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High and volatile market prices: what can be done?

Extraordinary SEEGAS Crisis Response meeting

Wien/virtual, 30 June – 1 July 2022

Dennis Hesseling, Head of Infrastructure, Gas & Retail

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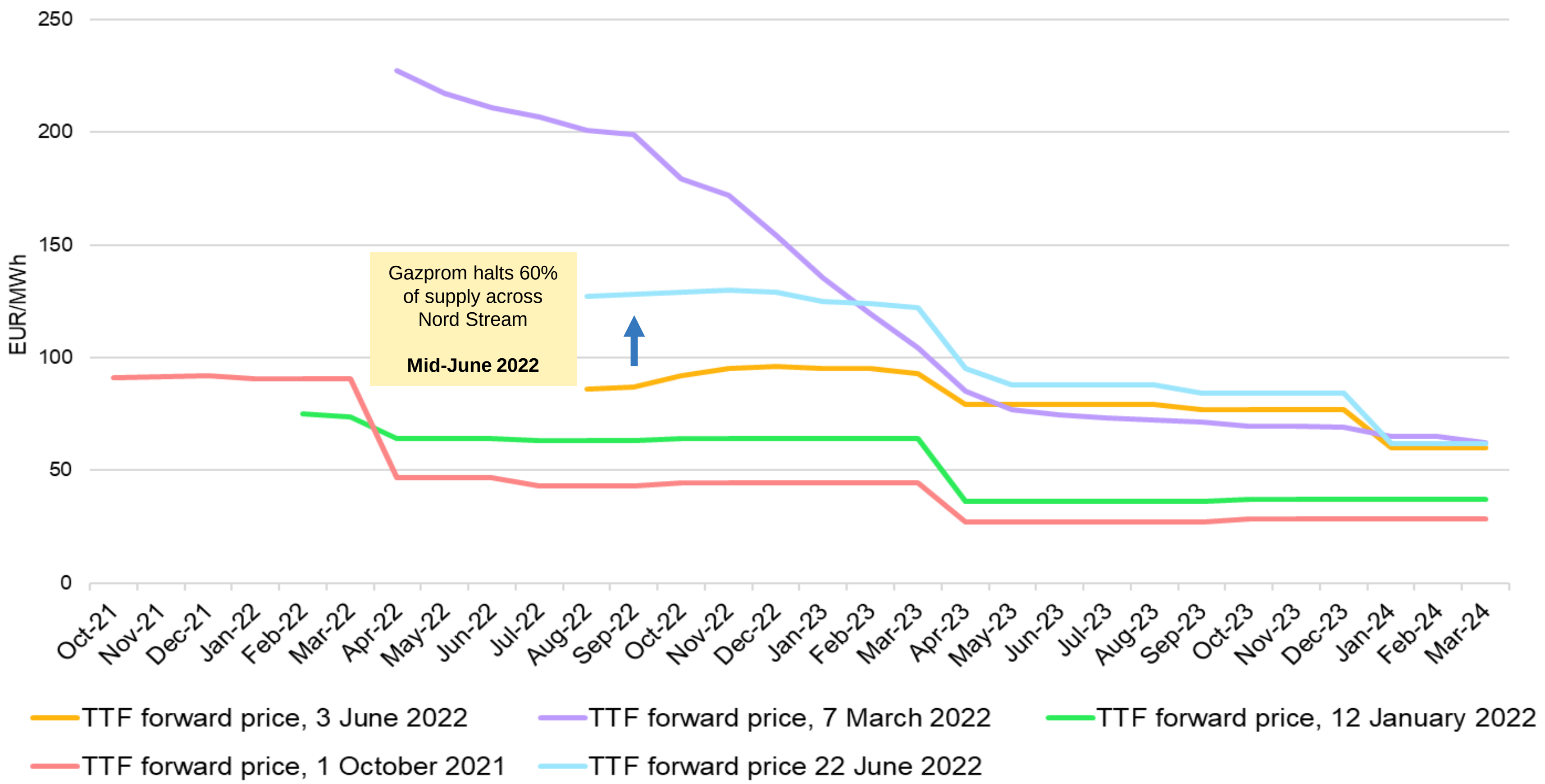
Current forward prices indicate price expectations

