



# Gas markets today and tomorrow

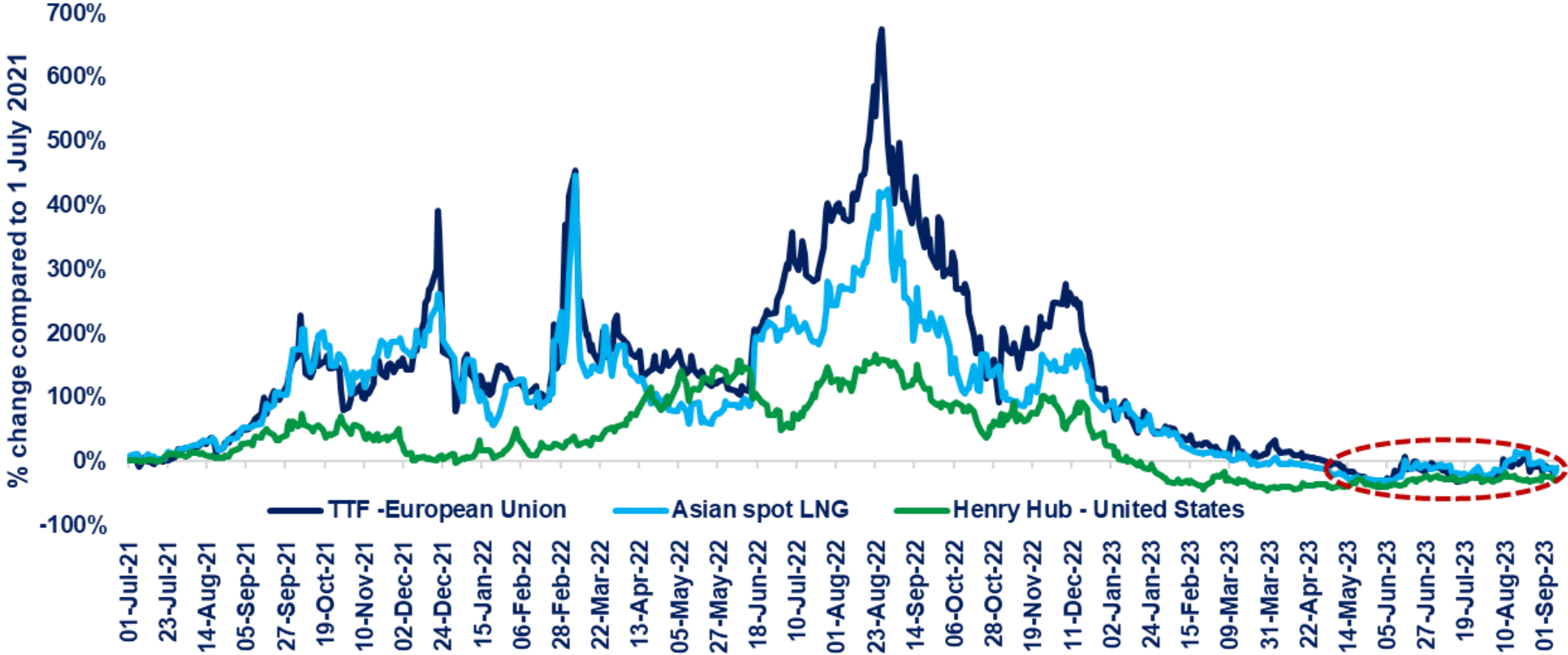
Tim Gould, IEA Chief Energy Economist

Congrès France gaz  
19 September 2023

# Market tensions have moderated significantly since the 2022 highs



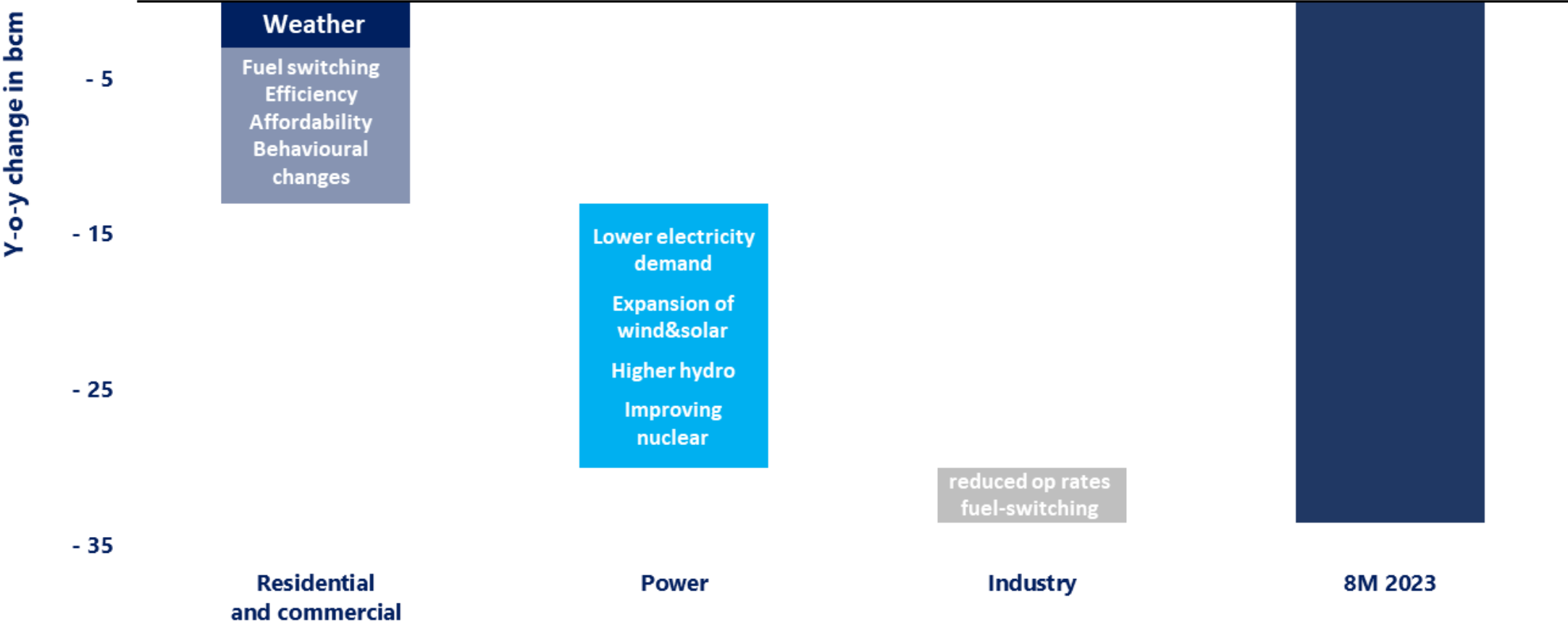
Selected regional natural gas prices, 2021-2023



