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DRAFT REPORT

on the implementation of the Energy Performance of Buildings Directive
(2021/2077(INI))

Committee on Industry, Research and Energy

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EXPLANATORY STATEMENT - SUMMARY OF FACTS AND FINDINGS

Background

Buildings are indispensable for reaching the EU's carbon neutrality, energy efficiency and renewable energy objectives. Reaching our climate targets without decarbonising our living and working spaces seems impossible. Indeed, they are responsible for 36 % of greenhouse gas emissions and 40% of the energy consumption in the EU. Yet, in today's Europe, 75 % of buildings are not energy efficient, mostly because many of the buildings in use today were constructed before the current requirements were in place.

As the Union recently set its target of net 55 % emission reduction by 2030, increasing the energy performance of its buildings has to contribute largely to the achievement of that objective. In fact, the EU should reduce its buildings' greenhouse gas emissions by 60 %, their final energy consumption by 14% and energy consumption for heating and cooling by 18 %. There are also numerous environmental, social and economic benefits associated with energy efficiency renovation, leading to energy savings, lower emissions, reduced energy bills for households and job creation, as well as improving European competitiveness and economic resilience.

While the latest energy requirements apply to new buildings, we must not forget the necessity of upgrading the energy efficiency of existing buildings, since about 85-95 % of today's buildings will be in use by 2050, according to estimates. Any convincing strategy must therefore tackle the stock of buildings as well as the new constructions.

However, the building renovation rate is currently low at around 1 % per year and the programme of renovation does not always cover energy aspects. Commonly, it will target the energy consumption to reduce waste in supply and will improve the technical building systems. Installing renewables is less frequent and addressing structural energy performance issues even rarer. That raises the question of the strategies in place to ensure that the renovation rate accelerates while targeting energy performance problems.

Furthermore, the building renovation rate is impeded by the fact that the largest potential gains are in the residential sector¹, where landlords are more scattered than in the non-residential space.

Legislative framework

These observations have justified intervention at Union level to harmonise and set minimum expectations for improving energy performance in buildings.

The Directive 2010/31/EU ("Energy Performance of Buildings Directive" or "EPBD") is the main legal instrument in the European Union. It provides for a comprehensive and integrated approach towards improving the efficient use of energy in both new and existing buildings,

¹ According to the impact assessment for the Climate Target Plan 2030, the residential sector would have to undergo the highest reduction in energy demand in heating and cooling, ranging between -19 % to -23 %, compared to 2015.

residential as well as commercial. The EPBD's provisions cover energy needs for thermal insulation, space and hot water heating, cooling, ventilation and lighting.

The EPBD has two complementary objectives, namely to accelerate the renovation of existing buildings by 2050 and to support the modernisation of all buildings with smart technologies and a clearer link to clean mobility. The EPBD is also intended to provide a stable environment for investment decisions and enabling consumers and businesses to make more informed choices to save energy and money.

The EPBD requires Member States to adopt long-term renovation strategies and establish minimum requirements for the energy performance of newly constructed buildings and existing buildings undergoing major renovation. In other words, it fosters a convergent and ambitious approach to long-term renovation of buildings without mandating the pace and the method for that renovation, which are left to Member States.

It was complemented by Directive 2012/27/EU (the “Energy Efficiency Directive” or ‘EED’) that contained provisions on building renovation and long-term strategies for mobilising investment in the renovation of national building stocks.

The last revision to the EPBD occurred in 2018. The EPBD and the EED have been amended by Directive (EU) 2018/844, which entered into force on 9 July 2018 and was to be transposed by 10 April 2020. Importantly, **this implementation report focuses on the latest changes to the EPBD** that were introduced then, in particular the requirements for Member States to present an upgraded version of their Long-Term Renovation Strategies (LTRSs), and does not cover the implementation of the parts of the EPBD that were not affected by its latest revision.

