











| Basic information   |                     |
|---|---------------------|
| <p><b>2008/0223(COD)</b></p> <p>COD - Ordinary legislative procedure (ex-codecision procedure)<br/>Directive</p>  | Procedure completed |
| <p>Energy performance of buildings. Recast</p> <p>Repealing Directive 2002/91/EC 2001/0098(COD)<br/>Repealed by 2021/0426(COD)<br/>Amended by 2016/0375(COD)<br/>Amended by 2016/0381(COD)</p> <p><b>Subject</b></p> <p>3.40.07 Building industry<br/>3.60.08 Energy efficiency</p> |                     |



| Key players         |  |                              |  |                  |
|---------------------|--|------------------------------|--|------------------|
| European Parliament | <b>Committee responsible</b>   |                              | <b>Rapporteur</b>  | <b>Appointed</b> |
|                     | <span style="border: 1px solid red; padding: 2px;">ITRE</span> Industry, Research and Energy |                              | ICU Silvia-Adriana (S&D)   | 21/07/2009       |
|                     |  |                              | Shadow rapporteur<br>SAUDARGAS Algirdas (PPE)<br>HALL Fiona (ALDE)<br>TURMES Claude (Verts /ALE)<br>FORD Vicky (ECR) |                  |
|                     | <b>Former committee responsible</b>  |                              | <b>Former rapporteur</b>   | <b>Appointed</b> |
|                     | <span style="border: 1px solid red; padding: 2px;">ITRE</span> Industry, Research and Energy |                              | ICU Silvia-Adriana (PSE)   | 02/12/2008       |
|                     | <b>Former committee for opinion</b>  |                              | <b>Former rapporteur for opinion</b>   | <b>Appointed</b> |
|                     | <span style="border: 1px solid red; padding: 2px;">JURI</span> Legal Affairs                 |                              | The committee decided not to give an opinion.  | 03/11/2008       |
|                     | <b>Former committee for opinion on the legal basis</b>                                       |                              | <b>Former rapporteur for opinion</b>   | <b>Appointed</b> |
|                     | <span style="border: 1px solid red; padding: 2px;">JURI</span> Legal Affairs                 |                              | FRASSONI Monica (Verts /ALE)   | 16/03/2009       |
|                     | Council of the   | <b>Council configuration</b> | <b>Meetings</b>  | <b>Date</b>      |

|                     |  |                     |            |
|---------------------|--|---------------------|------------|
| European Union      | Transport, Telecommunications and Energy | 2983                | 2009-12-07 |
|                     | Transport, Telecommunications and Energy | 2949                | 2009-06-11 |
| European Commission | <b>Commission DG</b>                     | <b>Commissioner</b> |            |
|                     | Energy                                   | OETTINGER Günther   |            |

| Key events |  |  |         |
|------------|--|--|---------|
| Date       | Event  | Reference  | Summary |
| 13/11/2008 | Legislative proposal published                           | COM(2008)0780<br> | Summary |
| 15/01/2009 | Committee referral announced in Parliament, 1st reading  |  |         |
| 31/03/2009 | Vote in committee, 1st reading                           |  | Summary |
| 06/04/2009 | Committee report tabled for plenary, 1st reading         | A6-0254/2009   |         |
| 21/04/2009 | Debate in Parliament                                     | CRE link   |         |
| 23/04/2009 | Decision by Parliament, 1st reading                      | T6-0278/2009   | Summary |
| 23/04/2009 | Results of vote in Parliament                            |                   |         |
| 11/06/2009 | Debate in Council  |  |         |
| 07/12/2009 | Debate in Council  |  |         |
| 14/04/2010 | Council position published                               | 05386/3/2010   | Summary |
| 19/04/2010 | Committee referral announced in Parliament, 2nd reading  |  |         |
| 28/04/2010 | Vote in committee, 2nd reading                           |  | Summary |
| 28/04/2010 | Committee recommendation tabled for plenary, 2nd reading | A7-0124/2010   |         |
| 17/05/2010 | Debate in Parliament                                     | CRE link   |         |
| 18/05/2010 | Decision by Parliament, 1st reading                      | T7-0159/2010   | Summary |
| 19/05/2010 | Final act signed   |  |         |
| 19/05/2010 | End of procedure in Parliament                           |  |         |
| 18/06/2010 | Final act published in Official Journal                  |  |         |