After reaching all-time highs in 2022, Asian and European spot gas prices averaged below their 2021 levels in Q2-3 2023 amidst easing market fundamentals.

# Lower demand has been key to easing market balances

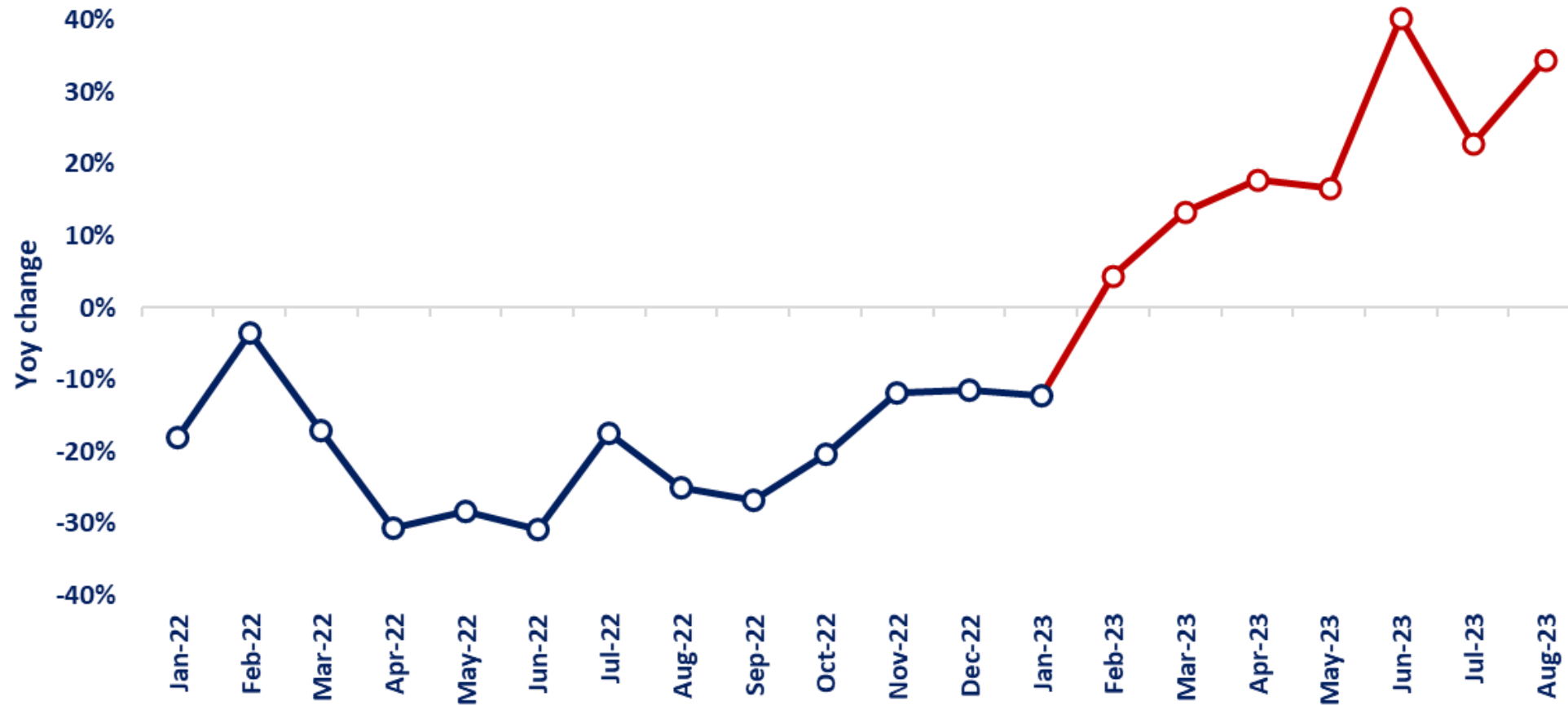
Year-on-year change in natural gas demand in OECD Europe during the first 8 months of 2023



