

A Guidebook to European Buildings Efficiency:  
Key regulatory and policy developments

# Report on the evolution of the European regulatory framework for buildings efficiency

This publication was produced with the financial support of the European Union's Partnership Instrument. The contents of this publication are the sole responsibility of the **BPIE (Buildings Performance Institute Europe)** and do not necessarily reflect the views of the funders.



U.S. DEPARTMENT OF  
**ENERGY**

Office of  
**ENERGY EFFICIENCY &  
RENEWABLE ENERGY**



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## Introduction

The European Union has committed to achieving full, society-wide decarbonization, with the goal of climate neutrality by 2050. This goal is now enshrined in central regulation, as part of the European Climate Law. The buildings sector has a critical role to play in this effort, given that EU building stock accounts for about 36% of total greenhouse gas (GHG) emissions. To achieve an interim 2030 climate target of reducing GHG emissions by at least 55% compared to 1990, and climate neutrality by 2050, the EU must significantly increase its rate and depth of renovation,<sup>1</sup> reduce GHG emissions from buildings by 60% compared to 2015, and by 2030 increase the deep renovation rate to 3% annually, up from the current 0.2%.<sup>2</sup>

In 2019 the EU launched several initiatives and introduced updated legislation to achieve 2030 targets, a key milestone for the 2050 climate neutrality goal. In addition, the COVID-related Recovery plan for Europe,<sup>3</sup> which allocates funds to promote a sustainable and green recovery, includes programs with a specific focus on building renovation – showing that the EU considers building renovation as a central component for recovery. The key initiatives include the EU Green Deal, the Renovation Wave and the Fit for 55 package. This paper provides an overview of the main European initiatives and regulations, serving as a guidebook for building energy efficiency.

## The status quo and what is needed to meet EU climate goals

At present, an estimated 97% of buildings in Europe are not energy efficient,<sup>4</sup> and only 11% of the existing building stock undergoes some level of renovation each year. These renovations often fail to take energy savings into consideration. The current weighted annual energy-renovation rate is just 1%.<sup>5</sup> Across the EU, ‘deep’ renovations are carried out in just 0.2% of the building stock annually.<sup>6</sup> At this pace, it would take centuries to cut carbon emissions from the buildings sector to net-zero.<sup>7</sup> Projected scenarios show that achieving climate neutrality by 2050 will require the annual renovation rate to increase to 3%, with ‘deep’ renovations accounting for 70% of the total.<sup>8</sup>

The key policy instrument for the EU buildings sector is the Energy Performance of Buildings Directive (EPBD), which is being recast to help increase the rate and depth of renovation of Europe’s existing building stock (see Box 1). A vital component of the Renovation Wave Strategy, the revised EPBD will upgrade the existing regulatory framework to reflect higher ambitions and more pressing needs concerning climate and social action, while providing Member States with the flexibility needed to address the differences in the building stock across Europe.<sup>9</sup>

<sup>1</sup> See definition on page 3

<sup>2</sup> Buildings Performance Institute (BPIE), Deep renovation: Shifting from exception to standard practice in EU policy, 2021 [https://www.bpie.eu/wp-content/uploads/2021/11/BPIE\\_Deep-Renovation-Briefing\\_Final.pdf](https://www.bpie.eu/wp-content/uploads/2021/11/BPIE_Deep-Renovation-Briefing_Final.pdf)

<sup>3</sup> European Commission, Recovery Plan for Europe, 2021, [https://ec.europa.eu/info/strategy/recovery-plan-europe\\_en#introduction](https://ec.europa.eu/info/strategy/recovery-plan-europe_en#introduction) (accessed January, 2022)

<sup>4</sup> In line with the level of efficiency required to meet 2050 decarbonization, source: Buildings Performance Institute Europe, 2017, <https://www.bpie.eu/publication/97-of-buildings-in-the-eu-need-to-be-upgraded/>

<sup>5</sup> Navigant, Comprehensive study of building energy renovation activities and the uptake of nearly zero-energy buildings in the EU: annex to final report, 2019, European Commission, [https://ec.europa.eu/energy/sites/ener/files/documents/2annex\\_to\\_final\\_report.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/2annex_to_final_report.pdf)

<sup>6</sup> Ibid.

