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WEEK



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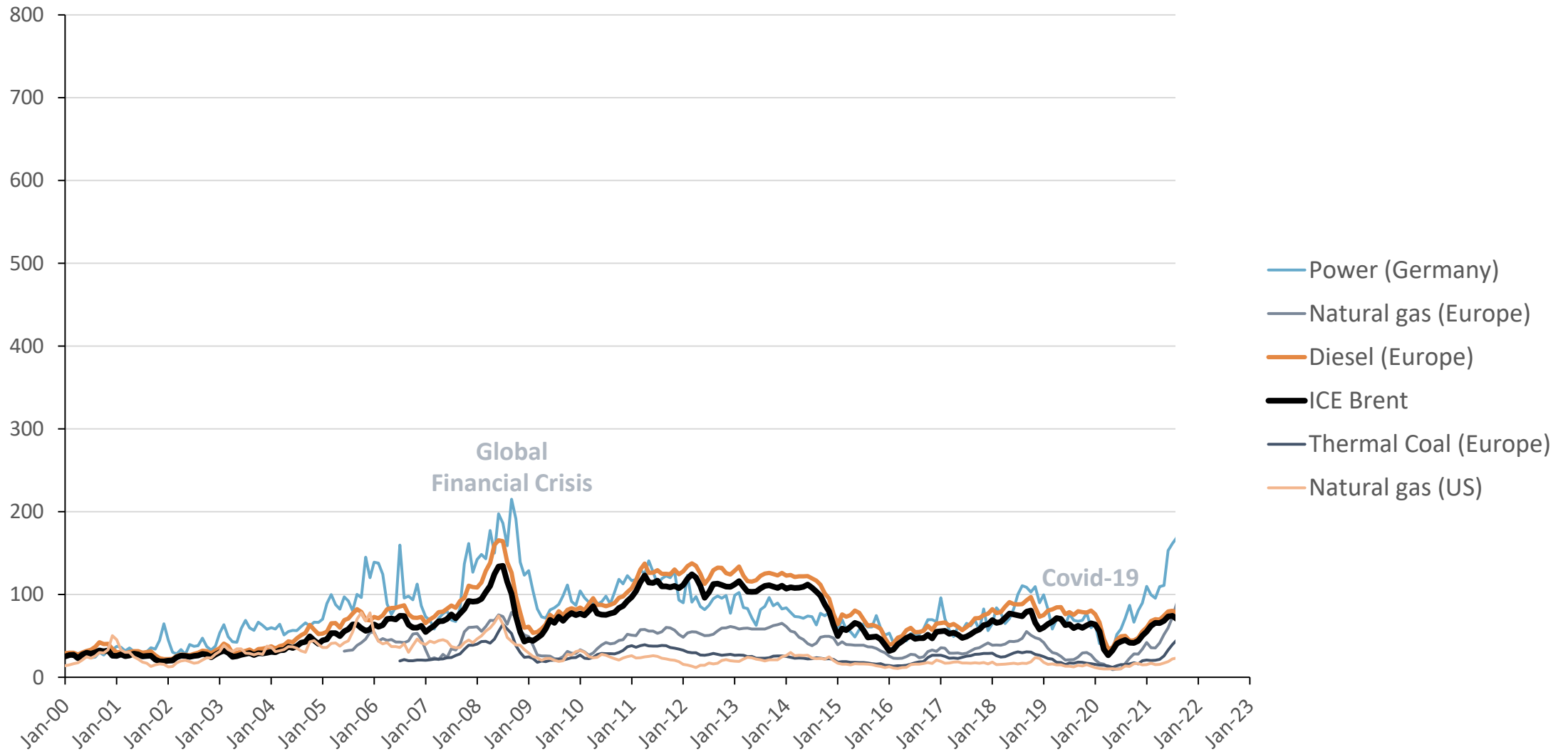
# State of the Kingdom

Simon Sjøthun

Operatørkonferansen 2022

# The energy markets are used to ups and downs...

Select energy commodity prices, monthly averages  
USD per barrel of oil equivalent



Source: Rystad Energy research and analysis, Bloomberg



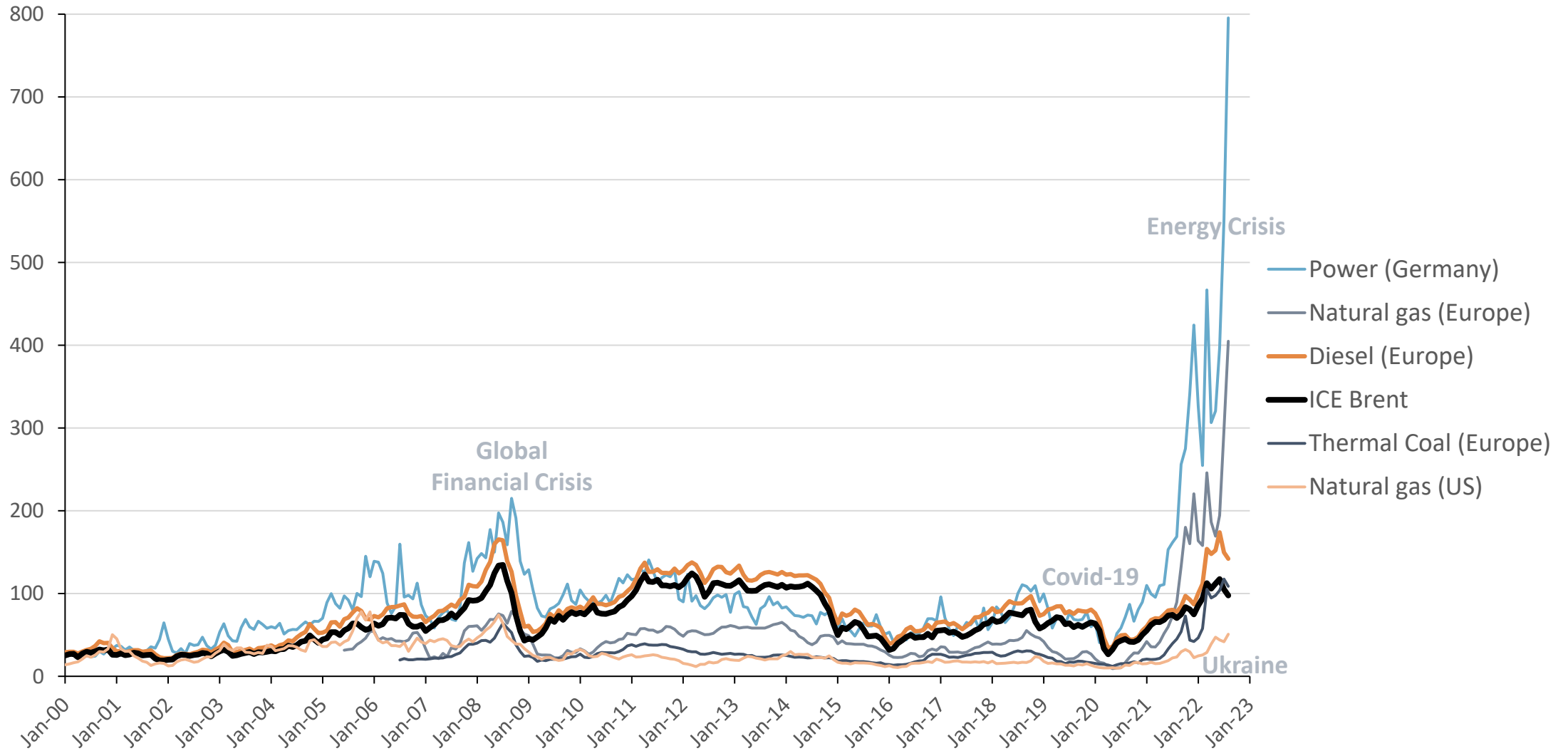
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# ...but the current situation can surely qualify as a «crisis» and not a cycle

