

Need for speed: electrify vehicle fleets to boost decarbonisation

The electrification of Europe's vehicle fleets will be the catalyst for clean mobility throughout the 2020s, accelerating the decarbonisation of transport, improving air quality in cities, boosting the deployment of charging infrastructure and spurring the creation of a second hand EV market. A 24-fold increase in fleet electrification is expected by 2030, according to [“Accelerating fleet electrification in Europe: When does reinventing the wheel make perfect sense?”](#), a joint undertaking by Eurelectric and EY.

Europe's vehicle fleets consist of 63 million cars, vans, buses and trucks, operated by private companies or public authorities. However, despite only representing 20% of the vehicle parc, they account for 40% of all kilometres travelled, and 50% of CO₂ emissions from transport. This means they hold a significant potential for supporting accelerated transport decarbonisation.

Kristian Ruby, Secretary General of Eurelectric said:

“Electrification of car fleets can be a real game changer. It comes with tangible reductions of total costs of ownership and CO₂ emissions. So it is a good deal both for fleet owners and society at large.”

Fleets are the prime candidate for electrification for a number of reasons. First, the public incentives and the discounts applied to bulk sales, raise the attractiveness of EV purchases. Secondly, the route predictability, which is a general operational characteristic of fleets, would enable and accelerate the deployment of charging infrastructure in key locations, making EVs more reliable also for private individuals.

The study finds that fleet electrification is expected to grow at pace, totalling 10.5 million EVs by 2030. By then, the bus segment will have electrified 42% of its parc, followed by the car and van segments that will have electrified at 17.5% and 12% respectively. These uptakes will be further enabled by shifts in company policies towards electric vehicles, and greater vehicle choice.

Accelerating the rollout and interoperability of the charging infrastructure

Europe's existing 213.000 public EV charging points, of which only 14% are fast chargers, are well below target. A 13-fold increase is needed to meet the European Commission's ambition of installing three million public charging points by 2030. The study finds that €20 billion are needed for public charging infrastructure and €60 billion for the private one. An additional €25 billion is required to enable the power distribution grids to support charging infrastructure rollout.

Serge Colle, EY Global Power & Utilities Leader, says:

“Electrifying transport is critical for Europe to meet its tough emissions targets and create a decarbonised future. Transitioning fleet first will pave the way, creating synergies for the underlying e-mobility ecosystem and generating new commercial opportunities. However, achieving this will require a fleet-centric approach across both government and industry, as well as an increased focus on the end customer with a greater choice of vehicles and a seamless charging experience. It is clear that no one sector can drive this transition alone – collaboration between all e-mobility players is critical to success.”

The carrot and stick approach

Fleet electrification will be spurred by increasingly stringent rules and regulations, as well as advantageous taxation schemes. At a local level, over 300 cities have introduced low- and zero-emission zones, pressing last-mile delivery and logistics companies to electrify or face penalties. At EU level, mandatory requirements for automakers to sell zero emissions vehicles should be introduced, in addition to the CO₂ standards, thereby catalysing the shift of cars and light duty vehicles to clean mobility.

Note to Editors:

About the study:

The coproduced study includes outputs from discussions with industry leaders within automotive, utility, oil and gas, battery manufacture, fleet management, leasing and charging infrastructure businesses. It collates insights and opinions, identifying key value pools and actions to accelerate and build out e-mobility solutions at scale. To identify the size of the fleet electrification opportunity in Europe, the study analyses the make-up and characteristics of 600 fleets operating across 16 industry segments.

Key facts and figures:

- The total number of fleet vehicles – both EVs and internal combustion engines – is expected to grow by around 15% by 2030, to 73 million vehicles. The electrified segment of fleet vehicles, with an anticipated 24-fold increase, will bring actual numbers to 10.5 million by 2030, up from 420,000 EVs today.
- In Europe, vehicle fleets travel 2.25 times more kilometres than personal cars, accounting for 40% of the total kilometres travelled, and half of the CO₂ emissions from road transport.
- The European Commission estimates that by 2030, three million public charge points will be needed for 40 million EVs. This represents a 13-fold increase, up from the 213,000 installed so far.
- Battery costs are coming down globally. From more than US\$1100/kWh in 2010, they averaged US\$137/kWh in 2020 and are forecasted to drop to around US\$100/kWh by 2023. At this level, automakers are expected to be able to produce and sell EVs at prices comparable with traditional vehicles.

The infographics can now be downloaded [here](#)

About Eurelectric

Eurelectric represents the interests of the European electricity industry. With members in over 30 European countries, we speak for more than 3,500 companies in power generation, distribution and supply. We seek to contribute to the competitiveness of our industry, provide effective representation in public affairs and promote the role of electricity in the advancement of society. For more information, visit: eurelectric.org

Press Contact:

Ioana PETCU, Press & Media Advisor

Tel: +32 470 45 35 89

e-mail: ipetcu@eurelectric.org