| Technical information             |   |
|-----------------------------------|---|
| <b>Procedure reference</b>        | 2008/0223(COD)  |
| <b>Procedure type</b>             | COD - Ordinary legislative procedure (ex-codecision procedure)  |
| <b>Procedure subtype</b>          | Recast  |
| <b>Legislative instrument</b>     | Directive   |
|                                   | Repealing Directive 2002/91/EC 2001/0098(COD)<br>Repealed by 2021/0426(COD)<br>Amended by 2016/0375(COD)<br>Amended by 2016/0381(COD) |
| <b>Legal basis</b>                | Treaty on the Functioning of the EU TFEU 194-p2   |
| <b>Stage reached in procedure</b> | Procedure completed   |

| Documentation gateway   |                      |  |            |                         |
|---|----------------------|--|------------|-------------------------|
| European Parliament   |                      |  |            |                         |
| Document type   | Committee            | Reference  | Date       | Summary                 |
| Committee draft report  |                      | <a href="#">PE418.275</a>  | 03/02/2009 |                         |
| Amendments tabled in committee                                  |                      | <a href="#">PE420.139</a>  | 23/02/2009 |                         |
| Amendments tabled in committee                                  |                      | <a href="#">PE421.190</a>  | 26/02/2009 |                         |
| Amendments tabled in committee                                  |                      | <a href="#">PE421.132</a>  | 05/03/2009 |                         |
| Specific opinion  | <a href="#">JURI</a> | <a href="#">PE423.703</a>  | 01/04/2009 |                         |
| Committee report tabled for plenary, 1st reading/single reading |                      | <a href="#">A6-0254/2009</a>   | 06/04/2009 |                         |
| Text adopted by Parliament, 1st reading/single reading          |                      | <a href="#">T6-0278/2009</a>   | 23/04/2009 | <a href="#">Summary</a> |
| Committee draft report  |                      | <a href="#">PE440.179</a>  | 13/04/2010 |                         |
| Committee recommendation tabled for plenary, 2nd reading        |                      | <a href="#">A7-0124/2010</a>   | 28/04/2010 |                         |
| Text adopted by Parliament, 2nd reading                         |                      | <a href="#">T7-0159/2010</a>   | 18/05/2010 | <a href="#">Summary</a> |
| Council of the EU   |                      |  |            |                         |
| Document type   |                      | Reference  | Date       | Summary                 |
| Council position  |                      | <a href="#">05386/3/2010</a>   | 14/04/2010 | <a href="#">Summary</a> |
| Council statement on its position                               |                      | <a href="#">02461/2010</a>   | 15/04/2010 |                         |
| Draft final act   |                      | <a href="#">00015/2010/LEX</a>   | 19/05/2010 |                         |
| European Commission   |                      |  |            |                         |
| Document type   |                      | Reference  | Date       | Summary                 |
| Document attached to the procedure                              |                      | <a href="#">SEC(2008)2865</a><br> | 13/11/2008 |                         |
| Document attached to the procedure                              |                      | <a href="#">SEC(2008)2864</a><br> | 13/11/2008 |                         |
| Legislative proposal  |                      | <a href="#">COM(2008)0780</a><br> | 13/11/2008 | <a href="#">Summary</a> |
| Commission response to text adopted in plenary                  |                      | <a href="#">SP(2009)3507</a>   | 25/06/2009 |                         |
| Commission communication on Council's position                  |                      | <a href="#">COM(2010)0165</a><br> | 15/04/2010 | <a href="#">Summary</a> |
| Follow-up document  |                      | <a href="#">SWD(2013)0143</a><br> | 18/04/2013 |                         |
| Follow-up document  |                      | <a href="#">COM(2013)0225</a><br> | 18/04/2013 | <a href="#">Summary</a> |
| Follow-up document  |                      | <a href="#">COM(2013)0483</a><br> | 28/06/2013 | <a href="#">Summary</a> |
| Follow-up document  |                      | <a href="#">COM(2016)0464</a><br> | 29/07/2016 | <a href="#">Summary</a> |

|                    |  |            |  |
|--------------------|--|------------|--|
| Follow-up document | <a href="#">COM(2020)0954</a><br> | 14/10/2020 |  |
| Follow-up document | <a href="#">SWD(2021)0365</a>  | 26/11/2021 |  |
| Follow-up document | <a href="#">COM(2022)0641</a><br> | 15/11/2022 |  |

#### Other institutions and bodies

| Institution/body | Document type                                  | Reference                    | Date       | Summary |
|------------------|--|------------------------------|------------|---------|
| CofR             | Committee of the Regions: opinion              | <a href="#">CDR0008/2009</a> | 21/04/2009 |         |
| ESC              | Economic and Social Committee: opinion, report | <a href="#">CES0869/2009</a> | 13/05/2009 |         |

#### Additional information

| Source               | Document                | Date |
|----------------------|-------------------------|------|
| National parliaments | <a href="#">IPEX</a>    |      |
| European Commission  | <a href="#">EUR-Lex</a> |      |

