
S&P Global

Commodity Insights

Global oil and refined products outlook

APIC 2024

Daniel Evans, Vice President, Global Head of Fuels and Refining

30 May 2024

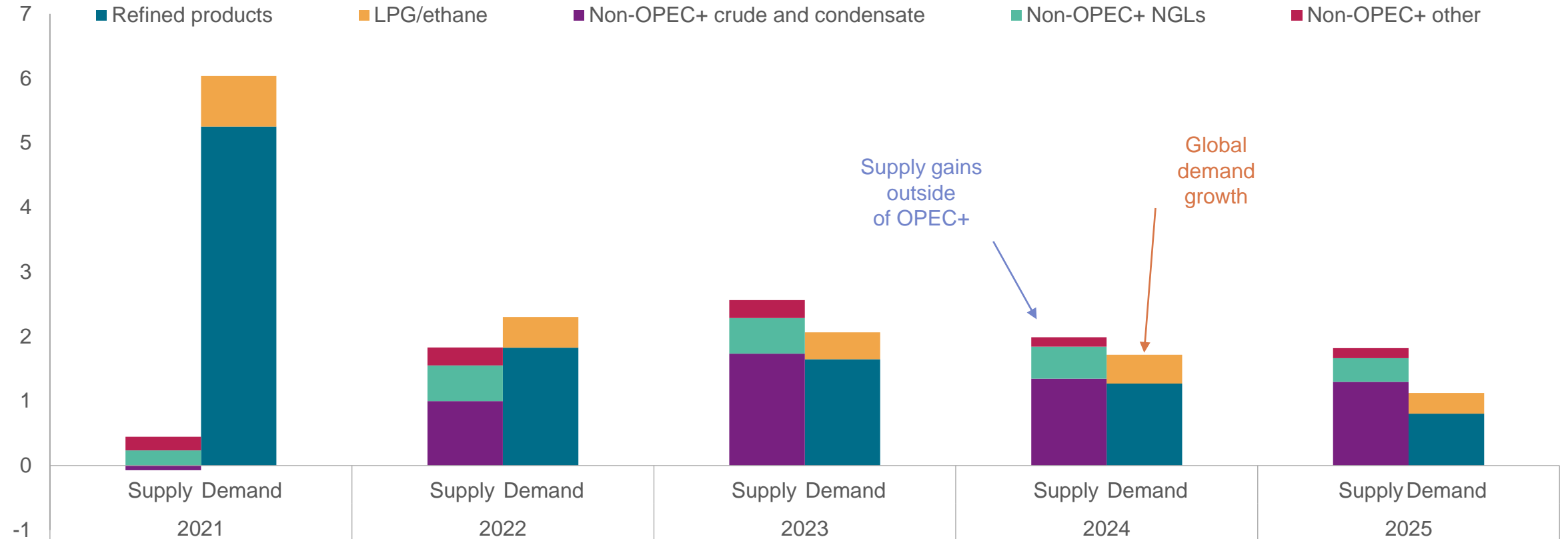
Agenda

- 1 Oil market cycles:** How long will crude oil's cycle of surplus and refined product tightness last?
- 2 From boom to bust:** Another wave of rationalization on the horizon?
- 3 A slow goodbye to oil:** An energy transition reset

**Oil market
cycles:** How long
will crude oil's
cycle of surplus
and refined
product tightness
last?

Supply growth outside of OPEC+ will outpace global demand growth through 2025

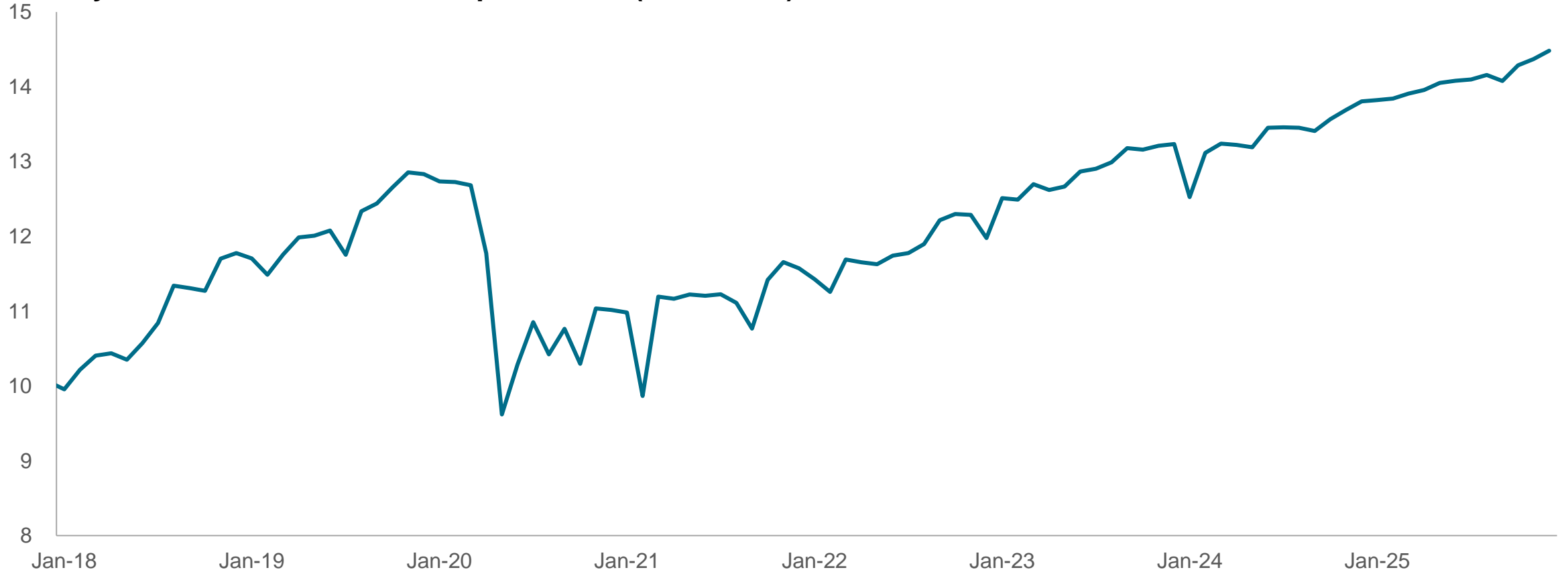
Non-OPEC+ supply growth vs. global demand growth (million b/d)



Data compiled April 27, 2024.
Source: S&P Global Commodity Insights.

The US will remain the leading source of global oil supply growth

Monthly US crude and condensate production (million b/d)



Data compiled April 27, 2024.

Sources: S&P Global Commodity Insights (rig counts and forecast); Primary Vision (frac crew counts).

