



Applying the EPBD to improve the Energy Performance Requirements to Existing Buildings – ENPER-EXIST

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Intern. conference on the transposition of the EPBD, 10-12 May 2006, Budapest including 2nd ENPER-EXIST workshop for further information see: www.trivent.hu

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Influences of ENPER-EXIST on CEN standards

In the previous period CEN has performed a huge job and produced a big set of EPBD standards. At this moment the draft EPBD standards are all ready (the so called prEN's) and have been subject of public enquiry. The technical committees of CEN are working now to incorporate the results of the public enquiry and to produce the final version of the standards.

The aim of the work package of ENPER-EXIST on 'Tools application' (work package 1) was to identify the gaps between the EPBD CEN standards and practice for existing buildings. This was done by analyzing the most important EPBD standards on aspects as:

- missing influencing factors especially important for existing buildings and
- influencing factors, which are of less importance for existing buildings and are complicating the gathering of data too much.

As part of the public enquiry, we gave advice to the responsible CEN working groups about possible changes they can make to make the standards more applicable to existing buildings.



The effect of the advice we gave to CEN is already visible. We can illustrate this with the example of the prEN ISO 13790 on heating and cooling demand of residential and non-residential buildings. We gave a list of comments and advise to the working group responsible for this standard. Here are some results of this advice:

- The CEN working group agreed that simple methods should be developed for various subjects to reduce the amount of labour needed to gather all the input data,

e.g. for thermal bridges and sunspaces.

- On various subjects ENPER-EXIST suggested to add lists with default input data to make the gathering of input easier for existing buildings. The CEN working group agreed to add informative annexes to the standard with examples of national values as far as available on e.g. nocturnal insulation, air tightness internal heat sources and internal heat capacity.
- A problem with heating systems in existing buildings is that old houses often have a local heating system. This can result in a poor thermal comfort, but also in low energy consumption because large parts of the house are not heated at all. This low energy consumption may lead to a relatively good energy performance. For some purposes and in certain climatic regions it is a question whether it is a desirable situation that the good energy performance is not compensated by a penalty for bad comfort. ENPER-EXIST suggested to introduce some comfort correction, possible on national level, or to assume in the method that all spaces which are intended to be heated are considered as heated. The CEN working group decided to take over this second advice: The calculation for EP requirements or for the EP certificate shall be done for standard conditions. The consequence is that if there is no heating system present to heat a living space (living room, kitchen, bedroom...), a heating system shall be assumed with conservative energy performance values.

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Detailed Programme of the 2nd ENPER-EXIST workshop at the EPBD conference in Budapest, May 2006

The second ENPER-EXIST workshop with the title "Calculated or Measured – is there a preferred rating method?" will take place in Budapest at the 10th May 2006 at the EPBD conference from 11:00 – 15:30.

Intelligent Energy Europe
Applied Research meets Daily Practice
EIE projects CA-EPBD

Workshop
at the Budapest EPBD conference,
May 10th 2006,
11:00 – 12:30 and 14:00 – 15:30

Calculated or Measured
Is there a preferred rating method?

Energy certificate
EPA-NR
EPLabel
EPBD

The three EIE-SAVE projects ENPER-EXIST, EPA-NR and EP-Label will join forces and host a workshop that serves as information exchange on the different approaches for the rating methods for the energy performance of buildings developed in the frame of the EPBD implementation in the EU Member States and their limits.

In the first part the methods developed in several EIE projects will be discussed and recommended to the countries, in the second part the experiences of countries with different assessment methods will be presented.

The detailed programme is planned as follows:

- **Part I: Suppliers offers for rating procedures** (moderation: J.-C. Visier)

- 1. Project scopes

- ENPER-EXIST projekt (J.-C. Visier)
- EPA-NR project (B. Poel)
- EPLabel (R. Cohen)

- 2. Challenge existing building stock

- Applicability of CEN standards (M. Spiekman)
- Expert tandem interview: (J.-C. Visier interviews B. Poel and R. Cohen)
- Pro's, con's and limitations of the rating systems (FAQ)

General discussion

Lunch break

- **Part II: Member states experiences with rating procedures** (moderation: H. Erhorn)

- Country reports

- Germany (H. Schettler-Köhler)
- Denmark (K. Engelund Thomsen)
- Netherlands (D. v. Dijk)

General discussion

(Subjects may alter)

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Progress in WP2: Legal, economical and organisation issues

The objective of the work package 2 is to study and analyse the non-technical issues related to the application of certification processes in the Member States and mainly the financial, educational and administrative aspects. In parallel, the work package aims to propose specific actions to be undertaken to create a more positive environment for the application of certification processes.