Evolution of gas (TTF) forward prices comparing the contractual outlook (October 2021 - June 2022)

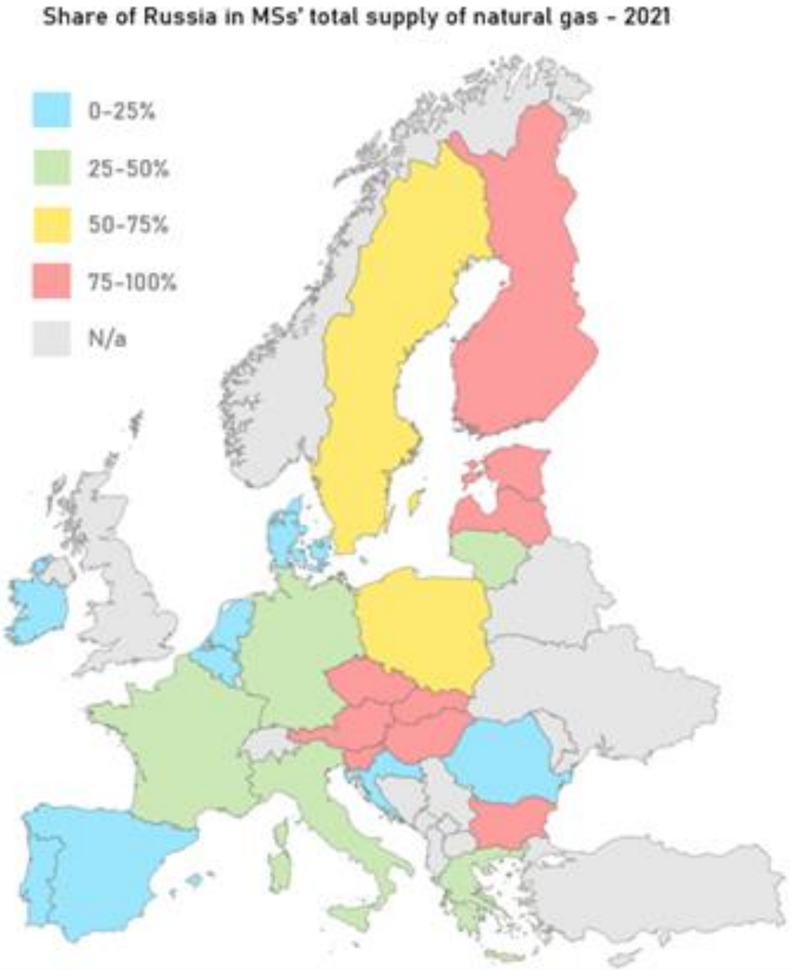


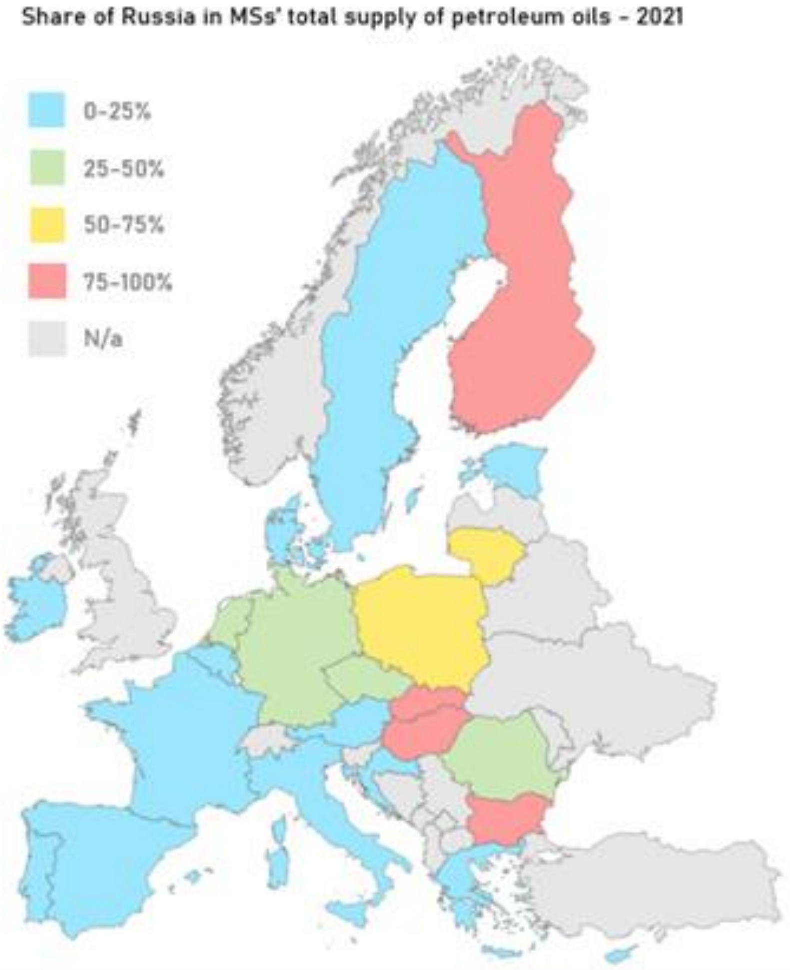
Whilst Russia's invasion of Ukraine lead to high price spikes, these subsequently eased somewhat. Now, forward prices rise again due to reduced gas deliveries, in particular via Nord Stream 1.