Natural gas consumption in OECD Europe fell by around 8% (or 33 bcm) y-o-y in the first eight months of 2023, with the power sector driving demand reductions

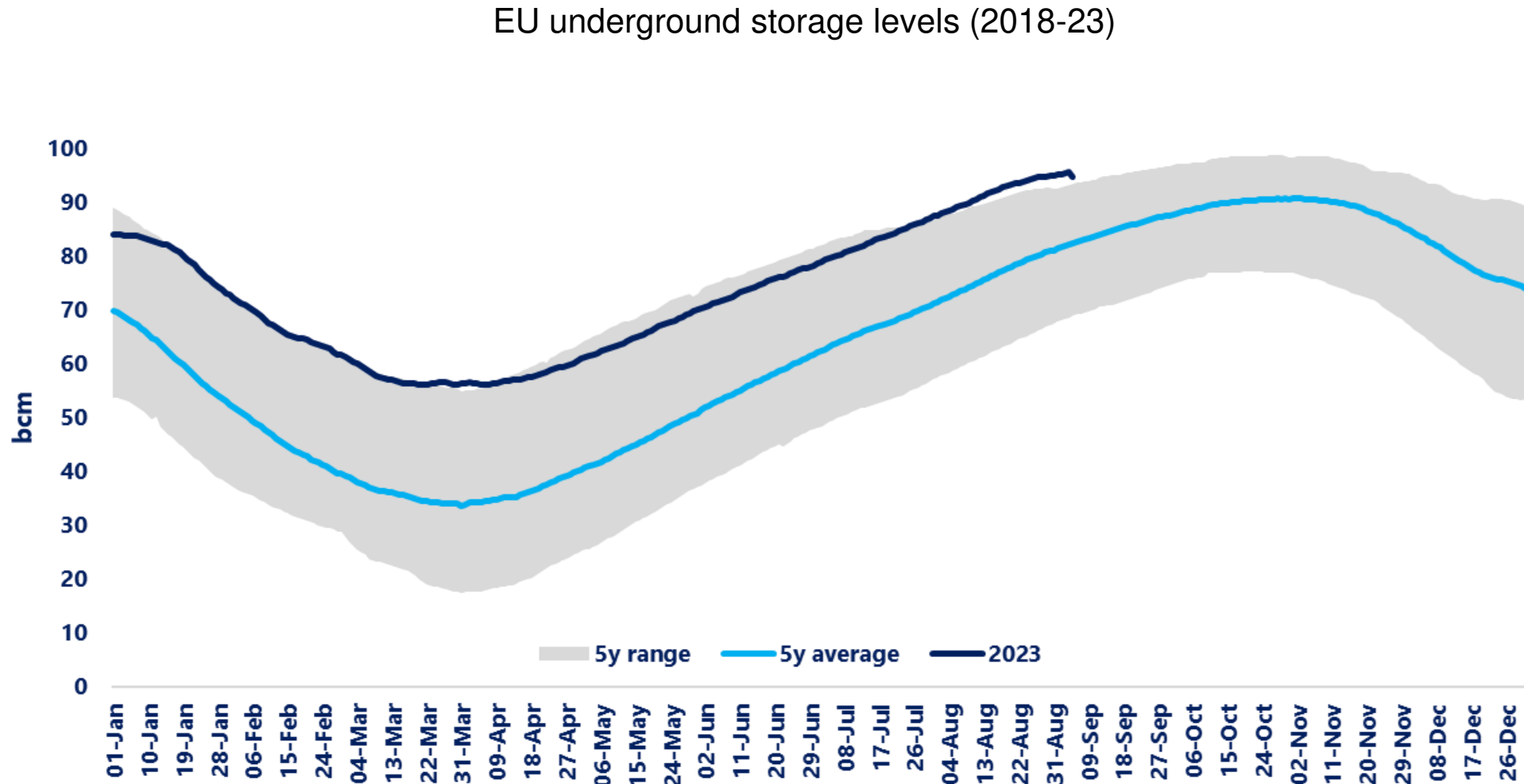
# China gradually recovering its appetite for LNG

