

Tomorrow's energy
will be defined by
today's thoughts

July 2025



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Advisory

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- Carbon Management & Energy Transition
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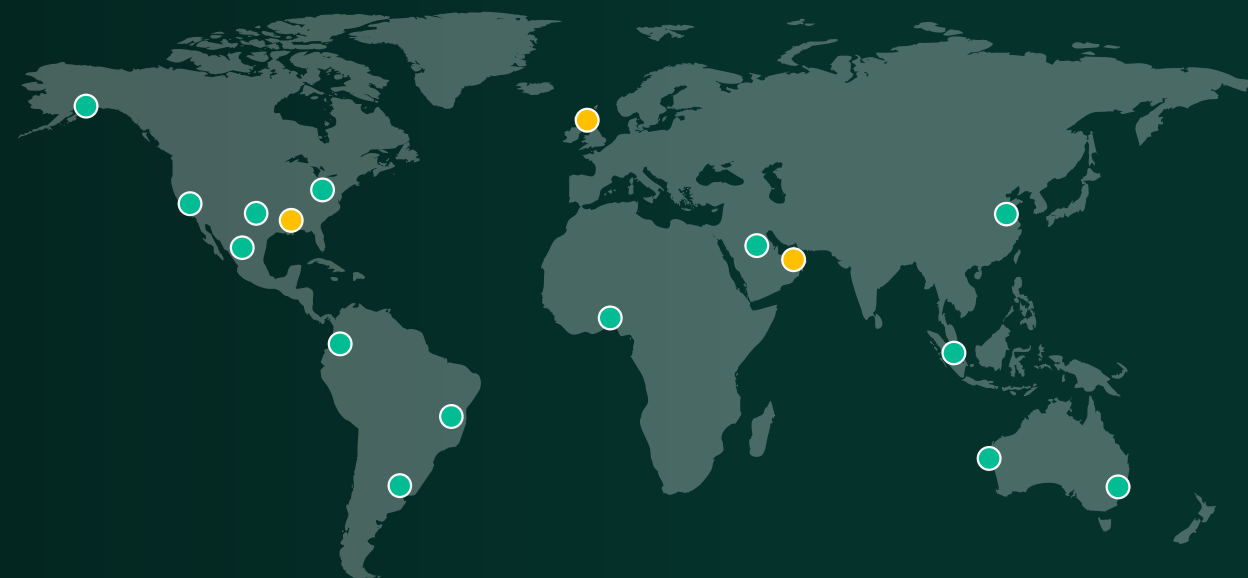
Geoscience

- Geology
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- Reservoir Navigation and Mapping

