

Decarbonisation



Decarbonisation is no longer simply a buzzword. It is here and the voices echoing it will only multiply and get louder as the global economies inch towards 2050. By this year, most developed nations have pledged to become carbon emissions neutral economy wide. As a result, this mission, broadly referred to as Net Zero 2050, has already spurred a flurry of actionable decisions by future-savvy major players across industries, including the automotive sector.



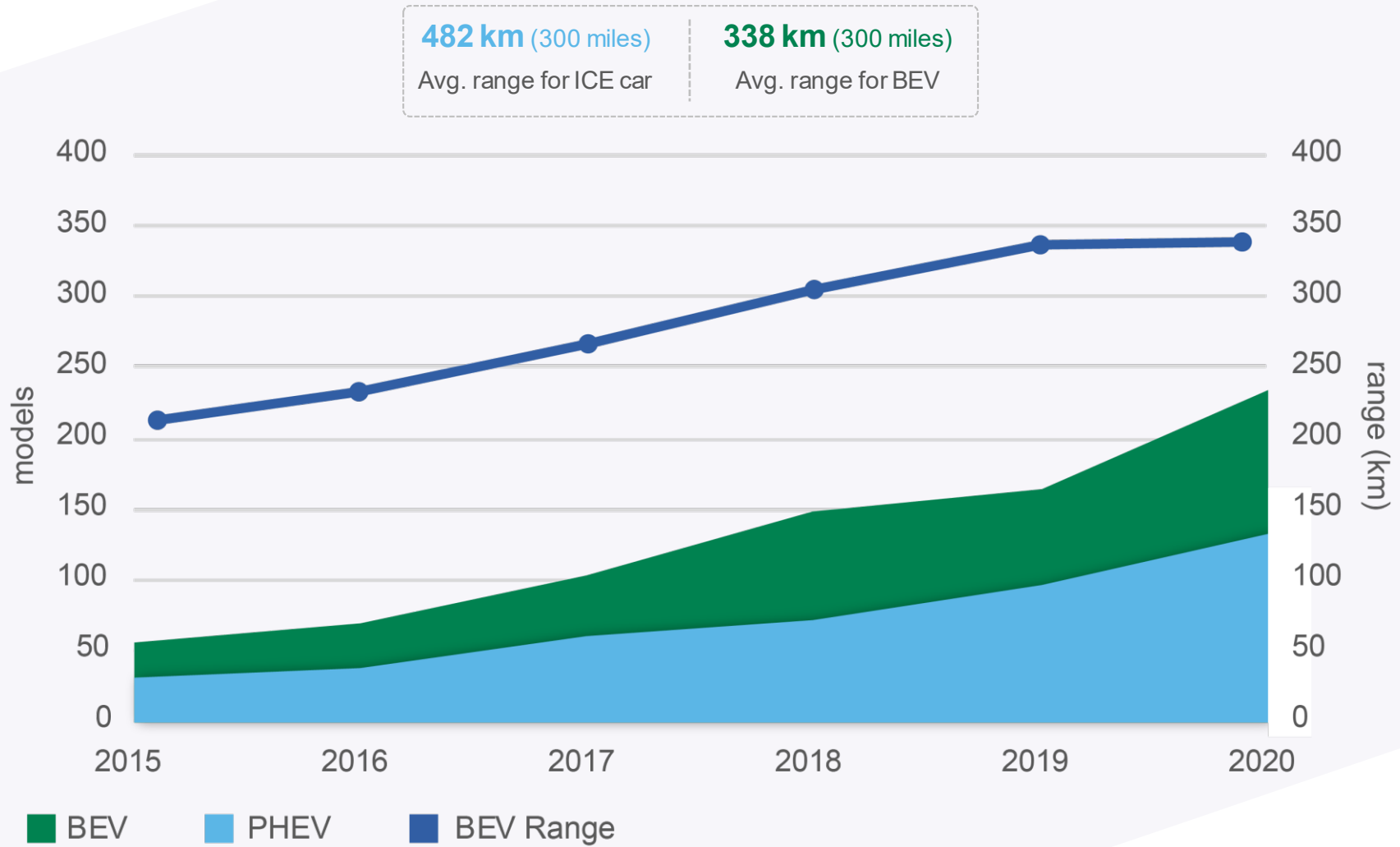
This paradigm shift towards decarbonisation also brings with it a whole new set of opportunities for investors, which you can read about in our [recent case study](#). However, nowhere is this change more visible than in the automotive value chains. The scope of opportunities for automotive original equipment manufacturers (OEMs) might just be as exciting. Let's find out more:



Electric Disruption



Electric Car models available globally and average range per charge



Source: Evalueserve Insights; [IEA](#)

The rapid growth of sustainable passenger vehicle technologies and their requisite energy sources is apparent from the increasing number of battery electric vehicle (BEV), and plug-in hybrid electric vehicle (PHEV) models being offered by carmakers, as also from the introduction of hydrogen fuel-cell electric vehicles (FCEVs).

