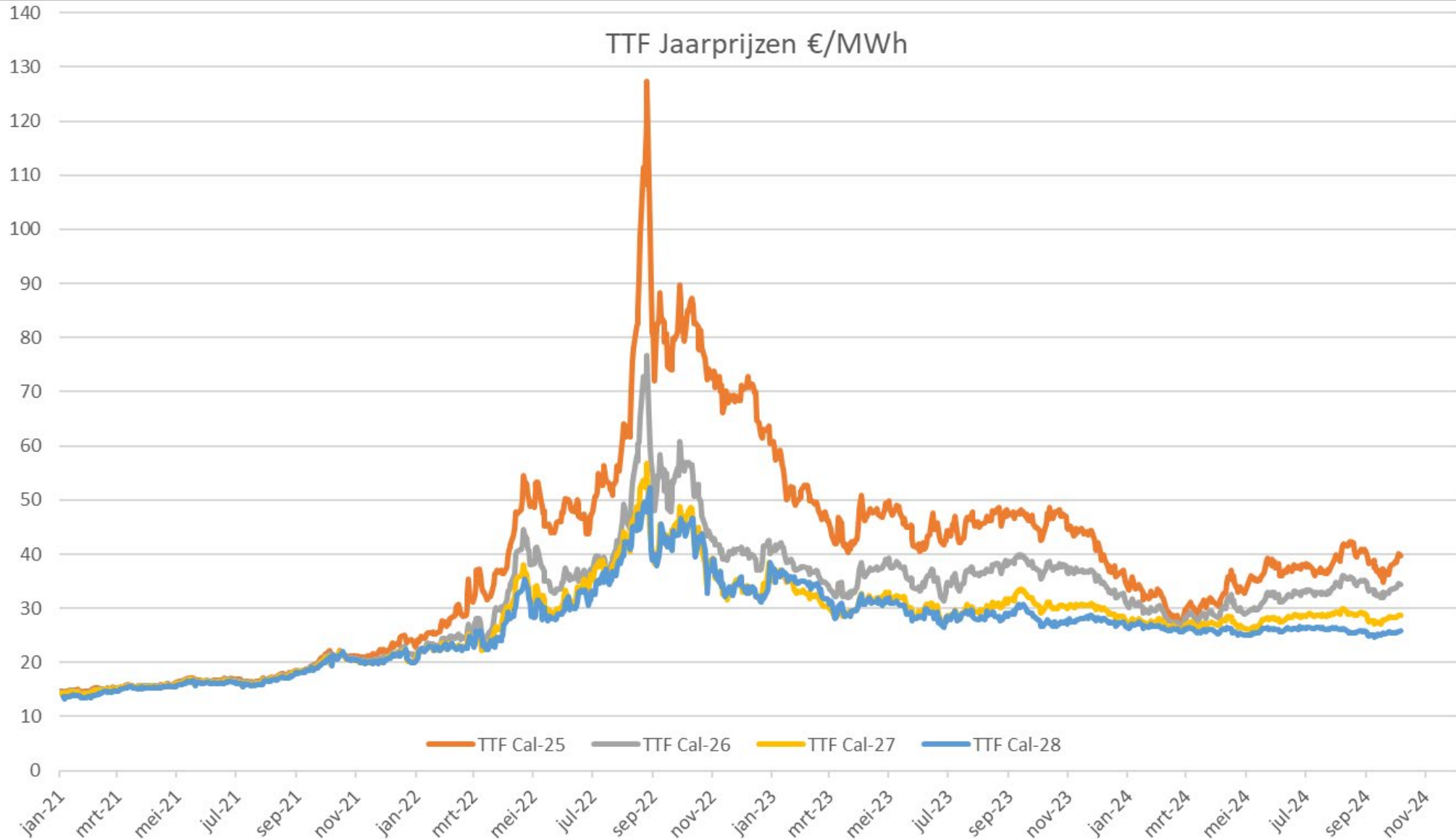


AARDGAS

Update gasmarkt

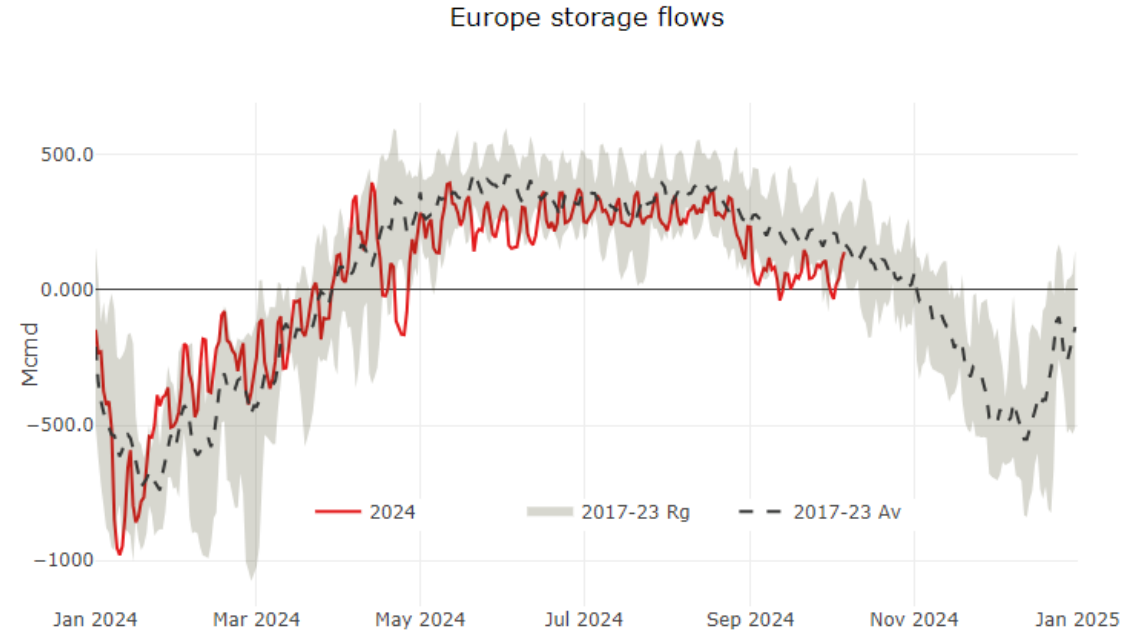
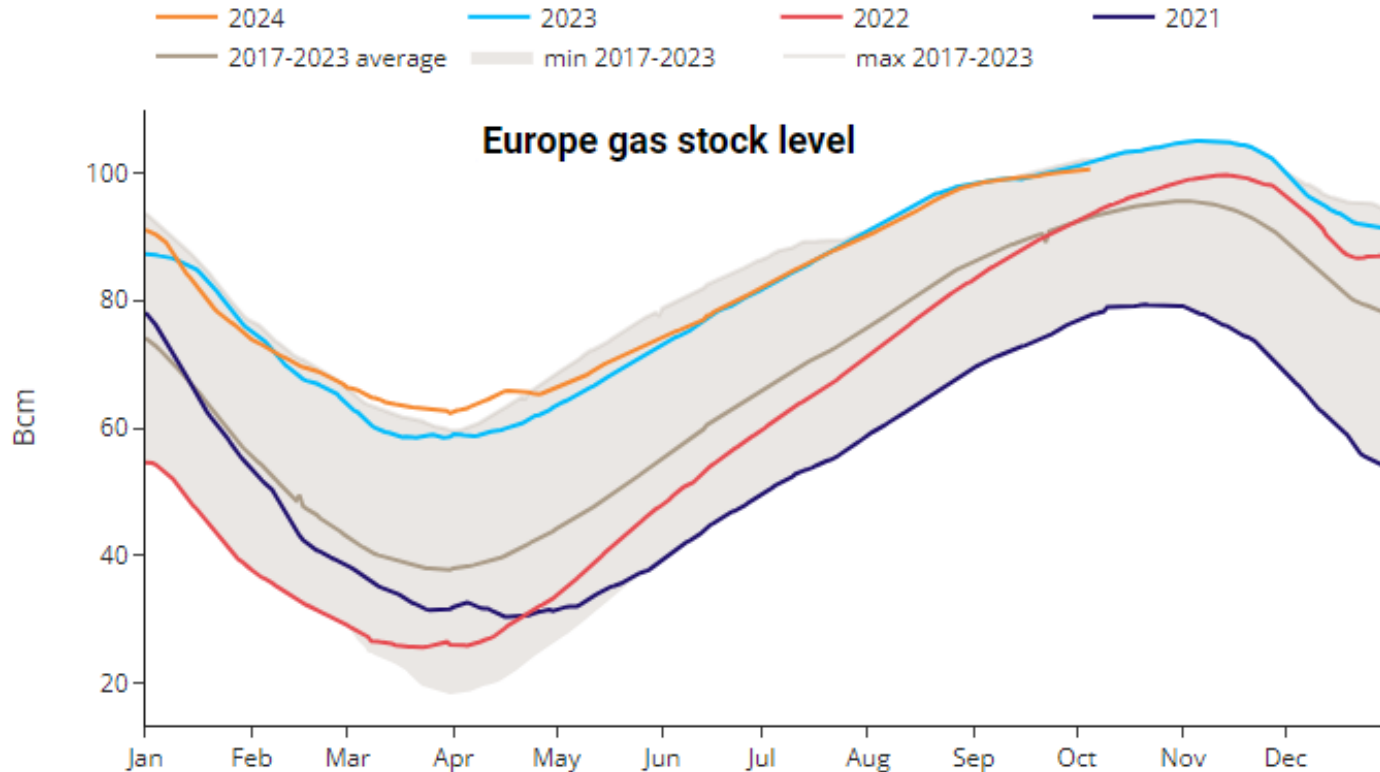


GAS PRICES BACK TO A NEW EQUILIBRIUM?



EU STOCKS FILLED TO THE BRIM.. AGAIN..

- EU gas stocks 95% full, filling was not a big challenge in 2024
- Surplus vs 2023 storage trajectory has vanished though