<sup>7</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 2020, [https://ec.europa.eu/energy/sites/ener/files/eu\\_renovation\\_wave\\_strategy.pdf](https://ec.europa.eu/energy/sites/ener/files/eu_renovation_wave_strategy.pdf)

<sup>8</sup> BPIE, On the way to a Climate-Neutral Europe, 2020, [https://www.bpie.eu/wp-content/uploads/2020/12/On-the-way-to-a-climate-neutral-Europe\\_Final.pdf](https://www.bpie.eu/wp-content/uploads/2020/12/On-the-way-to-a-climate-neutral-Europe_Final.pdf)

<sup>9</sup> EPB Center, <https://epb.center/epb-standards/energy-performance-buildings-directive-epbd/> (accessed December, 2021)

## BOX 1: DIRECTIVE AND RECAST

### Directive

A directive is a legislative act negotiated and voted for by EU institutions, that EU Member States must adopt and incorporate into national law. During transposition (see below), Member States determine and implement national laws to achieve a directive's goals. Directives cover many aspects of European policymaking, mostly when the EU and national levels have shared competences: these include agriculture, energy, accounting, environment and intellectual property rights, to name just a few.

### Recast

Recast means an update, amendment, or addition to or of the directive goals. A new draft is proposed by the associated directorate-general in the European Commission, and then it undergoes the complete legislative process and repeals, involving the EU Parliament and Council.<sup>10</sup>

### Transposition

Transposition is the procedure whereby EU Member States incorporate European directives into national law. Individual Member States can determine their own methods for implementation and periodic benchmarks toward climate target dates.<sup>11</sup>

## BOX 2: CO-DECISION PROCEDURE

The co-decision is the [ordinary legislative procedure \(OLP\)](#) in the EU used to adopt legislation, be it directives or regulations. In the OLP, the European Commission is the main institution to have the 'right of initiative', which means that it is usually the Commission that presents a legislative proposal to the European Council (the Council). The Council is the institution which gathers together all heads of state and governments of the 27 Member States; and it gives indications and directions through Conclusions. Besides those, the European Commission also prepares proposals based on public consultation procedures, where stakeholders and citizens can give their opinion.

Once the European Commission has issued its proposal for a directive or a regulation, it submits the proposal to the European Parliament (which represents European citizens) and to the Council. This pair are called 'co-legislators,' because to be adopted as law a directive or a regulation must be negotiated and adopted by both the Parliament and the Council.

<sup>10</sup> Planning and proposing law, European Commission, [https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law\\_en](https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law_en) (Accessed January 2022)

<sup>11</sup> Glossary of summaries, European Commission <https://eur-lex.europa.eu/summary/glossary/transposition.html> (Accessed January 2022)

In order to meet the goal of climate neutrality by 2050, as well as the 2030 climate targets, the buildings sector must vastly increase its investment to boost both the rate and depth of building renovations. Policy will play a key role in the introduction of regulatory and enabling measures for private and public funders looking to channel investment more effectively into energy-efficiency projects.

### Rate of renovation

The aim of deep renovation is to achieve the highest possible energy savings and a very high energy performance, with renewable energy covering any remaining energy needs. There are three primary categories of energy renovation; light (primary energy savings up to 30%), medium (primary energy savings between 30% and 60%), and deep (primary energy savings beyond 60%).<sup>12</sup>

The current rate of energy-renovation in the EU is 1% annually, and the rate of deep renovation stands at 0.2% overall, far below what is necessary.<sup>13</sup> Therefore, via the Renovation Wave, the European Commission has called for an increase in the deep renovation rate to 2% annually. However, the Buildings Performance Institute Europe (BPIE) estimates that an even more ambitious annual deep rate of 3% – 70% of all renovations – is required to achieve the 2030 targets.

Annual Renovation Rate	Annual Deep Renovation Rate	Annual Investment (vol.)	Annual Investment (share)
<ul style="list-style-type: none"> <li>• Current: 1% (EU level, small national, variation)</li> <li>• Needed for 2030 targets: Double the current rate to 2% (Renovation Wave)</li> </ul>	<ul style="list-style-type: none"> <li>• Current: 0.2% (EU level, small national, variation)</li> <li>• Needed for 2030 targets: 3% overall (BPIE estimate)</li> </ul>	<ul style="list-style-type: none"> <li>• Current: EUR 56 billion spent on medium and deep renovation</li> <li>• Needed for 2050 target: EUR 243 billion need annually to align building stock with climate neutrality</li> </ul>	<ul style="list-style-type: none"> <li>• Current: EUR 127 billion with 66.3% light renovation, 28.3% medium, 5% deep</li> <li>• Needed for 2030 target: 70% of renovations to be deep*</li> </ul> <p>*The European Commission does not have a set target for deep renovation.</p>

Figure 1: Status quo of building renovations, and the levels required to meet EU climate targets<sup>14</sup>

### Greenhouse gas emissions reductions

At present, the buildings sector in the EU is responsible for 36% of energy related greenhouse gas emissions. To achieve a 55% overall reduction in GHG by 2030 compared to 1990s levels, the buildings sector must decrease emissions by 60% by 2030,<sup>15</sup> as compared to 2015.