Select energy commodity prices, monthly averages  
USD per barrel of oil equivalent



Source: Rystad Energy research and analysis, Bloomberg

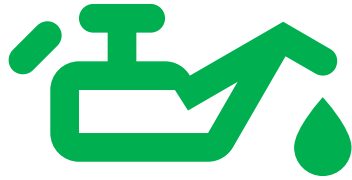


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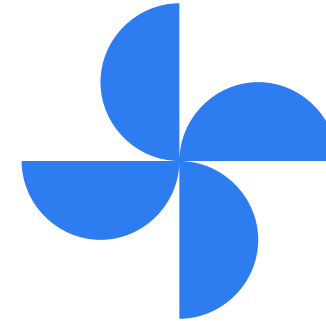
# Norway has once again won the lottery!



Oil is trading around 100 USD/bbl

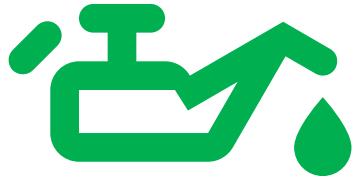


Gas is trading at off the scale levels



Dispatchable hydro power is extremely valuable

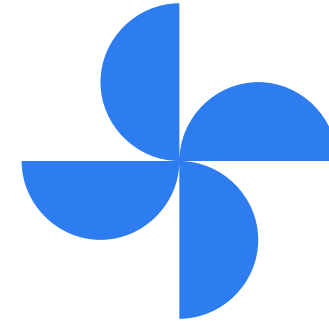
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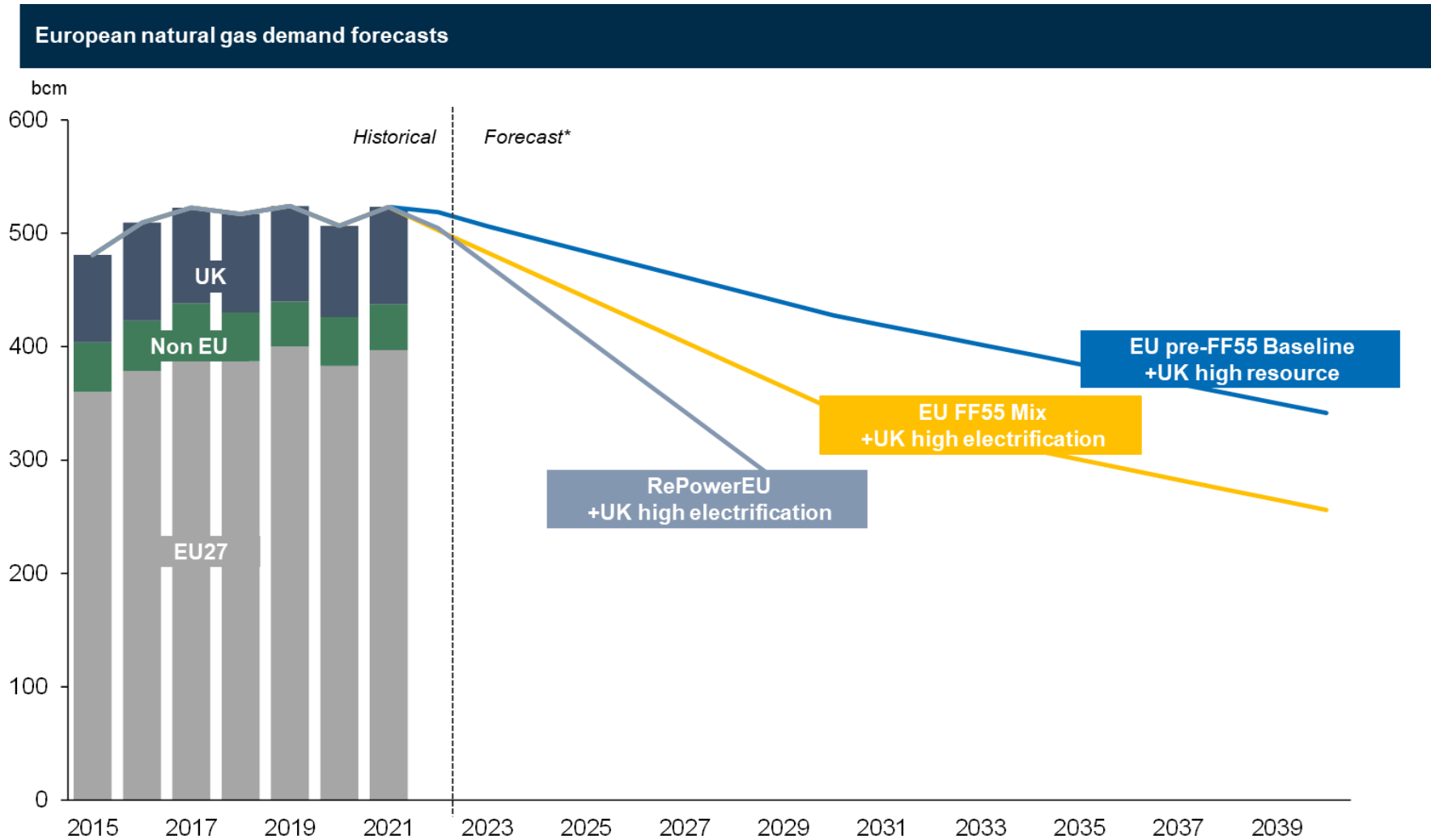
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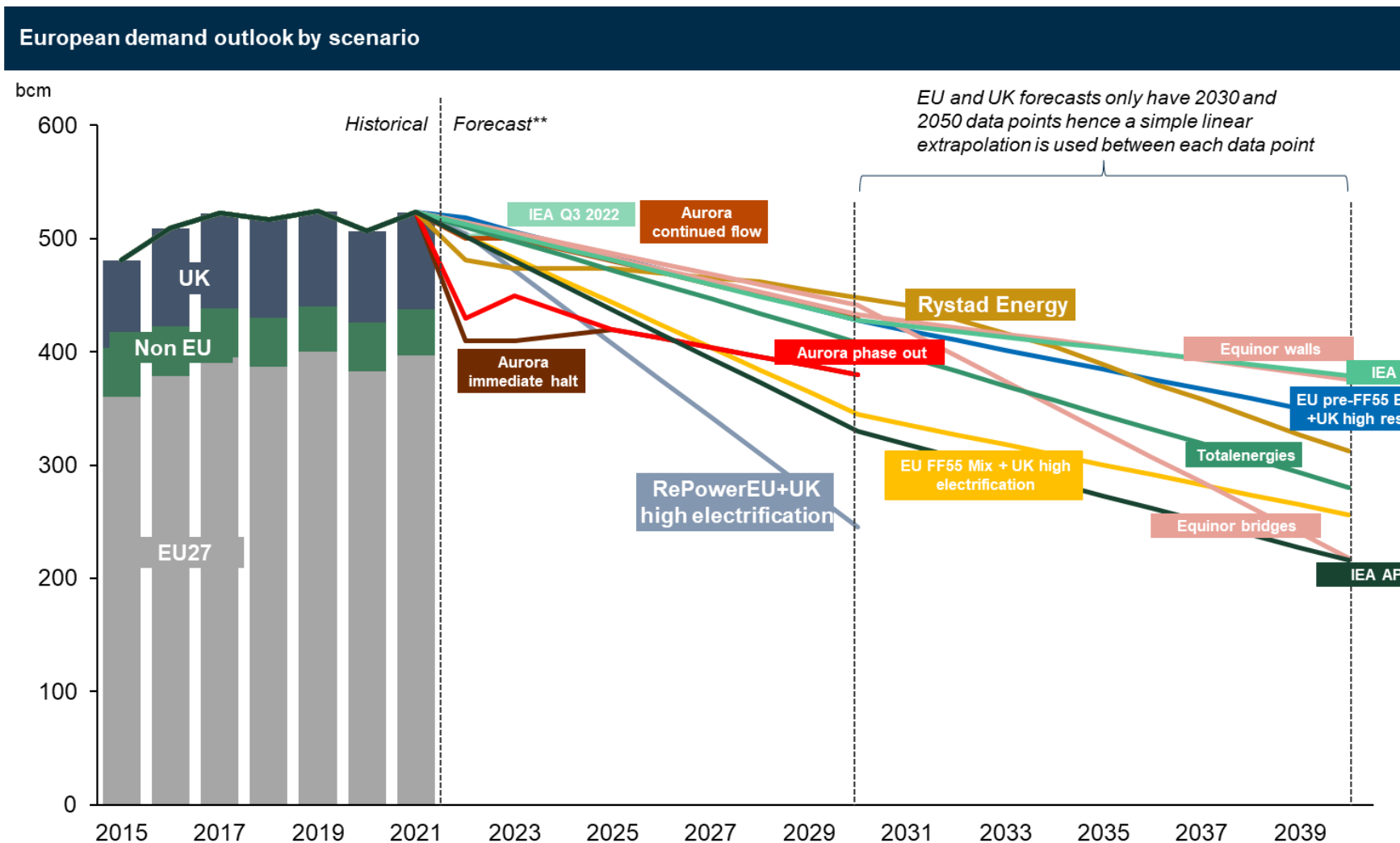


