



Feasibility analysis and development of on-road charging solutions for future electric vehicles



IEEE International Electric Vehicle Conference 2014

Florence, Italy • December 17-19, 2014

Europe meets IEVC

Angelos Amditis
Research Director ICCS

IEEE IEVC '14, Florence



European support to electromobility



- **National projects to deploy electromobility infrastructure.**
 - Nationwide charging infrastructure
 - Incentives to use EVs
- **Vehicle manufacturers offering electric versions of their models.**
- **OEMs providing charging infrastructure.**
- **Standardization bodies.**
- **EU funded R&D projects**



Workshop objectives

- **Presentation of current EU funded R&D projects focusing on electromobility**
- **Identify overlapping which can lead to standardization**
- **Identify gaps that can lead to future collaboration**
- **Bring together experts on the field and its associated areas**
- **Provide a comprehensive overview of the European SotA on electromobility**

Workshop agenda



- Opening presentation by Mr. Bert Witkamp (SG AVERE)
 - **“Development of EV deployment in Europe 2008 – 2014” - 20’**
 - The deployment of EV’s will be presented, providing detail on car types and numbers. Also some conclusions from the actual development will be presented as well as recommendations for policies.
- Projects presentations.
 - 10' each
- Dialog session.
 - 40'

Workshop projects



FABRIC: Feasibility analysis and development of on-road charging solutions for future electric vehicles

FABRIC

- Development and testing of wireless charging prototypes.
- Feasibility studies on large-scale electromobility deployment.

01/01/14-31/12/17

Yannis Damousis

UNPLUGGED: Inductive charging for electric vehicles

 **Unplugged**

- Investigation of use of EV inductive charging in urban environments.
- Increase interoperability and social acceptance.

01/10/12-31/03/15

Axel Barkow

Workshop projects



ZeEUS: Zero Emission Urban bus System



- Evaluate the economic, environmental and societal feasibility of electric urban bus systems through demonstrations.
- Facilitate the market uptake of electric buses in Europe with dedicated support tools and actions.

01/11/13-30/04/17

Umberto Guida

ASTERICS: Ageing and efficiency Simulation & TEsting under Real world conditions for Innovative electric vehicle Components and Systems



- Advanced testing and simulation methods for EV's and components.
- Batteries, inverter and e-motor modeling.
- Assessing the effect of different sub-system solutions in terms of energy efficiency

01/10/12-30/09/15

Horst Pfluegl

Workshop projects



eCo-FEV: Combining infrastructures for efficient electric mobility



- FEV integration into existing infrastructure
- Smart cooperative infrastructure for FEV services
- Efficient multimode FEV charging prototypes

01/09/12-31/05/15

Paolo Guglielmi

Green eMotion



- Part of the European Green Cars Initiative.
- Definition of Europe-wide electromobility standards.
- Demonstrations all over Europe

01/03/11-28/02/15

Giovanni Coppola

Workshop projects



EV-CONNECT



- Development of a strategic roadmap with the purpose of shifting from the current random and isolated charging infrastructure to interconnected charging networks based on market demands.

Giampiero
Brusaglino

FastInCharge: Innovative fast inductive charging solution for electric vehicles



- Development of inductive charging prototypes
- Study of dynamic charging
- Data security standards
- Micro-grid load balancing

01/10/12-30/09/15

Ioannis Karakitsios

Workshop projects



STEEP: Systems thinking for efficient energy planning



SYSTEMS THINKING FOR
EFFICIENT ENERGY PLANNING

Oct 2013 - Sep 2015

Alessandra
Barbieri

- Develop Energy Master Plans for districts in three cities, adopting a 'systems thinking' methodology in combination with open-data sourcing to achieve carbon reduction targets and overcome the barriers to energy efficiency

Ele.C.Tra: Electric City Transport



Enrico Cioni

- Increase use of electric scooters in urban areas
- Pilots with 90 scooters and accompanying infrastructure in three cities.

Workshop projects



DOROTHY: Development of regional clusters for research and implementation of environmental friendly urban logistics

- mission to enhance the distribution process of urban goods by reducing the number of vehicles and enhancing environmental standards
- aims to develop the potential of innovation and research in urban logistics across the European regions of Tuscany (Italy), Valencia (Spain), Lisbon & Tagus Valley (Portugal) and Oltenia (Romania).



01/07/2013-
30/06/2016

Enrico Cioni

Workshop agenda – Dialogue session



- The level of maturity of the technology for the deployment of Electromobility in Europe;
- Identification of research gaps and needs for H2020;
- Gaps on legislation for wide deployment of Electromobility;
- Benefits from the creation of synergies between European R&D Projects;
- Breakthroughs, critical bottlenecks, integration issues;
- Interoperability issues;
- Ways to accelerate the large scale deployment of specific electric vehicle categories or applications, for example city buses and taxis?



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for future electric vehicles

Thank you!



Dr. Angelos Amditis

- Research Director ICCS
- FABRIC coordinator

