



Improving the energy performance of municipal buildings and installations, the natural starting point for continuous improvement, cost- and energy efficiency.

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PATHWAYS TO RENEWABLE AND EFFICIENT ENERGY SYSTEMS

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## The SEC-BENCH project

**Duration:** November 2007 – April 2010

**Budget:** €838.669

**EU contribution:** €419.334

**Contract number:** EIE/07/067/SI2.466263

**Web-site:** <http://www.sec-bench.eu>



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## SEC-BENCH : Our main hypothesis

- Sustainable Energy Action Planning tend to be general and cover all the sectors in the municipality.
- The logical starting point for implementation is the sector the municipalities control themselves, namely their own building stock. If this sector is difficult, then what about the rest??
- Municipalities must get a better understanding of the energy performance in each and every one of their own buildings. The consequence is that they need to collect and analyse energy data from all their buildings - individually.



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## SEC-BENCH : Our main aim

- The SEC-BENCH project has aimed to develop a web-based benchmark system that is based on actual energy consumption figures from individual municipal buildings.
- Benchmarking can help the municipalities to realise and better understand the potential for energy and cost savings in each of their own buildings, and make it easier to realise these potentials in a prioritized manner.



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## SEC-BENCH : Our main steps

- Establishment and/or operation of energy networks between municipalities
- Carry out pilot energy and climate plans, with a main focus on municipal buildings
- Development of energy performance indicators
- Development of a web-based benchmarking scheme
- A series of dissemination activities to involve all relevant stakeholders at local, regional, national and international level.



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## Our challenges (and unforeseen help)

### Organisational challenges:

- Presenting and “selling” the concept to the pilot municipalities, motivating the Mayors
- Getting real access to existing networks for maximum synergy
- The launching of the Covenant of Mayors changed this completely, and the SEC-BENCH (and similar) projects are suddenly of great interest.

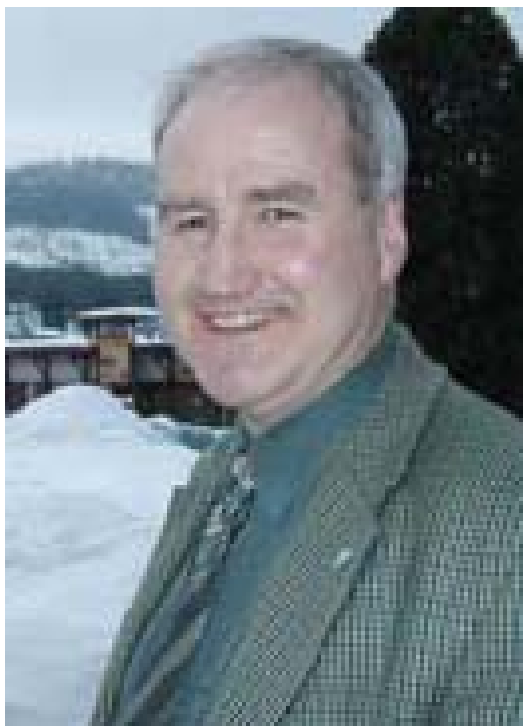
### Technical challenges/barriers:

- Lack of qualified staff and routines for data collection
- Lack of meters in buildings, limited understanding of energy flows
- Lack of in-house demand for data



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## Making the difference



Trying to “sell” benchmarking will not make sense unless the municipality is already active in energy matters, SEAP development, sustainable tourism etc. A motivated Mayor will make a difference.

Two (or more) motivated Mayors working together in a network will make even more of a difference !



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## Frequency and staff for data collection



Firstly, there needs to be staff to physically collect energy data on a sufficiently frequent basis. To stay hands-on with the energy performance of every building in a municipality at all times, such data should ideally be collected at least once per day!! Obviously, the long term answer is to install smart meters and automated Energy Monitoring Systems (EMS) ICP PSP Support progr.

