Long-term oil market outlook

Aker BP 2026

Aker BP long-term oil market view

Our 2026 to 2035 outlook

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Oil demand likely to keep growing for at least another ten years

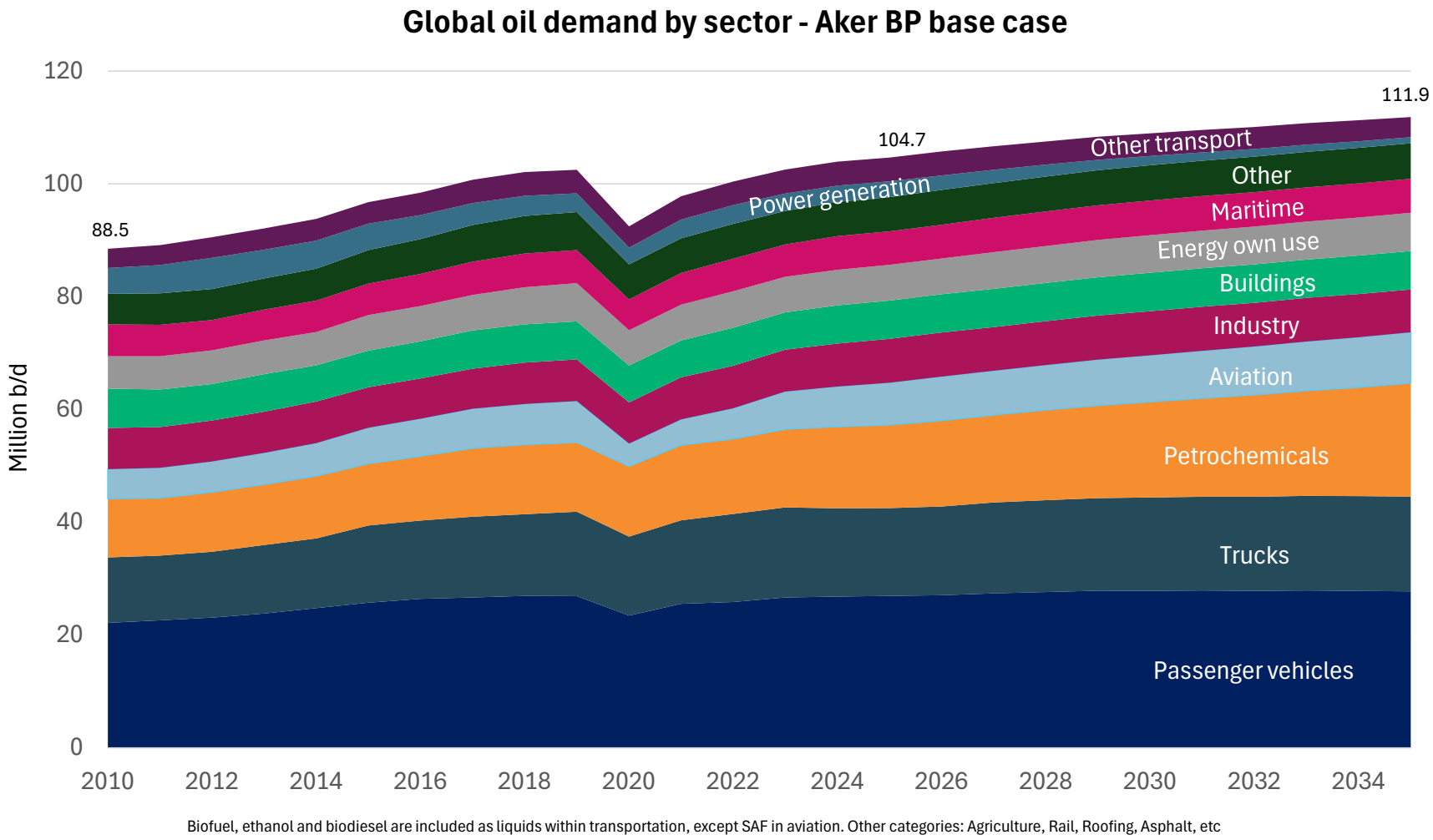
Continued oil demand growth at 0.7mmbd p.a. towards ~112 mmbd by 2035

Peak in road transportation – yet demand remains resilient

Petrochemicals and aviation key contributors to future demand growth

Passenger vehicles, trucks and petchem seen to still be the largest sectors by 2035; petchem and aviation key drivers for growth

Key assumptions related to transportation and petchem leads to no peak oil demand next ten years



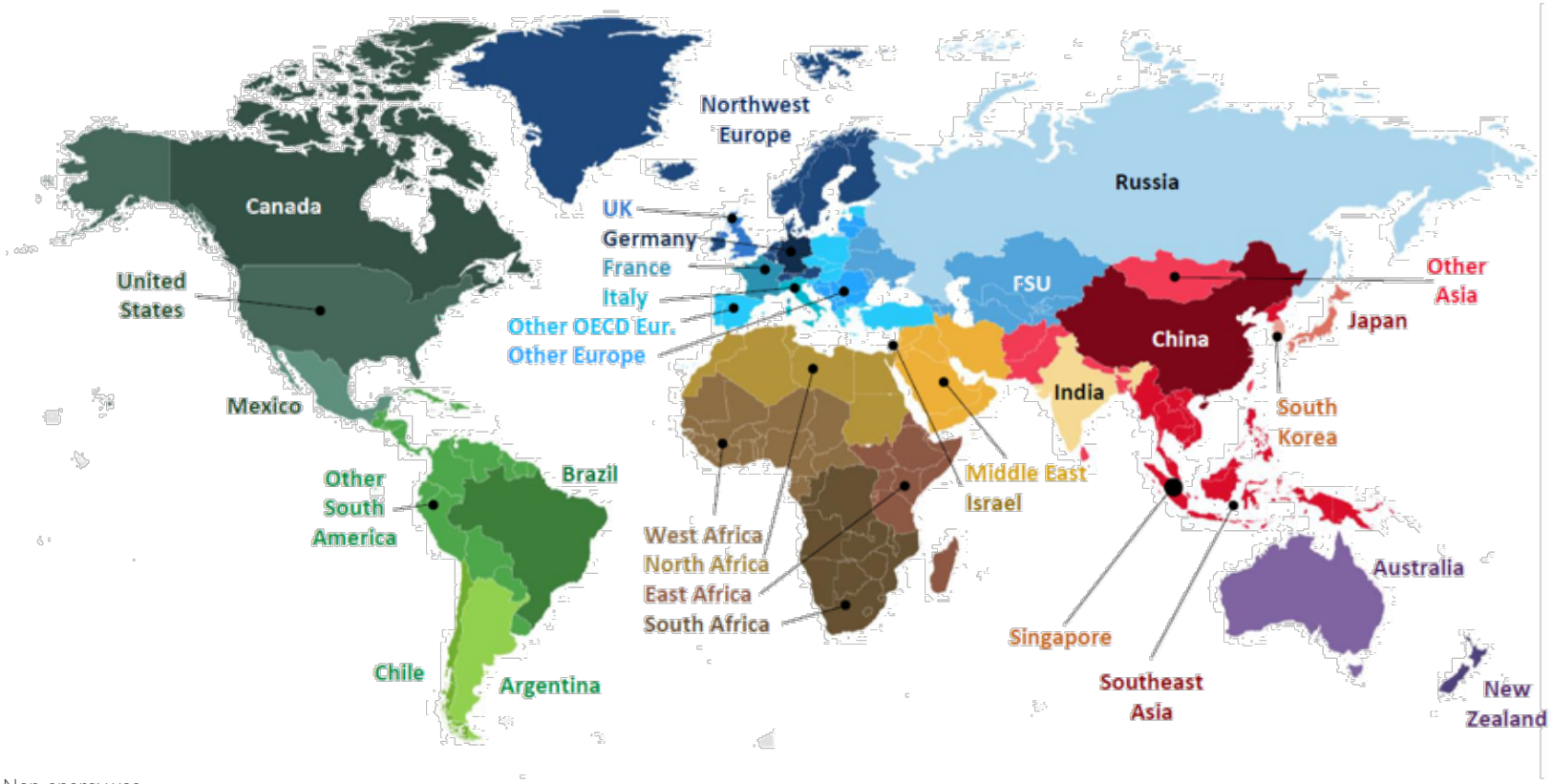
Biofuel, ethanol and biodiesel are included as liquids within transportation, except SAF in aviation. Other categories: Agriculture, Rail, Roofing, Asphalt, etc

- Road transportation - up by 1.4 mbd
  - Personal vehicles at 27 mbd in 2025 - peak in 2029 at 27.9 mbd, then ~flat to 27.8 in 2035
  - Trucks – up from 15.5 mbd to 16.8 mbd
  - Buses – down from 2.8 mbd to 2.2 mbd
  - Two/tree-wheelers – flattish at 1.4 mbd
- Petrochemicals – up from 14.8 mbd to 20.1 mbd
- Aviation – up from 7.5 mbd to 9.0 mbd
- Industry – down from 7.8 mbd to 7.6 mbd
- Buildings – flattish at 6.8 mbd
- Maritime – flattish at 6 mbd
- Energy own use – up from 6.3 mbd to 6.8 mbd
- Power generation – down from 2.8 mbd to 1.1 mbd
- Other (lubricants, roofing, asphalt, etc) – slightly up from 6.0 mbd to 6.3 mbd

mbd = million barrels per day

31 regions & 12 sectors with different demand drivers (macro, price elasticity, sector specific, politics, etc.)

