EASE reply to the European Commission Public Consultation on the revision of the Energy Performance of Buildings Directive (EPBD)

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EASE – European Association for Storage of Energy

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1. Introduction

As announced in the European Green Deal, the Commission adopted on 14 October 2020 a strategic Communication "Renovation Wave for Europe - greening our buildings, creating jobs, improving lives". It contains an action plan with specific regulatory, financing and enabling measures for the years to come and pursues the aim to at least double the annual energy renovation rate of buildings by 2030 and to foster deep renovations. It is expected that mobilising forces at all levels towards these goals will result in 35 million building units renovated by 2030.

The Renovation Wave confirms that the existing legislative measures on buildings will neither suffice to achieve the increased EU 2030 climate target of at least 55% emission reduction target and the planned increase in the ambition for energy efficiency, nor the 2050 climate neutrality objective. Therefore, the Renovation Wave communication announces a revision of the Energy Performance of Buildings Directive 2010/31/EU (EPBD) together with a number of areas of legislative and non-legislative reinforcement in relation to building renovation and decarbonisation of buildings. The EPBD is the cornerstone of European legislation in the area of energy performance of buildings. It aims at accelerating the transformation of the EU building stock into a highly energy efficient and decarbonised building stock by 2050.

The Renovation Wave already indicated some specific aspects which will be addressed in the revision of the EPBD, namely: the phased introduction of mandatory minimum energy performance standards for all types of buildings (public and private), an update of the framework for Energy Performance Certificates, 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 are also considered to be updated in line with the enhanced climate ambition of the European Green Deal and the Climate Target Plan 2030. This includes addressing resource efficiency and circularity principles in order to reduce whole lifecycle emissions, digitalisation in design, construction and operation of buildings, climate resilience and health and environmental requirements, as well as accessibility for persons with disabilities, and energy poverty, requires consideration. More information is provided in the Inception Impact Assessment.

This questionnaire is part of a larger stakeholder consultation which will feed into the Commission's work on the revision of the EPBD. It builds upon the results from the very extensive and in-depth public consultation for the Renovation Wave that took place between January and September 2020, whose results have been assessed in a dedicated report.

Part A. Planning and policy instruments

Decarbonisation of buildings

***Question 1.** The long-term decarbonisation strategy has introduced the concept of zero emission buildings by 2050, in view of achieving carbon neutrality in the long term. Do you agree that such a novel concept should be defined in the EPBD?*

☒ Yes

☐ *No, it is not needed in the EPBD*
☐ *No opinion*

If yes,
☐ *It should include greenhouse gas emissions covering the whole life-cycle of buildings*
☐ *It should include minimum renewable energy share in buildings and city neighbourhoods*
☐ *It should refer to a timeline to gradually phase out fossil fuels, in particular for heating and cooling systems*
☒ *Other – please specify in comment box*

* *Please specify*
500 character(s) maximum

The decarbonisation of heating and cooling systems is a priority of the EPBD as well as for EU long-term decarbonisation goals. Energy storage can help decarbonise the heating and cooling sectors, which are currently heavily dependant on fossil fuels. The energy efficiency first principle is supported by storage and flexibility options to gradually phase out fossil fuels. Therefore, the use and deployment of energy storage technologies are indispensable in the long-term decarbonisation strategy.

Question 2. *Long-Term Renovation Strategies (LTRS) set the vision, roadmap, concrete policy measures and actions, and dedicated financing mechanisms to decarbonise national building stocks by 2050. The first 13 LTRS submitted have been assessed by the Commission. Under the existing legal framework the LTRS are due every 10 years, with a possibility for updates as foreseen under the Governance Regulation. Should the EPBD provisions in the Long-Term Renovation Strategies be modified?*
☒ *Yes*
☐ *No*

* *If yes, how?*
1000 character(s) maximum

Deployed behind-the-meter, energy storage can support energy efficiency and energy optimisation, as well as citizens' engagement in and ownership of the energy transition. The EPBD should aim to promote the widespread deployment of energy storage systems, by encouraging its use at the national level. Long Term Renovation Strategies should seek to remove the barriers to energy storage and support its uptake with targets, financing, and with a technology neutral approach for storage systems.

Question 3. *Should the monitoring of the objectives identified by MSs in their LTRS be strengthened?*
☒ *Yes*
☐ *No*

If yes,
☐ *Through a specific monitoring tool to be developed by the Commission*
☐ *By requiring a 5-year revision of the LTRS*

☐ *By developing a common template and requesting specific data and indicators, in order to make the information provided by Member States more comparable*
☐ *By requesting more data, especially on greenhouse gas emission effects, to allow assessing the contributions to the EU climate policy targets*
☒ *By linking the LTRS to other policies (heating and cooling, renewables, products, etc.)*
☐ *Other – please specify in comment box*
☐ *No opinion*

* *Please specify:*
500 character(s) maximum

LTRS should be linked to other policies like heating and cooling and renewables to ensure that these policies are not neglected or are not contradicting. In addition, the LTRS should support the pillars of the Clean Energy Package such and consumer empowerment with initiating assessments and communication of the benefits of energy storage technologies for consumers, industry and communities, among other flexibility solutions.

