



Presentation | February 2025

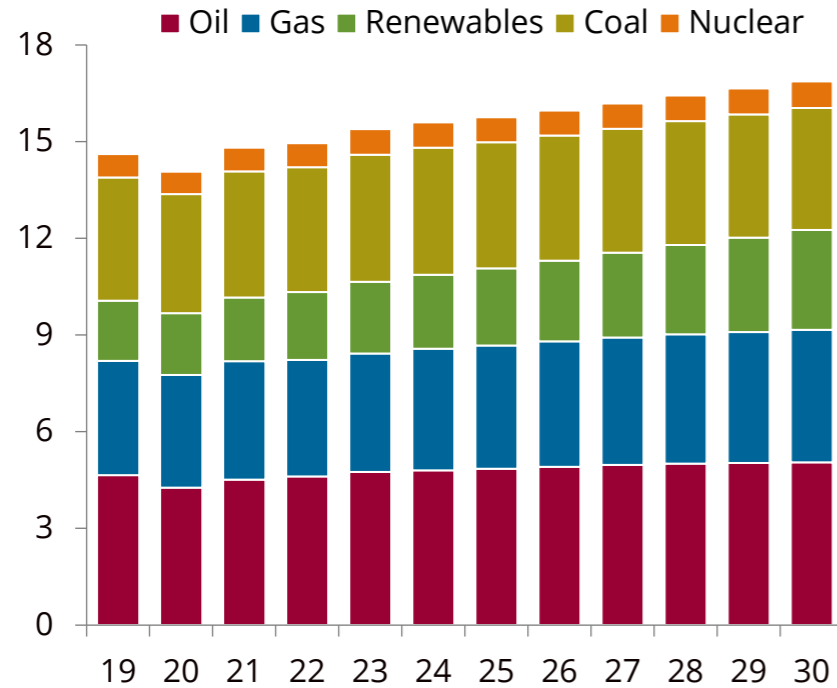
Orderly or disjointed energy transitions: Implications for energy markets



Global energy demand continues to grow but rate to slow

Global primary energy demand

btoe

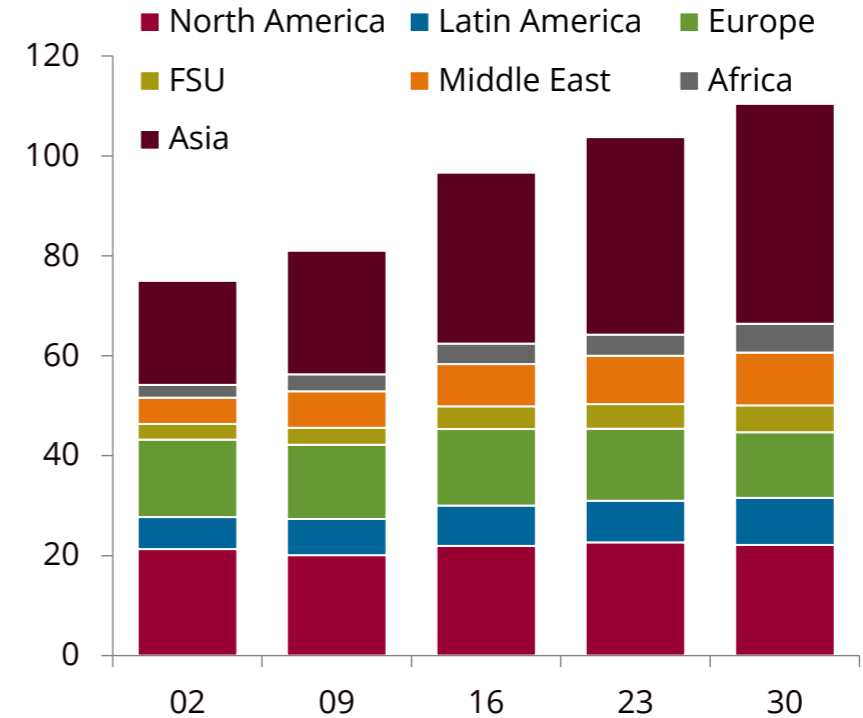


Global PED to rise by 10% over 2023–30 (1.3% per annum), an expansion dominated by renewables. The renewables share, of global PED, rises from 14.4% in 2023 to 18.4% in 2030.