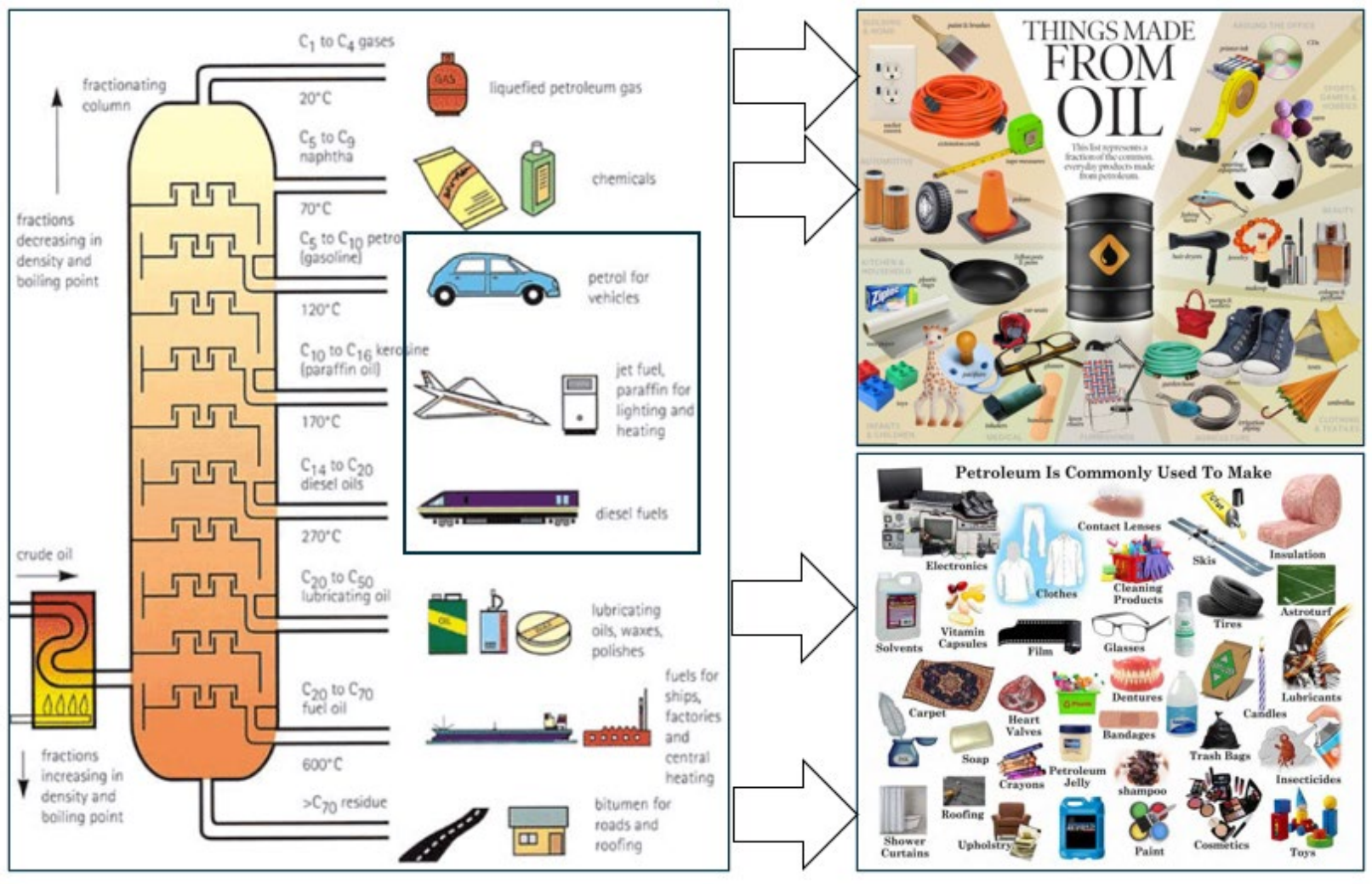
For each sector, the model utilizes data from the defined drivers in each demand region



1) Other includes Agriculture, Rail and Non-energy use.
Sources: Rystad Energy

Each sector has its own demand drivers and each sector uses a different mix of refined products

Most crude oil needs to pass through a refinery to create a product that can be used in an economic sector



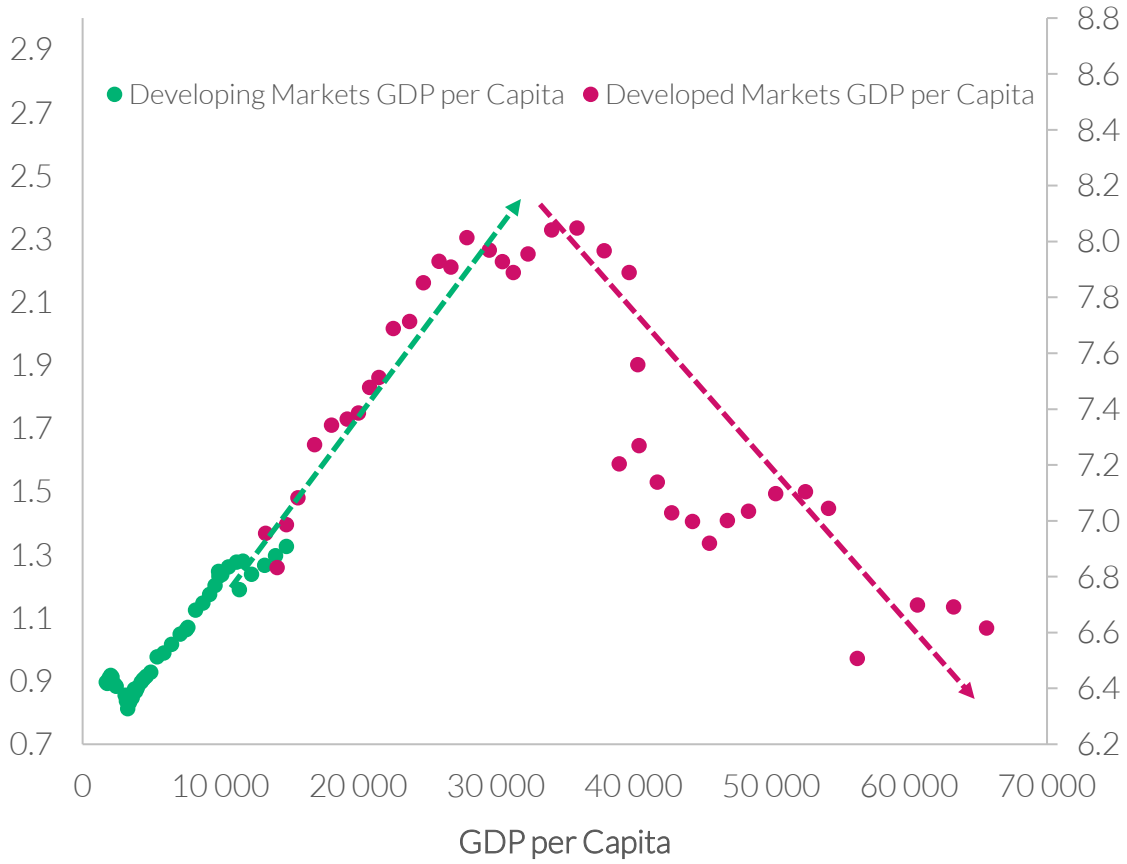
Key oil demand drivers

- **Population growth**
- **GDP growth**
- **Transportation:**
  - Total vehicle sales (ICE, EV, PHEV)
  - Scrap rates (passenger vehicles, trucks)
  - Driving distance
  - Freight volume (passengers/tonnes)
  - Fuel efficiency improvements
  - Market share sales (ICE, EV, PHEV)
    - Passenger vehicles (gasoline)
    - Heavy Duty Trucks (diesel)
  - Aviation growth
    - Sustainable aviation fuel (SAF)
    - Haul type (short haul, long haul)
- **Petrochemicals**
  - Growth factor
  - Unit capacity expansion
  - Recycling rates

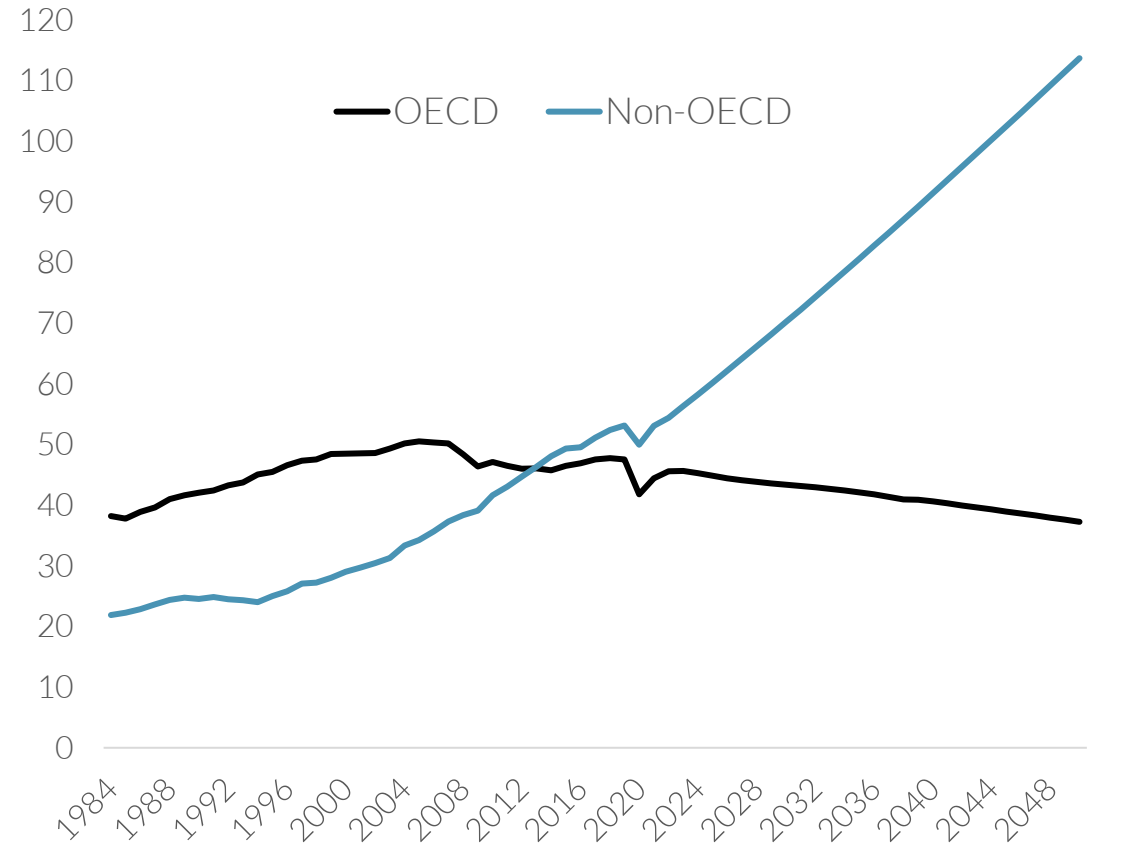
Oil demand to continue its growth in Emerging Markets (EM) - a growing population and a growing middle class is the key

Oil demand growth is an energy addition story – market share has dropped for 50 years but demand keeps growing

GDP per capita vs oil demand per capita (liter per day 1983-2024)
Demand per capita: developing Markets (LHS) vs. developed market (RHS)