# Study assumes demand reductions from 520 bcm to 260 or 340 bcm by 2040



\*EU and UK forecasts have 2030 and 2050 data points only; a linear extrapolation is used between these data points  
 Source: Rystad Energy research and analysis, Rystad Energy GasMarketCube, European Commission, UK Department for Business, Energy & Industrial Strategy

# Post conflict consensus seems to be far above RePowerEU ambitions

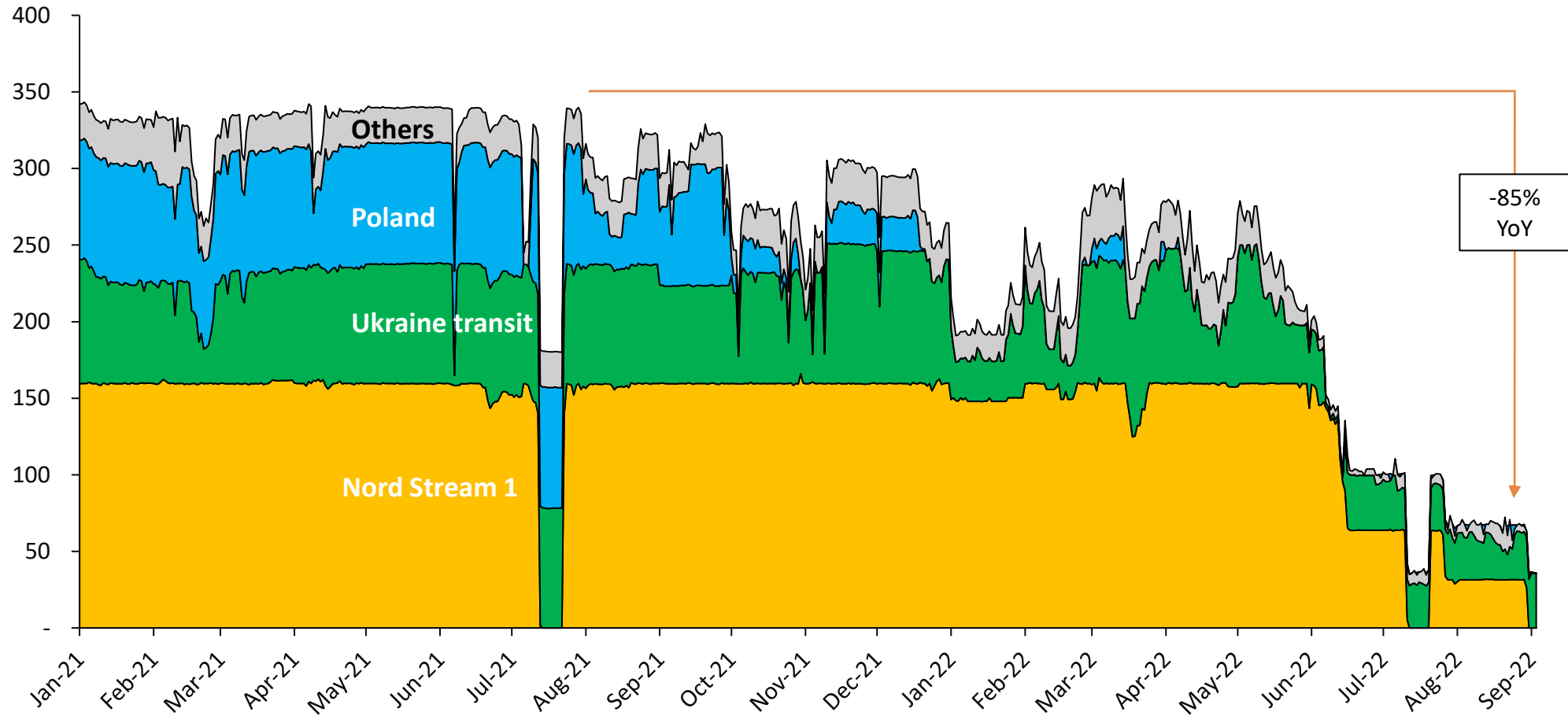


Countries included in the scope are: EU, UK, Norway, Albania, Moldova, Montenegro, North Macedonia, Serbia, Switzerland, Ukraine  
 IEA, Equinor and Totalenergies uses relevant growth rate for outlook – geographic coverage is not exactly 1 to 1 with historical data points  
 Source: Rystad Energy research and analysis, Rystad Energy GasMarketCube, European Commission, UK Department for Business, Energy & Industrial Strategy