Source: ACER calculation based on ICIS Heren

Energy dependence on Russia is significant

Share of Russian physical gas and oil in total supply of individual MSs – 2021 - % ranges





Source: ACER based on Eurostat data.

Russian long-term contracts will not suddenly disappear

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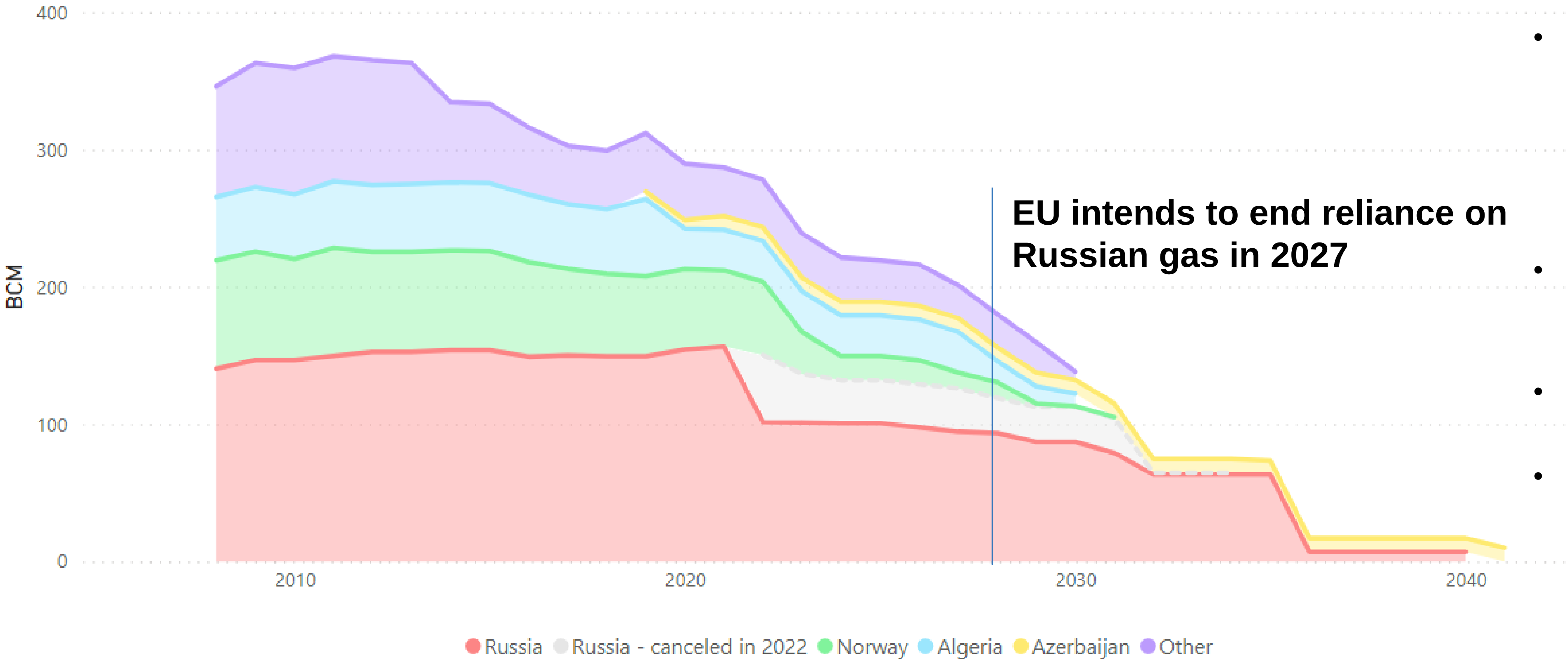
Evolution of the nominal capacity of pipeline long-term supply contracts prevailing in the EU and expiration calendar – bcm/year



