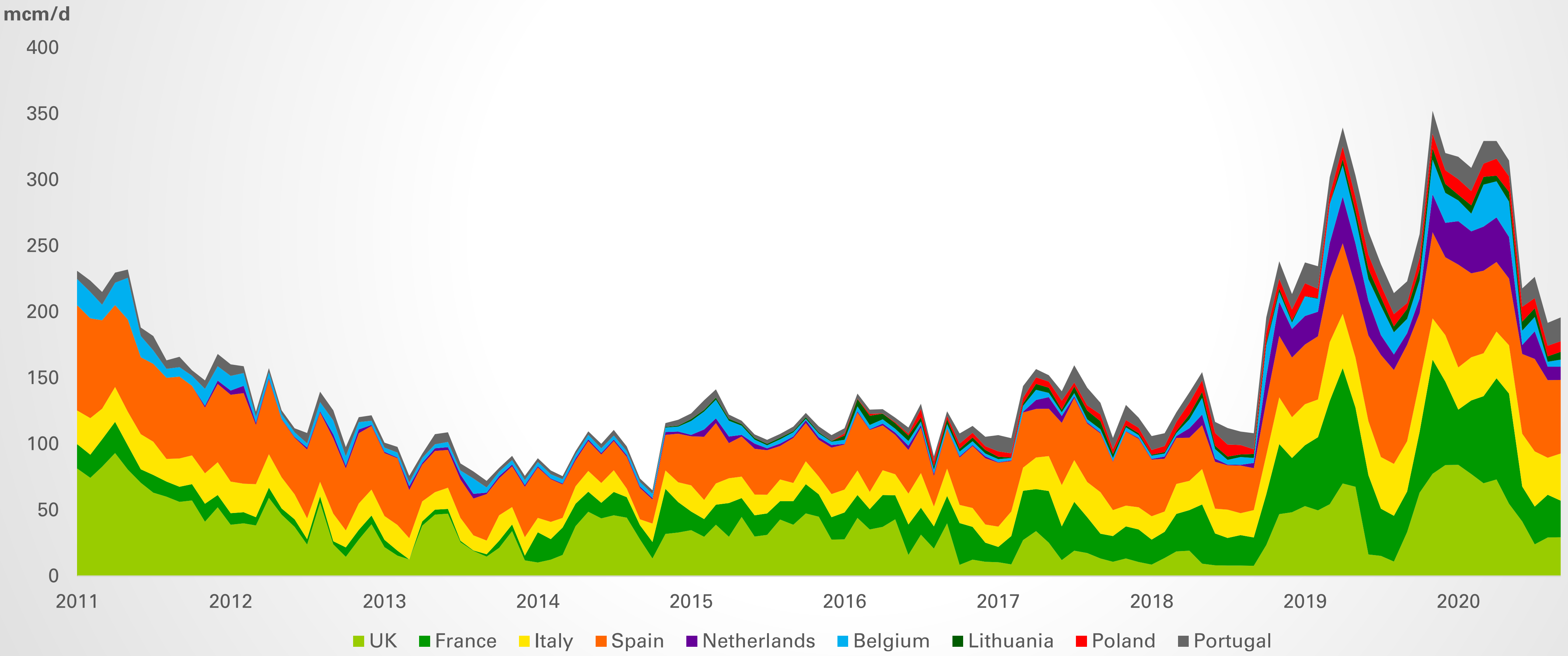
Source: Woodmac LNG Tool 3Q20, bp analysis

# LNG sendouts fall easing pressure on the European over supply situation

- LNG sendouts have continued to fall in 3Q20 with lower global LNG production reducing cargo arrivals.
- In both Aug-20 and Sep-20, monthly European LNG sendouts fell **below 200mcm/d**, the lowest monthly level seen since 2018.