550+
Global & Local experts

5,000 +
studies performed globally

60+
years advising governments and energy operators



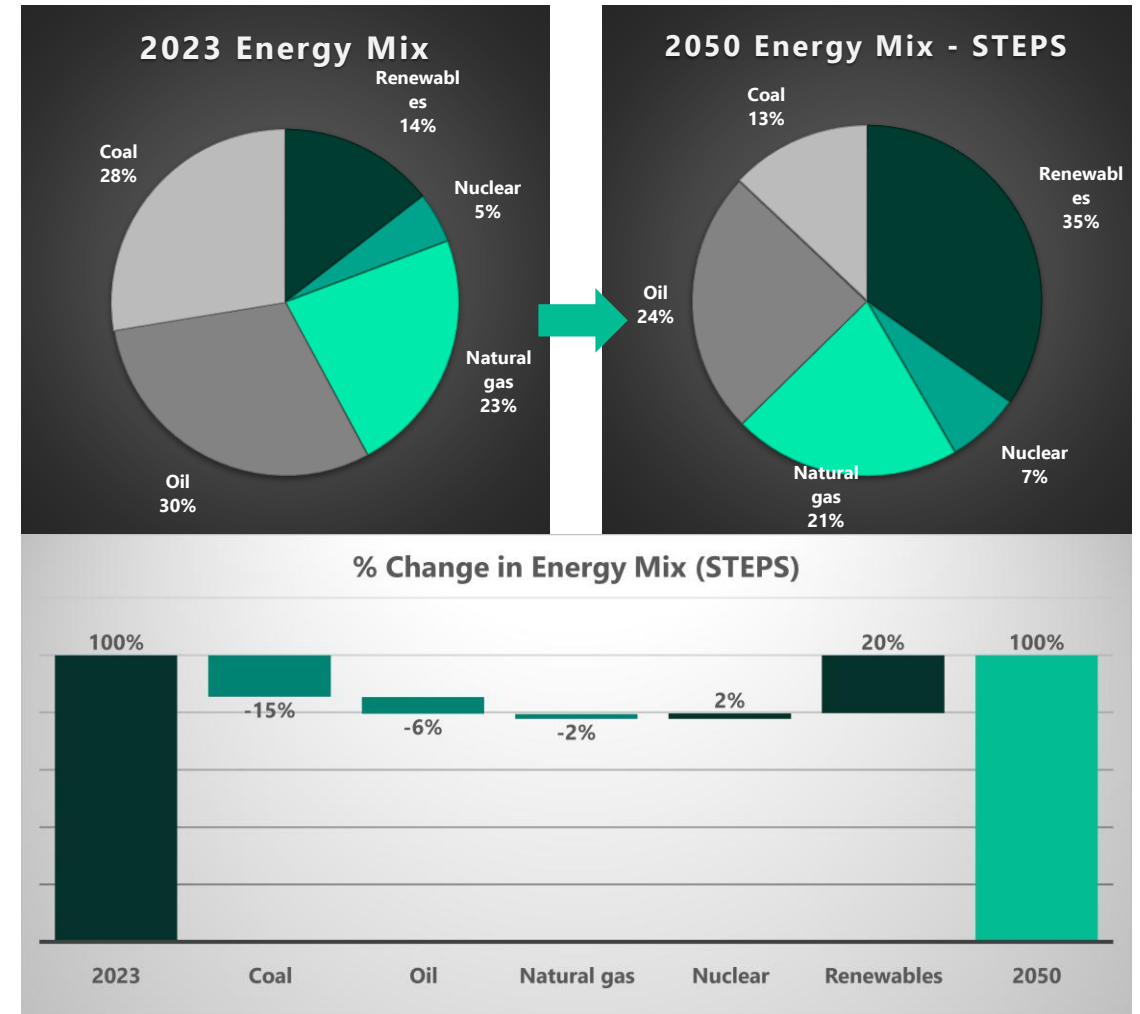
Energy Landscape Outlook & Future Role of Hydrocarbons

Energy Mix Outlook in 2050 (1/2)

- High uncertainty about the energy mix in 2050 - countries trying to balance sustainability & decarbonization goals with energy security and affordability.
- Wide range of scenarios possible but in almost all scenarios, renewables become the dominant energy source primarily driven by electrification of power, transport, heating and commercial sectors.
- In majority of scenarios coal's share in the energy mix declines the most; followed by Oil.

IEA's Stated Energy Policies Scenario

- Assuming current policies continue into 2050(IEA STEPS scenario), fossil fuels will still account for >50% energy mix in 2050.
- Oil share reduced by 6% and Gas share reduces by 2%

