European Insulation Manufacturers Association

Delivering on the EU Renovation Wave

September 2020

Summary

This paper outlines key EU action areas to help kick-start the Renovation Wave:

1. **Mobilising investments in building renovations** to bridge the large green transformation gap for energy efficient buildings and support local jobs and SMEs in the construction sector, in particular by:
    a. Setting a tangible and measurable target at EU-level based on the objective to at least double the renovation rate.
    b. Creating a dedicated EU renovation management facility which acts as a "one-stop-shop" for support to Member States.
    c. Providing guidance to Member States to prioritise deep renovations in their national recovery and resilience plans.
    d. Channeling part of the revenues of emissions trading to the Renovation Wave.
    e. Better attuning EU state aid rules to the specificities of building renovation programmes and consider exempting energy efficiency building renovation projects from EU competition rules.

2. **Introducing Minimum Energy Performance Standards in the EU legislative framework** to upgrade the worst performing buildings and get the buildings sector on a trajectory towards climate neutrality, for example by:
    a. Strengthening relevant articles of existing EU energy and building legislation, starting with targeting certain building segments and ensuring these buildings are upgraded to higher standards over time.
    b. Proposing incremental targets across the whole building stock.
    c. Setting an obligation based on results.

3. **Ensuring greater depth and quality of renovation works** to build confidence regarding the performance of the renovated building, inter alia by:
    a. Enhancing the required qualifications to deliver Energy Performance Certificates (EPCs) and increasing EU harmonization.
    b. Complementing the EPCs with Building Renovation Passports and real performance metrics.
    c. Providing EU support to enhance skills for renovation and re-skill workers in high-carbon regions to get quality jobs in the building sector.

It also sums up the reasons why including buildings in the EU ETS is not the right tool to spur renovations and decarbonize the building sector, and reflects on how sustainability can be embraced in the sector.

Introduction

This autumn the European Commission will release a 'Renovation Wave' initiative for the building sector to scale up renovation rates. The Renovation Wave is one of the flagships of the European Green Deal and the EU's recovery plan, since faster and deeper renovations are a must for a climate-neutral Europe and a clear win-win investment priority for a green and fair recovery.

Action is urgently needed as the building sector is the EU's largest single energy consumer in Europe responsible for 40% of energy consumption and 36% of EU's CO2 emissions. Over 80% of today's buildings will still be in use in 2050, which means that renovating these existing buildings to make them more energy- and carbon-efficient, as well as more comfortable and affordable to use, is of key importance. At the current very low energy renovation rate (around 1%), it would take over a century to reach a highly energy-efficient and decarbonized building stock. This is at odds with the EU's objective to achieve climate neutrality by 2050 at the latest. The average renovation rate and depth will need to triple to stay on track towards 2050 and to tap into the building sector's potential to deliver on the EU's increased 2030 climate target.

Spurring a Renovation Wave will also provide a significant contribution to creating local jobs and stimulating economic recovery in the context of the Covid-19 pandemic. Renovation projects can be unrolled quickly and are estimated to account for about 3 to 4 million workers. For every €1 million invested in energy renovation of buildings, an average of 18 local jobs is created in the EU[1]. These investments help stimulate economic growth and create local, long-term jobs, thereby supporting Europe's green recovery from the economic crisis.

To kick start the EU's Renovation Wave initiative it should be closely linked to the Recovery and Resilience Facility in the Next Generation EU and contain a concrete action plan including regulatory proposals to deliver on the building sector's potential to lower greenhouse gas emissions, create jobs and deliver healthier living environments. This paper outlines key EU action areas to help kick-start the Renovation Wave.

Action 1: Mobilising investments in building renovation

Spurring a Renovation Wave will not be feasible without setting a tangible and measurable target at the EU level based on the Commission's objective to **at least double the renovation rate** (e.g. deeply renovate at least 25 million buildings by 2025). This target should be reflected in the allocation to building renovations in the EU budget and the national recovery plans, supported by Long Term Renovation Strategies and accompanied with sub-targets for identified focus areas (e.g. worst performing buildings, public buildings including schools, hospitals and social housing, the rental and commercial sector).

Substantial efforts are needed to bridge the large green transformation investment gap for energy efficient buildings, which the Commission estimates to be €185 billion per year[2]. Such a significant injection of capital in the transformation of the EU building stock will also support local job creation and SMEs in the construction sector.

