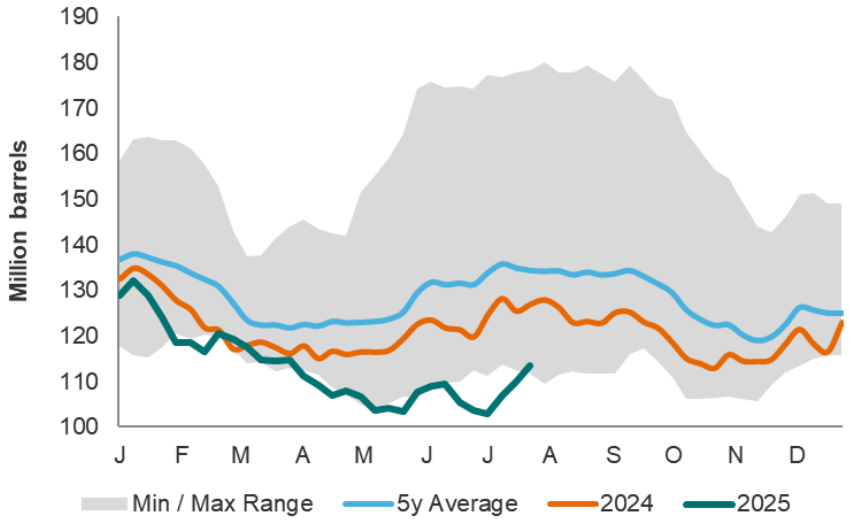
CHART OF THE MONTH

US distillate inventories have loosened somewhat in July but remain well below the five-year average. Iran's attacks on refining facilities in Israel in June have not helped what was already a tight situation: Israel's Haifa refinery remains partially offline, having been supplying about 60% of domestic distillate needs.

US distillate inventories



Source: Baker Hughes, Bloomberg, July 2025

OIL
Spot prices up sharply intra month

Brent and WTI spot oil prices rose at the end of July, with Brent moving over $70/bl, as President Trump threatened to bring forward sanctions against Russian oil exports. Trump is promising 100% tariffs against buyers of Russian crude, the largest being China and India. In June, Russia exported around 4.7m b/day of crude, plus around 2.5m b/day of refined products. The International Energy Agency (IEA) edged down its global demand growth forecast for 2025 to 0.7m b/day. Brent and WTI closed the month higher, at $72/bl and $69/bl respectively.

NATURAL GAS
International gas prices mixed

Asian gas prices fell in July by around $1 to $12/mcf while European gas prices rose slightly to $11/mcf. Natural gas in storage in Europe sits around 4% below the 10-year average, with significant LNG cargoes still required to meet European storage targets by the start of the winter. In the US, gas prices have dropped close to $3/mcf as the drilling rig count for gas rises.

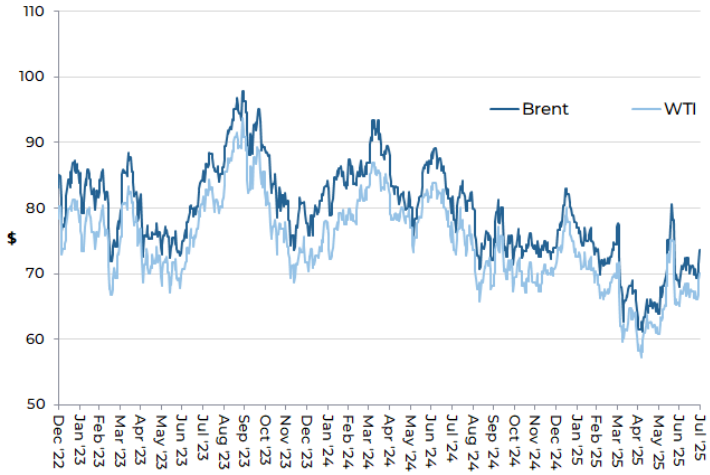
EQUITIES
Energy outperforms the broad market in July

The MSCI World Energy Index (net return) rose by 2.5% (USD) in July, outperforming the MSCI World Index (net return) which rose by 1.3%.

July in Review

OIL MARKET

Oil price (WTI and Brent $/barrel)
December 2022 to July 2025



Source: Bloomberg, Guinness Atkinson Funds. Data as of July 2025.

