European Commission

INCEPTION IMPACT ASSESSMENT

Inception Impact Assessments aim to inform citizens and stakeholders about the Commission's plans in order to allow them to provide feedback on the intended initiative and to participate effectively in future consultation activities. Citizens and stakeholders are in particular invited to provide views on the Commission's understanding of the problem and possible solutions and to make available any relevant information that they may have, including on possible impacts of the different options.

TITLE OF THE INITIATIVE	Revision of the Energy Performance of Buildings Directive 2010/31/EU
LEAD DG (RESPONSIBLE UNIT)	DG ENER Unit B3 (PLAN/2020/8667)
LIKELY TYPE OF INITIATIVE	Legislative proposal
INDICATIVE PLANNING	Q4 2021
ADDITIONAL INFORMATION	https://ec.europa.eu/energy/topics/energy-efficiency/energy-efficient-buildings/renovation-wave_en

The Inception Impact Assessment is provided for information purposes only. It does not prejudge the final decision of the Commission on whether this initiative will be pursued or on its final content. All elements of the initiative described by the Inception impact assessment, including its timing, are subject to change.

A. Context, Problem definition and Subsidiarity Check

Context

The decarbonisation of the buildings sector is vital to deliver on the EU's 2030 and 2050 climate and energy objectives, given that buildings are responsible for 40% of total energy consumption and 36% of energy-related greenhouse gas emissions in the EU[1]. In the Climate Target Plan 2030, the Commission has proposed to cut net greenhouse gas emissions in the EU by at least 55% by 2030 compared to 1990. The European Council endorsed this target on 11 December 2020. Energy efficiency is an essential component for action, and the building sector is one of the areas where efforts must be ramped up. To achieve a net 55% emission reduction target by 2030, the EU needs to reduce buildings' energy-related greenhouse gas emissions by 60% compared to 2015 levels.[2]

As announced in the Green Deal, the Commission presented its Renovation Wave communication on 14 October 2020, containing an action plan with concrete regulatory, financing and enabling measures, with the objective to at least double the annual energy renovation rate of buildings by 2030 and to foster deep renovations. The existing legislation will not suffice to achieve that goal; therefore, a revision of the Energy Performance of Buildings Directive (EPBD) is necessary as one of the vehicles to deliver on the Renovation Wave. This revision will focus on provisions that are central to delivering a Renovation Wave and that contribute to emission reduction.

The revision of the EPBD is part of the "Fit for 55 package" included in the Commission Work Programme 2021.

Problem the initiative aims to tackle

Decarbonisation of the EU building stock requires energy renovation[3] at a large scale: almost 75% of the EU's building stock is inefficient according to current building standards, and 85-95% of the buildings that exist today will still be standing in 2050. Inefficient buildings are often synonymous with energy poverty, which is a major challenge for millions of Europeans[4]. The weighted annual energy renovation rate is persistently low at around 1%[5], and in some parts of the EU, hardly any energy renovations are carried out. Across the EU, deep renovations that reduce energy consumption by at least 60% are carried out only in 0.2% of the building stock per year. Two thirds of the energy used for heating and cooling of buildings comes from fossil fuels. At the current pace, the decarbonisation of the building sector would require centuries. Furthermore, buildings are responsible for GHG emissions not only during

[1] These figures refer to the use and operation of buildings, including indirect emissions in the power and heat sector, not their full life cycle. Buildings are responsible for an even larger share of greenhouse gas emissions when looking at the whole life cycle of buildings. Buildings will have to become more energy-efficient and less carbon-intensive over their whole life-cycle.

[2] Impact Assessment accompanying the Climate Target Plan 2030, SWD(2020) 176 final.

[3] Energy renovation comprises measures leading to energy savings, for example insulation of walls and roofs, replacement of inefficient boilers and installation of renewable energy systems such as solar panels.

[4] In 2018, nearly 34 million Europeans were unable to afford keeping their home adequately warm.

[5] This aggregated number shows the annual reduction of primary energy consumption in the total building stock in the EU achieved through the sum of energy renovations of all depths.

their operation, but over their whole lifecycle, including production and transport of materials, construction, refurbishment and end of life; however, such embodied carbon is rarely addressed. Buildings are also vulnerable to the increasingly severe impacts of climate change.

Numerous barriers stand in the way of higher renovation rates.[6] Low awareness of the current energy and resource profile of buildings and the benefits of renovation, lack of trust in the energy savings that renovation will achieve, energy performance not being fully reflected in real estate prices, burdensome procedures and split incentives between owners and tenants are among the strongest reasons behind low renovation rates. Insufficient technical expertise in authorities and financial institutions and the shortage of a qualified workforce for sustainable building renovation also constitute important barriers. In the residential building sector, the lack of simple and easily accessible public incentives for renovation and the lack of attractive mainstream financing products are often mentioned as a barrier. Too many "shallow" renovations hardly touching on energy and sustainability aspects take place, instead of adequate combinations of measures leading to highly energy-efficient, resource-efficient and decarbonised buildings.