Source: OilX, Energy Aspects

Global liquids demand growth by region

mb/d

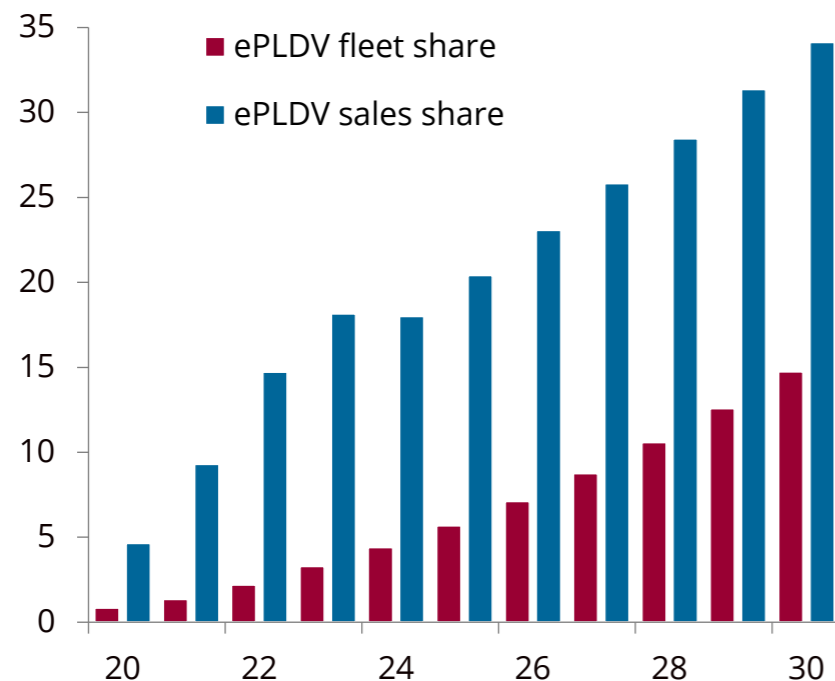


Strong emerging market gains will underpin global liquids demand, +7 mb/d over 2023–30 (0.9% a year). Non-OECD demand will rise by nearly 9 mb/d over the same period.

