Global EV Outlook 2017
Two million and counting
The year 2016 saw the global threshold of 2 million electric cars on the road exceeded, with over 750 thousand units sold over the year. In 2005, electric cars were still measured in hundreds. 2016 also saw more than 200 million electric two wheelers on the road and 345 thousand buses, primarily in China. The rapid electric vehicle uptake is facilitated by support policies deployed by governments and cities to reap their multiple benefits in the fields of transport decarbonisation, air pollution reduction, and energy efficiency and security.

**Electric car sales, market share and BEV versus PHEV sales share in selected countries, 2010–16**

Key point: The two main electric car markets are China and the United States. Six countries have reached over 1% electric car market share in 2016: Norway, the Netherlands, Sweden, France, the United Kingdom and China.

**Evolution of the global electric car stock, 2010–16**

Key point: The electric car stock has been growing fast since 2010, with a fairly consistent distribution of BEVs (60%) and PHEVs (40%) across the years. 80% of the electric cars on road worldwide are located in China, the United States, Japan, Norway and the Netherlands.

**Charging infrastructure**

There are an estimated total of 2.3 million electric car charging points worldwide in 2016. The deployment rate of publicly accessible charging infrastructure has been slightly ahead of the growth of the electric car stock in the past year.

**Geographical distribution of the 2016 stock of EVSE outlets by charger type**

Key point: Electric cars still outnumber public charging stations by more than six to one, indicating that most drivers rely primarily on private charging stations. Publicly available EVSE shares are also not evenly distributed across markets. This is consistent with the early stage of electric car deployment.

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1. Private chargers are estimated assuming that each electric car is coupled with a private charger.
Key point: Meeting 2030 decarbonisation and sustainability goals requires a major deployment of electric cars in the 2020s, as suggested by the new EVI target of the EV30@30 campaign. The level of ambition resulting from OEM announcements shows a fairly good alignment with country targets to 2020 and seem to lie within the range corresponding to the RTS and 2DS projections from the IEA.

Key point: Electric motors have a better energy efficiency than internal combustion engines (ICEs), making electric cars less CO₂-intensive than ICEs with most national grids today. In order to deliver significant greenhouse gas emission reductions in the future, transport electrification needs to go hand-in-hand with the decarbonisation of power generation.

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The EVI is a multigovernment policy forum established in 2009 under the Clean Energy Ministerial, dedicated to accelerating the deployment of EVs worldwide. It brings together representatives of its member governments and partners twice per year and acts as an effective platform for knowledge-sharing on policies and programmes that support EV deployment. In 2017, it launched the EV30@30 campaign, redefining its ambition by setting the collective aspirational goal for all EVI members of a 30% market share for electric vehicles in the total of all passenger cars, light commercial vehicles, buses and trucks, by 2030.

The EVI counts today ten member governments (Canada, China, France, Germany, Japan, the Netherlands, Norway, Sweden, the United Kingdom and the United States), representing most of the global EV stock and including the largest and most rapidly growing EV markets worldwide. China and the United States are currently co-leading the EVI*, and the IEA is the co-ordinator of the initiative.

* United States’ leadership under review