eceee 2007 Summer Study

Panel 3: Local and regional activities (Close to the action)

Energy savings from intelligent metering and behavioural change in local and regional public sector buildings

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Project partners

Co-ordinator:
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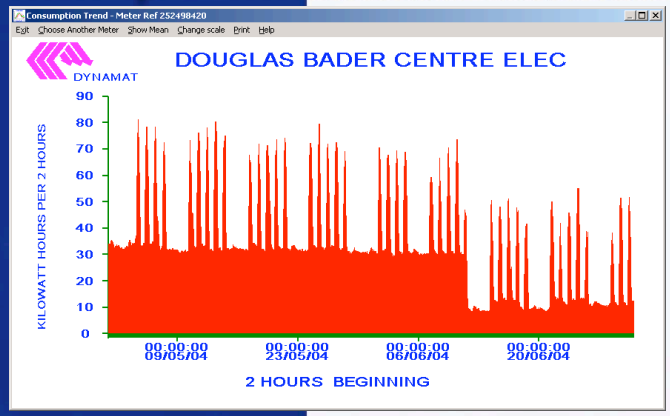
Partners:
County of South Jutland (Denmark)
ENERGIE 2000 e.V.(Germany)
Energieagentur Waldviertel (Austria)
Esbensen (Denmark)
IT Power Ltd (UK)
Sonnenplatz Großschönau GmbH (Austria)

Project website:
www.intelmeter.com

Supported by
Intelligent Energy Europe

Introduction, aims and objectives



Intelligent metering analyses half hourly monitored data and can be used to help to identify activities to change the behaviour of building owners and tenants resulting in energy and water savings.

- The project has aimed to demonstrate and promote the savings available from the use of intelligent metering and training occupants in public buildings and to show that these savings can be achieved at little, or no, additional cost.
- The overall objective of the project has been to maximise the energy savings available across Europe through the use of intelligent metering and behavioural changes of building occupants.

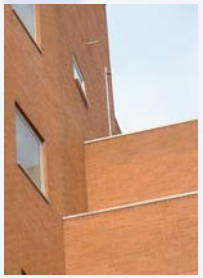
What is Intelligent Metering?

Intelligent Metering

Meters

Data Bird
Local Logger

Radio
Antenna

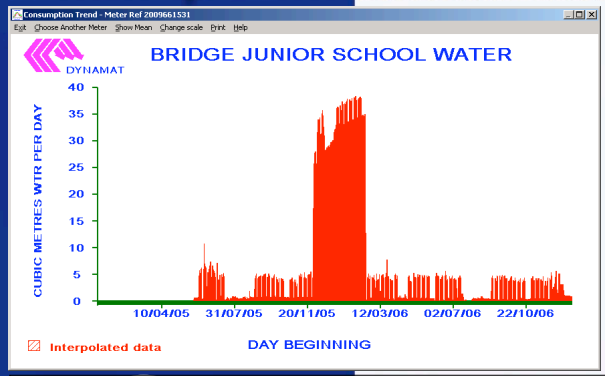


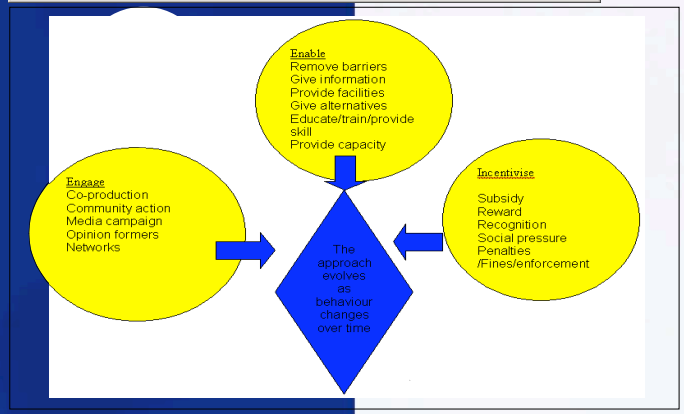
Computer

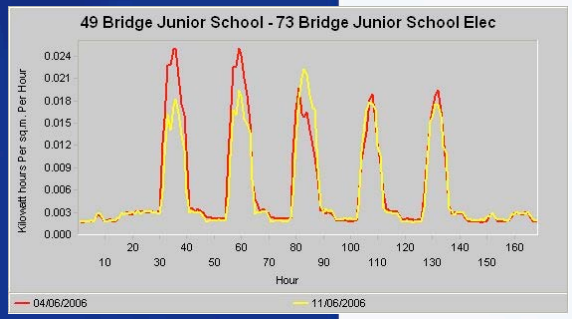
Modem

Central Receiver /
Data Logger

Activities







- Intelligent metering used to obtain half hourly energy and water consumption data for selected local public buildings
- Energy and water use in local authority buildings including offices, schools, sports/leisure facilities and community centres monitored
- Data processed to identify actions and associated savings
- Training provided to the building users and results of the training analysed

Results

- Intelligent metering of about 70 public buildings
- Energy and water savings from the use of intelligent metering and behavioural change in public buildings
- Building occupants in monitored buildings trained in energy efficiency
- Best practice methodology for intelligent metering
- Wider understanding and knowledge of the intelligent metering approach
- Framework for ongoing training

Conclusions

- Savings have been achieved from the intelligent metering of energy and water consumption and from behavioural change of building users.
- It is possible to use intelligent metering information to help to quantify savings over time.
- The approach has good potential for replication in other local and regional public buildings to help to achieve energy and water savings.

Discussion points

Intelligent Metering

- Experiences elsewhere with detailed energy/water monitoring for local/regional public buildings?
- Barriers and success factors for energy and water savings from intelligent metering and behavioural change?