<sup>12</sup> Navigant, Comprehensive study of building energy renovation activities and the uptake of nearly zero-energy buildings in the EU, 2019, European Commission, [https://ec.europa.eu/energy/sites/ener/files/documents/2annex\\_to\\_final\\_report.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/2annex_to_final_report.pdf)

<sup>13</sup> Buildings Performance Institute (BPIE), Deep renovation: Shifting from exception to standard practice in EU policy, 2021 [https://www.bpie.eu/wp-content/uploads/2021/11/BPIE\\_Deep-Renovation-Briefing\\_Final.pdf](https://www.bpie.eu/wp-content/uploads/2021/11/BPIE_Deep-Renovation-Briefing_Final.pdf)

<sup>14</sup> Ibid.

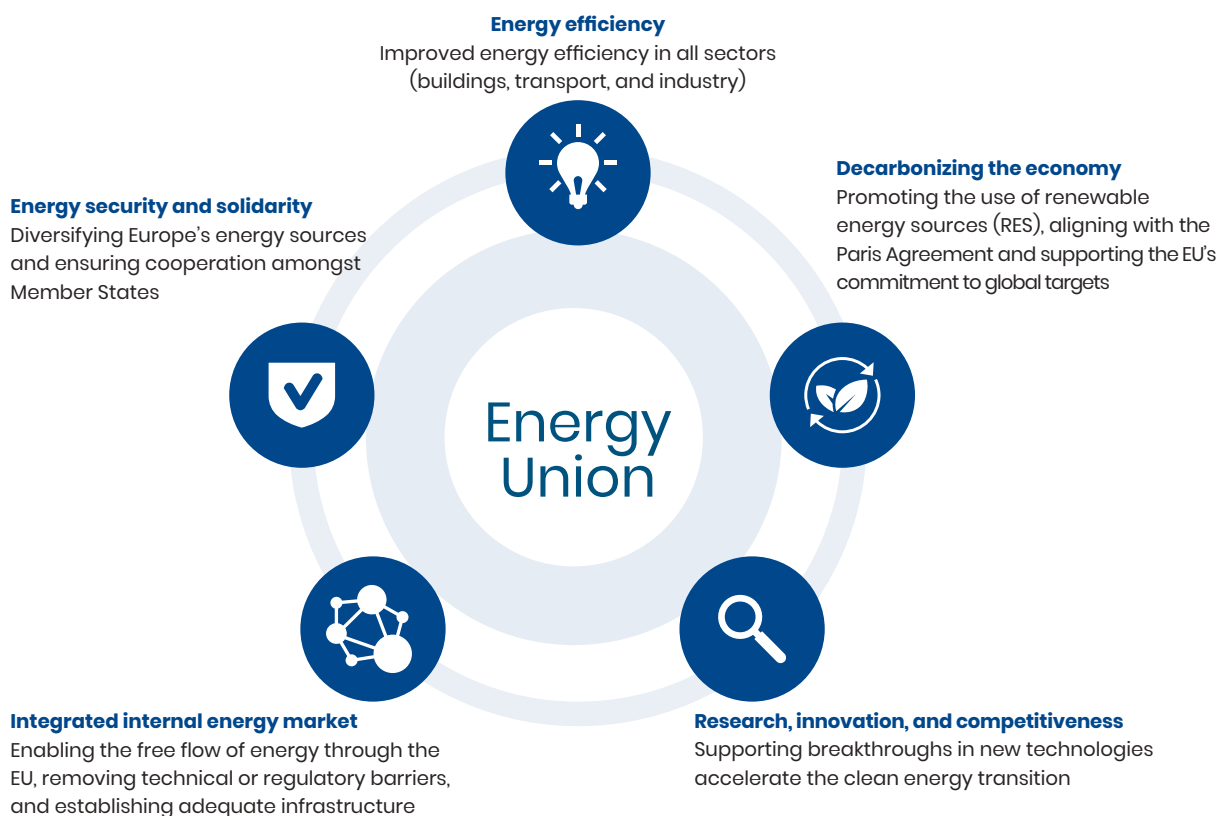
<sup>15</sup> Ibid.