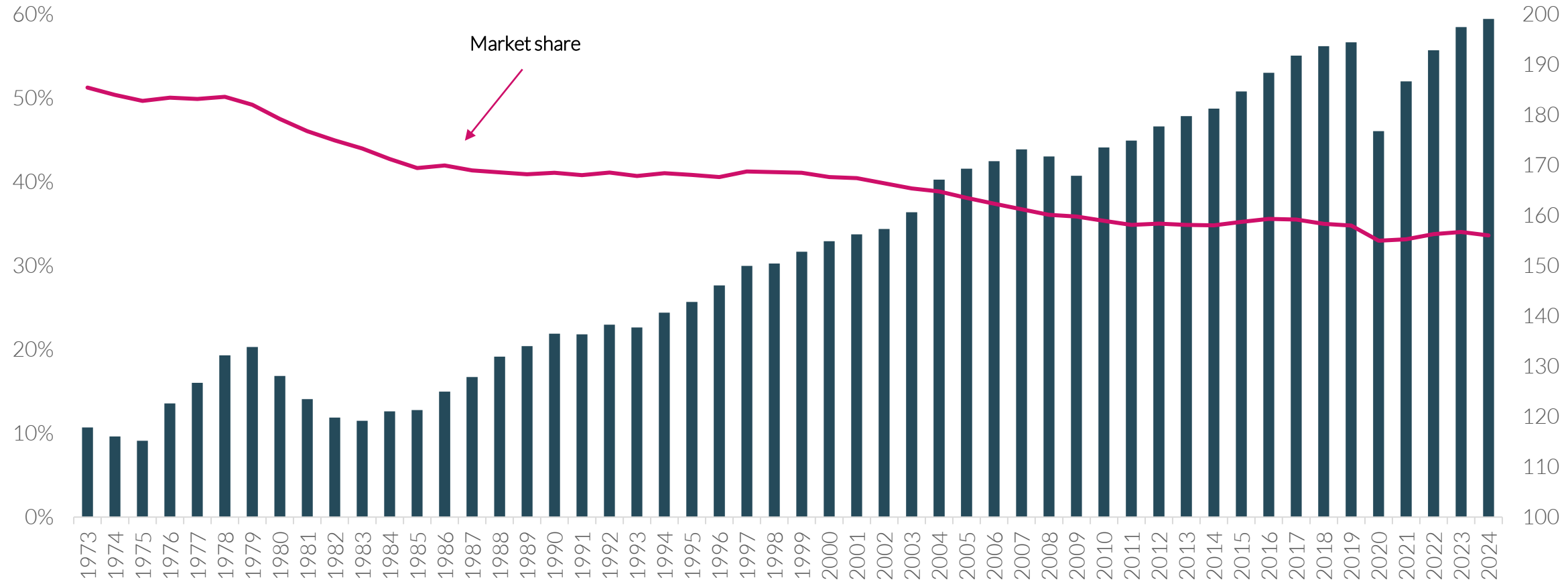
Oil demand million bpd
- if GDP/Capita vs Oil Demand /Capita continues to develop according to trend



Oil demand keeps growing measured in barrels and tonnes - only three incidents of short-term demand declines last 50 years

Oil demand growth is an energy addition story – market share has dropped for 50 years but demand keeps growing

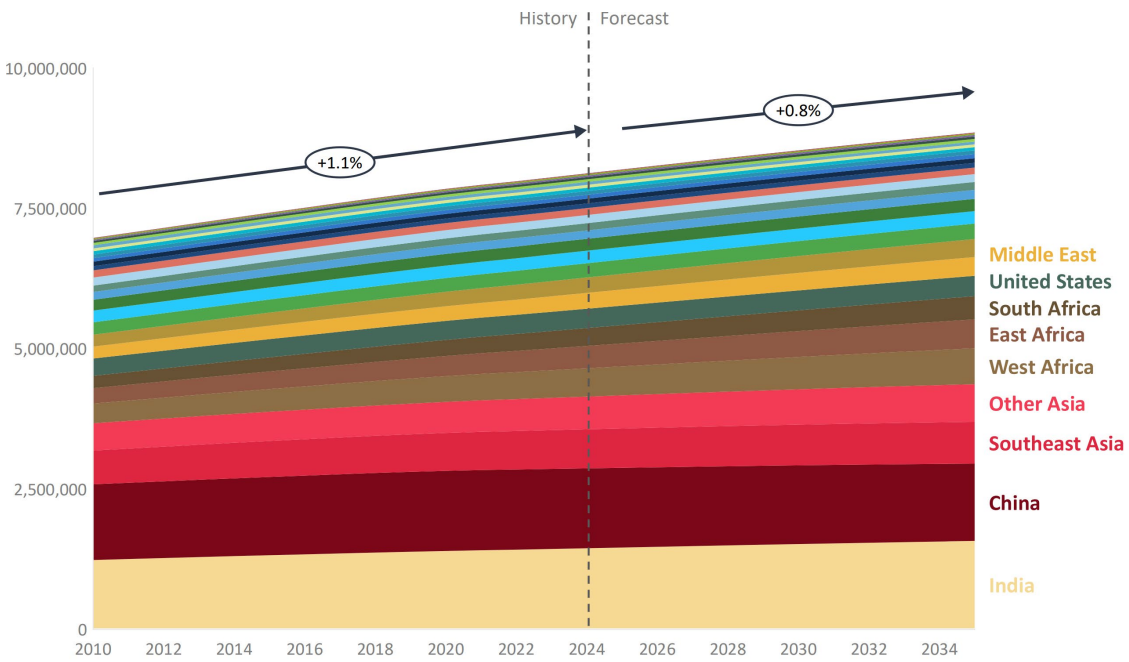
Global market share oil (LHS) vs
Oil demand in exajoules (RHS)



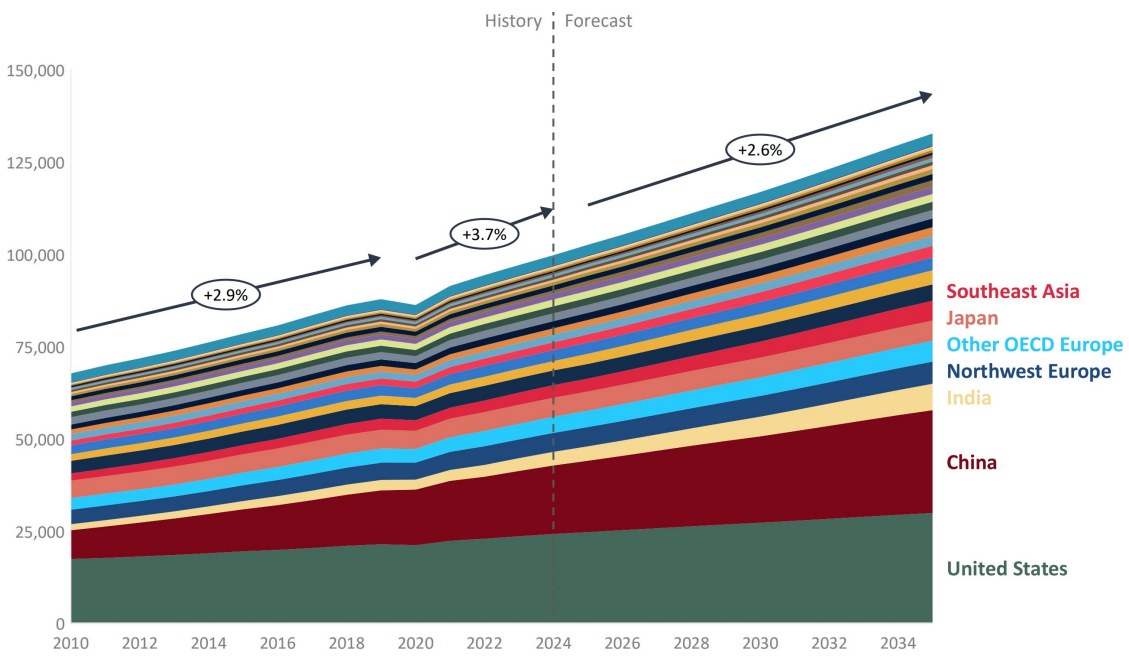
Continued population and GDP growth at a conservative and steady pace

Macro assumptions

Population growth
(Global population by region – thousands)



GDP growth
(Global GDP by region - USD billion)



Population outlook

- Population is assumed to grow by 0.8% annually, slightly below the long-term trend as birth rates continue to fall in many countries

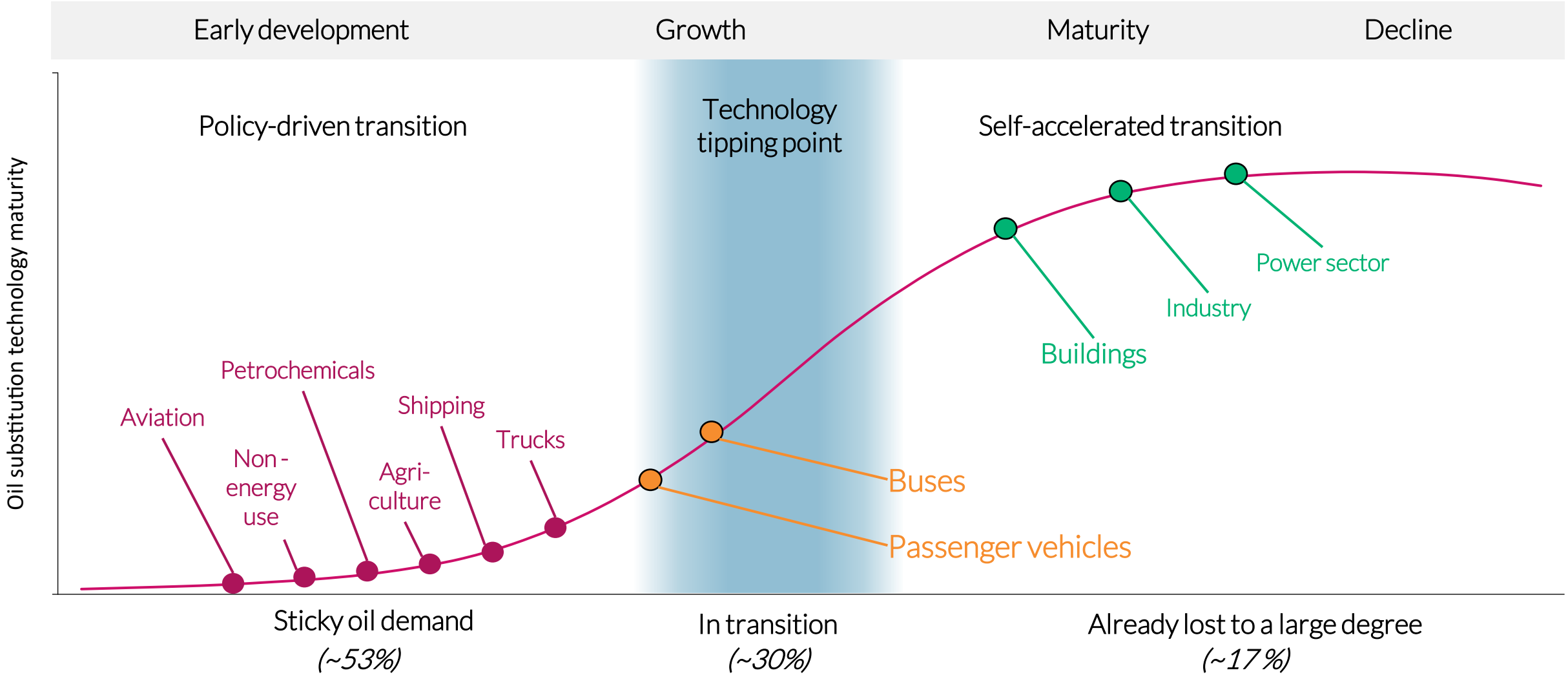
GDP outlook

- Global GDP is assumed to grow by 2.6% annually, a conservative outlook and weaker than historical growth since 2010
- Slower growth is driven by aging populations, lower productivity, rising trade barriers, high debt levels, fiscal vulnerabilities and institutional erosion