The creation of a dedicated **EU renovation management facility,** called for by a large coalition of organisations[3], can help mobilise the required investments to deliver on the EU's Renovation Wave and meet the above target. Such an EU renovation facility can provide the technical and development assistance to bundle smaller renovation

[1] BPIE (2020), Building Renovation: A kick-starter for the EU recovery, see here
[2] SWD (2020) 98, Commission Staff Working Document 'Identifying Europe's recovery needs', see here
[3] The proposal for a 'Renovation Fund for All Europeans' launched by the Renovate Europe Campaign can be found here

projects together, create stronger project pipelines, match the renovation projects with the appropriate financing mechanisms and help to solve regulatory barriers. Through dedicated EU renovation financing, these large scale projects can be rapidly activated in a coordinated manner with the required **financial, technical and organizational skills to deliver maximum results and provide visible benefits to citizens**. The new renovation management facility should be set up to support Member States with funding and design of targeted renovation programmes.

Beyond a dedicated EU renovation management facility, financial assistance can come from a range of public and private sources, including through the **national recovery plans, energy efficiency obligations, green mortgages and carbon revenue recycling**. Channeling (part of) the billions of euros raised from emissions trading to the Renovation Wave can deliver seven times more carbon savings than the price of emissions alone[4]. Scaled-up national building renovation programmes can get a headwind through the upcoming revision of the EU state aid guidelines which should better attune these rules to the specificities of structuring and managing the national programmes.

An important source of funding in the coming years will come from the **EU Recovery and Resilience Facility** that will distribute €360 billion in loans and €312.5 billion in grants in the years 2021 to 2023. Including energy renovation as an investment priority in the draft National Recovery and Resilience Plans that Member States need to submit to the Commission by 15 October 2020 has clear benefits in terms of jobs, wellbeing and the environment. The Commission can guide Member States in this process by giving concrete examples how Member States can support energy efficient buildings in their national recovery plans, and implement the structural reforms as outlined in their Long-Term Renovation Strategies. Commission guidance on the national recovery and resilience plans can help ensure that countries prioritise energy renovations.

EU-level actions to mobilise investments in building renovations

1. **Set a tangible and measurable target at EU-level based on the objective to at least double the renovation rate**, and reflect this target in the allocation to building renovations in the EU budget and recovery funding.
2. **Create a dedicated EU renovation management facility which acts as a "one-stop-shop" for support to MS** to: access the different EU funding opportunities, maximise blending of public and private financing, make available and coordinate project development assistance and manage the national implementation of structural reforms to meet the Renovation Wave's objectives.
3. **Provide guidance to Member States to prioritise deep energy renovations in their national recovery and resilience plans,** to ensure that funding supports the trajectory to a highly energy-efficient and decarbonized building stock by 2050, in line with the Long-Term Renovation Strategies.
4. **Channel part of the revenues of emissions trading to the Renovation Wave**, as part of the upcoming revision of the EU Emissions Trading System.
5. **Better attune EU state aid rules** to the specificities of structuring and managing national building renovation programmes and **consider exempting energy efficiency building renovation projects from EU competition rules.** Complex state aid procedures are often a real barrier to the implementation of building renovation projects in several Member States.

[4] See also Wiese, Cowart & Rosenow (2020), The strategic use of auctioning revenues to foster energy efficiency: status quo and potential within the EU ETS, see here

Action 2: Introducing Minimum Energy Performance Standards

Two recent studies by RAP (2020)[5] and CE Delft (2020)[6] show that Minimum Energy Performance Standards (MEPS) can stimulate the volume and depth of renovation, which is essential for the EU to meet its climate targets and recover from the crisis.

Minimum Energy Performance Standards require buildings to meet a minimum performance standard, set for example in terms of an energy rating, **by a specified compliance deadline or at a certain moment in the natural life of the building** (sale, change in tenure). The standards should be progressively tightened over time in line with the EU's climate and energy objectives. If the timeframe is missed, the building in question could be deemed unsuitable for occupation until renovated up to the required level.

Minimum Energy Performance Standards can ensure that the worst buildings are upgraded and can help get the EU building stock on a **trajectory towards climate neutrality**. They can support the **alleviation of energy poverty** and help ensure affordability of housing, by reducing energy costs, if accompanied with adequate social safeguards.

Minimum Energy Performance Standards are already in use worldwide. They are a proven policy solution that can help overcome the significant barriers that have hindered renovation to date, when introduced as part of a comprehensive renovation policy framework. These standards **signal the transition and destination for the entire building stock and individual buildings**, which helps align the demand for supply chains, providing impetus for business and social innovation. They can also drive take-up of funding, finance and incentives, improving the effectiveness, dispersion and absorption of existing and new programmes.