## Investment

Besides an enabling policy framework, sufficient financing is crucial for achieving Europe's 2030 and 2050 targets. For example, the European Commission's Joint Research Centre (JRC) estimates that between 2012 and 2016, on average, EUR 127 billion per year was invested in energy renovations in the residential sector, across the EU-28.<sup>16</sup> For the non-residential sector, the JRC estimated EUR 56.7 billion per year<sup>17</sup> in the same period. For the renovation rate to increase from 1% to 3%, there would be a need not only for a significant scaling-up of investments, but also for new financing instruments and schemes, as well as a significant increase in private capital. In 2020 the European Commission estimated that in order to reach the EU's 2030 target an additional EUR 275 billion would be needed annually to close the investment gap, most of it going towards energy efficiency.<sup>18</sup> The Renovation Wave Communication is accompanied by a document, which presents available EU funding budget solutions that could support the renovation wave in different ways: through direct investments, by leveraging private investments, for research and innovation, to address market barriers and available technical assistance.

## Overview of European clean-energy governance and policy-making<sup>19</sup>

The original overarching energy-policy framework in the European Union is called the [Energy Union](#). Established in 2015, the Energy Union strategy focuses on providing EU citizens with secure, sustainable, competitive and affordable energy. (Additionally, the strategic priority given to climate change is further reflected in the 2019 Green Deal, adding to the Energy Union – see Figure 3.)



**Figure 2:** The five dimensions of the EU Energy Union<sup>20</sup>

<sup>16</sup> EUR 84.4 billion for 'light' renovations, EUR 36 billion for 'medium' renovations and EUR 6.9 billion for 'deep' renovations.

See: [https://publications.jrc.ec.europa.eu/repository/handle/JRC122347\\_page.11](https://publications.jrc.ec.europa.eu/repository/handle/JRC122347_page.11)

<sup>17</sup> EUR 22 billion for 'light' renovations, EUR 29.1 billion for 'medium' renovation and EUR 5.6 billion for 'deep' renovations.

See: [https://publications.jrc.ec.europa.eu/repository/handle/JRC122347\\_page.12](https://publications.jrc.ec.europa.eu/repository/handle/JRC122347_page.12)

<sup>18</sup> EFIG, Closing the gap on energy efficiency investment, European Commission, [https://ec.europa.eu/info/news/closing-gap-energy-efficiency-investments-2020-dec-22\\_en](https://ec.europa.eu/info/news/closing-gap-energy-efficiency-investments-2020-dec-22_en) (accessed January 2022)

