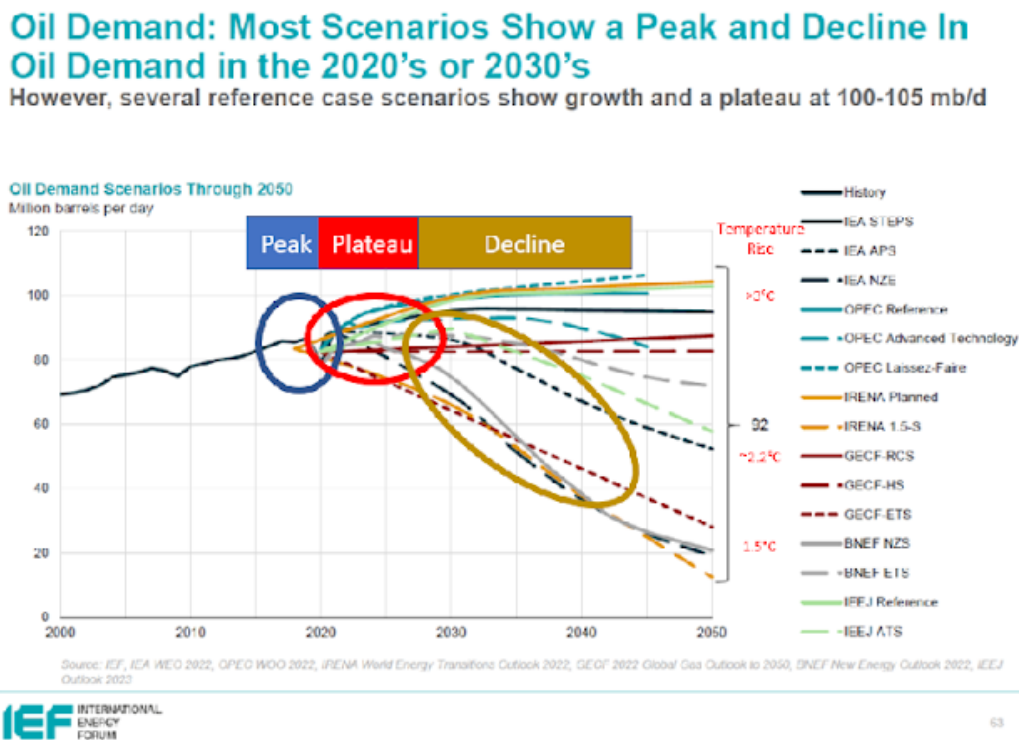


Change is Coming

Oil's Demand Peak, Plateau and Decline

For years global management consultancies, banks and super major oil companies, completed energy market scenario analysis that sought to outline oil market demand and supply dynamics. Over the years, these scenarios started to incorporate the impact of an energy transition on oil demand. Directionally, and as an aggregate, analysts completing this [scenario work tended to underestimate](#) the impact of renewable energy and the adoption of low carbon technology. This resulted in a bias towards scenarios demonstrating continued growth in oil demand. Of course, scenarios, by their very nature, are never static and evolve as new information becomes available which is why the latest energy market scenario outlooks are so remarkable: a shift from predictions of constant oil demand growth to demand peak, plateau and decline. Figure 1 summarizes various peak oil timelines published by some of the world's most respected energy market analysts, agencies and institutions.

Figure 1: Peak Oil Demand: Timeline Scenarios and Corresponding Global Temperature Changes¹



Source: IAPC graphic based on International Energy Forum [Outlooks Comparison Report Feb 2023](#)

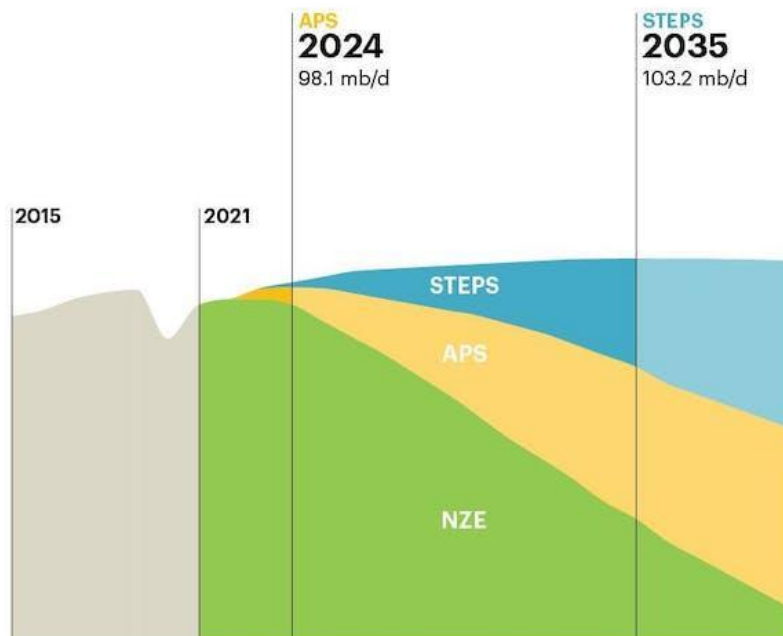
What Are Analysts Saying?

