

THE RENOVATION WAVE STRATEGY & ACTION PLAN: DESIGNED FOR SUCCESS OR DOOMED TO FAIL?

BRIEFING

A Review and Gap Analysis of the Renovation Wave

MAY 2021

INTRODUCTION

In October 2020, the European Commission published its Renovation Wave communication, a strategic document accompanied by an action plan, aiming at “greening our buildings, creating jobs, improving lives”. The Renovation Wave is part of the Green Deal, which sets the objective of climate-neutrality by 2050 at EU level. It aims to at least double the annual renovation rate by 2030, to foster deep energy renovation and mobilise forces at all levels towards these goals. The communication is a far-reaching document, adopting a comprehensive approach to building renovation, outlining a wide range of policies, measures, and tools to overcome barriers and mobilise all actors.

This paper analyses whether the Renovation Wave action plan is coherent and target-oriented, putting the EU on a path to deliver the 2030 Climate Targets, or if, on the contrary, it could potentially lead to inconsistencies and sub-optimal results when translated into regulatory measures. This would result in missed targets, opportunities and benefits. While the preparatory work for the first actions of 2021 is already underway, it is not too late for the European Commission to take corrective actions in the implementation phase of the strategy.

Is the Renovation Wave action plan leading to adequate measures, putting the EU on track to achieve its 2030 climate objectives? This question is broken down into three different sub-questions, each addressing different aspects of the issue: alignment with the 2030 Climate Target and 2050 climate-neutrality ambition, internal coherence between foreseen measures, and sequencing of actions. For each of these aspects, this paper will look at identifying possible gaps or shortcomings, which put at risk the definition and delivery of adequate measures.

IS THE RENOVATION WAVE STRATEGY ALIGNED WITH THE 2030 CLIMATE AMBITION?

For the buildings sector to contribute to the 2030 Climate Target of reducing greenhouse gas (GHG) emissions by at least 55% (compared to 1990), the Renovation Wave Strategy sets out clear targets: GHG emissions from buildings shall be reduced by 60%, final energy consumption shall decrease by 14% (both indicators by 2030 compared to 2015), and the annual renovation rate shall at least double.¹ BPIE has shown that there is an ambition gap between the Renovation Wave objectives and what would be needed in the buildings sector to achieve the 2030 Climate Target. While the objective of a 60% GHG emissions reduction in the buildings sector by 2030 is aligned with the overall 55% target, the annual renovation rate goal should go beyond merely doubling the current 1% renovation rate by 2030. BPIE's quantitative analysis shows that a higher renovation rate and depth is needed to contribute to the 2030 climate objective. The goal should be to increase the annual *deep* renovation rate² from the current 0.2% to 3% as quickly as possible.³ The Commission should therefore correct the Renovation Wave ambition in terms of targeted annual renovation rate and adapt the action plan accordingly.

Beyond the overall objective(s), there is a high risk that the measures listed in the action plan are not aligned with and will not deliver on the 2030 climate ambition. This can still be corrected when designing the specific policy options under the different actions proposed in the action plan, which spans between 2020 and 2024. It will be necessary to specify to what extent and how each action point contributes to increasing the renovation rate and to reducing GHG emissions by at least 60% by 2030. Undertaking this exercise would shed light on the overall ambition of all actions taken together, and may highlight that additional measures are needed, or that measures should be designed for a higher impact or following a different timeline. All regulatory and non-regulatory proposals, translating the Renovation Wave into concrete measures, should thus be designed in line with the updated 2030 climate ambition.

The Renovation Wave Strategy addresses topics which go beyond the energy performance of buildings, but which are also relevant for the achievement of the 2030 climate ambition. Some measures in the action plan touch upon whole life carbon emissions or the need to address climate adaptation. However, at this

point in time, it is unclear what the contribution of these measures will be towards the overall objectives, or how they will interact with each other. Moreover, it is unclear whether the assumptions and time horizon used in the modelling of the policy measures (which is an important first phase in the policy process for the implementation of the action plan) will be tailored to the topic of energy performance alone or also to issues related to whole life carbon.