Year-on-year change in China's LNG imports (2022-23)



**China's LNG imports returned to double-digit growth, supported by a recovery in demand. Nevertheless, China's LNG imports are expected to remain below their 2021 levels in 2023.**

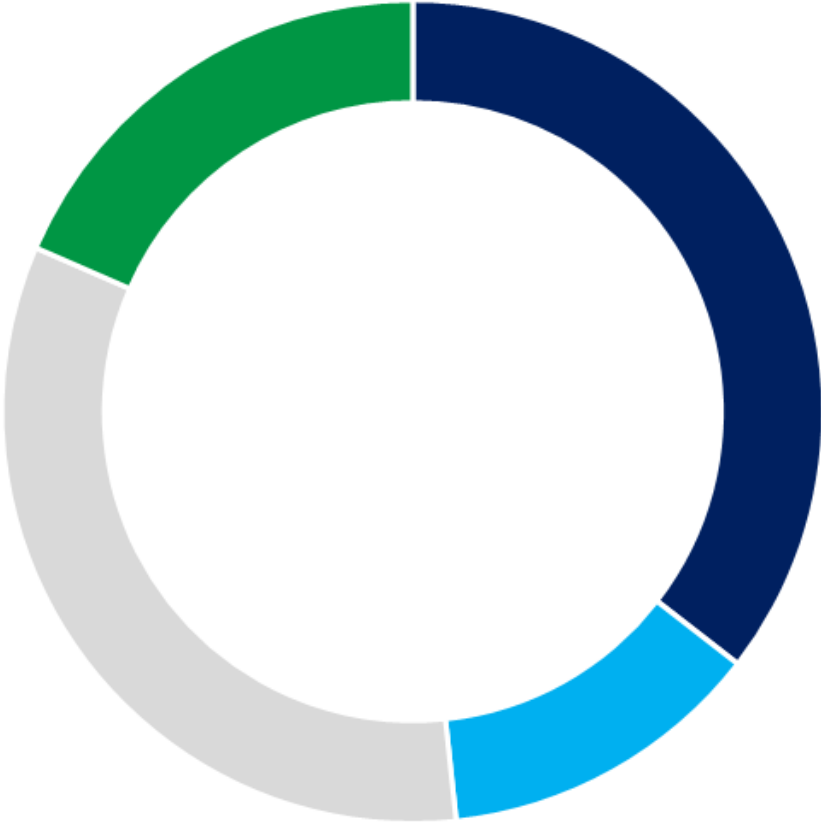
# In the EU storage sites reached 90% fill levels by mid-August



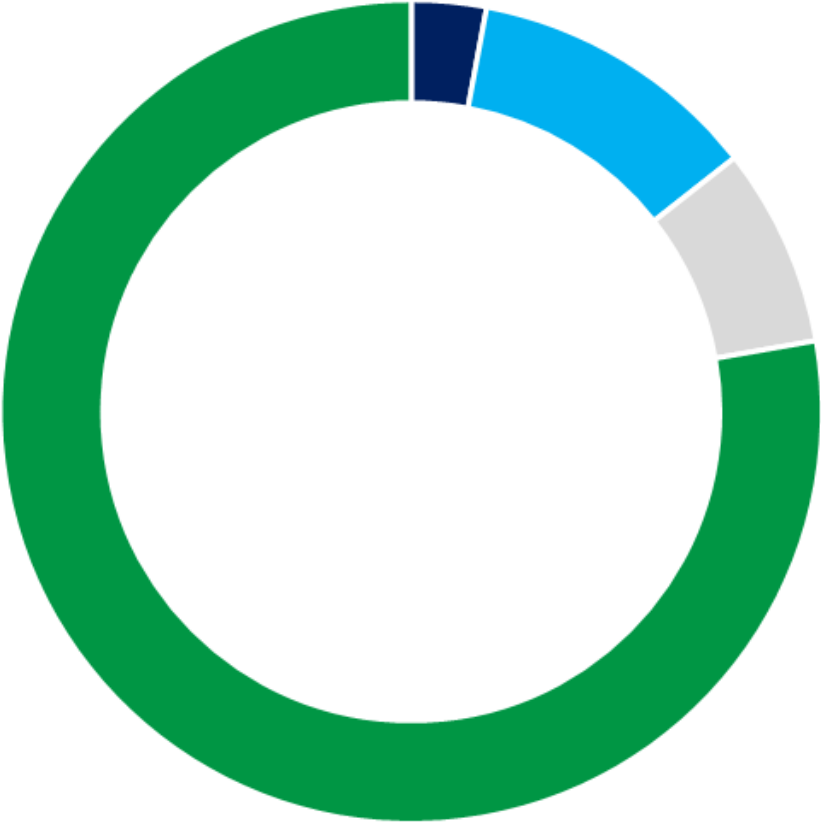
Lower demand together with healthy LNG inflows allowed the EU to fill 90% of working capacity by mid-August... but full storage sites do not rule out winter volatility and the risk of renewed market tensions.