# Russian gas exports has dropped 85% YoY in September 2022

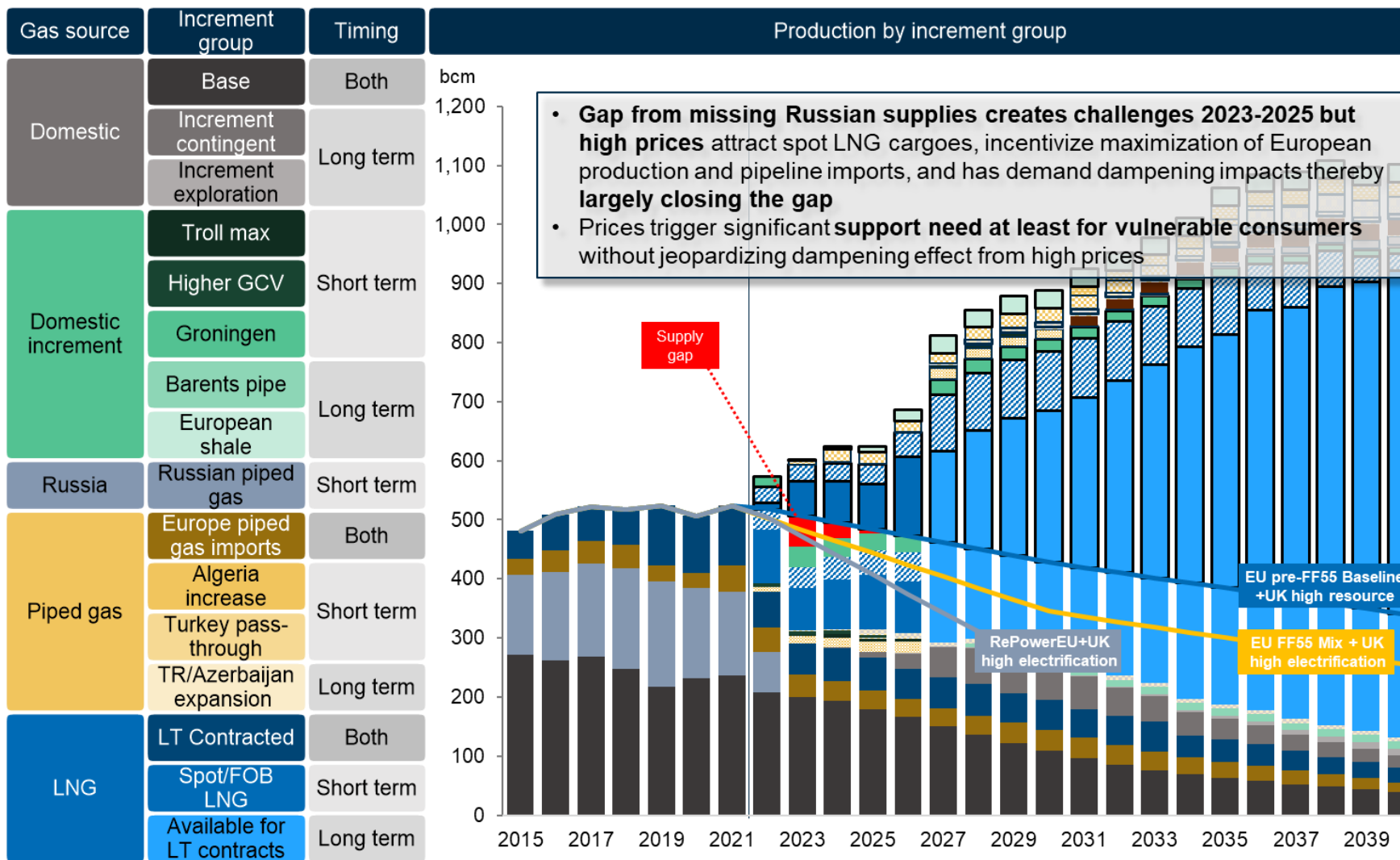
## Russian gas exports to Europe through main pipelines

Million cubic meters per day





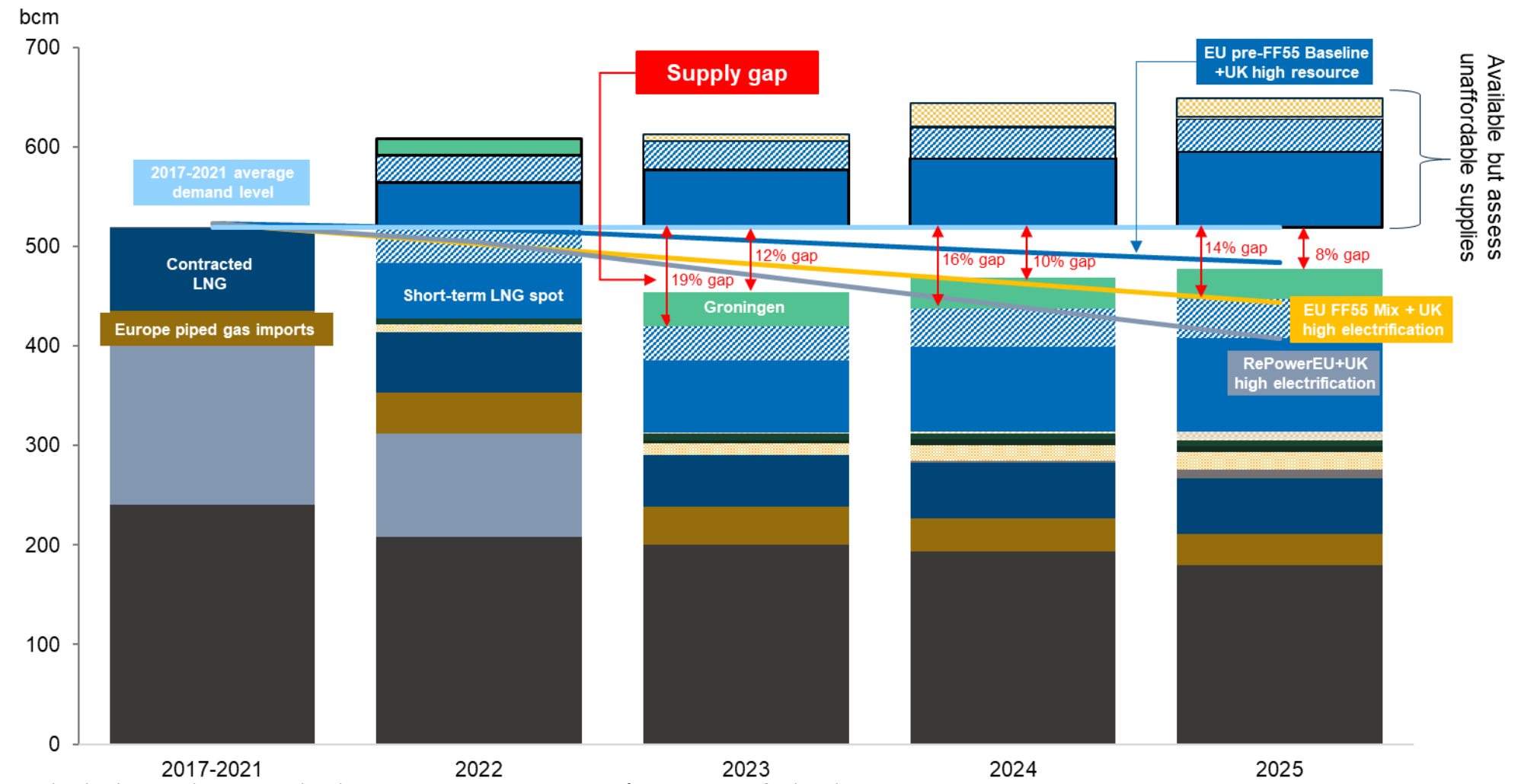
# No Russian supplies as of 2023 creates supply gap in 2023 - 2025



Source: Rystad Energy research and analysis, Rystad Energy GasMarketCube, European Commission, UK Department for Business, Energy & Industrial Strategy