## Monthly European LNG sendouts

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*N.B. data does not incorporate all regasification facilities in Europe, but rather can be used as a proxy for LNG send-outs*

Source: Official TSO Statistics

# Carbon prices remain strong, supporting gas in power generation

- EUA prices peaked at €30.78/tonne of $CO_2$ in September, the highest level since July's peak of €30.8/t. The 3Q20 average was €27/t, a significant increase over the 2Q20 average of € 21.2/t.
- In September the European Commission announced plans to propose a cut of at least 55% GHG emissions by 2030 driving a spike in carbon prices. Since then, the EU Parliament has passed an even higher target of 60% GHG emission reduction by 2030 (compared to 1990).

## EUA carbon futures

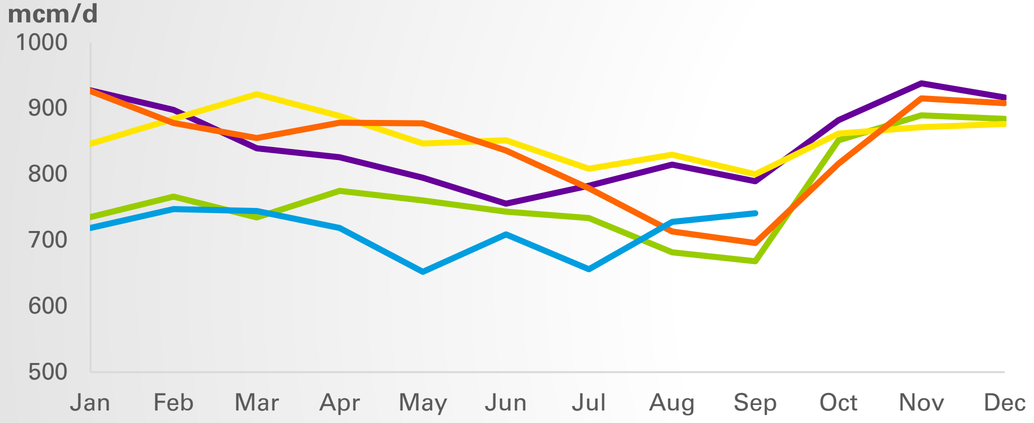

Source: ICE

# European pipeline flows started to recover in 3Q20

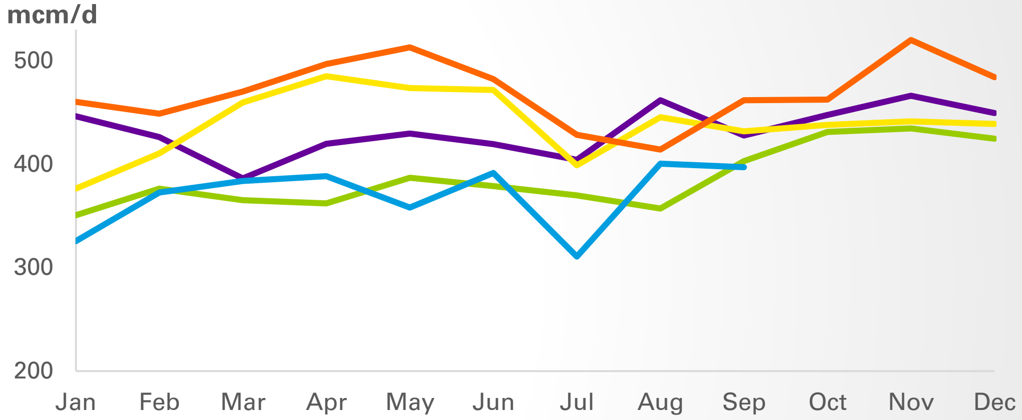
- Total European flows in 2Q20 were on average 170mcm/d lower than flows in 2Q19. However, 3Q20 has on average roughly been flat YoY due to lighter Norwegian maintenance in 3Q20.
- Algerian flows have steadily recovered in 3Q20.