The West Texas Intermediate (WTI) oil price began July at $65/bl and traded steadily higher over the month, closing at just below $70/bl. WTI has averaged just under $68/bl so far this year, having averaged $76/bl in 2024 and $78/bl in 2023. Brent oil traded in a similar shape, opening at $68/bl and trading up over the month to around $73/bl. Brent has averaged nearly $72/bl so far in 2025, having averaged $80/bl in 2024 and $83/bl in 2023. The gap be-tween the WTI and Brent benchmark oil prices remained narrow over the month, ending July at $3.7/bl. The Brent-WTI spread averaged $5/bl in 2024 after averaging a similar amount in 2023.

Factors which strengthened WTI and Brent oil prices in July:

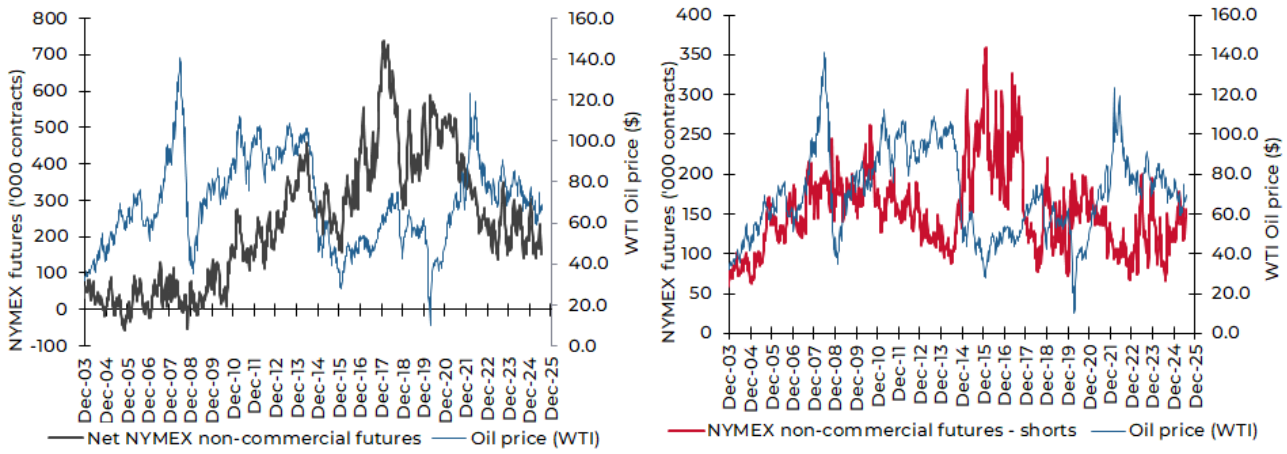
- **Aftermath of the 12-day Israel/Iran war**
  During June, oil prices rallied hard as Israeli attacks on Iran brought a significant risk premium to the oil price. A ceasefire was ultimately announced later in the month after US forces bombed three Iranian nuclear facilities. Preliminary data published by the IEA indicates that Iranian oil production fell in June from 3.5m b/day to 3.1m b/day, and likely remained subdued in July. Israeli hydrocarbon production seems to have been little affected, though the country's main oil refinery at Haifa sustained significant damage and remains partially offline. It is expected to be fully back online in October.
- **US threat of sanctions against Russian oil exports**
  On July 29, US President Trump shortened his timeline for imposing more sever sanctions on Russian oil exports to "10-12 days". His previous timeframe, set on July 14, had been 50 days. The sanctions threaten 100% tariffs on buyers of Russian oil, with the biggest customers to-day being India and China. In June, Russia exported 4.7m b/day (c.4.5% of world demand) of oil and 2.5m b/day of refined products, meaning that any follow-through of these threats could bring meaningful tightness to the world oil market.

- **Falling US rig count and signs of flattening US oil supply**
  According to the US Energy Information Administration (EIA), US onshore oil production in May averaged 11.2m b/day, essentially flat on April 2025 and up only 0.2m b/day on May 2024. US shale production typically moves with a lag to drilling activity, and we note that current production relates to a period when the onshore rig count was around 475 rigs. With oil prices lower over this year, a number of US shale exploration and production companies have indicated that drilling activity will fall and production growth will start to slow. The cur-rent rig count is around 415 rigs, implying that production will continue to soften.