Basis for EU intervention (legal basis and subsidiarity check)

The legal basis is Article 194(2) TFEU, the legal basis for Union policy to promote energy efficiency and energy savings. Energy policy is a shared competence between the EU and Member States.

Improving the energy performance of buildings is a key element of the European Green Deal's objective to achieve climate neutrality, as subsequently translated into the Renovation Wave strategy, and is central to the EU's green recovery. The existing legislative framework is not sufficient to achieve the necessary decarbonisation of the EU building stock. Stronger EU level action is necessary to ensure policy alignment towards decarbonisation of buildings, in particular through a higher renovation rate. The experience from the implementation of the EPBD shows that a common EU framework allows national policy-makers to build on each other's best practices, facilitates cross-border investment into buildings, stimulates innovation and increases competitiveness and the benefits of the internal market for construction products and appliances.

The initiative will be carried out in full respect of the subsidiarity principle. As is already the case today, sufficient flexibility for adaptation to national and local conditions in Member States will be provided.

B. Objectives and Policy options

The revision of the EPBD would aim to strengthen the legal framework on energy performance of buildings. Together with the other actions from the Renovation Wave action plan[7], it will aim to at least double the annual energy renovation rate of buildings by 2030, to foster deep energy renovation, and to contribute to the achievement of the EU's energy and climate objectives for 2030 and the climate neutrality objective for 2050. It will do so by exploring synergies and impacts of existing EU legislation related to energy and climate. This relates in particular to the Energy Efficiency Directive, the Renewable Energy Directive, the Emissions Trading System (ETS) Directive, the Effort Sharing Regulation, the Energy Taxation Directive, the Alternative Fuels Infrastructure Directive, which are currently also being reviewed and revised. Synergies will also be sought with other Green Deal initiatives such as the Circular Economy Action Plan, the Industrial Strategy for Europe, the EU Strategy on Energy System Integration, the Smart and Sustainable Mobility Strategy and the EU Strategy for Adaptation to Climate Change.

There are different pathways to fulfil these objectives. The impact assessment will look at the following options:

Option 1 – No policy change (baseline scenario)

The EPBD remains as it is, without any modification until the review envisaged for 2026 by Article 19 EPBD. The Commission follows the usual procedures to ensure the complete and correct transposition of the EPBD by Member States.

Option 2 - Non-regulatory measures

Reinforced non-regulatory policy instruments and additional guidance and support measures, such as technical assistance, information campaigns, training, project financing etc. can lead to increased energy renovation rates.

Option 3 – Amend the EPBD to translate the actions proposed in the Renovation Wave and the increased ambition towards building decarbonisation into legislation

The revision of several provisions of the EPBD will be explored, examining the required scope of the revision. Several sub-options with different measures with different ambition levels will be assessed. The phased introduction of mandatory minimum energy performance standards for different types of buildings (public and private, non-residential and residential) will be a central part of the EPBD revision. Different options for the type, scope, timeline and phasing in of such standards and the level of flexibility for Member States will be assessed. When phasing in such standards, one option could be to start with stricter requirements for specific types of buildings, such as public buildings or office buildings, and to extend progressively the requirements to other buildings. The conditions under which minimum

[6] For an overview of barriers to renovation mentioned by stakeholders, see the synthesis report on the stakeholder consultation on the Renovation Wave initiative.

[7] The Renovation Wave action plan comprises a wide range of actions such as financing measures, the development of a whole life-cycle performance roadmap for buildings, measures fostering research and skills, and the set-up of the New European Bauhaus.

energy performance standards should apply to residential buildings, for example change of ownership or rental, are also subject to assessment. In this context, the need for accompanying support policies to ensure affordability of housing will also be examined. Another central part of the revision is an update of the framework for Energy Performance Certificates with a view to increasing their quality and availability, for example through greater harmonisation, the inclusion of additional information and more stringent provisions on availability and accessibility of databases. Other measures that will be considered include the introduction of Building Renovation Passports and the introduction of a 'deep renovation' standard in the context of financing and building decarbonisation objectives.

The requirements for new buildings and measures fostering sustainable mobility might also need to be updated in line with the enhanced climate ambition of the European Green Deal and the Climate Target Plan 2030, developing a new vision for buildings.

Addressing resource efficiency and circularity principles in order to reduce whole lifecycle emissions, digitalisation, climate resilience and health and environmental standards also requires consideration.

C. Preliminary Assessment of Expected Impacts

Likely economic impacts

Increasing the renovation rate and depth will likely have positive impacts on economic growth, investments, innovation and competitiveness. The reduction in energy demand and the reduced need for fossil fuel imports will enhance energy security.

Increasing renovation rates will inject a stimulus in the construction sector and the wider economy with positive impacts on both GDP and jobs, in particular in local SMEs. More than 90% of companies in the building sector are SMEs. Increased deployment of renewable energy in buildings will also benefit SMEs, which operate most of the value chain of deploying renewable energy technology, in particular solar panels.

Building renovation has a large potential for innovative, industrialised and digital solutions. The development and uptake of such solutions by EU industry will increase the EU's competitiveness.