The International Energy Agency (IEA) in its '[Global EV Outlook 2021](#)' states that a total of 368 EV (BEV + PHEV) models were available in 2020, gaining exponentially from the 86 on sale in 2015.

At the same time, the average range per charge for EVs has also improved from 211 km (131 miles) in 2015 to 338 km (210 miles) in 2020. Within the scope of the 2050 target, these numbers are only slated to grow more rapidly with increased focus towards more efficient advanced energy storage solutions to better charging technology and infrastructure. This is helping allay the primary fear for potential EV consumers so far, which was the “range anxiety”.

Unknowns

What is the scope of EV sales and demand growth beyond the next two decades and when will it peak or plateau?

Share of ICE and Oil Decline

Further, the share of EVs in global car sales, which has risen from 0.1% in 2011 to 4.6% in 2020, is projected to gather unparalleled momentum till 2030. Mind you, these humble numbers translate into global EV stock already hitting the 10 million unit-mark in 2020, a steep 43% increase over 2019. According to the IEA Sustainable Development Scenario (SDS) EV penetration is pegged to reach a massive 36% of total car sales in the next two decades. Increasing sales will be supported as the delta in price between an internal combustion engine (ICE) and EV model closes.

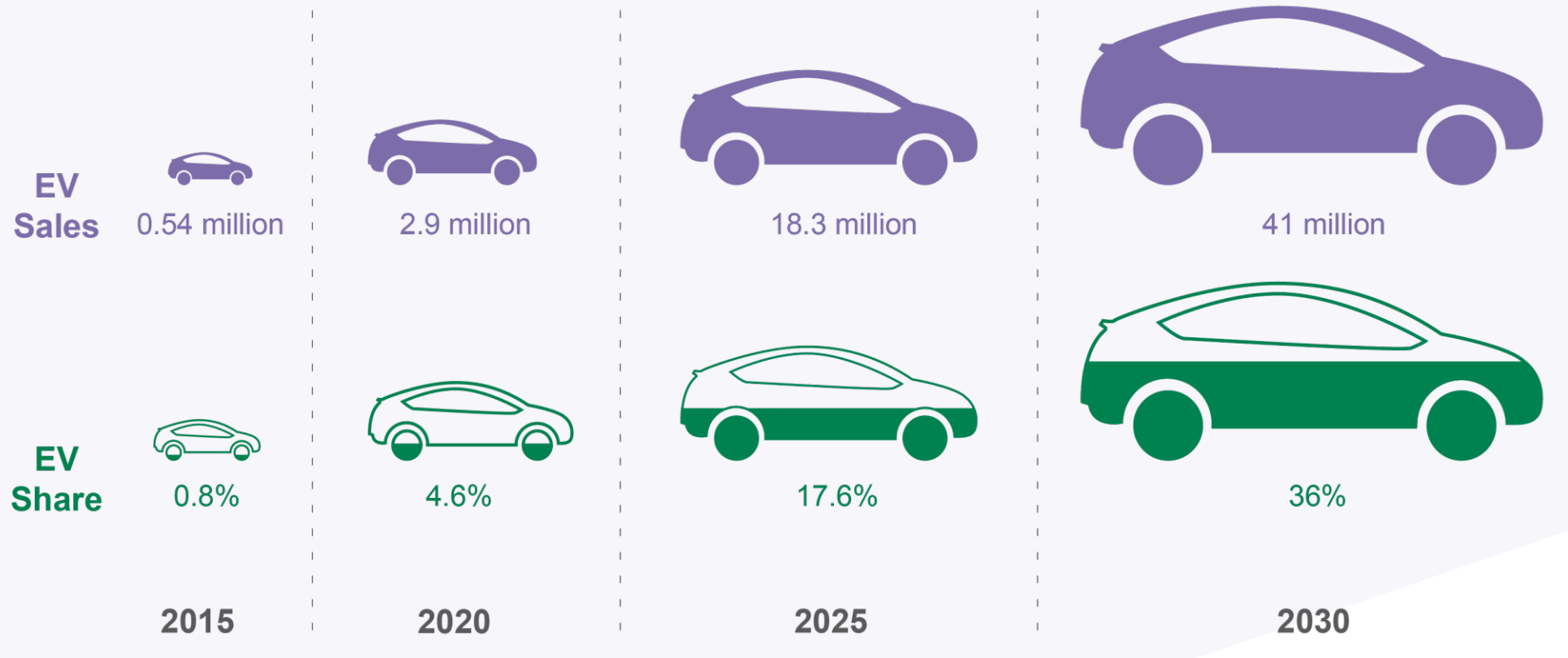
Global EV cars sales and market share projections

\$40,000 (2019)

Avg. ICE car price in the US

\$55,600 (2019)

Avg. EV price in the US



Source: [IEA](#); Evaluateserve Insights