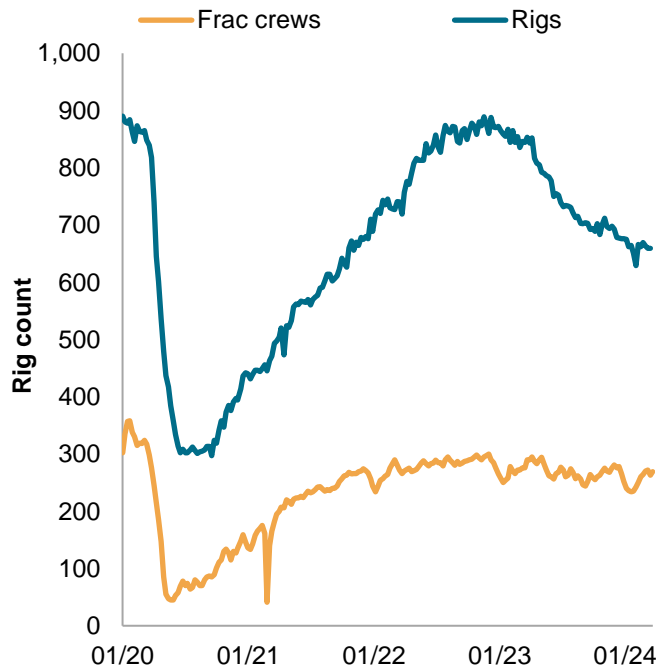
Independents and majors expected to boost activity in 2024, taking the lead from private operators

Rig counts down...

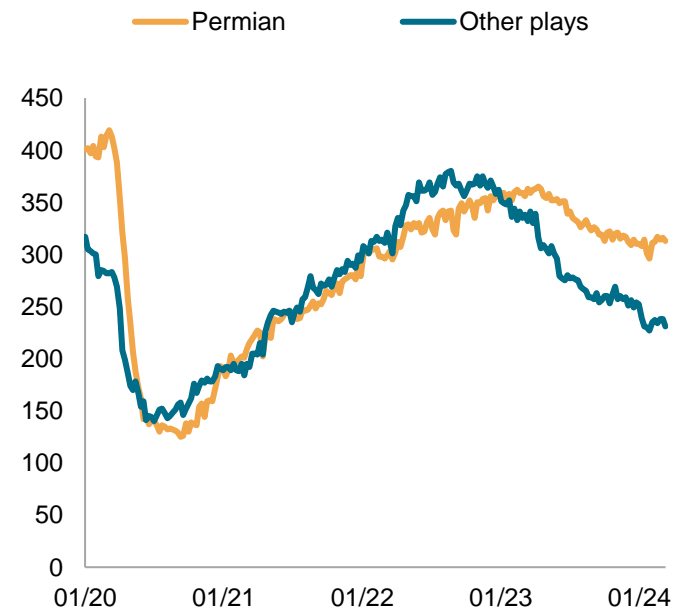
...but stable in the Permian...

...with biggest players maintaining activity

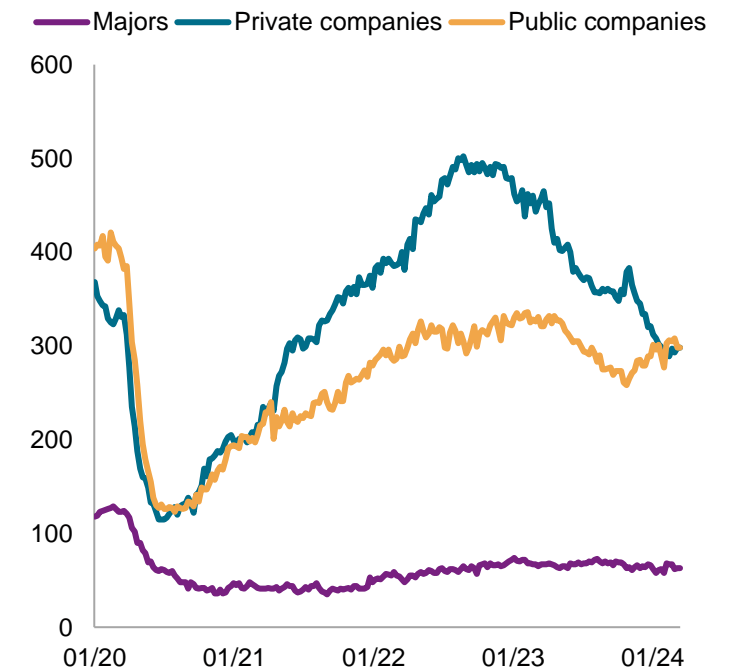
US upstream oil activity



US rig count by play



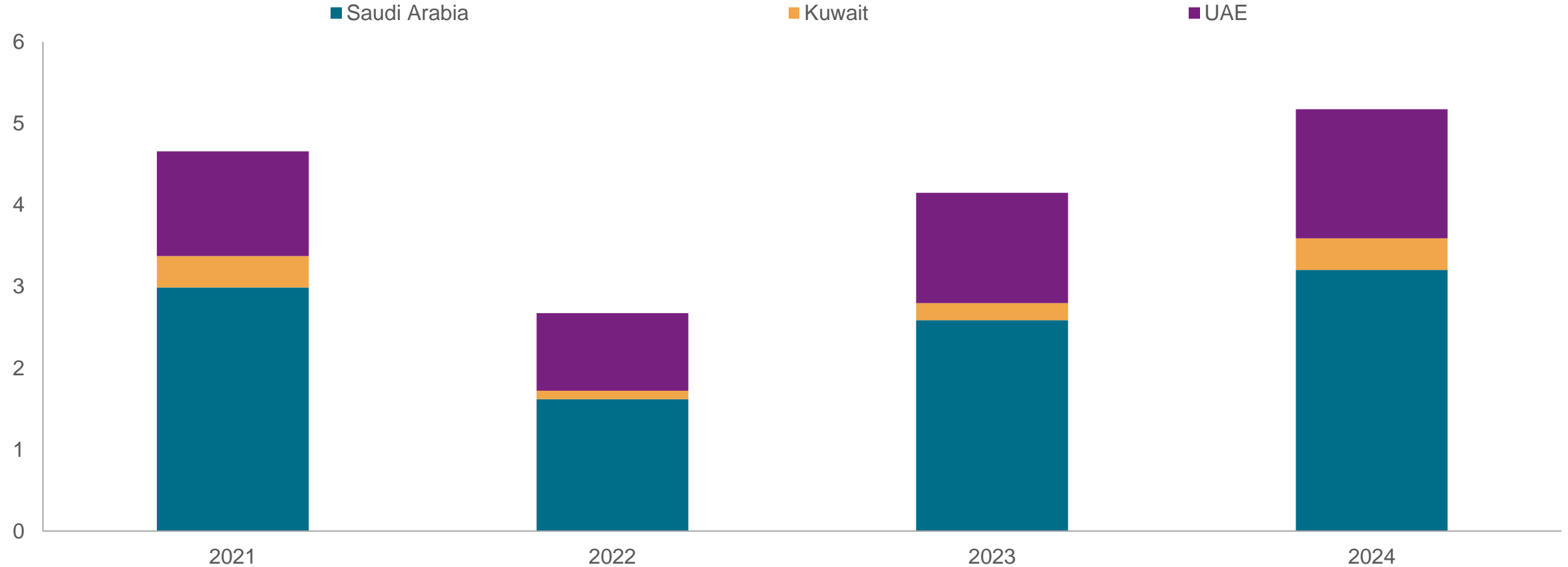
US rig count by operator type



Data compiled March 27, 2024.
 DJ Basin = Denver-Julesburg Basin.
 Sources: S&P Global Commodity Insights; Primary Vision.