Under the EED Article 4, Member States already had the obligation to present LTRs to enable implementation of their efforts on the ground through strategic planning, effective policies and financial support. Strong LTRs have been expected to accelerate the cost-effective renovation of existing buildings and ensure an increase in deep renovations. A strategy is not an end in itself, but a starting point for stronger action. LTRs are also part of the National energy and climate plans (NECPs). While Member States must adopt LTRs, there is no legal obligation on them to implement them and the Commission can therefore only assess them but not control their effectiveness.

There were iterations of the LTRs in 2014 and 2017. The obligation for Member States to establish an LTR of their national building stock was moved in 2018 to the EPBD from the EED. Indeed, Article 1 of Directive (EU) 2018/844 introduced into the EPBD a new Article 2a on LTRs and repealed Article 4 of the EED.

Latest developments

The Commission subsequently issued in 2019 two recommendations on building renovation² and on building modernisation³, based on the 2018 EPBD revision, to facilitate the Member

² Commission Recommendation (EU) 2019/786 of 8 May 2019 on building renovation (notified under document C(2019) 3352) (Text with EEA relevance.) C/2019/3352. OJ L 127, 16.5.2019, p. 34–79

³ Commission Recommendation (EU) 2019/1019 of 7 June 2019 on building modernisation (Text with EEA relevance.) C/2019/4135. OJ L 165, 21.6.2019, p. 70–128

States' transposition and implementation of the Directive.

- Meanwhile, the Commission has worked on its next revision of the EPBD under the “Fit for 55” Package. Changes to the EPBD were announced in its Communication on the Renovation Wave Strategy of October 2020⁴. It published in February 2021 an inception impact assessment⁵ as part of that work stream. Its objective is to adopt a legislative proposal revising the EPBD on 15 December 2021.

Elements of the latest EPBD revision

As the scope of this implementation report is restricted to the latest changes introduced in the EPBD, it is worth keeping in mind what those are and what their objectives were at the time of adoption.

- LTRSs (Article 2a(1))

Given the shortcomings of the 2014 and 2017 strategies and the increasing urgency to tackle climate change, the renovation strategy requirements were strengthened in the 2018 revision of EPBD. In particular, it expanded the scope of LTRSs. Like for the previous versions, LTRSs apply to the national stock of public and private, residential and non-residential buildings. However, the amended EPBD introduces new and broader obligations and identifies new areas of policy and action to be covered in the LTRSs.

Member States' LTRSs must now cover existing elements (see Article 4 of the EED) and new elements (see Article 2a of the EPBD). A core change was the obligation to specify in the LTRSs how to support the renovation of national building stocks into highly energy-efficient and decarbonised buildings by 2050, facilitating the cost-effective transformation of existing buildings into nearly zero-energy buildings (‘NZEBS’).

In addition, Member States are now encouraged to give careful consideration to the new elements that make up their strategies (e.g. milestones, indicators, longer term vision, trigger points, worst-performing buildings, energy poverty and smart technologies), in order to ensure that the relevant policies and measures are as effective as possible.

The Commission has set up a webpage dedicated to the LTRSs⁶ and published a staff working document in March 2021 to present its preliminary assessment of 13 LTRSs⁷.

- Roadmap (Article 2a(2))

A roadmap is now a compulsory element of the LTRSs. It includes “*measures and domestically established measurable progress indicators, with a view to the long-term 2050 goal of reducing greenhouse gas emissions in the Union by 80-95 % compared to 1990*”.

⁴ COM(2020) 662 final. “*The Commission will revise in 2021 the Energy Efficiency and the Energy Performance of Buildings Directives. It will propose to introduce a stronger obligation to have Energy Performance Certificates alongside a phased introduction of mandatory minimum energy performance standards for existing buildings. It will also propose to extend the requirements for building renovation to all public administration levels. The impact assessments accompanying these legislative revisions will consider different options in terms of the level, scope and timing of these requirements.*”

⁵ https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12910-Energy-efficiency-Revision-of-the-Energy-Performance-of-Buildings-Directive_en

⁶ https://ec.europa.eu/energy/topics/energy-efficiency/energy-efficient-buildings/long-term-renovation-strategies_en

