

Press release

Swiss companies join European consortium on energy efficiency

Lower electricity bills, reductions in carbon dioxide emissions and fuel costs

Sion/Neuchâtel, 14 October 2014 – Six Swiss companies contribute to a recently launched European research project that will develop a centralized system for Demand Response service provisioning based on aggregation, forecasting, and scheduling of electricity consumption. The project, called SEMIAH, has been granted €3.7 million from the European Union, and will last three years.

Imagine houses capable of shifting their energy consumption from high energy-consuming loads to off-peak periods with high generation of electricity from renewable energy sources. This would lower electricity bills, improve the integration of renewable energy sources, and offer higher stability of the electricity grid. The benefits would go to residential customers, energy utilities and society in general through savings in carbon dioxide emissions and fuel costs as well as reduced investments in distribution grid expansions and electricity peak generation plants.

The EU's Seventh Framework Programme (FP7) project "Scalable Energy Management Infrastructure for Aggregation of Households (SEMIAH)" has been launched to reach precisely these goals. The consortium behind the SEMIAH project aims to pursue a major technological, scientific and commercial breakthrough by developing a novel ICT infrastructure for the implementation of demand response in households and to increase energy efficiency. The smart grid research underpinning the project is not only for Europe but for the entire world, enabling scientific communities to work together supporting individual collaborative initiatives in ways that up until now were unthinkable.

The project's innovative approach is based on the development of an open framework that will promote an environment for the deployment of smart grid services for households. A centralized system for demand response service provisioning based on aggregation, forecasting and scheduling of electricity consumption will be developed. Furthermore, the project delivers a secure demand response solution for control of electrical loads in households at a competitive price, supported by new business models that provide incentives and benefits for players in the electricity market and residential customers.

Six Swiss companies participate in the SEMIAH consortium of twelve partners from four European countries. The partners have a diverse background in ICT, energy, and telecommunications and jointly possess the technological skills and competence needed to overcome the identified challenges and to drive this ambitious project to achieve successful results. From ICT: Aarhus University (DK), **Centre Suisse d'Electronique et de Microtechnique CSEM (CH)**, University of Agder (NO), and **Haute Ecole Spécialisée de Suisse Occidentale (CH)**. From energy: Fraunhofer IWES (DE), Agder Energi Nett (NO), **SEIC Teledis (CH)**, **EnAlpin (CH)**, **Misurio (CH)**, and Develco Products (DK). From telecommunications: Devoteam Solutions (NO) and **netplus.ch (CH)**.

*Project at a Glance

Project acronym: SEMIAH
Project title: Scalable Energy Management Infrastructure for Aggregation of Households
Starting date: March 1, 2014
Duration in months: 36
Funding: € 3,763,688.00
Funding scheme: Collaborative project
Call (part) identifier: FP7-ICT-2013-11
Work program topic addressed:
•Challenge: 6: ICT for a low carbon economy
•Objective: ICT-2013.6.1 Smart Energy Grids
•Target outcome: A scalable ICT infrastructure to control electricity consumption from household appliances in an incentive-based demand response program.
Coordinating person: Rune Hylsberg Jacobsen, rjh@eng.au.dk, Department of Engineering, Aarhus University (DK)
Project website: <http://www.semiah.eu>

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Additional information

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CSEM, founded in 1984, is a private research and development center specializing in microtechnology, nanotechnology, microelectronics, systems engineering, photovoltaics, and communications technologies. Over 400 highly qualified and specialized employees from various scientific and technical disciplines work for CSEM in Neuchâtel, Zurich, Muttenz, Alpnach, and Landquart. Further information is available at www.csem.ch

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The SEIC-TELEDIS Group is one of the canton's leading energy corporations and the top name in Valais in supplying multimedia products. It supports and develops the production of highly indigenous renewable energy. Its clients are all already supplied with green energy and can choose the current of indigenous origin exclusively. The Group also offers innovative products for energy efficiency and reducing electricity consumption in homes. Further information is available at www.seic-teledis.ch

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EnAlpin AG is involved at every step of the value creation chain for electrical energy, from production via distribution and trade to supply. The company provides additional services for engineering, contracting and energy efficiency solutions. Electricity is generated exclusively from renewable energies, largely from hydroelectric power and, currently to a lesser extent, from solar and wind energy. The aim is to increase commitment to regenerative and environmentally friendly energy sources. EnAlpin AG is focused on working as a collaborative partnership with its clients. Its main partners in distribution and supply are the local municipal energy supply companies. Further information is available at www.enalpin.com

