

EVALUATION ROADMAP			
TITLE OF THE EVALUATION/FC	Evaluation of the Energy Performance of Buildings Directive 2010/31/EU		
LEAD DG - RESPONSIBLE UNIT	DG ENER, C.3	DATE OF THIS ROADMAP	06 / 2015
TYPE OF EVALUATION	Evaluation Ex-post, Mixed	PLANNED START DATE PLANNED COMPLETION DATE	06 / 2015 02 / 2016
		PLANNING CALENDAR	http://ec.europa.eu/smart- regulation/evaluation/index_en.htm
This indicative roadmap is provided for information purposes only and is subject to change.			

A. Purpose

(A.1) Purpose

The Energy Performance of Buildings Directive 2010/31/EU (EPBD)¹replaced Directive 2002/91/EC setting a more ambitious framework to improve the energy efficiency of EU buildings. This initiative aims at the thorough evaluation of the Directive in the light of the experience gained and progress made during its application. The evaluation looks at past and current performance and provides an assessment by five different criteria: Relevance, Effectiveness, Efficiency, EU-added value, and Coherence.

This evaluation is a direct follow up to the Communication on an Energy Union², which foresees a review and possible revision of the Energy Performance of Buildings Directive by the end of 2016. The results of this evaluation will provide the basis for the Impact Assessment of policy options in the framework of the EPBD review. The evaluation is accompanied by an EU wide public consultation, kicking off during EU Sustainable Energy Week in June 2015 and followed by an open internet-based public consultation. (A.2) Justification

The Energy Performance of Buildings Directive foresees in its Article 19 that the Directive must be evaluated by 1 January 2017 at the latest. The review of the Directive including Smart Finance for Smart Buildings Initiative is one of the specific actions to improve the energy performance of buildings in the EU included in the Roadmap for the Energy Union COM(2015) 80 final of 25 February 2015³.

B. Content and subject of the evaluation

(B.1) Subject area

Energy use in buildings represents about 40% of the EU's total final energy consumption and CO_2 emissions⁴. Buildings are long-term assets useful for 50 or more years and 75-90% of those standing today are expected to remain in use in 2050. Following the introduction of efficiency requirements in building codes, new buildings today consume only half as much as typical buildings from the 1980s. With

¹ Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings (recast)

² <u>http://ec.europa.eu/priorities/energy-union/index_en.htm</u>

³ http://ec.europa.eu/priorities/energy-union/docs/energyunion-annex_en.pdf

⁴ Summary of the Impact Assessment accompanying the proposal for a recast of the EPBD, <u>http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52008SC2865</u>

low demolition rates (0.1% per year) and low refurbishment rates (1.2% per year), the EU needs to boost the number of deep renovations (60% savings or more) and to speed up the renovation rate of the existing stock to above 2% annually. Financing the required upfront investments is a challenge and should maximise significant investments of European Structural and Investment Funds expected in this area over 2014-2020.

The EPBD is the main legislative instrument at EU level to achieve energy performance in buildings. The Directive requires Member States to set performance standards for buildings; apply energy performance certificates (EPCs) to buildings; and ensure that from the end of the decade only "nearly zero energy buildings" (NZEBs) are built. The application deadline for most of these provisions was January 2013. Detailed information on their impact and implementation will be analysed in this evaluation.

The Commission in its Energy Efficiency Communication of 23 July 2014⁵ indicated that, with a 2030 perspective, additional measures should be considered to tackle the energy efficiency of buildings. The evaluation will give input in this context as well. The EPBD will also remain highly relevant for the 2030 climate and energy policy framework, which includes the target of a 30% reduction of greenhouse gases in non-ETS sectors.

(B.2) Original objectives of the intervention

The objective of the Directive is to promote the improvement of the energy performance⁶ of buildings within the Union, taking into account outdoor climatic and local conditions, as well as indoor climate requirements and cost-effectiveness.

(B.3) How the objectives were to be achieved

Diagram illustrating the intervention logic of the Directive:

^{5 &}lt;u>http://ec.europa.eu/energy/sites/ener/files/documents/2014_eec_communication_adopted_0.pdf</u>

⁶ Energy performance of buildings is defined as the amount of primary energy needed to meet the energy demand associated with typical use of the building.

