

# **SECURING THE TAKE-OFF OF BUILDING ENERGY CERTIFICATION: CONCEPT AND PLANS OF THE EIE STABLE PROJECT**

I. Aho and T. Husu

*Motiva Oy  
PO Box 489, 00101 Helsinki, Finland*

## **ABSTRACT**

Market acceptance is one of the most crucial elements in developing and introducing energy certification of buildings on the European property market. In order to build a firm basis for market acceptance the needs and expectations of building owner target groups have to be identified and understood and schemes tailored to combine these needs with the energy policy targets the EPB Directive aims at. The EIE STABLE project is a structured action for identifying the needs and expectations of European building owners, formulating recommendations for taking these into account in national energy certification implementation and for communicating the potential benefits of energy certification to various client sectors.

## **KEYWORDS**

Energy certification, buildings, energy efficiency, market uptake

## **OVERVIEW OF THE STABLE PROJECT**

The STABLE project aims at launching a collaborative effort of national energy agencies and federations of building owners in order to establish a firm basis for market acceptance of building energy certification as defined in the Directive on the Energy Performance of Buildings.

The overall aim of this project is to secure the genuine market-driven take-off of building energy certification in the participating countries. This aim will be reached through the realisation of the following objectives:

1. Improve market attractiveness of energy certification through developing and disseminating customer quality requirements, related quality recommendations to programme managers and approaches for linking high energy performance with financial market incentives;
2. Increase the awareness and interest of European building owners by delivering a targeted information campaign towards major building owner sectors in participating and developing a generic structure and basic elements of a European energy certification campaign for further dissemination;
3. Increase the certification related competence and knowledge level of qualified energy auditors; and

#### 4. Transfer best practices on energy certification and building energy auditing between Member States (current, new and candidate)

Expected results of the action are the following:

- information on energy certification and related benefits provided directly to 2000 building owners and indirectly to 100 000 building owners;
- 2000 building energy auditors directly informed regarding energy certification and customer requirements;
- analysed and structured information on customer requirements provided to certification programme management organisations and national authorities in all participating countries.

These results will be achieved through the work of a strong consortium of national energy agencies and national federations of building, supported by selected consultants. Furthermore, dissemination support is provided by the European Property Federation (EPF) and the Union Internationale de la Propriete Immobiliere (UIPI), which enables the results of the project to be effectively disseminated throughout Europe beyond the countries represented in the consortium.

## **OVERVIEW OF THE WORK PROGRAMME**

The project is divided in two major phases, eight work packages (see figure 1) and a separate work package including coordination tasks and contractual requirements

### **Phase 1 : Analysis and Development**

The overall aim of the first phase is to gather and analyse information on

- existing energy audit schemes and their relation to planned and/or existing energy certification schemes;
- the practical requirements that the buildings and property market (owners) put on energy certification and related services; and
- potential ways in which energy certification could be linked with market financing mechanisms (mortgages, loans, rent structures, etc) and cooperation possibilities with financial institutions.

#### *Work Package 2: Classification framework for audit and certification schemes*

A classification framework and methodology of analysis is developed in order to facilitate data gathering, analysis, comparison and classification of energy audit and energy certification schemes implemented and planned in the participating countries.

The classification framework will capture the technical characteristics of audit and certification programme issues, such as comprehensiveness, scope, cost, auditor requirements, etc.

Necessary data on audit and certification programmes is gathered primarily on the basis of the results of previous SAVE projects (e.g. AUDIT I and II, BELAS, Europrosper, etc) and only when necessary by means of interviews and literature surveys complementing the information available from previous projects.

