



Proposal/Contract no.: FP6-503186

16 May 2008

DEMOHOUSE

Design and Management Options for improving the energy performance of Housing

SPECIFIC TARGETED RESEARCH OR INNOVATION PROJECT

Thematic Priority 6

**Deliverable 8: Implementation and monitoring
First part: D8.1 Monitoring programme**

Due date of deliverable: October, 2006
Actual submission date: October 2007

Start date of project: October 18th, 2005

Duration: 4 years

Cenergia Energy Consultants
Peder Vejsig Pedersen

Executive Summary

The EU- Demohouse project is a specific targeted research and innovation project supported by the EU – 6th Framework programme. It started in October 2004 and is ongoing for 4 years until October 2008. Demohouse is here an acronym for Design and Management Options for Improving the Energy Performance of Housing. ECN from Holland is coordinator and there are realised demonstration projects in 5 countries – Denmark, Austria, Hungary, Spain and Greece, with main focus on housing renovation.

The main goal of WP2: “Generation of solutions and technical designs” which is coordinated by Cenergia from Denmark, is to assist with the development of new quality and value oriented design process in housing renovation projects in general and also in connection with the EU - Demohouse renovation projects.

It is envisaged that the energy monitoring programmes have a key role in evaluating the quality of the renovation projects. This report presents the foreseen energy monitoring programmes in all Demohouse renovation projects. The monitoring programme includes blower door and thermography tests as well as measuring the consumption of heat, electricity and water in renovated buildings. The monitored data is to be analysed and compared to design calculations for energy consumption prior the renovation. Renovation projects with renewable energy technologies have special programmes for monitoring of the energy production from renewable sources in addition to monitoring the actual energy consumption. Special tools such as BEMS, building energy management systems and the Energy Signature are also to be used to further analyse the energy consumption and examine the building functions in accordance with expectations and ambition of renovation.