Objectives EPBD

 to promote 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



Actions for Member States:

- Setting up minimum energy performance requirements for new buildings and existing buildings that undergo major renovation
- Applying energy performance certificates (EPCs) to buildings;
- Ensuring that from the end of the decade only nearly zero-energy buildings (NZEB) are built.
- Setting up minimum requirements for technical buildings systems (heating, air conditioning, large ventilation systems and domestic hot water) and regular inspection of heating and air conditioning systems
- Ensuring compliance and control through independent control systems



Consequences:

- Reduced energy use in buildings
- Relevant quality information for consumers on the energy performance of their homes and on how to improve it
- Minimum energy performance requirements for new buildings and for renovating buildings and parts of buildings set at the right level (lowest cost during the estimated life cycle), and kept under regular review
- Only NZEB constructed from the end of 2020
- Enhanced level of ambition of national and regional building codes, diminishing differences across Member States
- Innovation in the building sector
- Relevant quality information available to regional and local authorities , Member States and the Commission

External Factors:

- Characteristics of each national buildings stock (starting point)
- National and regional transposition and implementation measures
- Local climatic conditions
- National enforcement systems
- Cost-effectiveness
- Indoor climate requirements
- Technological development and innovation
- Maturity of national energy services sectors
- Availability of national public and private financing
- Other legislation touching on buildings



Expected Results/Impacts:

- Better energy performance and energy savings
- Reduced GHG emissions
- More jobs (creation and retention) in the renovation, construction and energy services sectors
- Reduced gas imports
- Reduced air, noise, water and soil pollution
- Increased use of renewable energy sources in buildings
- Reduced resource use for energy extraction, transformation, transportation and use
- Co-benefits on human health and state of the ecosystems
- Consumers can compare the energy performance of houses and apartments before renting or buying
- Reduced energy bills for EU citizens

C. Scope of the evaluation/FC

(C.1) Topics covered

The evaluation of the EPBD on the whole since its adoption in 2010 will provide evidence on whether the legislation is fit for purpose and achieving its objectives. An evaluation methodology and detailed evaluation questions will be developed and iteratively refined with input from an external contractor. The evaluation will also consider relevant building related provisions in other pieces of EU legislation, notably the Directive on the promotion of the use of energy from renewable sources (Directive 2009/28/EC) and the Energy Efficiency Directive (Directive 2012/27/EU).

(C.2) Questions/Issues to be examined

The main evaluation questions to be answered are provided below:

Effectiveness

-To what extent has the Directive achieved its objectives, e.g. to improve 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?

- Which provisions have been most appropriate for improving energy performance of buildings? To what extent has the lack of fixed EU-wide levels (requiring instead that Member States lay down the mechanisms for implementing its provisions) been effective and why?

- What main factors, in particular related to national implementation, have influenced, or stood in the way of, achieving these objectives?

- What results, if any, did the EPBD achieve beyond its main aim to promote energy performance, for example towards job creation or retention, incorporation of renewable energy sources in buildings or driving innovation in building-related technology?

- Did the Directive cause any other unexpected or unintended changes?

Efficiency

- What are the costs and benefits associated with the implementation of the EPBD?

- To what extend have the EPBD and the obligations included therein been efficient means of achieving a more energy efficient European building stock?

-To what extent are the costs involved with implementing the EPBD justified given the benefits which have been achieved?

- *Is there potential to simplify and deliver the objectives of the Directive more efficiently? How?*

- Have there been technical or other developments since the elaboration of the Directive that could contribute to achieving the objective more efficiently, for example in the context of the recent EEFIG report⁷?

- To what extent does the Directive allow for efficient policy monitoring (e.g. reporting mechanism)? How far do the reporting processes allow for efficient collection of all relevant information?

Coherence

- To what extent are the EPBD provisions internally coherent? Do provisions overlap or contradict, do they co-act as intended?

⁷ Energy Efficiency Financial Institutions Group Report: "Energy Efficiency – the first fuel for the EU Economy. How to drive new finance for energy efficiency investments", February 2015, www.eefig.eu

- Does the EPBD contradict other EU interventions with similar objectives?

- To what extent can effects be linked to provisions in other EU legislation?

- Which effects had the EPBD on areas targeted by other EU legislation?

- To what extent are there any gaps between the EPBD and other relevant EU legislation or initiatives that could prevent the objectives of the EPBD to be met?

Relevance

- Do the EPBD objectives still correspond to the needs of the policy area concerned?

- To what extent have the EPBD objectives proved relevant to the needs identified at the outset?