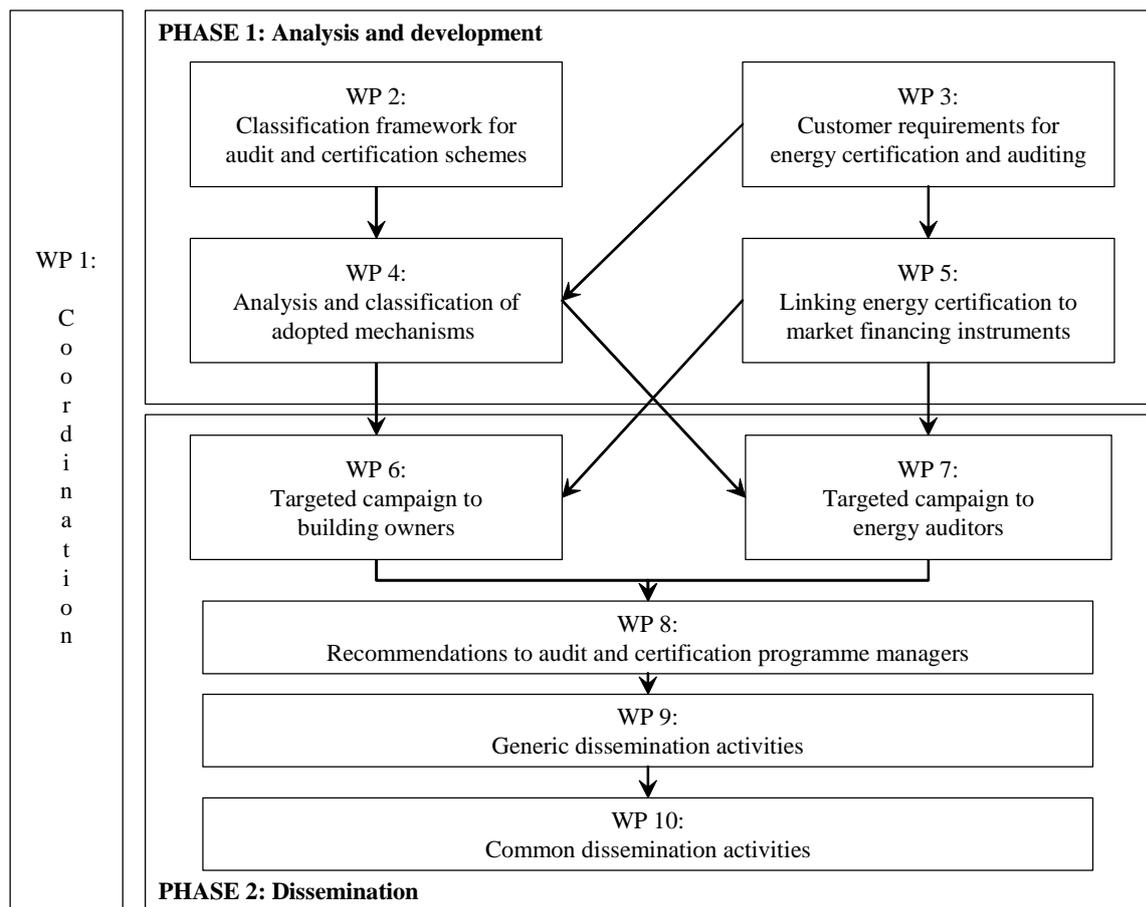


Figure 1. Structure of the STABLE project.

This work package produces a framework for use in analysing and classifying certification and audit systems adopted and/or being developed by Member States and Candidate Countries and documentation of basic data regarding energy certification and audit schemes in participating countries.

*Work package 3: Customer requirements for energy certification and auditing*

A www based survey is planned, designed and carried out

- on the requirements that building owners set on energy certification and audit services is planned, designed and carried out in participating countries; and
- in order to analyse how energy certification can stimulate building owners to take measures to improve the energy quality of their buildings.

Surveys are carried out in each participating country with a view of reaching a statistically meaningful number of building owners in order to reach relevant results and conclusions. The results of the survey and identified customer requirements are documented in national survey reports and compiled into an overall summary report.

Steps to be taken are identified for positioning the energy certificate in such a way that it will meet the defined consumer requirements. A step by step model is developed to effectively roll-out national EPBD/energy certification in such a way it will have market attractiveness and acceptance.

The target for survey coverage is set to be at least 100 building owners in each participating country. The survey has been opened during August 2005 and results are expected by the end of the year 2005.

*Work package 4: Analysis and classification of adopted mechanisms*

The information collected in work packages 2 and 3 is analysed and classified with a view on producing documentation of potential and adopted mechanisms for energy certification, their perceived quality in terms of responding to the requirements of building owners and potential benefits/drawbacks of the different approaches.

The results of the analysis serve as a starting point for the main activity, dissemination of information to relevant target groups.

The results will also be provided to the EPBD Concerted Action and to CEN TC89, WG4 (developing "Guidelines for developing certification schemes")

*Work package 5: Linking energy certification to market financing mechanisms*

A study will be carried out identifying financial instruments that can contribute to convincing or stimulating building owners to invest in energy efficiency measures recommended by auditors and included in the energy certificate recommendations.

The inventory comprises

1. An overview of the different approaches in the participating countries and the opportunities to link financial instruments, such as for example grants, mortgages and loans.
2. An overview and description of possibilities of financial products for commercial and financial organisations which will convince them to use an energy certificate in their day to day business and stimulate building owners to improve the energy quality of their homes and buildings.
3. An overview that will show the possibilities and benefits for building owners and social housing projects
4. In each country a workshop will be organised in which the results and information will be disseminated to the relevant stakeholders. The interaction and results from these workshops will be included into the project.
5. The work will be compiled into a report that will identify the possibilities and experiences per participating country and presented to the stakeholders
6. Information will become available through relevant communication channels such as websites etc.

Possible approaches for pilot studies include the following:

1. Linking the energy certificate or energy label of buildings/houses to the property tax, or make it one of the items in determining the value of the property concerned.
2. Linking it to the rental of a property.
3. Link it to mortgages in order to determine the height of the interest rate or the size of the loan someone gets
4. Link it to loans in general (e.g. obtain a lower interest rate) for actions to improve the energy quality of a property. This can be realized through a revolving fund construction.