Factors which weakened WTI and Brent oil prices in July:

- OPEC+ production increases
  In April, the 'group of eight countries' within OPEC+ announced the intention to increase (from May) the rate at which it returns withheld oil to the market, up to around 0.4m b/day. The group met again at the end of May, confirming their intention to return a further 0.4m b/day to the market in both June and July. At the start of July, the group announced a further production increase (for August) of 0.55m b/day and that they will meet again on 3rd August to discuss September production levels. We believe that a driver of these increases is a signal from Saudi to overproducing OPEC+ members, especially Kazakhstan, that continued overproduction will not be tolerated. Saudi are also unwilling to cede further market share to non-OPEC suppliers. That said, the OPEC+ group has stressed that it could be reversed at any time, should market conditions become materially looser.
- Speculative and investment flows
  The New York Mercantile Exchange (NYMEX) net non-commercial crude oil futures open position was 153,000 contracts long at the end of July versus 153,000 contracts long at the end of June. The net position peaked in February 2018 at 739,000 contracts long. Typically, there is a positive correlation between the movement in net position and movement in the oil price. The gross short position rose to 156,000 contracts at the end of July versus 125,000 at the end of the previous month.

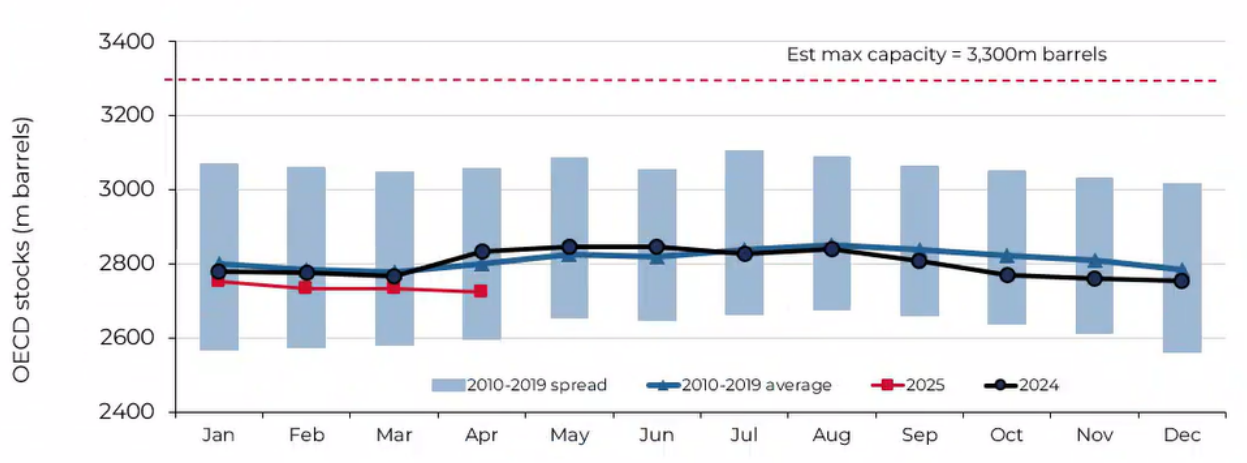
NYMEX Non-commercial net and short futures contracts:
WTI January 2004 – July 2025



Source: Bloomberg LP/NYMEX/ICE (2025)

- OECD Stocks
  OECD total product and crude inventories at the end of June (latest data point) were estimated by the IEA to be 2,792m barrels, flat versus the level reported for the previous month. The move in June compares to a 10-year average (pre COVID) build of 11m barrels, implying that the OECD market was looser than normal. The significant oversupply situation in 2020 pushed OECD inventory levels close to maximum capacity in August 2020 (c.3.3bn barrels), with subsequent tightening taking inventories below normal levels.

OECD Total Product & Crude Inventories
Monthly, 2010 to June 2025



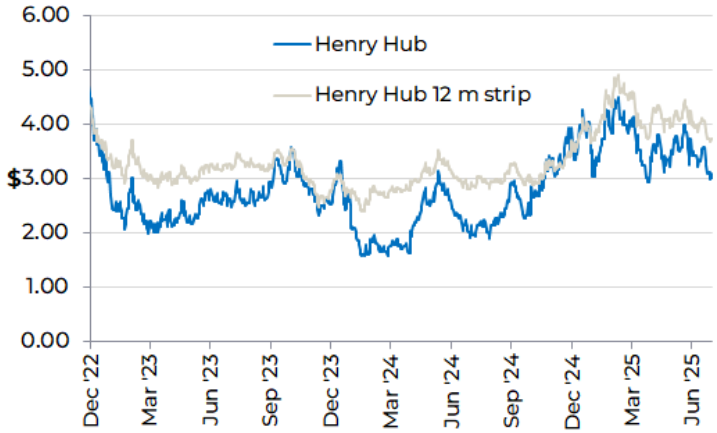
Source: IEA Oil Market Reports (July 2025 and older)

NATURAL GAS MARKET

The US natural gas price (Henry Hub front month) opened July at $3.46/Mcf (1,000 cubic feet), rose over the month to nearly $3.60/mcf, and settled down sharply at $3.01/Mcf. The spot gas price has averaged around $3.60/Mcf so far in 2025, having averaged $2.41/Mcf in 2024 and $2.67/Mcf in 2023.