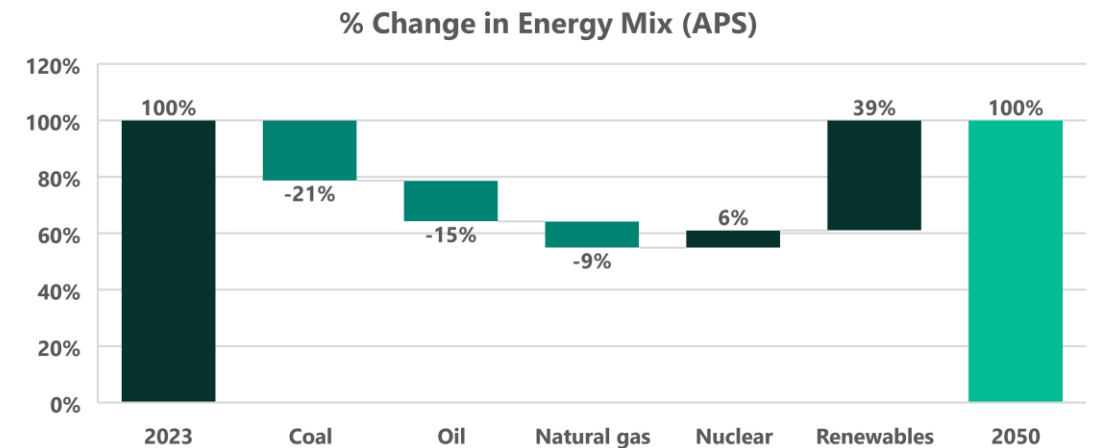
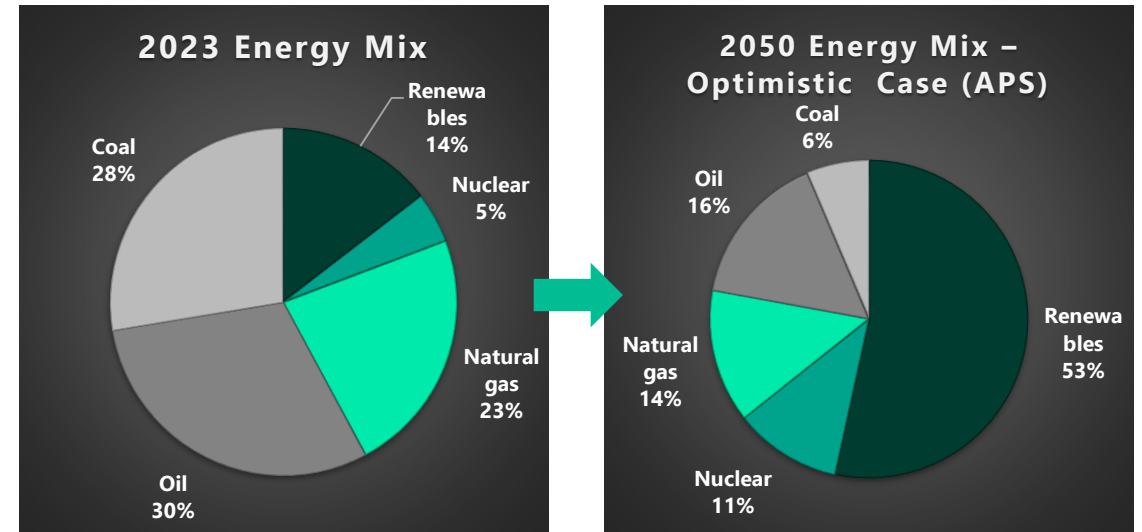


Source: International Energy Agency (IEA)

Energy Mix Outlook in 2050 (2/2)