5. Link it to a property index. During 2004 SenterNovem has facilitated a pilot study on linking the energy label to the Aedex/IPD index. This index is related to the English Investment Property Databank (IPD). There are already also French and Swedish equivalents.

Final decisions regarding which studies to launch will be taken during the autumn of 2005.

## **Phase 2. Dissemination**

Three targeted campaigns - one for building owners, one for energy audit professionals and one for energy audit and certification programme managers and/or authorities responsible for certification and audit programmes - are planned and designed on the basis of phase 1 and on the basis of results of both previous and on-going national and European EPBD implementation activities.

The campaigns will be tailored for each target group both in terms of content, form and scheduling. Follow-up and monitoring regarding the effectiveness and impacts of the campaigns will be established and monitoring data gathered and analysed.

The building owner and auditor campaigns are scheduled primarily for 2006 and contacts with programme managers for 2007.

### *Work package 6: Targeted campaign to building owners*

National dissemination plans are developed for raising the awareness of building owners in terms of energy certification and its benefits. The dissemination plans will include in minimum the following:

- targets and objectives
- selection of means and media for dissemination (seminars and events, printed media, electronic disseminations, etc)
- detailed implementation plans for each of the selected means; and
- plans for follow-up, monitoring and feedback

Implementation of the planned dissemination and campaign activities is carried out through cooperation of the national energy agency and building owner association partners. Monitoring data and feedback of building owners is systematically gathered throughout the implementation of the campaigns.

### *Work package 7: Targeted campaign to energy auditors*

Training and information session series are planned for energy auditors and other relevant technical experts in participating countries. The sessions will include themes such as:

- the objectives and nature of energy certification
- plans for implementation/established implementation mechanisms
- customer requirements and their implications to energy auditing and certification
- new and additional competence requirements to energy auditors
- etc

Implementation of the planned activities is carried out through cooperation of the national energy agency and building owner association partners. Monitoring data and feedback of the

trained professionals is systematically gathered throughout the implementation of the campaigns.

*Work package 8: Recommendations to audit and certification programme managers*

Based on the results of Work Packages 1-4 and on the feedback gained from work packages 5-6, recommendations are drafted for further development of energy certification and audit programmes from the points of view of

- building owners as customers to certification and auditing
- audit professionals as the central delivery vehicle
- best practices replicable transnationally
- etc

The recommendations are documented in both national recommendation reports and an overall summary for use in all participating countries as well as internationally. The recommendation documents are presented to national audit and certification management organisations and the governmental authorities responsible for the programmes.

*Work packages 9 and 10: Generic and common dissemination activities*

Overall dissemination activities include standard project communication (project web site at [stable.motiva.fi](http://stable.motiva.fi) and other means of communication), the development of a generic set of basic elements for use with dissemination and awareness campaigns on energy certification in countries not participating in the project, etc.

## **Progress made by August 2005**

Project management structure and procedures have been defined, documented and approved by partners. The management structure document has also been delivered to the EC.

Two project meetings have been arranged: the kick-off meeting in Helsinki, February 28 - March 1, 2005, and the 2nd project meeting in Athens, June 13-14, 2005. Minutes of the meetings have been prepared and made available to the partners and the EC.

Other management duties (contractual issues, prepayment management, contacts between the EC and the consortium, etc) have been performed when necessary and according to standard project management principles.

In Work Package 2 a background document describing the generic key elements of energy audit and certification schemes has been developed and discussed. The document serves both as a starting point for data gathering and analysis and as a definition document regarding terminology used and structure applied in the analysis of certification schemes.

A draft template for gathering data on certification schemes in participating and other EU countries has been developed. Responsibilities regarding data gathering have been agreed on by partners and preliminary data gathering has commenced, mainly on the basis of results of the previous SAVE Audit I and II projects and other information readily available. Full scale data gathering will commence at the EPBD CA meeting and AIVC/EPBD conference organised in September 2005 in Brussels; it is envisaged that the outcome of these events provides more concrete information on the status and contents of national implementation.

In Work Package 3 a www based questionnaire has been developed and discussed within the consortium. On the basis of these discussion a final version of the questionnaire has been developed and submitted to the EC and EPBD CA coordination for immediate comments and to the coordinators of other EPBD related EIE projects for information.

The questionnaire is being translated to the languages of participating countries and will be opened as the translations are made available. Partners have designed letters and e-mails to announce the questionnaire and are planning further steps to assure maximum response rates. The first language versions of the questionnaire have been opened in August. The questionnaire is implemented with a www based tool which produces basic analysis and reporting of responses automatically. This will also allow for segmentation of the answers by country, building owner group, etc.

Other Work Packages are still in their planning stages.