#### Final act

|   |                         |
|---|-------------------------|
| <a href="#">Directive 2010/0031</a><br><a href="#">OJ L 153 18.06.2010, p. 0013</a> | <a href="#">Summary</a> |
|---|-------------------------|

#### Delegated acts

| Reference                      | Subject                      |
|--------------------------------|------------------------------|
| <a href="#">2013/2752(DEA)</a> | Examination of delegated act |
| <a href="#">2013/2787(DEA)</a> | Examination of delegated act |
| <a href="#">2020/2831(DEA)</a> | Examination of delegated act |

## Energy performance of buildings. Recast

2008/0223(COD) - 18/04/2013 - Follow-up document

Buildings are central to EU energy efficiency policy, as **nearly 40% of final energy consumption (and 36% of greenhouse gas emissions) is in houses, offices, shops and other buildings**. Moreover, the sector provides the **second largest untapped and cost-effective potential for energy savings after the energy sector itself**. There are also important co-benefits from making buildings more energy efficient, including job creation, fuel poverty alleviation, health improvements, and better energy security and industrial competitiveness.

In accordance with Directive 2010/31/EU on the Energy Performance of Buildings, the report provides the main results of an analysis the Commission is required to present on the **effectiveness of EU funding**, funds from the European Investment Bank (EIB) and other public finance institutions, and the coordination of Union and national funding. The Report also seeks to indicate how financial support for energy efficiency in buildings can be improved, in accordance with the [new Directive on energy efficiency \(2012/27/EU\)](#).

**European Union financial support:** the EU has supported the improved energy performance of buildings for many years by means of a **range of programmes**, in particular in the context of its cohesion, research and enlargement policies.

The **European Energy Efficiency Fund (EEE-F)** with a volume of EUR 265 million, with funding coming from, among others, the European Union. The **Intelligent Energy Europe II (IEE II)** Programme with a budget of EUR 730 million, of which around 50% is allocated to energy efficiency.

The European **international financial institutions** (IFIs) operate their own investment instruments for energy efficiency in buildings. From 2008 until the end of 2011, the **EIB** mainstreamed energy efficiency into its operations, resulting in a total funding volume of EUR 4.8 billion in the EU, of which EUR 1.7 billion were in the building sector.

Lastly, **national governments** also use their own budgets to support energy efficiency in buildings. Many of the existing measures have been reported to the Commission through the National Energy Efficiency Action Plans (NEEAPs).

**Main conclusions:** the picture that emerges from the examination of the European building stock, the existing financial support measures for energy efficiency in buildings and the different market barriers, shows that:

- the **situation differs significantly between Member States** in terms of their building stock, the financial support measures in place and the relevant market barriers;
- although **investments in building energy efficiency are increasing** and there are many best-practice examples of instruments that are delivering cost-effective energy savings, there is **only limited information on the effectiveness of the different financial support measures**, both at EU and national levels;
- **important barriers hampering further uptake of energy efficiency investments** in buildings persist, including a lack of awareness and expertise regarding energy efficiency financing on the part of all actors; high initial costs, relatively long pay-back periods and (perceived) credit risk associated with energy efficiency investments; and competing priorities for final beneficiaries;
- if the EU is to meet its 2020 energy efficiency target and its ambitions for further savings towards 2050, it is **imperative to improve the financial support for energy efficiency in buildings**. For this to happen, it is necessary to **ensure that the regulatory framework is properly implemented, more financing is made available and key barriers are addressed**;
- although the Commission is engaged in many initiatives and activities to support these objectives, given the nature of the building stock and sector, and their responsibility for implementing the relevant legislation and addressing national market barriers, the **Member States are in the driving seat to ensure that more cost-effective investments take place**;
- the importance of a tailor-made approach to energy efficiency financing means that **close cooperation between public authorities, finance providers and the building sector is essential**;
- last but not least, **building owners will have to be convinced of the benefits of making their properties more energy efficient, not only in terms of a lower energy bill but also as regards improved comfort and increased property value**. This may well be one of the greatest hurdles to overcome in making Europe's buildings more energy efficient. However, the macroeconomic case for doing this is strong and targeted incentives and awareness raising efforts to change attitudes will be necessary. The building renovation roadmaps that Member States have to establish under the new EED will be a key tool in this context and should explicitly address these issues.

## Energy performance of buildings. Recast

2008/0223(COD) - 28/06/2013 - Follow-up document

In accordance with Directive 2010/31/EU on the energy performance of buildings (also known as the 'EPBD'), the Commission is required to publish, by December 2012 and every three years thereafter, a report on the progress of Member States in drawing up national plans to develop policies and take measures such as the setting of targets in order to stimulate the transformation of buildings that are refurbished into Nearly Zero-Energy Buildings (NZEBS).