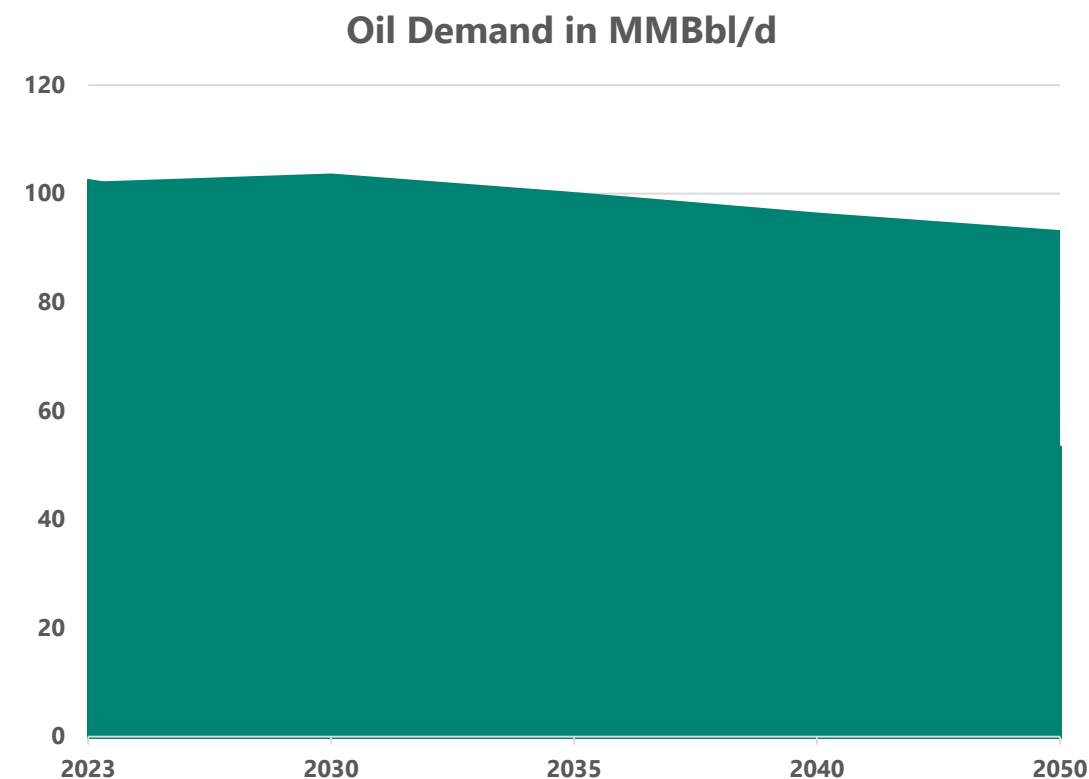
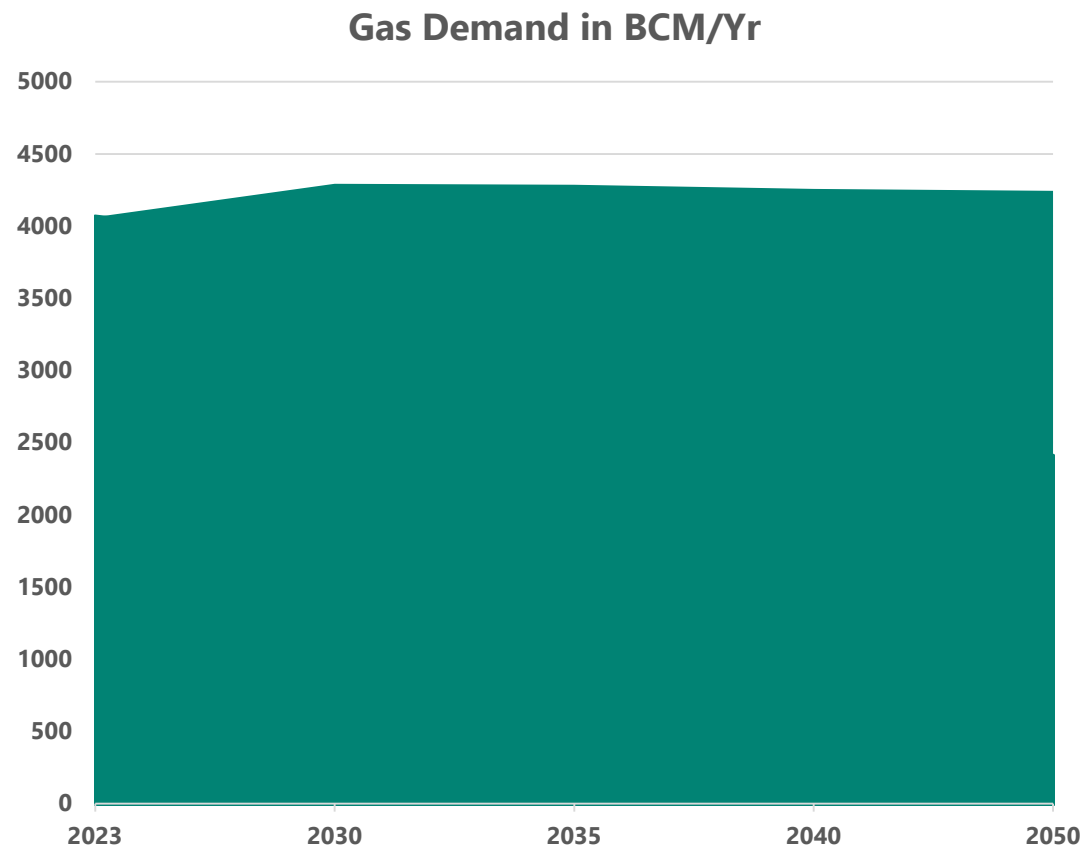
IEA's Announced Pledges Scenario