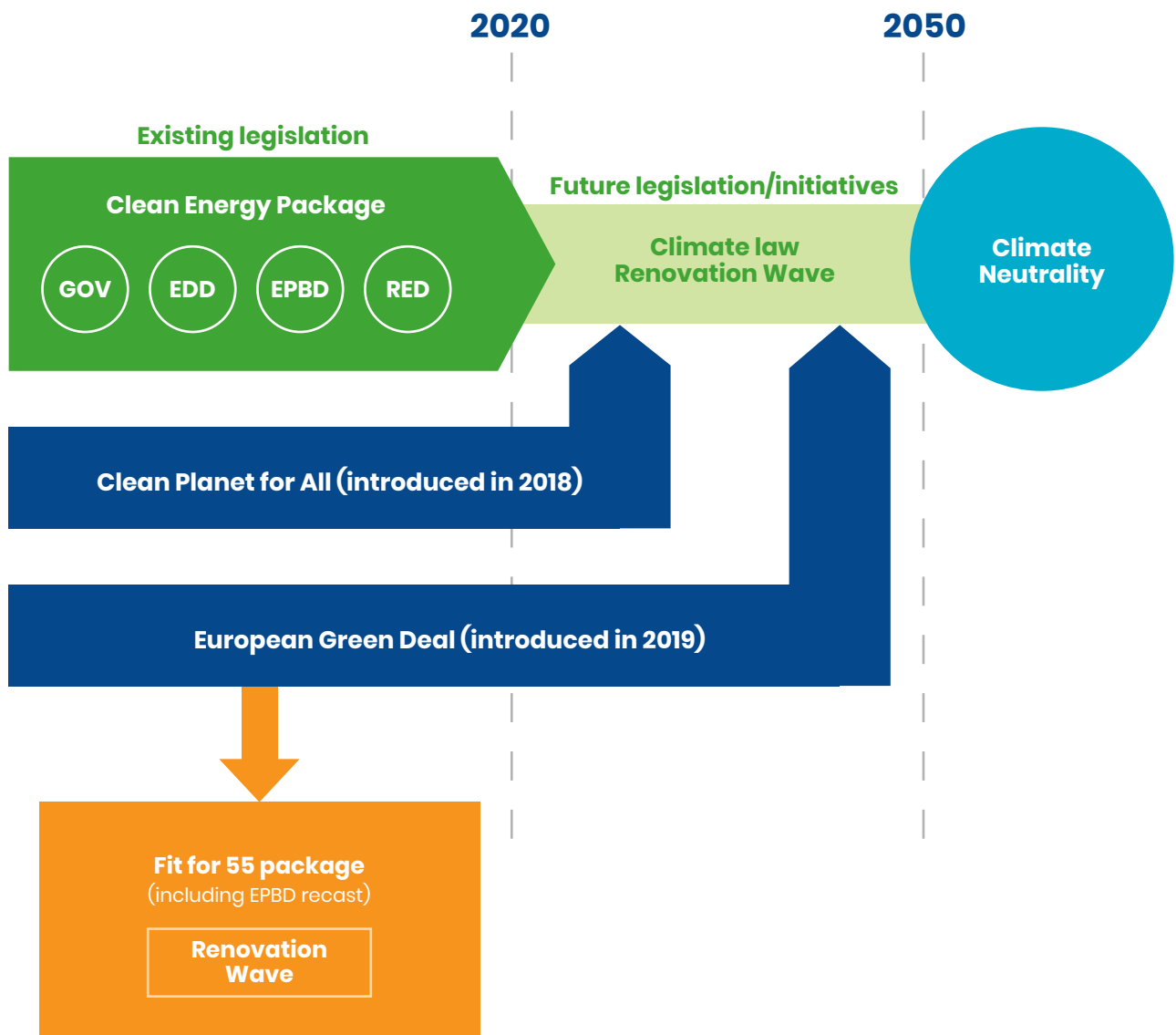
<sup>19</sup> For a more in-depth overview of the European system and key definitions, see the recent publication:

[Glossary of terms: Energy efficiency and building policies in the EU and US.](#)

<sup>20</sup> European Commission, Energy Union, [https://energy.ec.europa.eu/topics/energy-strategy/energy-union\\_en](https://energy.ec.europa.eu/topics/energy-strategy/energy-union_en) (Accessed February 2022)

The Energy Union strategy materialized into several key pieces of legislation, initiatives, and policy packages. The most important with regard to energy efficiency is the Clean Energy for All Europeans (Clean Energy) package, which was adopted in 2018. While the Clean Energy package comprises eight different pieces of legislation aimed at accelerating the energy transition in Europe, the main list of relevant directives and regulations for energy efficiency of buildings includes the Energy Performance of Buildings Directive (EPBD), the Energy Efficiency Directive (EED), the Renewable Energy Directive (RED), and the Regulation on Governance.

Figure 3 shows how European legislation, policy and plans fit in with the overall goal of climate neutrality by 2050.



**Figure 3:** European climate and energy legislation and initiatives (Source: BPIE)

## Governance and National Energy and Climate Plans (NECPs)

The Regulation on Governance entered into force in December 2018. This regulation emphasizes the importance of meeting the EU's 2030 energy and climate targets and sets out how EU Member States and the European Commission should work together to achieve Energy Union goals. This governance mechanism is based on integrated national energy and climate plans (NECPs) covering ten-year periods, starting from 2021 to 2030, the EU and national long-term strategies, and on integrated reporting, monitoring and data publication.

To help ensure that the EU reaches its energy and climate targets for 2030, the Regulation on Governance required each Member State, as of 2019, to submit to the European Commission a ten-year integrated national and climate plan (NECP) for the 2021-2030 period. NECPs must outline, among other things, how a country intends to address energy efficiency, renewables and GHG emissions reductions and meet the relevant targets and national contributions. Working from a similar template, Member States can now work together more effectively to make efficiency gains across borders.

## The Energy Efficiency Directive

The Energy Efficiency Directive (EED) is the overarching legal framework for energy-efficiency policy in the EU. The EED came into force in 2012, establishing measures to achieve a 20% energy-efficiency target by 2020. Revised in 2018 (and currently under revision as part of the [Fit for 55 package](#), described below), the EED now sets an indicative EU-wide 32.5% non-binding energy-efficiency target for 2030 and extends the lifespan of one of its core binding provisions, the 'energy savings obligation,' beyond 2020 until 2030.