This first report is largely based on the information contained in the national plans for NZEBs submitted by 8 Member States (BE, DK, CY, FI, LT, NL, SE and UK) as of the end of November 2012. In the meantime, six other Member States (BG, DE, FR, HU, IE and SK) have sent in their plans but these have not been taken into account in the analysis. In addition, for the Member States that did not provide an official national plan, information on their progress was drawn from their second National Energy Efficiency Action Plans (NEEAPs), where such information was available. Thirteen of the second NEEAPs (BG, EE, FI, FR, HU, IE, IT, LU, MT, PL, ES, NL and UK) refer to the NZEB objectives.

The report's **main conclusions** are as follows:

- at the end of November 2012, only 9 Member States (BE, DK, CY, FI, LT, IE, NL, SE and UK) had reported their NZEB national plans to the Commission. As regards the **practical definition of NZEBs**, only 5 Member States (BE, CY, DK, IE and LT) presented a definition that contains **both a numerical target and a share of renewable energy sources**;
- fifteen Member States (BE, CZ, DK, EE, FI, DE, GR, HU, IE, LV, LT, SL, SE, NL and UK) presented **intermediate targets for improving the energy performance of new buildings by 2015**, with most focusing on strengthening the building regulations and/or the energy performance certificate level;
- although most Member States reported a variety of support measures to promote NZEBs, including financial incentives, strengthening their building regulations, awareness raising activities and demonstration/pilot projects, it is not always clear to what extent these measures specifically target NZEBs.

The report reaches the conclusion that **insufficient progress has been made by the Member States in their preparations towards NZEBs by 2020**.

The lack of proper and timely preparation increases the risk that **Member States will not meet the deadlines for new buildings to be NZEBs**. Moreover, the absence of clear definitions, interim targets and dedicated support measures means that the building sector faces uncertainty over the regulatory and policy framework for NZEBs, thus **delaying the necessary investments** in technology, processes and training, and reducing its competitiveness.

Furthermore, the EU might lose part of the contribution that buildings should make towards meeting its long-term climate and energy objectives. Given the potential size of this contribution, it is unlikely that this gap would be filled by savings in other sectors.

This lack of progress also implies that **Member States are struggling to put in place a detailed practical definition of NZEBs within the scope of the EPBD**, which further increases the uncertainty for the building sector.

Lastly, since the Commission has received only **limited information** from the Member States, it is **not possible to undertake a proper evaluation of the national plans**, and in particular of the **adequacy of the measures** envisaged by the Member States in relation to the objectives of the EPBD.

# Energy performance of buildings. Recast

2008/0223(COD) - 14/04/2010 - Council position

In its first reading position, the Council has accepted 6 of the European Parliament's amendments in full and 70 in part or in spirit. It has not been able to accept 21 amendments.

In view of the tight timetable required in order to reach early agreement on this proposal as called for by the European Council, the Council aimed from the start at identifying elements that would be acceptable to both Parliament and Council, rather than drawing up a complete agreed Council position before entering into negotiations with Parliament. In order to make rapid progress while taking into account the date of entry into force of the Treaty on the Functioning of the EU, it was agreed to proceed in two steps:

- a) reach agreement on the substance of the Directive. Following consultations with the European Parliament this first step was concluded in November 2009. This agreement was confirmed by Coreper on 19 November 2009 and on the level of the European Parliament's Committee on Industry, Research and Energy, by means of a letter of its Chairman, dated 30 November 2009;
- b) reach agreement on the modifications resulting from the entry into force of the TFEU, concerning notably the adaptation of the legal basis and the comitology provisions. Following consultations with the EP this second step was concluded in March 2010.

The Council position incorporates the two agreements recalled above. Its main elements are:

**Provisions on financial instruments:** a new Article entitled "Financial incentives and market barriers" and new recitals were introduced in order to place much more emphasis on the funding side of the energy efficiency of buildings.

**Nearly zero energy buildings:** as was done for other EU legislation in the climate/energy area, a "2020 target" was inserted which prescribes that all new buildings must be nearly zero energy buildings by 31 December 2020, that an intermediate target must be set for 2015, and that buildings occupied and owned by public authorities have to be nearly zero energy buildings after 31 December 2018, in line with the leading role that the public sector should play in this field.

Furthermore, Member States should develop policies for the transformation of existing buildings into nearly zero energy buildings. The Council could not accept to set binding targets for existing buildings.

**Building elements:** in the spirit of Parliament's amendments the scope of the proposal was expanded to include building elements.