Gulf-3 unused (spare) crude oil production is ample and could rise further in 2025

Average annual spare capacity (million b/d)



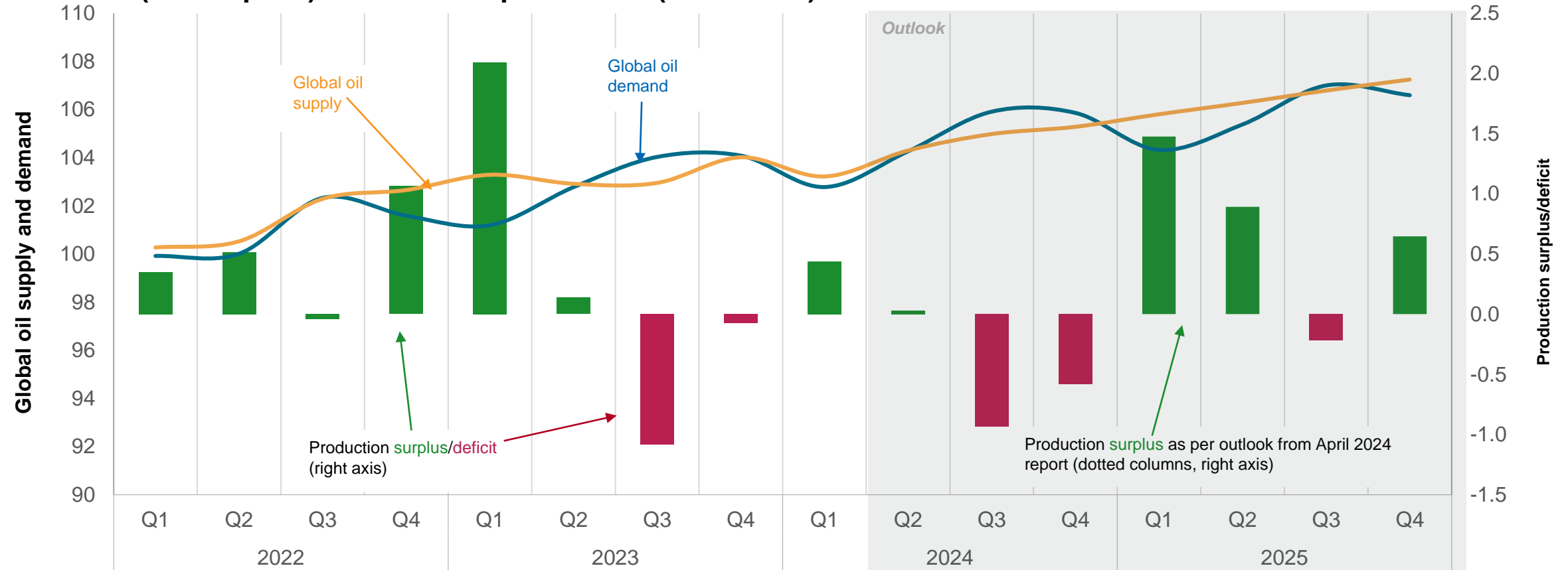
Data compiled April 27, 2024.

Gulf-3 = Saudi Arabia, the United Arab Emirates and Kuwait.

Source: S&P Global Commodity Insights.

Oil market expected to tighten over balance of 2024 owing to OPEC+ supply restraint and higher demand

World oil (total liquids) demand and production (million b/d)



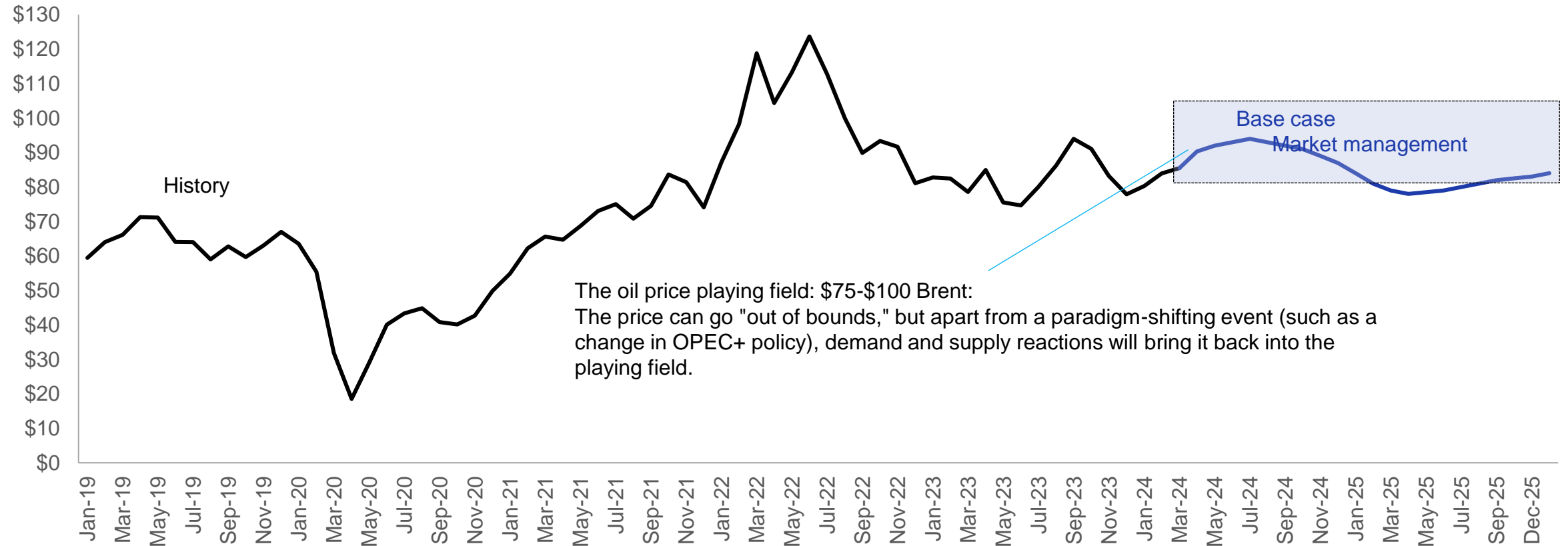
Data compiled April 27, 2024.

Demand shown is for total liquids, including petroleum-based refined products, NGLs from associated and nonassociated gas from crude oil and gas fields, direct crude oil burn, biofuels, refinery processing gains, refinery additives, gas-to-liquids and coal-to-liquids. Production shown includes crude oil and condensate production, supply of NGLs, biofuels, refinery processing gains and other components that make up the "total liquids" barrel.

Source: S&P Global Commodity Insights.

OPEC+ supply restraint and higher seasonal demand boost prices in Q2–Q3 2024; decelerating demand growth eases prices in 2025