The EED also includes an important provision targeting government buildings: each year Member States are required to renovate 3% of the total floor area of heated and/or cooled buildings owned and occupied by central governments, in line with at least minimum energy-performance requirements. This provision is from the original 2012 EED and was not modified in 2018. However, it is currently open for revision (see section below on the EED recast).

Additionally, the 2018 amended EED requires Member States to implement measures addressing vulnerable households, including those affected by energy poverty, and, where appropriate, social housing.

## Energy Performance of Buildings Directive

The Energy Performance of Buildings Directive (EPBD) is the cornerstone of European legislation for transforming the buildings sector. The EPBD was adopted in 2002, recast in 2010 and amended in 2018 (2018/844/EU). The 2018 amendments to the EPBD, which are part of the Clean Energy package, set a clear direction for the full decarbonization of Europe's building stock by 2050 while focusing on how to modernize the existing stock. A recast of the directive was launched in late 2021 with an intention to adopt it in 2023 (for details on the recast please see below, Delivering on the Green Deal – Fit for 55).

## National long-term renovation strategies (LTRS)

The Energy Performance of Buildings Directive (EPBD) requires Member States to develop national long-term renovation strategies (LTRS), which are policy instruments outlining how a country aims to transform its existing national buildings into a decarbonized and energy-efficient building stock by 2050. These strategies play an essential role for local public authorities looking to access funding for renovation and to benefit from opportunities presented by the Renovation Wave. The provisions in the LTRS within the EPBD are now open for revision (see section below on the EPBD recast).



## Strategic priorities 2019 – 2024

There are several key initiatives to guide and assist EU strategic priorities for the 2019–2024 period. The most important initiative is the Green Deal, which encompasses the Renovation Wave communication and the Fit for 55 package.

### European Green Deal

The European Green Deal,<sup>21</sup> introduced in 2019 by the European Commission, is a strategy for driving the EU towards a sustainable and climate-neutral economy. The overall target of the European Green Deal, later enshrined into legislation with the EU Climate Law, is to become a climate-neutral economy by 2050. The Green Deal covers nearly all broad aspects of European life, including health, transport, food, jobs and upskilling, and the economy. However, specific emphasis is placed on making a ‘just transition to a zero-carbon building stock’, which in turn leads to the Renovation Wave and associated initiatives (see below).

### Delivering the Green Deal – Fit for 55

Delivering the Green Deal, commonly referred to as the Fit for 55 package, is an EU communication released in July 2021 accompanied by a set of legislative proposals outlining how the EU will deliver its interim targeted 55% reduction of GHG emissions by 2030. Central to building energy performance, the Fit for 55 package is a recast of the EPBD. The key provisions for the recast include:

- Expand directive objectives to go beyond energy performance, primarily including GHG emissions reductions.
- Include a concrete definition for lifecycle GHG emissions. As of 2030, new building life cycle global warming potential (GWP) will be calculated and disclosed in the building energy performance certificate.
- Introduce a definition of ‘deep renovation.’
- Set a target that all public buildings must be [zero energy buildings \(ZEB\)](#) by 2027, and all buildings by 2030 – which marks an increased ambition from [nearly zero energy buildings \(NZEB\)](#).
- Introduce EU-wide [Minimum Energy Performance Standards \(MEPS\)](#) with clear benchmarks by when certain building typologies (non-residential and residential) need to be updated to a certain class.
- Reform the Energy Performance Certificate framework (which includes a new EU-wide template with additional indicators).
- Replace LTRS with national building renovation plans.
  - This includes more detailed targets and a mandatory template with indicators in order to develop more ambitious and standardized plans.
- Require Member States to provide appropriate financing in line with their national building renovation plans.
- All Member States must introduce Building Renovation Passports<sup>22</sup> by the end of 2024 based on a common EU framework.
- Phase out fossil fuel at the national level by 2040.

<sup>21</sup> A European Green Deal, European Commission [https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en) (Accessed December 2021)

<sup>22</sup> A document that provides a tailored roadmap for the renovation of a specific building in several steps that will significantly improve its energy performance.

Regarding the buildings sector, the Fit for 55 package also includes:

- A revision to the Energy Efficiency Directive (EED) that proposes to increase the 2030 energy-efficiency-improvement target of 32.5% to almost 39%, by requiring Member States to nearly double their annual energy-savings obligations in an effort to deliver 9% more energy savings.
- The Fit for 55 EED recast proposal also includes binding targets and extends the scope related to the provision on public-building renovations, which should extend beyond central governments to all levels of governance.
- A revision to the EU Emissions Trading System (EU ETS). These revisions will affect EU ETS coverage for a wide range of sectors, including maritime and aviation, and include a separate program for transport and buildings.
- A revision to the Renewable Energy Directive.
- A revision of the EPBD.

