

Factsheet on Energy Performance Certificates

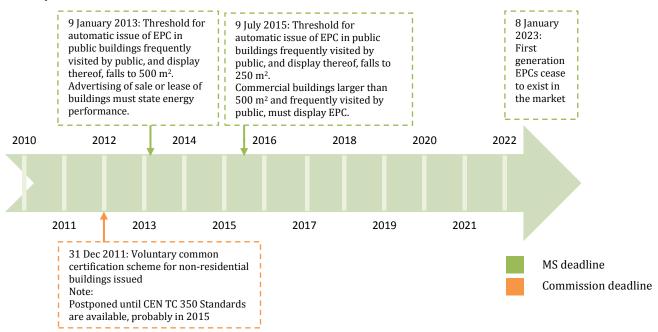
Other factsheets in toolkit: Cost-Optimality, Nearly Zero-Energy Buildings, Finance, Training

Why Energy Performance Certificates?

The scope and coverage of Energy Performance Certificates (EPCs) is growing. The EPBD Recast is explicitly designed to increase:

- The strength and level of detail of the recommendations EPCs must make;
- The number of people that see the EPC and who, as a result, take account of the information included in decisions on buying, renting, using and investing in buildings;
- The quality of EPCs and level of consumer confidence in them.

Description



Energy Performance Certificates were first introduced at European level under the 2002 Energy Performance of Buildings Directive (EPBD). A handful of Member States already had some building energy rating and labelling systems in place and these went some way to complying with the original Directive. The 2010 Recast of the EPBD clearly strengthens the importance and role of EPCs, in Articles 11, 12 and 13.

As was required by the 2002 Directive, EPCs must contain details of the performance of the building or building unit and they must give reference values so that owners and tenants can compare performance with other buildings. They must now also include more advanced recommendations for improving the building's energy performance. These should include specific building elements to be improved as well as major renovations comprising multiple building elements and building systems. An important change is that the recommended improvements must be cost-optimal (see factsheet on Cost Optimality), whereas before they needed to be 'cost-effective'. EPCs must provide information about the work needed to implement the recommendations and they must say where more detailed information can be found. Estimates of cost savings resulting from improvements must also be included, and a forecast of underlying energy prices.



The European Commission was due to issue a voluntary common EU certification scheme for non-residential buildings by the end of 2011, which all Member States were to be encouraged to recognise. However, the preparation of this scheme has been postponed. In the public sector, governments must encourage implementation of all the recommendations on the EPC within its validity period – which must not exceed ten years. Units within a block are still allowed to have a common EPC based on the whole building (if it shares a heating system), or an individual EPC based on a similar unit with the same energy characteristics. In addition, a single family home may now have an EPC based on a building of similar design and performance, but only if this similarity can be guaranteed by an accredited energy assessor.

As before, an EPC must be issued upon construction, sale or rent of a building to the new owner or occupier. If a building is occupied by a public authority, frequently visited by the public and over $500m^2$ (down from $1,000m^2$), then an EPC must be produced immediately. The size threshold falls to $250m^2$ after 9^{th} July , 2015. The EPC rating (or 'indicator') must now also be advertised with the details of a building when it (or a part of it) is marketed for sale or lease. If the building is still under construction, an assessment of future energy performance must be provided and advertised, to be replaced by a full EPC when the building is completed.

For public buildings frequently visited by the public and greater than 500m², the EPC must also be displayed in a prominent place. The threshold for display also falls to 250m² from 9th July 2015. All private sector buildings frequently visited by the public are now subject to the same conditions for display, although these will not have to show the EPCs recommendations (whereas public buildings must).

Key issues

Cross-cutting nature and potential

A major issue with the implementation of EPCs is that it often cuts across numerous national ministries' remits. Typically, EPC implementation may require the coordination of: trade / industry; construction / housing; energy / environment; and employment / skills / education ministries (see Resource 1).

Experience with the original directive has been mixed (see Resource 2); Ireland and Portugal provided experiences with EPC implementation which were independently viewed as best practice by the Buildings Performance Institute Europe and the European Council for an Energy Efficient Economy. Official accounts of all countries' experiences have now been collected by Concerted Action (Resource 2a). The Recast provides an opportunity to bring together experiences to date and learn from them. This creates new areas of potential for EPCs (more on this in Resource 4) and synergy with other aspects of the Recast. These areas, some of which are listed below, may give more support to the arguments for strengthening EPCs beyond the minimum requirements. However, it is important to remember that this potential can only be realised if there is full and proper uptake and stakeholder awareness of EPCs:

Exhibit A - The 'Roadmap' EPC

Germany's energy policy white paper – the 2010 *Energiekonzept* – announced plans for an EPC which includes long-term retrofit recommendations – e.g. to achieve an 80% reduction in space-heating by 2050. Certain steps would have to be taken by certain deadlines, possibly set every five years. Fines levied on those undertaking action too late could pay for early movers. As is required under the Recast, EPCs would be updated to make clear what actions previous owners had already undertaken