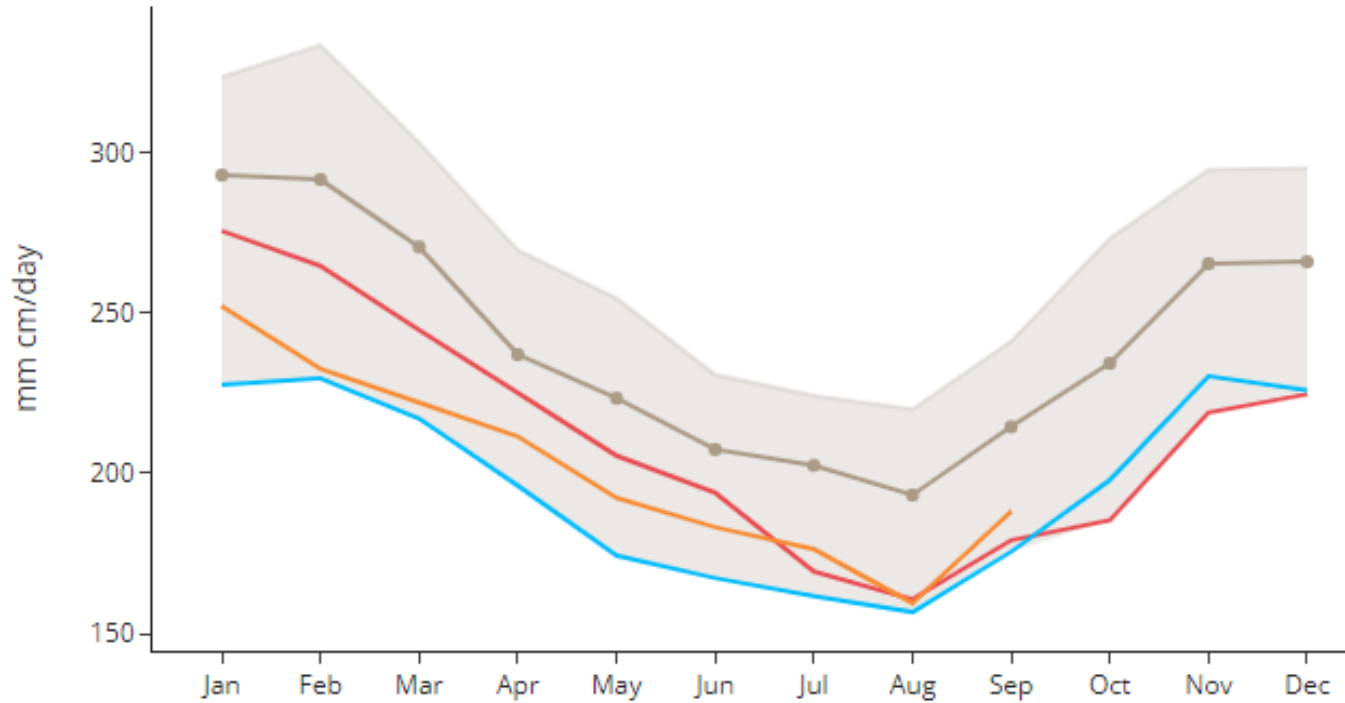


DEMAND REMAINS SUBDUED

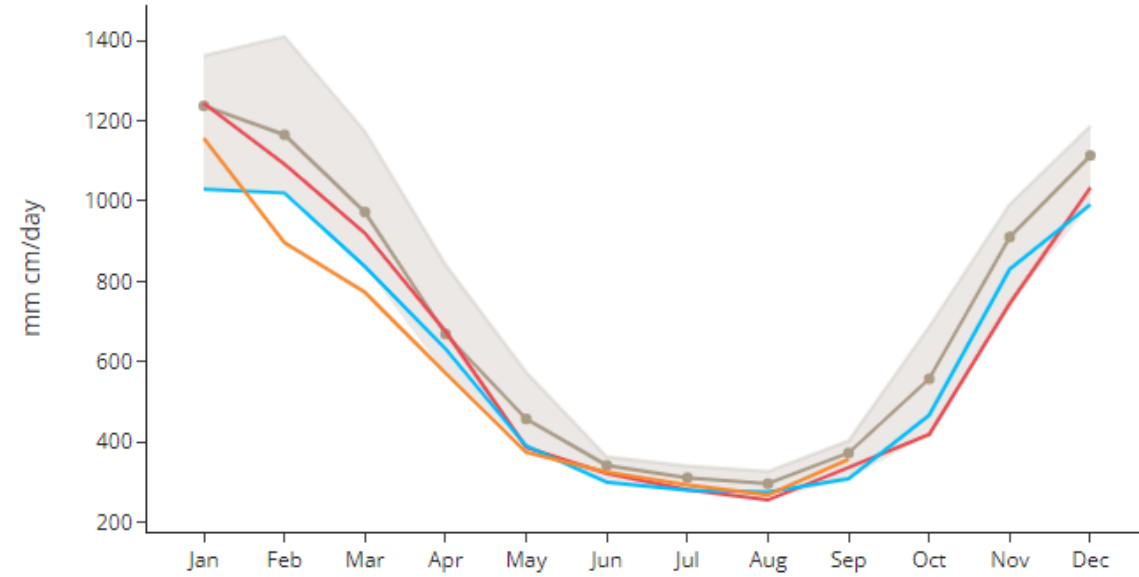
— Demand declined further in 2024 -3% (Jan-Aug)

- -1% LDZ
- +7% industry
- -16% Gas-to-Power

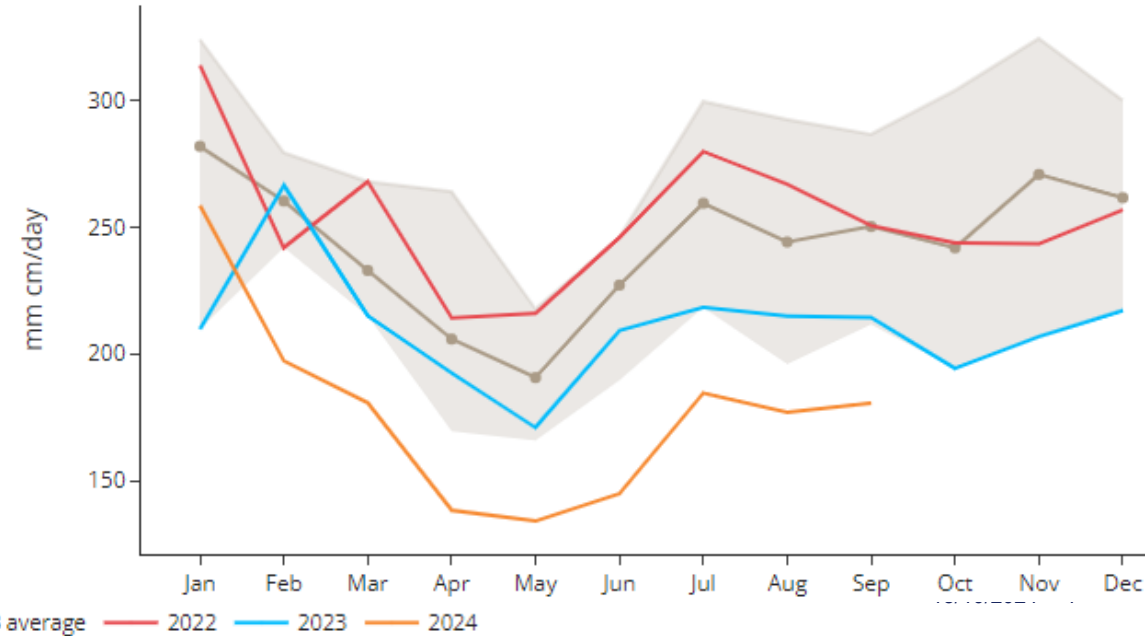
Europe monthly average industrial gas demand



