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Energy Performance Buildings Directive: comparing Member State performance

A method has been developed to compare how EU Member States have implemented the Energy Performance Buildings Directive. It suggests that implementation varies widely across Europe but that the Czech Republic, Finland, Portugal and Slovakia have kept to the Directive's aims and guidelines most closely, based on data available in 2009.

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Buildings account for 40% of energy use in Europe. The EU's Energy Performance Buildings Directive[1] aims to reduce and monitor energy consumption in buildings and requires all Member States to enhance regulations and introduce energy certification schemes which classify buildings according to their energy efficiency.

Little research has been conducted to compare how all 27 EU Member States have implemented the Directive's guidelines. This study therefore provides a new tool to measure how well it has been applied, to allow cross-country comparisons.

Data on the Directive's implementation, available in April 2009, were taken from a variety of sources including documents from European Institutions, publications in international scientific journals, national and EU laws, and documents drawn up by individual countries under the European Commission's 'Buildings Platform' initiative[2].

Using these data, Member States were classified using two different measurements: 'uniformity' and 'excellence'. 'Uniformity' assesses how closely a country has kept to the Directive's aims and guidelines, for example, whether there is an obligation to certify buildings and whether methodologies to calculate energy performance have been developed and adopted. The measurement of 'excellence' includes, for example, the timing of implementation and the dates that certification began, and the use of measures to enhance energy efficiency that benefit property owners/buyers and landlords/tenants. The 'excellence' measurement can be used to identify the 'best' performers, i.e. the leaders in energy certification of buildings.

The results found that the majority of countries had transposed the Directive by the Commission's deadline of January 2006. However, for all countries, compulsory energy certification was not put in place for the deadline. Only four countries (Czech Republic, Finland, Portugal and Slovakia) achieved the top score for uniformity. No countries received the best possible score for excellence, however, Germany, France, Denmark, The Netherlands and Slovenia had the best results.

Although most Member States (15 out of 27) had chosen an energy classification system based on seven classes (A to G), only five countries (Austria, Ireland, Netherlands, Portugal and Slovenia) achieved the highest scores for their certification schemes, as they provided sub-classes that enable the certificate to show small-scale improvements.

The research demonstrates that energy certification of buildings in Europe is varied in its implementation and scope of application. According to the researchers, in 2009 most countries were still at a halfway stage towards achieving excellence. In addition, professional qualifications required of certificate advisors varied widely between Member States. They suggest that a common framework of standards for training and professional qualifications would ensure the quality of the certificates issued.

While the data used by this particular study is now several years old, the method devised by this study to assess performance can still provide a useful means of comparing implementation of the Directive.

1. See: http://europa.eu/legislation_summaries/other/l27042_en.htm
2. See: www.epbd-ca.org/Medias/Pdf/EPBD_BuPLa_Country_reports.pdf