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Market correction mechanism

Effects report and relevance in view of recent energy market developments

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Working Party on Energy, Brussels, 30 March 2023

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Agenda

- *Recent energy market developments*
- *MCM effects report*

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Recent energy market developments

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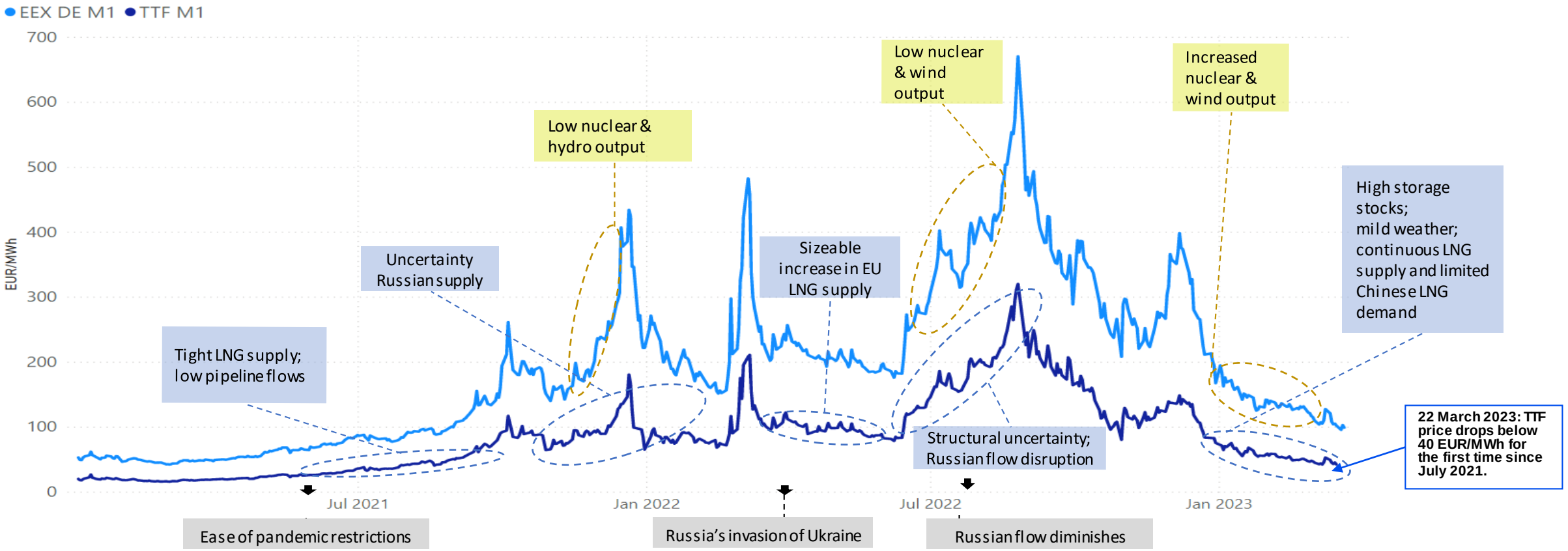
Wholesale prices keep falling, after a 'rollercoaster' ride

Electricity & natural gas price evolution, January 2021 - March 2023 (Month Ahead, EUR/MWh)



Better than expected demand-supply balance has driven energy prices further down during the last months. China's LNG demand remains an important factor for EU gas prices going forward.

Source: ACER based on Platts price data

Note: *TTF Month-ahead and EEX Germany Month-ahead contracts are, respectively, the referential EU price benchmarks for gas and electricity delivery.*

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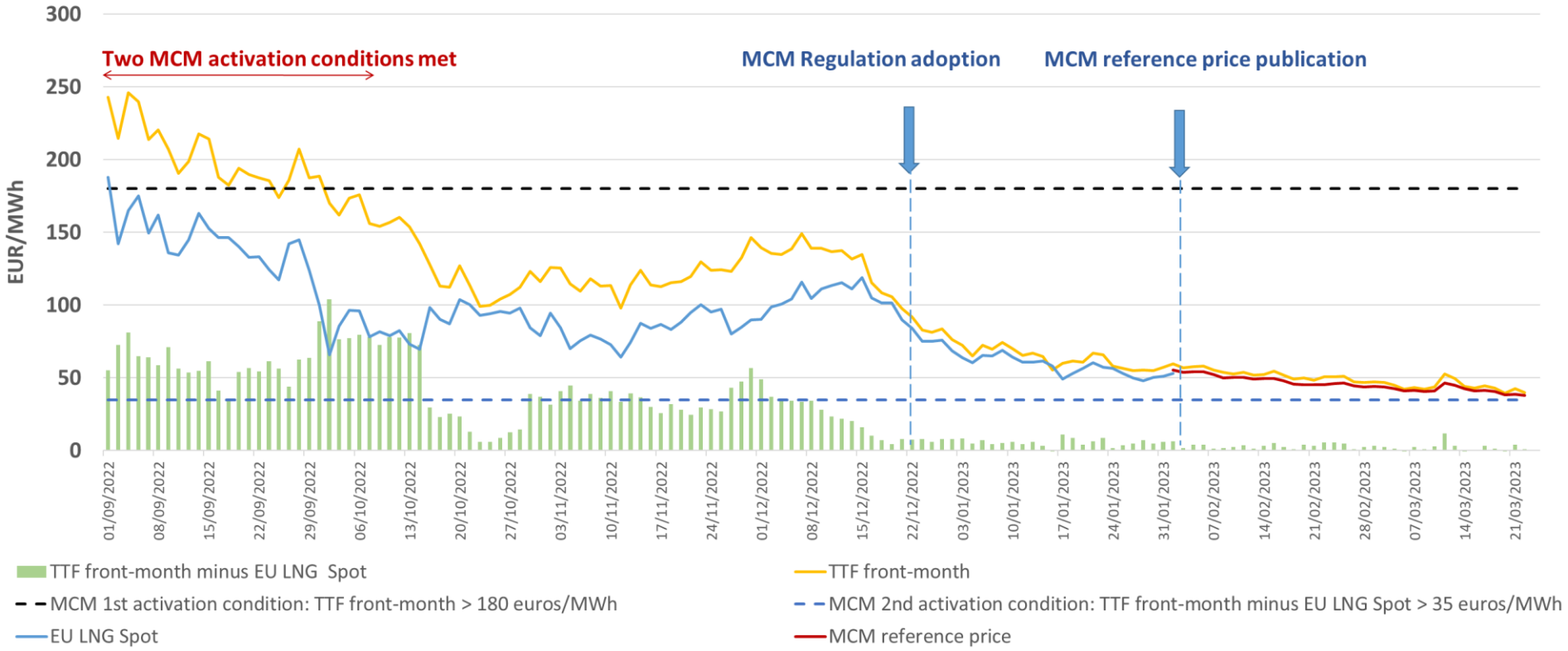
Making MCM activation unlikely

Front-month TTF, EU LNG spot and MCM reference price evolution (EUR/MWh) - Sept. 2022 - March 2023



Given the current and foreseeable market conditions, it is unlikely that the MCM activation thresholds will be met in the near to mid-term future.