Europe LDZ monthly average gas demand

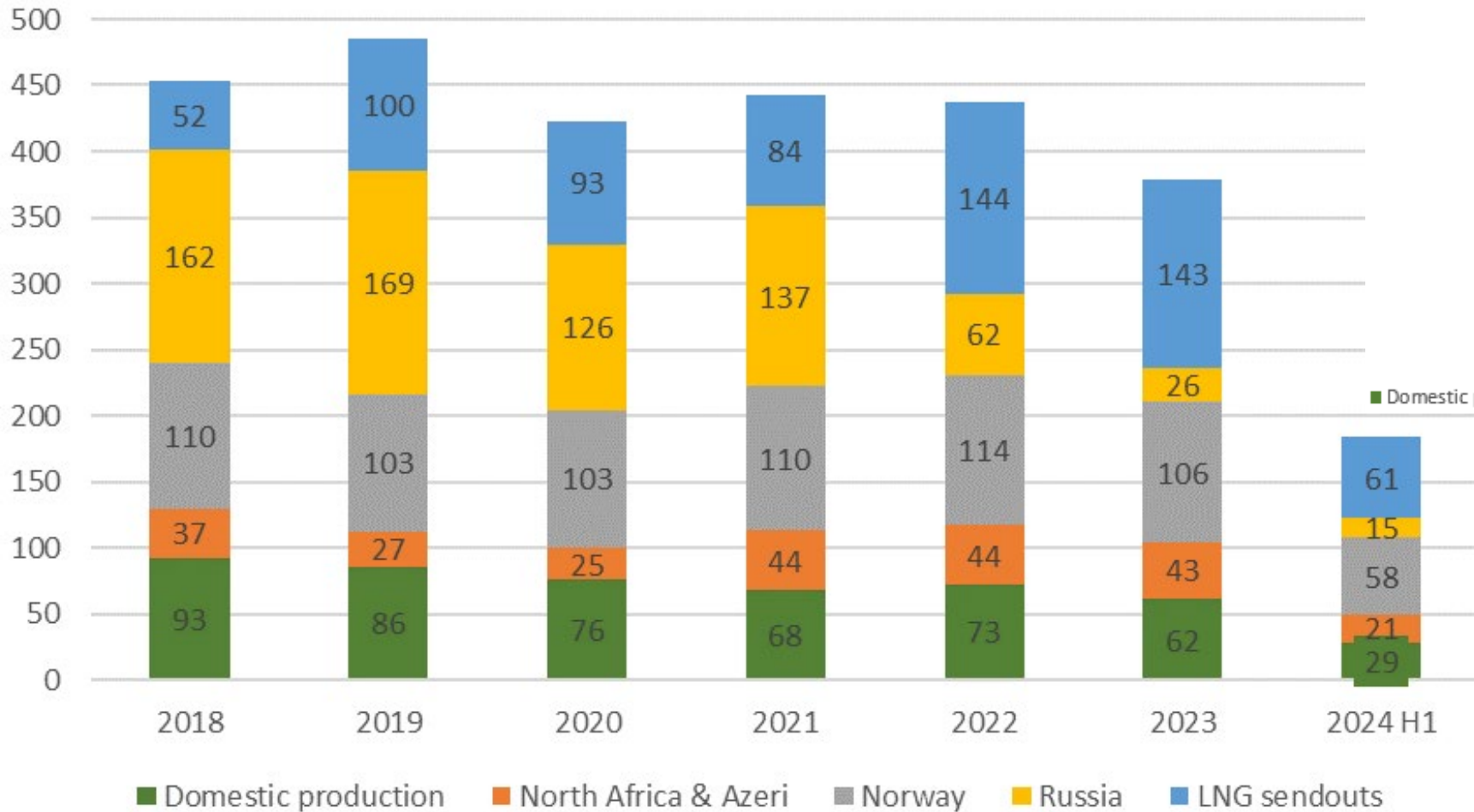


Europe monthly average gas-to-power demand

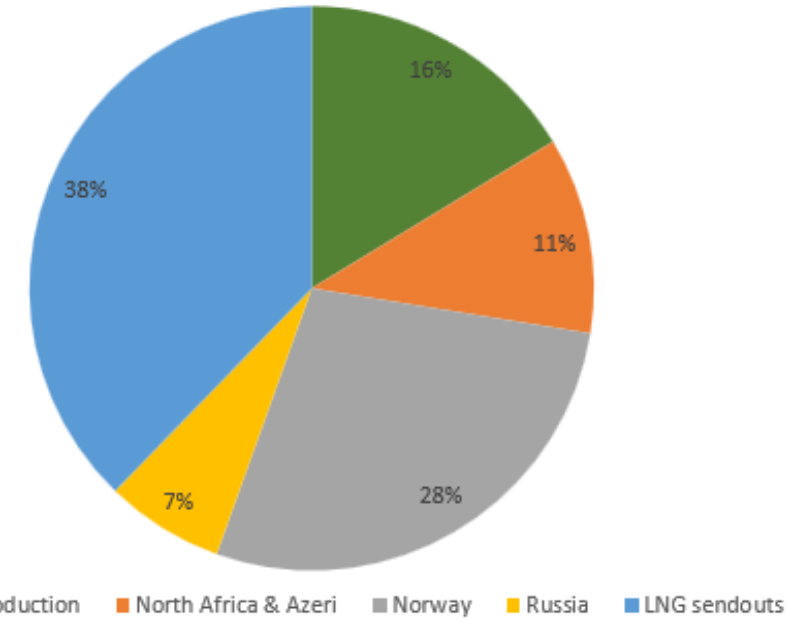


DEPENDENCE SHIFTED FROM RUSSIA TO LNG

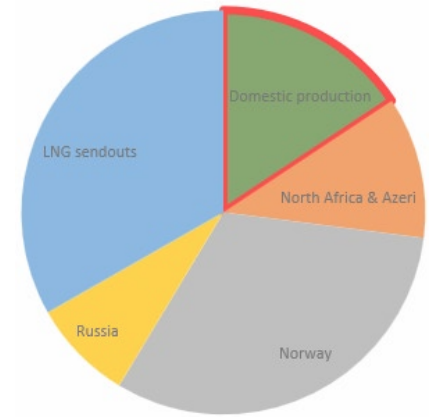
EU/UK Gas Mix - BCM



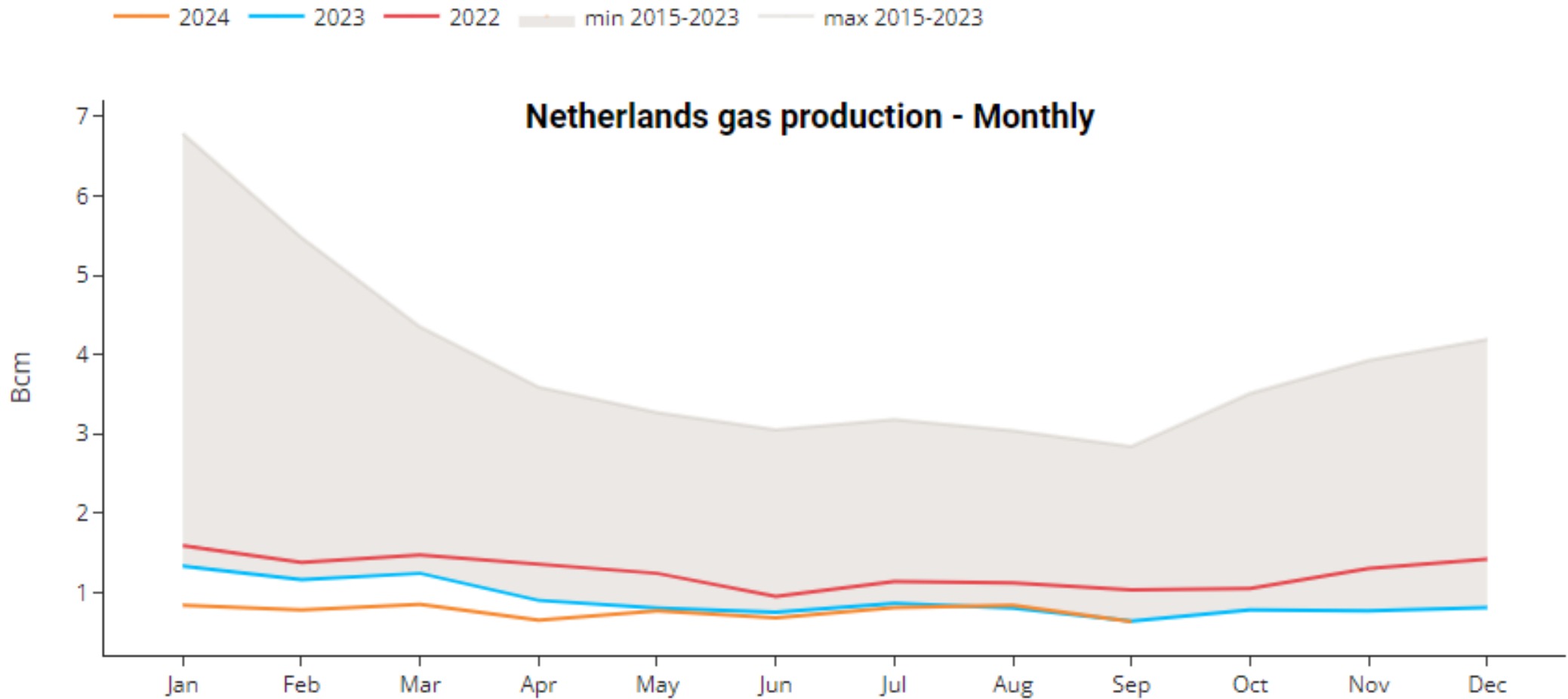
EU/UK Gas Mix 2023 - %



SUPPLY: DOMESTIC PRODUCTION IN DECLINE

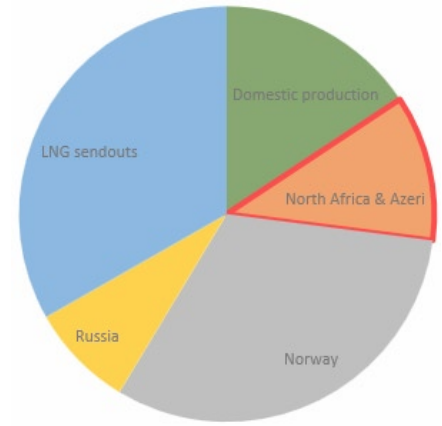


- Groningen field closure leaves NL/EU with less flexibility
- Prospects for revival of domestic NL/UK production remain bleak



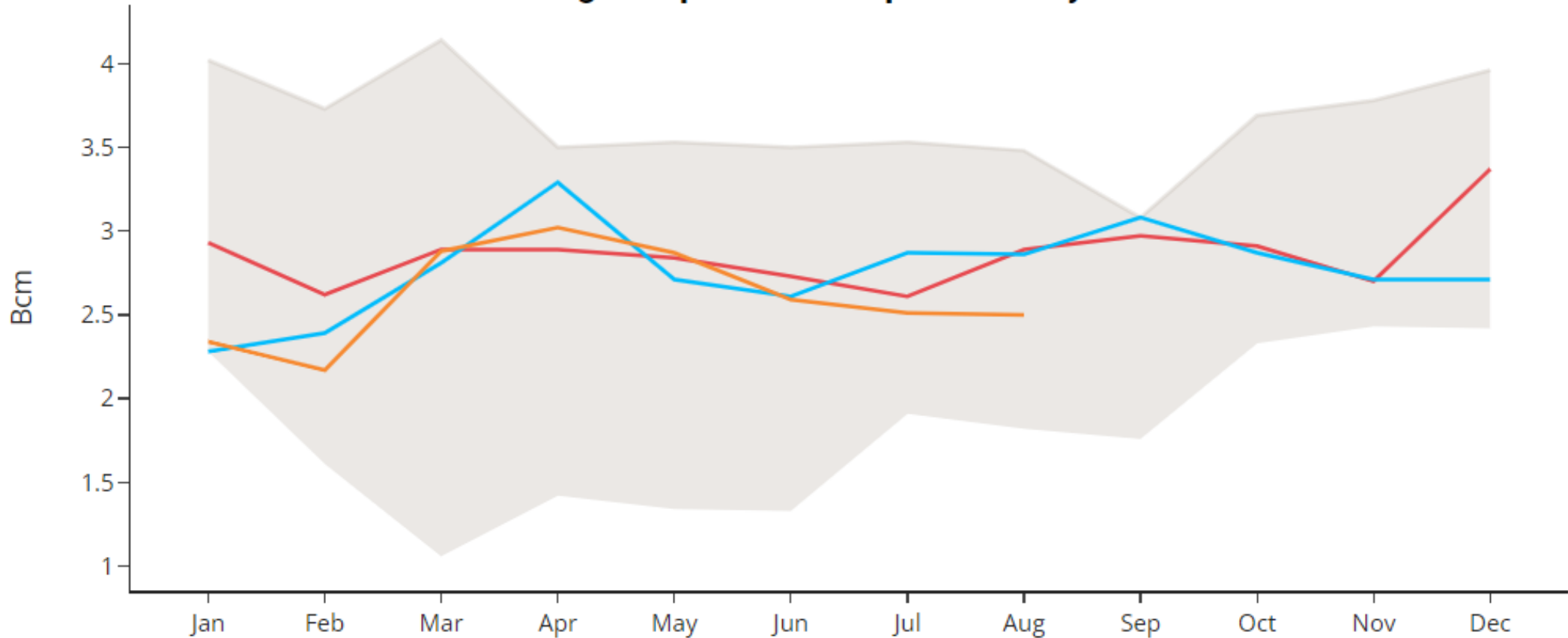
SUPPLY: NORTH AFRICA STABLE

— Relatively stable flows from Algeria & Libya



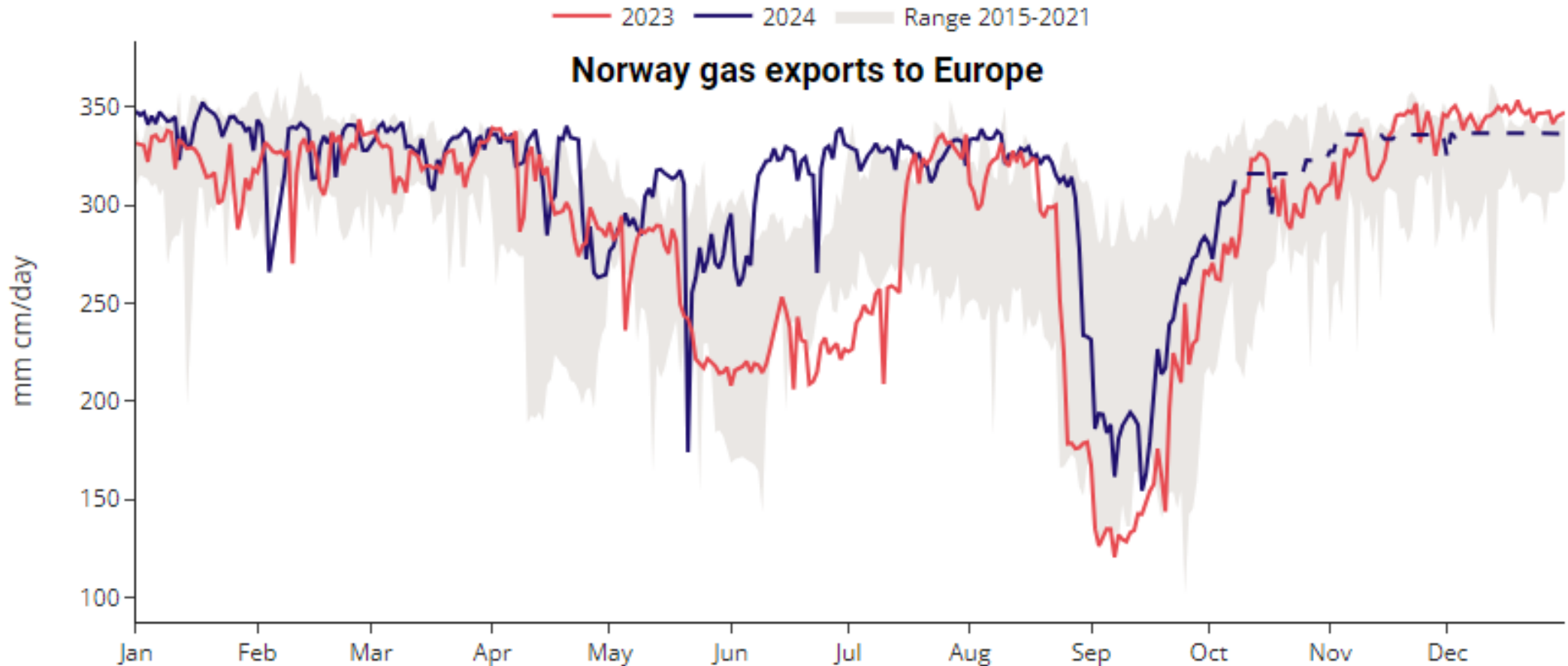
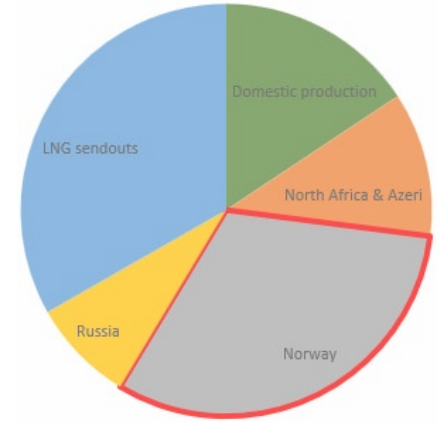
— 2024 — 2023 — 2022 — min 2015-2023 — max 2015-2023

