

## Electro-mobility Platform recommendations to the initiative report "Deployment of infrastructure for alternative fuels in the EU: time to act!"

A reliable and comprehensive coverage of public charging infrastructure for all vehicles (cars, vans, trucks and buses) is a prerequisite for the transition to electro-mobility. It provides certainty for electric vehicle users and potential adopters, as well as for transport operators and authorities willing to deploy electric heavy duty vehicles. However, public charging (regular power charging in urban areas or high power charging along corridors) represents only 20% of passenger car charging while the majority of charging is done with private chargers in buildings (at home or at work). Deployment of infrastructure should address the challenge of both public and private charging while public funding should aim at providing market certainty, long term stability and share the risk of uncertainty of market uptake speed. In light of this, the Platform for electro-mobility gives the following recommendations:

- 1. **Private normal and slow charging in buildings should be fostered.** The majority of all electric vehicle users will rely on a private charger at home or at work and the availability of such charging is a 'conditio sine qua non' for electric vehicle adoption. Home and work charging is the cheapest and easiest charging method to be managed by the grid and their deployment should be supported by proper financial schemes.
- 2. **Promote smart charging for electro-mobility**, by setting ambitious requirements in public as well as private charging infrastructures, beyond the minimum provisions outlined in the revision of the Energy Performance of Buildings Directive. This would allow for electric vehicles to work in harmony with the grid, and accelerate the uptake of self-consumption in residential buildings. Electric vehicles will therefore act as a form of demand response, rather than simply additional demand, making smart charging essential as electro-mobility is widespread. Private charging should aim at incorporating intelligence and should be networked by default while regulation should set e-mobility friendly building codes and ensure the "right to charge" for condo owners and tenants to help overcome non-financial barriers.
- 3. Member States should prioritize electro-mobility as a future-proof and long-term sustainable solution to clean power for transport including all modes. Currently, most of the Member States seem to have chosen this path, but some exceptions remain.
- 4. Member States should commit to ambitious and realistic national action plans within a reasonable timeframe to deploy a decent public charging infrastructure network that enables electro-mobility to develop significantly. Overall, if Member States comply with their 2020 goals set out in the national action plans, then charging infrastructure supply will not constrain the electric vehicle market<sup>1</sup>. In parallel Member States should start or speed up the deployment of alternative fuels infrastructure for public transport. To enable this deployment, a simplification of the rules governing urban buses depots is also needed.
- 5. Light-duty vehicles CO2 standards should enable electric vehicle roll-out through more ambitious standards and effective schemes for the promotion of zero emission vehicles, while the recast of the Clean Vehicles Directive should boost demand for electric mobility through higher procurement targets for public authorities.

<sup>&</sup>lt;sup>1</sup> http://www.platformelectromobility.eu/2018/02/27/enough-public-chargers-planned-infrastructure-cant-be-blamed-for-the-slow-uptake-of-evs-analysis/



- 6. **Electric vehicle market and infrastructures need to co-develop in a coherent manner** through cost-efficient and market-enabling funding. Different market phases can be expected, according to which funding should be allocated:
  - a. Early market phase: Public investment is necessary to provide a basic coverage of charging infrastructure, for instance through public-private partnerships.
  - b. Mature market phase: Electric vehicle infrastructure operations are market and business driven and are financially viable without public funding (purely private investment).

Public funding should be allocated to bring the market to the breakeven point as fast as possible, thereby limiting initial losses and risks for early market players.

