

Diseminare rezultate proiect

## PLUS-MOBY

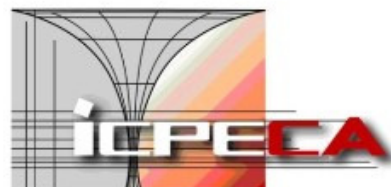
„ Premium Low weight Urban Sustainable e-Mobility”

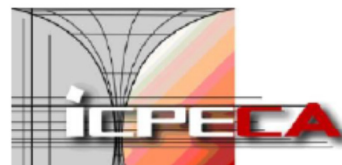
in cadrul seminarului: Consortiul pentru PNII si ORIZONT 2020

Showroom Icp

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**



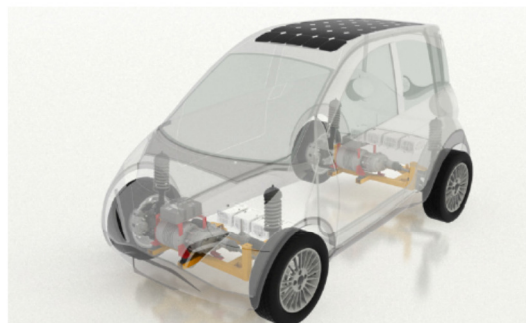
"This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no [605502]".

# PLUS-MOBY

## Premium Low weight Urban Sustainable e-MOBility

### General description

The PLUS-MOBY project is focused on **the implementation of low cost and low energy intensity technologies to manufacture premium four-wheel-drive fully electrical micro vehicles** (<600 kg before battery and speeds to 90+ km/h)) that can be upgraded to M1 configurations. Technologies and methodologies developed in previous calls of the EU Green Car Initiative will be implemented in terms of low aero-drag and safe structural designs, system integration on powertrain, batteries, solar panels, energy management (WIDE-MOB and P-MOB), design criteria to reduce electromagnetic emissions (EM-safety), and customer demand (Capire, ICT4FEV). Weight is optimised to satisfy maximum stability in all weather conditions **including high lateral wind**; materials and systems are selected to assure the highest Euroncap standards applied in conventional cars for both front and lateral crashes. Starting from a prototype having an energy consumption already demonstrated at 65 Wh/km in the NEDC cycle, further reduction of energy consumption is expected by enhancing the performance under pure electrical braking. Aesthetically pleasing flexible photovoltaic surfaces are installed to assure an additional 20 km/day range (based on annual average) in the Torino area; further improvement aiming at a average of 30 km/day extended range is projected by adopting all glazing solar active surfaces. Overall, the average energy consumption including solar radiation is expected to be <40Wh/km in the NEDC cycle with most of the days run by solar radiation only in southern EU countries. The vehicle powertrain is conceived to facilitate future autonomous driving with 4WD as well as 4WS. **The partnership is organised in such a way that a new era of easy to produce low cost but high performance micro e-vehicles is opened across all EU countries.**



### Goals / Objectives

- **Vehicle demonstrators** for urban mobility integrating the proposed innovative concepts.
- Guidelines for the implementation of **low cost and low energy consumption plants** for the developed concepts that can be applied to most low weight EVs and architectures.

### Societal impact / Results

Generating of IPR and knowledge/experience upon which to build a world-leading EU position to track and exploit the global uptake of electrical mobility in all EU Member States without the support/dependencies of large automotive companies. Results of the project will represent a breakthrough innovation for all involved industries. The major market for the new generation electric vehicles will be addressed by pan European industry. Furthermore, the University-Institute involved in the PLUS-MOBY project have the capability and infrastructure to organize and publicize conferences and seminars on the subject and to disseminate the results of the project to the EU design

### Looking ahead

The results of the project will represent a breakthrough innovation for the involved industries (Torino e-district, Magnetto Automotive, ICPE) as well as for the industrial oriented research centres like CIDAUT, BAEPS, IMBIGIS and University of Surrey that characterise their activities by focused collaborations with regional SMEs and Clusters. **PLUS-MOBY aims at setting up the background for low cost manufacturing of Micro EVs in all six regions of consortium's members.**

### Partners

- BITRON
- Magnetto Automotive CLN Group
- ICPE
- Cidaut
- Bulgarian Electric Vehicles Association
- University of Surrey
- Torino e-district
- Polimodel
- IFEVS

### Countries involved

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



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