



Project Fact Sheet

Updated: May 2010

Automatic Intelligent Metering For Small and Medium-sized Businesses (aIM 4 SME's)

Programme area:	SAVE, Innovative Approaches in Industry
Status:	Completed
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Partners:	Leicester City Council (Leicester Energy Agency), UK De Montfort University, UK Energy Control Group Ltd, UK Sonnenplatz Großschönau GmbH, Austria Energieagentur der Regionen, Austria Association of Municipalities Polish Network "Energie Cites", Poland Instituto de Engenharia Mecânica – polo IST (IDMEC), Portugal LABELEC- EDP Inovação, Portugal Csanády & Partners, Hungary
Website:	www.aim4smes.com
Objective:	Demonstrate the potential for energy savings by using automatic intelligent metering and increase its uptake by SME's
Benefits:	Engagement with SME's to further the reduction of carbon emissions
Keywords:	Automatic energy monitoring Bureau service Training
Duration:	12/2007 – 03/2010
Budget:	€ 865,668 (EU contribution: 50%)
Contract number:	EIE/07/136/SI2.466711



Short description

With rising fuel prices there is a need for small to medium sized businesses (SMEs) to have access to independent energy efficiency advice and training in order to reduce costs to help maintain their competitiveness. The project involves supporting small/medium businesses to use automatic detailed monitoring and targeting technology (intelligent metering). The detailed metering is being established for a range of business types and sizes in the small/ medium business sector and the resulting detailed energy and water use data will be analysed to identify energy saving opportunities. This information will help with providing energy awareness training to staff of the business, and in providing any on site energy survey. It is intended that the training will form part of certified training programme, and the training will give staff the ability to continue to analyse the data themselves beyond the duration of the project.

Expected and/or achieved results

- ◆ Automatically monitor energy (electricity, gas, heat, etc.) and water data in 75-100 small/medium businesses (SMEs) from a range of sectors (manufacturing, commercial, etc.) in 5 different European countries.
- ◆ Ability of businesses to analyse and use energy data
- ◆ Train building users in energy efficiency with relevance to their own building

- ◆ Increased awareness by SMEs of automatic intelligent metering, its applications, benefits and potential for savings.
- ◆ Energy and CO₂ savings of about 10-25% in participating businesses.

Lessons learnt

Engaging SMEs and Setting Up Metering

- Many SMEs were unaware of the concept of intelligent metering and how it could benefit their business.
- SMEs need to be convinced by examples of best practice e.g. intelligent metering producing savings in SMEs of similar size or similar sector.
- SMEs are discouraged by the financial barrier presented by installation costs.
- Having the support of local utility companies is a valuable way of setting up intelligent metering in SMEs at no cost to SMEs.
- Many of the grants currently available do not fund the actual installation of metering technology.
- Many SMEs believe that significant savings cannot be achieved by targeting the low hanging fruit. They feel that significant investment is required to produce savings. Most SMEs are pleasantly surprised by the level and speed in which savings are noted by low cost or no cost measures such as better housekeeping.

Analysis of Data

- There are various ways in which the data can be analysed. What is important is that the analysis is clear and simple so that the SME can fully understand it.
- SMEs prefer simple charts that are easy to understand and easy to explain to other members.
- Data alone is not enough, analysis is key. Good analysis is only possible through a good understanding of the SME and its activity.
- SMEs value having data analysed for them as they data analysis as a time consuming exercise.

Bureau Service & Training

- Bureau Service and training need to be tailored to the SME. They need to focus around the needs and working pattern of the SME.
- Bureau Service can be delivered in various different forms including written reports, visits, telephone calls and emails.
- Using alarm limits is a useful way of avoiding inefficient use of energy and allows for the identification of problems.
- The training/bureau service needs to link in to the initial reasons why the SME joined the project e.g. financial savings.
- There needs to be awareness of local and regional issues which should be incorporated into the training.
- Training needs to be continual to avoid the SME going back to old habits.
- Bureau service links and training are the catalyst for bringing about any change. They form the link between the data and savings.
- Bureau service which allows communication with a particular individual in the SME allows for ownership and accountability towards consumption reductions and savings within the SME.
- Local knowledge and local language are crucial to good bureau service and training. Furthermore they ensure action as the service is seen to be tailored and specialised to the needs of the SME.

Overall

- Significant energy consumption, financial and carbon savings are possible in SMEs from the usage of intelligent metering.
- Low hanging fruit can produce noticeable savings quickly and easily.
- SMEs lack time and resources to analyse data but are quick to act on recommendations made based on analysis of their data.