Case study: Minimum Energy Performance Standards in the Netherlands[7]

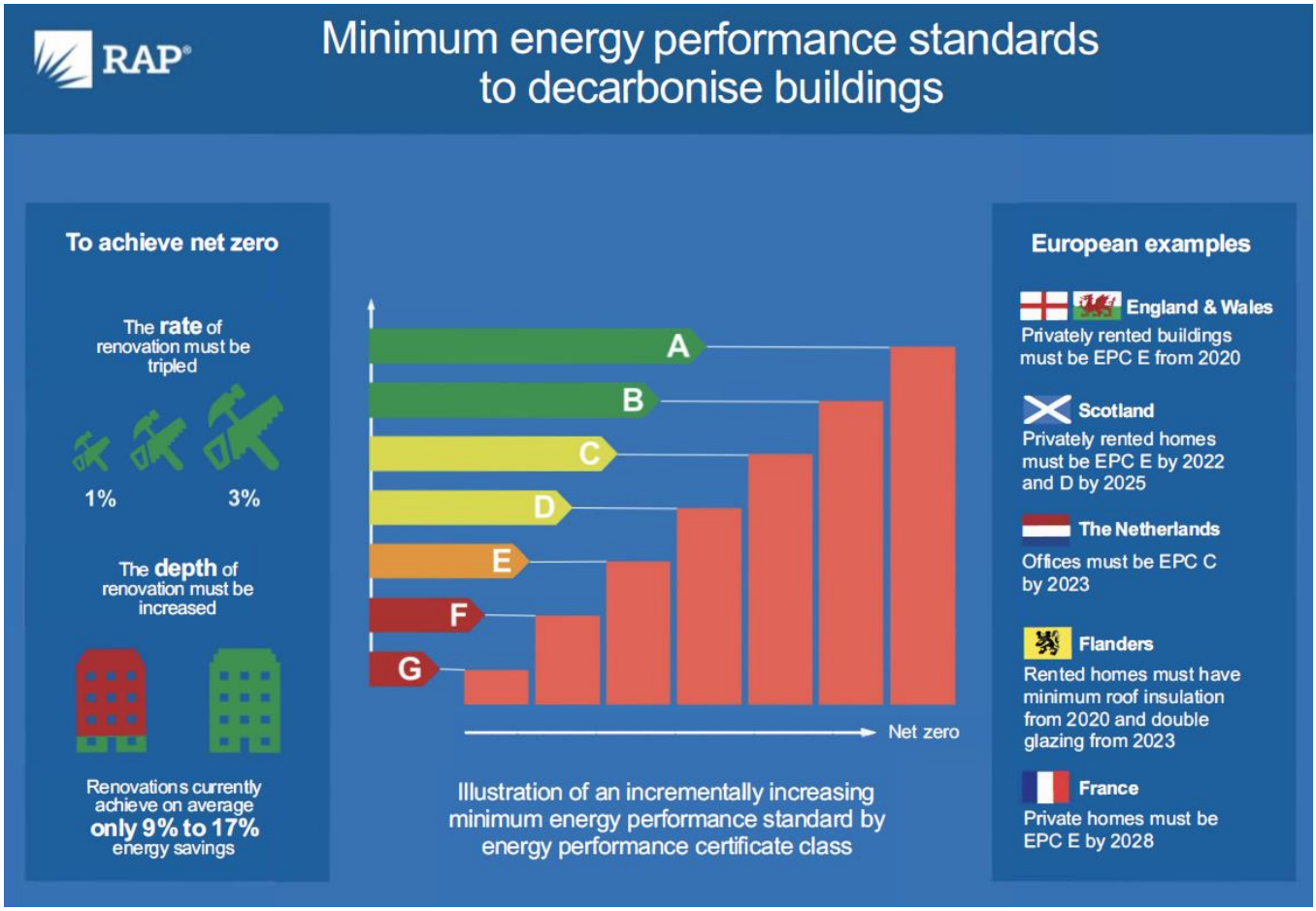
In the Netherlands, from 2023, any office that has an energy performance certificate lower than class C will not be considered fit for purpose and cannot be used as an office until it is renovated. The plan is to strengthen this requirement by mandating an energy label A for all offices by 2030. Private banks in the Netherlands promote this requirement among their clients and urge them to already renovate up to energy label A, to avoid having to go through two investment cycles. This has resulted in a very large growth of office buildings with an energy label A since 2012. This experience shows how a solid visibility on policy milestones can help market actors activate positive market dynamics that support achievement of regulatory objectives.