Source: ACER based on Platts price data

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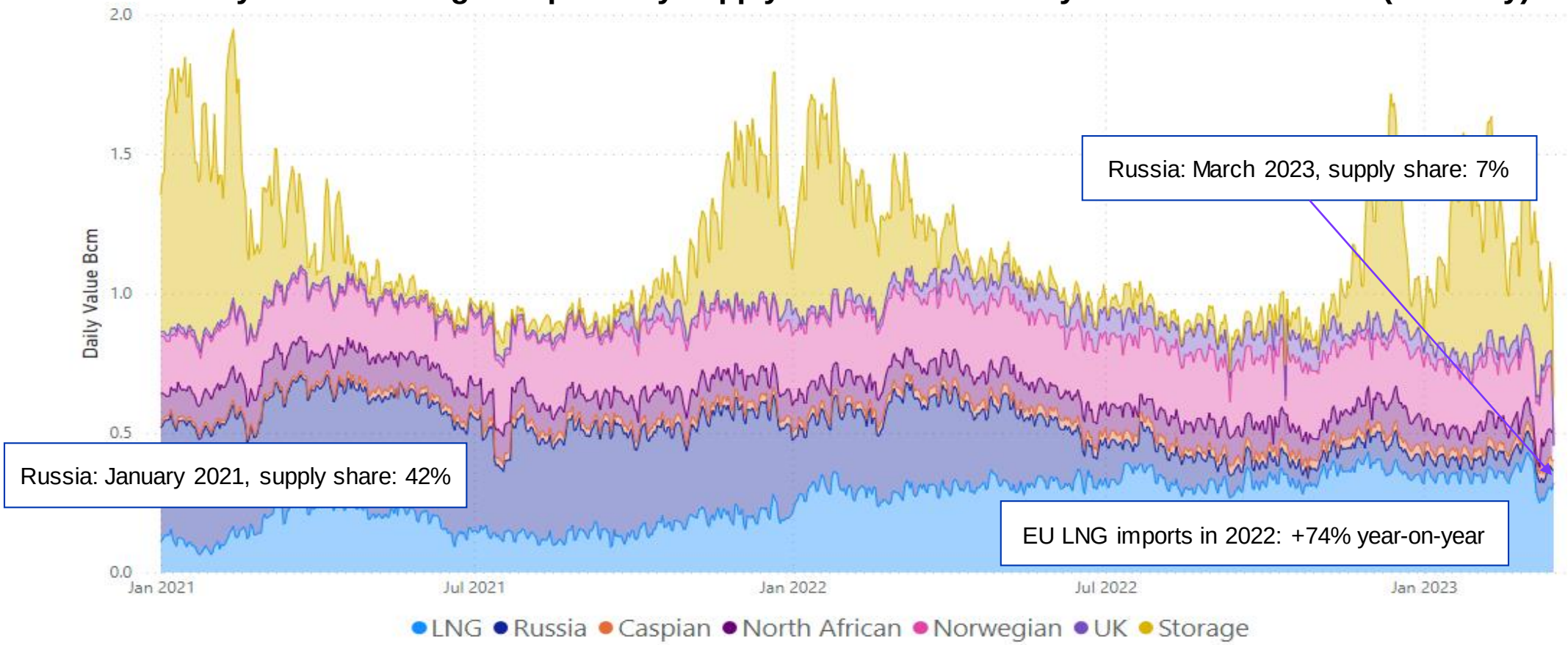
Sufficient supply alternatives to Russian gas

Daily evolution of gas imports by supply route from January 2021 to March 2023 (bcm/day)



The drop in Russian pipeline supply continues to be offset by rising LNG imports and lower demand. This, together with mild weather, has resulted in lower gas storage outflows during winter.

Source: ACER calculation based ENTSOG TP

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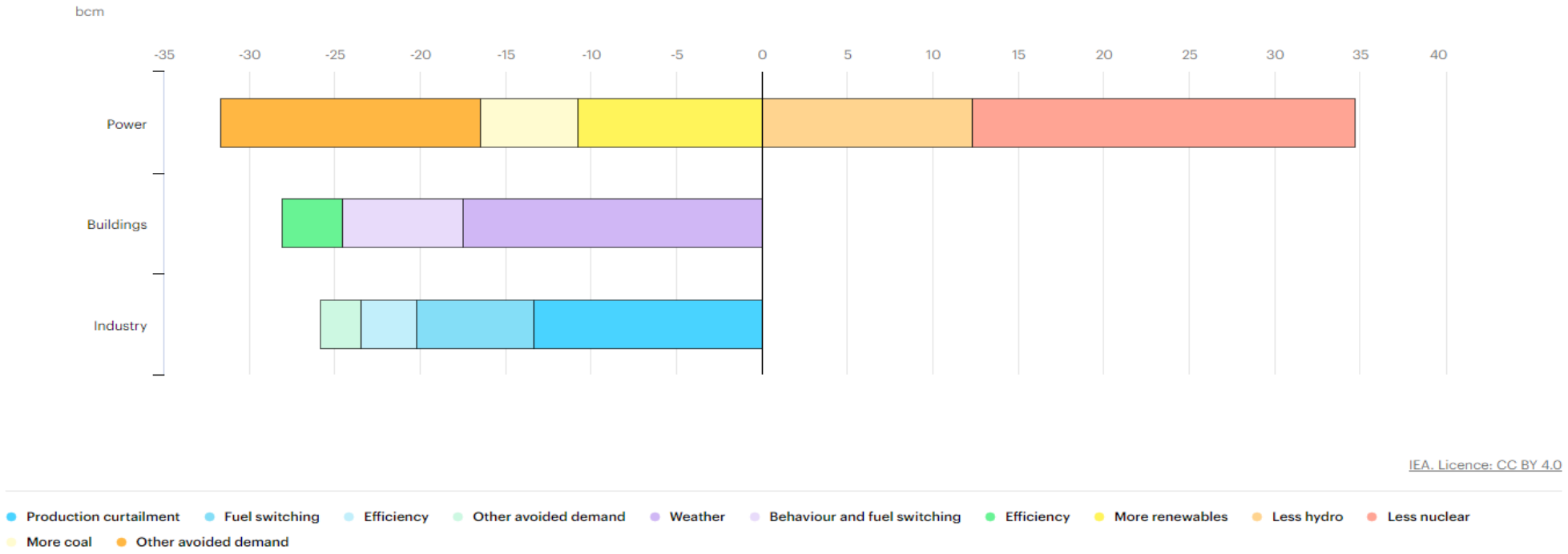
Gas demand reductions played a key role

Drivers of change in natural gas demand in the European Union, 2022 versus 2021 - bcm



Gas consumption in the European Union fell by 55 bcm in 2022, a 13% drop year-on-year. Mild winter lowered heating needs, next to overall demand reduction efforts and demand destruction. The highest contribution came from industry (-26% YoY). Power sector contributions varied per Member State[1].

Source: International Energy Agency

Note: EU gas-fired power generation rose slightly year-on-year in 2022 (+ 5 TWh, approx. 1-2%), with summer and early autumn accounting for most of rise, whilst in winter it dropped back again.