# The EU's exposure to the spot market is set to increase

EU natural gas supply by source (2021)



EU natural gas supply by source (2030)

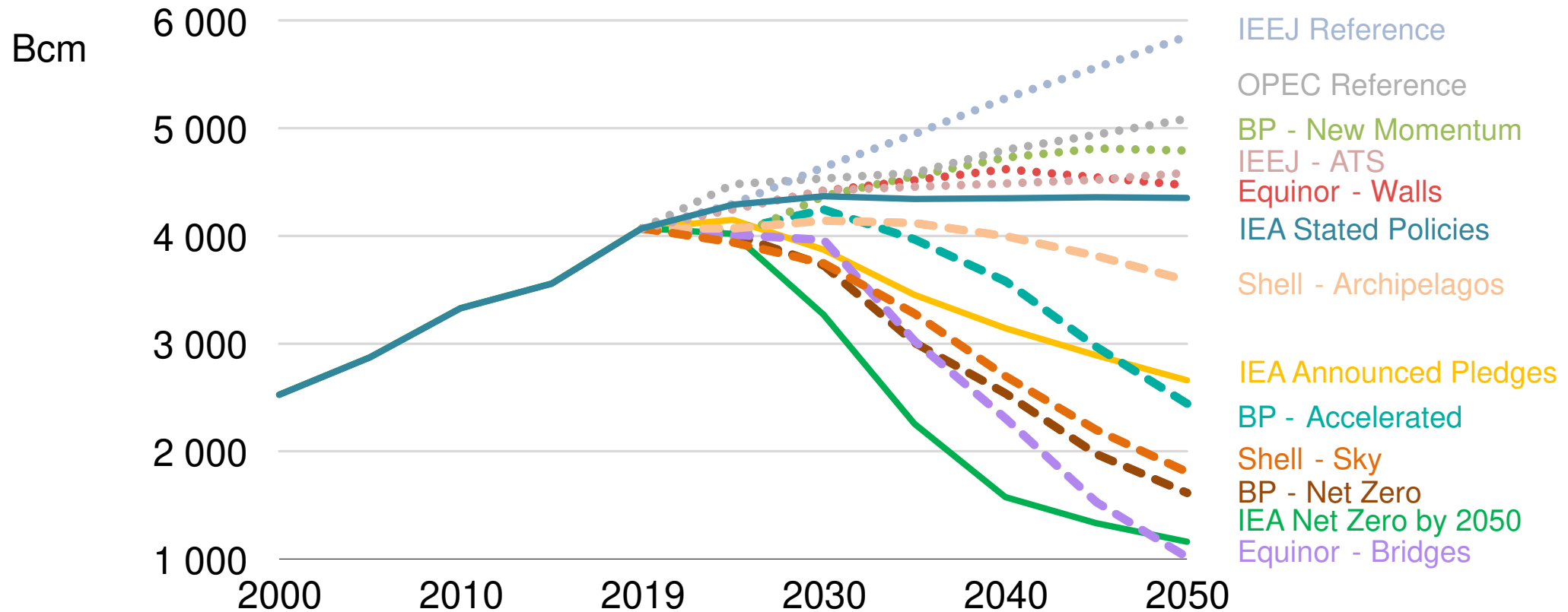


■ Russian LTC ■ Domestic production ■ Other LTC supply ■ flexible LNG/spot

**The share of spot volumes is expected to increase to more than 70% by 2030  
– if expiring contracts are not renewed and no new contracts are signed**