Sources: Rystad Energy, IMF, UN, World Bank

The oil market grow less quickly than before due to technological breakthroughs for passenger vehicles and buses

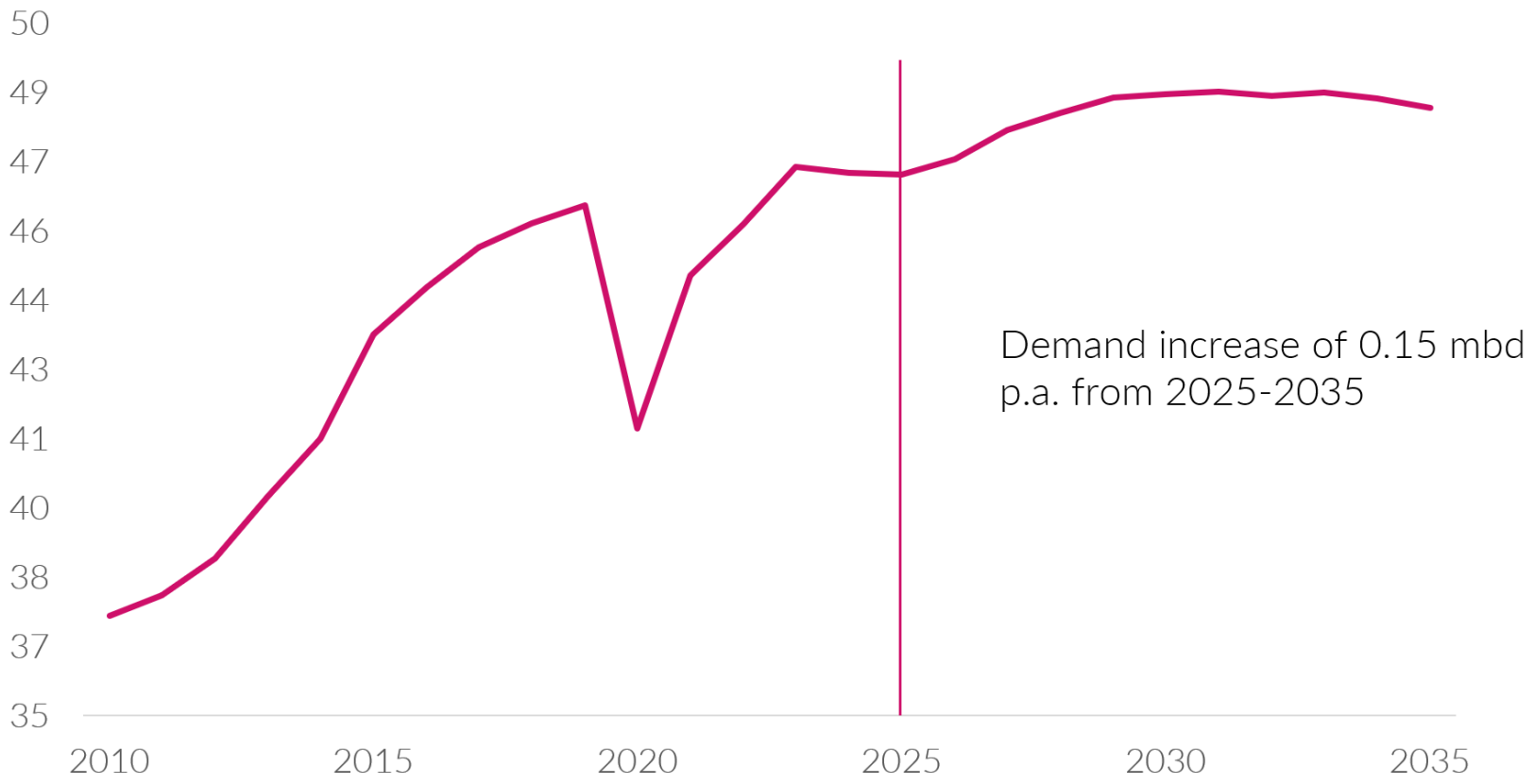
Still no reason to expect decline in demand next ten years due to sticky aviation and petchem demand



Road transportation demand for oil set to peak in 2029 due to increased market share for electric vehicles, but no sudden drop

Long lifetime for ICE vehicles (low scrap rates) and long-haul trucking on oil prevents a sudden drop in demand

Road transportation oil demand
Million barrels per day



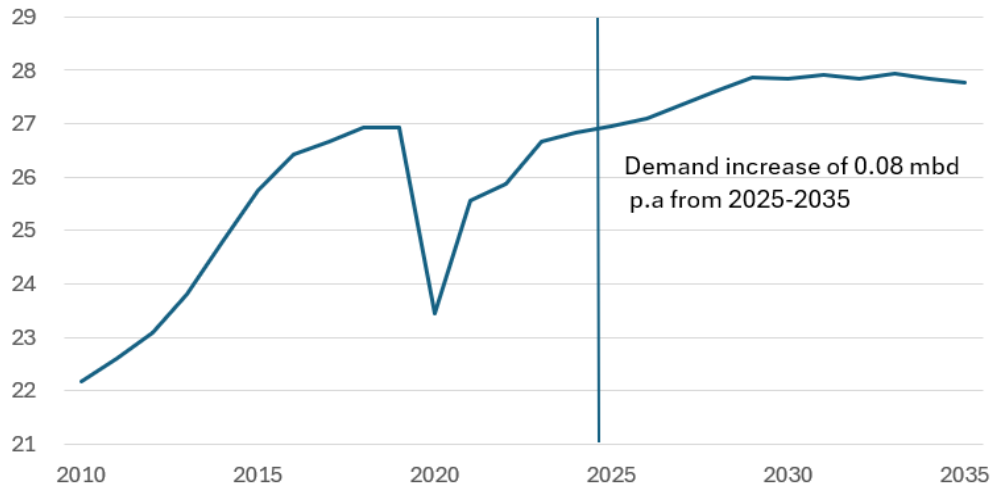
Transportation sector outlook

- **Personal vehicles up 0.8** mbd by 2035
- **Trucks up 1.3** mbd by 2035
- **Buses down 0.7** mbd by 2035
- Two- and three-wheelers slightly up (only 50 kbd) by 2035
- **Majority of the growth in oil demand prior to 2030**

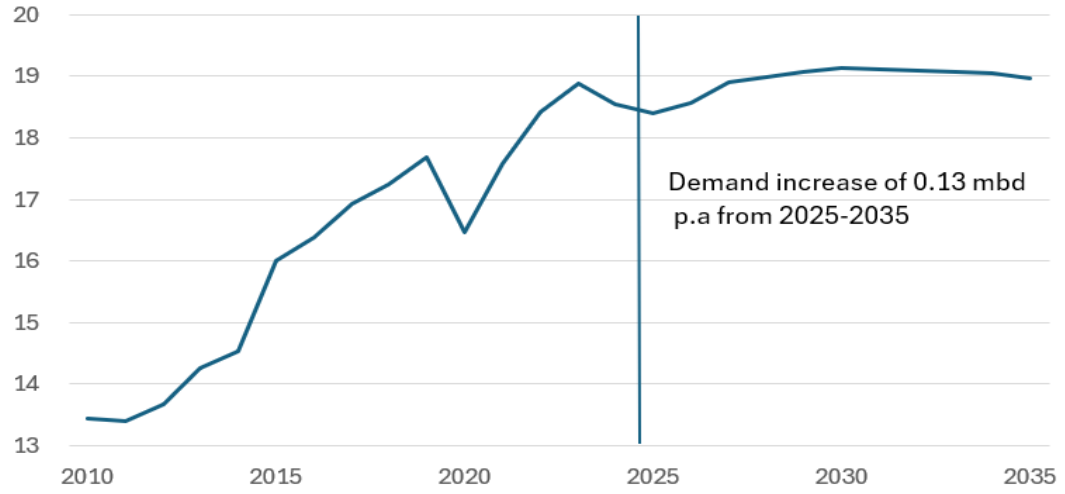
Demand for oil for passenger vehicles, trucks and buses set to peak in 2029-2030, but no large drop in demand seen by 2035

Scrap rates and efficiency improvements needs to increase a lot more to see a meaningful drop in demand for road transportation

Passenger vehicles oil demand
Million barrels per day



Trucks and buses oil demand
Million barrels per day



Passenger vehicles oil demand seen to peak in 2029

- Annual growth of 0.08 mbd; 0.8 mbd over ten years
  - Majority of growth before 2030
- EV sales set to disappoint vs expectations a couple of years ago
  - US seen slightly down before up again after ~2030
  - Europe likely to postpone the banning of ICE cars
- Scrap rates set to increase somewhat in China and India but stay fairly unchanged in the rest of the world

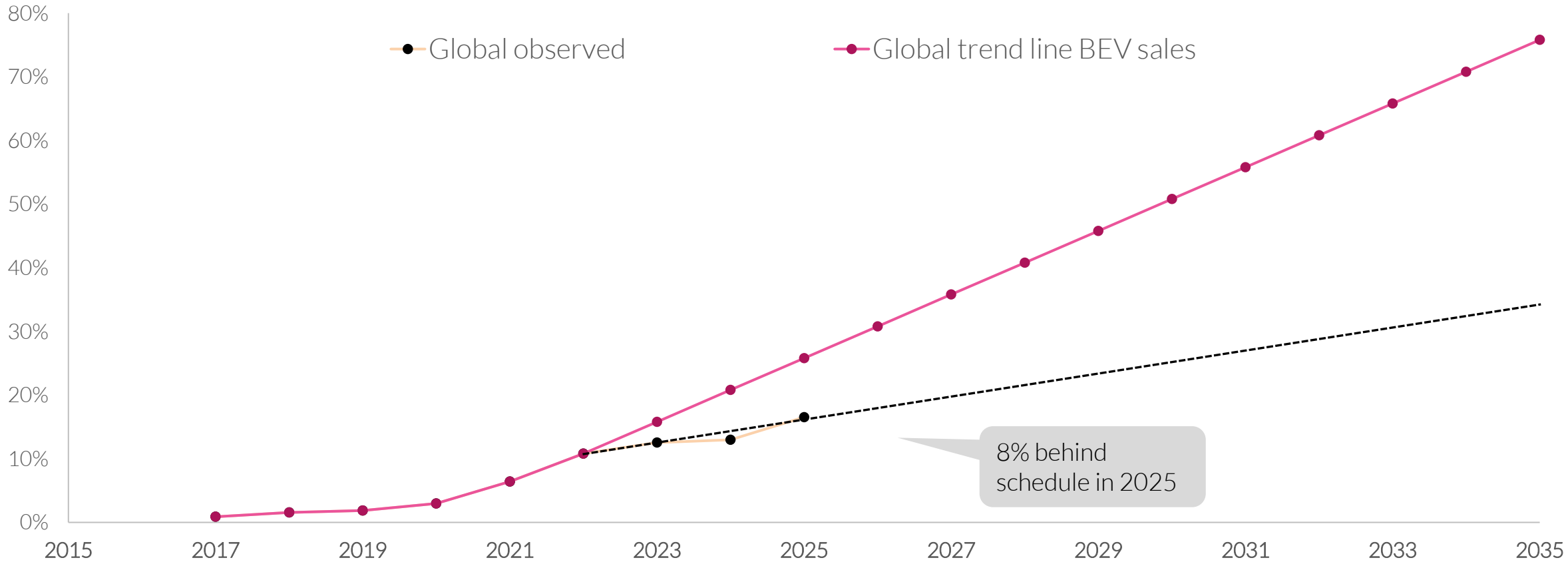
Trucks and buses oil demand seen to peak in 2030