⁷ COMMISSION STAFF WORKING DOCUMENT: Preliminary analysis of the long-term renovation strategies of 13 Member States (SWD(2021) 69 final)

- Obligation to facilitate access to mechanisms to support the mobilisation of investments (Article 2a(3))

The latest EPBD introduces an obligation on Member States to facilitate access to financial mechanisms to support the mobilisation of investments for achieving the renovation in line with the national strategy. This obligation builds on Article 20 of the EED, which requires Member States to facilitate the establishment of financing facilities, or the use of existing ones, for energy efficiency improvement measures. However, this provision did not exist under Article 4 of the EED. To drive their LTRSs, Member States will therefore need to create access to a range of financial mechanisms to support the mobilisation of investments.

- Public consultation and monitoring (Article 2a(5))

When developing its LTRS “*each Member State shall carry out a public consultation*”. This is a new element which did not exist under Article 4 of the EED. The consultation relates to the complete LTRS. As public consultations can improve policy results, the EPBD makes them mandatory, but leaves each Member State to determine the consultation format and method. Member States can also consider setting up a stakeholder platform.

- Technical building systems (Article 8)

The revision expands significantly the obligation, when renovating or constructing buildings, to install equipment that contributes to electro-mobility and smart readiness indicators. Such provisions, which did not exist in the 2010 version of the EPBD, are justified by the growing need for parking spaces, electric cables and charging stations for electric vehicles in both new and renovated buildings and by the development of new tools that can help saving energy, such as self-regulating equipment for individual room control and the replacement of physical inspections with building automation and electronic supervision of technical building systems.

- Financial measures (Article 10(6))

The EPBD in its previous version only required Member States to “*take account of the cost-optimal levels of energy performance when providing incentives for the construction or major renovation of buildings*”. The 2018 revision mandates that they “*link their financial measures for energy efficiency improvements in the renovation of buildings to the targeted or achieved energy savings*” but allows different approaches to achieve it and provides flexibility to the Member States as to its implementation according to national or regional conditions

- Databases for Energy Performance Certificates (EPCs) (Article 10(6a))

The EPCs are important instruments that should contribute to the enhancement of the energy performance of buildings and to recognising the state of a building and informing landlords and tenants of the buildings in this regard. Article 20(2) EPBD had already mandated Member States to provide information on the EPCs and the inspection reports, on their purpose and objectives, on the cost-effective ways and, where appropriate, on the available financial instruments to improve the energy performance of the building to the owners or tenants of the buildings. Yet, the Article 10(6a) of the EPBD adds that EPC databases must allow for the gathering of consumption data (measured or calculated) of the buildings covered. Member States do not have to establish a database or register. Where such a database exists or is introduced, Member States must comply with this new provision.

There has been relatively low penetration of EPCs across the EU with only three Member States

the share of the dwellings covered exceeds 15% of the national building stock⁸.

- Aggregated anonymised data: Article 10(6b)

This specific provision sets out that “*at least aggregated anonymised data compliant with Union and national data protection requirements shall be made available on request for statistical and research purposes and to the building owner.*” This provision does not require them to make changes to existing databases, but to ensure that the legislative framework allows the data to be made available.

- Inspection of heating systems and air conditioning systems (Articles 14 and 15)

To ensure the initial and continued performance of heating systems, air-conditioning systems and ventilation systems, inspection schemes should be designed to maximise their results. Articles 14 and 15 of the EPBD expand the scope of technical building systems subject to mandatory regular inspections or alternative measures. In addition, those Articles lay down alternatives to inspections based on automation and control or electronic monitoring and set out new requirements on the installation of building automation and control systems in certain non-residential buildings. Building automation and electronic monitoring of technical building systems have proven to be an effective replacement for inspections. The implementation of the requirements in Article 14(4) and Article 15(4) of the EPBD will ensure that building automation and control systems are installed in non-residential buildings where heating or air-conditioning effective rated output is above a certain threshold, and where this is technically and economically feasible.

