THE ENERGY INTERNET

Project Description

This project research will focus on models, methods and tools that will enable a new level of intelligence and effectiveness in IT infrastructures for a user-interactive energy system. More specifically, advanced IoT-based structures, algorithms, and functionalities will be developed to initially interact with the surrounding environment in terms of sensing and metering (e.g., electricity, heat and water in case of Denmark), then processing the information to extract knowledge for more efficient data management and transmission and eventually optimizing energy efficiency in both domestic supply and demand sides.

Research Aspects

The overall project time frame is 3 years starting from February 1st, 2017. Theoretical aspects of the project will be developed in cooperation with partners from academic institutions in USA, China, and Korea. The research plan will be also structured into three main work packages (WPs), defined as follows: Architectural reference model for the interoperability of IoT systems, Mechanisms for efficient integration of IoT into the service layer of the future smartgrid, Implementation of smart energy management use cases demonstrating the benefits of the developed architecture



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