The 12-month gas strip price (a simple average of settlement prices for the next 12 months' futures prices) traded in a similar pattern, opening at $4.03/Mcf and closing at $3.72/Mcf. The strip price has averaged around $4.10/Mcf so far in 2025, having averaged $2.98 in 2024 and $3.19 in 2023.

Henry Hub gas spot price and 12m strip ($/Mcf)
December 2022 to July 2025



Source: Bloomberg LP. Data as of August 2025.

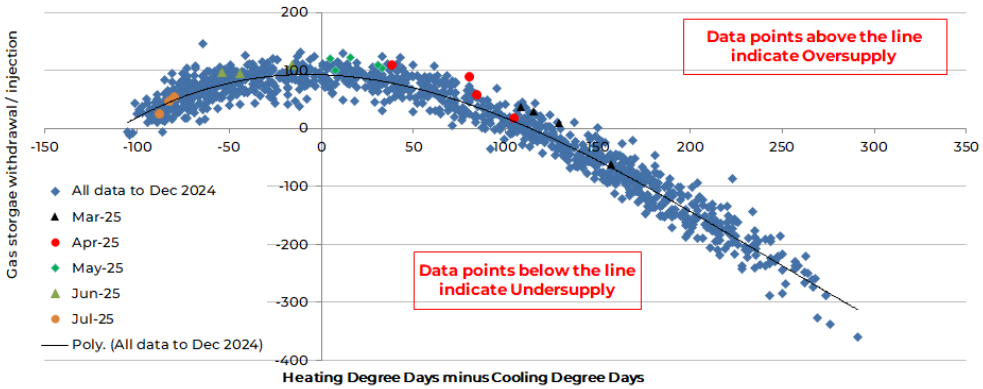
Factors which strengthened the US gas price in July included:

- Anemic rig count
  The number of rigs drilling for natural gas in the US fell from 160 in the middle of 2022 to a low of 94 in mid-September 2024. It has since averaged around 100 rigs and was reported at 122 rigs operating at the end of July 2025. Overall, the low number of gas rigs operating has slowed gas production growth, though 'associated gas' production (a by-product of shale oil) has continued to grow from the Permian basin.

Factors which were neutral for the US gas price in July included:

- Market supply in line (ex-weather effects)
  Adjusting for the impact of weather, the US gas market was, on average, neutrally supplied during July. This is a change to the sharply undersupplied markets earlier in the year, as illustrated in the chart below.

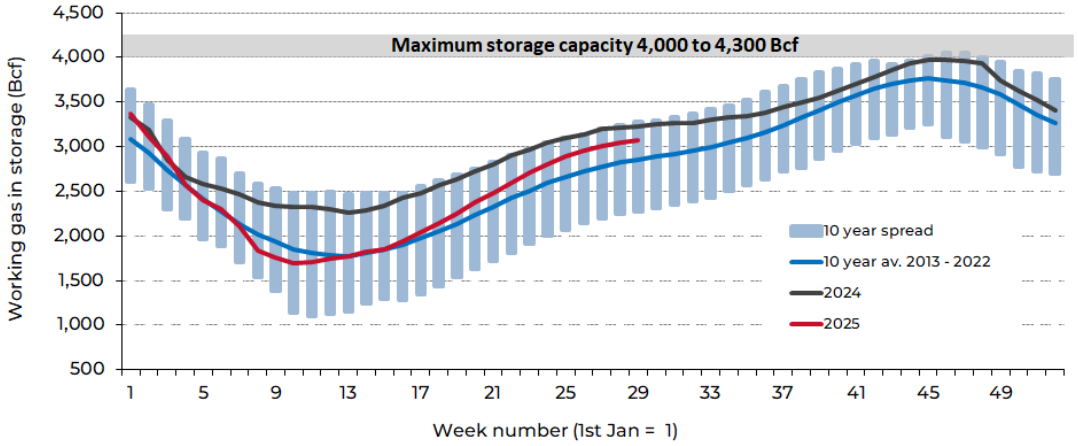
Weather-adjusted US natural gas inventory injections and withdrawals



Source: Bloomberg LP, Guinness Atkinson Funds. Data as of July 2025.