While scenarios demonstrating an end to the growth of oil represent, in and of itself, a profound shift, the pace at which these peak oil timelines are shifting is equally significant. In 2018, the International Energy Agency's (IEA) flagship publication, *World Energy Outlook* showed continued demand growth to over 120 mb/day in 2040.

¹ Our ability to support global ambition to stay on a 1.5 degree path and avoid the catastrophic events associated with overshooting that limit are very much tied to the level of oil demand (consumption and combustion of oil)

The most current *World Energy Outlook* publication (2022) shows just how drastically forecasts can change. Under all scenarios, the IEA now sees global oil demand peaking within a decade. Even with the most conservative and unrealistic IEA scenario (STEPS - the Stated Policies Scenario) where technology and policy deployment stops abruptly and improbably at current levels, global oil demand plateaus in 2035 and then begins to decline. With the Announced Policies (APS) and Net-Zero Emissions by 2050 (NZE) scenarios, where renewable energy, electric vehicles, and climate policies continue to deploy, oil demand peaks as late as 2024 (see Figure 2). For planning purposes, the peak for oil demand is essentially here.

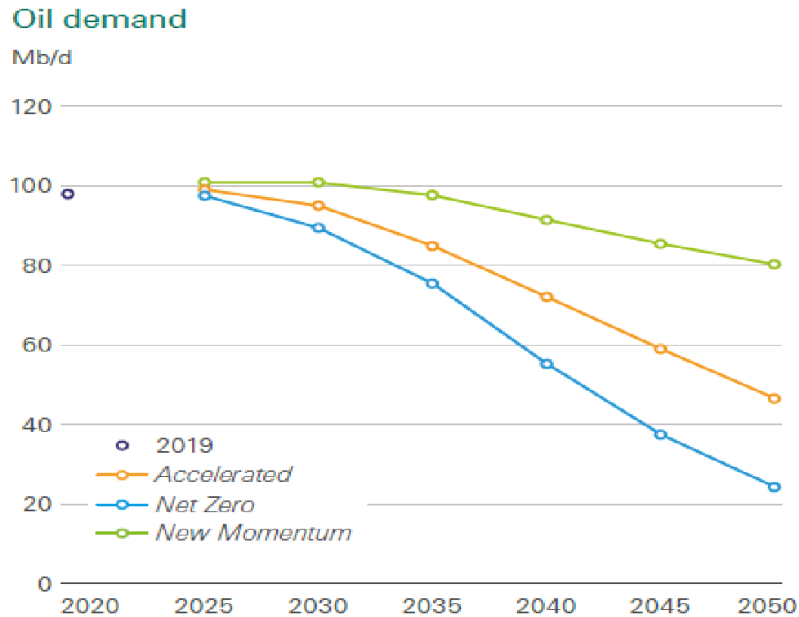
Figure 2: IEA *World Energy Outlook Oil Demand Scenarios*



Meanwhile, banks and investment firms have also been re-evaluating their scenarios. Goldman Sachs, one of the largest investment banks in the world, sees overall crude consumption still expanding this decade due to jet fuel and petrochemicals, but growth will be at an “anemic” pace past 2025 and [peak by 2030](#).

Interestingly, it’s not just management consultancies and banks rapidly adjusting their scenarios, oil companies themselves have started to demonstrate a shift in thinking. Equinor the 11th largest oil and gas company in the world demonstrates, under its most conservative estimate, oil demand dropping off after 2028 and British Petroleum’s (BP), *Annual Energy Outlook*, one of the most anticipated and closely read scenario documents published by the energy industry, sees peak oil already in the past even under its most conservative estimate (see Figure 3).