**Energy performance certificates (issuing and display):** as suggested by the European Parliament, the Council agreed to lower the threshold for the issuing of certificates for public buildings, to lower the threshold for the display of certificates in public buildings, and agreed to re-insert what it had deleted earlier, namely the requirement to display the energy performance indicator in advertisements.

**Comparative methodology framework:** the Council could not accept the European Parliament's request for a common methodology framework. On the other hand, it did accept the addition of a new Annex III proposed by Parliament which describes the content of the comparative methodology framework.

Furthermore, Council agreed to introduce a benchmarking system whereby Member States must justify significant differences between cost-optimal levels of minimum energy performance requirements and minimum energy performance requirements in force.

**Review:** the Council accepted the European Parliament's request for a review by the Commission; a compromise date of 1 January 2017 was agreed upon as deadline for this review.

**Information:** the Council proposed, in order to address several requests from the European Parliament related to the provision of information, to insert a new Article 20 in order to group together all information provisions.

# Energy performance of buildings. Recast

2008/0223(COD) - 23/04/2009 - Text adopted by Parliament, 1st reading/single reading

The European Parliament adopted by 549 votes to 51, with 26 abstentions, a legislative resolution amending, under the first reading of the codecision procedure, the proposal for a directive of the European Parliament and of the Council on the energy performance of buildings (recast).

The main amendments were as follows:

**Subject matter:** the subject matter of the Directive should include a reference to the cost-optimal calculation methodology, as well as to minimum performance requirements for building components and technical building systems, and to their application in new and existing buildings. Targets for net zero energy buildings are an important element of the recast. Education, training and mutual recognition requirements between Member States for certifiers of the energy performance of buildings and for inspectors of heating and air-conditioning systems should be included.

**Definitions:** Parliament inserted definitions for "new building", "parts of a building" "net zero energy building" "energy from renewable sources" "building component", "energy poverty" and "lighting design". It amended the definition for "major renovation."

**Adoption of methodology:** rather than Member States, the text states that the Commission shall, after consulting the relevant stakeholders and in particular representatives from local, regional and national authorities, establish by 31 March 2010 a common methodology of calculation of the energy performance of buildings, in accordance with the general framework set out in Annex I. The energy performance of buildings shall be expressed in a transparent manner and shall include an indicator for primary energy demand.

**Setting minimum energy performance requirements:** as from 30 June 2012 Member States shall only provide incentives for the construction or major renovation of buildings or parts thereof, including building components, the results of which comply at least with minimum energy performance requirements achieving the results of the calculation referred to in the text. Member States shall review their minimum energy performance

requirements and ensure that these requirements achieve at least the results of the calculation referred to in the text no later than 30 June 2015. Member States shall provide subsidies and technical advice for historic buildings or centres to undertake specific programmes for adaptation to energy efficiency. Systems for the production of energy and insulation measures located in historic centres shall be subject to visual impact assessments.

**Calculation of cost-optimal levels of minimum energy performance requirements:** a new Annex is inserted listing the principles for a common methodology on calculating cost-optimal levels. This common methodology may refer to relevant European standards and shall, inter alia, reflect the different climatic conditions in different Member States and the likely change in these conditions over the lifetime of the building concerned, and set out common assumptions or calculation methods for energy costs.

**Existing buildings:** Parliament added that Member States shall encourage, in relation to buildings undergoing major renovation, the following high-efficiency alternative systems being considered and taken into account: (a) decentralised energy supply systems based on energy from renewable sources; (b) cogeneration; (c) district or block heating or cooling, if available, particularly that based entirely or partially on energy from renewable sources; (d) heat pumps; (da) ICT equipment for monitoring and control purposes .

**Technical building systems and building components:** minimum energy performance requirements must be set in respect of building components and of technical building systems which are installed and brought into operation in buildings and which are not covered by Directive 2009/.../EC on eco-design requirements.

Smart meters must be installed in all new buildings and all buildings undergoing a major renovation. Whenever a meter is replaced, Member States shall encourage the installation of active control systems such as automation, control and monitoring systems, where appropriate.

**Net zero energy buildings:** this article replaces the article entitled "Buildings of which both carbon dioxide emissions and primary energy consumption are low or equal to zero." Member States shall draw up national plans for increasing the number of net zero energy buildings.

Parliament states that Member States shall ensure that all new buildings are at least net zero energy buildings by **31 December 2016** at the latest. They shall set targets for the minimum percentage of buildings which shall be, by 2015 and by 2020 respectively, net zero energy buildings, measured as a percentage of the total number of buildings and as a percentage in relation to the total useful floor area.

Within 2 months of the communication of a national plan by a Member State, the Commission, taking full account of the subsidiary principle, may reject that plan, or any aspect thereof, on the basis that it does not respect all of the requirements of this Article. In this case, the Member State concerned shall propose amendments. The Commission shall establish a **detailed common definition of net zero energy buildings** by 31 December 2010 at the latest.