- Natural gas in inventories comfortably above the ten-year average
  US natural gas inventories ran higher than seasonal norms throughout 2024, driven by a warmer-than-expected 2023/24 winter and early spring that brought lower-than-expected heating demand. Inventory levels moved to the top of the 10-year range but tightened in 4Q 2024 and further in 1Q 2025 as very cold weather arrived. At the end of July 2025, US natural gas inventories stood at around 3.1 Tcf, 7% above the 10-year average, as a result of stronger supply growth.

Deviation from 10yr US gas storage norm

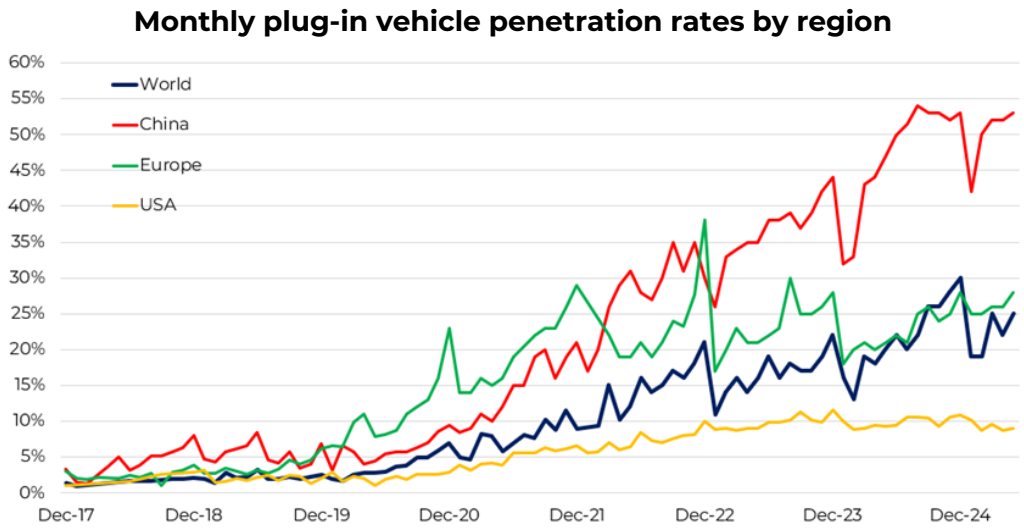


Source: Bloomberg, Energy Information Administration (EIA). Data as of August 2025.

Manager's Comments

Despite challenges in some regions, electric vehicle (EV) sales globally have continued apace over the last eighteen months. In 2024, around 17m EVs were sold, representing 19% penetration of the light autos market. This year, it looks like the world is on track for around 21m units, taking sales penetration up to around 24%. Here, in the context of our global energy strategy, we focus on the implications for oil demand brought about by the growing importance of EVs.

Global EV sales are on track to be up around 25% this year, taking EV market share as a proportion of the total light auto sales mix up to around 24%. In many ways, this level of market penetration is remarkable, given it was only 4% in 2020. China has significantly extended its lead over the rest of the world, this despite the removal of subsidies at the start of 2023. Just over a decade ago, China's 12th Five-Year Plan (2011-2015) identified the alternative fuel industry as a strategic emerging industry, deserving of government support to help combat dangerous levels of air pollution. Fifteen years later, not only is China the largest car market in the world (purchasing around 27m of the 88m new cars sold worldwide), but also the largest EV market, accounting for around 60% of world demand and home to over 400 EV manufacturers.



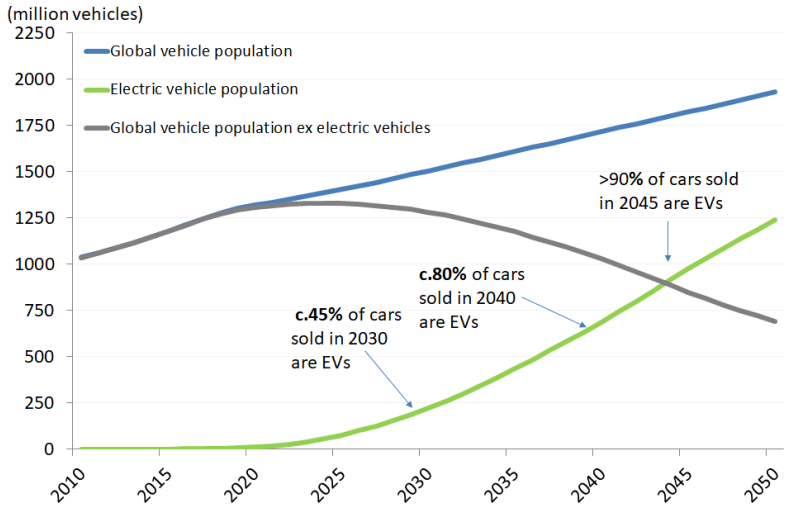
Source: BloombergNEF, Marklines, JATO Dynamic, Guinness Atkinson Funds. Data as of August 2025.

