

AFTER PROJECT

**Cost Optimum and Standard Solutions for Maintenance
and Management of the Social Housing Stock**

Dublin, 22 May 2013 – Shelter Conference

AFTER project to reach 20% target



In the last five years, Social Housing Organizations have played an exemplary role in experimenting energy saving measures. This commitment is a major resource that has to be diffused and optimized. AFTER promotes and develops this existing knowledge trying to assess solutions and to improve them. Energy efficiency can't focus only on new constructions. Management and maintenance are direct strategies to improve day by day the energy efficiency of buildings.

Focus

AFTER project partners wanted to verify the actual efficiency of the **energy savings measures** implemented during the **last 5 years**. Beyond the major investments, AFTER project aims to **increase the contribution of Operation and Management** of the stock (including measures focusing on tenants) to the energy efficiency policy of our companies.

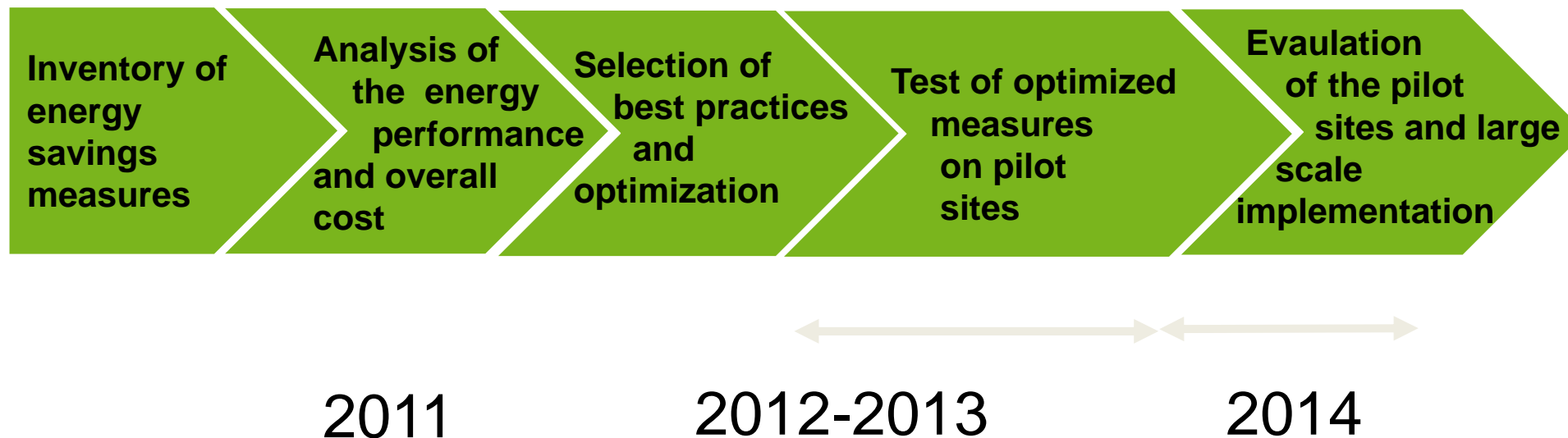
Objectives

- **IMPROVE MANAGEMENT** Improving Social Housing Organisations' awareness and knowledge on new and existing energy saving measures.
- **SAVE ENERGY** Reducing the short-term energy consumption of buildings and improving management of operations and running maintenance.
- **INCREASE TENANTS AWARENESS** Increasing tenants' involvement in reducing energy consumption thanks to a better adaptation of technical solutions to tenants' behaviour.
- **LINK ENERGY AND ECONOMIC PERFORMANCE** Developing the Social Housing Organization asset strategies linking energy efficiency and low-cost investment.

A three phases approach

- Retrospective analysis of the actual efficiency of energy savings measures implemented during the 5 last years (technical & financial performance, satisfaction of tenants).
- Selection and improvement of the best practices regarding operation and maintenance.
- Testing of optimized solutions on pilot sites, monitoring of the solutions, dissemination of the best solutions.

Project Plan



Partners & means

18 partners from 6 countries:
Czech Republic, Denmark, France,
Germany, Italy, and Slovenia

2,7 M€ budget granted for 75%
by the European Commission



Actions

- 18 pre-tested standard energy saving measures per country targeting an immediate energy reduction of 3 to 7,5%.
- 18 pilot sites per country to demonstrate the feasibility and efficiency of well-developed energy saving measures.

The pilot sites are the laboratory to quantify the efficiency and cost of every energy saving measure employed, and improve them. They allow the proposed technical solutions to be confronted with a real integration by housing providers and tenants.

After pilot sites (map to be updated!!!)



Main energy saving measures studied

● Operating Management

- JABURKOVE- Czech Republic
- H20 COLLEGE – Denmark
- RAMEAUX – France

● Running Maintenance

- MLADI - Czech Republic
- RIESI – Italy

● System Replacement

- AIGUILLADE – France
- HEINHEIMER – Germany
- PASSONI - Italy

● Recently refurbished buildings

- DESTINNOVE – Czech Republic
- LYSTRUP – Denmark
- BERGSON – France
- MATHILDEN – Germany
- PICCO - Italy

● New low energy Building

- MARSLET – Denmark
- SELBERT - Germany

Measures: Operating management



JABURKOVE – Czech Republic - 36 apartments.

- **How to improve the efficiency of a common web information tool about energy consumptions thanks to direct communication towards tenants?**
- **Type of ESM:** Web portal
- **Optimization Suggestion proposed:**
Web portal use and impact improved thanks to direct communication with the tenants: certificates in the entrance, visualization tools, personal advising for the most energy-consuming tenants by the staff of the SHO, competition and pedagogic approach of the information.

Measures: Running maintenance

RIESI – Orbassano - Italy - 51 apartments.



- **How to guarantee the thermal comfort and the economic performance of a heating system for tenants thanks to a better calibration of its outputs?**
- **Type of ESM:** Hydraulic balancing of the heating system.
- **Optimization Suggestion proposed:**
Regulation of the temperature settings and calibration of the heating curves (slop and level, from 0.8 point to 2) once a month.

Measures: System Replacement



AIGUILLADE – CLERMONT-FERRAND - France - 196 apartments.

- **How to couple and optimize environmental and economic efficiency in a renewable energy-based heating system (wood)?**
- **Type of ESM:** Connexion to a district heating system (80% wood)
- **Optimization Suggestion proposed:**
- Modification of the requested heat flow after a refurbishment of the building in order to maximize the economic efficiency reducing the standing charge linked to the access of the district heating system.

Measures: Recently refurbished buildings

LYSTRUP – Denmark - 14 apartments



- **How to reduce the difference between lowest and highest energy consumptions in a low-energy building improving the information delivered** (special target: students)
- **Type of ESM:** Global retrofitting to low-energy building
- **Optimization Suggestion proposed:**
Separation between the heating recovering system and the underfloor heating system adding a control valve for the heating coil of the ventilation system in order to make its control independent (to save energy at the beginning and at the end of the heating season).

Measures: New low energy Building



SELBERT – DARMSTADT, Germany - 44 apartments.

- **How to optimize the electric consumption regarding DHW in new Low-energy building adjusting the running time of the circulation pump?**
- **Type of ESM:** New construction in Passiv House Standard.
- **Optimization Suggestion proposed:**
Hot water demand in relation to total heating demand is very high (50%). Check to what extent the circulation pump can be turned off, for example in the night time (heat losses are reduced significantly in the hot water pipes).

Partners

- To update with news partners!

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Thank you for your attention

<http://afterproject.eu/>