The Renovation Wave Strategy acknowledges that reducing the whole life carbon impact of buildings is an essential cornerstone towards a fully decarbonised building stock. It will therefore be necessary to introduce carbon metrics in addition to energy performance metrics, as carbon metrics are needed to align building policies with carbon-neutrality goals. Energy and carbon are correlated, but the metrics are not interchangeable. Energy efficiency will certainly deliver further significant carbon emissions reductions, but not necessarily zero emissions. Having both energy and carbon metrics will help in understanding the relationship between improving operational emissions and the related carbon costs of doing so. Achieving a truly net-zero-carbon building stock will require moving away from considering the design, construction and operation of buildings independently from one another, and towards whole life-cycle considerations. This will also allow climate resilience and adaptation measures to be integrated from the outset. Policy measures addressing and affecting the different stages of the construction value chain need to be coordinated. It is thus questionable whether the development of a *'2050 whole life-cycle performance roadmap to reduce carbon emissions from buildings'* (scheduled for 2023) will be enough to address the issue when the regulatory revisions (notably the Energy Performance of Buildings Directive (EPBD)) take place in 2021.

As the impacts of climate change are increasing, it will be essential to align adaptation and mitigation measures in the built environment. The Commission should go beyond what is strictly mentioned in the action plan (e.g. *'support the development of climate resilient building standards'*, which were scheduled for 2020), and implement the Renovation Wave in line with the new Climate Adaptation Strategy, which specifically states that *"the Commission will [...] integrate*

¹ Commission Communication, COM(2020)662 final, *"A Renovation Wave for Europe"*, 14 October 2020, pp.1 and 3.

² The generally accepted definition of a 'deep renovation', i.e. achieving a reduction of at least 60% of the energy consumption, was used for example in the 2019 study for the Commission, *Comprehensive study of building energy renovation activities and the uptake of nearly zero-energy buildings in the EU*.

³ BPIE, 2020. *On the way to a climate neutral Europe: contributions from the buildings sector to a strengthened 2030 climate target*.

climate resilience considerations into the construction and renovation of buildings through Green Public Procurement criteria for public buildings, the Digital Building Logbook, and as part of the process to revise the EPBD and the Construction Products Regulation".⁴ In the implementation phase of the Renovation Wave action plan, the Commission should clarify what is meant by

resilience and adaptation in the buildings sector, and better coordinate with the Climate Adaptation Strategy, as it will be essential to the success of both policy files.

More generally, this issue of scope leads to another question, which is whether the action plan is missing some elements, and whether the different measures proposed are put together with sufficient coherence.

IS THE RENOVATION WAVE STRATEGY DESIGNED AS A COHERENT FRAMEWORK OF ACTIONS OR IS IT A BASKETFUL OF UNCOORDINATED MEASURES?

The Renovation Wave action plan includes 23 measures spread out in 8 thematic sections: 10 labelled in this paper as 'regulatory', 8 as 'non-regulatory' and 5 which could fall into either category depending on how they are further developed and implemented (see table p.5). This section aims to assess how the proposed measures (could) interact with each other, whether this has been sufficiently considered, and whether there are some missing elements.

The Renovation Wave aims at adopting a holistic perspective on EU buildings policy, going beyond solely the EPBD measures. While this approach in

the strategy is certainly welcome, it incurs the risk of multiplying intervention points in the action plan, without ensuring full coherence between them. Some measures from the action plan might not necessarily be included in an EPBD revision because they best fit in another piece of legislation or are better addressed in a non-regulatory way.