The European market is now in a distant second place with around 17% of global EV sales. The US lags further, making up just under 10% of global EV sales, with recent tax credit shifts from President Trump holding up growth.

The key to accelerating EV adoption is reaching parity with internal combustion engine (ICE) vehicles for both ownership costs and function (for which range and the availability of charging infrastructure are the primary considerations). In China, the rapid adoption electrification of small cars has been underpinned by their impressive affordability, with nearly all small battery electric vehicles (BEVs) priced lower than their ICE equivalents (according to the IEA. Importantly, in 2024, BEVs also reached price parity with ICE vehicles in the SUV segment, the most popular car segment in China. We still see "sticker price" premiums for EVs in Europe and the US, but continued growing economies of scale and falling battery costs should drive these regions towards price parity in the second half of the 2020s.

Despite the rapid growth in EV sales since 2020, the world EV fleet by the end of 2025 will still represent only around 6% of the total fleet of passenger vehicles. We expect EV sales penetration to rise to around 45% by the end of this decade, then increasing to around 80% by 2040. By 2030, this implies a passenger EV fleet of 210-220m vehicles, but still representing only around 15% of the total fleet of passenger vehicles. The penetration rate of EVs in the world fleet accelerates markedly in the 2030s, meaning the vehicle population is fairly evenly split between EVs and ICE vehicles by around 2045.

Global auto, ICE and EV population to 2050



Source: US DoE, Guinness Atkinson Funds, August 2025.

What are the implications for the ICE fleet and oil demand? Despite our relatively bullish assumptions on EV adoption, the offsetting impact of global vehicle population growth implies that the population of ICE vehicles is peaking around now, at about 1.3bn vehicles. And over the next few years, the population of ICE vehicles moves into relatively shallow decline, such that there are still around 1.2bn ICE vehicles on the roads globally in the mid 2030s, still higher than 2010.

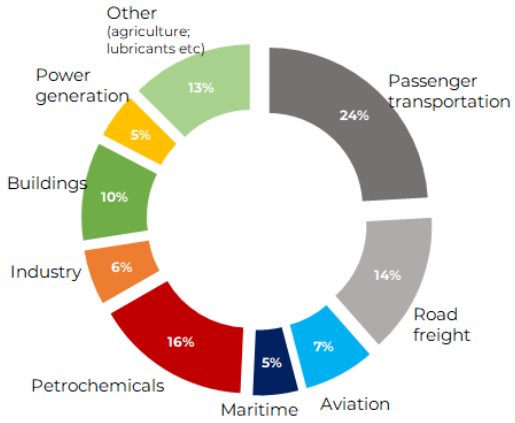
Also relevant is the fuel efficiency of the ICE portion of the market, which will improve, and will put further pressure on oil demand growth from the ICE fleet. In the US for example, at the end of July 2023, the National Highways Administration proposed new fuel economy standards for passenger cars and light trucks built 2027-2032. However, in July 2025, Congress in the US passed the "One Big Beautiful Bill", which eliminated all civil penalties for noncompliance with fuel economy standards for passenger car and light truck fleets—effectively stripping enforcement teeth from the standards. We still expect fuel efficiency improvements in the US, but less that the 2% annual improvement previously anticipated.

Taken together, we continue to believe a growing global auto fleet, improving fuel efficiency and EV penetration points to oil demand from cars and other light vehicles peaking this year.

How important is oil demand from road transport in the context of total oil demand?

Given how much EVs are talked about, there is a danger of overestimating the impact of road transport electrification on global oil demand. Cars and light trucks account for around 24% of global oil usage, with heavy vehicles accounting for around 14%.