- Information to owners or tenants of buildings (Article 20)

Article 20 was amended to clarify Member States’ obligation to provide information to tenants or owners. The list of cases now includes an obligation to provide information on replacing fossil fuel boilers with more sustainable alternatives. Article 20(2) requires further that Member States “*provide the information through accessible and transparent advisory tools such as renovation advice and one-stop shops*”.

General assessment of LTRSs

- According to the Commission’s preliminary assessment, there is a broad support for easier access to financing, technical support, promotion of advisory tools such as one-stop-shops, tackling energy poverty and better information.
- However, the LTRSs submitted so far vary in terms of the completeness of the elements required by the EPBD and the ambition level of renovation targets and goals in terms of objectives and budget allocation.
- As regards the completeness aspect, and from a formal point of view, the LTRS have in general respected the requirements of the EPBD, providing information in the different categories requested by Article 2a.
- As regards the strategies’ ambition level, Member States have committed to different types of indicative milestones for 2030, 2040 and 2050, and to different sets of policy measures and budget allocations.
- Strategies include an objective at or above 90 % GHG emissions reduction, which is in

⁸ https://ec.europa.eu/energy/content/buildings-epcs-registered_en

line with the legal requirement of the EPBD article 2a, that requires Member States to set a long-term 2050 goal of reducing GHG emissions in the EU by 80-95 % compared to 1990.

- With regards to the method to achieve that objective, most strategies appear to put more effort towards decarbonising energy supply systems and greenhouse gas emissions reduction, rather than actively improving the energy performance of buildings, reducing overall the energy consumption in this sector.
- In terms of granularity of the strategies, the level of detail provided varies from one document to another. The Joint Research Centre is currently working on an in-depth completeness check; this will be published complementary to the Commission assessment once all strategies have been submitted.
- Moreover, the data provided by Member States vary in nature and make it difficult to precisely compare the effect of the different national measures. In particular, not all long-term renovation strategies are providing GHG reduction data, which makes it difficult to assess the ambition of the strategies in terms of climate mitigation. There are also noticeable gaps in costs of renovation across Member States which are not always easy to justify.
- As for their overall coherence between commitments and funding, the strategies also fail to provide sufficient detail over the entire period to 2050 to enable an evaluation of whether the supporting policies and financial arrangements are adequate to meet the goals.
- Many Member States submitted late their LTRSs, which can be partly explained by the COVID-19 crisis and Member States' need to provide also national plans under the Recovery and Resilience Facility that integrated a strong building renovation component. As of June 21, 2021, 2 Member States have not yet submitted their LTRSs (Poland; Malta).
- Early submissions of LTRSs strongly indicate a willingness of some Member States to act expeditiously towards implementing their renovation strategy, irrespective of the global context.
- Beyond the circumstances of recent months, those observations seem to reflect a deep trend of late submissions and incomplete or uncompliant strategies since 2014. It would appear that developing an LTRS is treated by some MS more as an obligation, as opposed to a real strategic tool at national level towards achieving the economic and social benefits that highly energy efficient, decarbonised and healthy buildings can bring. Yet this process is now much more important than in the past, because the Commission should be able to use the LTRSs to determine whether policies at national level can deliver on overall EU targets and therefore what needs to be in the new EU legislation.
- The timing of the submission of the long-term renovation strategies by Member States, spread over the entire year 2020 and not yet concluded (see above), has reduced significantly comparability among the plans elaborated in different Member States. Late submissions had indeed the possibility to include in their strategy also the COVID-19 crisis and the latest EU policy initiatives, such as the Renovation Wave.
- Beyond this, the objectives of the LTRS (described in EPBD Article 2a) are now misaligned with the EU's strengthened 2030 Climate Target and 2050 climate-neutrality objective. There is therefore a risk that the policies and measures planned under the LTRSs are unlikely to significantly accelerate the rate and depths of renovation as necessary (that would be doubling the current rate since the Renovation Wave strategy,

published in October 2020, sets the goal to increase annual renovation rates in the EU from 1 % to 2 % over the next decade, and to boost deep renovations).

