

Søren Aggerholm
Danish Building Research
Institute, SBI
Denmark

www.buildingsplatform.org

European projects supporting the implementation of the Building's directive

The purpose of the paper is to help to identify European projects supporting the efficient implementation of the EPBD in practice in the member states and in the building branch. The most central projects are listed with a short indication of objectives and reference to further information.

1 > SAVE projects

In general SAVE projects in the frame of the Intelligent Energy - Europe programme are concerned with the improvement of energy efficiency and the rational use of energy, in particular in the building and industry sectors, including the preparation of legislative measures and their application.

In 2005 a significant number of projects were started to directly support in practice the efficient implementation of the EPBD (the Energy Performance of Buildings Directive). The projects cover most subjects of the EPBD: Energy requirement to new and existing buildings, Energy certification, Inspection of boilers and air-conditioning system. The core projects related to the EPBD are listed in Table 1 in the Appendix with a short description of objectives and for further information reference to the individual web page for each of the projects.

Also in 2006 a number of projects are launched having the focus to support the implementation of the EPBD. The objectives for these projects are given in Table 2 in the Appendix. The projects are still too new to have individual web sites.

Many of the other SAVE projects are also relevant to the implementation in the practise of the directive. Further information of all the SAVE projects started in 2005 and 2006 can be found on the web page

http://europa.eu.int/comm/energy/intelligent/projects/save_en.htm.

2 > Concerted action

The EPBD poses significant challenges for EU Members States in terms of the practical details of the transposition. The European Commission has consequently established initiatives to try to overcome these difficulties and move towards a certain degree of harmonisation on a voluntary basis. One of the main initiatives towards promoting the dialogue between the Members States is the Concerted Action (CA), funded by the 'Intelligent Energy-Europe' Program of DG TREN.

The CA-participants are the representatives of national governmental ministries or governmental affiliated institutions that are in charge of preparing the technical, legal and administrative framework for the transposition of the EPBD in their own country. The CA working plan is organized around a series of 8 meetings (from January 2005 to June 2007), bringing together the participants of 26 countries (24 Member States + Bulgaria and Norway - Missing only: Czech Republic and Luxemburg).

The objectives of the Concerted Action are given in Table 3 in the Appendix. Further information can be found on the web page www.epbd-ca.org.

3 > ECO Buildings

Eco-buildings is an energy demonstration initiative of the European Commission (DG TREN) within the sixth Framework Programme.

The Eco-buildings concept is expected to be the meeting point of short-term development and demonstration in order to support legislative and regulatory measures for energy efficiency and enhanced use of renewable energy solutions within the building sector, which goes beyond the EPBD

Eco-buildings projects aim at a new approach for the design, construction and operation of new and/or refurbished buildings, which is based on the best combination of the double approach: to reduce substantially, and if possible, to avoid demand for heating, cooling and lighting and to supply the necessary heating and cooling and lighting in the most efficient way and based as much as possible on renewable energy sources and polygeneration.

A common portal for the four Eco-buildings demonstration projects, <http://www.ecobuildings.info/>, provides common information on project development and links to the individual projects.

The EPBD Buildings Platform has been launched by the European Commission in the frame of the Intelligent Energy - Europe, 2003-2006 programme. It is managed by INIVE EEIG (www.inive.org), on behalf of Transport and Energy DG.

The information in this publication is subject to a Disclaimer and Copyright Notice; see http://www.buildingsplatform.org/legal_notices_en.html

© European Communities, 2006
Reproduction is authorised provided the source is acknowledged

APPENDIX

Table 1. SAVE projects in the frame of the Intelligent Energy - Europe programme started in 2005 having special focus on facilitating the efficient implementation of the EPBD.



[www.energyagency.at/\(en\)/projekte/auditac.htm](http://www.energyagency.at/(en)/projekte/auditac.htm)

AUDITAC: Field benchmarking and Market development for Audit methods in Air Conditioning

The objectives are:

- To accelerate the adoption of Air Conditioning inspection,
- To generate a sufficient number and variety of field demonstrations and benchmarks of inspections,
- To promote best practice examples and procedures in such audits and consequent retrofits.



<http://www.buildingdirective.org/>

BUDI: Pilot actions to develop a functioning market for energy performance certificates

The objectives are:

- Creating regional information and competency centres which will disseminate their practical experiences
- Carrying out pilot actions for two important target groups: public buildings and apartment blocks
- Supporting these target groups in the broader implementation of energy performance certificates through information, tools and advice
- Developing training for independent experts to assure a sufficient number of qualified experts (one training seminar per country)
- Developing guidelines, implementation and quality assurance procedures plus accreditation schemes
- Transferring the results and gained experiences to interested key actors in other regions in Europe



<http://www.eebd.org/>

EEBD: Electronic Energy Buildings Directive

The objective is:

- To develop a web-based dynamic vocational training tool. The training tool will provide building designers, managers and operators with a suitable means of obtaining the technical competence that allows them to better understand and use the EPBD and relevant national regulations, and to design, maintain and operate the buildings with higher energy efficiency



<http://www.enper-exist.com/>

ENPER-EXIST: Applying the EPBD to improve the Energy Performance Requirements to Existing buildings

The objectives are:

- To de-fragment technical work performed on existing buildings. Actions launched in CEN are de-fragmented but mainly focus on new buildings. On the other hand different projects on certification procedures are going in Europe but are not coordinated.
- To de-fragment work on legal, economical and organisational problems such as the analysis of certification on the market, the human capital and the national administrations.
- To achieve a better knowledge of the European building stock.
- To define a roadmap for future actions regarding existing buildings.



