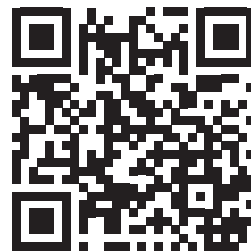




Join Us



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PLATFORM FOR electromobility

The Platform for electromobility unites 40+ organisations from across civil society, industries, cities and across all transport modes. Our members are committed to promote electromobility and strive to collectively develop solutions to electrify European transport, and to promote those solutions to the EU institutions and Member States.

Our Aims are to drive the development, implementation and support for sustainable European Union policies, programmes and initiatives to move people and goods.

"Where transport, energy
and digital meet ..."

Debunking some myths

ON BATTERIES

Recycling of lithium-ion batteries has the potential of offering a credible source of cobalt, one which could ease supply concerns by providing, by 2030, an additional 100,000 metric tonnes each year. The number of consumer electronics batteries that are being recycled will have the greatest impact on the potential amount of additional cobalt available – the more batteries there are to recycle, the better the recycling rate. The Battery Regulation will ensure that only sustainable batteries will be placed on the EU market, with the obligation to use recycled materials for manufacturing new batteries for EVs. The Batteries EU production capacity is expected to be able to cope with the demand from EVs.

ON JOBS

In total, 5.65 million jobs in the automotive (OEMs and suppliers) and adjacent industries (energy production, charging infrastructures, material recycling and batteries) are involved in the transition to electromobility. Approximately 2.4 million positions will require different degrees of training to prepare them for future job demands. Reskilling is very costly for industries and also creates uncertainties. Therefore it will be important to unite the efforts of industries, policy makers, local governments and social partners.

ON TRAINS

Electrified rail lines already carry more than 80% of passengers and freight in EU. In the long run, further direct electrification of rail lines will substantially reduce maintenance costs and promote sustainable energy, while battery-powered trains provide alternatives where direct electrification is not feasible. Some 30% of electric trains are currently powered by renewable energy; indeed, since 2018, electric traction is fully from renewable energies in Austria, while in the Netherlands trains are already running on 100% wind energy and Sweden 100% use only hydropower.

ON AFFORDABILITY

Electric vehicles (EVs) already offer the lower-cost lease option in a growing number of scenarios when compared to the total cost of ownership (TCO) of petrol and diesel vehicles (ICEs). The prices for Battery Electric vehicles (BEV) are expected to continue to drop, thanks to falling battery costs (down 60% between 2020-2030) and improvements in manufacturing techniques (through integration and economies of scale). The TCO of a BEV purchased in 2030 would be 30% lower than that of a new petrol car running on synthetic fuels. The TCO of electric buses with an autonomy of 250-300 km is lower than that of diesel buses. Moreover, within 2-3 years, e-buses in almost all configurations will be competitive on a TCO basis.

FIT FOR 55

“The ‘Fit-for-55’ package is promising a block of measures to benefit the planet and the people. I believe though adjustments can be made to this first proposal. We need to look at what is already working within the EU and build on those,”

Said Arne Richters, Chair of the Platform for electromobility 2020-2021



ON INFRASTRUCTURE

The number of publicly accessible charging stations is growing fast, from normal, passing the threshold of 300,000 operational units in 2021, of which more than 36,700 are fast. By 2030, the EU ambitions a twelvefold evolution of charging station numbers. Private charging will represent 90% of the recharging.

In order to keep developing the required infrastructure, avoiding a growth of chargers not commensurate to EV sales, we need to continue working on a proper policy framework, in cooperation with cities and regional governments and the right market design which will allow for the growth of technological solutions including smart charging and innovative financing schemes.

CO2 EMISSIONS

EVs in Europe generate, on average, around three times less CO2 than their petrol/diesel equivalents. In a worst-case scenario, an electric car with a battery produced in China and driven in Poland still generates 22% less CO2 than diesel and 28% less than petrol. In the best-case scenario, an electric car with a battery produced in Sweden and driven in Sweden generates 80% less CO2 than one driven with diesel and 81% less than petrol. Electric cars will also reduce CO2 emissions fourfold by 2030, thanks to an EU grid that increasingly relies on renewable sources.

ON RENEWABLES

The combination of EVs, their batteries, and charging infrastructures as sources of ancillary services for the distribution grid will benefit the shift to integrating renewable energy sources.

EV charging will create an additional electricity load on grids, which will nonetheless remain perfectly manageable for system operators. In fact, thanks to smart-charging technologies, EV loads will actually become an asset for grid management. Shifting the charging from high -to low-consumption periods, for example, will reduce the impact of EVs on peak demand and the need for grid upgrades while delivering financial gains to users.

ON ELECTRICITY DEMAND

Even if EVs were to make up 50% of the EU car fleet by 2035, the entire electric fleet would be responsible for less than 9% of the total electricity consumption in Europe. This would represent a 0.5% increase in electricity demand per year, while the real annual growth in electricity consumption has been 1.3% per year since 1990.

ON EFFICIENCY

BEVs are more efficient than ICEs. Power to wheel - from the energy production (fuel/electricity) to the movement of the vehicle - efficiency is around 86-90% in a BEV, while in an ICE it is about 16-25%, with some 60% being lost in heat.

Some key Figures

80%

of passengers and freight in EU are carried by electrified rail lines



30 million

zero emission cars on the road by 2030. That's the target of the European Commission¹



300,000

charging points were operational by end of 2021 in Europe, including more than 36.000 fast-charging points.



9% is the percentage of total electricity consumption that the total electric fleet would consume if electric cars were to represent 50% of the car fleet by 2035



€1,250

is the average loss to an inhabitant of a European city in 2018, directly or indirectly linked to poor air quality



59%

is the percentage of sales in Europe that will come from electric vehicles by 2030 (70%, if plug-in hybrids are included)