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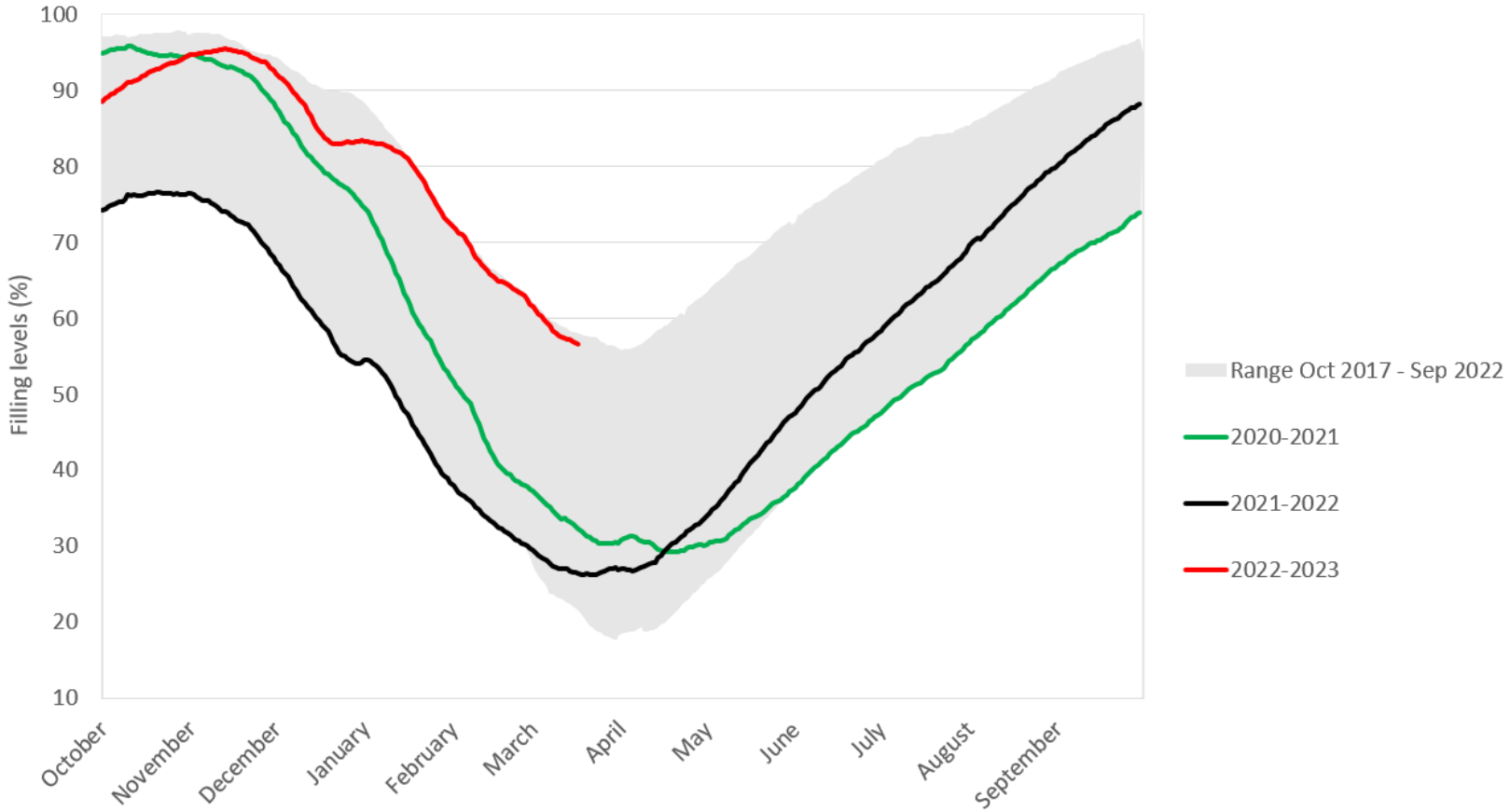
Gas storage remains high

EU gas storage levels evolution – 2017 – 2023 (% of total capacity)



Storage filling levels are significantly above last years' average and have contributed to driving prices down. Stocks will finish above 50% by the end of March, thus alleviating price competition for injections this summer.

Source: ACER based on GIE data and Platts' estimates

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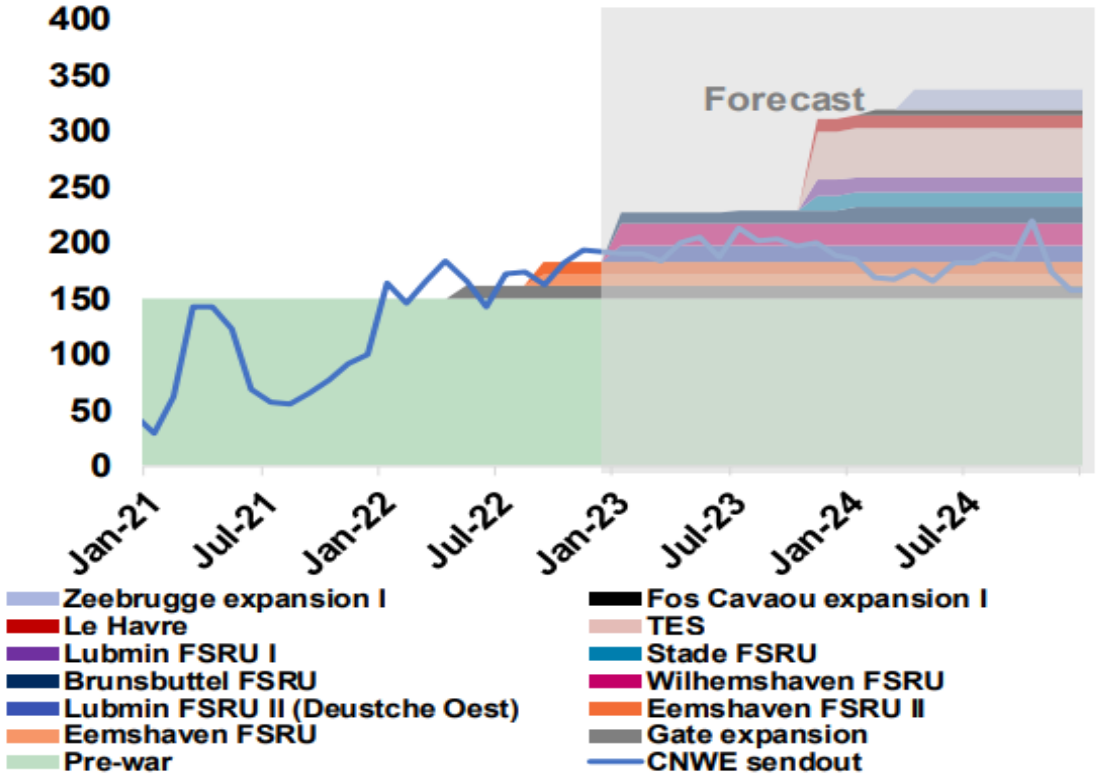
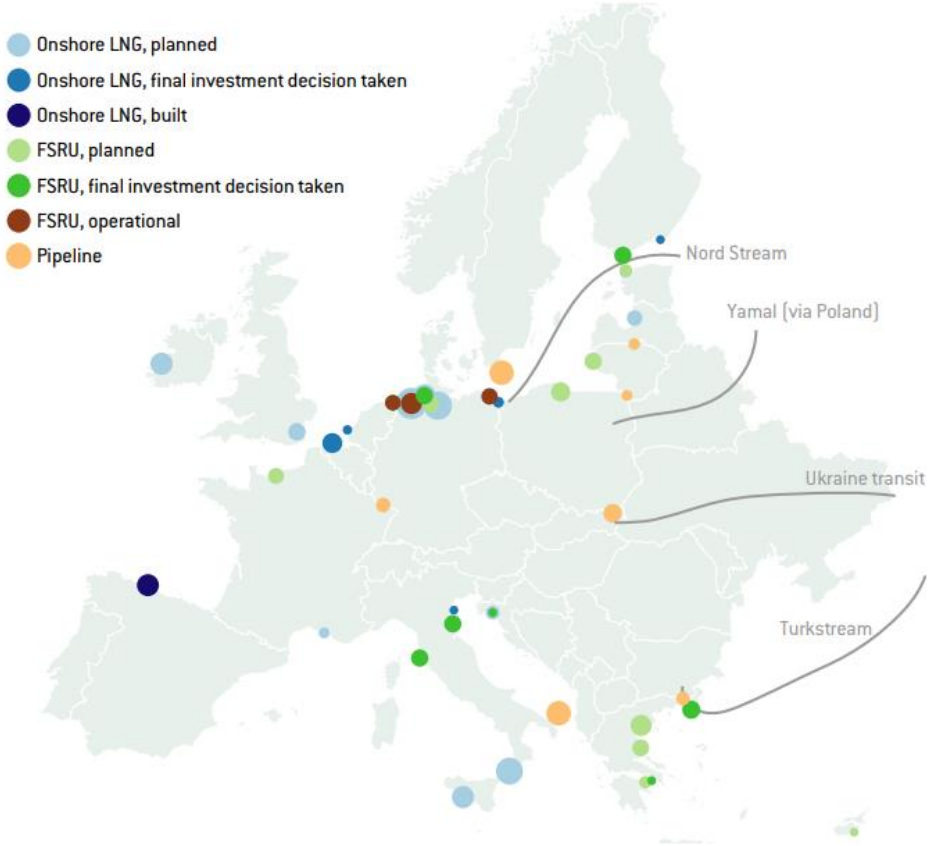
Whilst past 'LNG receiving bottlenecks' are improving