- Which other approaches than those set currently in the EPBD became more important for improving energy efficiency in buildings, including solutions at district and city levels?

- What are citizens' expectations for the role of the EU to ensure an efficient building stock?

EU added value

- What has been the EU added value of the Directive, and do the issues addressed continue to require action at EU level?

- Why would the EPBD objectives be better achieved by EU action?

(C.3) Other tasks

The evaluation will provide the basis for the Impact Assessment of policy options in the framework of the review and possible revision of the EPBD. The external contractor will prepare a report of the open internet-based public consultation that will follow the session on 'Tapping the energy savings potential in the building sector' organised during EU Sustainable Energy Week on 18 June 2015.

D. Evidence base

(D.1) Evidence from monitoring

Information on the implementation of current policies is available from the regular dialogue with Member States and the reporting obligations under the EPBD. A report on the national implementation of the cost-optimal methodology is about to be finalised. Feedback on the practical application at Member State level is provided through the ongoing work of the Concerted Action on the EPBD (<u>http://www.epbd-ca.eu/</u>), and the building-related Concerted Action work on the Energy Efficiency Directive and the Directive on Renewable Energy Sources.

(D.2) Previous evaluations and other reports

The evaluation will build on the preparatory work that was carried out for the Energy Efficiency Communication of 23 July 2014 COM(2014) 520. An analysis of financing of energy efficiency in buildings is presented in the EEFIG Report⁸. A number of studies in relation to implementing key aspects of the EPBD such as Nearly Zero-Energy Buildings and Energy Performance Certificates are available: <u>http://ec.europa.eu/energy/en/topics/energy-efficiency/buildings</u> or under preparation. We refer in addition to the Commission progress report on Nearly Zero-Energy Buildings COM(2013) 483 and to the

⁸ Energy Efficiency Financial Institutions Group Report: "Energy Efficiency – the first fuel for the EU Economy. How to drive new finance for energy efficiency investments", February 2015, <u>www.eefig.eu</u>

Commission report on financing support for energy efficiency in buildings COM(2013) 225.

(D.3) Evidence from assessing the implementation and application of legislation (complaints, infringement procedures)

Timely transposition and implementation of the EPBD is ensured through constant collaboration between the Commission and Member States. DG Energy has met bilaterally with Member States in numerous occasions and organised missions to individual Member States to meet this end. As a result, transposition and implementation has advanced considerably in 2014. Non-communication infringements remain open against 5 Member States. This is seen as an indication of the extended scope and ambition of the EPBD of 2010, as compared to its predecessor. Citizens have complained about this relatively slow transposition as well as about the non-conform implementation of key provisions such as Energy Performance Certificates. The non-conformity assessment of the national transposition measures was launched in 2014 and will continue during 2015. A meaningful source of information is the European Parliament database with the replies to Parliamentary questions. This provides further evidence for the evaluation.

(D.4) Consultation

An open internet-based consultation on the evaluation of the Energy Performance of Buildings Directive will run from 26 June to 31October 2015 (longer period than the mandatory 12-week consultation). The target groups of this consultation are Public authorities, Member States authorities, private organisations, industry associations, SMEs, Consultancies, other relevant stakeholders and Citizens outside the European Union). The consultation (inside and of is available on: https://ec.europa.eu/energy/en/consultations/public-consultation-evaluation-energy-performancebuildings-directive. The questions were elaborated in a way that the consultation feeds well into the

evaluation and at the same time provides a basis for the identification of policy options that will be part of the Impact Assessment in the framework of the EPBD review. Position papers will be received through a dedicated functional mailbox ENER-CONSULTATION-EPBD@ec.europa.eu. Results will be made available online.

A further stakeholder consultation focusing on the analysis of alternative follow-up policy options will be carried out beyond the 2015 internet-based consultation on the evaluation of the EPBD. A targeted stakeholder consultation meeting will be organised in spring 2015. This consultation meeting will target mainly public authorities, Member States authorities, private organisations, industry associations, SMEs and other relevant stakeholders.

Further stakeholders opinions will be collected throughout the full review process, including through the organisation of thematic workshops. These workshops will target stakeholders in public authorities, industry and other groups relevant to the specific theme. The existing Committee on Energy Performance of Buildings will play an important role in shaping the outcome of the review process. Member States will also be involved in the process through the EPBD Concerted Action.

(D.5) Further evidence to be gathered

E. Other relevant information/ remarks