- The European Commission should monitor closely whether LTRS align with the Renovation Wave and the new targets. The Commission should assess all Member State LTRSs not only in accordance with the legal text of EPBD Article 2a, but also in view of aligning with the climate neutrality objective by 2050 (meaning a higher decarbonisation objective and stronger emphasis on reducing the energy demand in the buildings sector), and guide Member States accordingly for their next LTRS update which is due by 2024 at the latest.

MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

on the implementation of the Energy Performance of Buildings Directive (2021/2077(INI))

The European Parliament,

- having regard to Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings¹ (Energy Performance of Buildings Directive or EPBD) and Directive (EU) 2018/844 of the European Parliament and of the Council of 30 May 2018 amending Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency²,
- having regard to the Treaty on the Functioning of the European Union, in particular Article 194 thereof,
- having regard to its resolution of 19 May 2021 on a European strategy for energy system integration³,
- having regard to Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC⁴ (Energy Efficiency Directive or EED),
- having regard to Commission Recommendation (EU) 2019/786 of 8 May 2019 on building renovation⁵,
- having regard to Commission Recommendation (EU) 2019/1019 of 7 June 2019 on building modernisation⁶,
- having regard to the Commission communication of 11 December 2019 on the European Green Deal (COM(2019)0640),
- having regard to the Commission communication of 11 March 2020 on a new Circular Economy Action Plan – For a cleaner and more competitive Europe (COM(2020)0098),
- having regard to the Commission communication of 14 October 2020 on a Renovation Wave for Europe – greening our buildings, creating jobs, improving lives (COM(2020)0662),
- having regard to the Commission staff working document of 25 March 2021 on the Preliminary analysis of the long-term renovation strategies of 13 Member States (SWD(2021)0069),

¹ OJ L 153, 18.6.2010, p. 13.

² OJ L 156, 19.6.2018, p. 75.

³ Texts adopted, P9_TA(2021)0240.

⁴ OJ L 315, 14.11.2012, p. 1.

⁵ OJ L 127, 16.5.2019, p. 34.

⁶ OJ L 165, 21.6.2019, p. 70.

- having regard to Rule 54 of its Rules of Procedure, as well as Article 1(1)(e) of, and Annex 3 to, the decision of the Conference of Presidents of 12 December 2002 on the procedure for granting authorisation to draw up own-initiative reports,
 - having regard to the report of the Committee on Industry, Research and Energy (A9-0000/2021),
- A. whereas buildings are indispensable for reaching the EU’s carbon neutrality, energy efficiency and renewable energy objectives;
 - B. whereas staged and deep renovation of the 210 million existing buildings will be crucial to any convincing strategy, as these are the most energy inefficient and up to 110 million buildings are potentially in need of renovation⁷;
 - C. whereas the building renovation rate is currently low, at around 1 % per year, and the renovation programme does not always cover energy aspects;
 - D. whereas the latest revision of the EPBD in 2018 through Directive (EU) 2018/844 aimed to accelerate the renovation of existing buildings by 2050, to support the modernisation of all buildings with smart technologies and a clearer link to clean mobility, and to provide a stable environment for investment decisions and enable consumers and businesses to make more informed choices to save energy and money;
 - E. whereas the EPBD mandates Member States to adopt long-term renovation strategies (LTRSs), but does not mandate them to actually renovate or give instructions on how this should be done, and does not provide them with efficient means to check their strategies against results;
1. Highlights that provisions in Article 2(a) of the EPBD will need to be strengthened in order to achieve 2050 climate-neutrality;
 2. Stresses that the EPBD, and detailed LTRs, should be a driving force to increase the scale and speed of the renovation of the EU’s building stock through new innovative policy measures, as suggested in the ‘Renovation Wave’;
 3. Regrets the fact that some Member States submitted their LTRs late and that two have not yet submitted their LTRs at all; points out that, as a result, comparability among the plans from Member States is difficult, as late submissions include links with national recovery plans adopted because of the COVID-19 crisis and the latest EU policy initiatives, such as the Renovation Wave;
 4. Notes that the LTRs submitted have in general broadly respected the requirements of Article 2(a) of the EPBD, providing information on the different categories requested therein; regrets the fact, however, that the level of detail provided, and the level of ambition, varies from one LTR to another;
 5. Acknowledges that the EU did not reach its energy efficiency target in 2020;
 6. Calls on the Commission to monitor closely whether the LTRs’ objectives are aligned