Central and North-West LNG import capacity and flows – 2021-2024 (mcm/day)



Overview of new EU LNG planned capacity[1] – October 2022



More LNG terminals are coming online, and the aim is to double EU LNG import capacity by 2025. Quicker planning, permitting and building for what normally takes several years has already had a positive impact.

Source: Platts and Bruegel. The map overview also comprises selected new pipeline capacity developments.

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Highlights from ACER's MCM Effects Report

Assessment of the MCM effects and its design

ACER & ESMA **assessed the effects and design of the MCM:**

- Assessment of effects caused by the MCM on financial and energy markets and on security of supply
- Analysis of MCM extension to other EU Virtual trading points
- Appropriateness of the key MCM design elements

Publications:

- Preliminary data report published on 23 January
- Final Report submitted to the Commission and published on 1 March

Market Correction Mechanism | www.acer.europa.eu

Effects monitoring: main findings

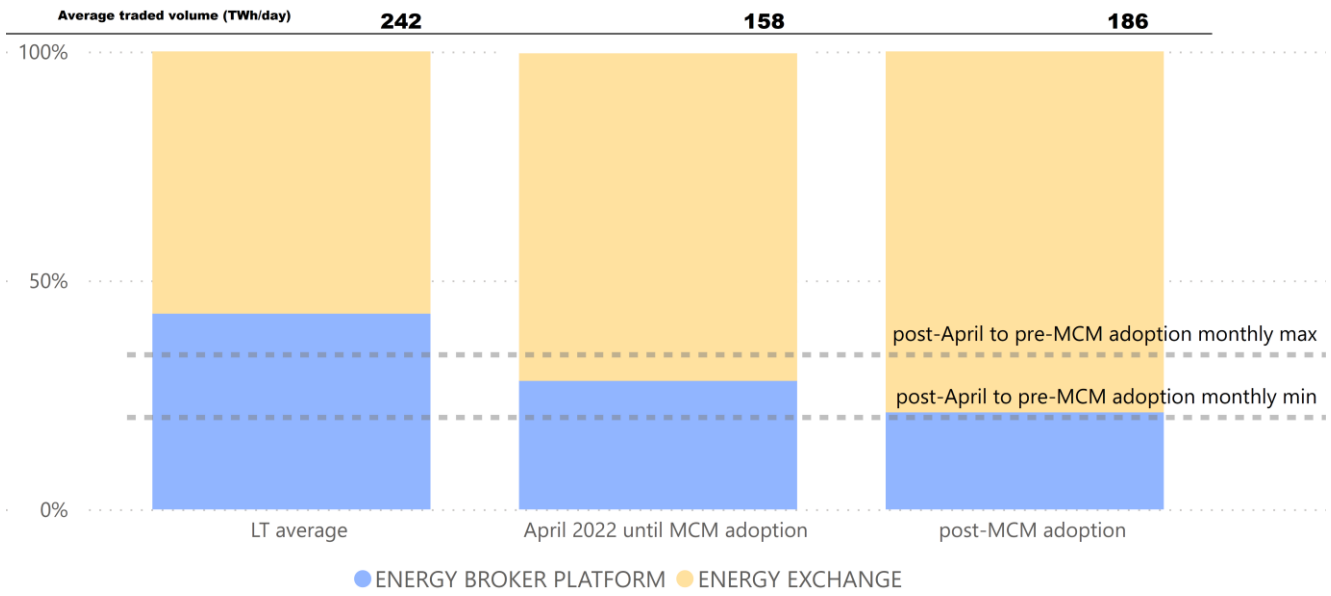
- ACER and ESMA remain unable to identify significant impacts, either positive or negative:

1. TTF prices have dropped by 60% after the MCM adoption, driven by supply and demand fundamentals.

2. Demand reduction and mild weather conditions have contributed to ensuring security of supply.

3. The MCM Regulation has not prompted a discernible shift in trading activity:
   - Total hub traded volumes remain stable
   - Gas derivatives liquidity has not been negatively impacted

Share of brokered and exchange traded gas volumes at TTF and total hub traded volumes – 01 January 2021 – 15 February 2023 (% of total hub traded volumes; TWh/day)



Source: ACER based on REMIT data.

Note: 'LT average' includes data from 1 January 2021 until 1 April 2022, 'post-MCM adoption' includes data from 22 December 2022 up to 15 February 2023.

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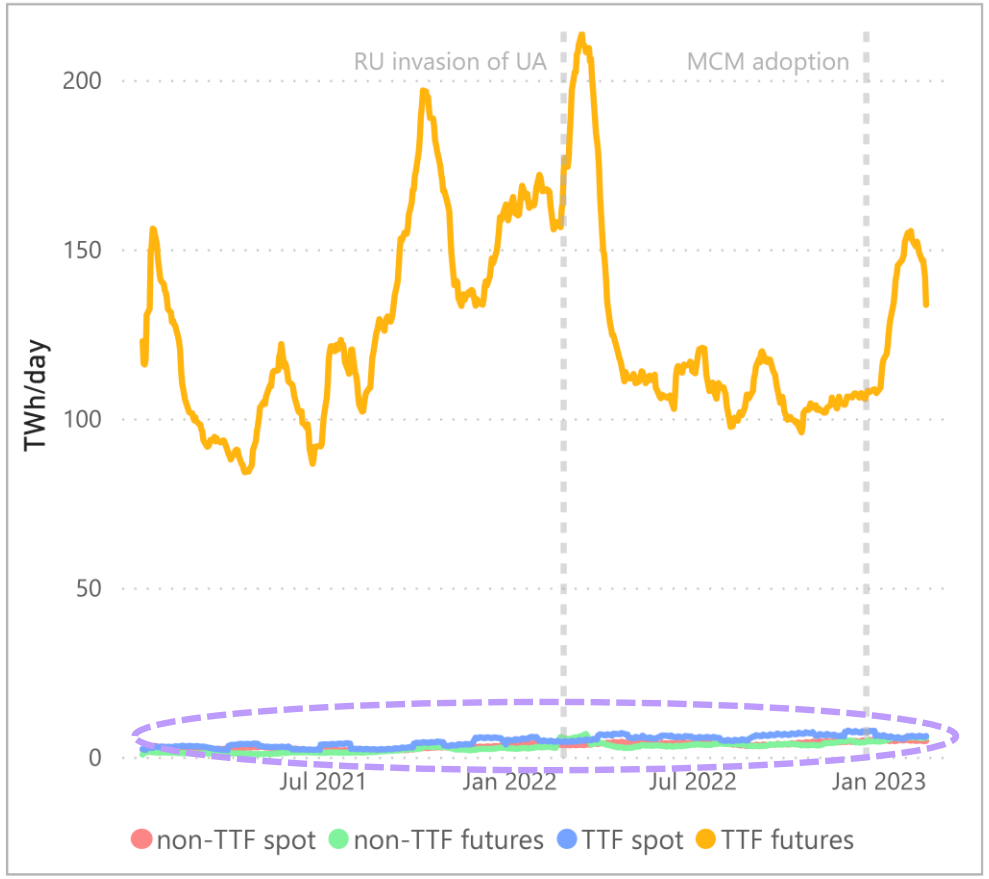
Effects monitoring: gas hubs' liquidity