The work package is composed by the three following work tasks:

Wt1: The Impact of certification processes in the market: A study is carried out in the participating countries to identify the main economic impact of the applied certification processes in the market. In particular the direct cost of the certification processes is calculated and its impact on labour is evaluated. A specific work on the calculation of the indirect cost is actually carried out. The study has prepared a comprehensive list of the most important components of indirect cost, it discusses and analyses each of the above components, it collects information from existing knowledge and experience on the importance and when possible the absolute value of each component. In parallel, the study has prepared a template for the calculation of the indirect cost by the member states and discusses possible methods to evaluate the different components of the indirect cost.

In parallel, a second study on the possible economic schemes to be developed in order to finance the application of certification schemes has been already carried out. The study identifies possible financial schemes that may be applied by the Member States in order to enhance the application of the Directive, discusses the basic advantages and disadvantages of the identified financial schemes, while it presents the existing experience in the member states and valorises the possible benefits and drawbacks. Finally it discusses the applicability of identified financial schemes in the Member States, the possible boundary conditions and the expected outcomes from the application of the identified schemes.

Wt2. The impact of the certification schemes on the Human Capital: This work task has already identified the impact of the applied certification schemes to the human capital of each participating country. In particular the number of certifiers has been estimated together with the necessary educational and training effort. The characteristics of the certifiers body as well as the accreditation schemes are under analysis. A specific study on the accreditation schemes is actually carried out. The study defines the various accreditation services to be developed and applied, describes the main characteristics of the identified accreditation services, while it discusses the existing knowledge and experience in Europe. Finally, the study proposes guidelines on how to develop and apply accreditation services in the member states.

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Please visit also the website of ENPER-EXIST:
www.enper-exist.com

Progress in WP2: Legal, economical and organisation issues (cont.)

Wt3. The impact of the certification process on the national administrations: This work task has already discussed the necessary structures and configurations in the national administrations in order to better support the application of the certification schemes in the countries. A study is already carried out to analyse the necessary post auditing services. The study is mainly based on the Danish experience and defines the services related to post auditing, the characteristics of the main tasks and the existing knowledge from Denmark while it proposes guidelines on the organisation of the post auditing services.

A full report of sixty pages including all information and studies has been prepared and is under discussion in the group. It is expected that the final report of the present work package will be available by the end of May.

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Effinergie - a new French association for low energy buildings

On March 27th the Effinergie association was founded by 3 French Regions, 2 financial organisation, 3 local agencies, a manufacturers association and CSTB.

The association aims at supporting the development of low energy buildings. Effinergie will concentrate on:

- the coordination of exchanges between local actors,
- national communication on projects,
- development of reference documents which can be used to provide labels to low energy buildings.

This association could play a key role in the future for the development of low energy buildings in France.

List of founding partners of Effinergie: le Conseil régional d'Alsace, le Conseil régional de Franche-Comté, le Conseil régional Languedoc-Roussillon, AJENA, l'association CEFIIM, l'Agence régionale Rhônalpénergie - Environnement, le Collectif "Isolons la Terre contre le CO₂", le CSTB, Groupe Banque Populaire, la Caisse

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Eco-buildings projects in a specific session at the 2nd Solar Cities congress in Oxford, April 3-6, 2006

The 4 EU 6FP eco-buildings projects "BRITA in PuBs", "SARA", "Demohouse" and "Eco-culture" were presented in a special session on 5th of April during the 2nd International Solar Cities Congress. The Congress in Oxford was attended by over 450 delegates from the worlds of science, business and policy-making. Representatives from 20 cities participated in the Mayors' Forum. During the event over 1200 people from Oxford and Oxfordshire attended an Open Day introducing solar and other renewable technologies, which can be used in the home.



Jens Ole Hansen (COWI, coordinator of the Eco-culture project), informed on demonstration



and dissemination of ECO-concepts for high-performing European cultural buildings before fellow-coordinator Mike Barker (University of Barcelona) presented the project SARA: Sustainable architecture applied to replicable public access buildings. The Demohouse project, which works on design and management options for housing and the BRITA in PuBs project that has the aim to bring retrofit innovations to application in public buildings were explained by the respective coordinators Henk Kaan (ECN) and Hans Erhorn (Fraunhofer Institute of Building Physics, FhG-IBP). Additionally the BRITA in PuBs information tool (BIT) was introduced as a first step towards a European-wide database for eco-buildings by Heike Erhorn-Kluttig (FhG-IBP).

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