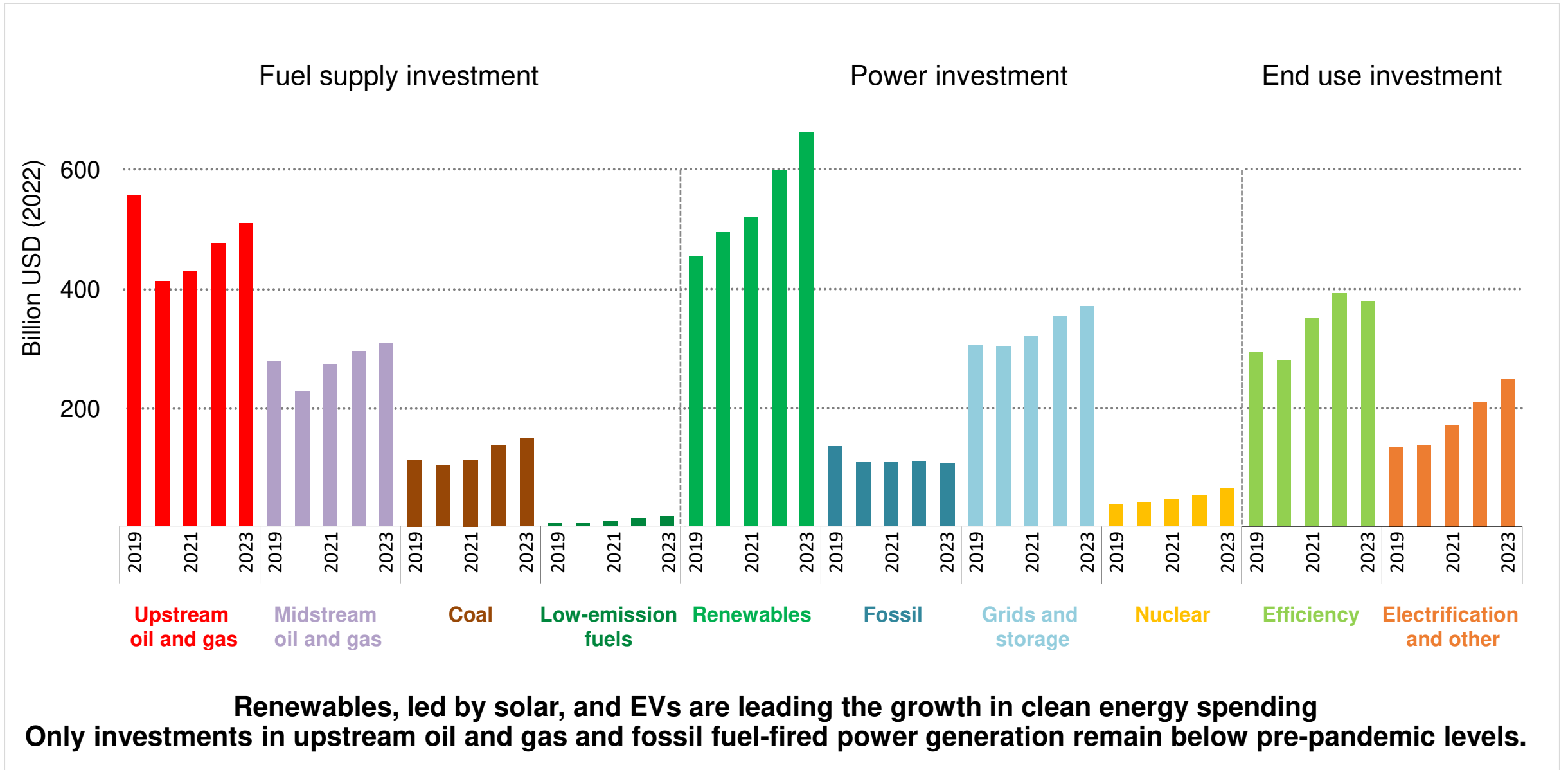
# There is considerable uncertainty around future gas demand

Natural gas demand in the World Energy Outlook 2022 compared with other scenario assessments



**There is considerable variation in modelled outcomes for natural gas demand, depending largely on assumptions about the role and durability of natural gas as a transition fuel and the strength of climate ambition.**

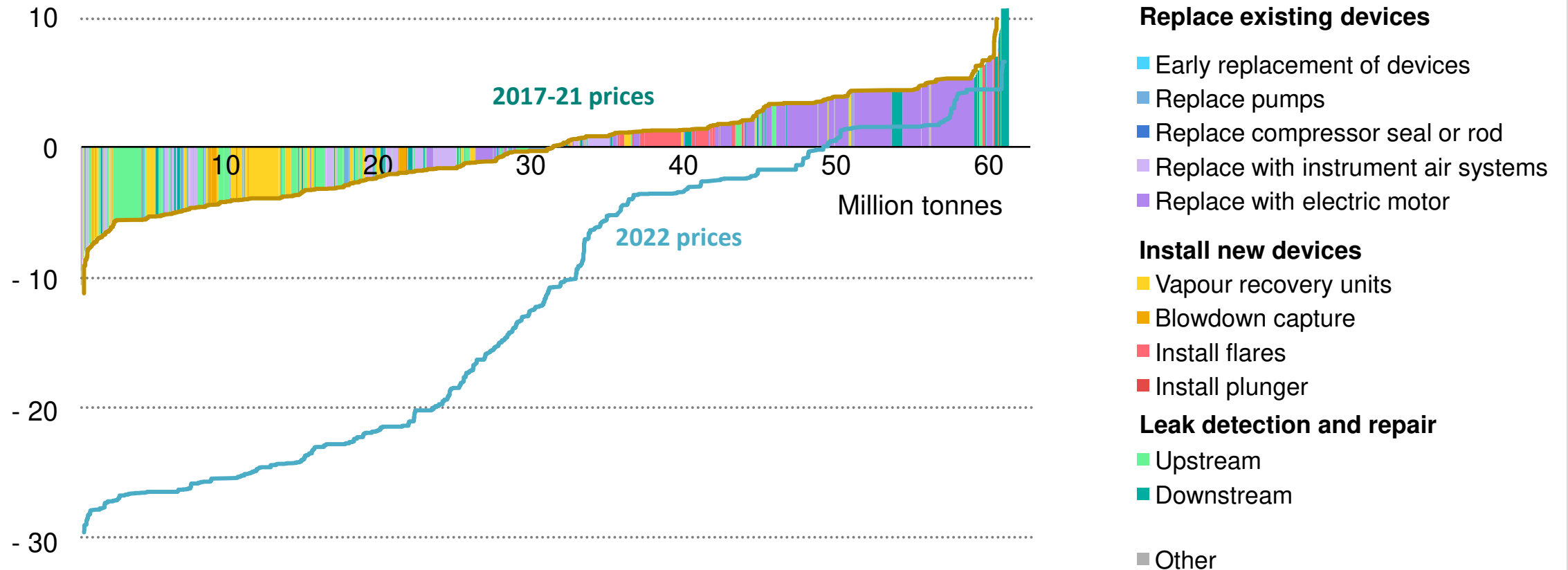
# Clean energy investment is picking up quickly