# Possible supply gap of up to 19% in the next years unless demand is adjusted

Short-term supply with high-cost / non-affordable gas filtered out, and without Russia from 2023

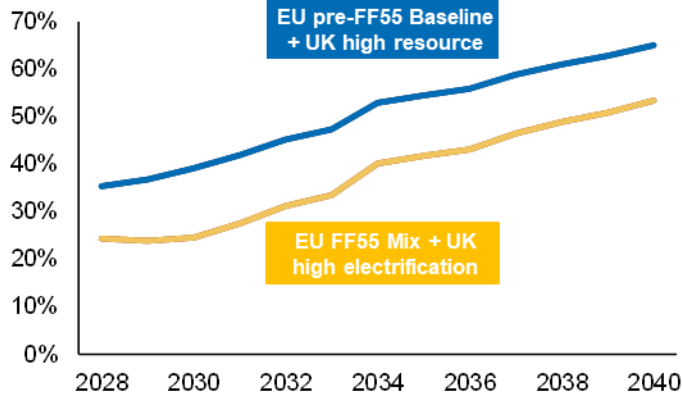


Source: Rystad Energy research and analysis, Rystad Energy GasMarketCube, European Commission, UK Department for Business, Energy & Industrial Strategy

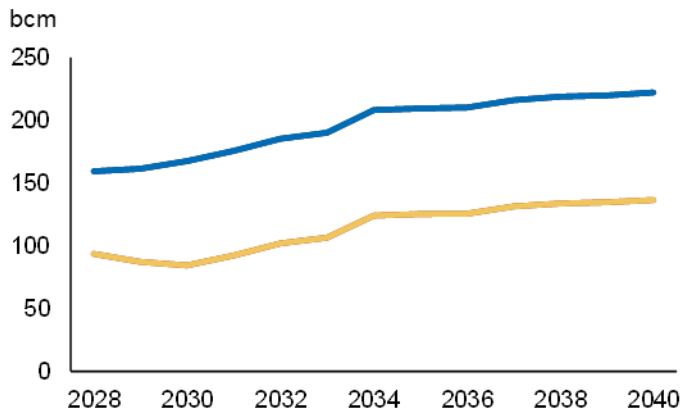


# Long-term new capacity expansion is required and could act as a future insurance policy

## Call on capacity expansion\* market share



## Call on capacity expansion\* absolute volume



## Assessment

**Increased long term gas export capacity is required despite undesired lock in risk**

However, it is arguably sensible to risk over investment in gas acting as insurance policy versus a possible new energy crunch



Emissions go up when coal is used as an energy supply of last resort



High energy prices result in energy poverty and its regressive tax nature has the biggest impact on the least fortunate

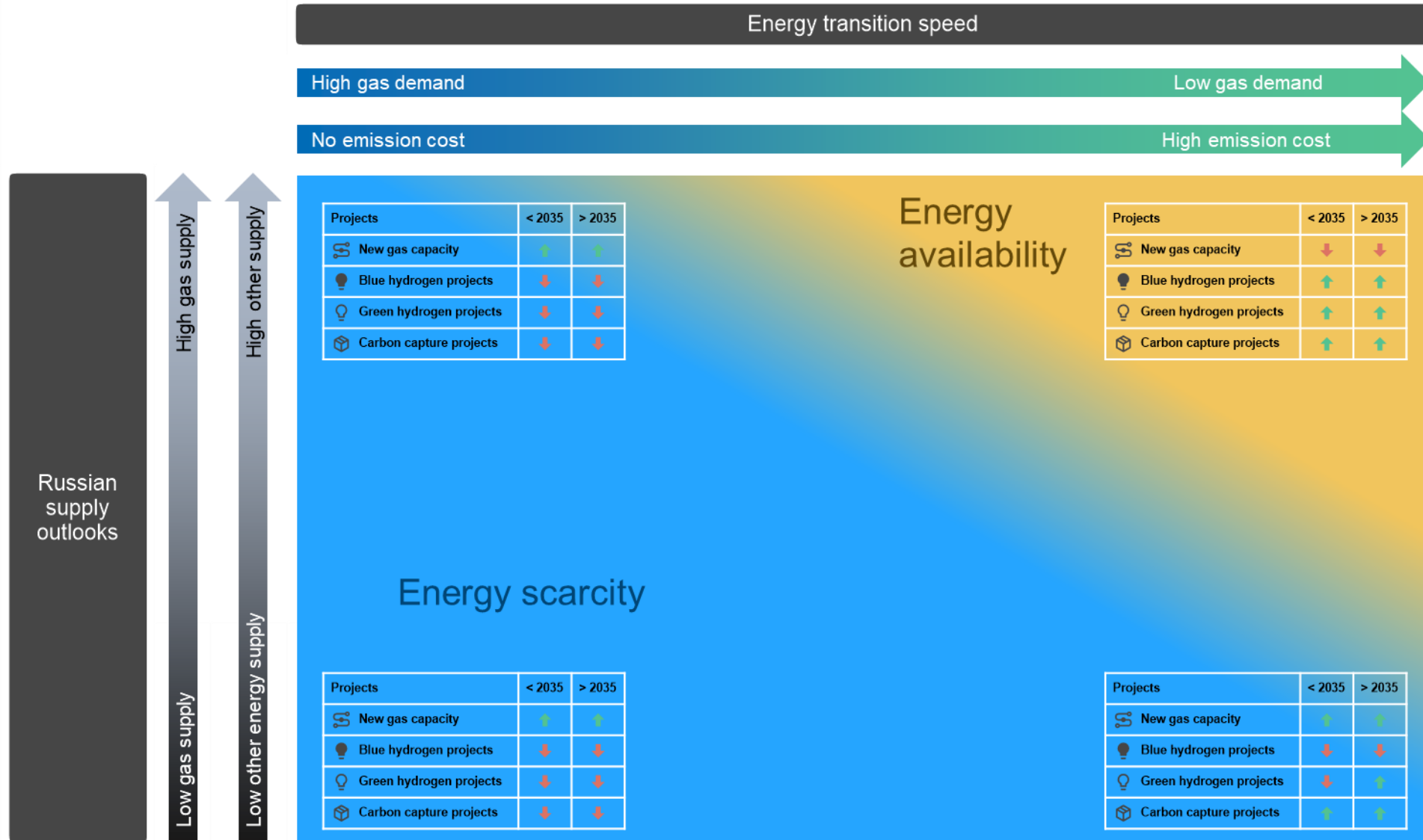


Investments, business and consumers desire stability

\* Capacity expansion represents future projects and their volumes which are not yet in place, including TANAP expansion, Barents pipe and uncontracted LNG