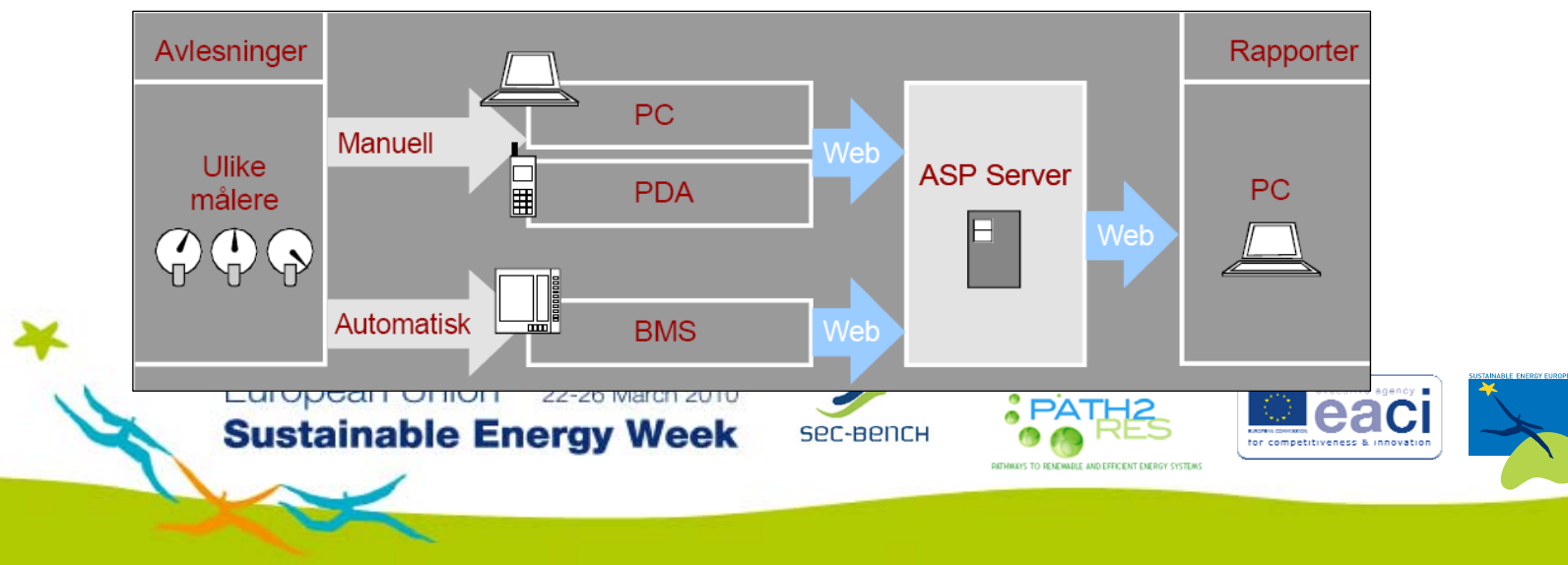
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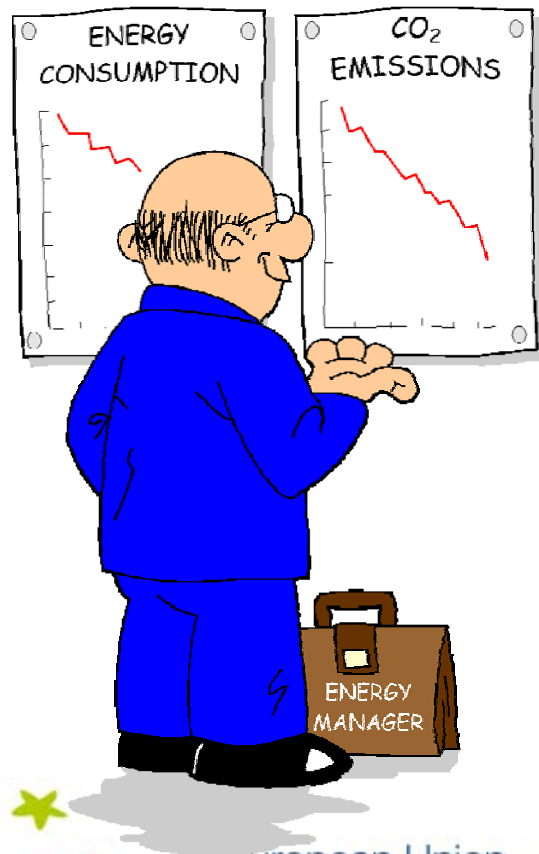
## Energy meters and technical know-how

Secondly, there is a need for more meters to give a correct picture of the system borders and energy flows in the buildings. Most municipalities require technical assistance to define system borders and map the energy flows. However, this is a one-off exercise which normally should be covered by a traditional energy audit.



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## In-house demand for data



There is a need for in-house knowledge in the municipalities to interpret the collected data and to present them to the management level, which of course is a precondition for taking necessary, corrective actions. The SEC-BENCH benchmarking system presents a number of useful and easy to understand indicators which can help decision-makers understand and act.

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## Concluding remarks

- In order to stimulate a large scale, dynamic and constant improvement of energy performance in municipal buildings in Europe, important barriers need to be removed. A useful start would be to stimulate all European municipalities to introduce Energy Management in accordance with EN-16001. A crucial part will be the availability and – quality of bottom-up energy data.



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# Thank you!

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## Main discussion points (in line with the questionnaire)

- Is there a need for a European, bottom-up benchmarking tool for municipal buildings?
- Possible approaches to solve the challenge of data collection?
- Do municipalities have the means and know-how to follow-up the energy performance of their own buildings?



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