Energy Savings from Intelligent Metering and Behavioural Change

INTELLIGENT METERING

Backed by estimates suggesting that energy savings of up to 30% could be achieved by combining intelligent metering with behavioural change among occupants, the INTELLIGENT METERING partners in the United Kingdom, Austria, Denmark and Germany set themselves the task of improving the energy consumption of some of their public buildings. The consumption of almost 70 buildings was made available on-line in graphic form in order to give occupants an idea of consumption trends. Via training sessions, the building users were shown the impact of their behaviour which was immediately and visibly demonstrated on their computer screens by the intelligent metering system.

Results

- Some 70 public sector buildings (offices, schools, sports facilities and community centres) in four European countries had automatic remote monitoring of energy and/or water consumption installed. All participant buildings saw substantial savings, though 30% in some cases proved too optimistic.
- Over 100 training sessions took place with over 600 people trained.
- The participants discovered, however, that the beneficial effects of training wear off after about nine months. A major recommendation is that training be repeated annually.
- A roadmap for intelligent metering usage and training was developed, with case studies also produced for further guidance. Follow the path to energy savings by downloading the information which is available on-line.
- The communities involved continue their efforts in their public buildings, whilst new attempts to replicate success are being made with a further action, aim4smes, oriented towards small and medium sized enterprises.

Lesson learned

- It has been possible to collect half hourly energy and water consumption data for up to 70 public sector buildings (e.g. offices, schools, sports centres, and community centres) in the 4 European countries in the project
- Initial preparation work has ensured that data from the different intelligent metering data collection systems being used is in the required format to be transferred to computer analysis software and displayed graphically on the project website
- The data is helping with the use of a training package, which has been developed by a professional educator for use with occupants of the buildings using intelligent metering

Partners and coordinator

Leicester City Council [1]	United Kingdom
Energieagentur der Regionen - Waldviertel [2]	Austria
Sonnenplatz Großschönau GmbH [3]	Austria
County of South Jutland [4]	Denmark
Esbensen Raadgivende Ingenioerer A/S [5]	Denmark
ENERGIE 2000 e.V. Energieagentur im Landkreis Kassel [6]	Germany
IT Power Limited [7]	United Kingdom

Contact

Leicester City Council
United Kingdom

Contact point

Name: Stewart Conway

E-mail: stewart.conway@leicester.gov.uk

Tel: 0044 116 299 5128

Name: Nick Morris

E-mail: Nick.Morris@leicester.gov.uk

Tel: +44 116 299 5123

Budget

Overall budget: 858.814,00 € (EU contribution: 50,00 %)

Key documents

- Intelligent Metering: How is it done? [8]
  PDF 1.92 MB

In brief

Sector: Buildings

Duration: *01/01/2005* to *31/12/2006*

Contract number: EISAV/EIE/04/107/2004

Website: http://www.intelmeter.com

Tags:

building

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- [**CHECK IT OUT!** [16]] Check and improve the energy performance of schools and disseminate best...
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- [**EPBD CA III** [38]] EPBD Concerted Action III (2011-2015)
- [**EPEE** [39]] European fuel Poverty and Energy Efficiency
- [**EULEB** [40]] European High Quality and Low Energy Architecture
- [**ENFORCE** [41]] European Network for the Energy Performance Certification of Buildings
- [**E-SEAP** [42]] European Sustainable Energy Award for Prisons
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Source URL: https://ec.europa.eu/energy/intelligent/projects/en/projects/intelligent-metering

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