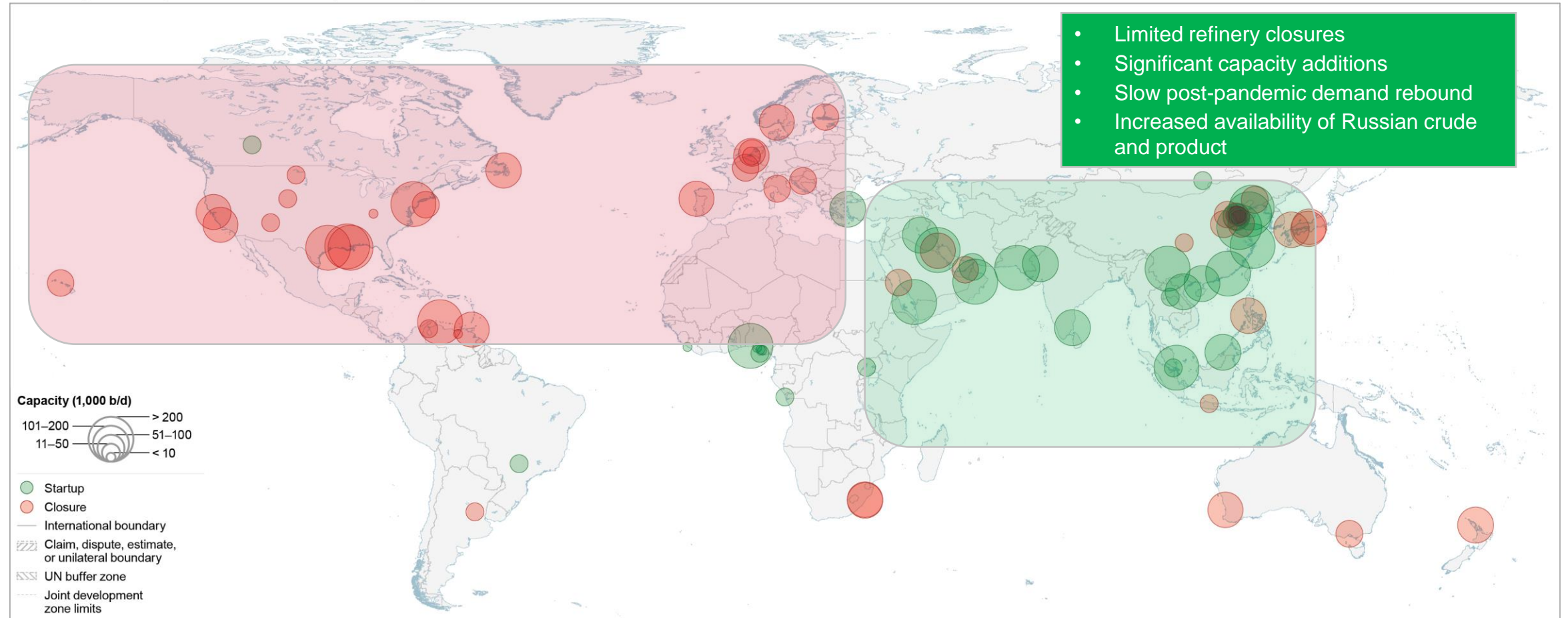
s&P Global Commodity Insights Dated Brent price outlook (\$/b)



Data compiled April 27, 2024.
Source: S&P Global Commodity Insights.

The “Great Shakeout” set the scene for a prolonged period of structural tightness

Refinery startups and closures (2017–26)



Data compiled Dec. 27, 2022.
Source: S&P Global: 2008217.

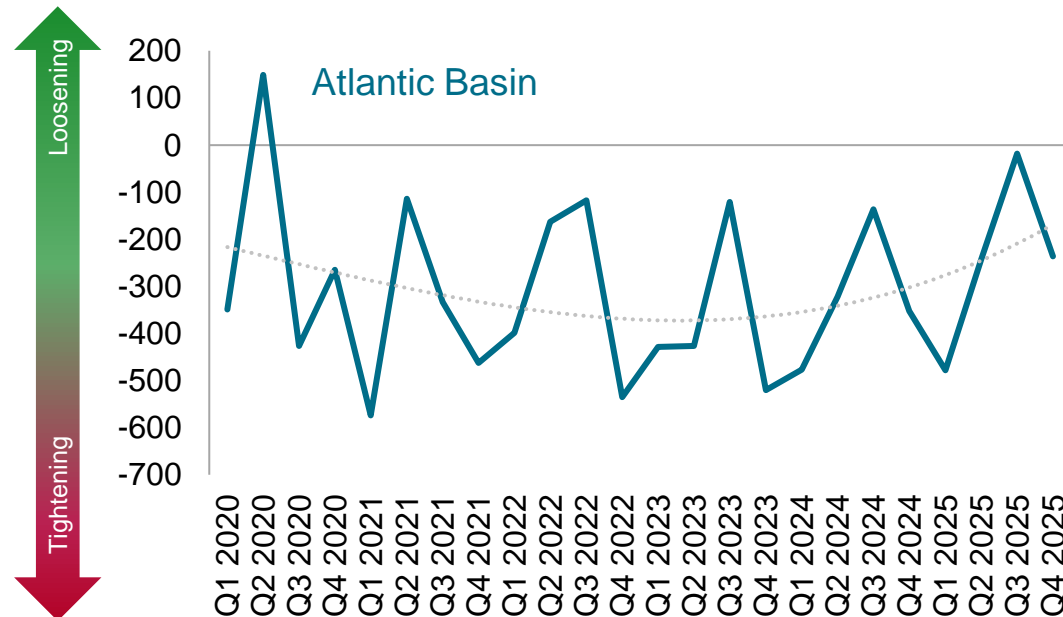
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New capacity ramp-ups and slowing demand growth will loosen product balances in 2025 but this will be counteracted by expected run cuts and shutdowns

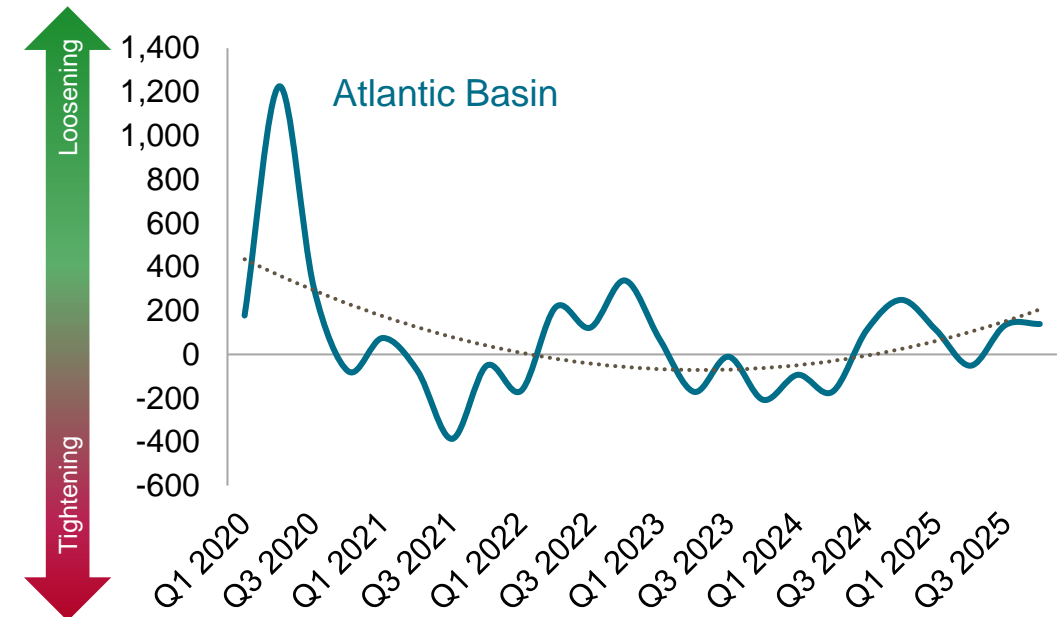
Gasoline markets will only loosen once Dangote and Olmeca refineries ramp up

Gasoil balances to loosen somewhat as Middle East refineries ramp up

Motor gasoline implied balance (supply-demand excluding biofuels) vs. 2017–19 average (thousand b/d)