⁷ [https://www.europarl.europa.eu/RegData/etudes/STUD/2016/587326/IPOL_STU\(2016\)587326_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2016/587326/IPOL_STU(2016)587326_EN.pdf)

with the Renovation Wave and the new targets;

7. Points out that Member States broadly focused on decarbonising energy supply systems and greenhouse gas emissions, rather than actively improving the energy performance of buildings and thus reducing overall the energy consumption in this sector;
8. Highlights the importance of sustainability in material use and resource consumption of a building's lifecycle, from material extraction, construction and use, to end of use and demolition, including renewable and sustainable nature-based materials such as wood;
9. Regrets the fact that although the deadline for transposing the EPBD expired on 10 March 2020, some Member States have still not fully implemented this legislation;
10. Highlights the importance of clear and accurate information on energy performance and energy cost for prospective buyers and prospective tenants; believes that Energy Performance Certificates should be easy to read, display practical information and integrate information from the local market in order to make them more accurate and comparable;
11. Highlights that ambitious goals for staged and deep renovation of the existing building stock will create millions of local, non-outsourcable jobs, in particular in small and medium-sized enterprises, and provide clean and affordable energy to consumers;
12. Reiterates its calls for an EU skills initiative that enables intermediaries such as installers, architects or contractors to advise, prescribe or install relevant solutions for energy efficiency programmes and a decarbonised building stock;
13. Believes that the principle of cost neutrality can help lift millions of people out of energy poverty and reduce energy bills;
14. Welcomes the relative success of 'one-stop shops' and emphasises the critical role they can play in connecting potential projects with market players, including smaller-scale projects; notes that there is no common understanding on what a one-stop shop is, as the existing models across the EU are different in terms of structure, management and type of assistance provided, and that they are often not economically viable and need to be run by public or publicly funded bodies;

Recommendations

15. Calls on the Member States to ensure the proper implementation of the EPBD in all its aspects; calls on the Commission to continue monitoring this implementation and, where possible, take action in the event of non-compliance;
16. Calls on the Commission to investigate how to formulate a standard template that Member States could use to ensure that they address all the requirements of Article 2(a) and harmonise objectives and requirements to allow for better comparability;
17. Calls on the Commission to consider how to facilitate further the development of one-stop shops, including through more stringent measures in the EPBD;
18. Believes that the revision of the EPBD should serve to further promote smart buildings

technologies and foster a data-centric approach; encourages the use and deployment of emergent technologies, such as 3D modelling and simulation and artificial intelligence, to drive carbon emissions reduction at every stage of a building's lifecycle;

19. Believes that the LTRSs should provide more details on long-term actions to create a more stable environment for investors, developers, homeowners and tenants;
20. Highlights that the EPBD should ensure that renovation delivers value for money and a return on investment for homeowners and building owners by establishing real and measured improvements in energy performance of buildings; underlines that an approach based on the measured energy saved as a result of renovation will drive down the cost and increase both the quality and scale of the energy efficiency retrofits for existing buildings;
21. Calls on the Member States to use the LTRSs to implement innovative policies to actively involve citizens in energy efficiency programmes and implementation of the LTRS;
22. Encourages more Member States to introduce minimum energy performance standards;
23. Calls on the Commission to link the LTRSs with the relevant provisions of the Energy Efficiency Directive and the Renewable Energy Directive on efficient district heating and cooling and on the promotion of renewable energy in the building sector, while recognising that fossil fuels, especially natural gas, currently play a role in heating systems for buildings;
24. Recalls its demand for the next revision to evaluate the need to review the charging infrastructure requirements in the EPBD, as well as include an integrated, systematic and circular approach for both urban and rural developments;

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25. Instructs its President to forward this resolution to the Council and the Commission.