However, even in that case, the action plan does not identify or sufficiently explain how the Commission plans to address possible interactions and, more importantly, interdependencies between different actions. For example:

▶ **How would the introduction of a requirement for minimum proportions of renewable energy in buildings (in the framework of the Renewable Energy Directive (RED) revision in 2021) or the introduction of a 'deep renovation' standard (as part of the EPBD revision in 2021) impact the introduction of mandatory minimum energy performance standards (MEPS) for all types of buildings (also within the EPBD revision in 2021)?**

▶ **How would a 'proposal on Building Renovation Passports and introduction of a single digital tool unifying them with Digital Building Logbook' (scheduled for 2023) be done with a true added value, considering the revision of energy performance certificates (EPCs) is foreseen under the EPBD revision in 2021?**

▶ **How would the action of 'presenting a unified EU framework for digital permitting' (scheduled for 2021) interact with the updated framework for EPCs (also scheduled for 2021) and with the introduction of digital building logbooks (scheduled for 2023)?**

⁴ European Commission, Communication 'Forging a climate resilient Europe – the new EU Strategy on Adaptation to Climate Change', 24 February 2021, p.15.

These are only a few examples of issues that arise from reading the action plan; many more could be listed. This lack of a fully coherent approach culminates in the absence of links being drawn, or coordination ensured, between different planning tools/strategies that have an impact on how measures are delivered on the ground. While the Commission commits to 'developing a 2050 whole life-cycle performance roadmap to reduce carbon emissions from buildings' (in 2023), it does not link it with existing strategic long-term tools impacting the buildings sector, such as the national Long-Term Renovation Strategies (LTRS, EPBD Article 2A) or the comprehensive assessments of heating and cooling (Energy Efficiency Directive (EED) Article 14). Additionally, it is not entirely clear whether and how the energy efficiency first principle, which is mentioned as a key principle in the Renovation Wave communication, will be applied to all measures listed in the action plan.

When it comes more specifically to the EPBD, which is the cornerstone of buildings policy in the EU, it is questionable why the Renovation Wave Strategy, which sets a new climate ambition and encompasses so many (new) aspects, fails to lead to a comprehensive revision of the Directive to address its shortcomings and correct some historic issues. For the last review of the EPBD in 2016, the European Commission chose to publish a targeted proposal. It did not address several issues,⁵ such as improving the framework for setting minimum energy performance requirements, which thus has not been revised since 2010. These requirements only apply in the case of major renovations and are set up in accordance with cost-optimal methodologies, which are decided at national level, based on outdated assumptions and ignoring wider benefits. Considering the low compliance and ambition of the national LTRS put forward by Member States in 2020,⁶ it is doubtful whether the annual deep renovation rate will increase and whether GHG emissions from the building sector will be reduced in the coming years without additional policy action. Another targeted revision of the EPBD in 2021 may not be enough to deliver its contribution to the 2030 Climate Target and put us on a path which is compatible with climate-neutrality.

The Commission should rather aim at a comprehensive revision of the EPBD, going beyond a mere implementation of the Renovation Wave action plan, as some measures are completely missing there, although they are mentioned in the Renovation Wave communication. This is the case for the Taxonomy Delegated Act⁷ for example, which currently sets out a threshold of at least 30% reduction of primary energy demand for renovations, a threshold which would not be in line with the introduction of a 'deep renovation standard'. The Taxonomy is also not accompanied by a clear roadmap for revising and improving the technical screening criteria over time. Another example is one-stop-shops, mentioned in the communication in relation to the work of the European Investment Bank, but similarly not replicated in the action plan.

Some other measures are mentioned, but in such a way that their contribution to the increased climate ambition looks doubtful or marginal. This is notably the case for several non-regulatory measures, which have no specific contribution spelled out, whether to increasing deep renovation rates, reducing GHG emissions or improving the framework needed for further regulatory measures. For example, the action related to skills ('supporting Member States to update their national roadmaps for the training of the construction workforce through the Build Up Skills Initiative and helping implement the 2020 European Skills Agenda') seems insufficient to cope with the needs for training and upskilling the workforce that will deliver the Renovation Wave on the ground. This is because it is not directly coupled with the objective of increasing the renovation rate or linked to new requirements, such as the 'development of climate-resilient building standards' (which was also scheduled for 2020).

This issue of the contribution from one action to the realisation of another or several others raises another question:

Is the sequencing of the Renovation Wave action plan well designed, considering when measures will start to have an impact, and do the 'packages' of actions, which are mostly introduced in 2020-2021, make sense from a timing perspective?