Oil's biggest transition story (EV) only slowly trimming oil demand growth

Global ePLDVs

% share of all PLDVs

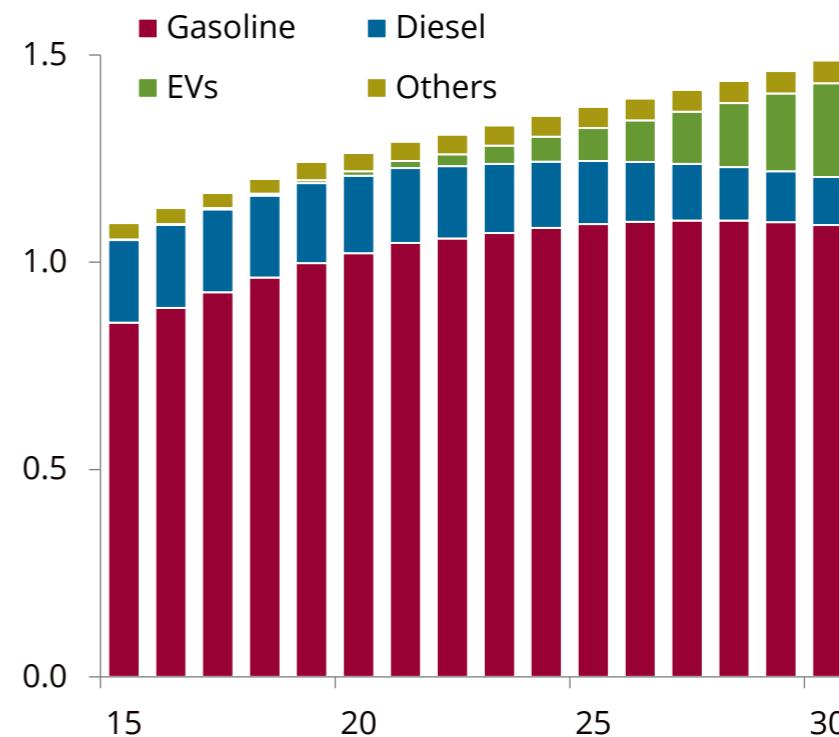


Sharp uptick in EV sales only slowly filtering into EV fleet share. The global electric passenger light-duty vehicle (ePLDV) oil demand hit is only estimated to be around 2 mb/d in 2030.

Source: Energy Aspects

Global PLDV fleet, by fuel type

billion vehicles

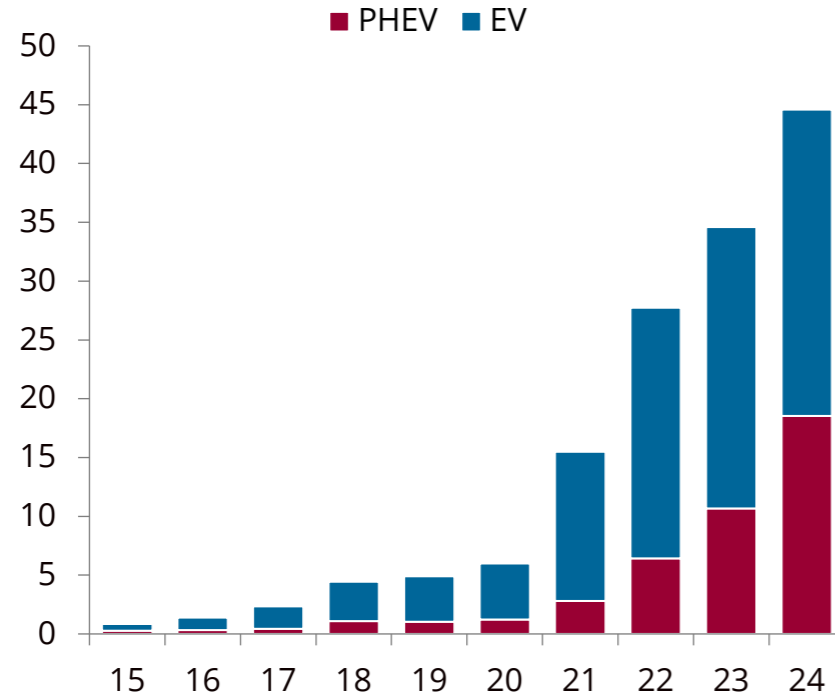


The global internal combustion engine fleet will expand before gradually losing market share to EVs, which are now expected to account for 35% of PLDVs in 2030, revised down from 38%.