Exchange gas trading volumes for delivery at TTF and other VTPs in the EU (30 day rolling average[1], TWh/day)

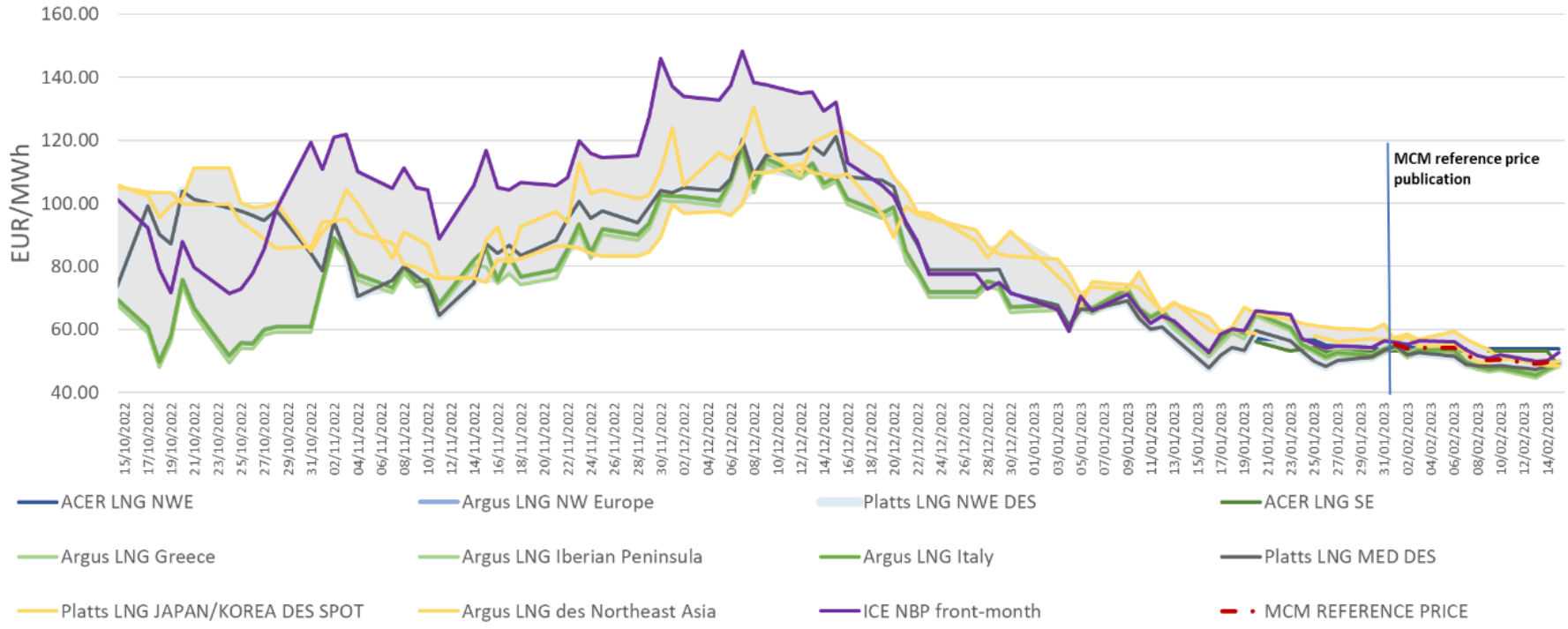


TTF is by far the most liquid gas trading hub in the EU, with more than 10,000 derivatives' transactions per day, representing 95% of EU gas derivatives' trading (for comparison, 100 derivatives are daily traded at the second most liquid hub, the German THE).

Source: ACER calculation based on REMIT data
Note 1: The rolling average corresponds to the average trades concluded in the preceding 30 days, on a rolling basis. Its use allows to show the trend without disturbance from day to day volatility.
Note 2. Futures include contracts with at least monthly delivery (i.e. Months, quarters, seasons and years) while spot include contracts with duration shorter than a month (within-day and day-ahead, etc.).

Effects monitoring: reference price evolution

Evolution of the price indexes that constitute the MCM reference price – EUR/MWh – October 2022 – February 2023



ACER could not identify a need for revising the price indexes used to calculate the MCM reference price: they offer a valid proxy of global spot LNG pricing, their price differences are under 5-7 EUR/MWh - as of the first quarter of 2023[1] - whilst the inclusion of several indexes makes the MRM price reference relatively robust.

Source: Argus, Platts, ICE Endex and ACER. The price of the NBP front-month tends to set the maximum price level of the basket, as NBP prices are in many trading days determined by the price of spot LNG deliveries plus the British VTP access cost. Yet, NBP inclusion is beneficial given that its price signal is reliable and transparent as it is connected to a highly liquid trading venue.

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ACER's view on MCM extension

1. On the sufficiency of EU VTPs' liquidity[1].

- Implement the MCM only at VTPs where gas derivatives' liquidity is sufficiently high.
- Nonetheless, the extension to other VTPs is unlikely to lead to '*significant negative effects*'.

2. On the prices to activate the extended MCM.

- Use the same activation and de-activation conditions for all EU VTPs, relying on the TTF front-month price as the most liquid one.

3. On the bidding limits to apply.

- Use the same dynamic price bidding limit at the EU VTPs to which the MCM is extended.

Note: VTP stands for Virtual Trading Point.

Thank you for your attention.
Looking forward to the discussion.