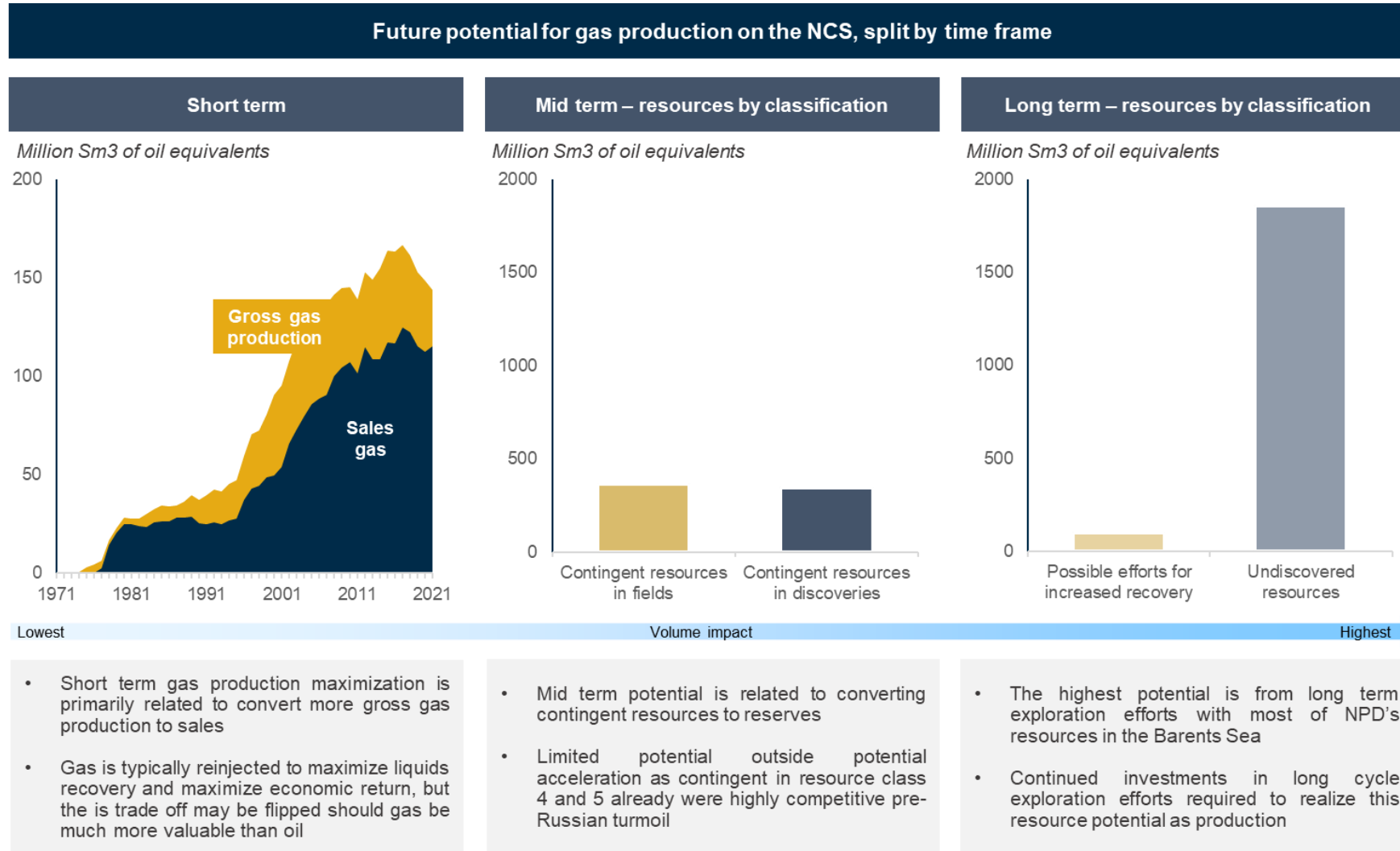
Source: Rystad Energy research and analysis

# Project viability will be influenced by energy access and policy



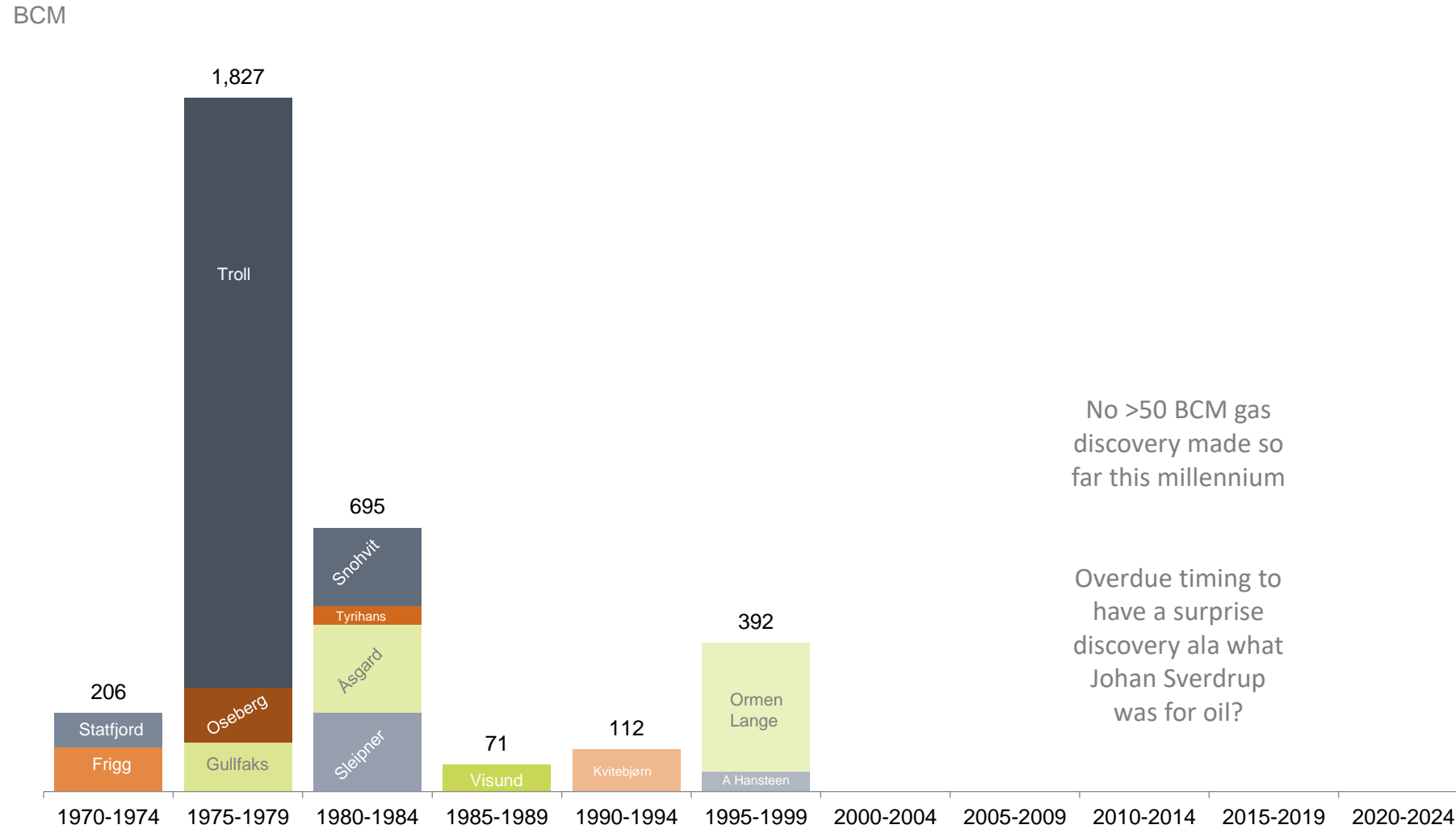
# Limited incremental volume impact from short and mid term resources

- More and higher risk exploration is the only way to see significant incremental reserves