**Financial Incentives and Market Barriers:** a new clause states that Member States shall, by 30 June 2011, draw up national action plans, including proposed measures, for meeting the requirements laid down in the Directive through reducing existing legal and market barriers and developing existing and new financial and fiscal instruments to increase the energy efficiency of new and existing buildings.

Member States must compare their financial and fiscal instruments with the instruments listed in a new Annex IIIb and, without prejudice to national legislation, implement at least two measures from that Annex.

The Commission shall, by 30 June 2010 at the latest, following an impact assessment, bring forward appropriate legislative proposals to strengthen existing and propose additional Community financial instruments to support the implementation of the Directive. These proposals shall consider certain specified measures, including in the context of the revision of the ERDF Regulation for the next programming period, a significant increase of the maximum amount of the European Regional Development Fund allocation that may be used to support energy efficiency including district heating and cooling and renewable energy investments in housing and an extension of the eligibility of those projects; and the establishment of an Energy Efficiency Fund, based on contributions from the Community budget, the European Investment Bank and Member States to act as a leverage for increasing private and public investments for projects increasing energy efficiency of buildings, including renewable energy in buildings or building components, related to energy efficiency by 2020.

**Energy performance certificate:** energy performance certificate may for non-residential buildings, if appropriate, also include the actual annual energy that is consumed. When a building is sold or let in advance of construction, the seller shall provide an accurate written assessment of its future energy performance.

Public authorities, taking into account the leading role which they should play in the field of energy performance of buildings, shall implement the recommendations included in the energy performance certificate issued for buildings occupied by them.

The Commission shall adopt, by 30 June 2010, **guidelines** specifying minimum standards for the content, language and presentation of energy performance certificates. Each Member State shall recognise certificates issued in another Member State in accordance with these guidelines and shall not restrict the freedom to provide financial services for reasons relating to the certificate issued in that Member State.

In addition, Parliament states that by 2011, on the basis of information received from Member States and in consultation with the relevant sectors, a **voluntary common European Union certification** for the energy performance of non-residential buildings shall be developed through the Committee procedure. By 2012, Member States shall introduce the EU voluntary certification system in their countries to function alongside the national certification scheme.

A building owner may at any time request an accredited expert to produce, re-calculate and update an energy performance certificate, irrespective of whether the building is being constructed, refurbished, rented out or sold.

Parliament added some clauses to the provisions on **inspection of air-conditioning systems, independent experts, and training.**

Lastly, Parliament states that by 2010, the Commission shall **establish a website**, which shall contain certain information including the latest version of every Energy Efficiency Action Plan.

## Energy performance of buildings. Recast

2008/0223(COD) - 13/11/2008 - Legislative proposal

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

PROPOSED ACT: Directive of the European Parliament and of the Council.

**BACKGROUND:** the energy consumption of buildings varies enormously. Whilst new buildings may need less than 3 to 5 litres of heating oil or equivalent per square meter floor area and year, the existing buildings stock consumes, on average, about 25 litres per square meter, some buildings even up to 60 litres. Available construction products and installation technologies can drastically improve the building's energy performance – and so reduce its energy consumption – and create net benefits: the annual energy cost savings are exceeding the annual capital costs for the investments. The best moment for energy improvements is when buildings are constructed or renovated.

The existing Energy Performance of Buildings Directive (2002/91/EC) is a key element to improve buildings' energy performance. Some Member States have made promising progress in recent years, but the majority still have an enormous untapped potential for improvements. To this end, the Commission sees further room for strengthening the effectiveness and the impact of this Directive.

**CONTENT:** in the proposal the objectives and main principles of the current EPBD are retained and the role of Member States in setting up the concrete requirements is also the same as in the current EPBD. The administrative burdens are kept to a minimum, but developed in order to achieve maximum effect. It is crucial that the current EPBD be properly implemented and on time. This proposal should not be an excuse to delay implementation of the current Directive.

The proposal clarifies, strengthens and extends the scope of the current EPBD's provisions by:

- introducing clarification of the wording of certain provisions;
- extending the scope of the provision requiring Member States to set up minimum energy performance requirements when a major renovation is to be carried out;
- reinforcing the provisions on energy performance certificates, inspections of heating and air-conditioning systems, energy performance requirements, information, and independent experts;
- providing Member States and interested parties with a benchmarking calculation instrument, which allows the nationally/regionally determined minimum energy performance requirements ambition to cost-optimal levels to be compared;
- stimulating Member States to develop frameworks for higher market uptake of low or zero energy and carbon buildings;
- encouraging a more active involvement of the public sector to provide a leading example.