- Annual growth of 0.13 mbd; 1.3 mbd over ten years
- Buses under attack from electricity and LNG
- Short haul trucking under attack from electricity
- Long haul trucking diesel more sticky
  - Most of the heavy-duty trucking oil demand is from long haul
- Scrap rates seen higher than for passenger vehicles but not as high as i.e., Rystad Energy's base case

Battery electric vehicle (BEV) sales not progressing according to the trend line that looked to have started in 2020

Tracking only BEV sales because PHEVs are in effect just more efficient gasoline/diesel cars

Global battery electric sales market share
Per 2025



Source: Bloomberg intelligence, Aker BP analysis

Electric vehicle sales expected to stall in 2026 - US sales end-2025 already plunged ~40% from a year ago

China winding down subsidies - EU scrapping the end of ICE cars - US ending subsidies

BNEF case example

Global EV sales softening

- EV growth slowing as China wind down some subsidies and Europe wavers on ICE phase-out
  - EU governments reallocating funding from passenger vehicles to infrastructure and heavy-duty sectors
- US policymakers pulling back from EV support
- 2026 forecast 24.3m EVs, 12% growth, down from 23% last year

US EV market slowing down

- "EV winter", few near-term catalysts
- Fuel-economy standards hollowed out, and $7,500 consumer tax credits withdrawn
- 2025 December EV sales down 41% YoY

China market cooling

- EV tax break halved (cut by 2,200 USD) from 2026 through 2027
- Stricter requirements to qualify for tax breaks
  - PHEVs must extend the range on electricity from 43km to 100 km – 40% of PHEVs to be ineligible
  - PHEVs must be running less than 70% on fuel
- Cash-for-clunkers stricter, less incentive to scrap fuel driven cars
- New EV efficiency law

Mixed sector outlook

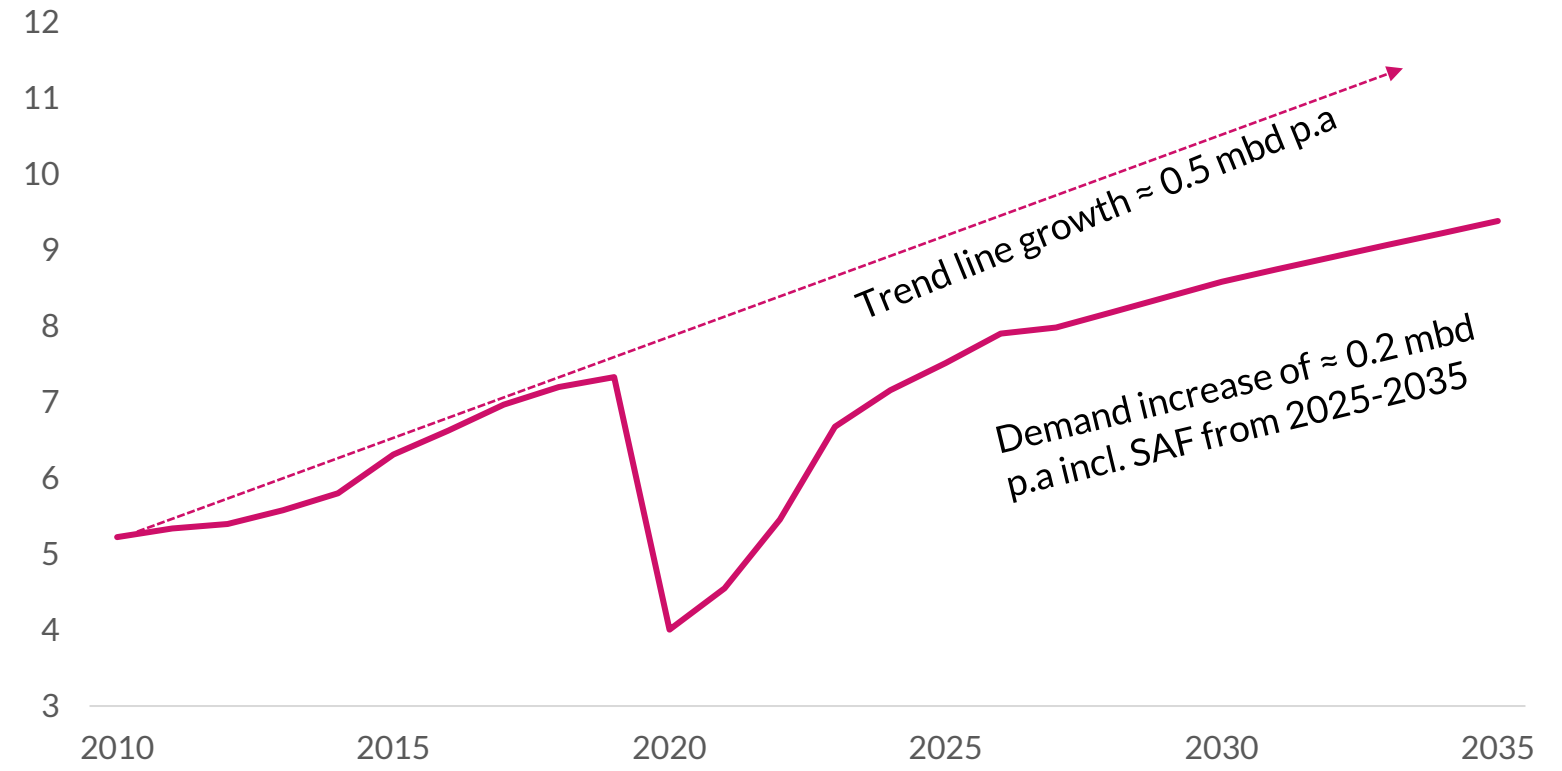
- Short-term sentiment weak across major markets
- Ford's $19.5bn EV charges highlight the fragility of short-term prospects and follow broader strategy rollbacks by major producers outside China
- Recovery 2027-2028?

Source: Bloomberg Energy New Finance – Kyle Stock & Lily Pike, Aker BP

Aviation demand for oil set to continue to grow but weaker than trendline

Annual growth leaving the trendline; still decent growth expected next ten years

Aviation oil demand
Million barrels per day

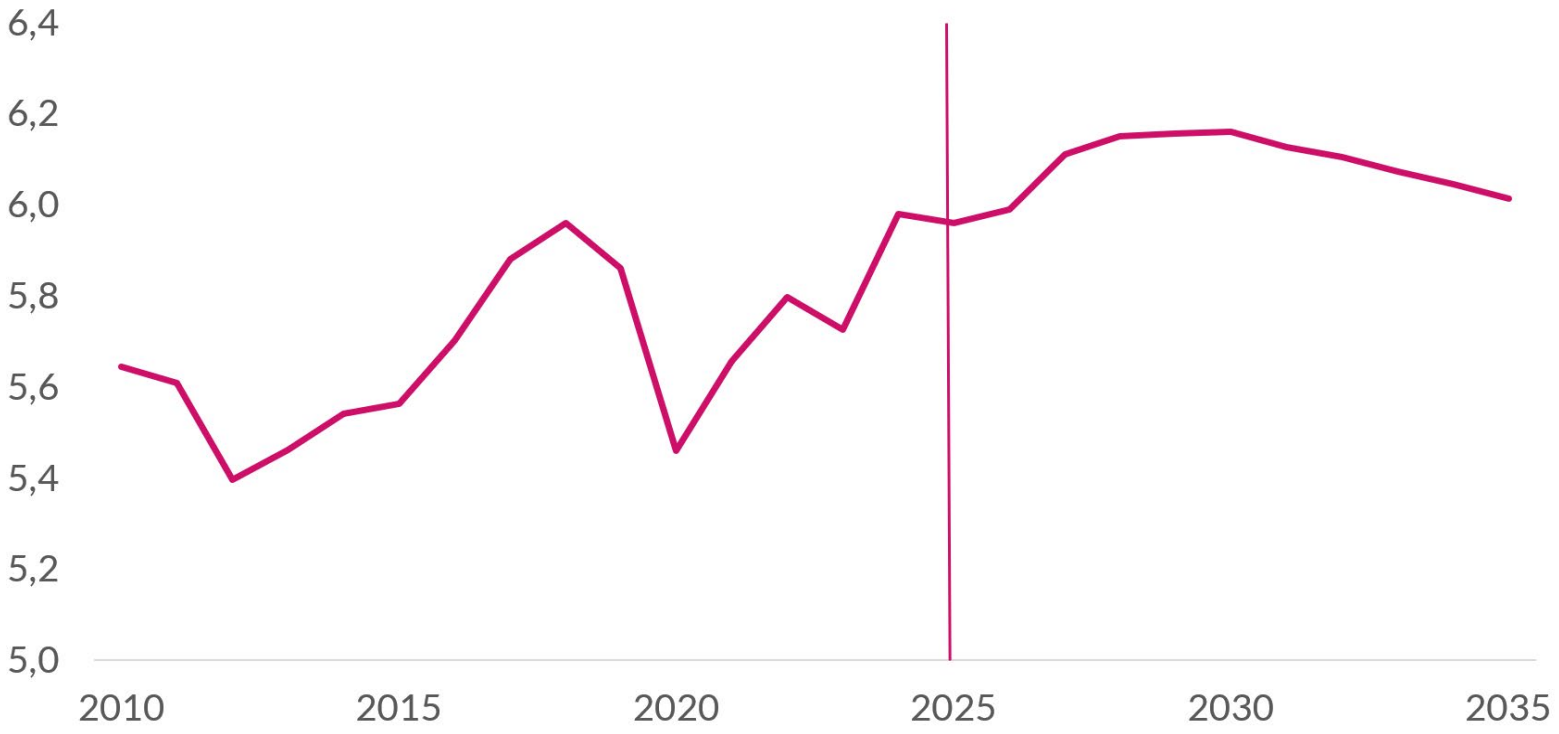


- **Number of airplane departures expected to continue to grow** almost as fast as the pre-Covid trend line. SAF will take some of the growth from traditional jet fuel demand (370 kbd in 2035, from 55 kbd in 2025)
  - Driven by **Asia, Africa and Middle East**
  - Key drivers are **population growth and a growing middle class**
- **Trend line growth in jet fuel demand before 2020 was at 3.9% annually**
- 2024-26 to average at 5.4%
- We are assuming that the **World Cup in Football in 2026 drags jet fuel demand growth higher to an all time high of 7.8 million b/d of demand**
- Football effect fades off in ’27. Demand **grows structurally at 1.8% thereafter**
  - Conservative approach: We assumes the annual growth will weaken compared to pre 2020 trend line