## Europe pipeline imports

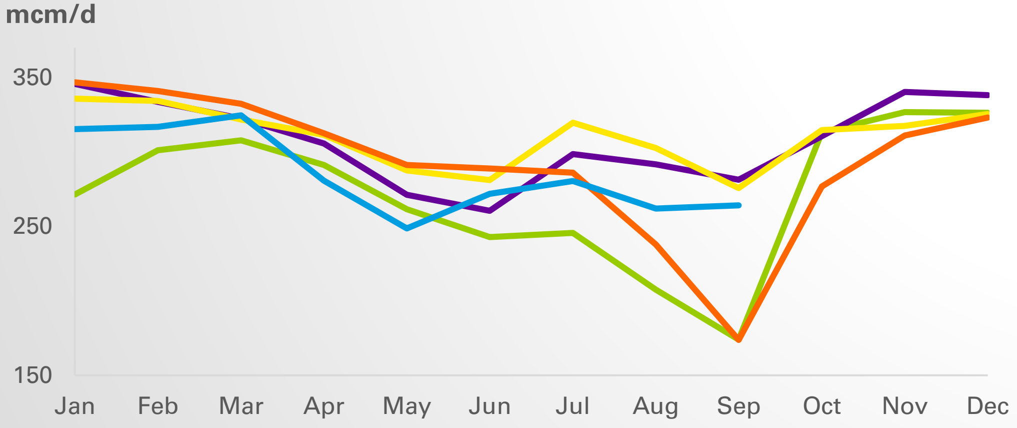
### Total



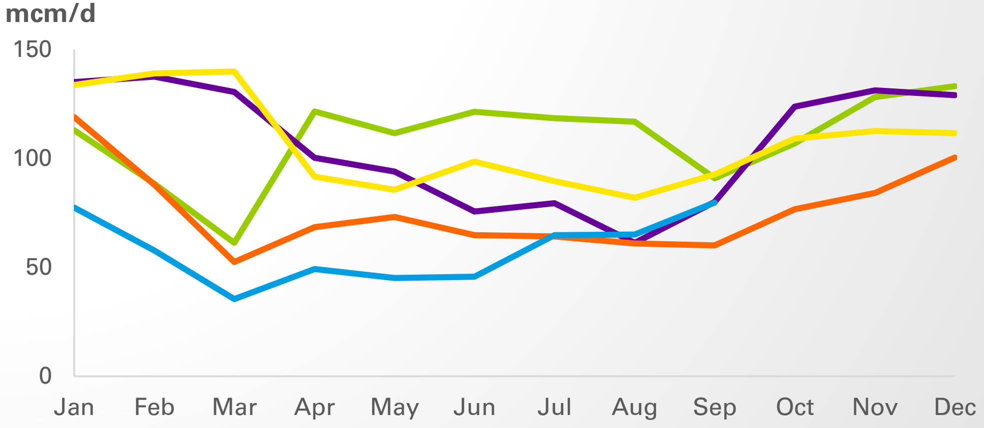

### Russia




### Norway




### Algeria




2016 2017 2018 2019 2020

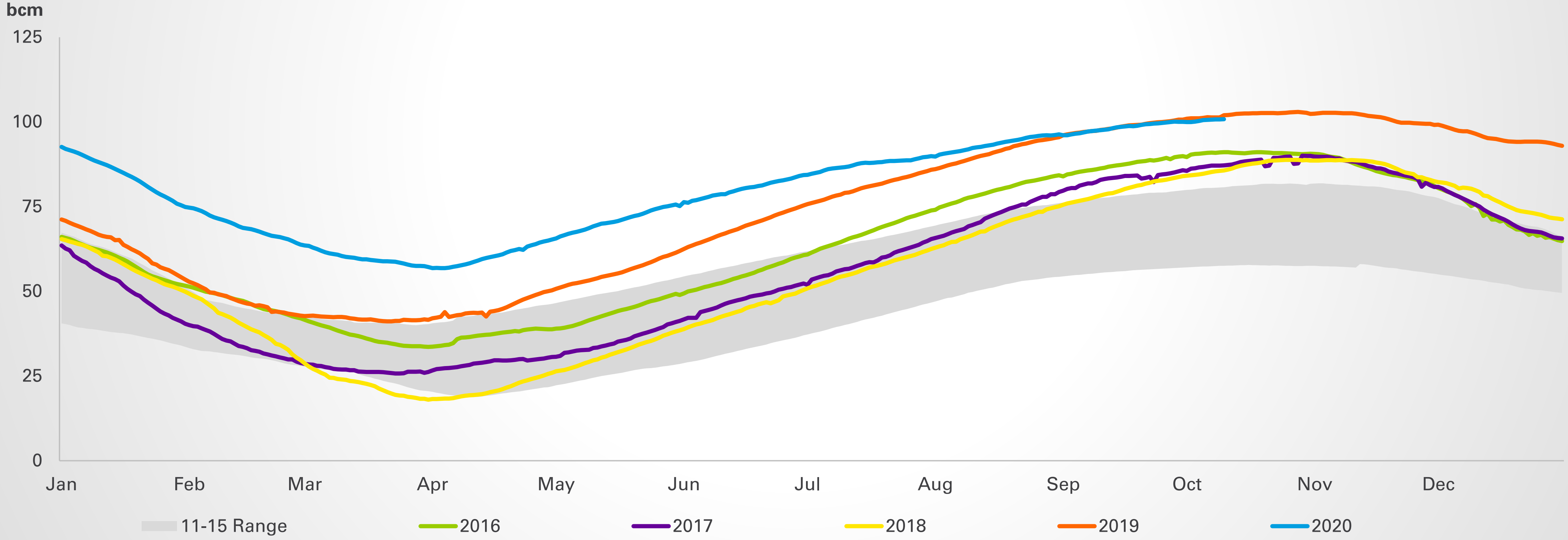
*Total flows are from Russia, Norway, Algeria & Libya; Russia flows are to Central and Western Europe only*

Source: Official TSO Statistics

# Following a record year of high inventories, injections ease as stocks approach capacity

- Robust imports over 1H20 combined with a very mild winter and pandemic linked demand destruction, have contributed to high levels of European storage stocks throughout the year.
- EU storage levels are at approximately 95% capacity. At **99.9 bcm** at the end of Sep-20, stock levels are roughly flat YoY.