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Annex

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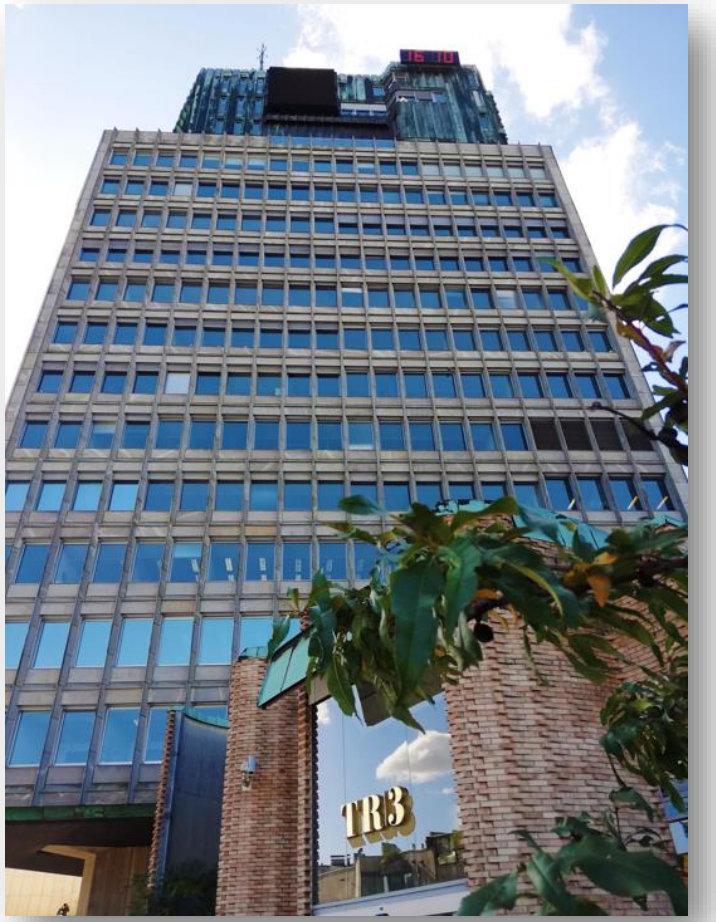
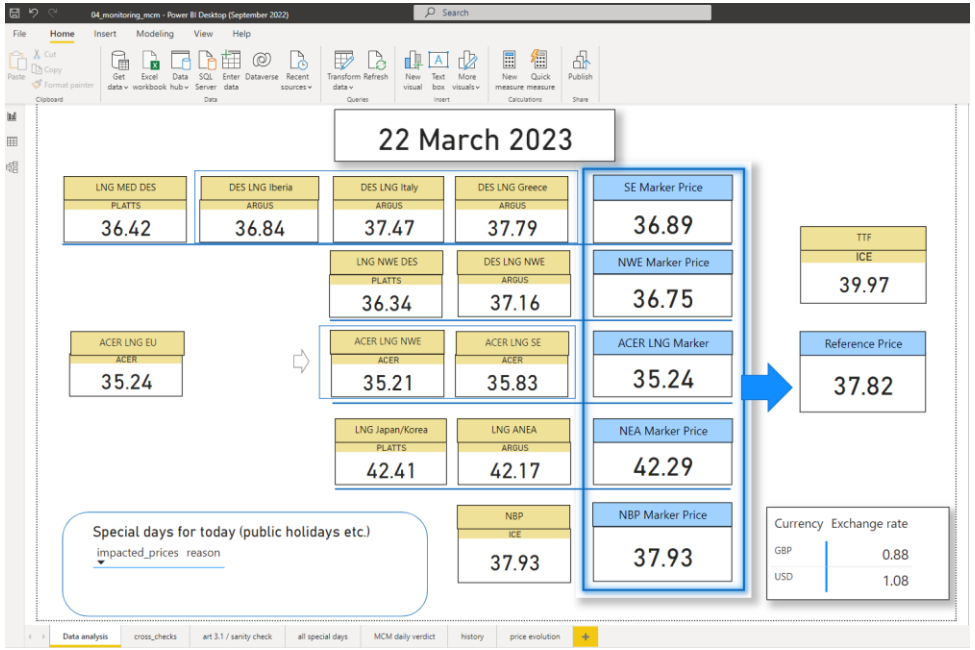
ACER: Role & governance

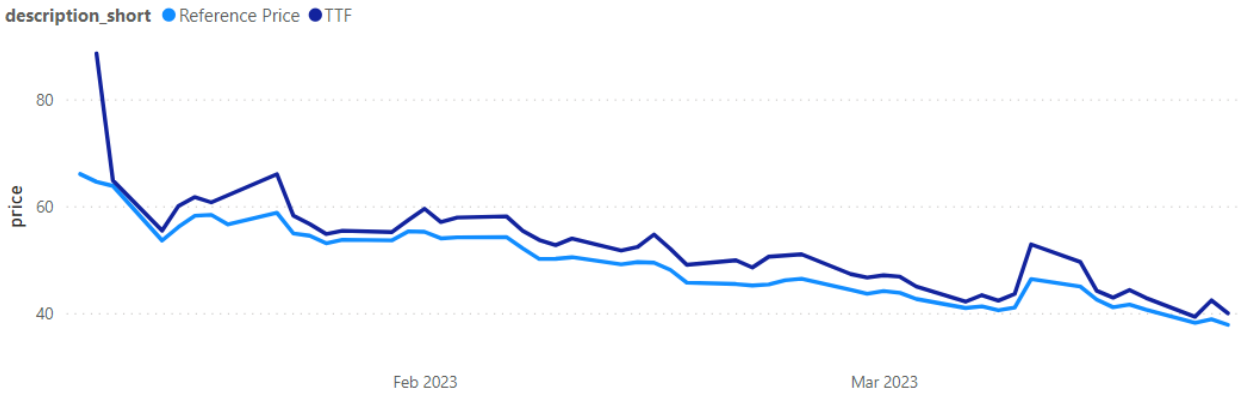


- **Supporting the integration of energy markets in the EU** (by common rules at EU level). Primarily directed towards transmission system operators and power exchanges.
- **Contributing to efficient trans-European energy infrastructure**, ensuring alignment with EU priorities.
- Monitoring the well-functioning and transparency of energy markets, **deterring market manipulation and abusive behaviour**.
- Where necessary, **coordinating cross-national regulatory action**.
- Governance: **Regulatory oversight is shared** with national regulators. **Decision-making** within ACER is collaborative and joint (formal decisions requiring 2/3 majority of national regulators). **Decentralised enforcement** at national level.

ACER calculates daily the MCM reference price

1. Calculation and Publication of the **‘reference price’**
2. Check whether conditions to **activate/deactivate** market correction mechanism are fulfilled





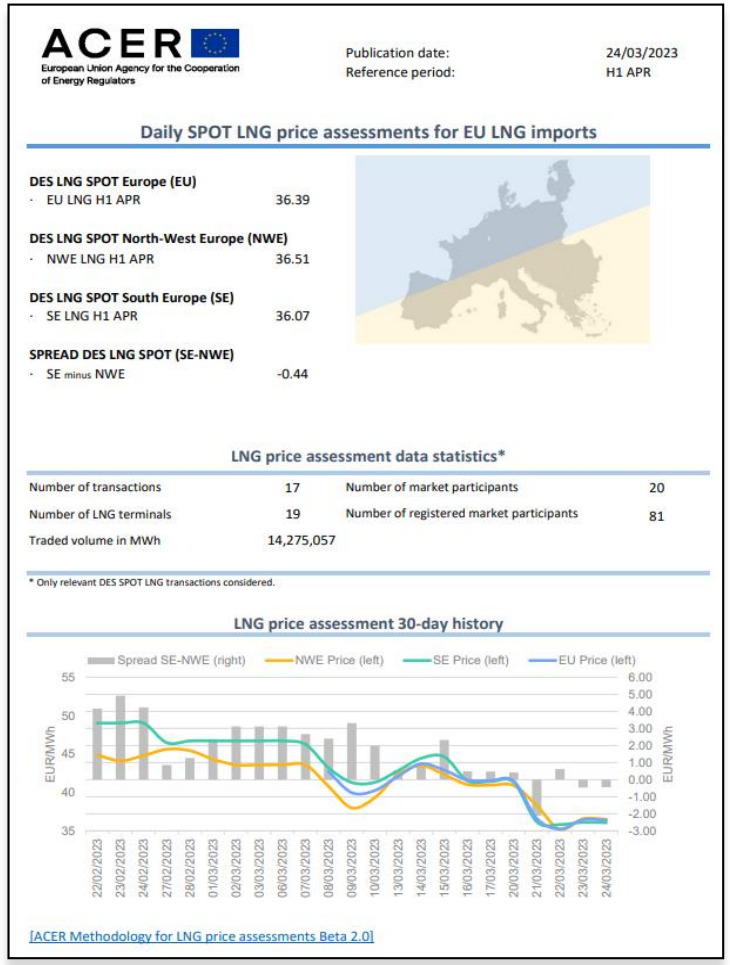
Tasks are performed every working day between 21h and 23:59h.