Structure of global oil demand in 2025



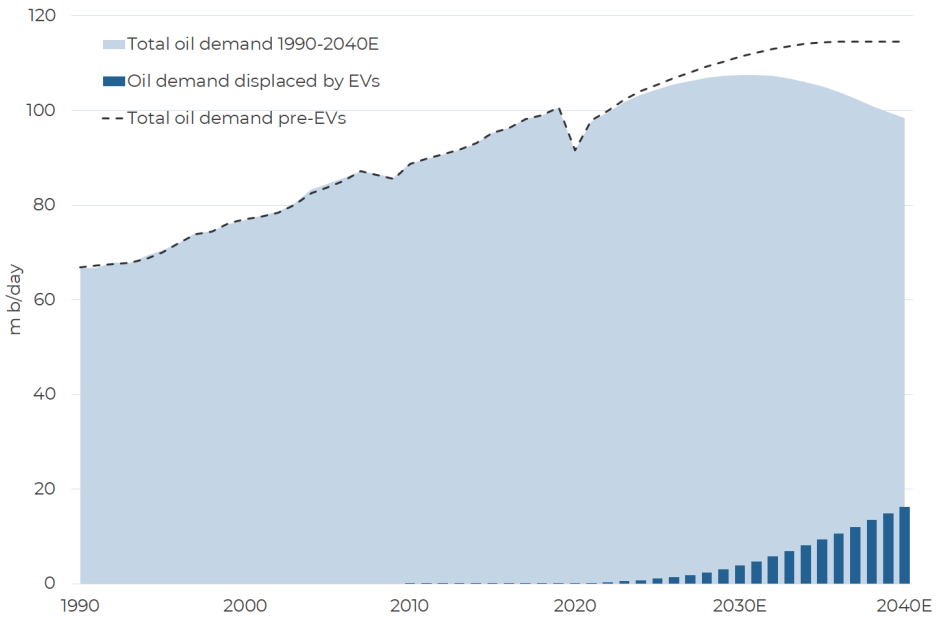
Source: Guinness Atkinson Funds estimates, IEA, July 2025

We expect oil demand from road freight to continue to grow this decade, peaking around 2030 (so around 5 years later than light auto demand) then moving into steady decline. Here, the electrification of the truck fleet is offset by road freight ton-miles around the world more than doubling over the next twenty-five years.

Meanwhile other key categories of oil use, in particular those with no electric alternatives on the horizon like aviation and petrochemicals, will continue to put upward pressure on oil demand. Credible forecasts suggest jet fuel demand rising from around 7m b/day currently to around 18m b/day by 2050, as aviation miles per person double globally over that timeframe. In the plastics sector (a subset of petrochemicals), demand of 10m b/day may also double by 2050. According to Thunder Said Energy, average per capita consumption of plastics in the OECD is 170kg per year, while the number in the non-OECD is around 75% less. By 2050, it is expected that average consumption in the non-OECD is around 50% less than the OECD, which in aggregate points to a doubling of consumption.

Putting the key moving parts for oil demand together, and will oil demand peak? Our assumptions for EV adoption see around 5m b/day of oil demand displaced globally by 2030, growing to 13-15m b/day of oil demand displaced by 2040. But other key oil uses continue to grow. Taken together, the most likely scenario for peak oil demand would be sometime around 2030, reaching a peak of somewhere between 106-108m b/day.

World oil demand 1990 – 2040E versus oil demand pre-EVs



Source: BP, Guinness Atkinson estimates. Data as of June 30, 2025

And despite rapid EV adoption around the world in the 2030s, oil will continue to be consumed at significant volume well beyond the 2030 peak. We expect oil demand in 2040 at 95-100m b/day, consistent with demand in the late 2010s. The signs still point, therefore, to significant new oil resources being required to balance natural production declines and match the volume of oil that will be consumed.

GUINNESS ATKINSON FUNDS

Performance

as of 7/31/2025	YTD	1 Year	3 Years	5 Years	10 Years
GAGEX	9.13%	-3.57%	7.14%	20.01%	3.12%
MSCI World Energy Index NR	7.13%	-0.24%	7.52%	20.62%	5.49%
MSCI World Index NR	10.88%	15.72%	15.81%	13.77%	10.59%

as of 6/30/2025	YTD	1 Year	3 Years	5 Years	10 Years
GAGEX	5.31%	-6.07%	7.30%	18.36%	1.56%
MSCI World Energy Index NR	4.56%	-0.84%	9.04%	19.11%	4.57%
MSCI World Index NR	9.47%	16.26%	18.29%	14.54%	10.65%

All returns after 1 year annualized.

Inception 06.30.2004 Expense ratio* 1.46% (net); 2.13% (gross)

Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. Performance data current to the most recent month end may be obtained by visiting www.gafunds.com or calling 800-915-6566.