- From now until 2025 Russian long-term contract volumes remain relatively unchanged at ~100 BCM
- By 2029 they gradually dip below 90 BCM
- By 2032 they go to 64 BCM
- By 2036 they go to below 10 BCM

Russian long-term contracts towards EU markets last significantly beyond 2027. This adds complexity to current considerations.

Source: ACER calculation based on Cedigaz and NRAs

US LNG coming to the rescue; will it suffice?

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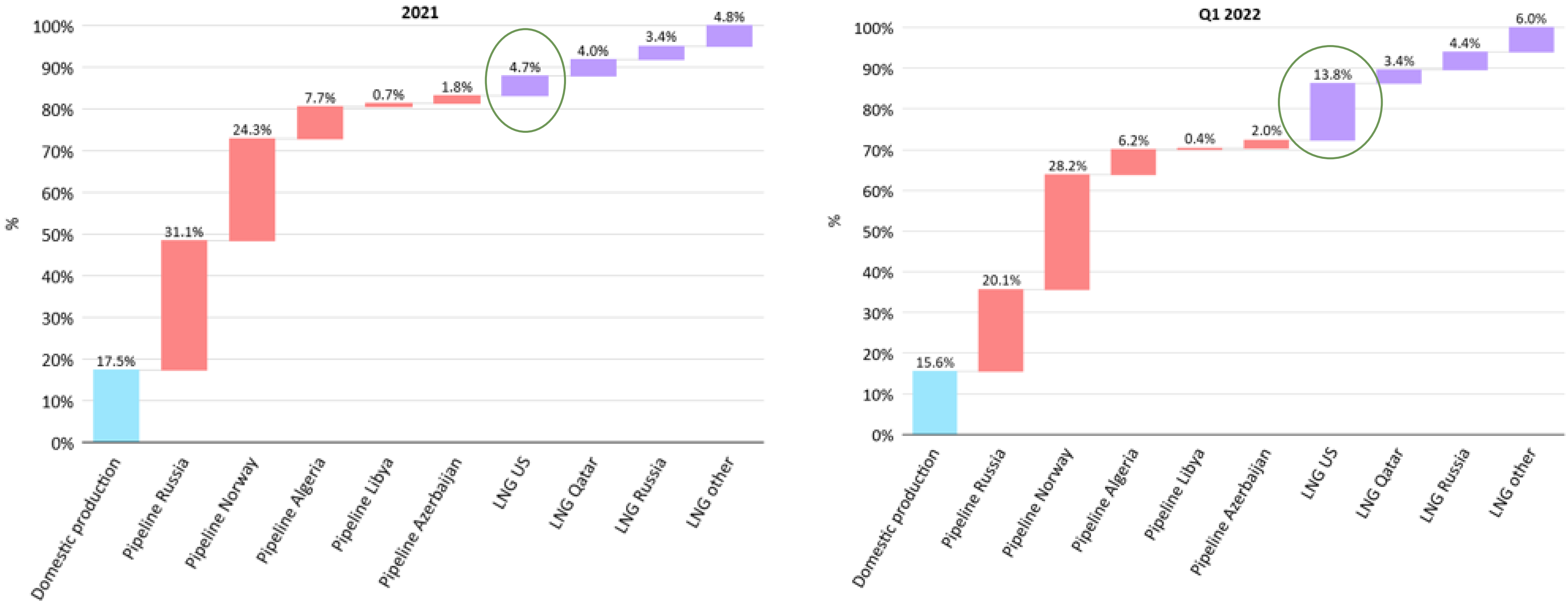
EU and UK gas supply portfolio by origin – 2021 (100% = 480 bcm) vs Q1 2022



While LNG supply is rising significantly (+70% in Q1 2022), mostly coming from the US, it will be a challenge to meet the targeted two thirds reduction of Russian supply.