<http://www.epa-nr.org/>

EPA-NR: Energy Performance Assessment for Existing Non Residential Buildings

The objectives are:

- To provide a support platform that organises the implementation process for existing Non Residential building stock in an efficient and cost-effective way.
- To determine an energy performance certificate specifically designed for existing Non Residential buildings.
- To develop tools to perform the assessment of check lists, inspection protocol and a software package for the energy calculation.
- Pilot projects which will test the method and tools.
- Policy recommendations which will be provided to all levels of government across Europe.



EPLabel
<http://www.eplabel.org/>

EPLabel: A programme to deliver energy certificates for display in public buildings across Europe with a harmonising framework

The objectives are:

- Extending the proven methodology for energy certification of existing office buildings developed by the Europrosper project to other key non-domestic sectors which might fall under the "Public" building designation: higher education, schools, sports facilities, hospitals and other public health facilities, hotels and restaurants.
- Making the methodology applicable to and available in all EU Member States
- Establishing a delivery infrastructure including training schemes, quality assurance and a user-friendly web site which allows the method to be used readily, robustly and efficiently.
- Developing data processing proposals which support a process of "learning by doing", so that information collected using the certification system can track developments in buildings and as well as their energy performance, allowing techniques and benchmarks to be refined.

E-TOOL

E-TOOL: Energy-toolset for improving the energy performance of existing buildings

The objectives are:

- Benchmarking of the energy consumption of different main categories (age, type etc.) of existing buildings, making it possible to compare actual consumption against what could be expected
- Guidelines for typical energy saving measures including cost estimates for different classifications of existing buildings
- Energy performance requirements after energy retrofitting, for different categories of buildings.

impact

<http://www.senternovem.nl/impact>

impact: Improving energy Performance Assessment and Certification schemes by Tests

The objectives are:

- Test energy performance certification for existing buildings in practice in 6 pilot country
- Exchange experiences and success factors
- Derive recommendations for improvement of tools, certification schemes, training of experts and communication
- Support the EPBD implementation process in 6 countries
- Disseminate project results on a National and EU scale

STABLE

<http://stable.motiva.fi/>

STABLE: Securing The Take Up of Building Energy Certification by Improving Market Attractiveness through Building Owner Involvement

The objectives are:

- 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.
- 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.
- Increase the certification related competence and knowledge level of qualified energy auditors.
- Transfer best practices on energy certification and building energy auditing between Member States.



<http://www.display-campaign.org/>

TOWARDS CLASS A: Towards Class A - Municipal Buildings as Shining Examples

The objectives are:

- Extending the display of the performance of municipal buildings - in terms of energy consumption and CO₂ emissions - in more than 500 municipalities throughout Europe.
- Initiating and stimulating a certification of buildings process in municipalities.
- Encouraging municipalities to improve their building performance towards Class A so that they become "Shining examples".
- Making known existing "Shining example" buildings and the reasons for such a performance.
- Developing "How to become a shining example?" processes, by motivating municipalities, and allowing a gradual improvement towards certification.
- Stimulating communication and awareness raising campaigns at local level towards the general public from municipal "Shining examples".

Table 2. SAVE projects in the frame of the Intelligent Energy - Europe programme just started in 2006 having special focus on facilitating the efficient implementation of the EPBD.

ESAM: Energy Strategic Asset Management in Social Housing Operators in Europe

The objectives are:

- Define and plan long-term strategies for reaching the energy performance requirements of the EPBD. Given the lack of financial resources, these requirements have to be integrated in the existing maintenance and refurbishment strategies of Social Housing Operators.
- Assess an estate's energy situation and define what solutions would entail the highest level of energy saving.
- Implement an efficient co-operation with occupiers on energy saving, and with energy suppliers and public authorities on the management of energy in social housing. Co-operation can entail great savings both in terms of costs and energy consumptions.

RESHAPE: Retrofitting Social Housing and Active Preparation for EPBD

The objectives are:

- Accelerate the implementation of the EPBD by social housing actors in Europe
- To overcome barriers for refurbishment in the social housing sector by providing practical tools based on the opportunities of energy performance certification.
- Increase the awareness and change the attitude of social housing actors towards solutions for refurbishments.

Table 3. Objectives of the Concerted Action focusing on the EPBD.



<http://www.epbd-ca.org/>

EPBD CA

The objectives are:

- To discuss and to prepare a structure for the energy certification of buildings to maximize similarities and reduce the range of different options selected by the Member States
- To discuss and prepare a coherent basis for the methodologies for inspection of heating boilers and air-conditioning equipment
- To discuss and prepare ways to implement adequate schemes for accreditation of energy audit and inspection experts in Member States
- To discuss criteria for the implementation of common methodologies for calculation of the energy performance of buildings.