The Commission will continue to help Member States implementing this Directive, like with the information service "Buildings Platform". In 2009, the Commission will launch a major "Build-up" initiative to increase the awareness of the whole chain from authorities, to construction industry and citizens on the saving opportunities. New financing schemes are introduced to overcome investment barriers.

According to the Commission, the macroeconomic estimated impacts are also significant: 5-6% less energy will be used in EU in 2020 (which equals the total current consumption of Belgium and Romania) and about 5% less CO<sub>2</sub> emissions will be emitted in the whole EU in 2020.

## Energy performance of buildings. Recast

2008/0223(COD) - 18/05/2010 - Text adopted by Parliament, 2nd reading

The European Parliament adopted a resolution on the Council position at first reading with a view to the adoption of a directive of the European Parliament and of the Council on the energy performance of buildings (recast). It approved the Council's position.

A draft Commission statement on financing for energy efficiency in buildings is annexed to the resolution.

In this statement, the Commission underlines the crucial role that financing instruments play for a successful transformation of the European building sector into an energy-efficient and low carbon one.

The Commission:

- will continue to encourage Member States to use extensively the available funds under the European Regional Development Fund and support Member States in making better use of all available funds and funding that can act as a leverage for stimulating investments in energy efficiency;
- will explore the possibility of further developing all existing initiatives, such as the Smart Cities initiative ([SET-Plan](#)) or the use of the Intelligent Energy - Europe II budget, e.g. for the purpose of knowledge sharing and technical assistance on the establishment of national revolving funds;
- will prepare an overview and analysis of financing mechanisms currently in place in Member States and take account of the findings to endeavour to disseminate best practice across the EU;
- will reflect on the possible future development of financial incentives (inter alia with regard to the Union instruments referred to for this purpose in Article 10(5)(a)) and their optimal use for investments in improved energy efficiency of buildings.

## Energy performance of buildings. Recast

2008/0223(COD) - 15/04/2010 - Commission communication on Council's position

The text of the negotiated Council Position is, in substance, in line with the Commission's proposal and therefore can be supported.

The negotiated Council Position is the result of inter-institutional negotiations in two stage process. The first stage covered the technical substance of the proposal and the second the adaptation of the proposal to the Treaty on the Functioning of the European Union (TFEU) as regards its legal basis and comitology provisions.

The main subjects of negotiation on which an agreement was reached are as follows:

**Change of legal basis (preamble):** due to the entry into force of the Treaty on the Functioning of the European Union (TFEU), the co-legislators agreed to change the legal basis to Article 194 (2) TFEU. It is added that the Directive sets minimum requirements that do not prevent Member States from maintaining or introducing more stringent measures. The Commission agrees with these changes, which do not modify the applicable decision-making procedure.



**Cost-optimal minimum energy performance requirements and comparative methodology framework:** the Commission will develop a comparative methodology for calculating energy performance cost-optimal levels for buildings. Member States will justify any significant gap and present a plan outlining appropriate steps forward.

**Existing buildings:** this provision was reinforced by requesting that all existing buildings undergoing major renovation meet energy performance requirements and that energy performance requirements are also set out for building elements.

**Technical building systems:** a new provision requires the setting of energy performance requirements for the technical building systems (e.g. heating, hot water, and air conditioning systems).

**Nearly zero energy buildings:** a consensus emerged on the definition of 'nearly zero energy buildings' and the need for developing national plans to increase their number. Member States shall ensure that by 31/12/2018 new buildings occupied and owned by a public authority and by 31/12/2020 other new buildings are 'nearly zero energy buildings'.

**Financial incentives and market barriers:** this new article was included to highlight the importance of appropriate financing. Member States shall draw up a list of existing and proposed measures and the Commission shall present an analysis of the funds available. A Commission's statement on financing for energy efficiency in buildings indicates its role in supporting the use of financing instruments to achieve an energy-efficient and low carbon European building sector.

**Energy performance certificates:** this provision was reinforced by improving the content of the certificates, by reinforcing the obligation to display then certificate in public buildings and by requiring that the performance indicator set on the certificate is indicated in housing advertisements.

**Inspection of heating and air-conditioning systems and Independent experts and control systems:** greater flexibility to Member States regarding the inspection of air-conditioning systems was coupled with a requirement to ensure independent control systems for certificates and reports on inspections of heating and air conditioning systems.

**Provisions on delegated and implementing acts:** the Directive delegates powers on the Commission to adopt the comparative methodology framework of Article 5 (until 30 June 2011) and to adapt to technical progress (points 3 and 4 of Annex I) for a period of 5 years -automatically renewed- following the entry into force of the Directive. The Parliament and the Council may revoke the delegation of powers at any moment and object to the delegated act within the 2 months following the notification, with the possibility of asking for an extension of 2 additional months.