North Africa gas exports to Europe - Monthly



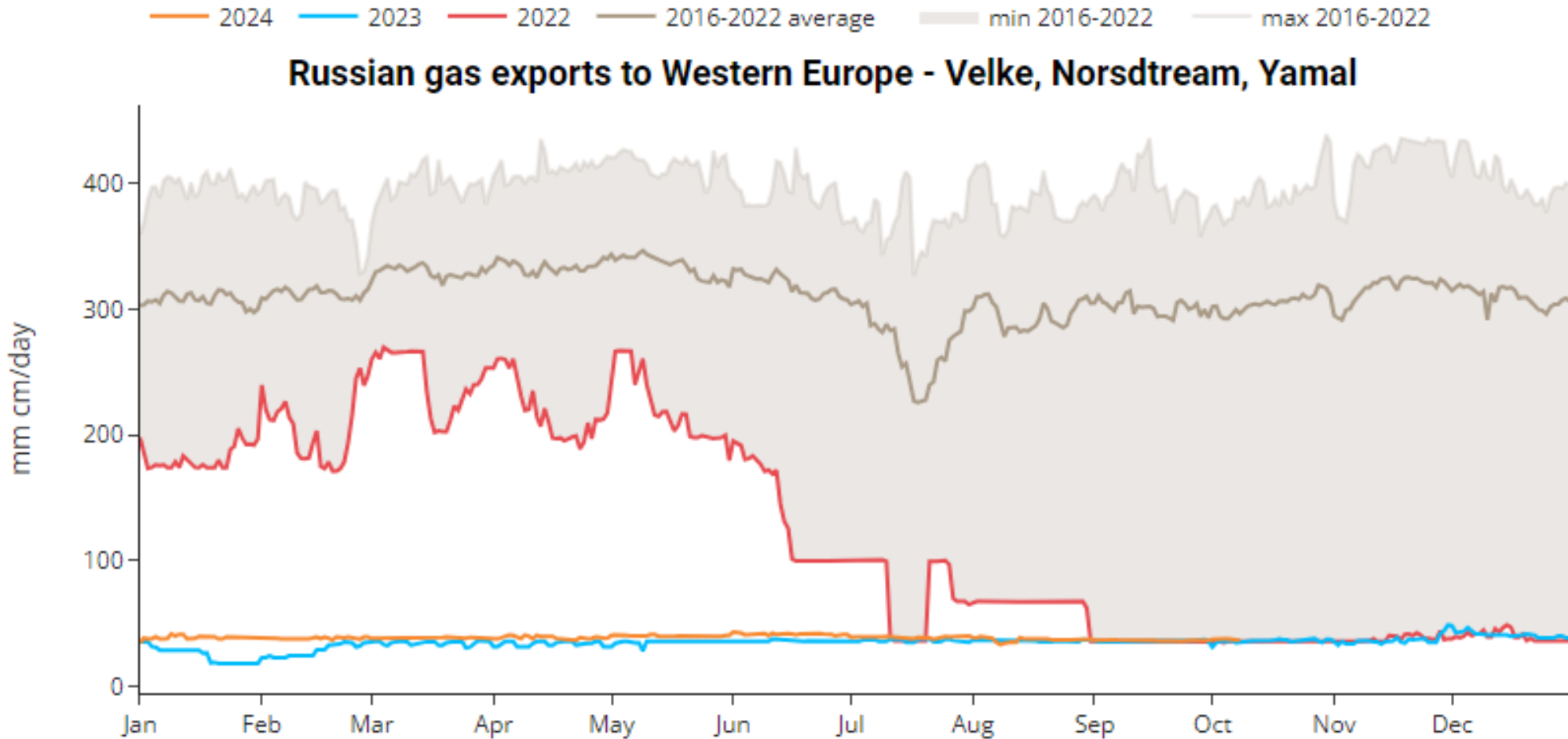
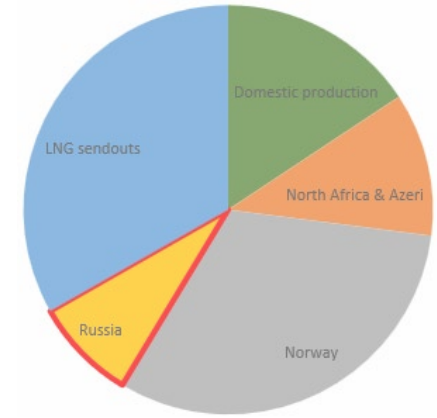
SUPPLY: NORWAY

- Norway exporting near maximum, on track for record exports
- Maintenance season nearing its end, delays have occurred but limited

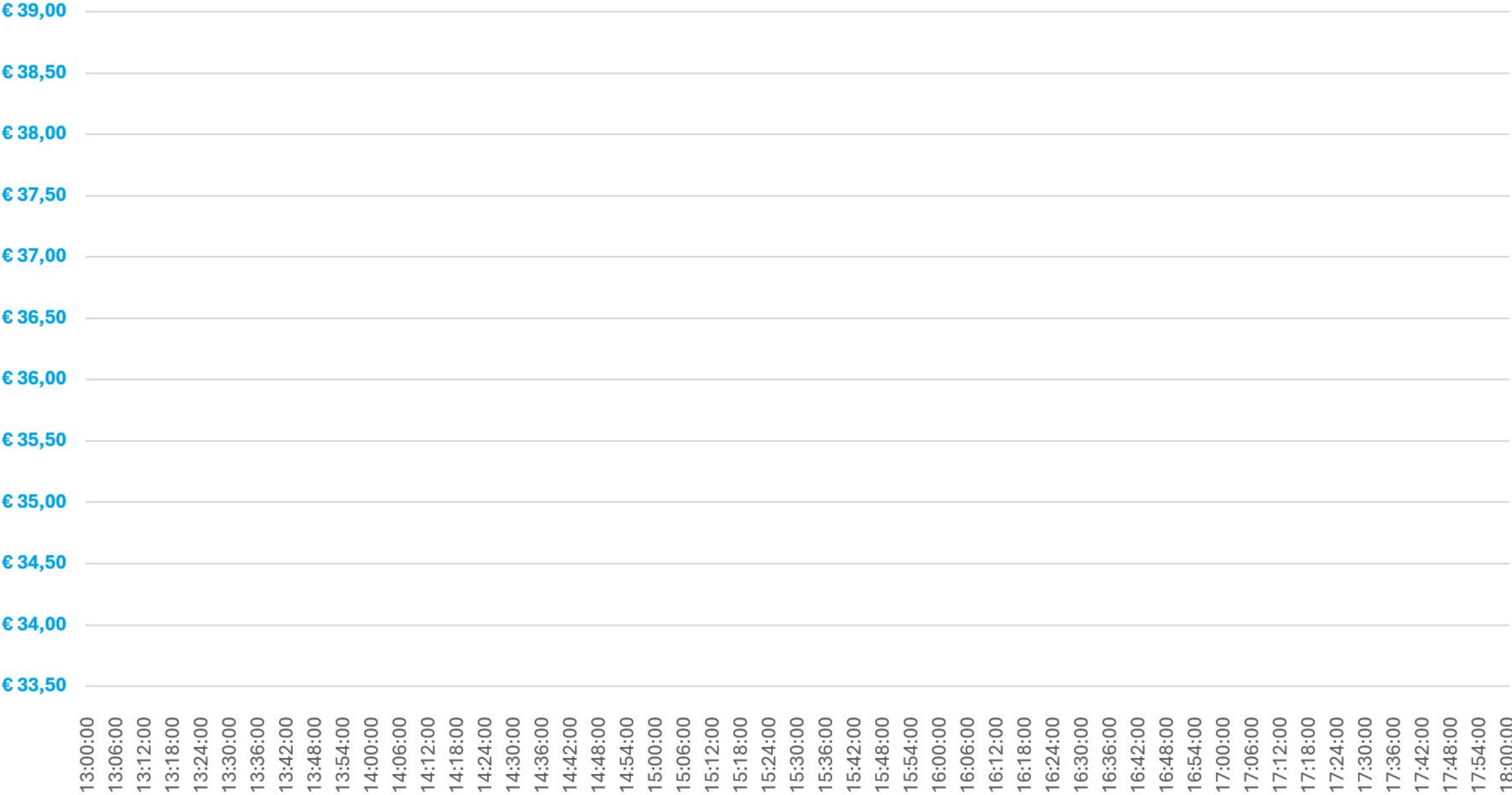


SUPPLY: RUSSIA PIPELINE

- Renewal of transit-agreement seems unlikely (14/15 BCM per year)
- Markets base case seemed to be an end of Ukraine transit flows. But some doubts remain...

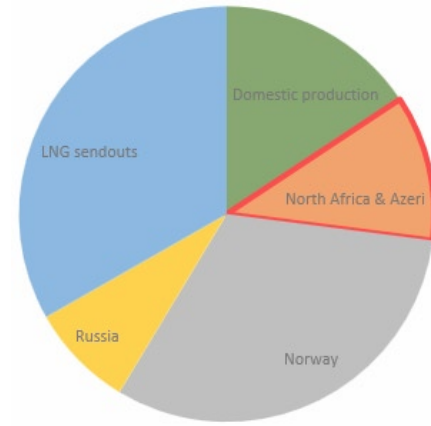


TTF CAL-25 (19 Sep)