ACER calculates daily the LNG price assessment

- ACER collects real-time market data to compute its daily LNG price assessment. Deliverables so far:
  - Detailed Guidance on reporting
  - IT tool for data collection (TERMINAL)
  - Methodology document
  - Establishment of an LNG Expert Group
  - Establishment of an Oversight Committee
- Procedure:
  - Daily data collection and processing
  - Daily publication at the dedicated ACER site
  - Resources: 5 FTEs - not yet hired - and dedicated IT budget

New task: from 31 March, ACER to publish an *LNG benchmark = ACER LNG price – TTF ICE Endex Front month settlement price*

Example of ACER's LNG price daily publication – 24 March 2023 – EUR/MWh



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Publication date: 24/03/2023
Reference period: H1 APR

Daily SPOT LNG price assessments for EU LNG imports

DES LNG SPOT Europe (EU)
· EU LNG H1 APR 36.39

DES LNG SPOT North-West Europe (NWE)
· NWE LNG H1 APR 36.51

DES LNG SPOT South Europe (SE)
· SE LNG H1 APR 36.07

SPREAD DES LNG SPOT (SE-NWE)
· SE minus NWE -0.44

LNG price assessment data statistics*

Number of transactions	17	Number of market participants	20
Number of LNG terminals	19	Number of registered market participants	81
Traded volume in MWh	14,275,057		

* Only relevant DES SPOT LNG transactions considered.

LNG price assessment 30-day history

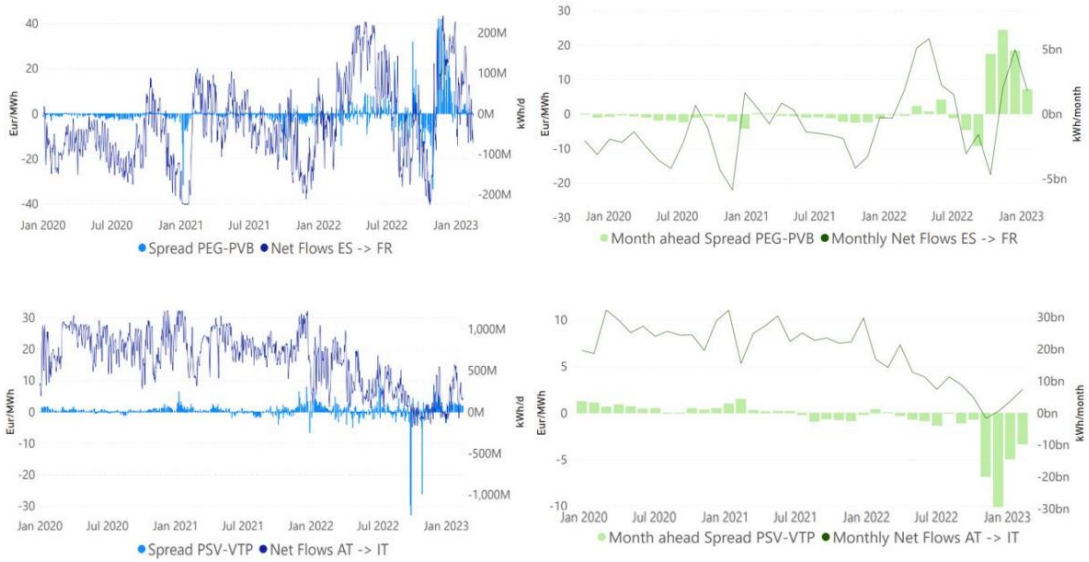
[ACER Methodology for LNG price assessments Beta 2.0]

Source: ACER based on market participants' reported data

ACER's tasks on MCM suspension monitoring

- **ACER must continuously monitor** the market effects of the dynamic bidding limit, alongside ESMA, ENTSOG, GCG, and ECB.
- **The EC can suspend** the MCM with an implementing decision. Reasons for suspension:
  1. Unintended market disturbances
  2. Manifest risks with a negative effect on the security of supply, intra-Union flows of gas, or financial stability
- **ACER key focus is on monitoring market-based intra-Union flows of gas**

Net flows and spreads for day- and month-ahead prices for a selection of EU IPs and VTPs – 2020 – 2023 (kWh/day and EUR/MWh



Source: ACER based on ENTSOG TP and ICIS Heren.

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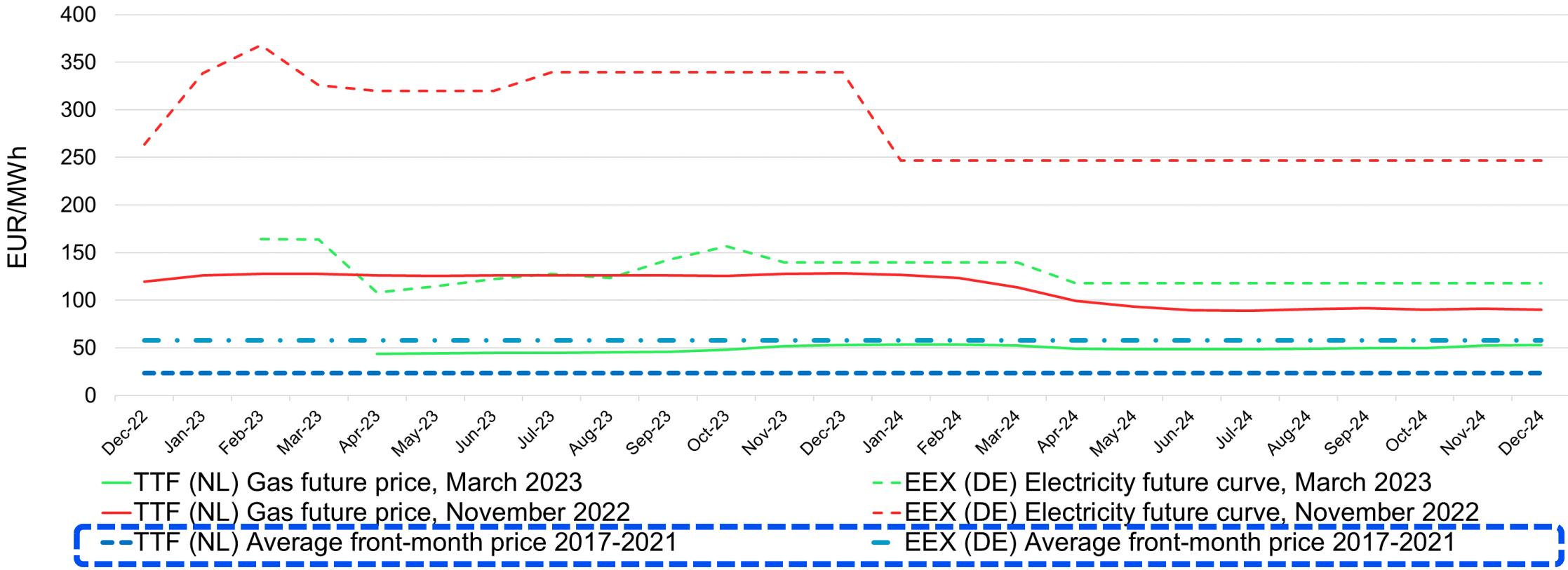
Energy price expectations remain higher than pre-crisis

Two-year evolution of TTF and EEX future prices - November 2022 and March 2023 (EUR/MWh)



Although gas and power futures' prices have substantially dropped in last months, they remain almost two times above recent historical average.