* The Advisor has contractually agreed to reduce its fees and/or pay Fund expenses (excluding Acquired Fund Fees and Expenses, interest, taxes, dividends on short positions and extraordinary expenses) in order to limit the Fund's Total Annual Operating Expenses to 1.45% through June 30, 2028. To the extent that the Advisor absorbs expenses to satisfy this cap, it may recoup a portion or all of such amounts absorbed at any time within three fiscal years after the fiscal year in which such amounts were waived or absorbed, subject to the expense cap in place at the time recoupment is sought, which cannot exceed the expense cap at the time of the waiver. The expense limitation agreement may be terminated by the Board of the Fund at any time without penalty upon 60 days' notice.

Top 10 Fund Holdings as of 7/31/2025:

1. Shell PLC 6.11%
2. Chevron Corp 5.58%
3. Exxon Mobil Corp 5.34%
4. TotalEnergies SE 5.07%
5. Imperial Oil Ltd 4.57%
6. Suncor Energy Inc 4.31%
7. BP PLC 4.30%
8. Valero Energy Corp 4.19%
9. Kinder Morgan Inc 4.18%

10. ConocoPhillips 4.18%

MSCI World Energy Index is designed to capture the large and mid cap segments across 23 Developed Markets countries. All securities in the index are classified in the Energy sector as per the Global Industry Classification Standard.

MSCI World Index captures large and mid cap representation across 23 Developed Markets countries. With 1,546 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

Brent Crude is the price benchmark used for the light oil market in Europe, Africa, and the Middle East, originating from oil fields in the North Sea between the Shetland Islands and Norway.

West Texas Intermediate (WTI) is the price benchmark for the US light oil market and is sourced from US oil fields.

Long futures position in oil is when a trader buys an oil futures contract in the belief that the price of oil will increase.

Short futures position in oil is when a trader sells an oils future contract in the belief that the price of oil will decrease before the contract expires.

Organization for Economic Cooperation and Development (OECD) is an intergovernmental organization with 38 member countries meant to stimulate economic progress and world trade.

OPEC+, or the Organization of the Petroleum Exporting Countries Plus, is a loosely affiliated entity consisting of 12 OPEC members and 10 of the world's major non-OPEC oil-exporting nations.

Permian Basin is a large oil and gas-producing area in the United States that spans parts of West Texas and southeastern New Mexico.

New York Mercantile Exchange (NYMEX) is the world's largest physical commodity futures exchange.

Henry Hub is a natural gas pipeline located in Erath, Louisiana, that serves as the official delivery location for futures contracts on the New York Mercantile Exchange (NYMEX).

Free cash flow represents the cash that a company generates after accounting for cash outflows to support its operations and maintain its capital assets.

Capital Expenditure (CapEx) are payments that are made for goods or services that are recorded or capitalized on a company's balance sheet rather than expensed on the income statement.

Return on Capital Employed (ROCE) is a financial ratio that measures a company's profitability in terms of all of its capital.

Net Debt/EBITDA is a debt ratio that shows how many years it would take for a company to pay back its debt if net debt and EBITDA are held constant.

P/B Ratio (Price-to-Book Ratio) is a comparison of a firm's market capitalization to its book value.

S&P 500 is a stock market index tracking the stock market performance of 500 leading companies listed on stock exchanges listed in the United States.

Standard Deviation is a statistic that measures the dispersion of a dataset relative to a mean and is calculated as the square root of the variance.

Fund holdings and/or sector allocations are subject to change at any time and are not recommendations to buy or sell any security.

One cannot invest directly in an index. Dividends are not guaranteed and dividend payments, if any, may fluctuate.

Earnings Growth is not a measure of future performance. Dividends are not guaranteed and dividend payments, if any, may fluctuate.

Opinions expressed are subject to change, are not guaranteed and should not be considered investment advice.

The Guinness Atkinson Global Energy Fund's investment objectives, risks, charges and expenses must be considered carefully before investing. The statutory and summary prospectuses contain this and other important information and can be obtained by calling 800- 915-6565 or visiting www.gafunds.com. Read and consider it carefully before investing.

The Fund invests in foreign securities which will involve greater volatility and political, economic and currency risks and difference in accounting methods. The risks are greater for investments in emerging markets. The Fund also invests in smaller and mid-cap companies, which will involve additional risks such as limited liquidity and greater volatility than larger companies. The Fund's focus on the energy sector to the exclusion of other sectors exposes the Fund to greater market risk and potential monetary losses than if the Fund's assets were diversified among various sectors.

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