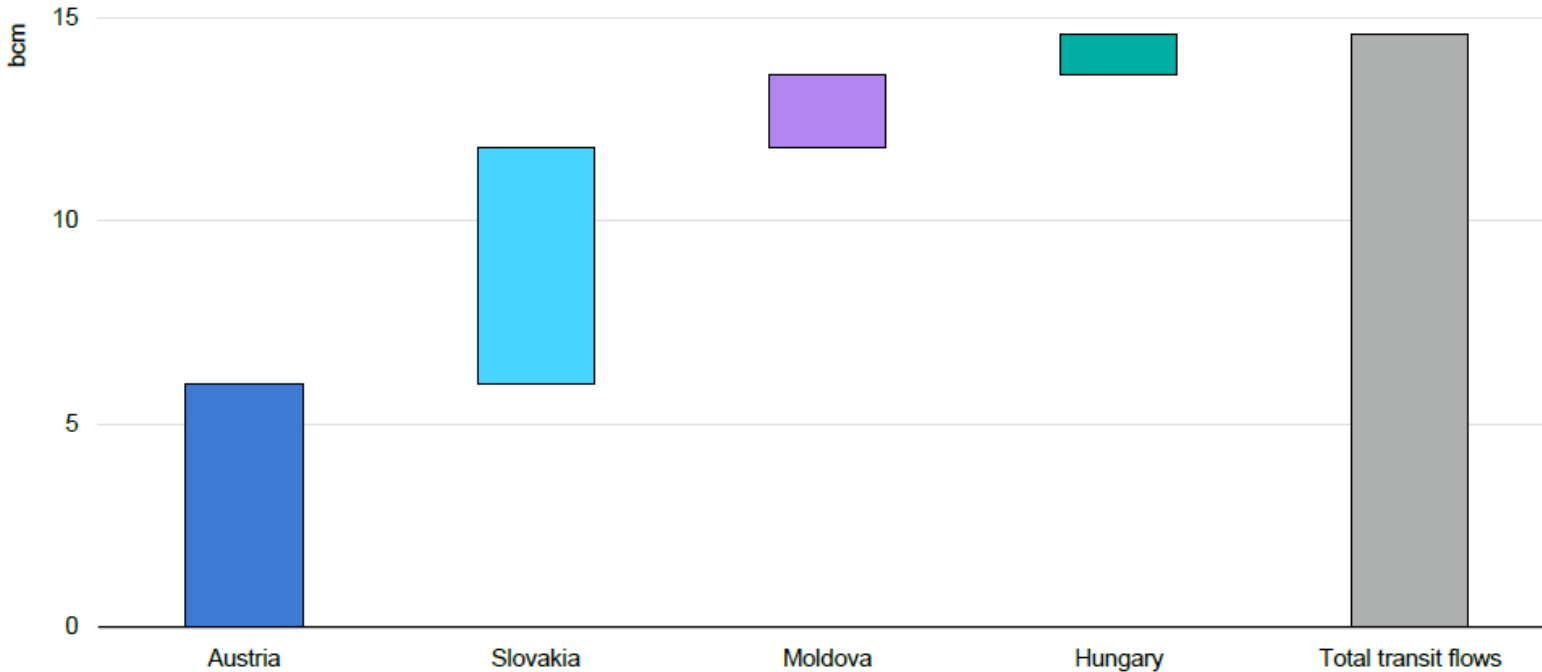


SUPPLY: AZERI GAS SWAP?

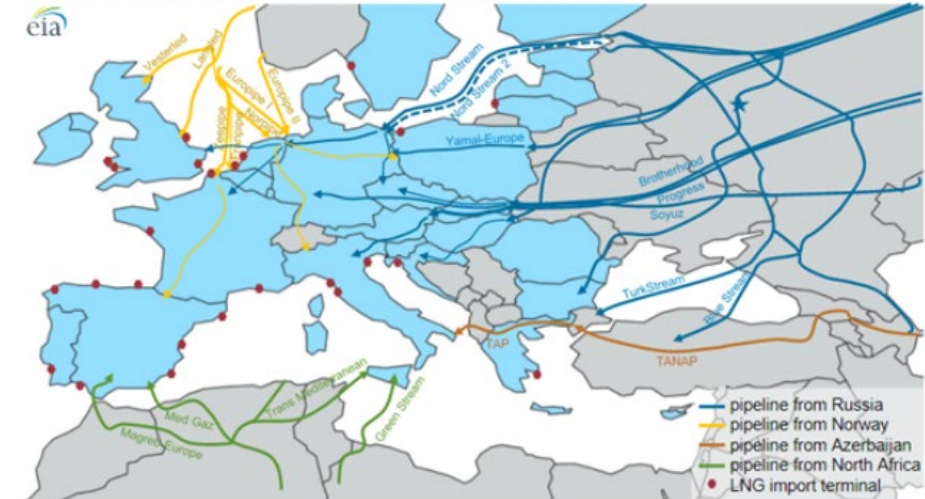
- Is swapping Azeri/Russian a realistic alternative to keep gas flowing?
- Azerbaijan produces 45 BCM, Azeri demand is 15 BCM, exports 30 BCM (12 BCM to EU)



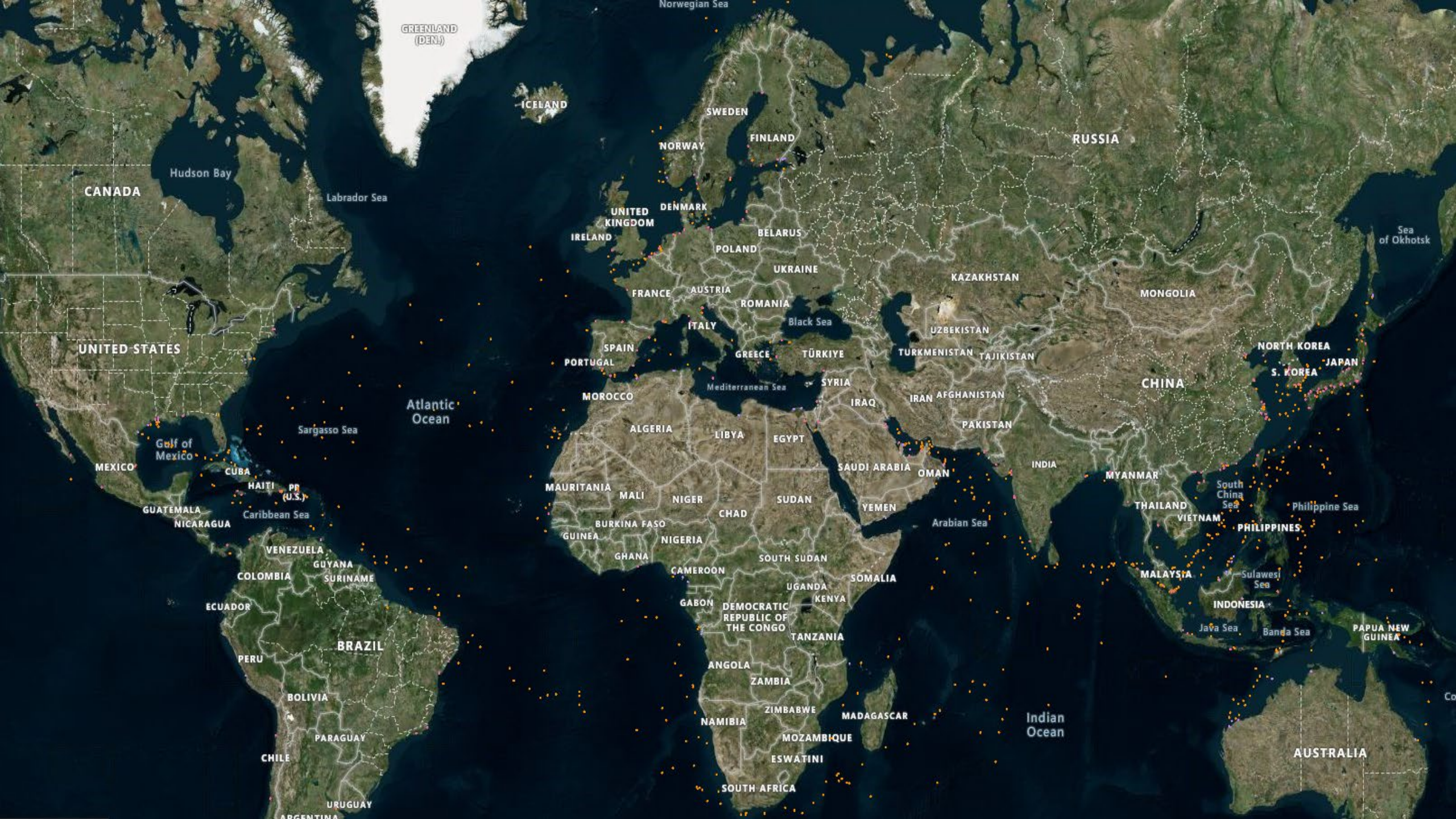
Estimated deliveries of Russian piped gas via Ukraine by country, 2023



Major natural gas delivery routes into the European market

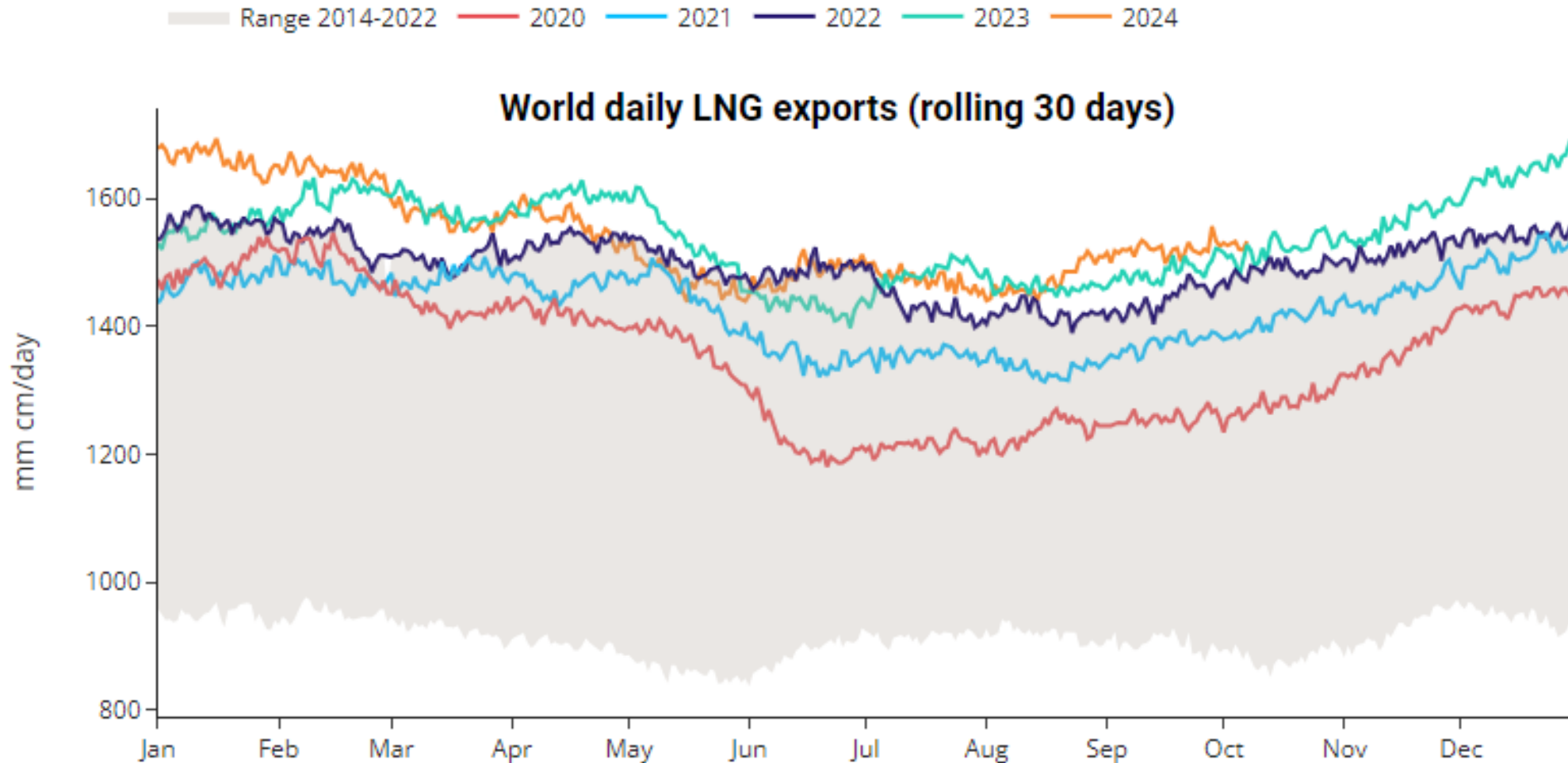
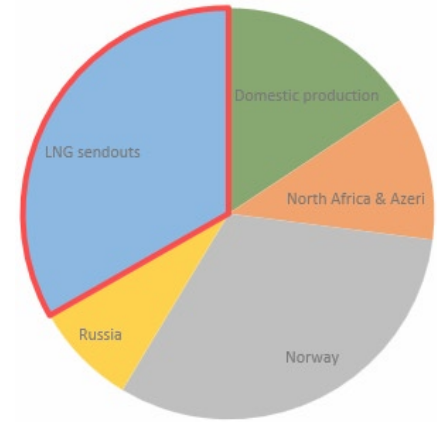






