About the Project

The SmartHouse/SmartGrid project sets out to validate and test how **ICT-enabled collaborative technical-commercial aggregations of Smart Houses** provide an essential step to achieve the needed **radically higher levels of energy efficiency** in Europe.

See: The SmartHouse/SmartGrid Vision

Our Mission

Improving energy efficiency, increasing the penetration of renewable energies, and diversifying and decentralising Europe's energy mix - these are the three goals that the SmartHouse/SmartGrid project is heading towards.

ICT will play a key role in the transformation of the electricity sector, enabling it to cope with more decentralized and renewable generation efficiently.

The energy distribution of today only knows one direction from few centralised power plants to millions of users, while the energy distribution of the future will be closer to a community based model, with energy and information flowing from thousands of decentralised power systems to millions of users.

The SmartHouse/SmartGrid concepts will built on

- available open industry standards from both ICT and energy worlds, and
- communication and computing capabilities that are already in widespread use in mainstream home and working environments

On this basis, the project will define a roadmap to mass application. Only by considering the aggregated network level of smart houses managed by intelligent networked ICT for scale and flexibility, one is able to achieve the quantum leap in energy efficiency and sustainability that the EU's "20% by 2020" objectives call for.

Germany, The Netherlands, Greece: three field tests

The SmartHouse/SmartGrid technology will be field tested in three different countries, delivering proof of concept of a specific aspect of the new technology:

- 1. The capability to handle the large-scale communication, negotiation and information exchange between many thousands of smart energy devices at the same time (Netherlands).
- 2. The capability to intelligently interact with the customer (such as home owners) and deliver optimal home energy management as a response (Germany).
- 3. The capability to control smart energy devices in a fully decentralized and bottom-up way such that optimum energy efficiency at the aggregate level is achieved, together with higher security of supply levels for the end-user. (Greece).

See: Field Test Descriptions

Distinction

The SmartHouse/SmartGrid project has been one of the finalists for the Best ICT4EE Project Award 2010, selected out of 39 research projects.