⁵ Multiple areas for improvements were suggested at the time in this BPIE briefing: *9 ways to make the EPBD more effective*, 2016.

⁶ See these two BPIE reports on 2020 LTRS: *A review of EU Member States' 2020 LTRS*, September 2020, and *The road to climate neutrality: are national LTRS fit for 2050?*, March 2021.

⁷ European Commission, *Annex to the Commission Delegated Regulation supplementing Regulation (EU) 2020/852, C(2021)2800/3*, 21 April 2021.

2020

Supporting Member States to update their national roadmaps for the training of the construction workforce through the Build Up Skills Initiative and helping implement the 2020 European Skills Agenda	NR	3
Setting up a creative European Bauhaus platform to combine sustainability with art and design	NR	5
Supporting sustainable and decarbonised energy solutions through Horizon Europe and the R&I co-creation space	NR	5
Facilitating the development of energy communities and local action through the European Smart Cities Marketplace	NR	5
Supporting the development of climate-resilient building standards	R/NR	5
Developing eco-design and energy labelling measures	R	8

2021

Revision of EPCs and proposal to introduce mandatory MEPS for all types of buildings in the EPBD	R	1
Revision of requirements on energy audits in the EED	R	1
Proposed strengthened financing for the ELENA facility from the InvestEU advisory hub and possibly from other European programmes	NR	2
Consider the introduction of a 'deep renovation' standard as part of the EPBD revision	R	2
Revising the climate proofing guidelines for projects supported by the EU	NR	2
Supporting de-risking energy efficiency investments and proposing to incorporate environmental, social and governance (ESG) risks into the Capital Requirements law and the Solvency II Directive	R	2
Reviewing the General Bloc Exemption Regulation and Energy and Environmental Aid Guidelines	R	2
Presenting a unified EU Framework for digital permitting and recommending building information modelling in public procurement	R/NR	4
Supporting digitalisation in the construction sector through Horizon Europe, digital innovation hubs, and testing and experimentation facilities	NR	4
Launching the Affordable Housing Initiative, piloting 100 renovation districts	NR	6
Proposing to extend the requirements for renovation to buildings in the EED to all public administration levels	R	7
Assessing the extension of the use of emissions trading to emissions from buildings	R	8
Revising the RED and EED; considering strengthening the renewable heating and cooling target and introducing a requirement for minimum proportions of renewable energy in buildings; facilitating access of waste and renewable heat and cooling into energy systems	R	8

Table - List of Renovation Wave action points, re-arranged by year of implementation, categorised into regulatory (R) and non-regulatory (NR) measures, and linked to their 'intervention areas' as described by the European Commission in the Renovation Wave action plan.

Renovation Wave 'intervention areas'

- 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 built environment
- 5 – Placing an integrated participatory approach and neighbourhood-based approach at the heart of renovation
- 6 – Tackling energy poverty and worst-performing buildings
- 7 – Public buildings and social infrastructure showing the way
- 8 – Decarbonising heating and cooling

2022

Based on LEVEL(S), developing green public procurement criteria related to life-cycle and climate resilience for certain public buildings	R/NR	7
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2023

Proposal on building renovation passports and introduction of a single digital tool unifying them with digital building logbooks	R/NR	3
Developing a 2050 whole life-cycle performance roadmap to reduce carbon emissions from buildings and advancing national benchmarking with Member States	R/NR	3

2024

Reviewing material recovery targets and supporting the internal market for secondary raw materials	R	4
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IS THE RENOVATION WAVE STRATEGY SETTING OUT THE RIGHT SEQUENCING OF ACTIONS?

This could be the reason why a high number of actions are scheduled in the short-term, according to the European Commission (6 measures in 2020 and 13 in 2021). This leaves only four measures of the action plan to be introduced in the last three years of the European Commission current mandate (2022-2024). Arguably, many measures need to be introduced in 2021, considering the length of the political processes/procedures and of the transposition period. However, leaving aside the question of how these policy measures should be designed to have an impact in such a short timeframe (by 2030), the Commission should outline in more detail and more carefully assess when certain actions will begin to take effect and how important their impact will be, instead of only laying down the date when they will be introduced at EU level. This can have an impact on both how actions should be sequenced and how they should be designed in terms of ambition.