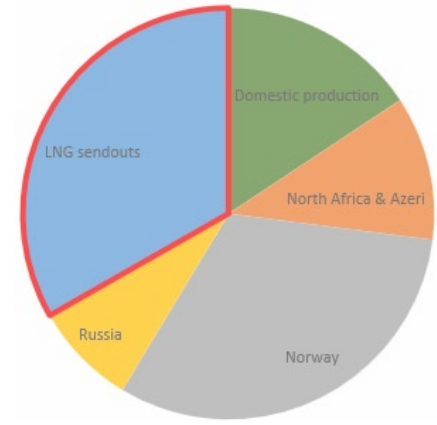
SUPPLY: GLOBAL LNG

- Supply currently fairly healthy, although less LNG heading to EU

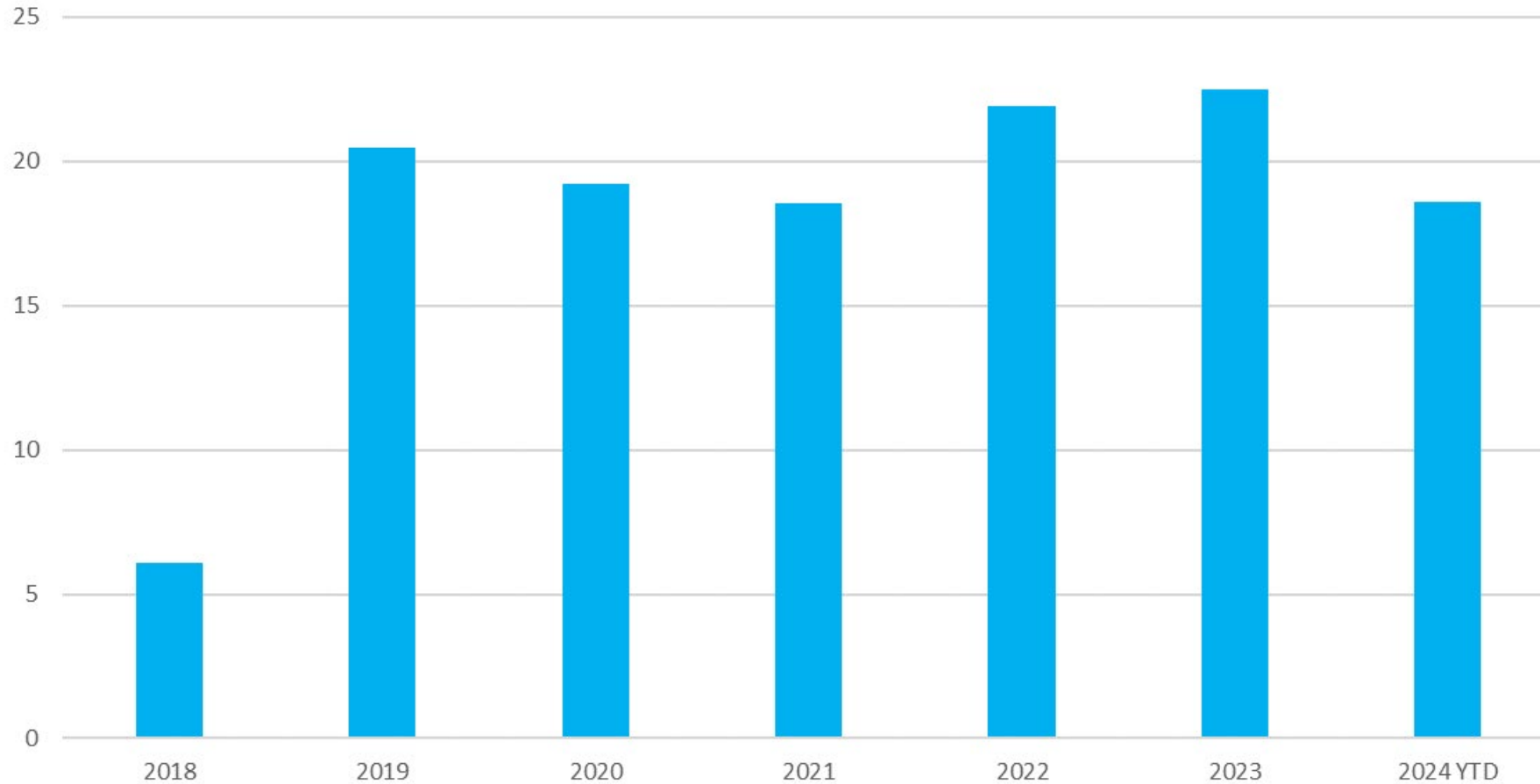


SUPPLY: RUSSIA LNG

- Russian LNG still finding its way to EU
- Sanctions so far have been mainly focused on re-export, first step towards outright ban?

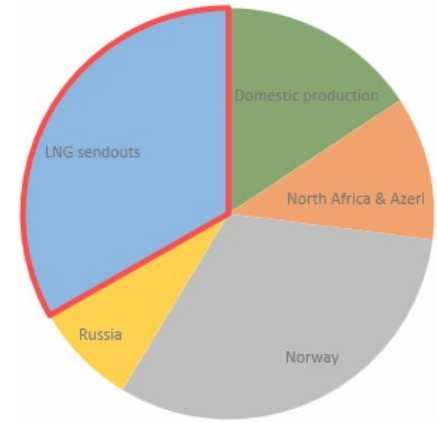


RUS LNG Export to EU (BCM)

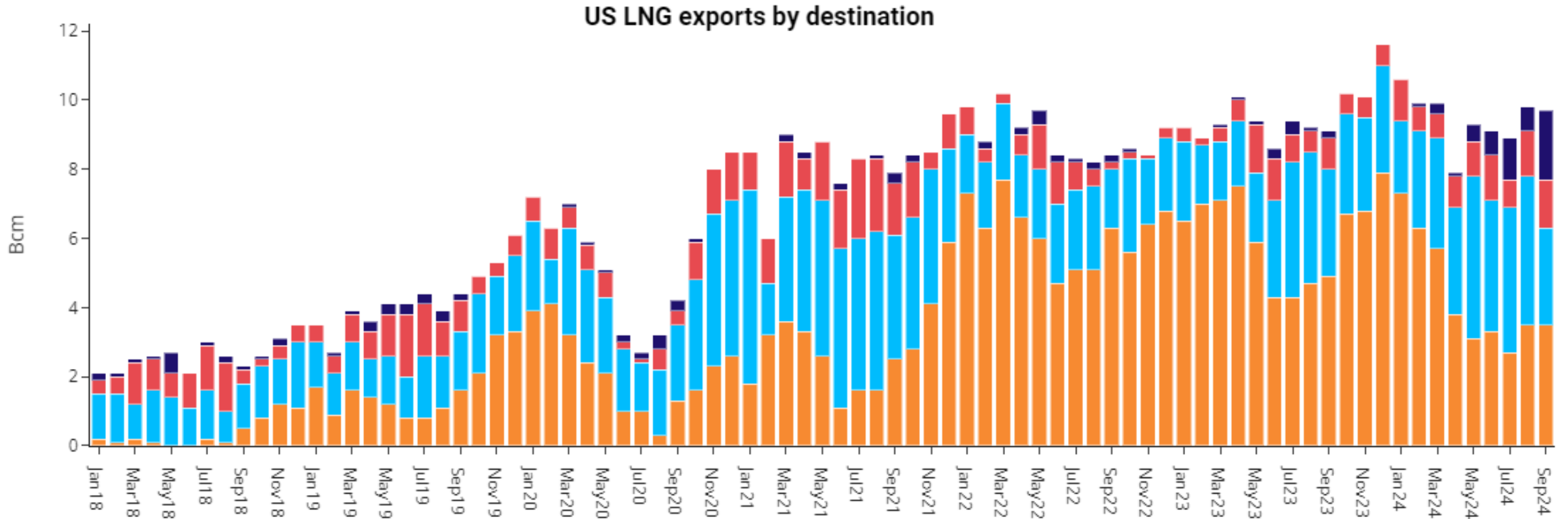


SUPPLY: US LNG

- US LNG main supplier of Europe
- Full EU storages and low demand incentivized more exports to Asia

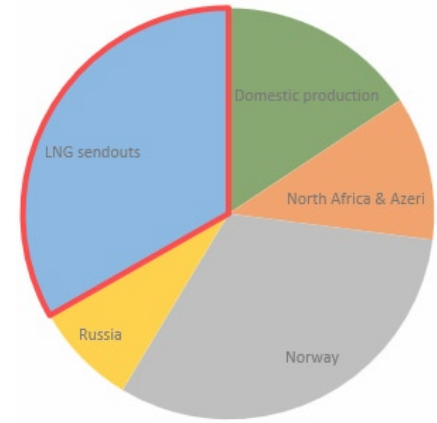


■ Other ■ Americas ■ Asia ■ Europe

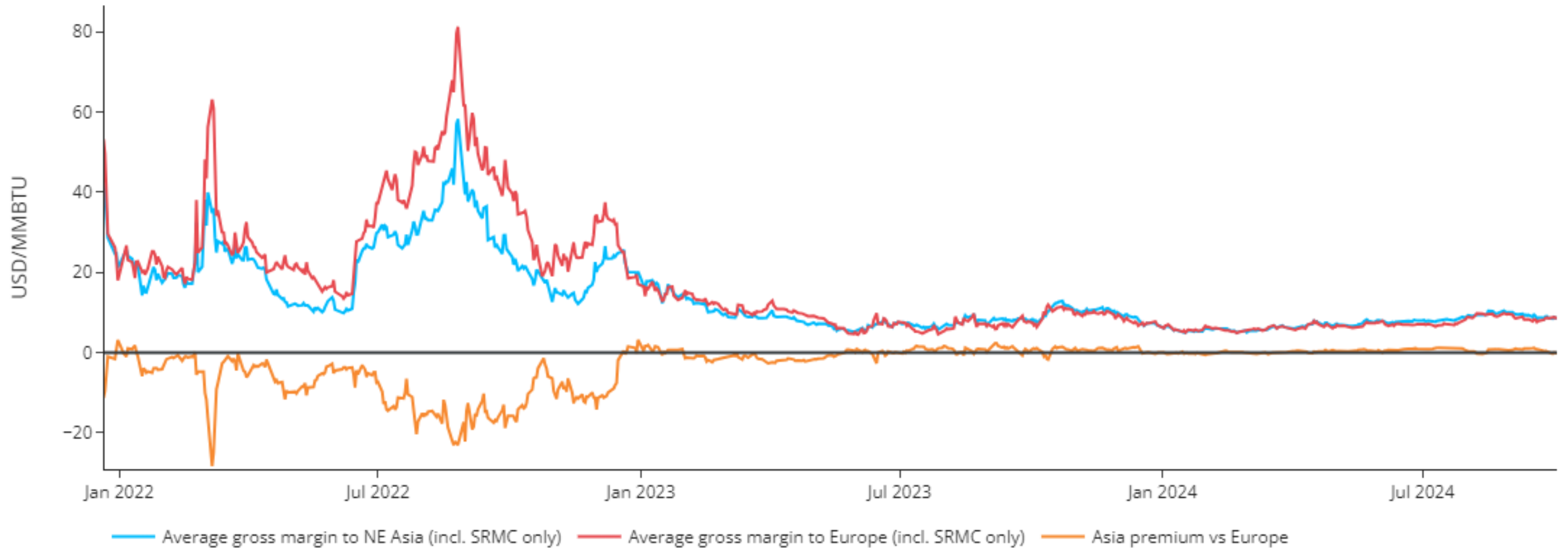


SUPPLY: US LNG NETBACKS

- LNG ships are flexible and “follow the money”