- In a scenario where all current climate commitments made by governments and industry are fulfilled (IEA APS Scenario), >50% of energy will come from Renewables.
- Fossil fuel share will see a steeper decline but will still be ~35% of energy mix.
- Oil share reduced by 15% and Gas share reduces by 9%



Source: International Energy Agency (IEA)

Future of Oil & Gas in Energy Mix

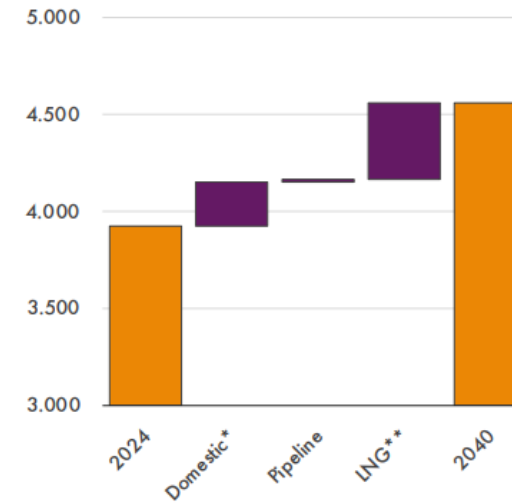


Source: International Energy Agency (IEA) STEPS scenario

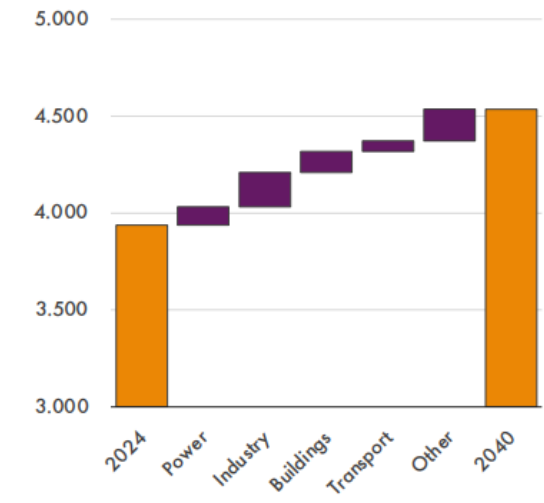
Gas Supply Outlook

- Global gas supply is expected to grow 16% from 4000 bcm/year in 2024 to about 4700 bcm/year in 2040
- LNG expected to be a significant part of the supply growth; coming mainly from the US and Middle East.
- Global gas demand is expected to peak by late 2030s. Unlike crude oil demand, gas demand expected to remain at a plateau into the 2040s.
- Demand is mainly driven by Asia and Africa.