Source: ACER calculation based on International Energy Agency, Refinitiv, ENTSOG and Eurostat

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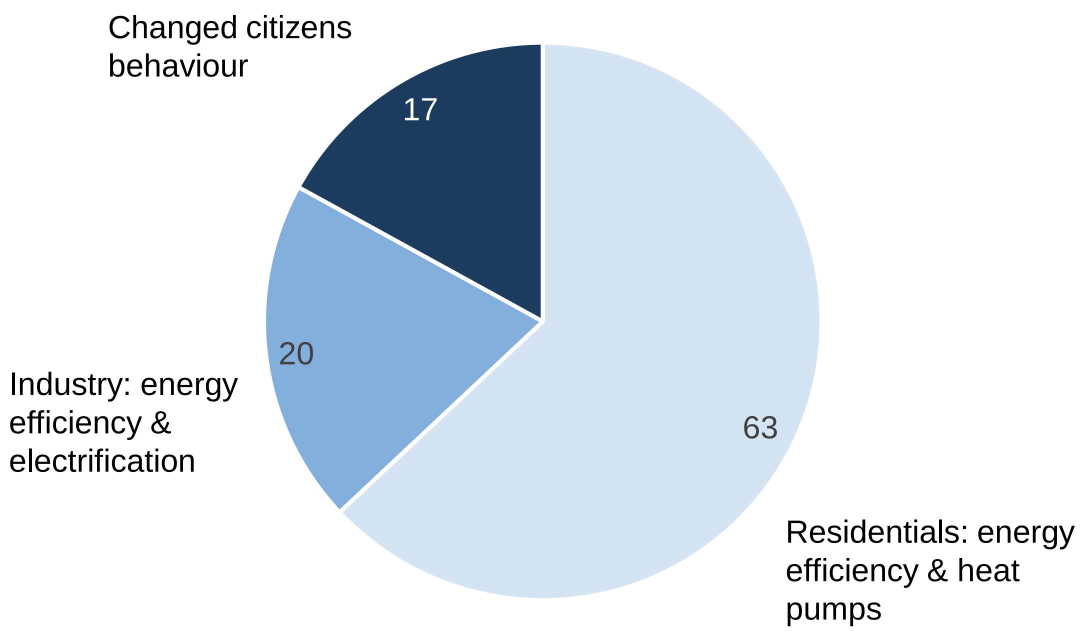
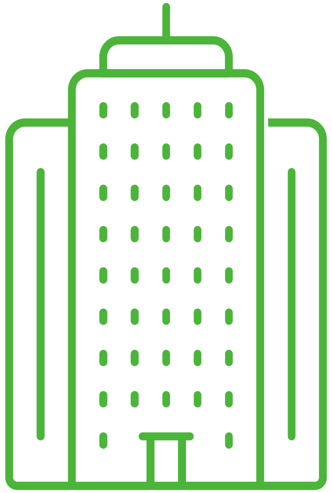
Aggressive demand reductions will be necessary

REPowerEU gas demand savings; what is being targeted 100% = 59 BCM



Example: buildings energy consumption

- Buildings represent 40% of energy consumption
- 75% of buildings are energy inefficient
- Only ~1% of building stock renovated yearly, getting to 1.7% a year would save an extra 1 BCM/year
- More investment and support needed to speed up renovations



Targeting demand-side measures is key. Price signals are not 'the full story' (current incentives being a case in point). Institutional and behavioural barriers persist. In addition, some interventions have long lead times.

Source: European Commission COM/2022/230 final; IEA A 10-Point Plan to Reduce the European Union's Reliance on Russian Natural Gas

Thank you for your attention

Interested in more? Join our webinar on Gas Wholesale Market Monitoring on July 8, 10.00 – 11.00 h. CET