US LNG netbacks : Asia vs Europe

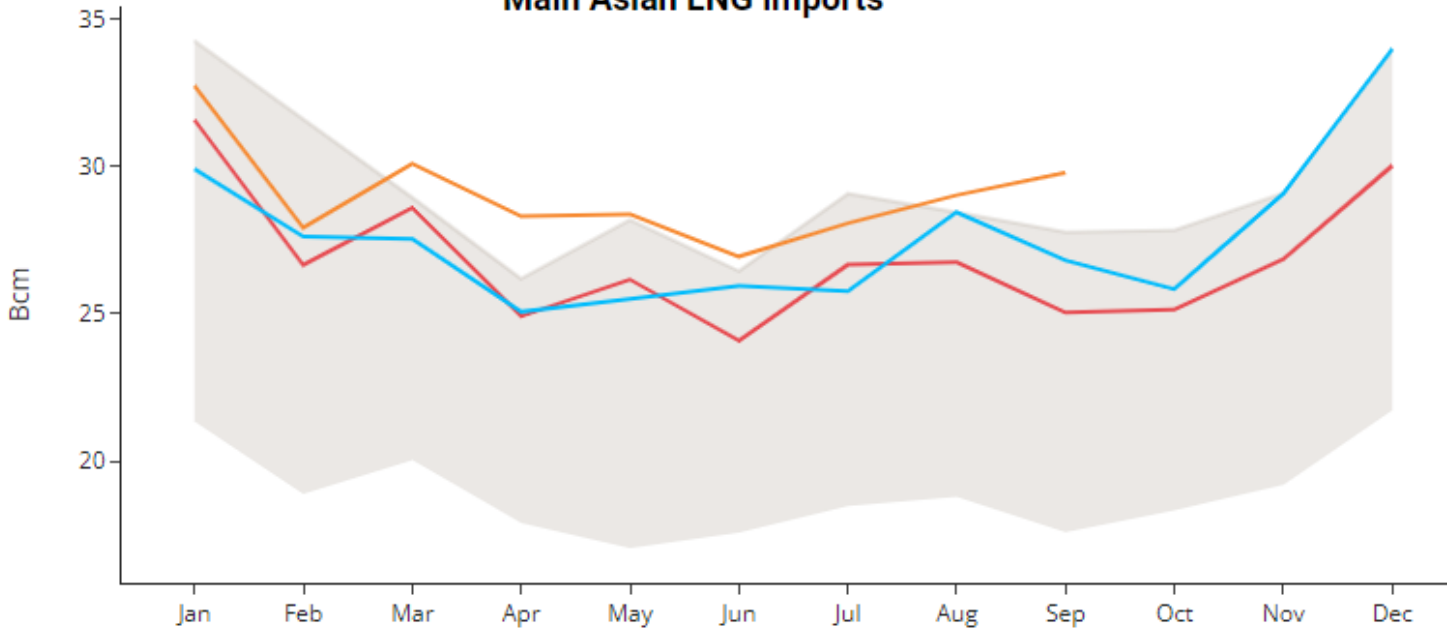


DEMAND: LNG

- Full storages depressed EU LNG imports
- Demand growth Asia, also outside the traditional top 3

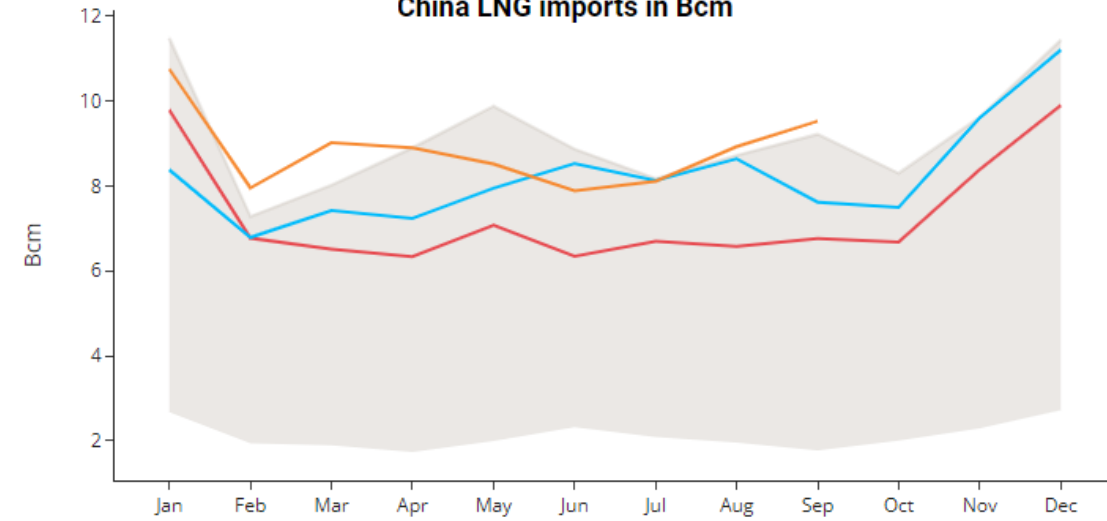
2024 2023 2022 min 2014-2023 max 2014-2023

Main Asian LNG imports



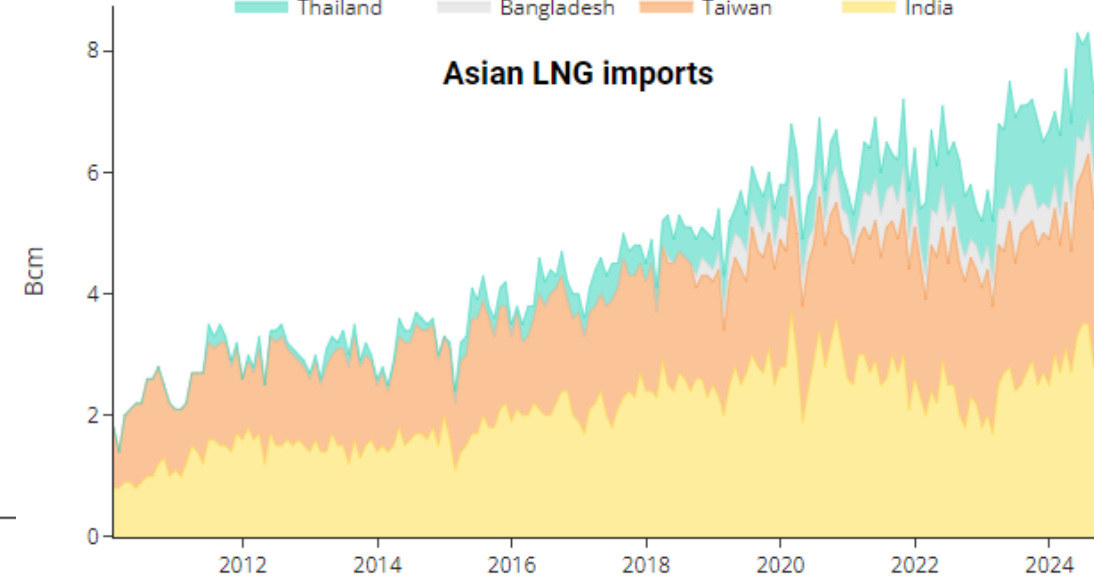
2024 2023 2022 min 2014-2023 max 2014-2023

China LNG imports in Bcm



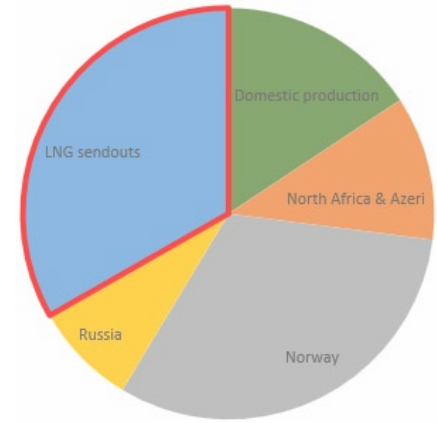
Thailand Bangladesh Taiwan India

Asian LNG imports



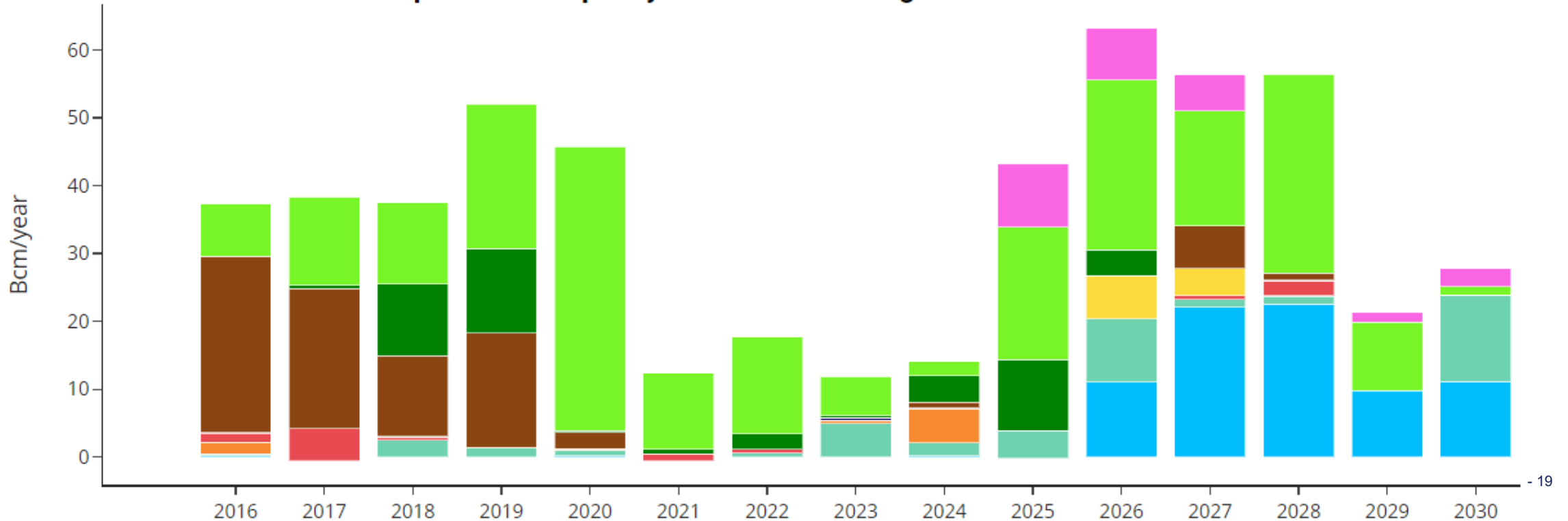
SUPPLY: GLOBAL LNG

- EU waiting for next wave of LNG supply, limited capacity expansions
- Risk delays of new LNG projects (for example Golden Pass) leaving market tighter for longer