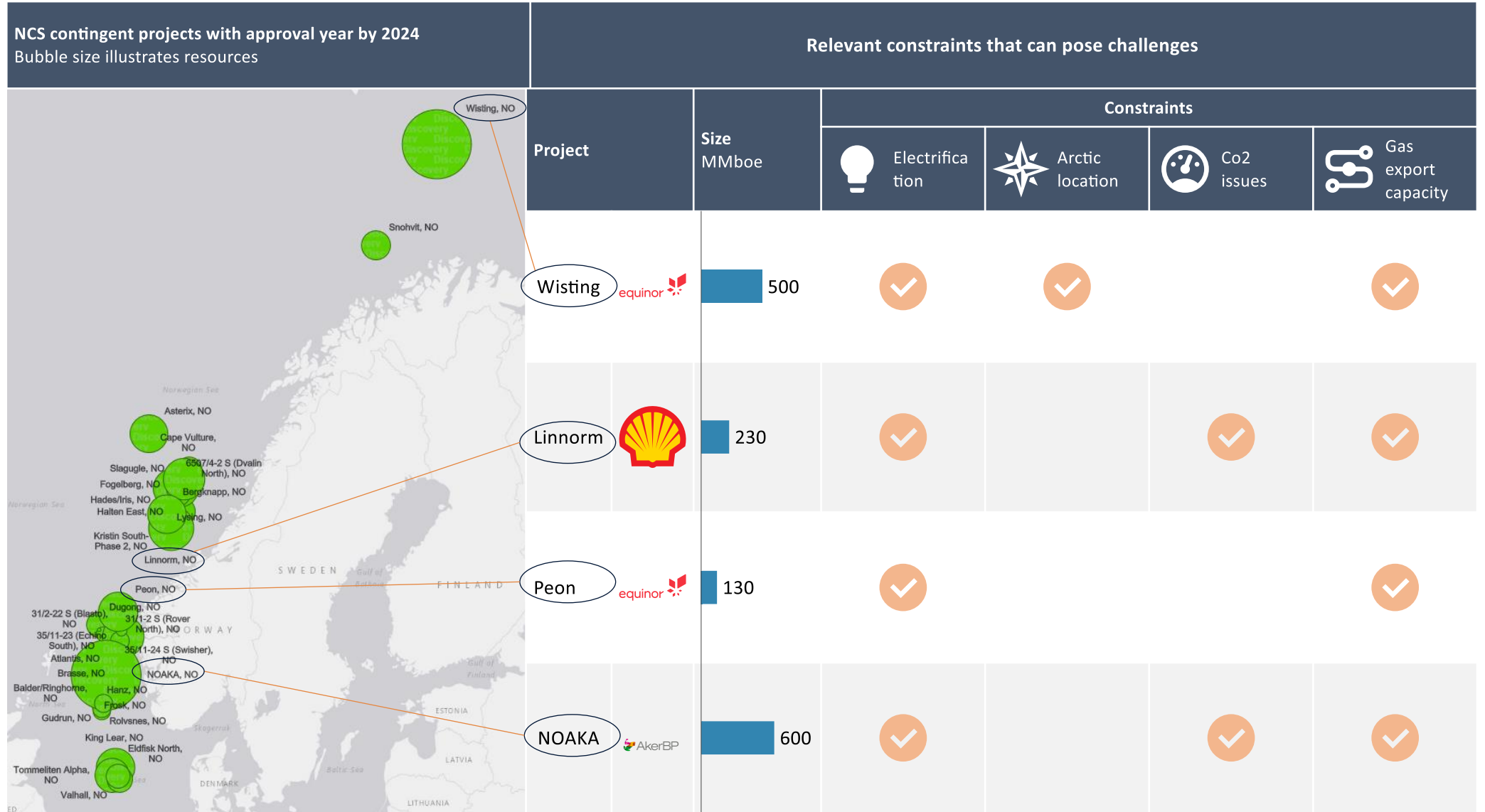


Source: Rystad Energy research and analysis, Norwegian Petroleum Directorate

# But no sizeable gas discoveries made this millennium



# And we struggle to get some of the biggest discoveries off the ground

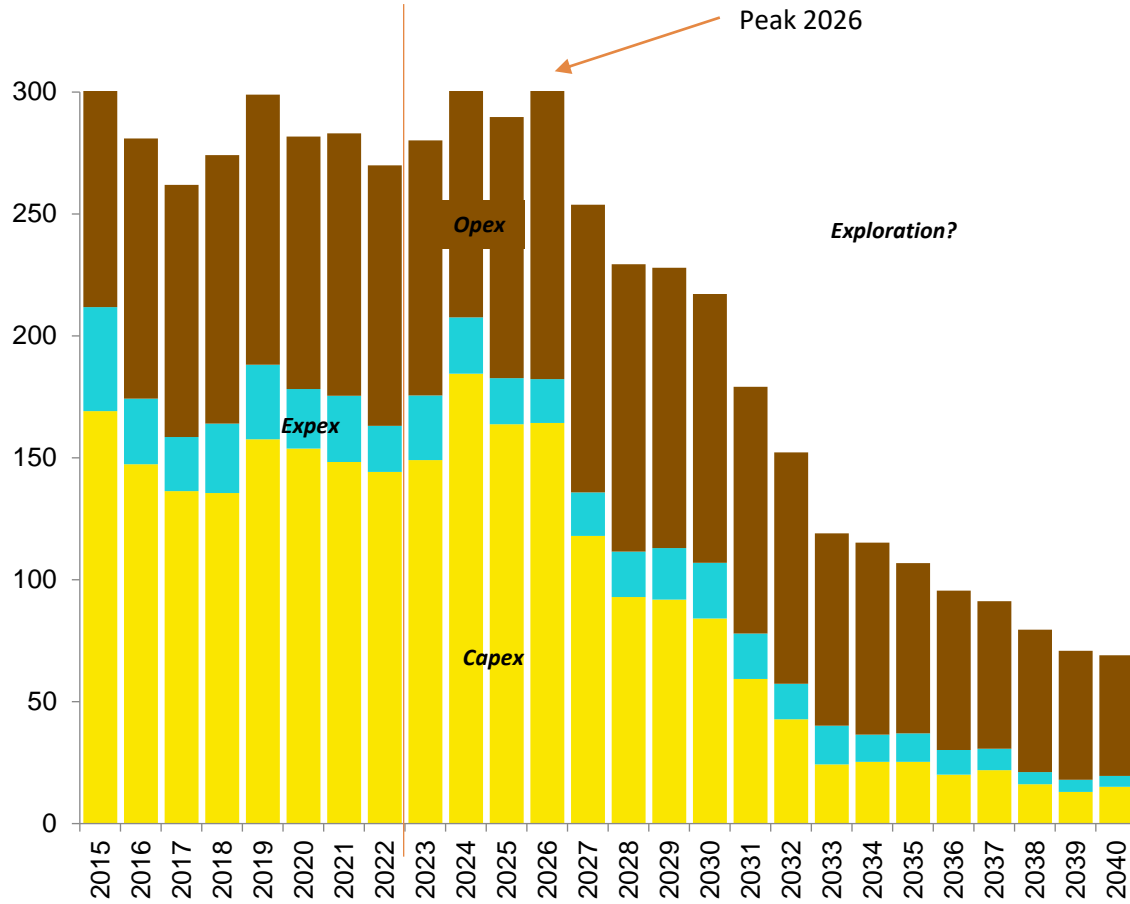


Source: UCube