Moreover, as part of a voluntary agreement between the national government and the social rental sector, Dutch social housing corporations, which own over 2 million homes, must have an average energy label B by 2020. This goal should be reached by next year. Moreover, 80% of the around 750,000 private rental buildings must have an energy label C or higher by 2020. Large landlords, who own over 500 houses, are close to meeting the target, while smaller landlords are likely to need additional financial and technical support and mandatory requirements to comply.

[5] RAP (2020), Filling the policy gap: Minimum energy performance standards for European buildings, see here
[6] CE Delft (2020), Bringing Buildings on Track to Reach Zero-Carbon by 2050, see here
[7] For more case studies, see RAP (2020), Case studies: Minimum energy performance standards for European buildings here

Increasingly tightened Minimum Energy Performance Standards set **a trajectory for the transition of each building segment (commercial, public, rental sector, affordable housing etc.) over time, and enable policymakers to** plan accompanying measures, technical assistance and financial instruments in support of these trajectories. If done right with sufficient lead times, the standards allow the market to mobilise itself and properly plan for the transformation. **They provide the missing policy link between short-term actions to recover from the crisis and financing incentives, and the long-term objective of a highly energy-efficient and decarbonized building stock by 2050**.

It is for all these reasons that the industry committee of the European Parliament has called for the introduction of Minimum Energy Performance Standards. Earlier this year, the committee called on the Commission to *'develop a legislative framework for the introduction of minimum energy performance standards for existing buildings that are progressively tightened over time in line with the 2050 objective*'.[8] This call was recently supported by a wide range of stakeholders incl. construction industry groups, NGOs and think tanks who in an open letter urged Commission's Executive Vice-President Frans Timmermans to introduce minimum energy performance standards in the upcoming Renovation Wave.



[8] 2020/2070 (INI), Maximising the energy-efficiency potential of the EU building stock (Rapporteur: Ciaran Cuffe)

EU-level actions to introduce Minimum Energy Performance Standards

The Commission should put forward legislative proposals in the immediate future to introduce Minimum Energy Performance Standards, making use of the available funding and technical assistance to support their introduction. The report by RAP (2020)9 outlines different options how this can be done at the EU level:

1. **Strengthening relevant articles of existing EU energy and building legislation**, starting with targeting certain building segments (e.g. public buildings (including schools and hospitals), social/affordable housing, rental sector, commercial sector) and ensure these buildings are upgraded to higher standards over time.
2. **Proposing incremental targets across the whole building stock**.
3. **Setting an obligation based on results**.

Minimum Energy Performance Standards can be introduced through the revision of the Energy Efficiency Directive next year and/or as part of an early revision of the Energy Performance of Buildings Directive. They should be designed with a view to achieving the 2050 objective of a highly energy-efficiency and decarbonized building stock and be announced with sufficient lead times.

Action 3: Ensuring greater depth and quality of renovation works

Energy Performance Certificates (EPCs) should become a more reliable tool in assessing energy performance and improvements post-renovation, notably by enhancing the required qualifications to deliver EPCs and increasing EU harmonization to allow these certificates to be more comparable and useful for building occupants, owners and investors.

Building renovation passports, energy advisory services and one stop shops are essential to boost the renovation market and to reach the needed 75% energy savings on average, next to lifting the burden of work planning for owners. Building Renovation Passports and real performance metrics should complement the EPC to provide tailored renovation advice to building owners and ensure adequate project planning, coordination of the renovation steps and proper design of measures. Progressively, real performance metrics should complement calculated performance, which would also facilitate the financing of energy renovation linked to guaranteed savings.

EU level support, e.g. through the Just Transition Fund, should be made available to enhance the skills for renovation and re-skills workers in high-carbon regions to be able to get high-quality, green jobs such as in the building sector.

EU ETS extension to building emissions – not the right tool

The European Commission has been consulting stakeholders and doing research about whether to extend the EU Emissions Trading System (EU ETS) to include road transport and the heating of buildings. A recent analysis by Cambridge Econometrics[10] shows that this would have little additional impact on emissions from these sectors, as

[9] RAP (2020), Filling the policy gap: Minimum energy performance standards for European buildings, see here
[10] Cambridge Econometrics (2020), Decarbonising European transport and heating fuels, see here

the buildings and transport sectors are relatively unresponsive to the carbon price. It would however significantly increase living costs for poorer households. If the EU ETS is extended to buildings, the price of fossil heating would increase by 30%, which in the case of low-income households could lead to under-heating and thereby affect their quality of life.