Likely social impacts

Increasing the renovation rate and depth will create jobs at local level. According to the International Energy Agency, investment in energy efficiency in buildings can create 12-18 jobs per million Euros of investment, more than in other areas of energy policy[8]. To create new jobs and to address existing shortages of qualified staff, investments in skills[9] will be needed. Work in the construction sector carries comparatively high occupational safety and health risks, which compliance with legislation on worker protection should keep in check.

Improving the energy performance of buildings leads to lower energy bills for consumers, thereby contributing to the alleviation of energy poverty. Renovation can also improve comfort and sanitary conditions in inefficient buildings, making buildings healthier and improving wellbeing and productivity. Renovation can make buildings more accessible for persons with disabilities and older persons, more adaptable, safer and less vulnerable to natural disasters. However, renovation requires significant upfront investment, which is more challenging for low-income households, and can have negative impacts on the affordability of housing, in particular through increased rents leading to so-called 'renovictions'. Options need to be carefully designed and flanked by financing and other support measures to minimize such negative impacts and keep the cost balance neutral for residents.

Likely environmental impacts

Improving the energy performance of buildings is a key driver to reduce greenhouse gas emissions and mitigate climate change. Buildings can even turn into a carbon sink through green infrastructure such as green roofs and the use of nature-based building materials that can store carbon. Through the reduction of energy consumption and a switch away from the use of fossil fuels in buildings, air pollution is expected to be reduced.
Building renovation can reduce pressure for greenfield construction, helping preserve nature and biodiversity. Renovating buildings implies resource use and construction waste; however, compared to demolition and new construction, renovation generates less waste and material extraction.
By improving resource efficiency, carbon emissions throughout the whole life cycle of buildings will be minimised.

Likely impacts on fundamental rights

The initiative is in line with Article 37 of the Charter of Fundamental Rights of the European Union, which requires that a high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development.

The policy options will need to be designed in full respect of the right to property laid down in Article 17 of the Charter.

Likely impacts on simplification and/or administrative burden

Strengthened regulatory requirements may increase the administrative burden, notably for building owners and for the construction industry. At the same time, streamlined provisions and greater synergies with other pieces of legislation aim to reduce administrative burden. The update of the provisions on Energy Performance Certificates

[8] International Energy Agency, Sustainable Recovery, June 2020, https://www.iea.org/reports/sustainable-recovery
[9] Specific skills are needed for sustainable energy renovation, especially with regard to heritage buildings.

aims at greater digitalisation, availability and accessibility.

D. Evidence Base, Data collection and Better Regulation Instruments

Impact assessment

The Commission will prepare an impact assessment in the first half of 2021. Its aim is to support the choice and design of policy options for the amendment of the EPBD in order to support the Renovation Wave strategy and the increased ambition in the European Green Deal and the Climate Target Plan.

Evidence base and data collection

The impact assessment will build on the impact assessment and the evaluation of the EPBD which were carried out as part of the Clean energy for all Europeans package, and on the impact assessment carried out for the 2030 Climate Target Plan. The studies and impact assessments carried out in the context of the upcoming revision of the Energy Efficiency Directive, the Renewable Energies Directive and the Emissions Trading System Directive will also be taken into account.

The data collected through the EU Building Stock Observatory, the analysis of the national long-term renovation strategies submitted under the EPBD[10] and the national energy and climate plans will be an important part of the evidence base, along with existing and evolving quantitative evidence, including modelling. In addition to a number of existing studies, a dedicated study to support some elements of the impact assessment is commissioned.

This broad evidence base is complemented by the reports from the Concerted Action on the EPBD and previous and future stakeholder input (see next point).

Consultation of citizens and stakeholders

A wide consultation process will be organised to seek views from different stakeholders on the improvements to be made to the EPBD in order to ensure that it boosts renovation rates and adequately contributes to the achievement of the EU's climate and energy objectives. The main stakeholders for this initiative are public authorities, businesses including SMEs, industry, professional associations (including architects and heritage experts), building owners and associations, social partners and social actors, NGOs, the finance sector, the insurance sector, academia, research centres and citizens.

- This inception impact assessment will be open for comments for 4 weeks in all EU official languages.
- A 12-week public consultation will subsequently be launched in early 2021. Once published, it will be possible to send a reply via the Commission's central public consultations page.
- Targeted public workshops on specific topics will be organised with relevant stakeholder groups.
- The Commission will also consider the extensive public feedback received to the Renovation Wave roadmap, the replies to the public consultation on the Renovation Wave and the public feedback received in the context of the revision of the Energy Efficiency Directive and the Renewable Energy Directive.

A summary of the different contributions and views received during the consultation process will be published on the consultation page.

Will an implementation plan be established?

No implementation plan will be established. The changes to the Directive are expected to be targeted and therefore an implementation plan is not considered necessary.

Once the amendments to the Directive are adopted, efforts to ensure correct and timely transposition and implementation will include:

- Guidance on new provisions
- Discussions with Member States in committee and concerted action
- Transposition/correlation tables

[10] On 22.2.2021, seven Member States had not yet submitted their long-term renovation strategies.