Marine transportation assumed to peak in 2028-30 as more LNG is used in long-haul shipping

Oil use in the marine sector grown the past years; LNG likely to take market share

Maritime oil demand
Million barrels per day

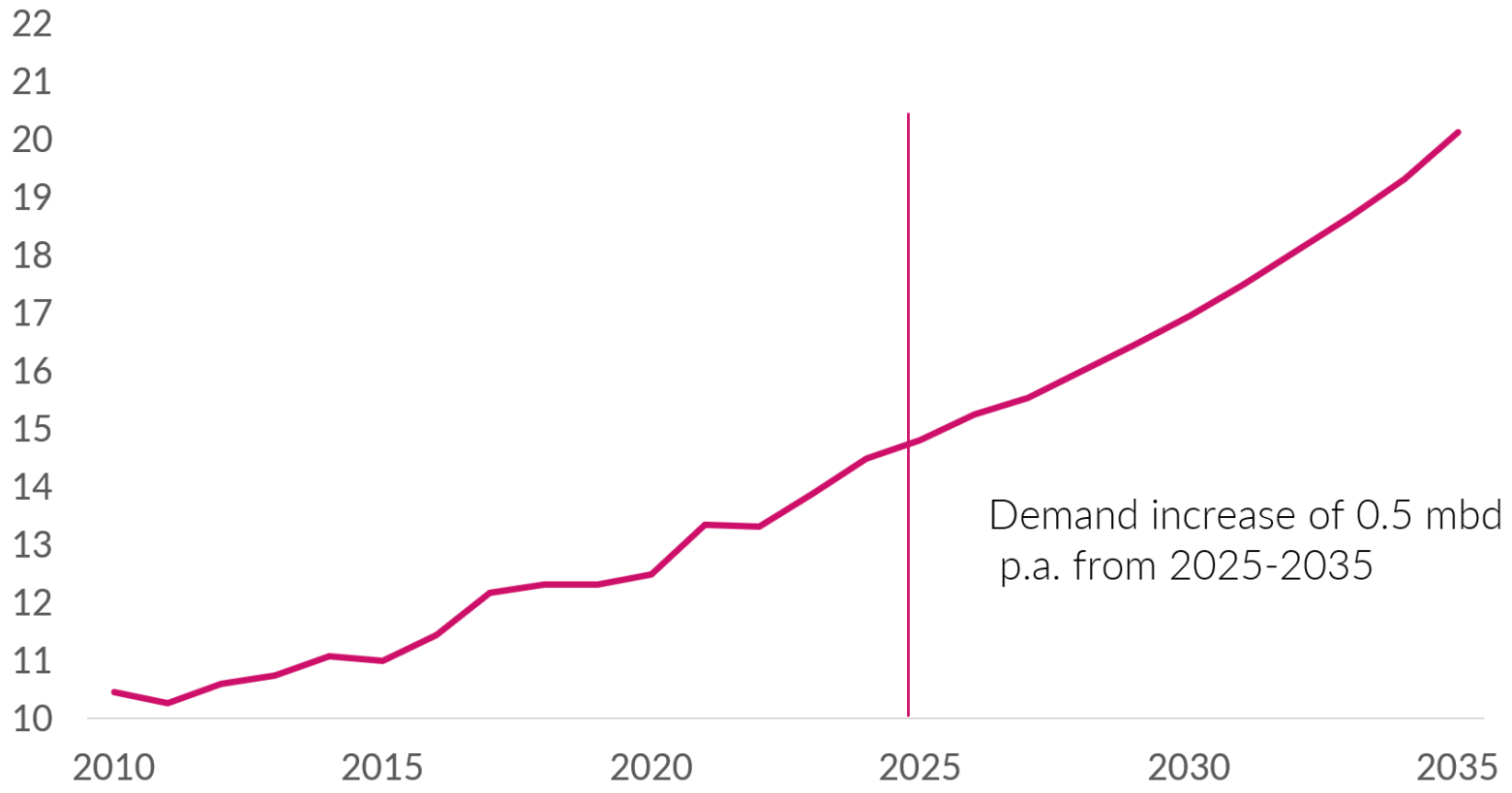


- Seaborne trade primarily **driven by economic growth and population expansion**
- Over the last decade, these drivers have been **strongest in Asian economies**, resulting in the largest increases in seaborne trade to Asian countries and a declining relative share for Western countries. This trend is expected to continue in the coming years.
- Within the global fleet, **container ships and bulk carriers are projected to lead tonne-mile growth**, together accounting for ~70% of global tonne-miles by 2035.
- Three factors contribute to **peak oil demand growth by 2030 in the maritime sector:**
  - LNG is expected to grab a growing share of propulsion demand
  - Enhanced vehicle efficiency
  - Tighter regulations of shipping

Petchem demand growth for oil set to continue as GDP growth continues and chemical recycling disappoints

Petchem demand has already left the trend-line to the upside in 2023-2025

Petrochemical oil demand
Million barrels per day

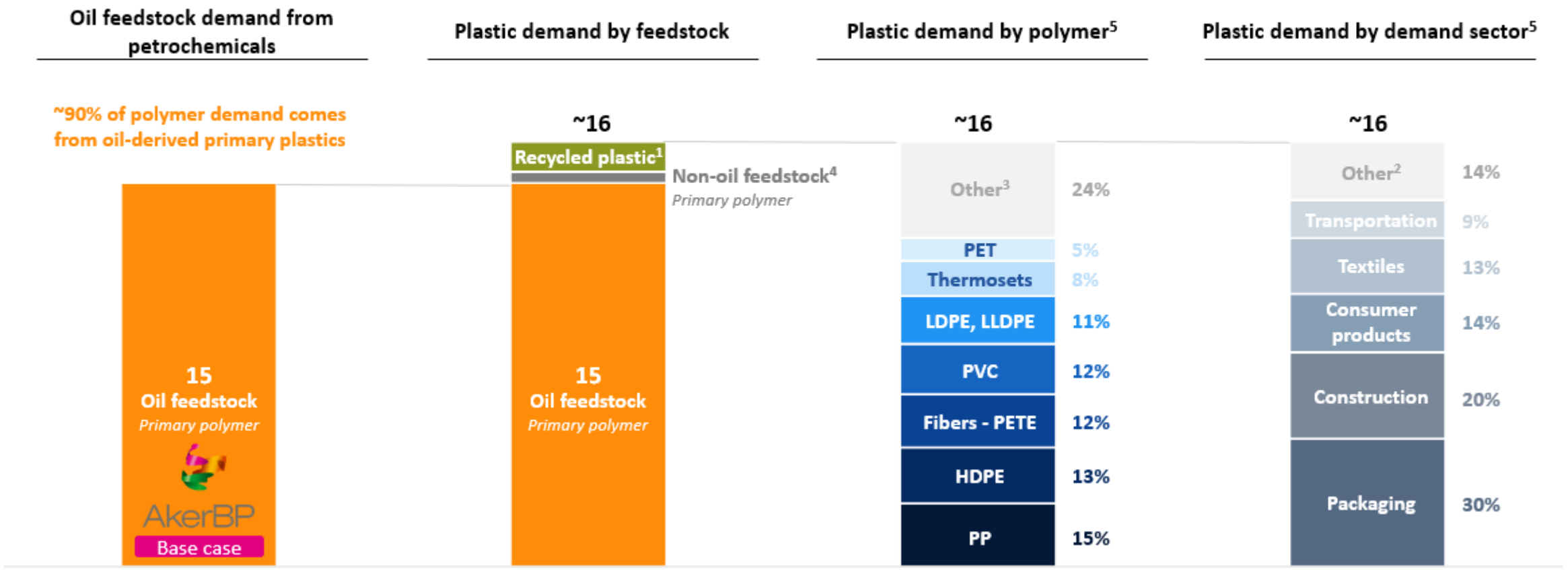


- Key drivers are population growth and a growing middle class
  - **Ten-year trend growth is 2.7%**
  - **Growth in 2023-2025 averaged 3.6%**
- **We assume annual growth in oil demand for petrochemicals of 3% going forward**
- Oil-based petrochemical production capacity seen a steep increase last 15 years and is expected to continue increasing as the world demands more plastic products
- Chemical recycling has been proven difficult as consumer plastic waste streams are highly diverse
  - Even small contamination can degrade product quality or damage processing equipment
  - Many facilities have faced delays or low production capacity, undermining early promises of scalability
- The rise in capacity is led by China and the Middle East, increasing their capacity by more than 30% towards 2030

Oil feedstocks account for 90% of total plastic demand, with packaging the main driver, before construction

Plastic demand is already a large part of oil demand and keeps growing as chemical recycling has disappointed

Plastic demand across the value chain – from oil feedstock to end-use (2025)
Million bbl/d