## European GIE storage



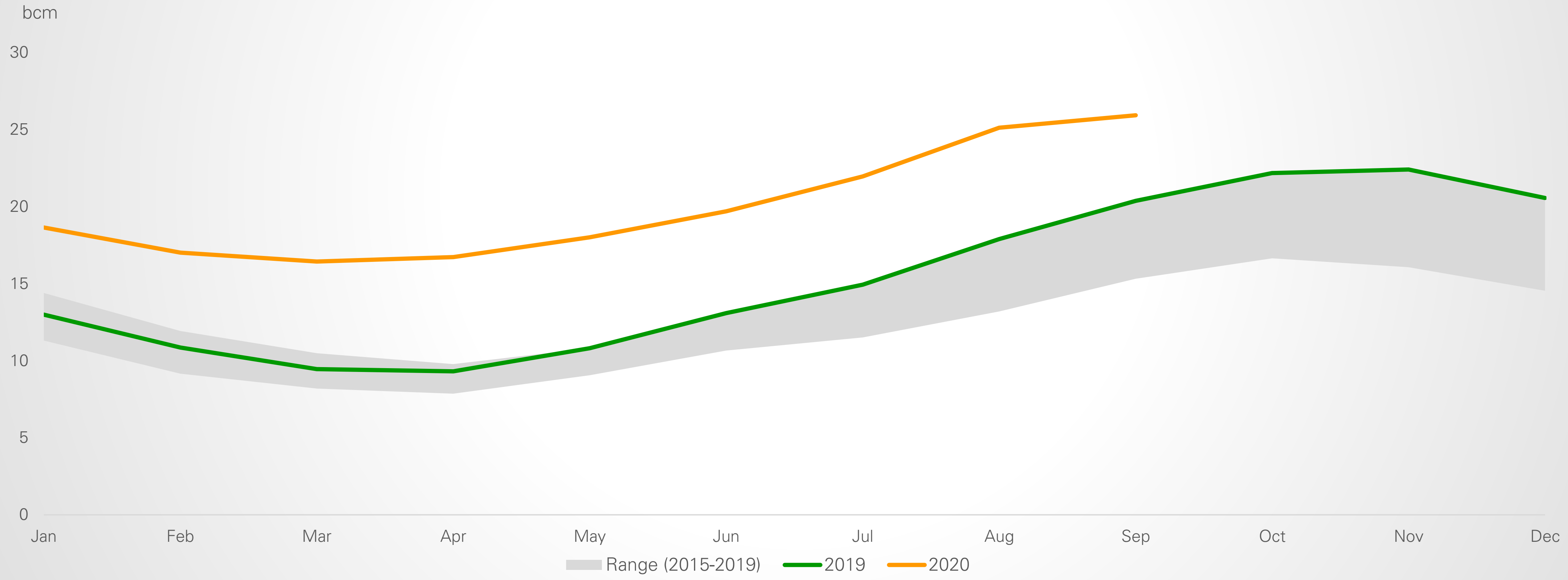

*N.B. data from GIE does not incorporate all storage facilities in each country, but rather can be used as a proxy for total storage*

Source: Gas Infrastructure Europe

# Ukraine storage helps to absorb the summer supply surplus

- The well supplied gas market, along with favourable forward curve prices, has incentivised additional use of Ukraine storage.
- Injections this summer have been supported by strong pipeline imports at Ukraine's western border points.

## Ukraine storage

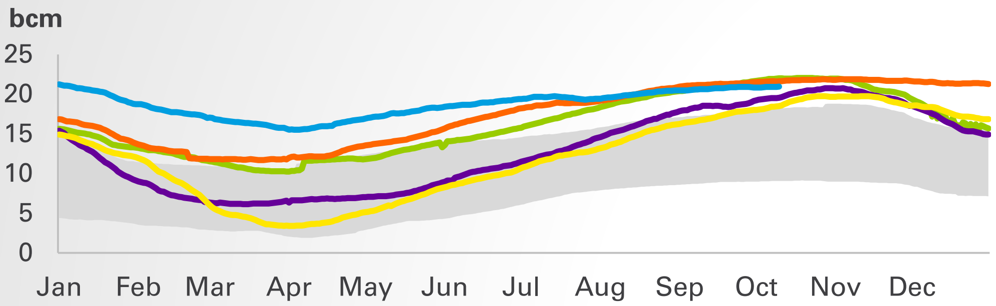



Source: GIE

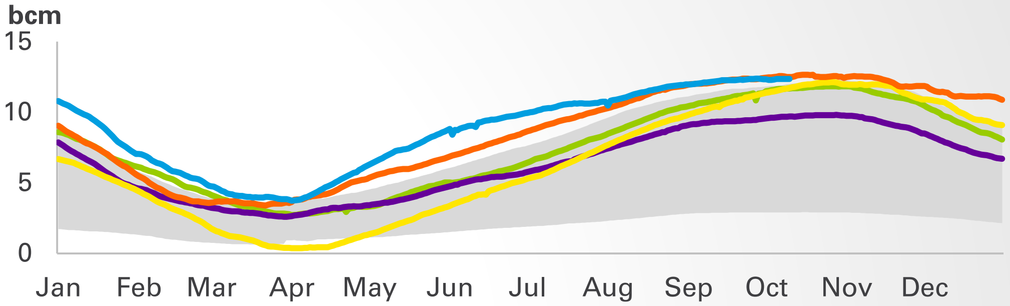
# Storage levels remain high across most major European sites

France, Italy and Spain in particular have sustained high gas inventories.