Natural gas supply 2024-2040
BCM

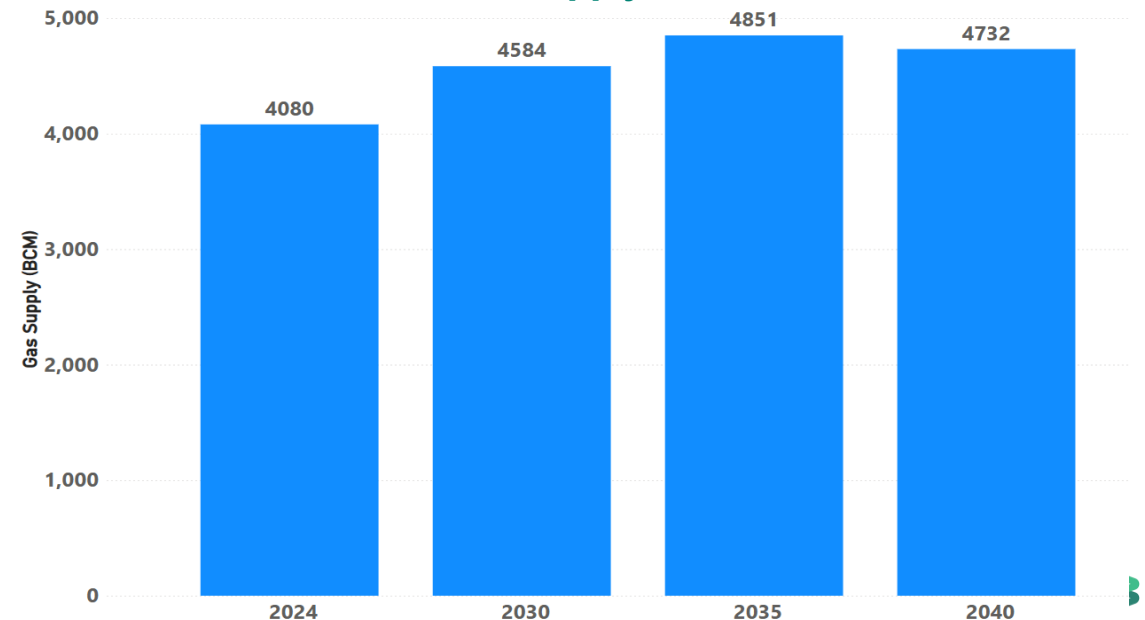


Natural gas demand 2024-2040
BCM



Source: Shell LNG Outlook 2025

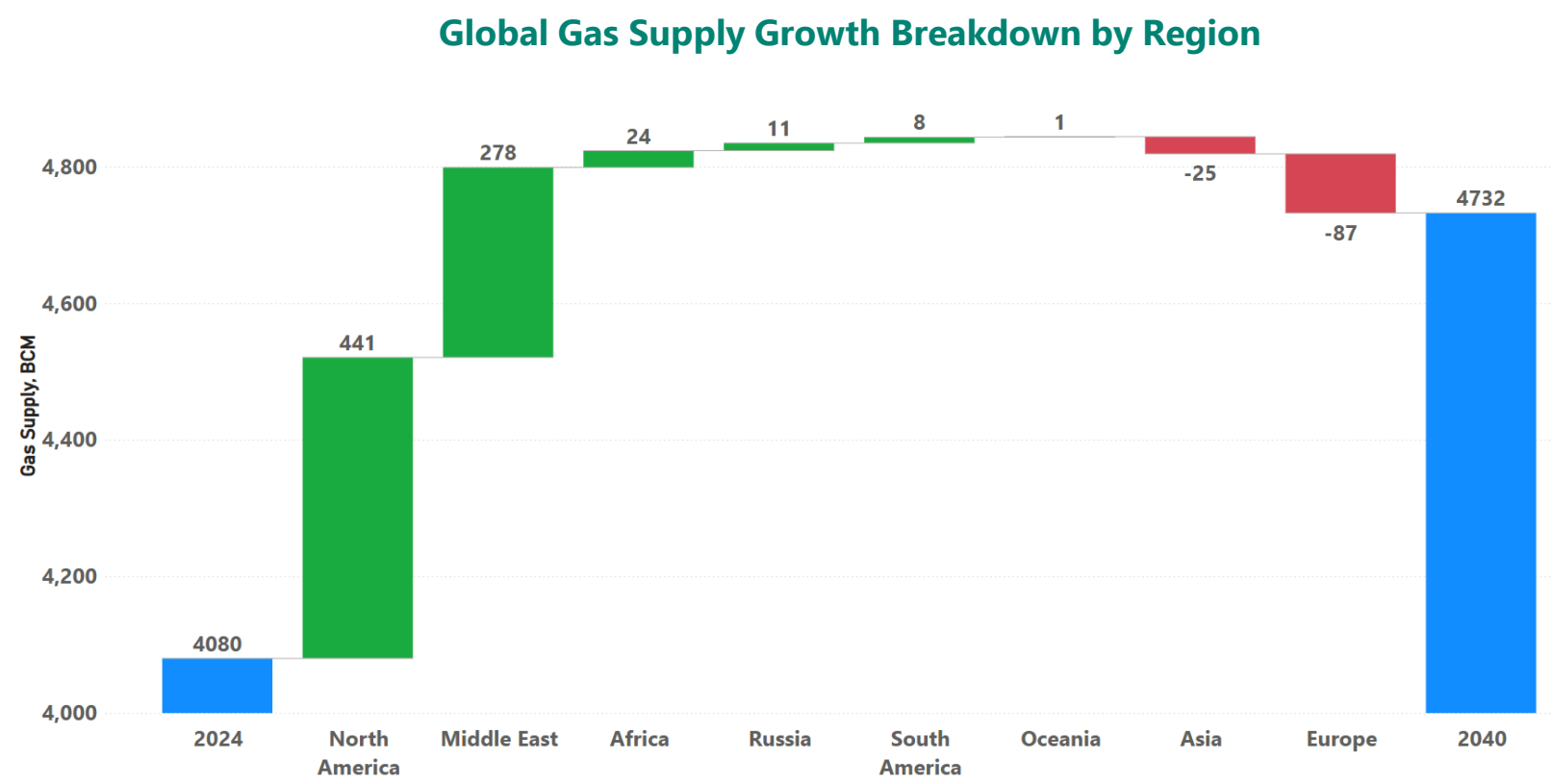
Global Gas Supply in BCM



Source: Rystad data and GaffneyCline analysis

Gas Supply Growth

- Majority of supply growth will be from US and Qatar
- Europe and Asia will see decline of supply capacity in 2040 compared to 2024