## Renovation Wave

The Renovation Wave<sup>23</sup> highlights key areas of intervention to boost the renovation of buildings in the 2021-2024 period.

The goal of the Renovation Wave is to help meet the 2030 climate target and to decarbonize the building sector through a wide range of policies, measures and tools that must be put in place at all levels to overcome existing barriers and mobilize all actors, including citizens, local authorities, investors, and the construction value chain.<sup>24</sup> The key principles of the Renovation Wave are:<sup>25</sup>

1. Strengthening information, legal certainty, and incentives for renovation
2. Reinforced, accessible, and more targeted funding supported by technical assistance
3. Creating green jobs, upskilling workers, and attracting new talent
4. Sustainable building environment
5. Placing an integrated participatory approach and neighborhood-based approach at the heart of renovation
6. Addressing energy poverty and worst-performing buildings
7. Public buildings and social infrastructure as exemplar cases
8. Decarbonizing heating and cooling

## Budget and recovery initiatives

### Multiannual Financial Framework (MFF) 2021-2027

The Multiannual Financial Framework (MFF) is the seven-year framework for the EU budget. The current MFF runs from 2021-2027 and includes provisions for short-term economic recovery, while supporting a green and digital future for the EU. An existing budget of EUR 1.211 trillion for this period is combined with a further EUR 806.9 billion from the temporary recovery instrument, NextGenerationEU, for a total of EUR 2.018 trillion.<sup>26</sup> Given the importance of building renovation for the EU's climate targets, the planned budget includes dedicated funds for building energy efficiency measures, outlined below.

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<sup>23</sup> Renovation Wave, European Commission [https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/renovation-wave\\_en](https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/renovation-wave_en) (Accessed January, 2022)

<sup>24</sup> BPIE, The European Renovation Wave: From words to action, 2020, [https://www.bpie.eu/wp-content/uploads/2020/10/Renovation-Wave-briefing\\_04.pdf](https://www.bpie.eu/wp-content/uploads/2020/10/Renovation-Wave-briefing_04.pdf)

<sup>25</sup> BPIE, The Renovation Wave Strategy and action plan: Designed for success or doomed to fail, 2021, [https://www.bpie.eu/wp-content/uploads/2021/04/BPIE\\_Renovation-Wave-Analysis\\_052021\\_Final.pdf](https://www.bpie.eu/wp-content/uploads/2021/04/BPIE_Renovation-Wave-Analysis_052021_Final.pdf)

<sup>26</sup> European Commission, The 2021-2027 EU budget – What's New? [https://ec.europa.eu/info/strategy/eu-budget/long-term-eu-budget/2021-2027/whats-new\\_en](https://ec.europa.eu/info/strategy/eu-budget/long-term-eu-budget/2021-2027/whats-new_en) (Accessed December 2021)



**Figure 5:** Overview of the Multiannual Financial Framework in relation to NextGenerationEU and the Recovery and Resilience Facility

## InvestEU

InvestEU<sup>27</sup> is an investment support mechanism under the MFF for the 2021–2027 period. This EUR 26.2 billion EU guarantee program is expected to mobilize another EUR 372 billion of investments. InvestEU supports four policy areas: i) Research, innovation and digitalization; ii) SMEs; iii) Social investments and skills; and iv) Sustainable infrastructure, which also includes energy efficiency, building renovation and the integration of buildings-connected energy sources.<sup>28</sup>

## NextGenerationEU (NGEU)

NextGenerationEU is a temporary European recovery instrument with a budget of EUR 806.9 billion, intended to help fix the economic damage incurred during the coronavirus pandemic. The NextGenerationEU instrument will reinforce the EU MFF 2021–2027 budget by providing additional funds to be distributed to Member States across several programs through grants and loans, primarily focusing on the 2021–2023 period.<sup>29</sup>

## Recovery and Resilience Facility (RRF)

The Recovery and Resilience Facility is the main NextGenerationEU program, making 90% of its total budget, EUR 723.8 billion, available in loans and grants to Member States for buildings renovation.<sup>30</sup> This facility aims to support the achievement of climate targets, while ultimately promoting economic recovery. The aim is to mitigate the economic and social impact of the coronavirus pandemic and make European economies and societies more sustainable, resilient, and better prepared to meet the challenges and opportunities of the green and digital transitions. ‘Renovation’, one of the eight RRF flagships highlighted by the European Commission, leads to job creation and savings on energy bills, and is ultimately indispensable as a tool to support the economic recovery.