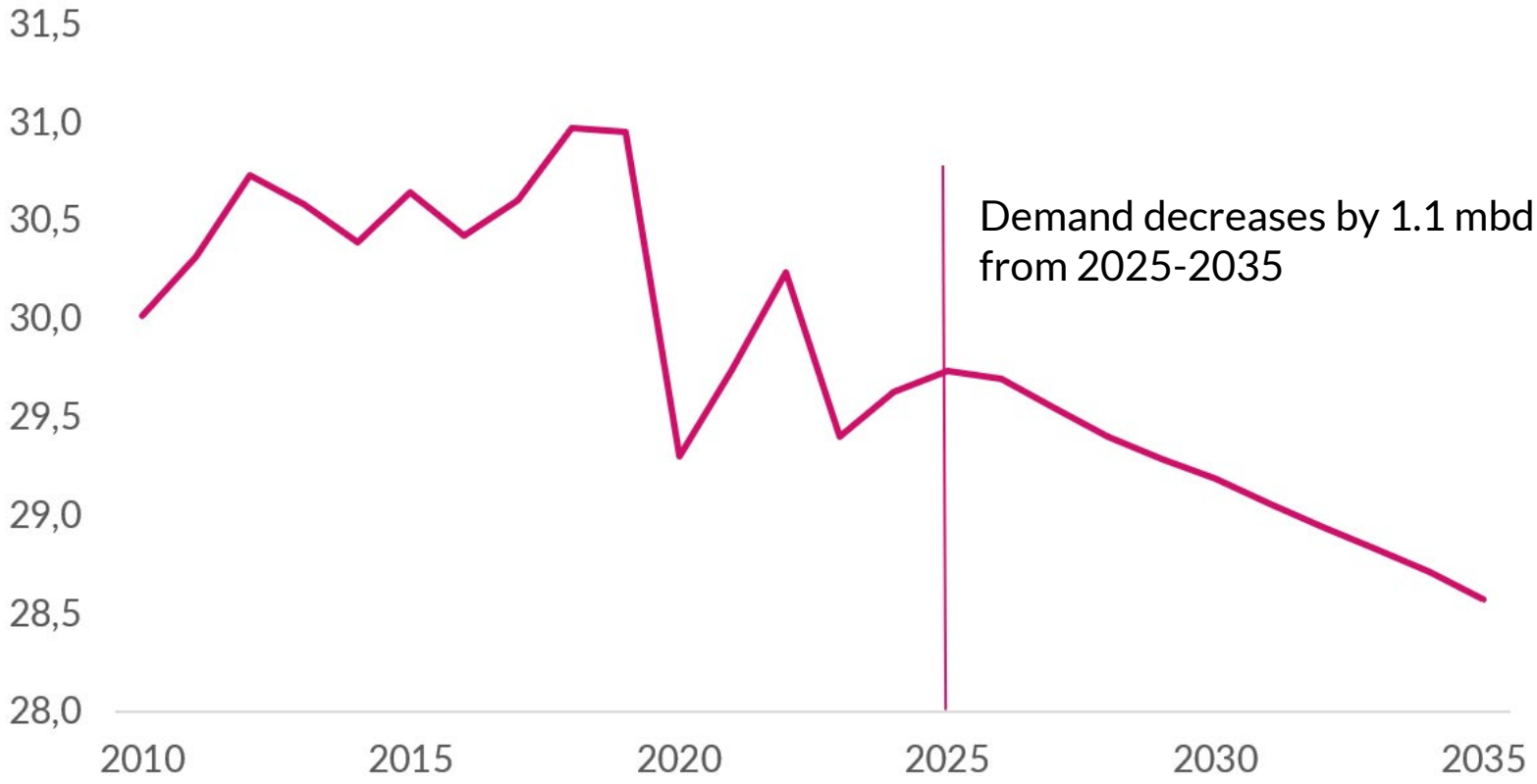


1) Recycled plastic, or secondary polymer, is included by adding volumes similar to 7.7% of total plastic demand. These recycled polymer volumes are converted into an equivalent liquid-demand basis, assuming the same feedstock mix as primary plastics. 2) Other sectors include plastics used in renewable energy, batteries, and other smaller end-use sectors. 3) Other polymers include polymer types representing <5% of total 2025 plastic demand, such as various specialty fibers (e.g. carbon fibers). 4) Primary plastics from non-oil feedstocks, such as coal, assumed to account for 3% of total primary plastics demand. 5) Percentage splits by polymer and sector are based on polymer demand in tones and do not account for conversion to barrels; similar splits are assumed. Source: Rystad Energy research and analysis

The rest of oil use is mainly dropping, due to structurally less usage of oil in the power sector

Other oil uses

Buildings, industry, power generation and other
Million barrels per day



Power generation

- Continue **downwards** trend after 2020-blip when oil became cheaper than gas, down from 2.8 million b/d to 1.1 million b/d by 2035

Building stock to increase with population

- Heating and cooling
- Demand seen **flattish** at 6.8 million b/d as electrification offsets stock growth

Industry

- Rail, agriculture, heavy machinery, mining, industrial heating (cement, steel)
- **Flattish** to 2030 at 7.8 million b/d, then **down** 0.2 million b/d to 2035 as oil is substituted

Other oil use

- Lubricants, roofing, asphalt
- Demand seen **flat** at about 6 million b/d

Energy own use

- Refineries, E&P, transport losses
- **Growing** from 6.2 million b/d to 6.8 million b/d by 2035 as energy production continues to grow

Why is it difficult to eliminate all oil use in buildings? The remaining barriers are structural – not behavioral

Subsidized fuels, weak grids, cold climates and limited investment capacity concentrate the remaining oil use in specific regions

Oil persists in buildings where electrification is costly, unreliable or politically difficult. The main drivers are subsidised fossil fuels, insufficient grid capacity, high heating or cooling loads, and households with limited ability to invest in new systems

North America (selected regions)

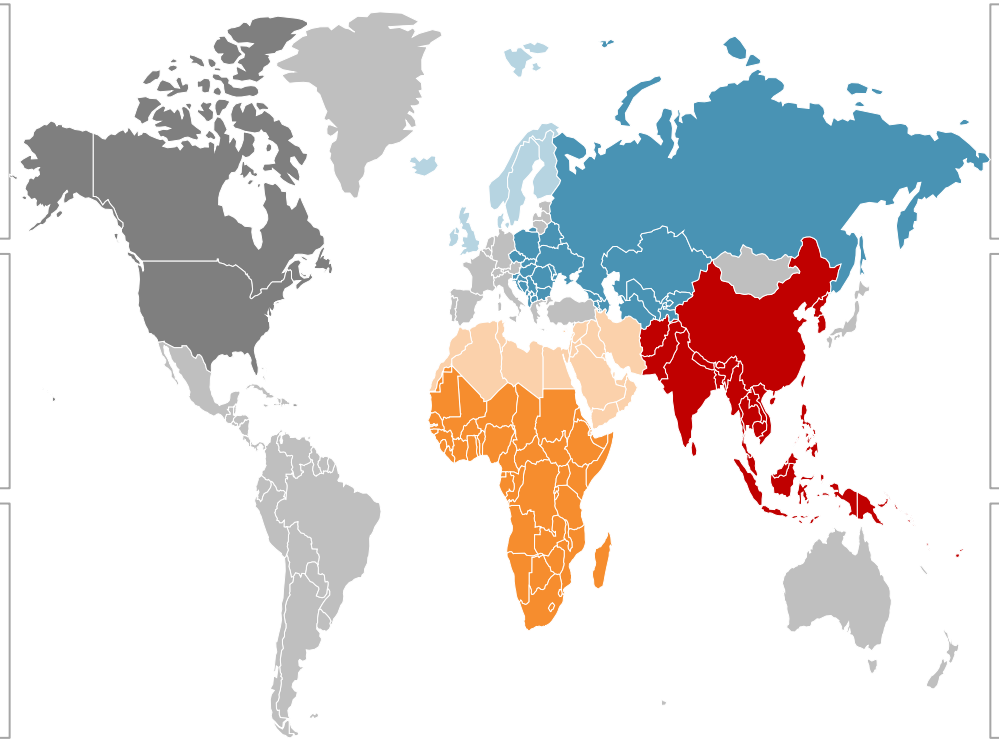
Cheap natural gas, extensive legacy systems and political resistance slow electrification in colder states and parts of Canada.

Middle East & North Africa

Subsidised oil prices and fossil-heavy power systems keep electricity expensive, while extreme cooling loads and weak grid resilience limit alternatives.

Sub-Saharan Africa

Weak and unstable grids, high reliance on diesel generators and limited capital make oil one of the few reliable heating and power options.



Nordic & Northern European pockets

Rural homes with extreme cold still use oil boilers; alternatives are expensive and not always available at scale.

Eastern Europe & Central Asia

Old buildings with poor insulation and radiator systems rely on oil or coal; very cold winters require high-load heating grids can't deliver.

South & Southeast Asia

Rapid growth, high cooling demand and coal-based grids keep electricity carbon-intensive; many buildings use outdated systems.

Why is it difficult to eliminate all oil use in industry?

High-temperature processes are the main obstacle

Some of the hardest-to-decarbonise industrial activities depend on heat-intensive processes with very high and stable thermal loads. Many require furnaces and boilers that are hard to electrify at scale, or run continuous production lines with tight energy specifications and limited downtime for conversion

Cement Industry
Clinker production needs process heat around 1,400–1,600°C, which still favours fossil firing in large rotary kilns and makes full electrification complex and costly

Steel and Other Metal Processing
Primary steelmaking and many metallurgical steps rely on blast or basic oxygen furnaces and high-temperature reheating, where alternatives are capital-intensive and not yet widely available

Glass, Ceramics and Brick Production
Melting, moulding and sintering require sustained high heat and uniform temperature profiles that are difficult to replicate with electric systems at today's cost and scale

Food and Beverage Processing
Large volumes of reliable steam and hot water are needed for cooking, drying and sterilisation, and many plants have legacy boiler systems that are costly to replace without disrupting production

Pulp and Paper Industry
Drying and pulping depend on continuous thermal input and steam networks integrated in mill operations, which raises conversion cost and risk even when long-term savings favour electrification

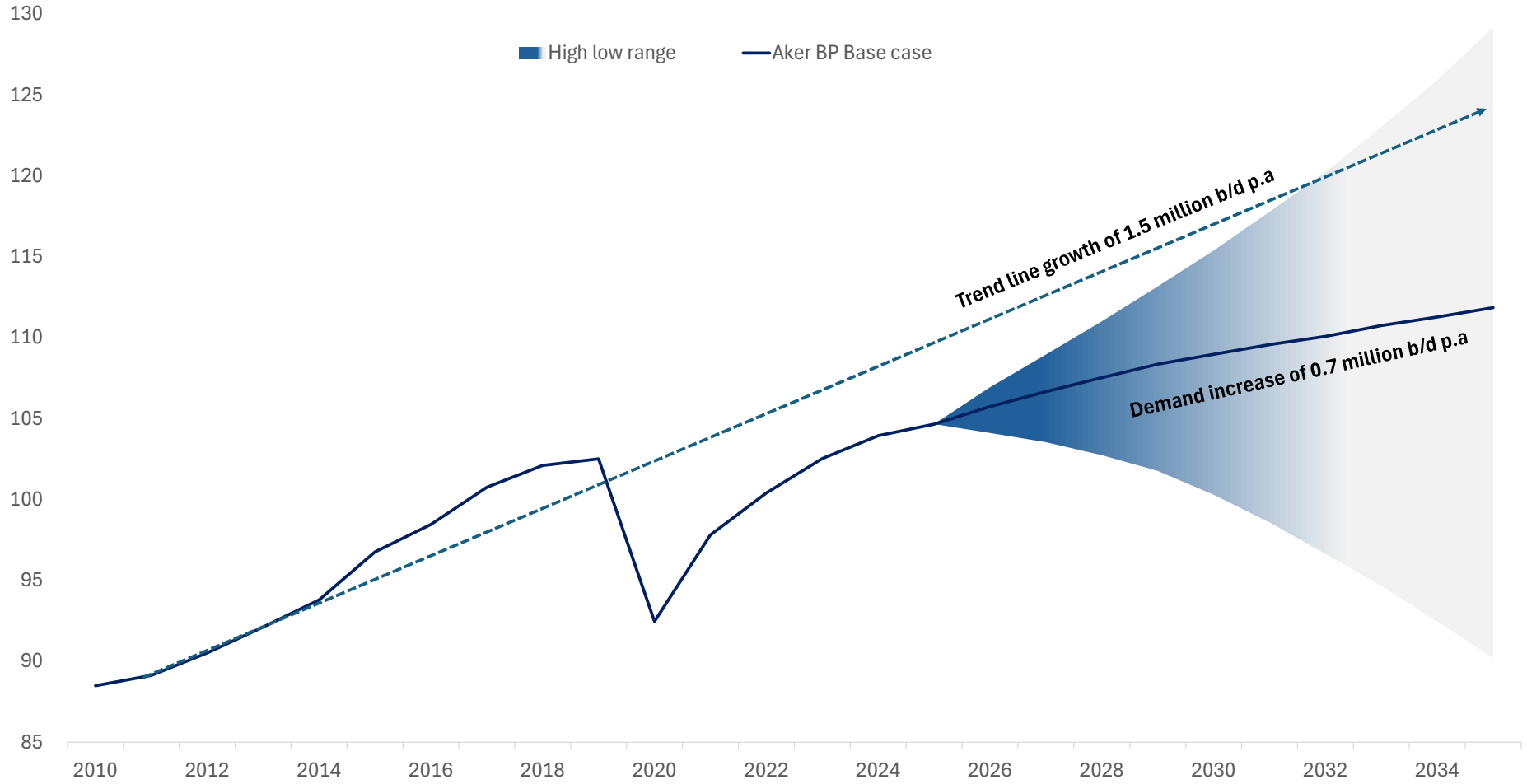
Textile Manufacturing
Dyeing, washing and finishing often need temperatures above 100°C and stable steam delivery, with dispersed plants that face higher unit costs and operational disruption during conversion

