

European Green Vehicles Initiative PPP: Use of new energies in road transport

- Create more energy efficient vehicles using alternative powertrains, strengthening the future competitiveness of the automotive industry
- Help to reach the ambitious targets set by the European Union (EU) transport, energy and climate protection policies;
- Match the transport needs within the EU with highly efficient and more flexible mobility products/ services



What is the challenge?

The automotive industry is a key sector for Europe, with 12 million direct jobs and over € 500 billion/year in turnover, but it is under growing pressure from global competitors. At the same time, the vehicle market is facing technological challenges to comply with more ambitious environmental regulations. The quick introduction of new, greener vehicles with higher energy efficiency and alternative powertrains is pivotal for the ongoing success of the sector, the wider economy and Europe's environment. Meeting these challenges requires innovation coming from several technological areas and EU industries to join their research and innovation forces. This is where a contractual public-private partnership (PPP) can help.

What is the European Green Vehicles Initiative (EGVI)?

EGVI is a public-private partnership based on Article 19 of the Horizon 2020 Regulation setting out a contractual arrangement between the Commission and the private sector. The private side of the PPP will be represented by the European Green Vehicles Initiative Association (EGVIA). The role of the Association is to engage in the contractual PPP with the European Commission (EC) and collaborate with the EC services responsible for the implementation

of Horizon 2020 on research, technological development along the value chain, and demonstration.

What results and benefits are expected?

The technologies developed under the EGVI will help in reaching the targets set under the EU's climate, energy and transport policies, notably the 20-20-20 targets on reducing greenhouse gas emissions, increasing use of renewable energy and more energy efficiency. Expected innovations will support a sector that directly employs some 12 million jobs and have a significant impact on growth and international trade (In 2011 the European automotive sector had a positive contribution to the EU trade balance of EUR 92 billion). Specific objectives of the EGVI are:

- an improvement of the energy transport system efficiency by 50% from 2010 to 2030, including: +80% energy efficiency of urban vehicles and +40% energy efficiency of long distance freight transport;
- a deployment of alternative powertrains like electric and plug-in hybrid technologies;
- 5 million electric & hybrid vehicles in the EU by 2020 (EUR 0.5 million by 2016);
- Battery life-time and energy density doubled, at 30% lower cost, in 2020 compared to 2009 Li-Ion technology.

What is the total budget?

The estimated budget of the EGVI is EUR 1.5 billion. The EU will contribute with EUR 750 million from the Horizon 2020 programme budget. The industrial partners will contribute the same amount. Additional budget will be invested in the deployment and transfer of successful concepts into industrial products, impacting on the EUR 30 billion/year that the automotive sector spends on R&D.

How will it be run?

The EGVI PPP will be governed by a Partnership Board bringing together the European Commission and EGVI. Within this body, private and public sides will meet on a regular basis to jointly prepare the Work Programmes of the European Green Vehicles Initiative PPP. EGVI will nominate the private side members of the Partnership Board, who will represent the wider community of stakeholders involved within EGVI, particularly: the European Road Transport Research Advisory Council, the European Technology Platform on Smart Systems Integration and the European Technology Platform for Electricity Networks of the Future. These members commit themselves to provide advice in their relevant fields of expertise in the best interest of EU research.

What has the current European Green Cars Initiative (EGCI) achieved?

EGCI, the predecessor of EGVI, was set up under the EU's seventh framework programme (FP7) in response to the global economic crisis of 2008. It evolved into a lean, fast and efficient instrument for the funding of research, development and innovation in the field of sustainable mobility. It has delivered innovative solutions in the areas of electromobility, long distance trucks and logistics, contributing to increased energy efficiency of road transport and lower CO2 emissions and pollution. In total, it has supported 107 research and innovation projects with an EU financial contribution of EUR 420 million in strategic areas such as advance electric energy storage systems, advanced electric propulsion, vehicles grid integration, safety, low emissions, long distance trucks and logistics.

Electric vehicles are set to play a key role in the future of urban mobility, reducing pollution, decreasing dependence on fossil fuels and saving drivers' money.

The demand for mobility is increasing: several studies show that the linear trend of EU traffic growth is expected to continue beyond 2020. The road network of several EU Member States is at the limit of its capacity; therefore it is likely that sales of conventional vehicles will be replaced by different modalities and vehicles having a lower carbon footprint. The industry is faced with satisfying demand for: clean, safe and low energy consumption vehicles, requiring less energy to be produced and using recyclable materials/systems. The WIDE-MOB project is developing e-vehicles that are not only clean, but extremely efficient, safe and compact. The objective of the project is to design and develop the main building blocks of safe, ergonomic and efficient multipurpose fully electrical vehicles with a low environmental footprint. The partners took a novel approach to vehicle design and anticipate the establishment of a supply chain among European companies, in particular SMEs, capable of delivering all components for multipurpose personal electrical vehicles.

WIDE-MOB: <http://eeepro.shef.ac.uk/wide-mob/>



Useful links

European Green Vehicles Initiative:
www.egvi.eu