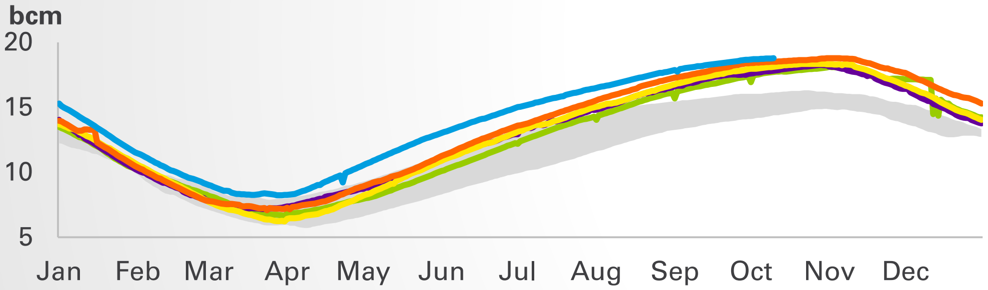
## Germany



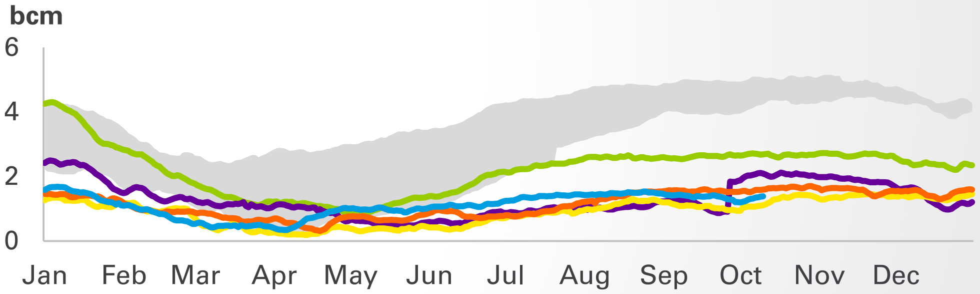

## France



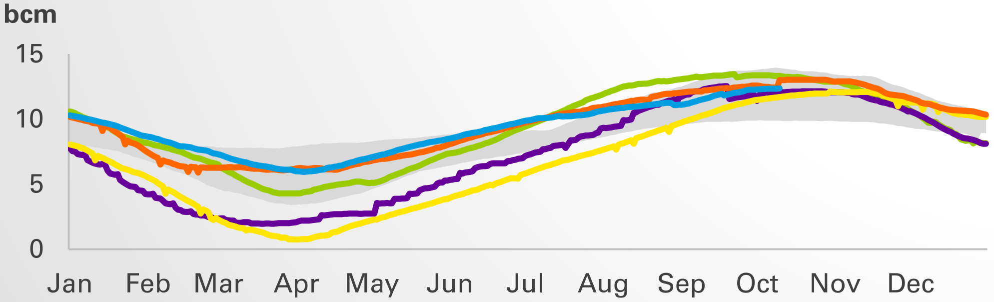

## Italy



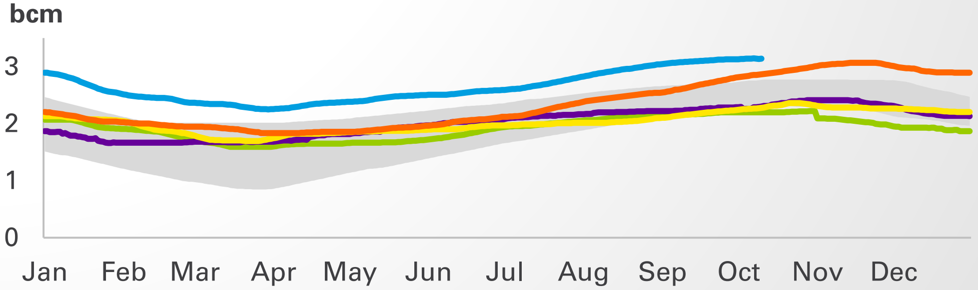

## UK




## Netherlands




## Spain




11-15 Range 2016 2017 2018 2019 2020

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*N.B. data from GIE does not incorporate all storage facilities in each country, but rather can be used as a proxy for total storage*

Source: Gas Infrastructure Europe

# Groningen's rise and fall

In response to earthquakes witnessed around the Groningen area, the Dutch Cabinet have been progressively lowering production levels at the Groningen field production facility. On 21st September the Dutch Minister of Energy announced gas extraction from the Groningen field would drop to a maximum of 8.1 bcm in the coming gas year, 1.2 bcm less than previously anticipated.

## Groningen gas production


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Source: NAM