

## Case Study S3C

### EnergiUdsigten

---

#### S3C related keywords:

- Demand response
- End user awareness
- End user flexibility

**“Technology can help end users to increase their flexibility”**

### Project Summary

The project EnergiUdsigten involved a group of about 500 households in the Southern and South Western part of Jutland (Denmark) in the years 2007-2009: all of them were equipped with smart meters measuring their consumption on an hourly basis.

During the course of the project, the following measures were implemented in order to assess their influence on demand response or price flexibility for electricity consumption in the households:

- A forecast of the energy spot market prices for the 36 following hours, shown on the website. The energy forecast was also broadcasted on a regional TV station's news programme as part of the weather forecast during a period of 3 months
- Media campaigns in TV, radio and on the internet
- Spot contracts
- Development of a tool called SEE1, a box indicating the relative electricity price level per hour through 3 different colours, which made people aware of their consumption and the development of electricity prices in the coming hours

The project analysis included comparisons of load distribution curves combined with modelling to compensate for weather conditions among end users. Besides, surveys and focus groups were used to assess end users' attitude and knowledge about demand response.

### What sets this project apart from other Smart Grid projects?

The project gave a comprehensive picture about demand-response in households and quantitatively determined its potential and also tested certain mechanisms to encourage and stimulate the demand-response. The field testing of these mechanisms represents an added value which led to the evaluation of the impact of demand-response policies on the end users.

### What happened?

Results from the project showed that during the pilot period, the end users' knowledge on electricity markets, electricity prices and the load of the electrical system was raised. Interest for demand response did not increase in general, but it increased in the group which entered spot contracts. This group expected to save money through their new contracts but didn't take any actions to check the hourly electricity price before receiving the SEE1 tool. The SEE1 tool was shown to have a strong impact on end users' awareness of electricity prices



as well as their activities related flexibility in their consumption, thus showing that technology can be really helpful to increase customers' engagement.

## **Further information / Contact**

Contact S3C Consortium:

Simone Maggiore (R.S.E. Ricerca sul Sistema Energetico)

E-Mail: [simone.maggiore@rse-web.it](mailto:simone.maggiore@rse-web.it)