

Abstract

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Organisation : B.A.U.M. / INEM

Short description:

Sustainability Consulting for Enterprises, Municipalities, Regions and Governments; International Projects

International Network to promote sustainability in business organisations.

Presentation title: E-mobility, renewables and smart grids

Executive Summary of your Abstract:

Renewable energies need smart grids. Smart grids need storages such as the batteries of electric cars. Electric mobility creates better living places and new income with sustainable products and services. Information and communication technology is the key to use these chances.

Abstract:

Introduction of renewable energies in a large scale demands smarter electric grids. E-Energy is a German research, development and deployment programme to develop key technology for a smart grid. Such solutions will allow for a balance between volatile power generation and fluctuating power consumption. ICT modules and a set of new services will establish an "Internet of Energy" which will considerably ease and speed up the information, communication and transaction processes on the electricity markets. E-Energy technology will also allow to intelligently monitor, control and regulate the technical energy infrastructure, and link this infrastructure to electronic marketplaces.

Smart grid and smart home technology will allow to control energy consumption of all types of electricity consumers. Electric cars will offer the best opportunities for demand side management. They provide the flexibility to quickly absorb energy from intermitting sources, store it for mobility purposes or send it back to the electric grid. In that sense electric vehicles leverage the introduction of renewables while reducing direct emissions in critical urban areas. For rural areas electric mobility triggers new intermodal mobility patterns and open the door for new dispersed value creation - in mobility and energy production

Resumé: Ludwig Karg graduated with a master (Dipl. Inf. univ.) in Computer Sciences at the Technical University of Munich (1981). He gained practical experience in software engineering and held German and international positions in Intel Corp. for multimedia and network products. He is Managing Director of B.A.U.M. Consult GmbH (since 1993) and Chairman of INEM (International Network of Environmental Management). Mr. Karg led various research and development projects on sustainability and renewable energy usage in enterprises, municipalities and regions. Since 2008 Mr. Karg heads a consortium of researchers, knowledge managers and communication specialists to manage and support the German E-Energy and ICT for Electromobility programs..

Recommended reading: www.e-energy.de/en ; www.ikt-em.de/en ; www.baumgroup.de