

Diseminare rezultate proiect

FREE-MOBY

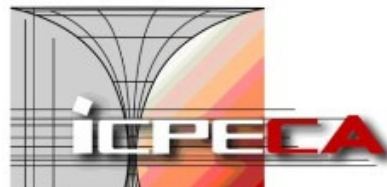
„ People Centric easy to implement e-mobility”

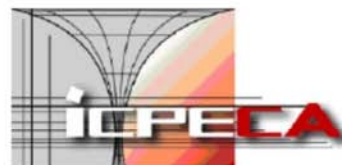
in cadrul seminarului: Consortii pentru PNIII si ORIZONT 2020

Showroom Icpe

București

28 octombrie 2014






PROGRAM

BUCURESTI, 28.10.2014

9.00 – 9.10 Cuvant de deschidere: Director General Icppe ***Virgil Racicovschi***
Director General ICPE-CA ***Wilhelm Kappel***

9.10 – 10.40 Icppe | Cercetare pentru industrie

10.40 – 11.00 

11.00 – 12.30 Prezentari ICPE-CA

11.00 – 11.15 Mariana Lucaci - Prezentare Departament Materiale Avansate: realizari si discutii

11.15 – 11.30 Sergiu Nicolae - Prezentare Departament Eficienta in Conversia si Consumul de Energie:
realizari si discutii

11.30 – 11.45 Mircea Ignat - Prezentare Departament Micro-Nano-Electrotehnologiei: realizari si discutii

11.45 – 12.00 Mihai Badic – Prezentare Laborator Compatibilitate Electromagnetica: realizari si discutii

12.00 – 12.15 Sorina Mitrea - Prezentare Laborator Caracterizare si Incercari Materiale si Prodeuse
Electrotehnice: realizari si discutii

12.15 – 12.30 Georgiana Marin – Prezentare domeniu utilaj petrolier si tehnologii noi de foraj: realizari si
Discutii

12.30 – 13.00 Posibilitati de colaborare, interventii invitati

13.00 Inchiderea lucrarilor seminarului



"This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no [608784]"

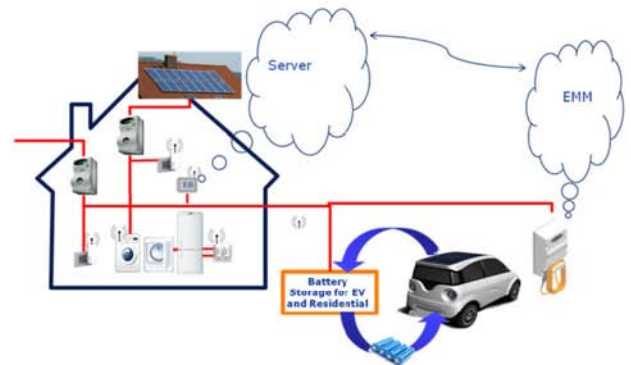
FREE-MOBY

People Centric easy to implement e-mobility

General description

The FREE-MOBY project is focused on the implementation of **easy-to-deploy micro-electric vehicles** (with a mass of 450-650 kg and speeds up to 90+ km/h) and **urban electric vehicles (EVs, 650-1000 kg)**. With an extra cost of only 15%, **solar installations** on the roof of houses can be integrated with **robust battery packs** that can smooth peak powers of the electricity network by up to 30%. **Solar parking and photovoltaic-battery installations** are becoming more and more popular in many EU countries and **will be fully exploited through the holistic approach of the FREE-MOBY project**. The availability of largely deployed renewable energy installations will attract a large number of EV users with a push-pull impact on efficiency, reduced energy waste and dependency on hydrocarbons. The project will open a new route in electro-mobility based on simplicity, freedom of operation, low-cost and easy-to-find components.

The project will adopt technologies and methodologies developed in previous calls of the DG connect Directorate in terms of system integration on powertrain, batteries, solar panels and energy management (e.g., P-MOB and Smart-LiC).



Goals / Objectives

- Development of premium microEV prototypes with novel vehicle to infrastructure interfaces based on **large scale manufacturing concepts**;
- Development of a simplified electric architecture using a two motor powertrain layout, comprising automated two-speed gearboxes and independent axel control;
- Development of an universal battery-monitoring systems, with a focus on simplified battery management systems based on monitoring of cells status and dedicated Vehicle-To-Home (V2H) interface;
- Development of modular vehicle battery pack that allows partial swapping.
- Development of V2H-compliant stationary battery rack housing vehicle battery packs for smart charging (including photovoltaic panels) and possibility of physical swapping with battery pack of vehicle.

Societal impact / Results

The partnership is organised in such a way that a new era of low cost but high performance micro e-vehicles production is opened across all EU countries. A relevant role is given to SMEs and regional SMEs clusters to assure competing speed and commitment. The achievements of the project will represent a breakthrough innovation for all involved industries and EU Member States.

Partners

- BITRON
- Lithium Balance
- ICPE
- CIDAUT
- BAEPS
- IMBIGIS
- University of Surrey
- STMicroelectronics
- Ricerca sul Sistema Energetico – RSE S.p.A.
- CISC Semiconductor GmbH
- Enel Distribuzione S.p.A.
- Torino e-district
- Polimodel
- IFEVS

Countries involved

- Italy
- United Kingdom
- Romania
- Spain
- Bulgaria
- Poland
- Denmark
- Austria

Looking ahead

FREE-MOBY is the route to the large scale manufacturing of premium European ICT centric vehicles (I-CARS) by promoting the creation of novel supply chains. Regional specialization and the link to structural funding will be part of the dissemination activities



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www.moby-ev.eu/free-moby