FOSS Research Centre for Sustainable Energy at the inauguration of the European Interoperability Centre for Electric Vehicles and Smart Grids

The inauguration of the European Interoperability Centre for Electric Vehicles and Smart Grids was held on 28th – 29th October 2015 in conjunction with the International Symposium "Towards a Transatlantic E-Mobility Market" at the facilities of JRC (Joint Research Centre of the EC) in Ispra, Italy.

The chairman of FOSS Dr Venizelos Efthymiou was an invited speaker among key stakeholders of the EU and the USA. The symposium was attended by high level representatives of the European Union, the government of the USA, industry, research organizations and academic institutions, policy makers, regulators, standardization bodies and grid Operators. The symposium addressed the following important topics:

- State-of-the-art and trends in technologies on both the vehicles and grid side (vehicles, batteries and other components, interoperability, grids and electric systems etc.)
- Market perspectives and policy initiatives to promote electrification of transport
- Fundamental research challenges to be addressed at international level on alternative fuels and transport decarbonisation
- Barriers to the deployment of e-mobility and ways to overcome them
- Future international collaboration on key e-sectors

Dr Venizelos Efthymiou underlined the importance of developing smart charging to satisfy the needs of e-mobility. He stressed with convincing evidence that:

- With smart charging the electricity grid can serve 100% of e-mobility through the infrastructure that serves the rest of the economic activity since the additional energy required is not more than 25% of the annual national consumption
- E-mobility is three times more efficient than the conventional mobility means, offering the possibility for substantial total savings to the owner of an electric vehicle provided that assets are managed smartly and smart charging is employed throughout the useful life of the vehicle. For this to happen however, smart grids should be developed since they are not available today.
The two day symposium attracted overwhelming interest from all stakeholders with particular emphasis on the issues of interoperability that should characterise the technological developments in e-mobility and smart grids. Through the discussions at the symposium the important principle of interoperability that aims to interconnect equipment and operate with other apparatus or systems without any limitations to its accessibility and operational capability, was highlighted. This was considered by the symposium as of critical importance for opening the road towards mass use of electric vehicles.

The inaugurated testing centre at Ispra, with the state of the art facilities, compliments its partner facility in the US Department of Energy’s Argonne National Laboratory which has been in operation since 2013 and together the two laboratories will ensure that the next generation of electric cars and smart grids are fully interoperable, based on harmonised standards, technology validation and testing methods. This is an important step towards creating "a single language" for all components that will benefit both the industry and the environment on both sides of the Atlantic.

Maroš Šefčovič, Vice-President of the European Commission, responsible for the Energy Union, stated at the inauguration that “Smart grids and electric vehicles are rapidly evolving, but we have not yet harnessed their full potential. Developing harmonised standards across the Atlantic will minimise trade barriers and increase the global market for innovative products and services for the EU and US producers and consumers”.

More information for the two day symposium can be found at the following web address:

Contact Information:

Dr. Venizelos Efthymiou
FOSS Research Centre for Sustainable Energy
University of Cyprus
foss@ucy.ac.cy
http://www.foss.ucy.ac.cy
Tel. 22894329