Oil demand growth expected to be slower than before, but demand still set to grow annually by 0.7 million b/d* and reach 112 mbd by 2035

The long-term trend for annual oil demand growth pre-2020 was about 1.5 million barrels per day (mbd)

Global liquids demand

Million barrels per day



* 0.1 million b/d of this is biofuels

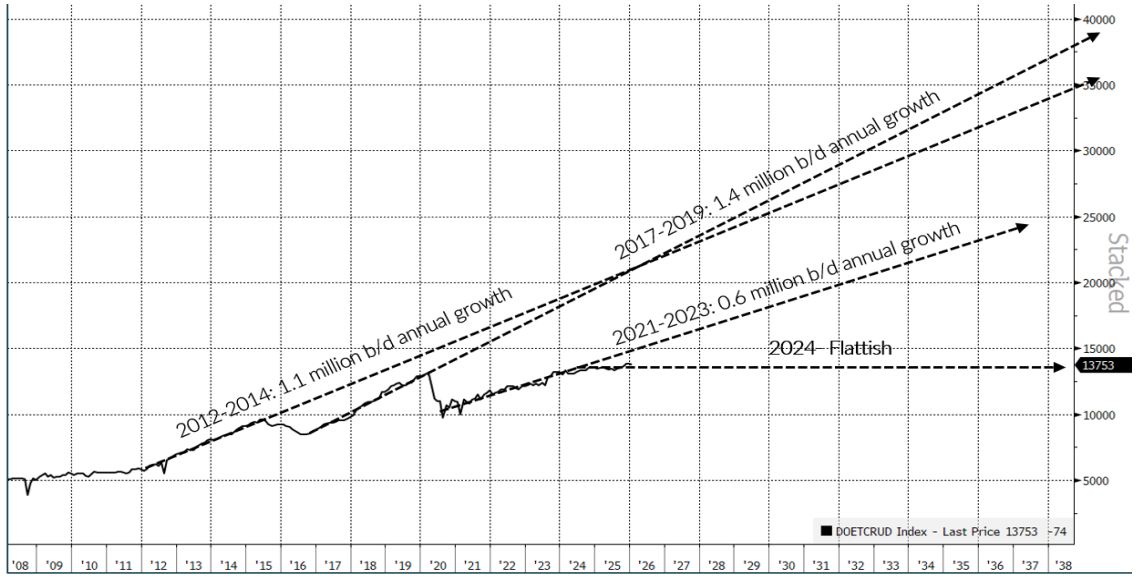
Source: Aker BP analysis

Global supply stability depends on continued growth in US shale as long as oil demand rises, which in turn requires a sustained, robust oil price

US shale oil producers need a high enough oil price to secure production growth – not high enough today

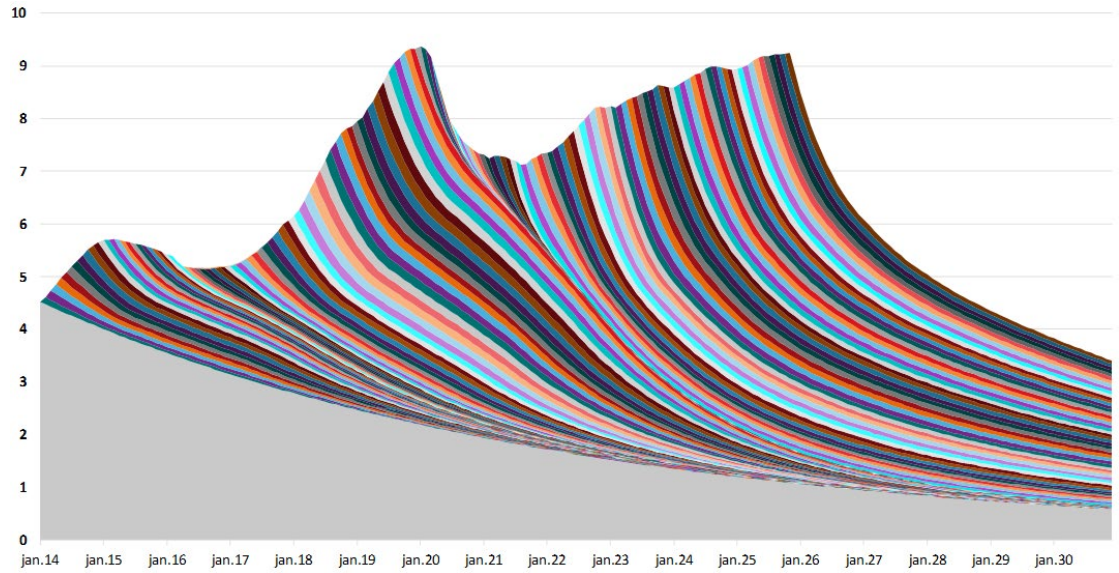
US oil production grows at a lower rate – flat development since 2024

Thousands barrels per day



Modelled US shale production – 80% decline first three years of production

Million barrels per day



US shale oil production growth depends on

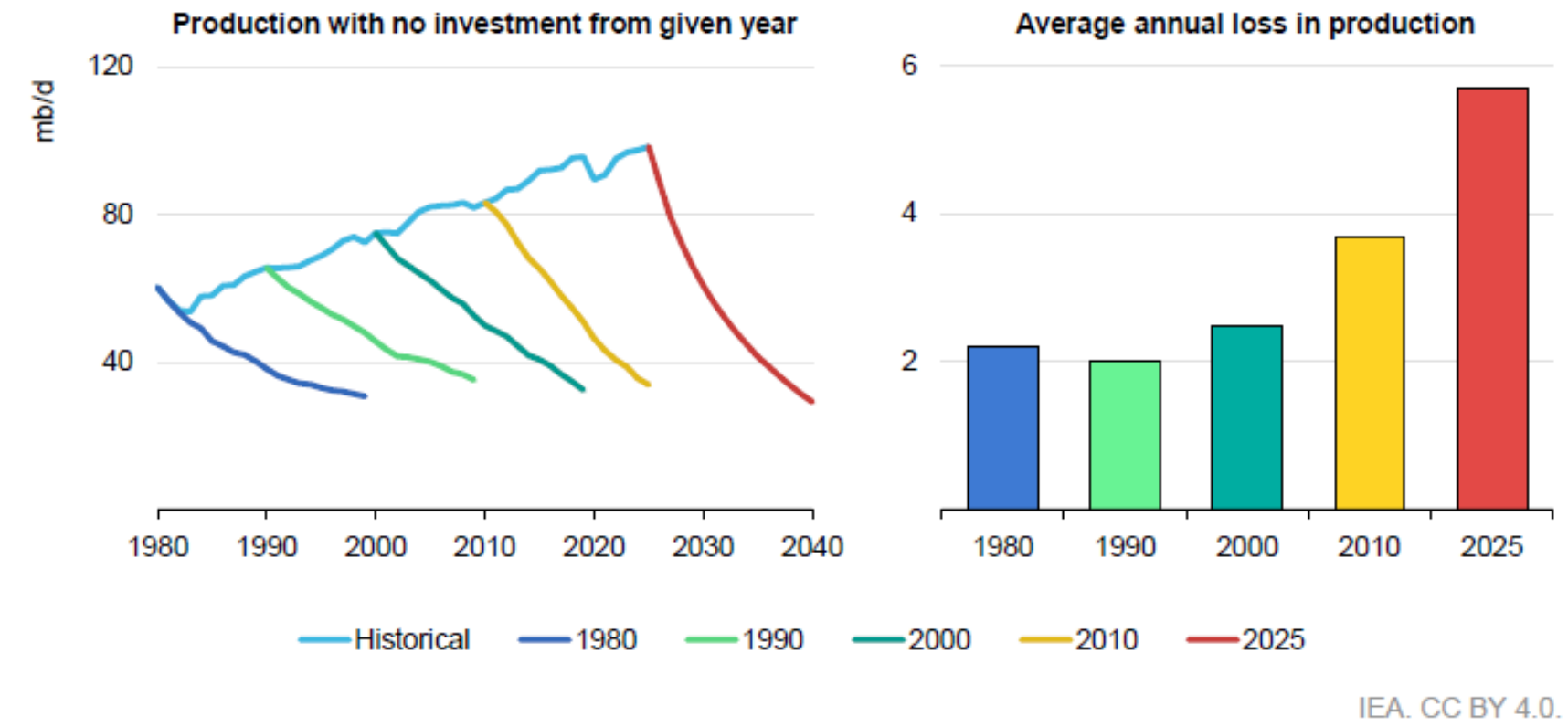
- Growth in activity
  - Rig count
  - Frac crew count
  - Well completions
- Continued efficiency improvements
  - Km drilled per rig
  - Time to drill a well
  - Lateral length of a well
    - x2.5 improvement since 2010 (Exxon)
  - Use of proppants per well
  - Production per drilled foot

Growth in activity is dependent on the oil price - efficiency improvements are not

Source: Aker BP analysis based on EIA data

Recent decline rate study from IEA says field decline is accelerating - making it necessary to invest more than before to keep production flat

Key reasons for faster decline are more tight oil and NGLs in the production mix



- Global oil production would drop more than 50% the next ten years with no investments
  - Would drop about 5.5 million b/d every year on average
  - Need to invest 540 billon USD every year to keep production flat
- US shale oil production collapses if activity collapses
  - Well completions in COVID-year 2020 collapsed 77% and production fell by more than 2 mbd in one year
- Infill wells (investments in existing fields) is the most essential
  - But also need a lot of new discoveries and still high growth in tight oil drilling

Source: IEA decline rate study

Thank you for joining us!

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