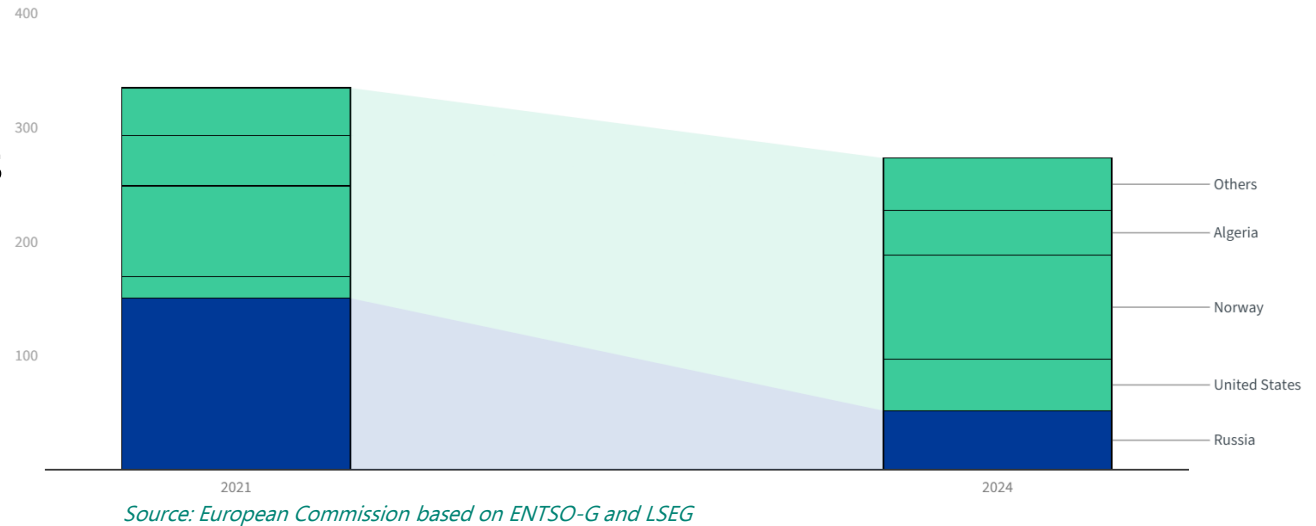


Source: Rystad data and GaffneyCline analysis

Europe Gas & LNG Outlook

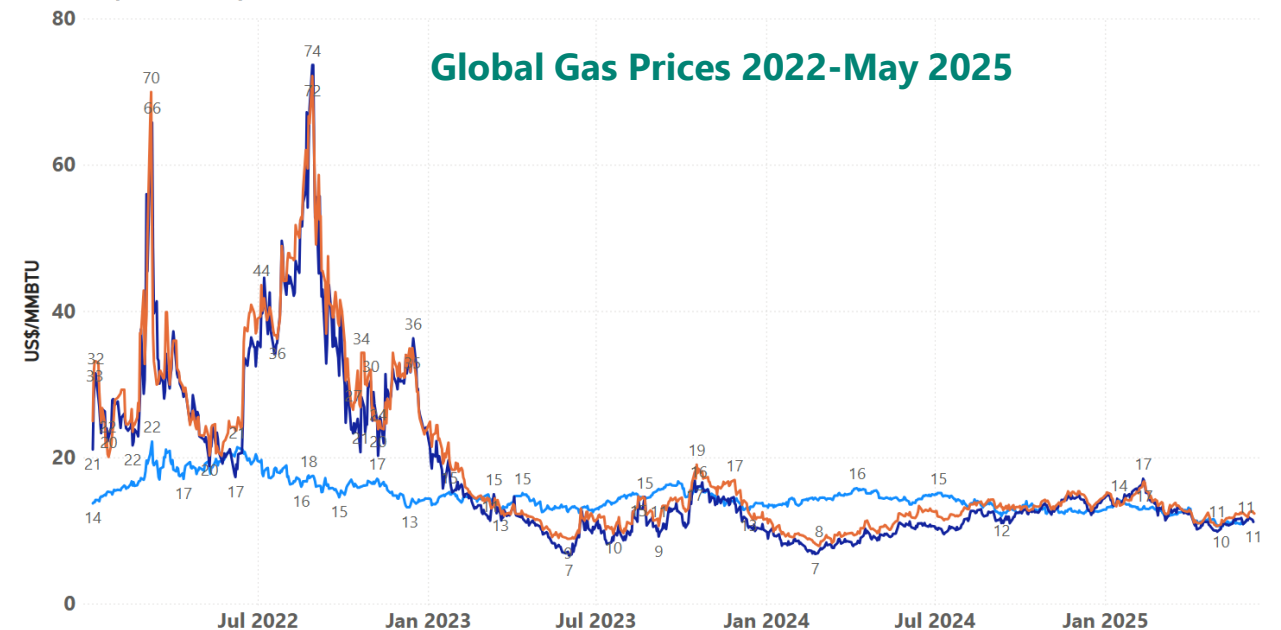
- Europe share of gas imports from Russia has reduced from 45% in 2021 to 19% in 2024.
- Russian gas imports mainly displaced by US LNG and Norwegian pipeline gas.
- A roadmap for elimination of Russian gas imports by 2027 published by Europe in May 2025
- European gas prices and East Asian LNG prices have recently converged, but Europe is expected to regain its premium due to tightening market fundamentals.
- As of early June, Europe showed a small premium of \$0.3/MMBTU over Asia

Europe Gas Supply Source 2021 & 2024



● Brent Eq. ● NW Europe ● NE Asia

Global Gas Prices 2022-May 2025



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