- 7. Geographical coverage is key and must provide a homogeneous coverage avoiding any recharging gaps:
  - a. Fast charging along and beyond corridors: While the TEN-T Core network will be relatively well covered with high-power charging infrastructure<sup>2</sup>, it is important to also direct public funding and investments into the TEN-T Comprehensive network (designed to ensure accessibility to all peripheral and outermost regions) as well as outside of the TEN-T network entirely. To ensure a comprehensive European geographical coverage of high power charging infrastructures, funding should also be allocated to regions where coverage is necessary but not prioritized because of lower utilization potential.
  - b. Fast and regular charging in cities and multimodal urban nodes: public funding and investment should be directed to ensure a homogenous electro-mobility uptake across all cities. This is relevant for bus networks, city logistics and urban transport operators both in cities and in rural areas.
- 8. European Structural and Investment (ESI) Funds streamed towards electro-mobility deployment. Combinations of ESI Funds (ERDF and CF) <sup>3</sup> and EFSI<sup>4</sup> at project level and through risk financial instruments should be directed towards all segments of electro-mobility and enable entrepreneurial SMEs and larger innovative companies to finance initial capital investments and risks.
- 9. Encourage Transmission System Operators (TSOs) and Distribution System Operators (DSOs) to invest in smart grid solutions. To answer the growing electricity demand from electro-mobility, continued grid investments will be necessary to have a stronger and smarter electricity grid.
- 10. **Interoperability and communication protocols**. A seamless electro-mobility market in the EU requires interoperability of charging and payment systems and standardized protocols, for both light-duty and heavy-duty vehicles and this need to happen fast. The Commission recommendations from the Sustainable Transport Forum (STF) expert group need to be implemented quickly. Similar to the telecommunications sector, market roaming fees for EV drivers should decrease over time.
- 11. Member States should start or speed up the deployment of charging infrastructure for public transport, which was not sufficiently addressed in the Alternative fuels infrastructure directive but is urgently needed if any mandatory procurement targets for buses are to be met following a revision of the Clean Vehicles Directive.

<sup>&</sup>lt;sup>2</sup> High power charging infrastructures: 50 kW and ≥150 kW charging power (DC)

<sup>&</sup>lt;sup>3</sup> European Regional Development Fund (ERDF): €280 billion and Cohesion Fund (CF): €75 billion

<sup>&</sup>lt;sup>4</sup> European Fund for Strategic Investments (EFSI): €500 billion targeted investment by 2020

http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=36206&no=2



12. **New shared mobility services** such as vehicle and ride sharing benefit from electrification and vice-versa. An investment in shared electric vehicle infrastructure is an investment in more efficient transport, which incentivizes electric car sharing with benefits in air quality, noise pollution, and climate warming emissions.

The platform addresses further recommendations to the following authorities:

## **National governments**

- Prioritize incentivizing electric vehicle purchase and use to stimulate early market. It has been proven that
  these incentives are the most cost effective way to transition to electro-mobility until electric vehicles
  reached cost-parity with conventionally fuelled vehicles. The incentives for the purchase of an electric
  vehicle could be progressively lowered over time until complete phase-out. In order to provide the needed
  long term vision and stability to the market, subsidies should be tied to the actual number of electric
  vehicles on the road.
- Member States should work in close cooperation with regional and local authorities and with private stakeholders across the relevant industries to ensure that cities' needs are covered and national action plans are in conformity with cities plans for development of transport infrastructure.
- National governments should get involved more in the TEN-T CEF funding. Sufficient funding and guidance
  for cities on successful public-private cooperation and financing schemes should be envisaged to support
  cities with the roll-out of the necessary charging infrastructure

## Cities

- Stimulate procurement of electric bus systems and other electric public transport vehicles, urban transport operators, city logistics and innovative multimodal mobility services. They can provide an emission-free solid base of early users and stability to the charge point operators.
- Strategic urban planning. Cities can choose to use the electric infrastructure deployment to influence mobility patterns. They should support deployment of Direct Current (DC) fast and Alternating Current (AC) normal charging, possibly mixed together in strategically placed charging hubs for public and urban transport, commercial delivery vehicles and passenger cars' needs (to be set up in cooperation with the operators). For instance, railway stations may work as appropriate multimodal transport hubs.
- **Ensure minimum coverage** of publicly accessible charging infrastructure, ideally complemented with a demand-driven model in densely populated areas.
- Charging in buildings. Cities should take timely measures to ensure simplification of procedures for the
  installation of smart charging and ducting infrastructure in both new and existing buildings (especially
  permitting procedures for multi-tenant buildings and car parks), and publicly accessible buildings such as
  railway stations.
- **Safety regulation.** Fire safety requirements for charging infrastructure in indoor car parks and electric bus depots should ensure actual risks are prevented while remaining proportionate in order to avoid any unnecessary burden.