Source: ACER based on ICE Endex and European Energy Exchange (EEX)

Note: EEX Power and TTF gas average prices are shown for comparison and are based on the front-month products traded in the period 2017-2021 (i.e., they are not future prices for delivery in 2023-2024).

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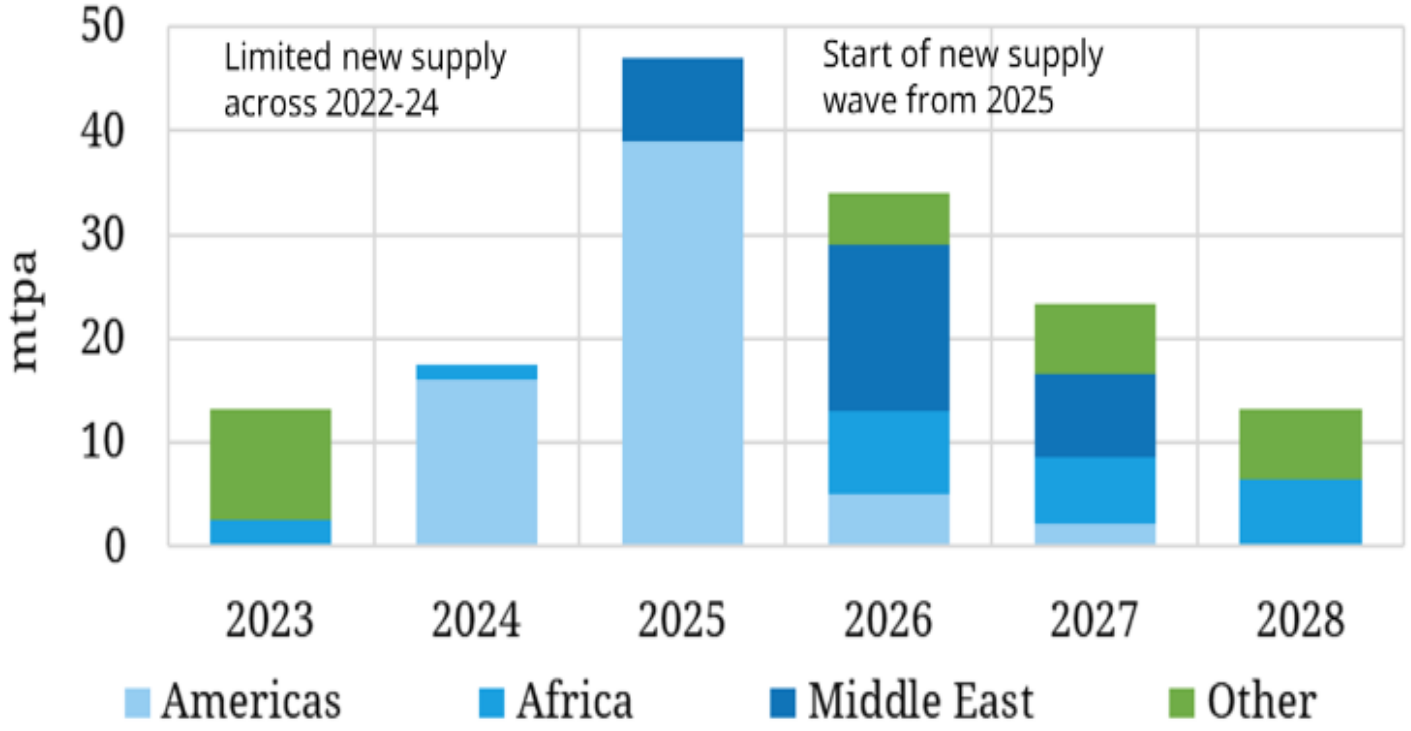
Global LNG supply remains tight the next two years

Global LNG liquefaction capacity additions by regions and start-up year – 2023-2028 (Mtpa)

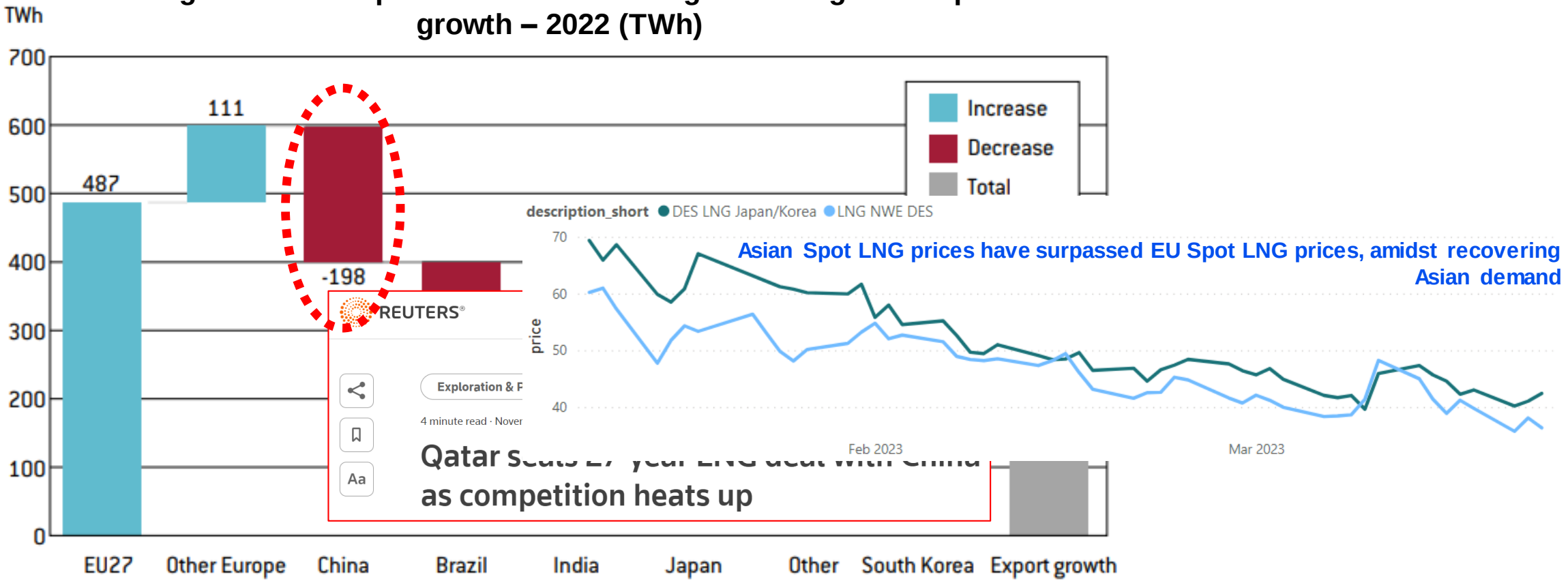


The EU will compete for extra LNG volumes with Asia, which will see growing demand driven partly by overall economic growth, partly by lowering coal usage. Given market tightness, unexpected events, such as outages, can have outsized impacts, adding tension to global LNG supply and hence to EU gas prices.

Source: Timera Energy. Headlines from Bloomberg.

With one particular ‘demand variable’ standing out

Changes to LNG imports from selected regions and global export growth – 2022 (TWh)



China’s COVID-19 driven demand decline in LNG volumes (-20% YoY) was absorbed by Europe, while US LNG supply continues to grow. However, in 2023, in line with the expected increase in its economic growth, China’s LNG demand is expected to gradually rise (+3% YTD), intensifying competition for overall LNG resources.

Source: Bruegel based on Bloomberg. Reuters 21 November 2022.