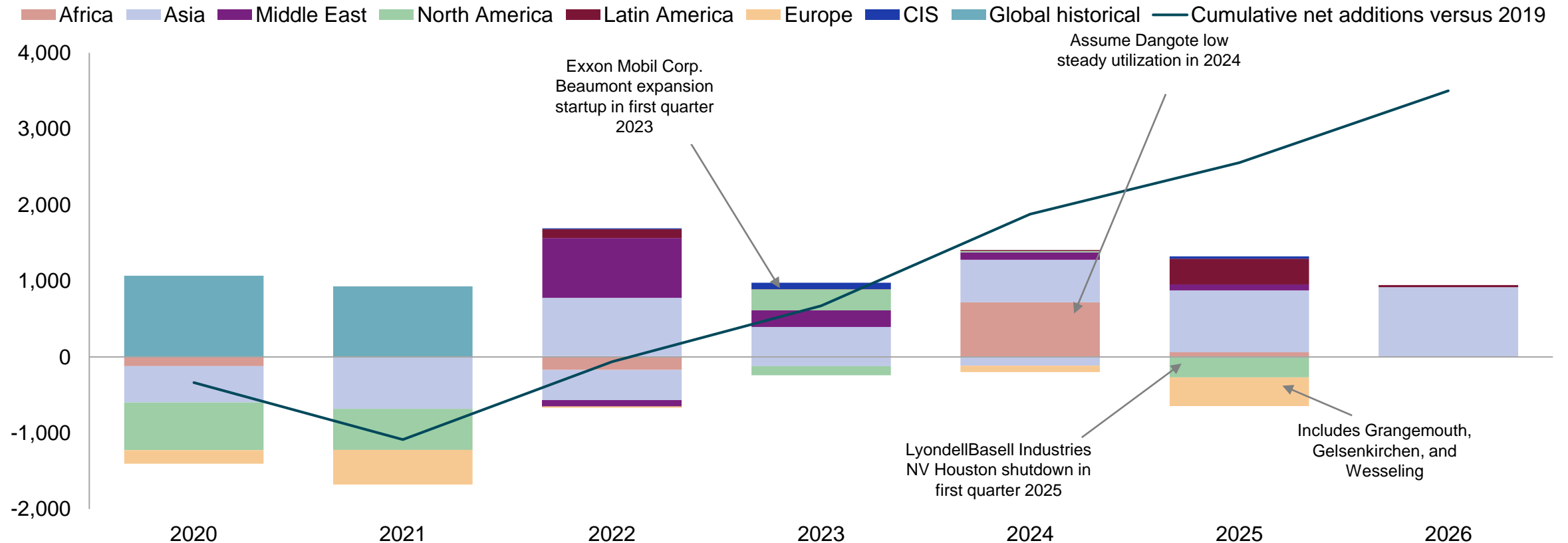
Gasoil/diesel implied balance (supply-demand excluding biofuels) vs. 2017–19 average (thousand b/d)



Data compiled April 2024.
 PADD 5 = US West Coast.
 Source: S&P Global Commodity Insights.

Significant capacity start-ups are expected in 2024 and 2025... ...but partly offset by planned shutdowns in the Atlantic Basin in 2025

Anticipated crude capacity additions and closures to 2026 (thousand b/d)



Data compiled April 2024.

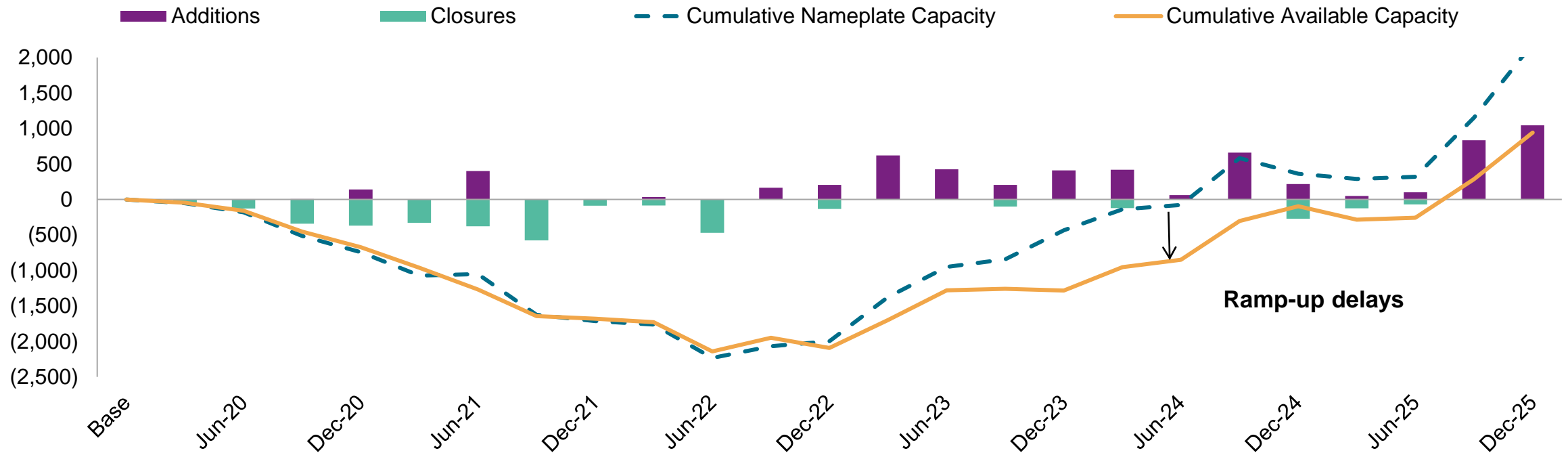
CIS = Commonwealth of Independent States.

Historical capacity additions represent global sum of new projects and incremental capacity creep at existing refineries. Closures of crude distillation unit (CDU) capacity include biorefinery conversions. Chart reflects initial startup of CDU capacity; please see slide 11 for specific timing of production ramp-up.

Source: S&P Global Commodity Insights.

Slow ramp ups will leave effective capacity lagging 2019 levels until the end of 2025

Change in global refinery capacity excluding China (thousand b/d)



Data compiled March 2024.

CIS = Commonwealth of Independent States.

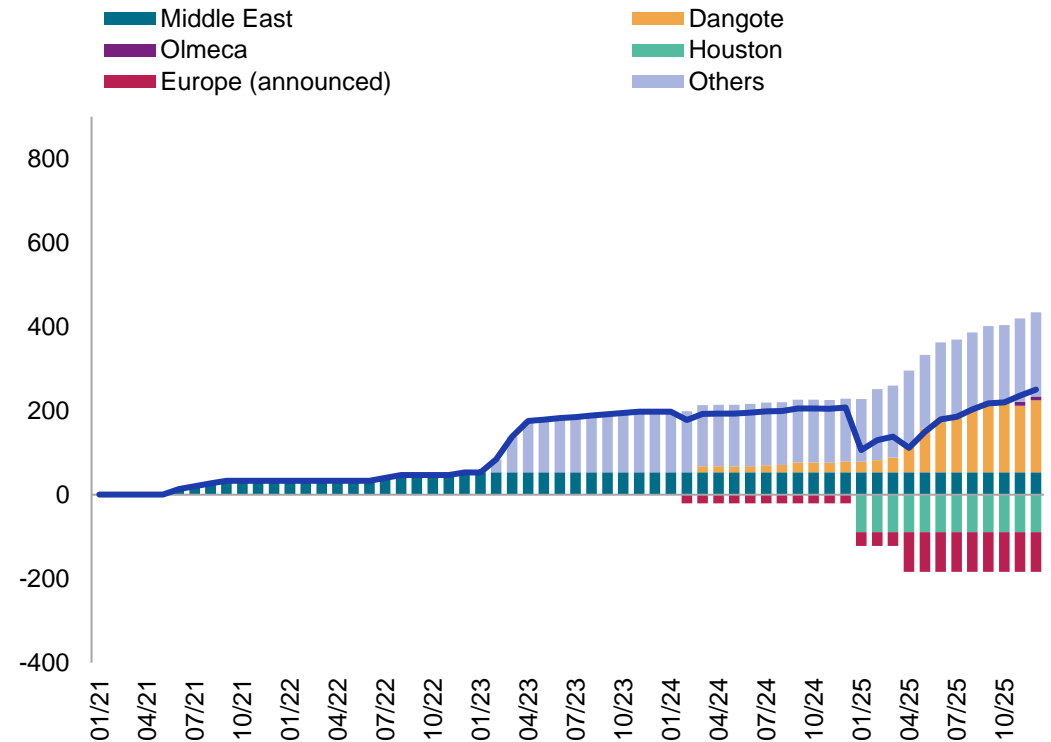
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Source: S&P Global Commodity Insights.

