## **Energy performance of buildings. Recast**

2008/0223(COD) - 19/05/2010 - Final act

PURPOSE: to recast Directive 2002/91/EC to improve the energy performance of buildings.

LEGISLATIVE ACT: Directive 2010/31/EU of the European Parliament and of the Council on the energy performance of buildings.

CONTENT: the aim of this Directive is to clarify, strengthen and extend the scope of Directive 2002/91 /EC, as well as to reduce the large differences between Member States' practices in this sector. Its provisions cover energy needs for space and hot water heating, cooling, ventilation and lighting for new and existing, residential and non-residential buildings.

Buildings account for 40% of total energy consumption in the Union. The sector is expanding, which is bound to increase its energy consumption. Therefore, reduction of energy consumption and the use of energy from renewable sources in the buildings sector constitute important measures needed to reduce the Union's energy dependency and greenhouse gas emissions.

**Subject matter**: the Directive promotes the improvement of the energy performance of buildings within the Union, taking into account outdoor climatic and local conditions, as well as indoor climate requirements and cost-effectiveness. It lays down requirements as regards:

- the common general framework for a methodology for calculating the integrated energy performance of buildings and building units;
- the application of minimum requirements to the energy performance of new buildings and new building units;
- the application of minimum requirements to the energy performance of: (i) existing buildings, building units and building elements that are subject to major renovation; (ii) building elements that form part of the building envelope and that have a significant impact on the energy performance of the building envelope when they are retrofitted or replaced; and (iii) technical building systems whenever they are installed, replaced or upgraded;
- national plans for increasing the number of nearly zero- energy buildings;
- energy certification of buildings or building units;
- regular inspection of heating and air-conditioning systems in buildings; and
- independent control systems for energy performance certificates and inspection reports.

The requirements laid down are minimum requirements and shall not prevent any Member State from maintaining or introducing more stringent measures, which must be notified to the Commission.

The main points of this recast Directive are as follows:

**Nearly zero-energy buildings**: by 31 December 2020, all new buildings must be nearly zero-energy buildings; and after 31 December 2018, new buildings occupied and owned by public authorities must be nearly zero-energy buildings. Member States must draw up national plans for increasing the number of nearly zero-energy buildings, which may include targets differentiated according to the category of building. 'Nearly zero-energy building' is defined as a building that has a very high energy performance, as determined in accordance with Annex I of the Directive. The nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby;

Leading role for the public sector: the public sector in each Member State should lead the way in the field of energy performance of buildings, and therefore the national plans should set more ambitious targets for the buildings occupied by public authorities. An energy performance certificate must be issued for: (a) buildings or building units which are constructed, sold or rented out to a new tenant; and (b) buildings where a total useful floor area over 500 m 2 is occupied by a public authority and frequently visited by the public. On 9 July 2015, this threshold of 500 m 2 shall be lowered to 250 m 2. The Directive notes that public authorities should lead by example and should endeavour to implement the recommendations included in the energy performance certificate. Member States should include within their national plans measures to support public authorities to become early adopters of energy efficiency improvements and to implement the recommendations included in the energy performance certificate as soon as feasible.

Setting of minimum energy performance requirements: minimum energy performance requirements for buildings or building units must be set with a view to achieving cost-optimal levels. This energy performance shall be calculated in accordance with the methodology referred to in the text. Cost-optimal levels shall be calculated in accordance with the comparative methodology framework once the framework is in place. The Commission should lay down a comparative methodology framework for calculating cost-optimal levels of minimum energy performance requirements. Member States should use this framework to compare the results with the minimum energy performance requirements which they have adopted. Should significant discrepancies, i.e. exceeding 15 %, exist between the calculated cost-optimal levels of minimum energy performance requirements and the minimum energy performance requirements in force, Member States should justify the difference or plan appropriate steps to reduce the discrepancy. The estimated economic lifecycle of a building or building element should be determined by Member States, taking into account current practices and experience in defining typical economic lifecycles. The results of this comparison and the data used to reach these results should be regularly reported to the Commission. These reports should enable the Commission to assess and report on the progress of Member States in reaching cost-optimal levels of minimum energy performance requirements.

**Major renovation**: when buildings undergo major renovation, the energy performance of the building or the renovated part thereof must be upgraded in order to meet minimum energy performance requirements set in so far as this is technically, functionally and economically feasible. Those requirements shall be applied to the renovated building or building unit as a whole. Additionally or alternatively, requirements may be applied to the renovated building elements.

Regular inspections of heating and air-conditioning systems: there must be a regular inspection of the accessible parts of air-conditioning systems of an effective rated output of more than 12 kW. The inspection shall include an assessment of the air-conditioning efficiency and the sizing compared to the cooling requirements of the building. The assessment of the sizing does not have to be repeated as long as no changes were made to this air-conditioning system or as regards the cooling requirements of the building in the meantime. There must also be a regular inspection of the accessible parts of systems used for heating buildings, such as the heat generator, control system and circulation pump(s), with boilers of an effective rated output for space heating purposes of more than 20 kW. That inspection shall include an assessment of the boiler efficiency and the boiler sizing compared with the heating requirements of the building. The assessment of the boiler sizing does not have to be repeated as long as no changes were made to the heating system or as regards the heating requirements of the building in the meantime.

Independent control systems for energy performance certificates and inspection reports: there must be established independent control systems for energy performance certificates and reports on the inspection of heating and air-conditioning systems in accordance with Annex II. Member States may establish separate systems for the control of energy performance certificates and for the control of reports on the inspection of heating and air-conditioning systems.

ENTRY INTO FORCE: 08/07/25010.

TRANSPOSITION: 09/07/2012.

APPLICATION: certain provisions apply from 09/01/2013 and others from 09/07/2013.