Chinese EV replacement rate slows down; European hybrid sales also pick up

Sales share of Chinese passenger vehicle

%

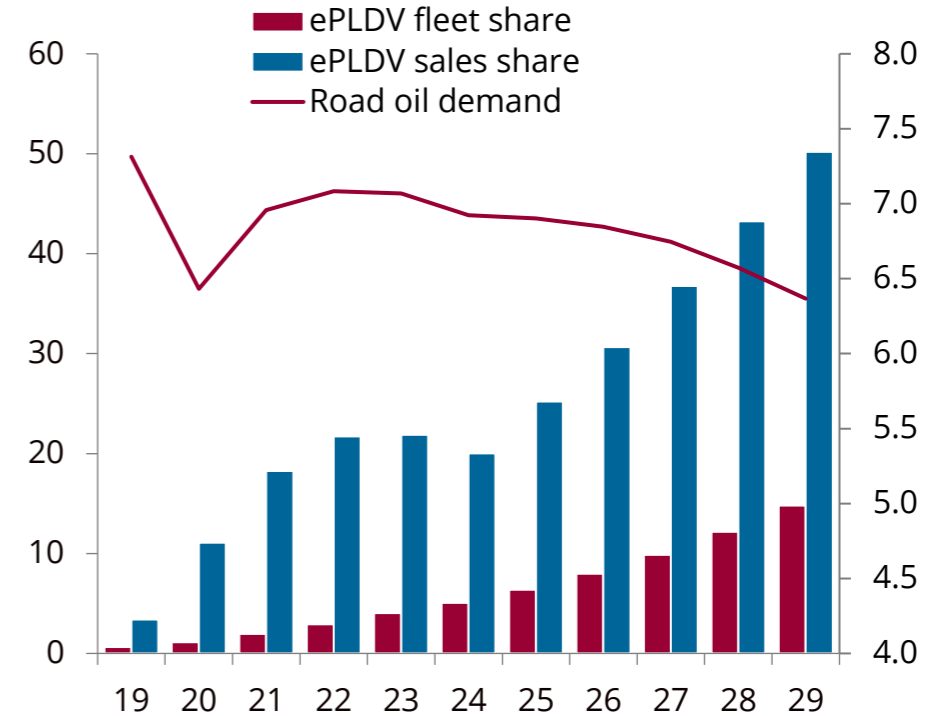


Beijing's vehicle-upgrading stimulus policy drove up Chinese new EV sales. However, PHEV share also grew quickly, slowing down overall EV replacement rate.

Source: CEIC, CAAM, Energy Aspects

European electric PLDV shares vs road oil demand

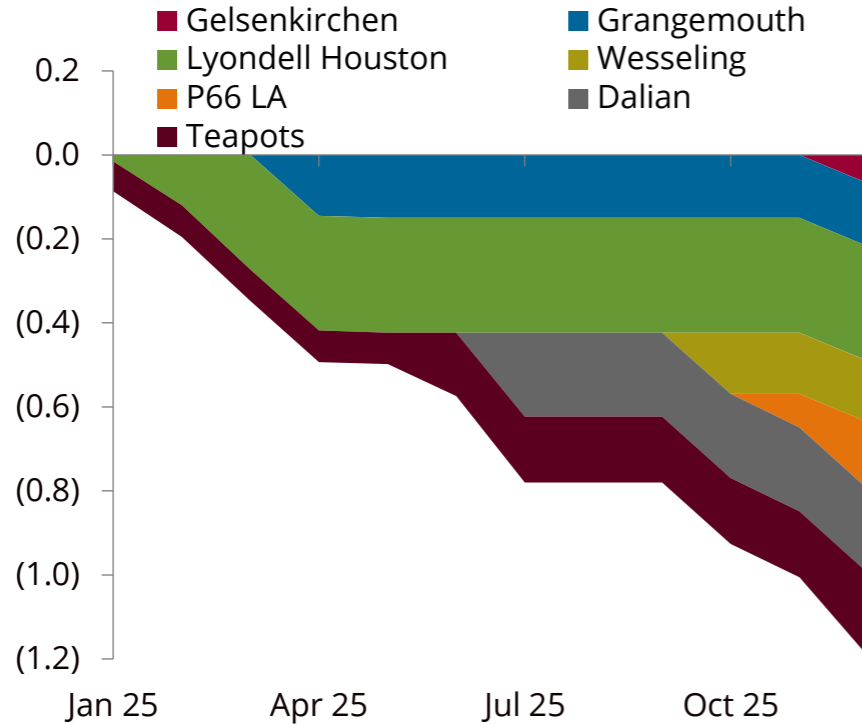
%(LHS); mb/d (RHS)



While EV sales growth in Europe slowed in 2024, the introduction of new, affordable mass-market EV models from this year could change the outlook, but questions remain.

