

[CT1 – Certification]



Warsaw, 10-11 December 2007 | Lyon, 19-20 May 2008 | Prague, 1-2 December 2008 |

Berlin, 15-16 June 2009 | Amsterdam, 21-22 January 2010

Summary

Member States (MS) implemented mandatory certification of new and existing buildings, along with periodic certification of public buildings. Those with experience described their approaches. They discussed advantages and disadvantages of various possible alternatives and solutions to overcome difficulties.

During this period the following topics were addressed and discussed: certification of flats and blocks of flats, as well as complex and mixed-use buildings; formulation of recommendations; cost and layout of certificates; database management; quality assurance (QA) schemes; impact of Energy Performance Certification (EPC) schemes; and compliance and control of Energy Performance (EP) requirements and certification systems.

Simplification of both the methodologies for certification of one family houses as well as of procedures for new buildings remains an open issue. Furthermore, there is a need to establish a common methodology to gain knowledge about the impact of EPC schemes.



Concerted

Action II ◀

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Lessons learned

The lessons learnt, during the period December 2007 until January 2010, can be summarised as follows:

- The optimum solution for existing buildings would be to have both measured and calculated EPC, even though this is a more costly approach and not without problems.
- Zoning, or a reduced zone model, could be considered for calculations for complex and mixed use buildings.
- In large and complex buildings (e.g. hospitals, shopping malls, etc) it seems appropriate to use measured energy performance values, as it is very time consuming and therefore costly to set up a calculation model representing the building in all its detail.
- For blocks of flats and mixed use buildings it is important that the same expert issues certificates for all parts of the building – preferably for the whole building - to ensure coherence in the recommendations.
- Encouragement to implement recommendations can be made by placing the most cost-effective recommendations on the very first page of the certificate.
- A central database makes it possible to perform quality checks of data and gain increased knowledge about the energy performance of the building stock.
- When running a QA scheme, the follow-up mechanism regarding the quality of the certificates is the core of the whole scheme.
- A sanction system is a valuable tool to ensure high quality work by the experts.
- Certification of one family houses was the first certification scheme being implemented in most MS and calculated EPC are widely used.

Important recommendations

Important recommendations are already detected:

- Establishment of an interaction between certification of buildings and inspection of boilers, ventilation and air-conditioning systems.
- Installation of additional sub-meters, where needed, to be able to identify potential energy savings in sections of a large building. Often, installation of additional meters is cost effective from an energy savings point of view.
- The front page of the EPC should be eye-catching, expressing clearly the energy quality for everyone to see, possibly using an expressive graphic presentation.
- Energy saving recommendations should be directly targeted towards the actual building being certified. This will increase the public acceptance of the certificates and help persuade building owners to carry out the suggested energy savings.
- Establishment of a cost settlement system ensuring that users of the certificate get a document with a content that matches the cost of getting the certificate.
- It is essential to set up a QA system to be able to follow the EPC scheme.
- Collection of EPC data in central registers should be mandatory in all MS.
- There is a need to statistically investigate the energy consumption in the existing building stock to enable a valid set of benchmark criteria.
- Establishment of a penalty system to increase compliance with the regulation and issuing of correct certificates.
- Identification and establishment of a commonly agreed methodology to measure the impact of EPC in MS.
- Simplified methodologies for one family houses should be discussed in the future.

For more detailed information, see the [extended summary](#) report on this topic (soon to be available)