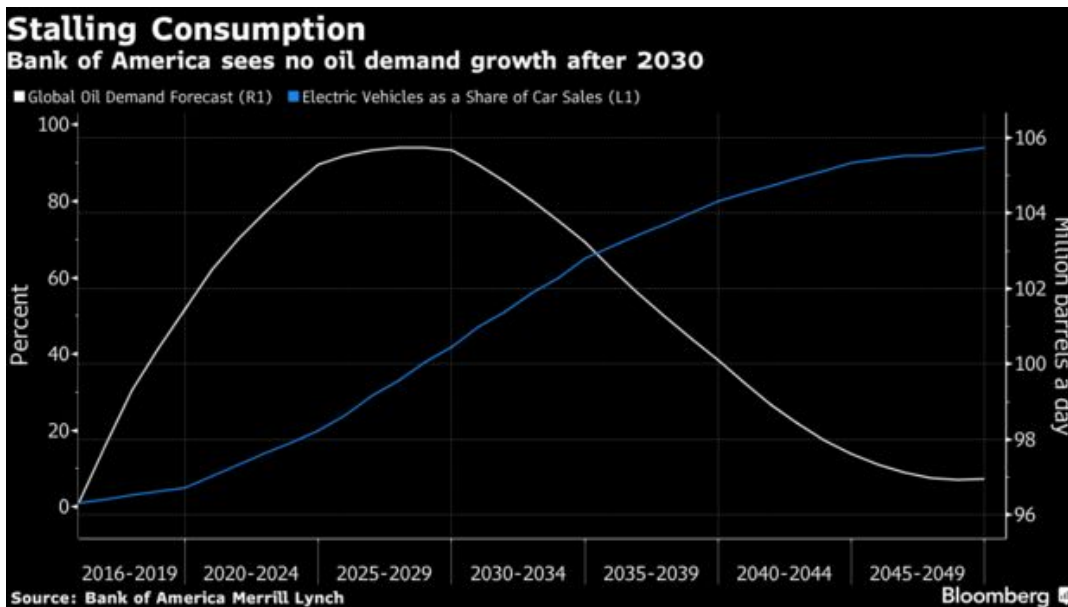
Figure 3: BP Annual Energy Outlook



Why are things Shifting?

The shift in oil demand scenarios demonstrates the staggering impact of accelerated technology adoption, specifically within the transportation sector. Electric Vehicle (EV) adoption is outpacing even the most optimistic expectations and is on track to reach disruption status. For example, Bank of America released analysis (see figure 4) demonstrating the inverse relationship between EV adoption and oil demand and, in this case, predicts “Electric vehicles will likely start to erode this last major bastion of oil demand growth in the early 2020s and cause [global oil demand to peak by 2030](#)”.

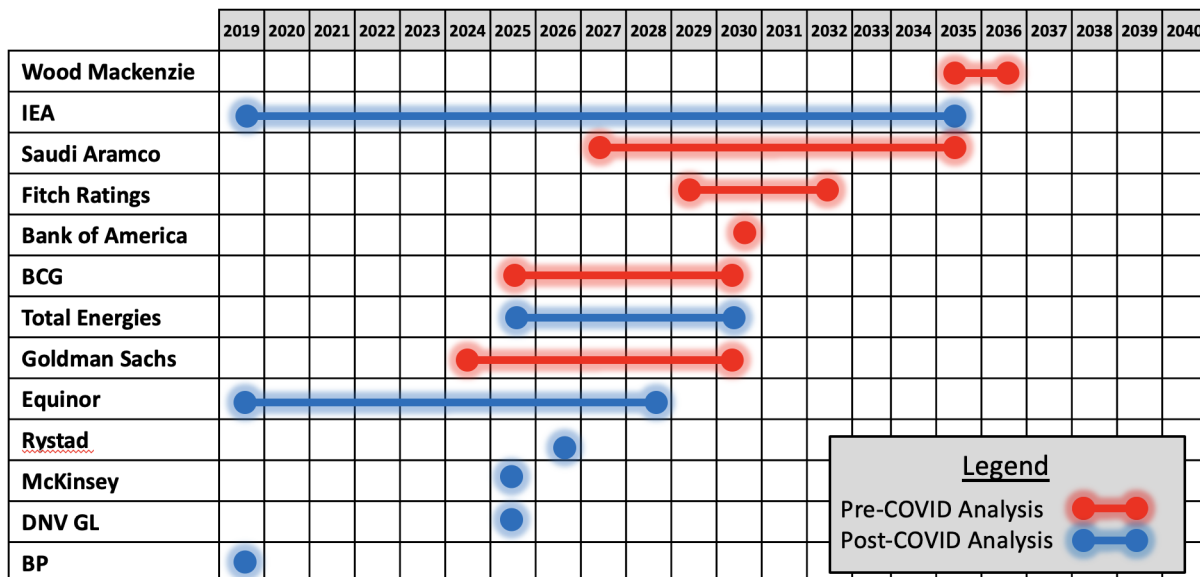
Figure 4: Bank of America Oil Demand Scenario



What was once considered an “[extreme thought experiment](#)” by many analysts has given way to an understanding that we are on the cusp of a “[tectonic](#)” shift in the transport sector towards electric cars, and autonomous vehicles. Consequently and, as an aggregate, analysts have shifted the anticipated dates for peak oil to sometime this decade (see Figure 5).

Figure 5: Peak Oil Demand: Timeline Scenarios

Peak Oil Demand: Timeline Scenarios



Source: Nexus Climate & Energy Strategy

Survival of the Fittest

The oil and gas industry has seen continual growth for generations. Demand destruction is now paving the way towards peak oil at a rapid rate ultimately leading to an end in the growth of oil demand. As the oil and gas sector has never faced a future with plateauing let alone declining market demand, this shift will have a profound impact on the oil and gas industry. A plateauing and declining market will create volatility and uncertainty as cost, carbon intensity, geopolitical clout, and other variables will enable some producers to succeed and others to fail.