# Cutting methane is one of the cheapest ways to limit near-term global warming

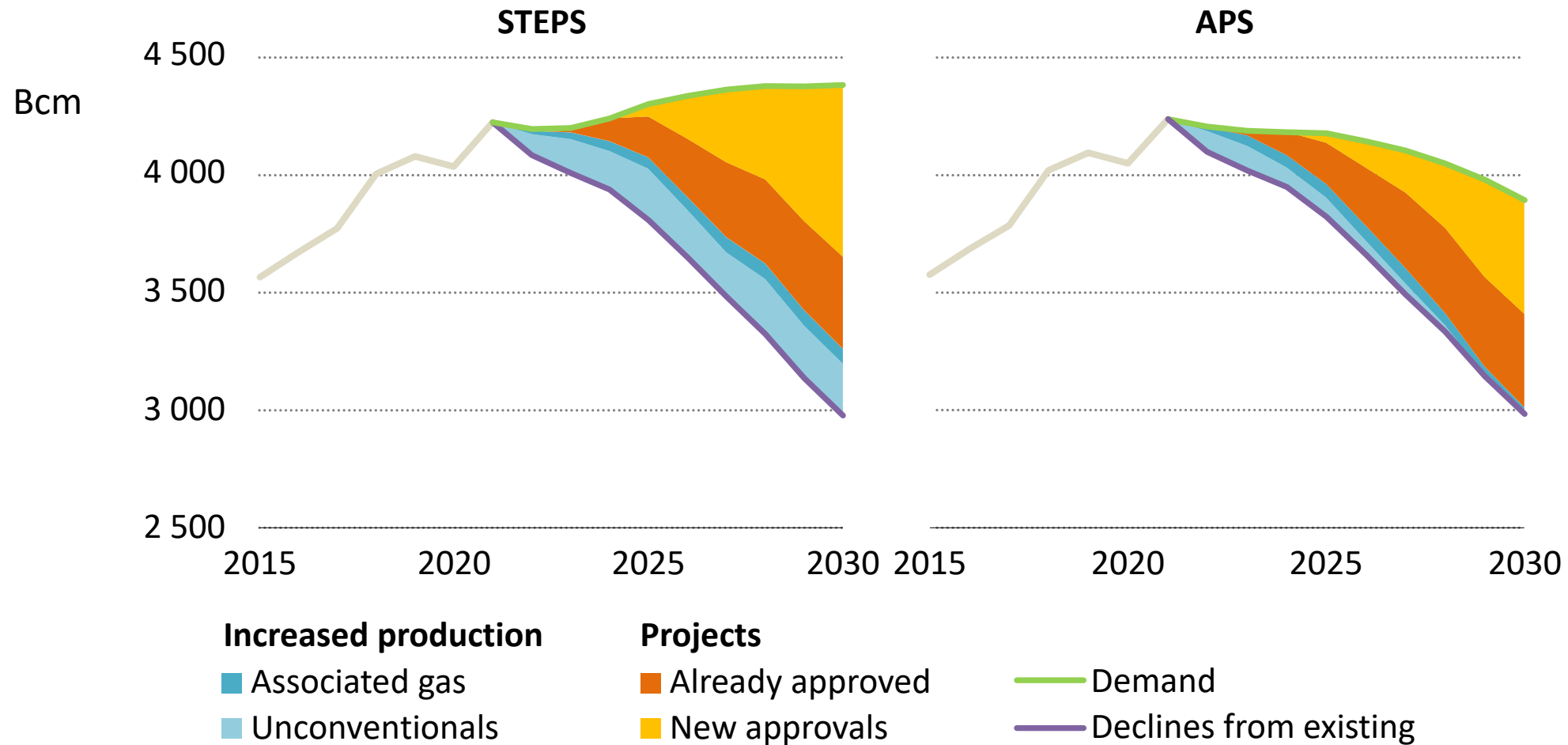
Oil and gas methane abatement cost curve at 2017-21 prices