Startup timing of Dangote and Olmeca refineries remain key to Atlantic Basin balances in 2025

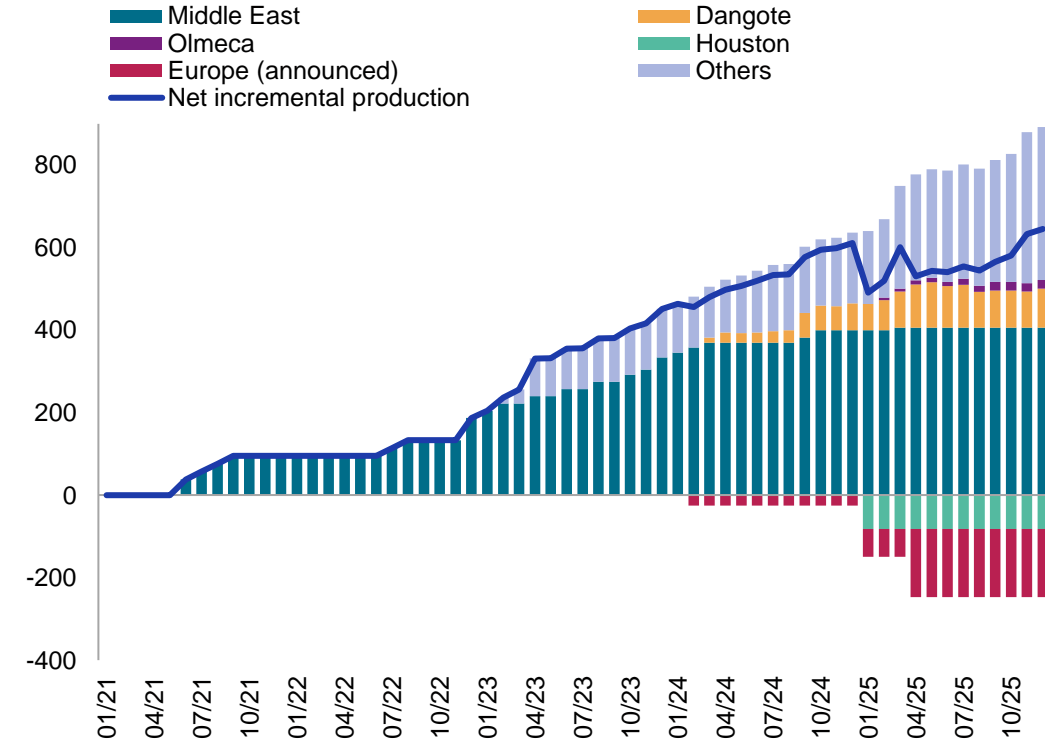
Very modest gasoline supply additions expected in 2024

Gasoline supply increase from new refinery capacity (thousand b/d)



More rapid ramp up of Middle Eastern refineries will add diesel supply more quickly

Diesel supply increase from new refinery capacity (thousand b/d)



Data compiled April 2024.

Middle Eastern refineries include Jizan, Al Zour and Duqm. European refineries include Grangemouth, Wesseling, Gelsenkirchen and Livorno. Some refineries' supply may reflect incremental production elsewhere as a result of feedstocks produced from the new capacity.

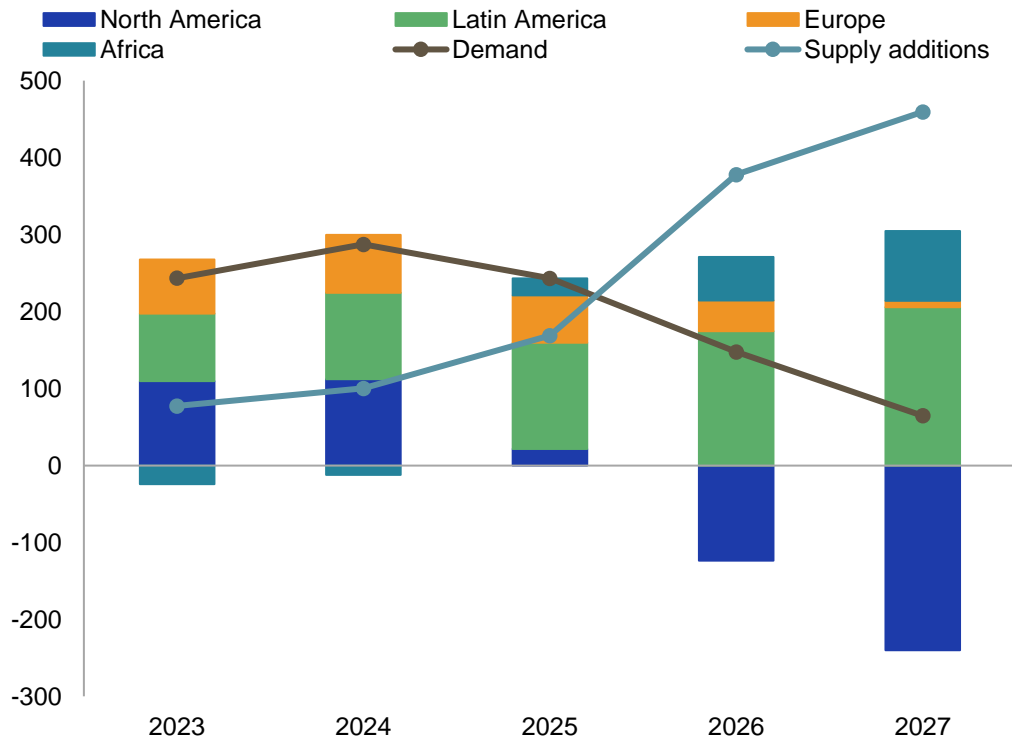
Source: S&P Global Commodity Insights.

From boom to bust: Another wave of rationalization on the horizon?