## Recovery and Resilience Plans (RRPs)

To receive funding from the RRF, Member States must submit Recovery and Resilience Plans. These provide an overview of reforms and investments in line with RRF objectives that any Member State plans to undertake in the coming years. Additionally, RRFs are required to allocate at least 37% of RRF spending to climate-related investment and policy.

<sup>27</sup> [https://europa.eu/investeu/home\\_en](https://europa.eu/investeu/home_en)

<sup>28</sup> [https://europa.eu/investeu/about-investeu/what-investeu-programme\\_en](https://europa.eu/investeu/about-investeu/what-investeu-programme_en)

<sup>29</sup> European Commission, The 2021–2027 EU budget – What’s New? [https://ec.europa.eu/info/strategy/eu-budget/long-term-eu-budget/2021-2027/whats-new\\_en](https://ec.europa.eu/info/strategy/eu-budget/long-term-eu-budget/2021-2027/whats-new_en) (Accessed December 2021)

<sup>30</sup> [https://ec.europa.eu/info/strategy/recovery-plan-europe\\_en](https://ec.europa.eu/info/strategy/recovery-plan-europe_en)

## Conclusion

Over the past 10 years, the European Union has committed to progressive energy and climate goals and introduced significant legislation to achieve them. Given that the EU building stock accounts for 36% of total GHG emissions, building energy efficiency plays a pivotal role in reaching climate neutrality by 2050. From the existing framework of the Clean Energy Package, which managed to strengthen relevant EU legislation, to the current proposals under the Fit for 55 package and Renovation Wave, progress is taking place in accelerating the energy transition in Europe, especially for building renovation.

Despite political ambition, the renovation rate in Europe remains low and building decarbonization has a long way to go to meaningfully contribute to climate goals. To achieve an interim 2030 climate target of reducing GHG emissions by at least 55% compared to 1990, and climate neutrality by 2050, the EU must significantly increase its rate and depth of renovation,<sup>31</sup> reduce GHG emissions from buildings by 60% compared to 2015, and by 2030 increase the deep renovation rate to 3% annually, up from the current 0.2%.<sup>32</sup> With updated legislation and stringent targets moving the EU in the right direction, political will and investment needs to continue to increase to realize 2050 climate neutrality.

## Additional resources

As part of the [Strategic Partnerships for the Implementation of the Paris Agreement \(SPIPA\)](#), BPIE ([Buildings Performance Institute Europe](#)) hosted, in collaboration with the [Institute for Market Transformation](#), the [US Department of Energy](#), the [US Department of Housing and Urban Planning](#), and the [European Commission](#), a [series of expert dialogues on energy and buildings](#) aiming to strengthen transatlantic collaboration and exchange on climate mitigation and green recovery policies.

## Glossary of terms: Energy efficiency and building policies in the EU and US

[This glossary](#) gives a comprehensive overview of the key terms used in the EU and the US in the field of energy efficiency and building policies.

## Webinar series

The SPIPA US project included a series of 5 webinars held between July 2021 and February 2022 covering several key topics on energy efficiency in buildings including affordable housing, financing, codes and standards, and recovery instruments. The recording and summaries can be found on our site [here](#). [This document](#) highlights some of the main United States (US) and European Union (EU) policy initiatives presented in a five-part 'US-EU Exchange' webinar series organised through the 'Strategic Partnerships for the Implementation of the Paris Agreement' (SPIPA) project. The webinar series, which ran from June 2021 to January 2022, covered five main topics related to renovation of buildings and clean-energy solutions: [advancing a climate-neutral recovery](#), [affordable housing](#), [job creation](#), [financing](#), and [building standards and codes](#). The following excerpts are meant to be instructive in a comparative sense and do not represent the full landscape of policy initiatives currently underway in either the US or the EU.

## Stakeholder survey

In February 2022, BPIE conducted a survey with involved participants to understand what topics matter most and understand how this crucial transatlantic collaboration should continue. The results can be found [here](#).

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<sup>31</sup> See definition on page 3

<sup>32</sup> [https://www.bpie.eu/wp-content/uploads/2021/11/BPIE\\_Deep-Renovation-Briefing\\_Final.pdf](https://www.bpie.eu/wp-content/uploads/2021/11/BPIE_Deep-Renovation-Briefing_Final.pdf)