# Implying limited change to prevailing outlook on NCS spend and production

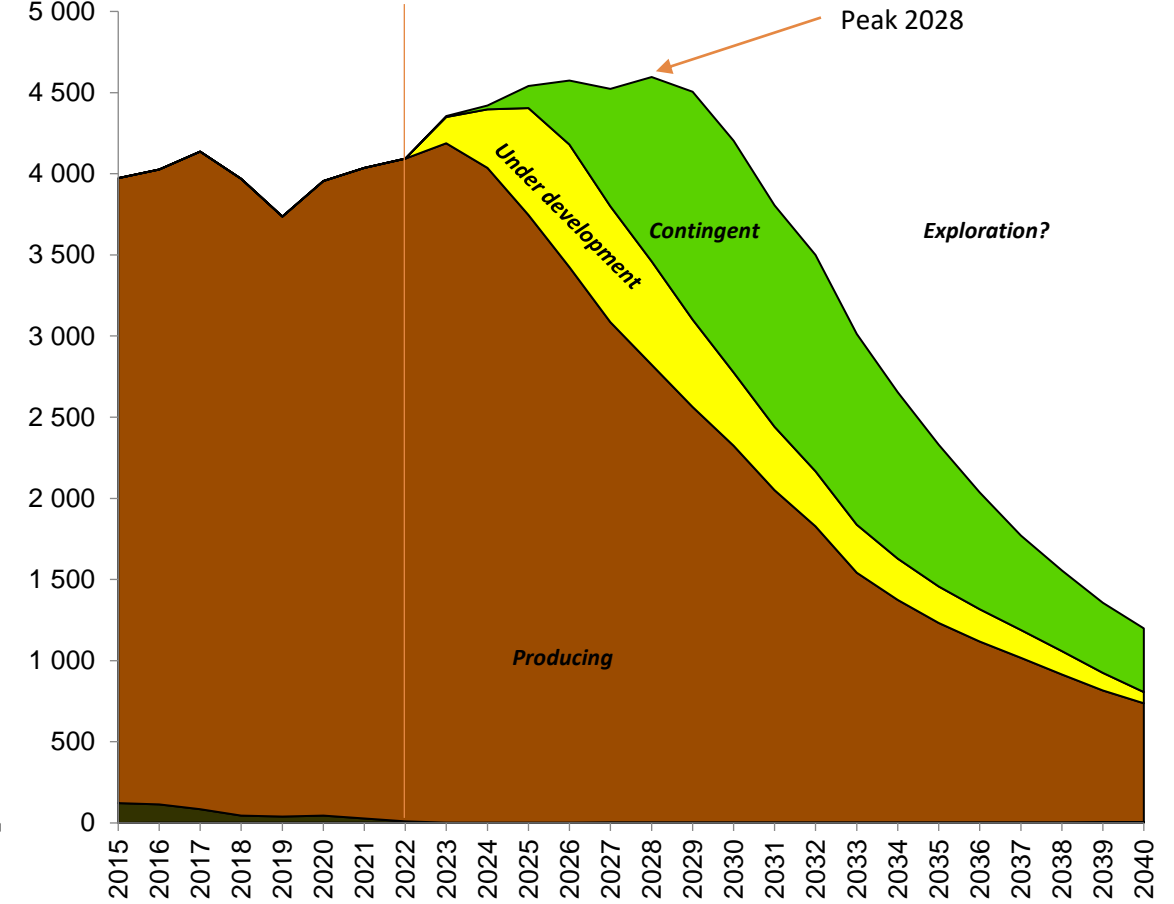
## NCS spend

Billion NOK real



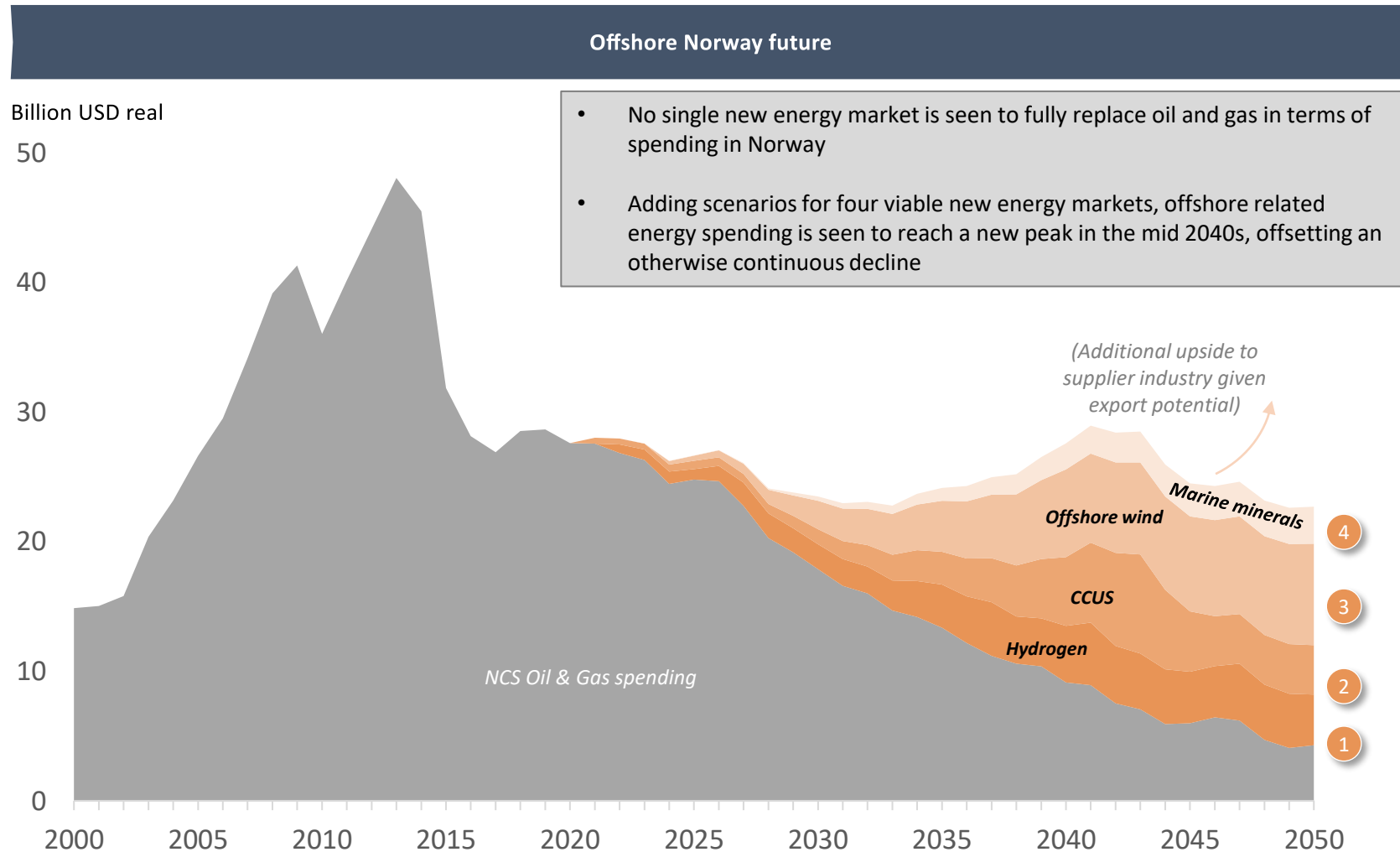
## NCS production

Kboe/d





# New markets needs to be accessed to maintain spending levels





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