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European Union Agency for the Cooperation of Energy Regulators

info@acer.europa.eu
acer.europa.eu
@eu_acer
linkedin.com/in/EU-ACER/

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Back-up slides

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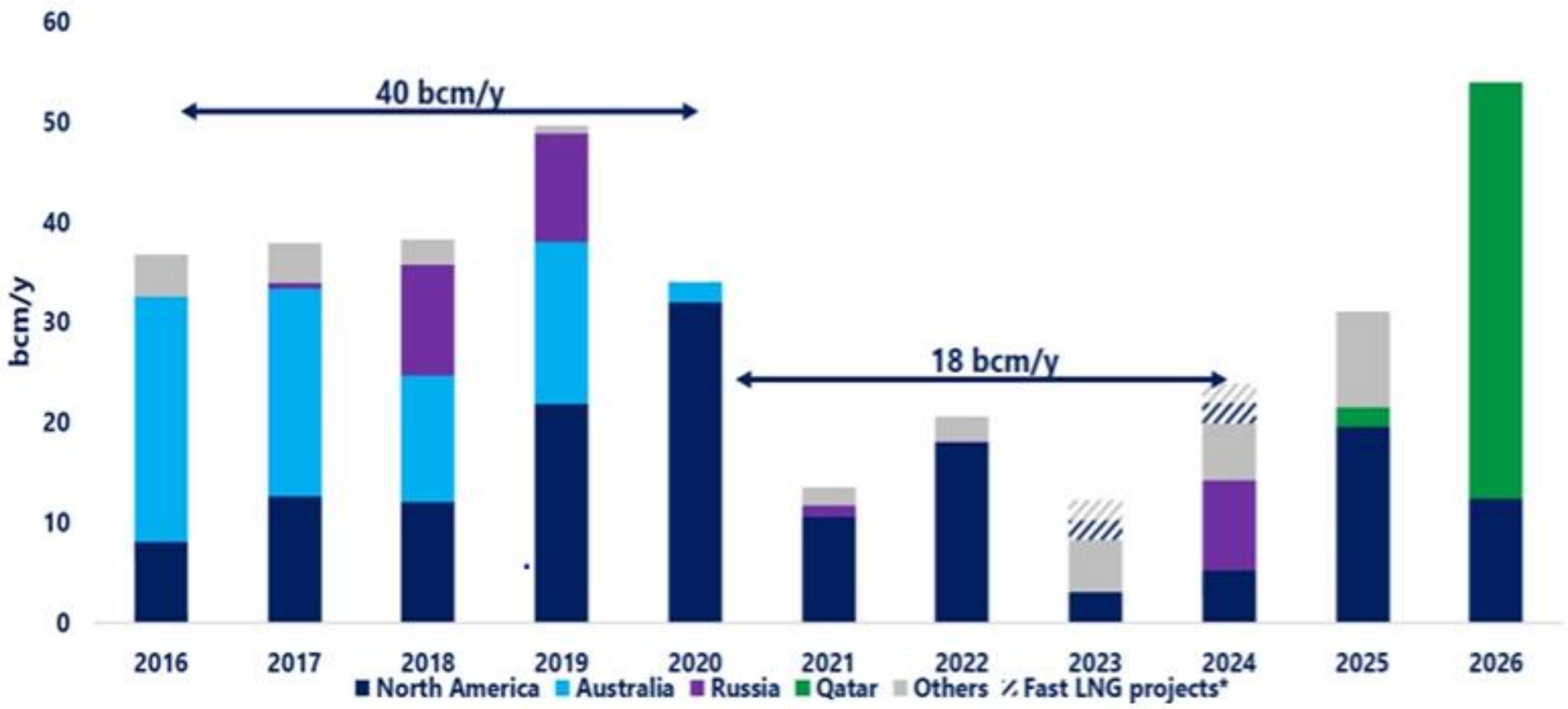
LNG capacity remains tight in the coming years

Global LNG liquefaction capacity additions by regions by start-up year – 2016-2026



The EU will compete for extra volumes with Asia which will see growing demand, partly for overall economic growth, partly for lowering coal usage.

