

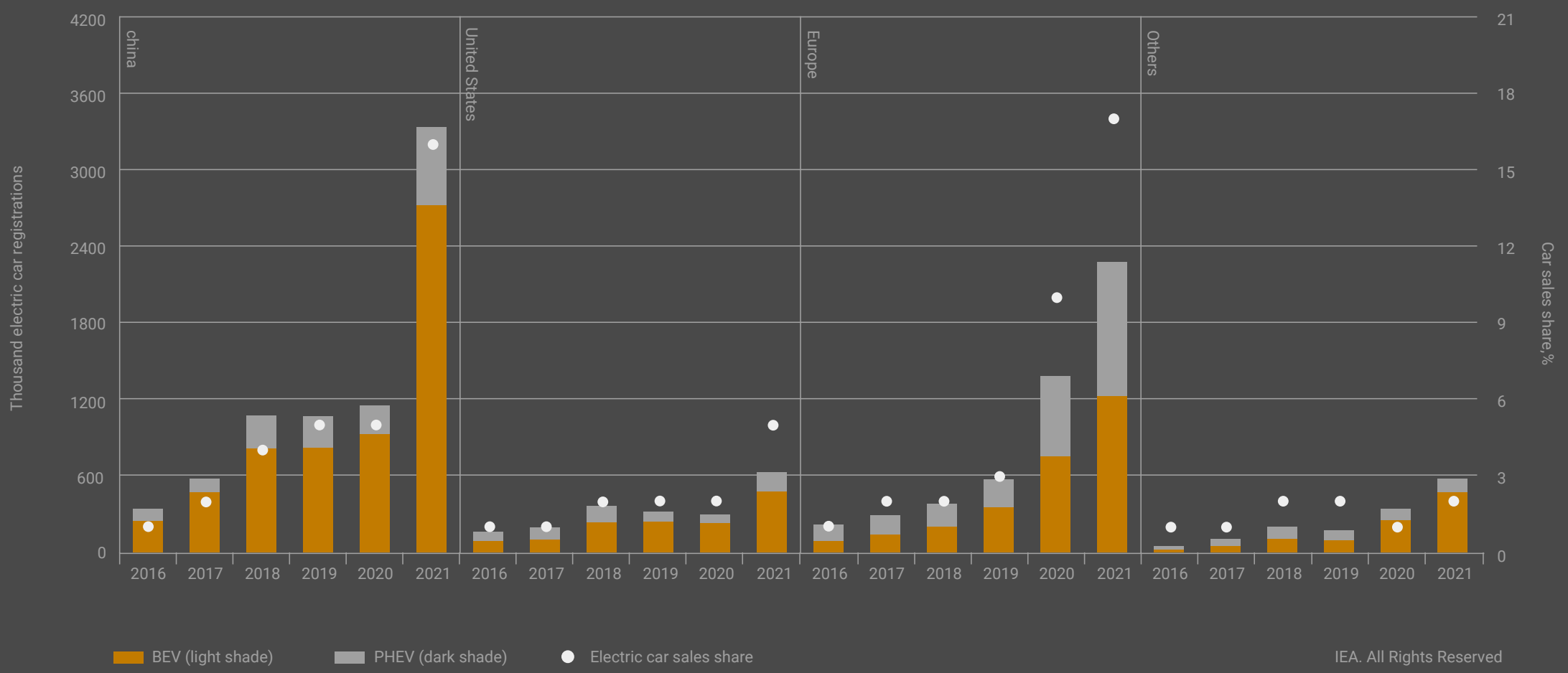


By 2025 it is expected that 10% of global passenger vehicle sales will be EVs, growing to 28% in 2030 and 58% in 2040.

The market share of electric vehicles in Europe has quickly increased from 3% in 2019 to 11% in 2020, and to 19% in 2021. Key driver behind this sudden jump was the second round of European CO<sub>2</sub> targets for new cars taking effect.

Meanwhile, the electric vehicle market share in China only saw a moderate increase from 5% to 6% in 2020 but then quickly reached 15% in 2021.