Exhibit B – The European Display Campaign

The Display Campaign is a voluntary scheme designed by energy experts from European towns and cities. When it started in 2003 it was first aimed at encouraging local authorities to publicly display the energy and environmental performances of their public buildings. See www.display-campaign.org



- Linking EPCs (the information they carry on energy rating and recommendations) to other regulations and incentives: e.g. mandatory minimum standards; minimum standard to be achieved to qualify for financial support, tax incentives etc.;
- Linking EPCs to pathways to nearly zero-energy for existing buildings (see Exhibit B);
- Using EPCs to meet broader energy reporting needs (such as energy or environmental management systems, sustainability reporting and engagement, or regulatory requirements)
 – see Exhibit C;
- Collecting together EPC data into national buildings performance databases to inform market development and policy;
- Integrating EPC information into building valuation techniques to impact on buildings' value (see Resource 5).

Quality and cost

EPCs are the central information tools that enable many other aspects of the Recast to reach their potential. Strong implementation of the EPC requirements is therefore critical and it must pay particular attention to ensuring that the information they contain is robust and reliable. Ensuring high quality of information, and training energy assessors adequately to do this, is a key issue. Greater consistency with all related aspects of regulation (for example compliance with building standards) is another. Also important is how to balance the need for quality against the need to limit the cost of EPCs and the need to train a large number of assessors within a short space of time (see Exhibit A). Articles 17 and 18 deal more specifically with the accreditation of assessors and quality control (see Resource 2). There is also a separate factsheet on Training in this series.

Exhibit C - Quality Control

The Netherlands has struck a balance between ensuring quality and standards of assessors and assessments, and harnessing the markets to deliver training and a range of assessment tools. Assessor training is not mandatory, but there is a mandatory national examination to pass before being added to the public register of assessors, at www.kbi.nl. Training and tools are governed by national standards, and all EPCs must be transmitted by recognised software into a national database, which enables quality audits.

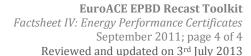
Achieving a good balance of quality and cost is necessary for EPCs' public acceptance and usability. So far, there have been too few effective efforts by Member States to promote public awareness of EPCs. The Recast builds on the existing requirements for EPCs and many lessons learned to date, and there is an opportunity to put right the mistakes that may have been made in delivering the first Directive, whilst strengthening the role and quality of EPCs.

A recent report (see Resource 6) by the European Commission investigated whether or not EPCs are having the desired effect of stimulating the market. It examined whether or not there is a measurable effect on the sale value and rental value of properties with EPCs, finding that there is a measurable positive effect in all but one city studied. Highlighting this stimulus effect of reliable EPCs can be a convincing way of ensuring the Member States increase their efforts to establish good EPC schemes.

Resources

Information on implementing Energy Performance Certificates

- 1. **Buildings Performance Institute Europe** (2010) *Energy Performance Certificates across Europe From design to implementation;* www.bpie.eu/energy_performance_certificates.html
- 2. **EPBD Concerted Action** (2010) *Report on the Core Theme of Certification;* www.epbd-ca.org/Medias/Pdf/CT Reports 14-04-2011/CT1 Certification.pdf
 - a) Implementation reports for all EU Member States to end of 2012:





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- 3. European Network for Energy Performance Certification of Buildings (2010) Comparison of Building Certification and Energy Auditor Training in Europe;

 www.enforce-een.eu/eng/uploads/File/Documents/Comparative%20Report.pdf
- 4. **International Energy Agency** (2010) *Energy Performance Certification of Buildings A policy tool to improve energy efficiency;* www.iea.org/papers/pathways/buildings certification.pdf
- 5. **Royal Institution of Chartered Surveyors** (2010) *On the Economics of EU Energy Labels in the Housing Market* www.rics.org/site/download feed.aspx?fileID=7754&fileExtension=PDF
- 6. **EPBD Concerted Action:** Building Energy Performance under the EPBD Taking Stock and Looking Forward http://www.epbd-ca.eu/archives/610
- 7. **European Commission** (2013): Energy Performance Certificates and their impact on transaction costs in selected EU Countries:
 - http://ec.europa.eu/energy/efficiency/buildings/doc/20130619-energy performance certificates in buildings.pdf

Basic guides to the EPBD recast

Accessible, short and direct guides to the new EPBD and some of the key questions around the recast:

- ECEEE (2010) Steering through the Maze 1 Your guide to the EPBD recast;
 www.eceee.org/buildings/Mazeguide1 EPBDrecastRev090310.pdf
- ECEEE (2010) Steering through the Maze 3 Your guide to FAQs on the EPBD recast;
 www.eceee.org/buildings/Mazeguide3-FAQ-EPBD.pdf