Source: IEA Gas Quarterly Report Q2 2022

Current Russian gas supply cannot just ‘go elsewhere’

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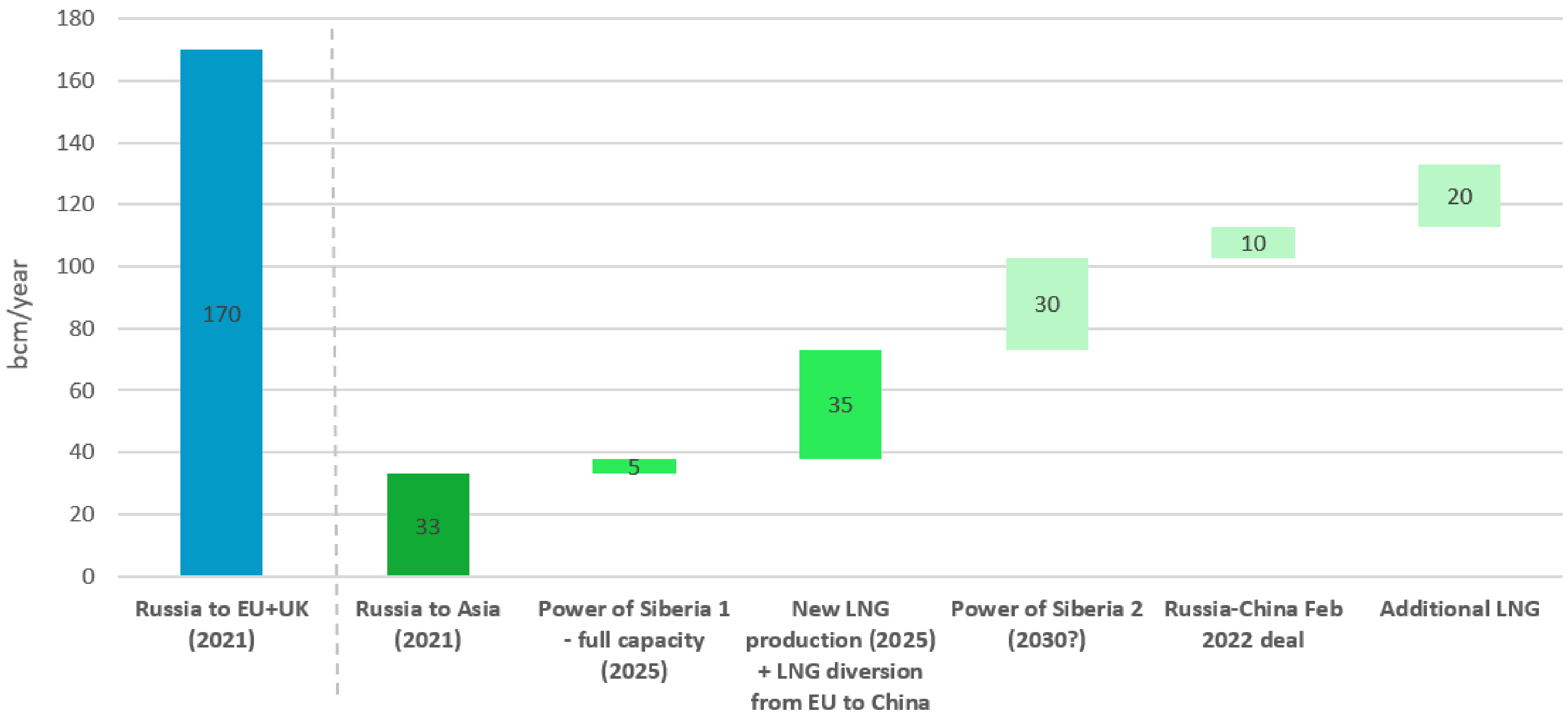
Existing and potential Russian gas exports to Asia vs Russian export to EU + UK



Russia expected to prioritise new export capacity, in particular towards China. This will involve significant investment and price concessions. Volumes are highly unlikely to make up for current EU + UK exports.

Source: Eurostat Energy database; Centre for Strategic and International Studies (May, 2022); IEA: Energy Fact Sheet: Why does Russian oil and gas matter?