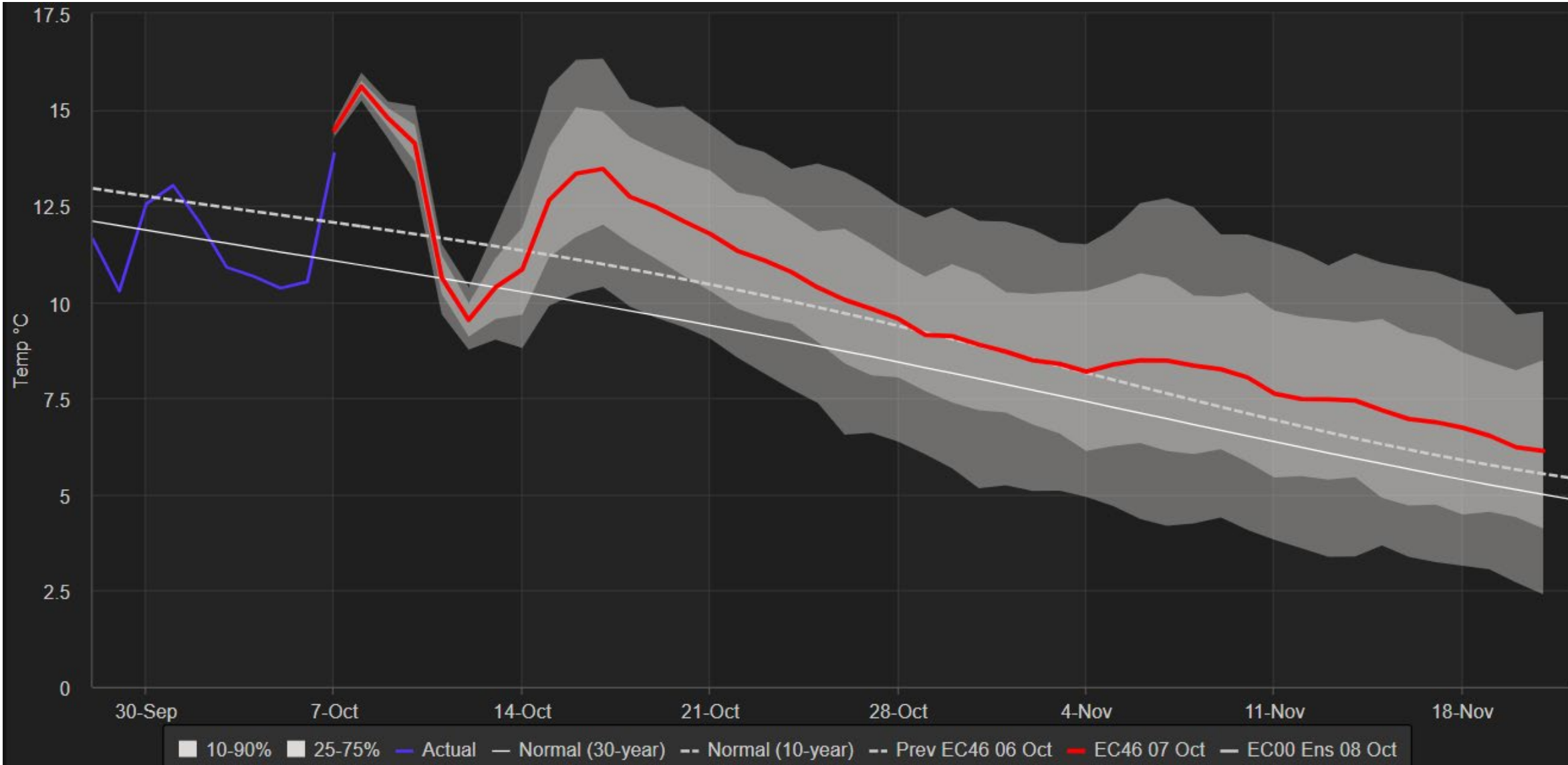
■ Canada
 ■ USA
 ■ Russia
 ■ Australia
 ■ Nigeria
 ■ Algeria
 ■ Malaysia
 ■ Indonesia
 ■ Other
 ■ Qatar

World liquefaction capacity additions : existing and under construction



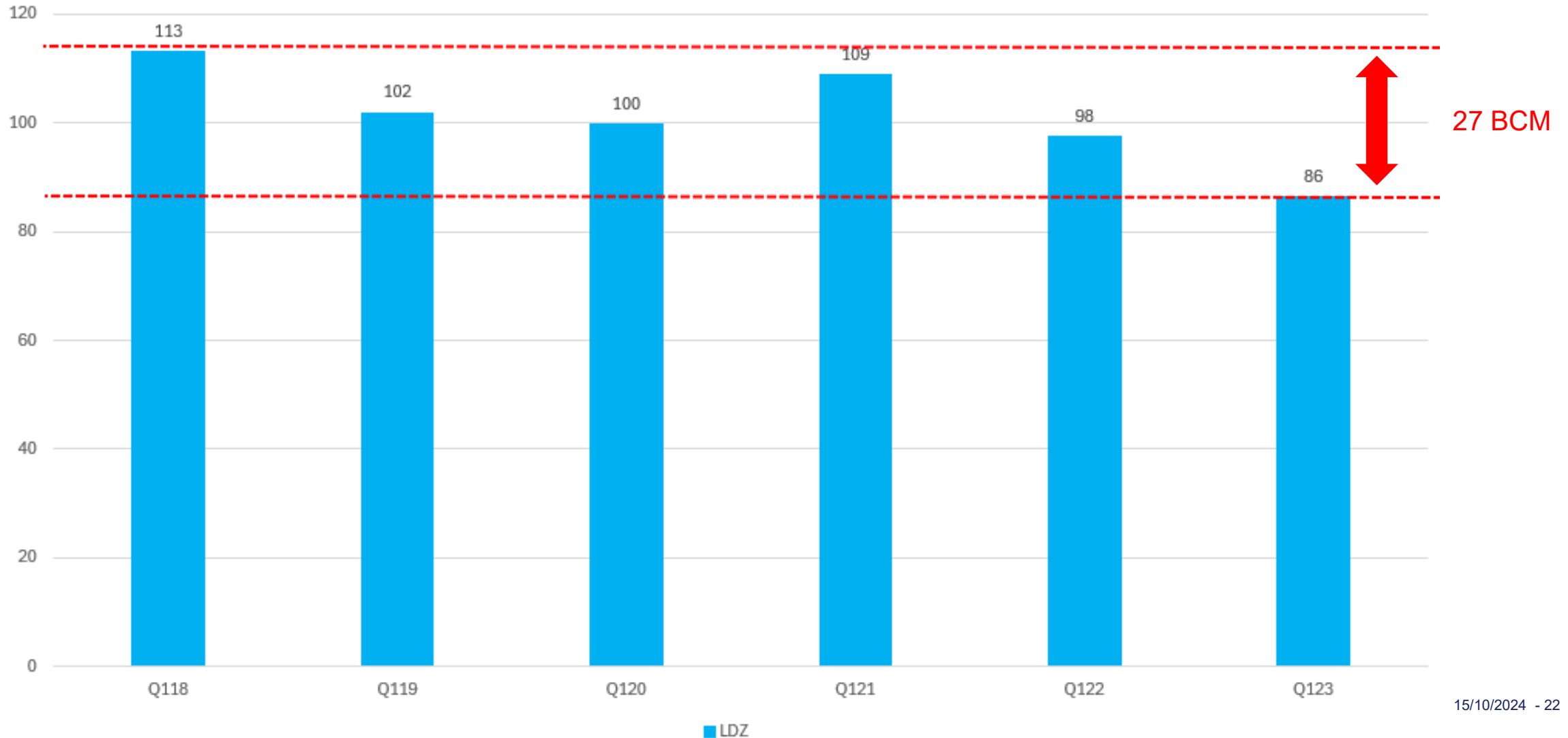


WEATHER RISK



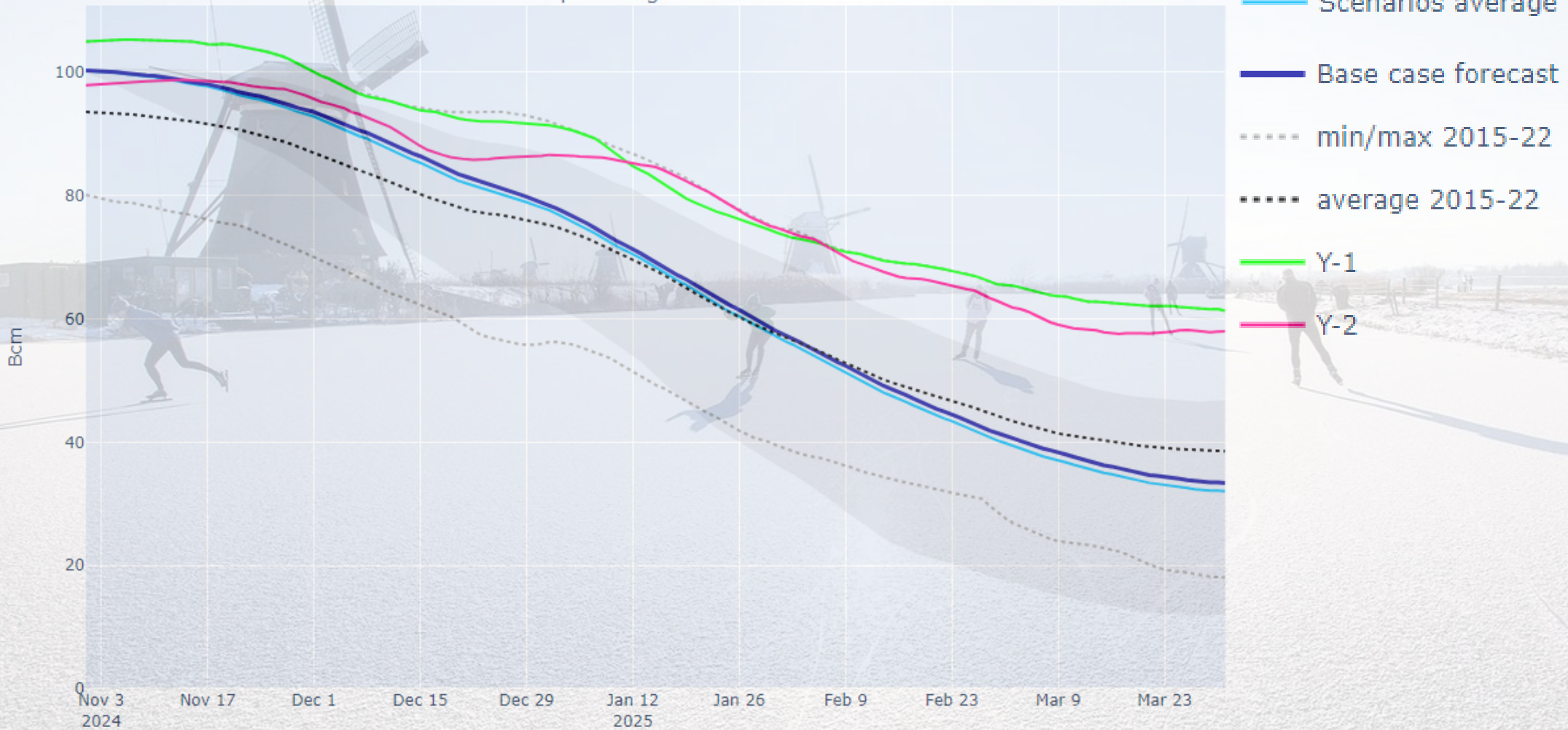
WINTER DEMAND

LDZ Demand (BCM)



WILL EUROPE'S LUCKY STREAK CONTINUE?

Win24 - Europe storage - Weather scenarios



OUTLOOK

- EU will need to attract more LNG in 2025, depending winter demand and continuation of Ukrainian transit
- TTF gas market prices will need to be at levels that incentivize extra LNG deliveries to fill the gap
- Upward price risks currently seem greater than further downward potential