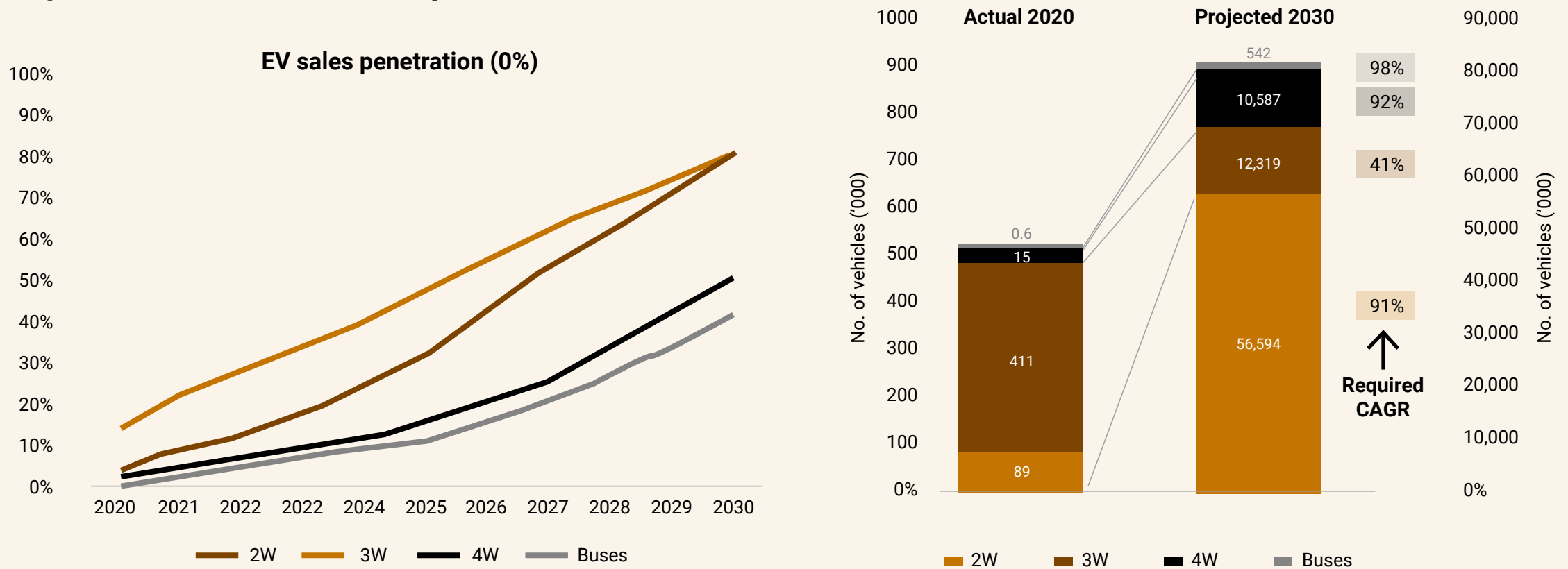
In the United States, electric vehicles are not yet as popular as in China and Europe. The market share almost doubled in 2021, going from about 2% in 2020 to 4% in 2021.



With a population of over 1.4B, India imports approximately 84% of its crude oil needs, making it the 3rd largest oil consumer and imports in the world.

With the **transport sector** accounting for greater than 70% of diesel consumption, 95% of the petrol consumption, and approximately 14% of the CO<sub>2</sub> emissions in India, it becomes critical to de-carbonize the automotive industry to achieve the target set by the government. To do so, **alternate fuel and electric powertrains are the need of the vehicles.** Electric vehicles (EVs) are a promising alternative that could help in drastically reduce the adverse environmental impacts caused by conventional vehicles when compared to traditional fossil fuels.

Figure 5: Forecast of EV adoption<sup>13</sup>

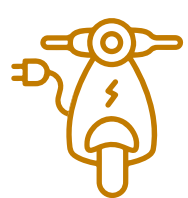


Source: NITI Aayog

With 2Ws accounting for over 70% of the petrol consumption in India, the electrification of this segment will enable a significant reduction in crude imports.

There have been many such **EV developments** in India in the past years where major OEMs, MNCs, Associations etc., have been working together to develop the required infrastructure for faster adoption of EVs.

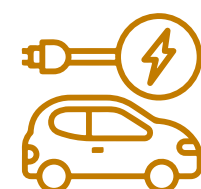
Some of the major players are,



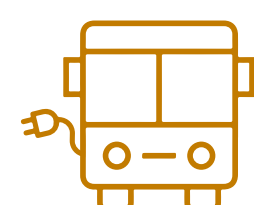
2W: Ampere, Okinawa, Ola Electric, Ather, Hero Electric, TVS Motors



3W: Bajaj Auto, Piaggio, Atul Motors, Mahindra Electric Mobility, Tata Motors



4W: Tata Motors, MG, Mahindra & Mahindra



Buses: Tata Motors, Olectra Greentech, Ashok Leyland, Eicher Motors

As per industry statistics, **EV sales hit their highest** at 4,29,217 units in financial year 2022, up 218% from 1,34,821 units in financial year 2021. This was 155% higher than 1,68,300 units sold in financial year 2020.

According to the Society of Manufacturers of Electric Vehicles, **EV sales in India is poised to cross a million units mark in FY23**, led by E2W at 750,000 units, 3W at 200,000 units, PV at 45,000 units majorly led by Tata Motors & MG, and 5,000 units from the bus segments.

To summarise, the future of mobility is shifting towards EV. It is supported by national policies, tax advantages and targets around the world.