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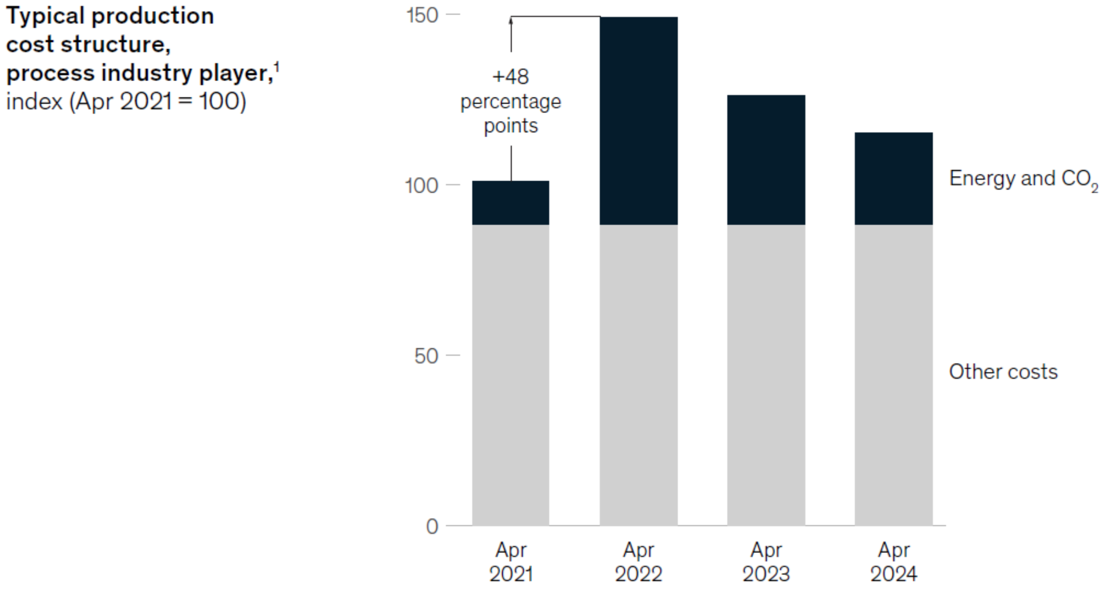
Rising energy costs in industry lead to demand cuts

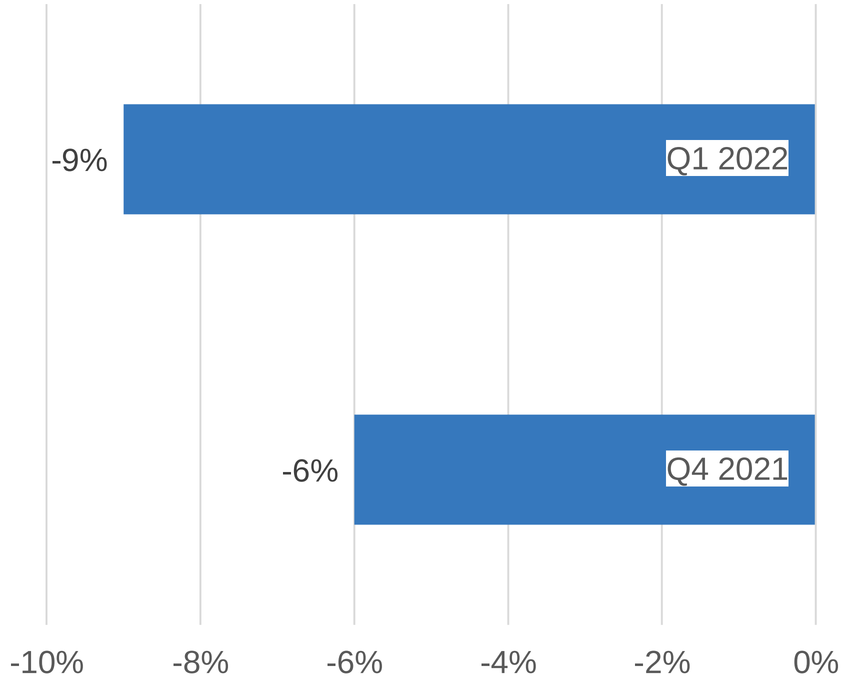
Exhibit 1

For some process industry players, rising energy prices have increased production costs by almost 50 percent.



[1]Fraction of total cost in 2021 for electricity 5% (€60/MWh), gas 5% (€20/MWh), CO_2 2.5% (€50/MWh). Prices for gas futures based on EEX Futures, TTF (title transfer facility) as of Mar 14, 2022. Electricity price assumed double of natural gas price including CO_2. CO_2 price evolving to €100/ton for future years.

EU industrial gas demand



Industry is likely to be further encouraged or forced to further efficiency oriented investment.

Source: Left graph McKinsey & Company, right graph Eurostat Energy database