











PLATFORM FOR THE ELECTRIFICATION OF SURFACE TRANSPORT

Common Statement

Alstom, AVERE, CER, ETRA, Eurelectric, Eurobat Going Electric, Nissan, Polis, UITP, UNIFE

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The European Commission's 2011 Transport White Paper lays out the stark challenges facing the transport sector: it depends on oil and oil products for 96% of its energy needs and has contributed negatively, so far, to climate policy goals.

Taking these challenges into account and recognising the importance of a competitive European transport equipment industry, our organisations are convinced that substantial electrification of the transport system is essential.

The White Paper sets a 60% greenhouse gas emissions reduction target by 2050 compared to 1990 levels for the transport sector. Electrified transport holds a significant reduction potential in order to reach this target. Widely available and produced all over the EU, the greater use of electricity in transport can, while reducing greenhouse gas emissions, simultaneously help to promote fuel diversification, strengthen energy security and improve air and noise quality in urban areas. This in turn will enhance human health and quality of life in the Union.

Our organisations are convinced that the transformation of Europe's transport system should be based on natural complementarities between transport modes.

Existing and future electrified public transport infrastructure should serve as a backbone providing charging facilities for electric road vehicles, while also facilitating seamless multimodal travel.

Electrification of surface transport is achievable with existing technologies using electrified railways. In the urban and sub-urban context, an expansion of electrified public transport services, including light rail, metro, and trolleybuses, and the successful deployment of light-duty electric road vehicles, buses and other captive fleets as well as electric twowheelers are within reach now.

Compared to other alternative road transport fuels, the infrastructural hurdles for charging electric road vehicles are considerably lower: the electricity distribution grid is already in **place** and only the public charging infrastructure now needs to be rolled out.

Our organisations welcome the Transport White Paper's Goal to phase out conventional cars and light duty trucks in cities by 2050. In order to improve air and noise quality levels and lower urban congestion, an optimal mix of means and modes of transport needs to emerge in which sustainable public transport should play a major role in combination with private vehicles, walking and cycling.











For mass deployment of electric surface transport, some network capacity reinforcement and a proper load & energy management, including smart charging, will be necessary to ease stress on the electricity grids.

Our organisations support the development of collaborative solutions for multimodal transport services, including innovative travel information and ticketing services, thus opening the way for **fully electrified door-to-door multimodal transport**. Our organisations believe that this is the way of the future for Europe's transport system.

The European Union's electricity sector has made **considerable progress in terms of efficiency and sustainability**: according to the International Energy Agency, total CO2 emissions from power generation fell by 13% from 1990 to 2010. Better still, **the CO2 intensity of power generation fell by 32%** over the same period (¹).

Electrification of surface transport generates crucial synergies: the deployment of 'smart charging' and 'smart braking' for electric road vehicles and of 'smart braking' for electric rail vehicles will allow for efficiency of the grids to manage supply and demand on a daily basis – thus increasing the capacity of electric grids to accommodate increasing shares of renewable energy sources such as wind and solar. These synergies strengthen the case for electrification of surface transport even further, while demonstrating the case for decisive and well-targeted investments in sustainable transport infrastructure and in smart grids.

Fair competition and clear price signals are essential for an efficient and competitive transport system. Taxation and pricing should be based primarily on carbon emissions, while also taking noise and air pollution into account. Our organisations support the White Paper's initiatives to align **transport taxation** with Europe's sustainability goals and to proceed with the **further internalisation of external costs**.

Furthermore, our organisations support the introduction of *binding economic instruments* to ensure that the emissions reduction target for the transport sector is actually met and call upon the Commission to prepare legislative proposals for that purpose.

The deployment of adequate economic instruments would accelerate the deployment of energy-efficient, low-carbon, rail and road vehicles. This would boost demand in the vehicle manufacturing sectors and support the international competitiveness of Europe's manufacturers of transport equipment. Among other measures, continued efforts are needed with respect to RDI policies and funding.

Last but not least, according to available economic studies both overall reductions in the oil intensity of transport and electrification per se should have **significantly positive net job creation effects** across the economy as well as in the vehicle manufacturing sector.

For the reasons outlined above, we jointly call upon public authorities to support the further electrification of surface transport on the basis of a multi-modal approach.

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¹ Source: IEA World Energy Outlook 2012. EU Electricity generation: 1990: 2568 TWh; 2010: 3310 TWh. EU emissions from electricity generation: 1990: 1492 Mt CO2; 2010: 1304 Mt CO2. EURELECTRIC reports for its full member countries (EU27 + Iceland, Croatia, FYROM, Norway, Switzerland and Turkey) that capacity from Renewable Energy Sources, *excluding hydro-power*, rose by a factor of 100 between 1980 and 2011, from 1.6 GW to 166 GW, and is projected to reach 264 GW already by 2020.







EUROBAT





The Members of the Platform

ALSTOM is a world leader in transport infrastructure, power generation and electrical grid. Alstom supplies rolling stock, transport infrastructure and signalling, maintenance equipment and global rail systems; it is the world leader in integrated power plants for the production of electricity and air quality control systems and provides advanced grid management solutions to meet energy demands.

AVERE promotes the widespread use of electric vehicles in Europe and Africa. AVERE is composed mainly of national associations representing vehicle and equipment manufacturers and electricity utilities, as well as a range of EV user groups, non-profit groups, public bodies and research & development entities.

CER (Community of European Railway and Infrastructure Companies) brings together more than 70 European railway undertakings, infrastructure companies and vehicle leasing companies, including long-established bodies, new entrants, and both private and public-sector organisations.

ETRA is the European trade association for (electric) bicycle and motorcycle retailers. ETRA's aim is to group these retailers in Europe and to defend and further their interests. We represent nearly 7,000 companies, which employ approximately 17,500 people in eight EU Member States.

The Union of the Electricity Industry - EURELECTRIC is the sector association which represents the common interests of the whole electricity industry at pan-European level, plus its affiliates and associates on several other continents.

EUROBAT is the European association of automotive and industrial battery manufacturers representing over 90% of the battery industry in Europe.

Going-Electric, Association for Electric Vehicles and their Users in Europe, is representing businesses, associations, NGOs and individuals promoting Electric Vehicles (EVs) in Europe, as the most sustainable motorised road vehicles.

NISSAN provides unique and innovative automotive products and services that deliver superior measurable values to all stakeholders in alliance with Renault. Nissan currently manufactures vehicles in more than 20 countries and offers products and services in more than 160 countries.

POLIS is the network of European cities and regions networking for innovative transport solutions.

UITP (International Association of Public Transport) is the international network for public transport authorities and operators, policy decision-makers, scientific institutes and the public transport supply and service industry.

UNIFE represents the European Rail Industry in Brussels since 1992. The Association gathers more than 80 of Europe's leading large and medium-sized rail supply companies active in the design, manufacture, maintenance and refurbishment of rail transport systems, subsystems and related equipment.