Besides, the Commission seems to have adopted an incremental approach to some topics. While this might make sense for some actions, e.g. where pathway dependencies need to be managed, for other actions the incremental approach, as it stands now, raises questions. For example, why and how would building renovation passports (BRPs) be introduced in 2023 together with digital building logbooks (DBLs) – and in which piece of legislation, since the revision of the Energy Performance Certificates (EPC) framework is already scheduled within the EPBD revision in 2021? It would make more sense if the EPBD revision already included provisions for the introduction of BRPs and DBLs, either as separate tools or as an evolution of the EPC. In any case, changes to the EPC framework in the EPBD revision should reflect the fact that the data they include will be needed to input into building renovation passports and digital building logbooks.

Another example is how public buildings are treated in a sequenced and disaggregated manner. They will possibly be covered by the introduction of mandatory MEPS, which would apply to all types of buildings within the EPBD revision in 2021. At the same time, the renovation requirement to which they are subject under EED Article 5, will be extended to all levels of governance under the EED revision in 2021. The question is whether the Commission intends, within the EPBD, to introduce a MEPS framework that will supplement, take over or somehow include the 3% renovation requirement under the EED. Another option would be to move EED Article 5 to the EPBD. In addition, the action plan foresees that, based on LEVEL(S), green public procurement criteria related to life-cycle and climate resilience will be developed in 2022 for certain public buildings. Climate-resilient building standards (assuming they cover all types of buildings) should also have been developed, starting in 2020 – progress on these is unclear.

A final example is that whole life carbon considerations are introduced in a way that leaves many open questions. The Commission commits to producing, by 2023, a 2050 whole life-cycle performance roadmap to reduce carbon emissions from buildings, but will already introduce revisions to existing policy tools, such as EPCs, in 2021. The EPBD and EPCs would benefit from adopting a whole life carbon perspective now, such as through the requirement to report on carbon emissions. This would be a first step to increase awareness and availability of data and, later on, to develop benchmarks and set carbon emission targets.

CONCLUSIONS AND RECOMMENDATIONS



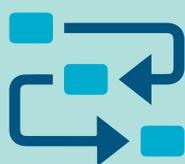
This paper, analysing the Renovation Wave Strategy and especially its action plan, shows the need to correct its design during the implementation phase, to align measures with the EU climate-neutrality ambition, ensure their coherence and adjust their sequencing. While the urgency to act is undeniable, it is not too late to correct mismatches and unclarities, and to introduce the right measures at the right time using the right legal 'vehicle', whether regulatory or non-regulatory measures. The discussions on defining policy options, notably within the revisions of the EED and EPBD, are an opportunity to shed new light on how to implement the Renovation Wave and improve its design – its overall ambition, its scope, its coherence and its sequencing of actions.



To be aligned with the 2030 Climate Target, the European Commission should correct the Renovation Wave headline ambition in terms of targeted annual renovation rates, aiming at reaching an annual deep renovation rate of 3% by 2030.



The Commission should specify to what extent and how each measure of the action plan is supposed to contribute to the increase of the annual deep renovation rate and to the reduction of GHG emissions by 2030. All regulatory and non-regulatory proposals should then be re-designed to deliver on this updated climate ambition.



In the implementation phase of the Renovation Wave action plan, the Commission should clarify what is meant by resilience and adaptation in the buildings sector, and better coordinate with the Climate Adaptation Strategy, as it will be essential to the success of both policy files.



The Commission should aim at a comprehensive EPBD revision, going beyond what is included in the action plan, adding some missing elements. It should also better outline how it will, in the upcoming legislative revisions, address possible interactions and interdependencies between different policy measures, and between different strategic planning tools.



The Commission should outline in more detail and more carefully assess when certain actions will begin to take effect and how important their impact will be, instead of only laying down the date when they will be introduced at EU level. It should revisit the incremental and disaggregated approach adopted for the legislative developments in some policy areas.

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