A Commission statement concerning the notification of delegated acts during the recess period of the institutions has been included at the request of the Parliament, together with a joint statement of the European Parliament, the Council and the Commission declaring that the provisions of this Directive will not constitute a precedent on their positions on delegated acts.

The Commission is also requested to adopt an implementing act to establish a voluntary common certification scheme for energy performance of non-residential buildings.

**Review clause:** the review clause was made more specific by setting a date to evaluate the Directive (1 January 2017).

**Transposition:** the adoption of transposition measures by the Member States was changed to 'two years after the entry into force' of the Directive. The dates of application of national provisions transposing most of Directive's provisions are now 'two years and six months' and 'three years' after the entry into force of the Directive. Additional time (until 31/12/2015) was granted for the application of Article 11(1) and (2) to single rented units.

## 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<sup>2</sup> is occupied by a public authority and frequently visited by the public. On 9 July 2015, this threshold of 500 m<sup>2</sup> shall be lowered to 250 m<sup>2</sup>. 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.

## Energy performance of buildings. Recast

2008/0223(COD) - 29/07/2016 - Follow-up document

In accordance with Article 5(4) and Article 23 of Directive 2010/31/EU on the energy performance of buildings, this report reviews progress achieved by Member States in **reaching cost-optimal levels of minimum energy performance requirements for new and existing buildings**, and also for building elements.

The Commission recalled that buildings are central to the EU's energy efficiency policy. Nearly **40 %** of final energy consumption and **36 %** of greenhouse gas emissions is due to houses, offices, shops and other buildings.

**Cost-optimality:** this term is defined in the Directive. It is the energy performance (measured in kWh/m<sup>2</sup> of primary energy) that **leads to the lowest cost during the estimated building life cycle** (30 years for residential buildings and 20 years for non-residential buildings).

The cost calculations (expressed in net present value) include investment costs in energy efficiency and renewable energy measures, maintenance and operating costs, energy costs, earnings from energy produced and disposal costs (costs for deconstruction at the end of a building's life).

The EU legislators decided to establish under the Directive a **benchmarking mechanism** to calculate the cost-optimal level of energy performance requirements for new and existing buildings, both residential and non-residential.

This benchmarking mechanism indicates where Member States are setting performance requirements that are below cost-optimal levels, meaning that there is an untapped cost-efficient energy-saving potential in national building stocks.

The benchmarking mechanism is drawn up based on a **framework methodology** that enables the comparison of energy efficiency measures, measures incorporating renewable energy sources and various combinations of these measures. This framework enables the Commission to measure Member States' progress in reaching cost-optimal levels of minimum performance requirements.

The use of the cost-optimal framework methodology contributes to **setting minimum performance requirements for new and existing buildings** and building elements (e.g. walls, roof, windows, etc.) in line with the technical and economic energy-saving potential and specific national and regional conditions. Furthermore, it enables the definition of efficiency levels that are cost-efficient for households and investors.

Detailed provisions on minimum performance requirements with a view to achieving cost optimal levels are laid out in Commission [Delegated Regulation \(EU\) No 244/2012](#).

**Main conclusions of the report:** the report noted that all Member States, **except Greece, have submitted cost-optimal calculations**. In most cases, **requirements were met** for both the Directive on the energy performance of buildings and the Delegated Regulation on the framework methodology. The other cases are being followed up by the Commission as appropriate.

The report stressed that:

- **the objective of the cost-optimal framework methodology was achieved**, because it informed decision-making on setting minimum energy performance requirements at national and regional levels at the 'right' (i.e. cost-effective) level;
- the cost-optimal calculations have shown that there is **still a significant potential for cost-effective energy savings** that can be achieved by bridging the gap between the current minimum requirements and cost-optimal levels.

The report noted that for the first time, a benchmarking framework based on the cost-optimal methodology proposed in the Directive and the Regulation was used. This enabled the comparison and combination of various energy efficiency and renewable energy technologies. This work supported national authorities in their task of setting realistic minimum energy performance requirements for buildings and in preparing the ground for meeting the targets for nearly zero- energy buildings.

However, the potential of **different types of renewable energy** could have been better explored in the calculations and **better statistical information** on national building stocks could be sought.

The Commission will fully use its powers under the Treaty to **ensure that the Directive on the energy performance of buildings is correctly implemented**. This includes achieving the cost-optimal levels of minimum energy performance requirements, within the indicated timeline, to ensure that the EU's longer-term energy and climate objectives, and the contribution of the building sector to meeting those objectives are fulfilled.