Including buildings in the EU ETS[11]:

- **Would require a very high carbon price to achieve the necessary emission reductions in the building sector**. There are many non-economic barriers that lead to this price unresponsiveness such as split incentives between the landlord making investments and the tenant paying energy bills, the inability of people to come up with the high upfront costs and a lack of information on renovation opportunities and financing options. Including buildings in the EU ETS would do nothing to overcome these barriers to make buildings more energy- and carbon-efficient, and hence would have little additional impact on the emissions from the building sector[12].
- **Could lead to higher energy bills for tenants or homeowners who are not able to, or cannot afford to, renovate their homes**. Extending the EU ETS to buildings could increase spending on heating by 30%. This hits low-income households the hardest, as they have little financial means to invest in renovation, or no opportunity to do so if they are tenants. They are hence left with higher energy bills, or less comfort and wellbeing when they cannot afford these higher prices and do not turn on their heating as a result.
- **Is complex and likely to take many years**. It took around 10-15 years to make the EU ETS an effective instrument for the existing covered sectors.
- **Shifts the responsibility of climate action from governments to heating fuel suppliers**[13]. This is problematic because it is still up to governments to take ownership of the transition and put in place programmes to accelerate building renovation and alleviate energy poverty.

For all these reasons, the EU ETS is not the right tool to spur renovations and the focus of the Renovation Wave should be on proven solutions such as Minimum Energy Performance Standards.

Renovating Sustainably: Towards the Sustainable Built Environment

Moving to sustainable buildings and Level(s)

The Energy Performance of Buildings Directive (EPBD) has set an objective to have a highly energy-efficient and decarbonized building stock by 2050. It also specifies that by 2021 all new buildings need to be nearly zero energy buildings, but so far does not set any specific requirements for the climate performance of new buildings. The next step should be to also include indicators and criteria for operational and embodied carbon, alongside other sustainability criteria, in the legislative framework. This can ensure that lifecycle carbon emissions are considered in the design of new buildings, using the Level(s) framework.

Level(s) is a transparent and harmonized reporting framework to measure and account for the sustainability of buildings across their whole lifecycle, including climate performance. It offers great scope to be included in the Green Public Procurement criteria and the sustainable finance framework.

[11] Eurima (2019), Why including buildings in the EU ETS is not the right tool to deliver energy-efficient homes, see here
[12] Cambridge Econometrics (2020), Decarbonising European transport and heating fuels, see here
[13] Including buildings in the EU ETS would remove the sector from the Effort Sharing Regulation under which each Member State has annual climate targets it needs to meet. Under the EU ETS, the responsibility is on installations, not governments.

Integrating life cycle performance evaluations into the regulatory framework would allow the building sector to play its optimal role in addressing multiple challenges, starting with climate change. New buildings can benefit in particular from the mainstreaming of life cycle assessment.

When it comes to renovation, the Level(s) framework can be applied to large, major renovation projects, which follow the same planning, design, construction and commissioning path as new constructions. In large major renovation projects, there is a higher chance of having the required dedicated resources and data availability to carry out optimization exercises between life cycle parameters. Applying Level(s) to other renovations would be very complex due to the highly diffuse and diverse nature of the renovation markets, with uncertain outcomes due to the lack of data.

Achieving circularity

The built environment requires vast amounts of resources and accounts for about 50% of all extracted material. The construction sector is responsible for over 35% of the EU's total waste generation. To ensure the Renovation Wave is implemented in line with circular economy principles, the following considerations should be kept in mind to increase the recycled content in construction products and scale up the recovery and recycling of building materials from renovation projects.

To increase the circularity of construction products, mandatory requirements should be set, for example by public authorities integrating into their procurement rules. Additionally, circularity requirements should become mandatory declarations in the Construction Products Regulation.

At the same time, it is of high importance to accelerate and mainstream deconstruction practices, instead of demolition. The recovery and recycling of "post-consumer" waste generated during renovation or demolition/deconstruction projects can put a halt to the landfilling of valuable resources and instead promote the use of these resources as a valuable secondary raw material to substitute virgin non-renewable materials. Recycling also contributes to less carbon intensive products.

The work conducted by the Commission, in close cooperation with industry, on design for deconstruction, is a useful step in this regard. Related to this, the separate collection of waste at deconstruction/demolition stages is a major enabler for circular practices and should become mandatory. Stricter rules on permissions for demolition should also be considered e.g. carbon/resource impact when a building is demolished in comparison to a renovation.

The sorting of construction waste from deconstruction sites will need to become mandatory and (non-weight) targets for the recycling of construction products should be set. The reuse and recycling must become more (financially) attractive than landfilling. Today, most construction materials still end up in landfills, as landfilling is often cheaper than recycling these materials.