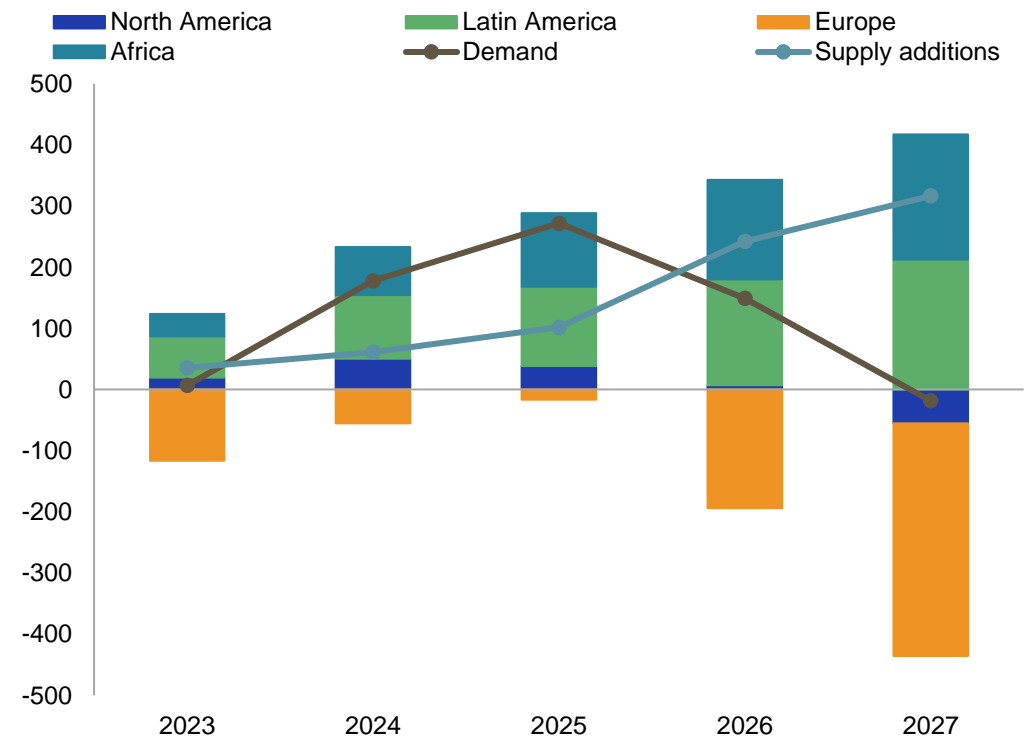
Closure announcements a harbinger of the next round of rationalizations?

Atlantic Basin supply additions outstrip demand growth from 2026, creating downward pressure on margins

Cumulative growth in gasoline demand in the Atlantic Basin since 2022 (thousand b/d)



Cumulative growth in diesel/gasoil demand in the Atlantic Basin since 2022 (thousand b/d)

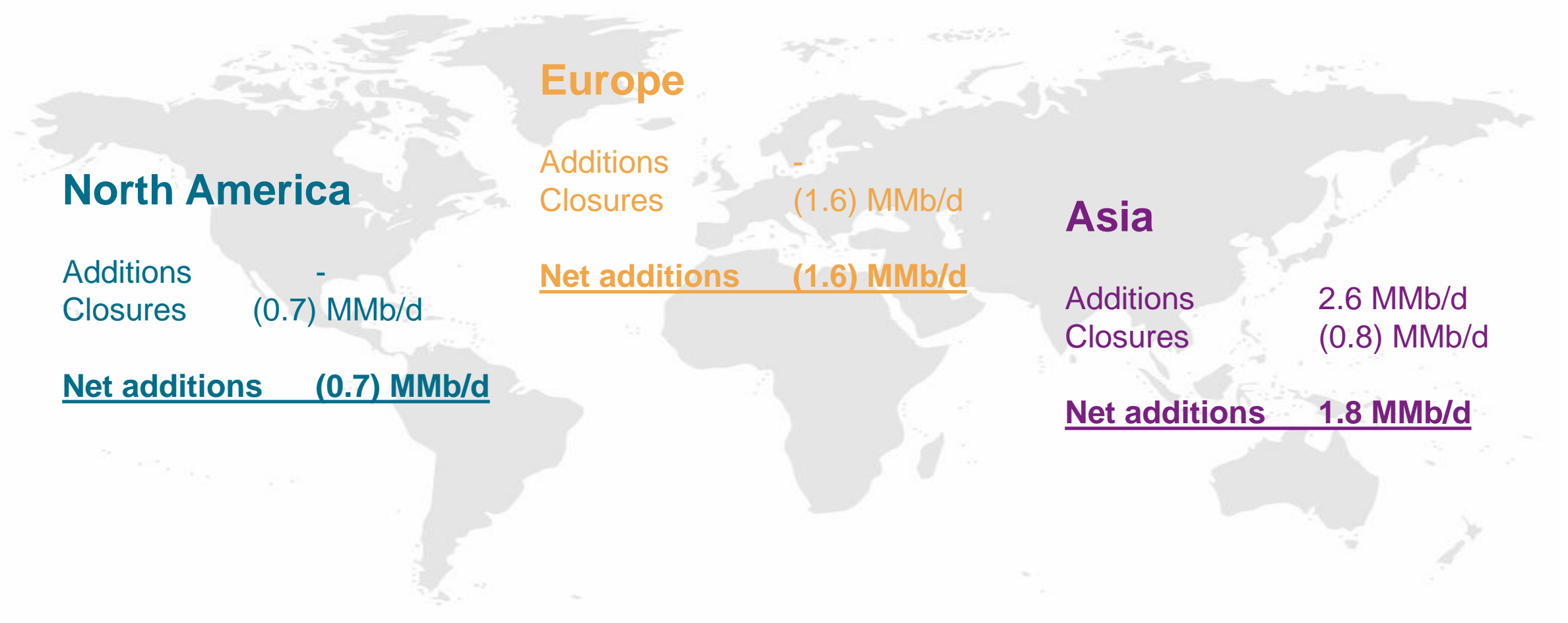


As of Dec. 13, 2023.

Atlantic Basin includes Africa, Europe, Latin America and North America. Supply and demand exclude biofuels. Supply additions are from new projects only.

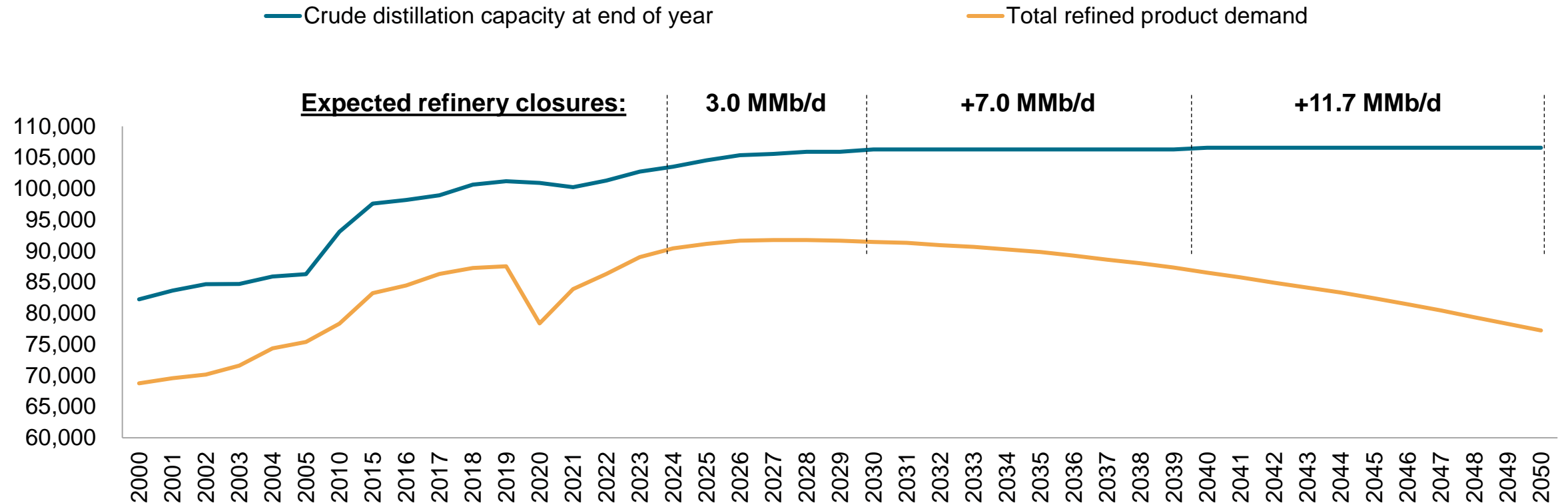
Source: S&P Global Commodity Insights.