Yet refinery shutdowns accelerating due to ESG pressures, peak demand fears

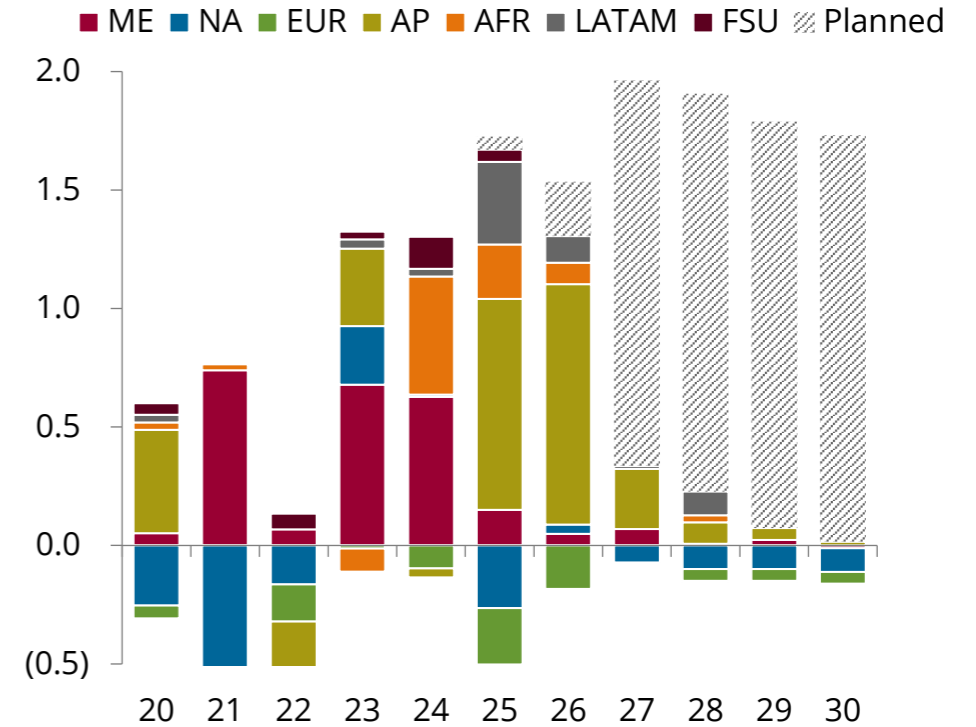
CDU capacity closures by site
mb/d



Global capacity closures will reach 1.2 mb/d across 2025, 0.8 mb/d of which is in Europe and the US.