**High prices in 2022 meant most abatement measures could have been deployed at no net cost. Less than 3% of the net income received by the oil and gas industry in 2022 would be enough to cut emissions by 75% to 2030**

# How much new supply is needed?

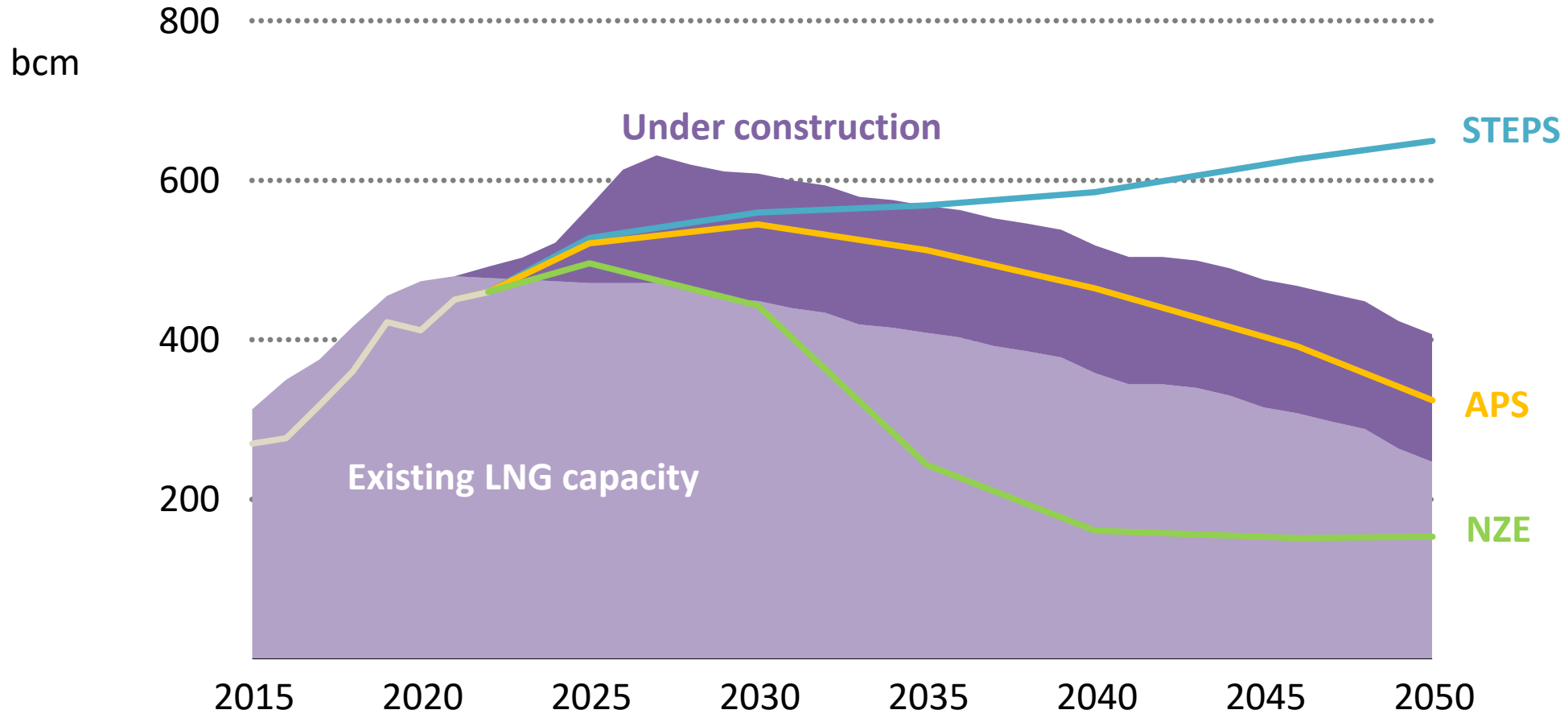
Investment in upstream natural gas supply in the Stated Policies (STEPS) and Announced Pledges (APS) scenarios, 2015-2030



**In the STEPS and APS, new investments are required to offset declines from existing fields, even with flat or declining demand. In the NZE, the fall in demand is steep enough to be met without new fields.**

# LNG is in high demand, but for how long?

Total inter-regional LNG trade by scenario compared to existing and under construction LNG capacity



There is near-term growth in LNG trade in all scenarios, but sharp divergences thereafter. A gap between LNG capacity and demand emerges in STEPS from the mid-2030s.

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