More than 3 million b/d of capacity to close by 2030



Further waves of closures will be required to ensure the industry remains profitable

Refining capacity and refined product demand (thousand b/d)



As of Apr. 16, 2024.

Closures are indicative of capacity reductions required to return utilization rates to the global average for the period 2000 to 2024 excluding 2020.

Source: S&P Global Commodity Insights.

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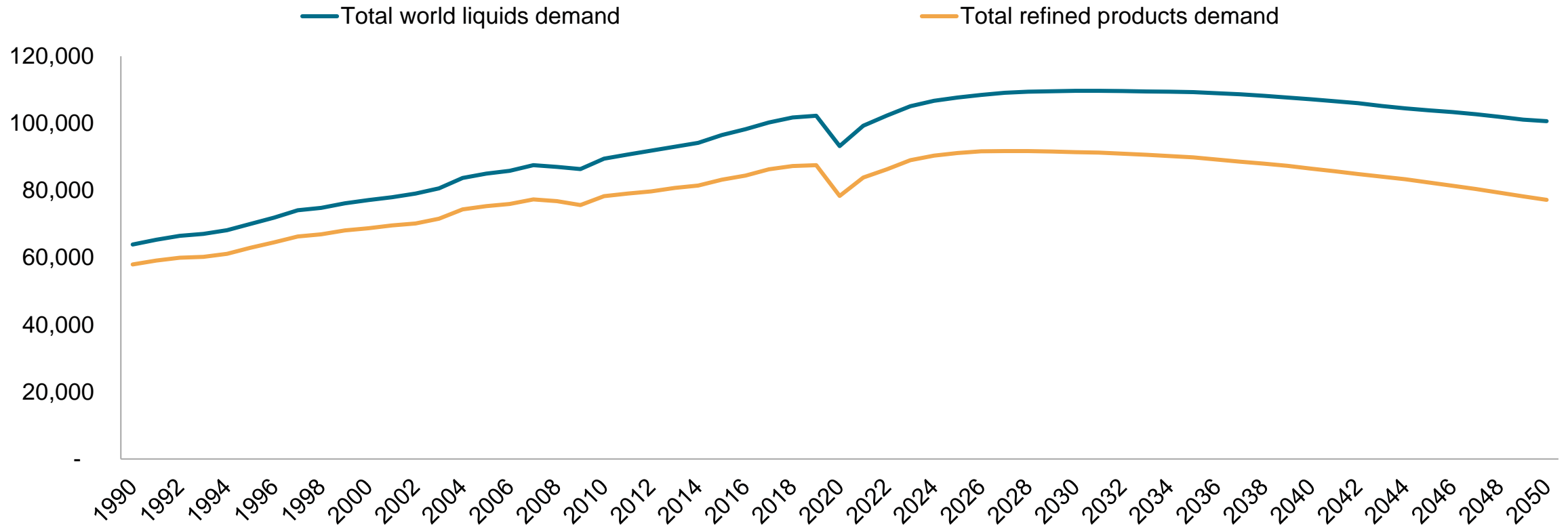
A slow goodbye to oil: An energy transition reset

Pulse of the industry: A shift in thinking about the energy transition?

- No more denying we have a problem
- A seat at the table
- A more pragmatic transition
- Multidimensional transition
- Concerns about the compatibility of profitability and sustainability

We project a “slow goodbye” for oil

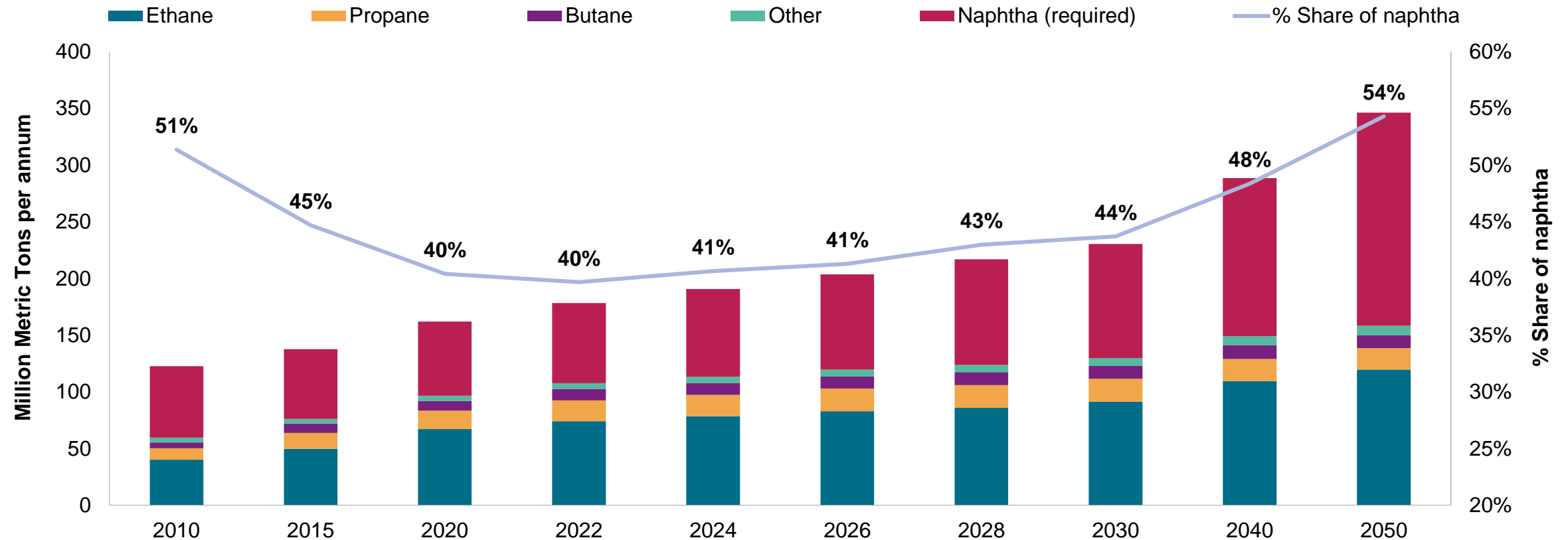
World oil and refined products demand (thousand barrels per day)



As of Nov. 01, 2023.
Source: S&P Global Commodity Insights. Annual Strategic Workbook 2023
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The call on the refinery to produce more chemical feedstocks is set to increase

Global Ethylene Production by Feedstock



Source: S&P Global Commodity Insights.

Key messages

- 1 OPEC+ to continue **market management strategy** to defend price
- 2 Refining **boom to turn to bust**, leading to a wave of closures
- 3 Oil has a long-term future, but the industry is on the cusp of a **major transformation**