Source: Energy Aspects

Refining capacity growth, y/y
mb/d

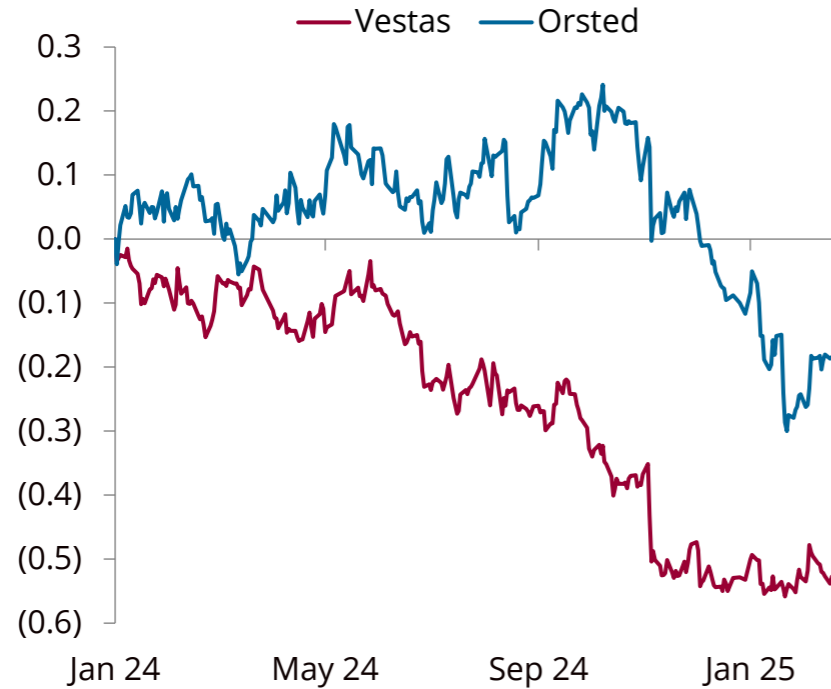


Growth in non-OECD capacity beyond 2026 will be slow. Over 2.5 mb/d of additional projects have been announced in the ME but are unlikely to be completed before end-decade.

Cost of transitioning is huge, including billions of dollars of wasted investment

Vestas and Orsted share prices vs January 2024

% change

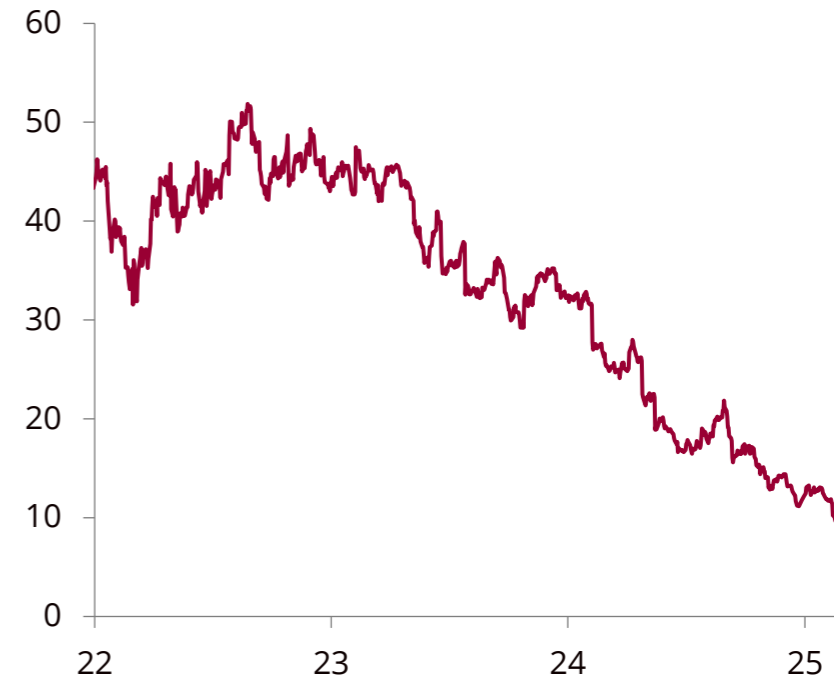


Wind turbine makers have struggled to remain profitable over recent years amid supply-chain issues and cost inflation, even with slightly better results in 2024.

Source: Refinitiv, Bloomberg, Energy Aspects

Neste share price

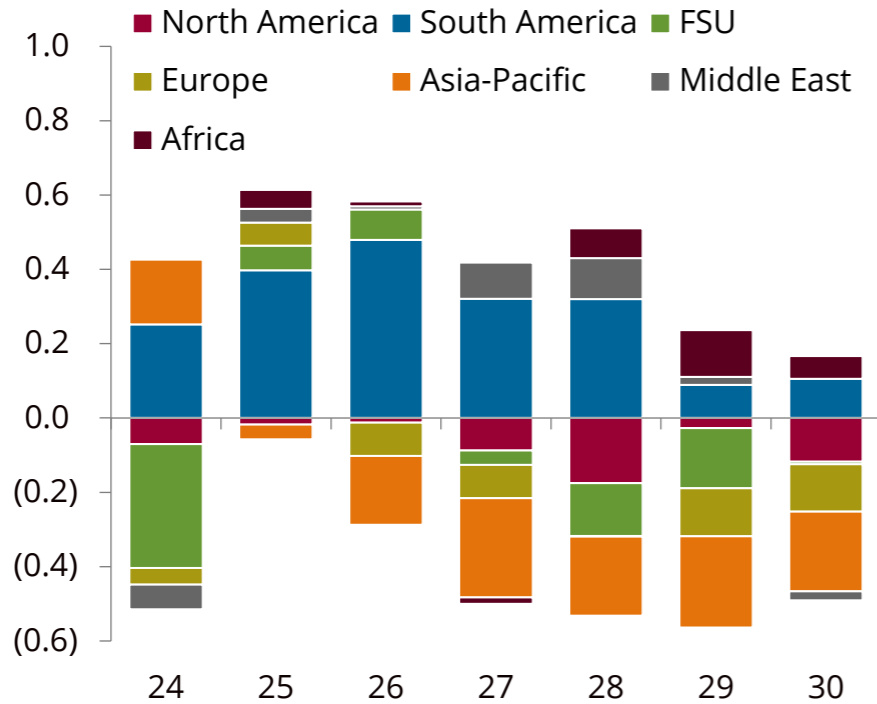
€



Neste, the world's leading producer of advanced biofuels, faces a difficult outlook as global overcapacity has intensified demand for waste feedstocks such as UCO.

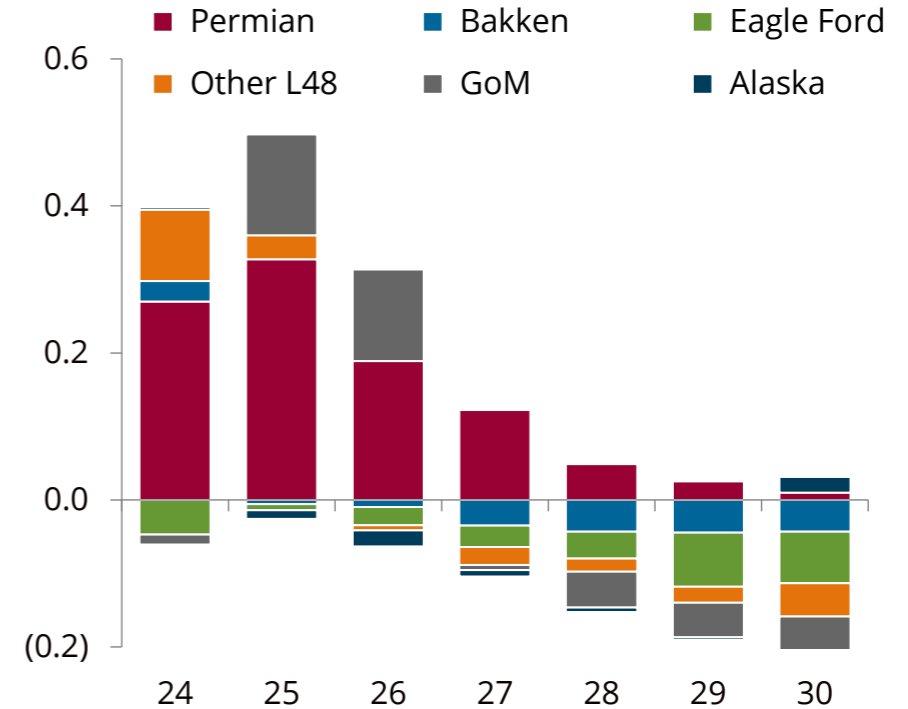
US black oil production growth to peak this decade while declines elsewhere pick up

Conventional non-OPEC crude production, y/y
mb/d



Brazil and Guyana will lead the conventional non-OPEC production growth over the medium term. But offsetting decline rates will be more challenging.

US crude production, y/y change
mb/d



Permian basin will continue slow growth until 2030, but declines in secondary basins will mean total US crude production peaks in 2027.

Source: Novi Labs, Inc., Government agencies, Energy Aspects



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