Question 4. *Which measures would you add in the EPBD to further support district and city authorities to increase energy efficiency in buildings and to accelerate the rate of replacement of boilers by carbon free ones based on renewable energy?*
1000 character(s) maximum

- Increasing energy efficiency should go hand in hand with raising awareness about the benefits for the consumer. In this context therefore not only accelerating the rate of replacement of boilers but also introduce the many benefits of smart heating and cooling concepts, including thermal storage concepts that have the potential to provide the needed flexibility options for the energy system as a whole and also reduce cost for the consumer.
- Timeline to restrict fossil installations: Phase out fossil fuel systems by 2025 for new buildings and by 2035 for existing buildings
- Annual deep renovation rate of at least 3% applicable to the overall building stock
- Higher level public one-stop-shop approaches that cover the whole process from information, technical assistance, structuring and provision of financial support
- Complementary policy actions that progressively eliminate the least efficient products and fossil based technologies and promote renewable and electric heat-pump alternatives
- Give room for ESCO, by offering services against payment, and therefore limiting the investment risk to the customers with the main goal of facilitating improved efficiency
- Financial support to implement solutions towards the electrification of energy consumption (to finance the civil works, necessary the civil works, necessary to switch from gas)

Resource efficiency and climate resilience in buildings renovation

The European Green Deal points to energy and resource efficiency. Following this, the new Circular Economy Action Plan (CEAP) adopted in March 2020 acknowledges that reaching climate neutrality by 2050 requires highly energy and resource efficient buildings equipped with renewable energy, considering life cycle performance and a more efficient use of

resources for building renovation and construction. The Renovation Wave equally sets our actions in this regard, such as the development of a 2050 whole life cycle performance roadmap to reduce carbon emissions from buildings.

***Question 5**. Do you think a revised EPBD should include measures to report on whole life-cycle carbon emissions from buildings (manufacturing and construction, use and end of life)?*
☒ Yes
☐ No, the EPBD is not the right tool for this
☐ I don't know/ No opinion

If yes,
☒ For all buildings (new buildings and renovations)
☐ For all new buildings
☐ For renovations only
☐ For all new public buildings
☐ For renovations of public buildings only
☐ For a subset of private non-residential buildings such as shopping centres or datacenters
☐ The opportunity should be considered in the context of the revision evaluation mandated for 2026

Comment:
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There should be a provision on the EPBD with measures to report on whole life-cycle carbon emissions from buildings. For reaching actual performance optimisation manufacturing, construction and end-of-life will play a role as well.

***Question 6**. Should the EPBD require that the likely impacts of climate change are taken into account in the planning of new buildings and major renovations?*
☒ Yes
☐ No, the EPBD is not the right tool for this
☐ No opinion

If yes,
☒For new private buildings (residential and non-residential)
☒For new public buildings
☒For private renovations
☒For renovations of public buildings
☐ For renovations of public buildings only
☐ In case of private buildings, only for a subset of non-residential buildings such as offices or commercial buildings
☒The opportunity should be considered in the context of the revision evaluation mandated for 2026

Question 7. *As announced in the Renovation Wave, the Commission will develop a 2050 whole life-cycle performance roadmap[1] to reduce carbon emissions from buildings and advancing national benchmarking with Member States. How do you think the EPBD could contribute to this roadmap?*

1000 character(s) maximum

The EPBD will lay the foundations for the building performance section of this future roadmap. To this, manufacturing, construction, and end-of-life targets should then be added energy storage as it can support energy efficiency and energy optimisation, as well as citizens' engagement in and ownership of the energy transition.
In addition to including energy storage, the following should be considered such as fossil fuel phase out in new buildings by 2025 and existing buildings by 2035.

- Annual deep renovation rate of at least 3%, to the overall building stock
- Harmonised building energy performance standard (EPS) across the EU. New buildings binding trajectory for implementing a minimum EPS. Existing buildings must have an EPS by 2024 and a binding trajectory for implementing the minimum EPC:
- By 2030 MSs must improve the average EPS of their existing building stock by at least two levels of categorisation, compared to 2021
- By 2040, MSs must ensure that at least 70% of existing buildings must be zero energy buildings to achieve 100% by 2050
    - Exemplary ambition for public administrations.

Nearly zero-energy buildings (NZEB)

Question 8. *The EPBD requires all new buildings from 2021 (public buildings from 2019) to be nearly zero-energy buildings (NZEB). According to Article 2 "nearly zero-energy building" means a building that has a very high energy performance, as determined in accordance with Annex I. The nearly zero or very low amount of energy required should be covered to a very significant extent from renewable sources, including sources produced on-site or nearby. Do you think that the current definitions for NZEBs are ambitious enough to contribute towards a fully decarbonised building stock?*

☐Yes, the current definition is ambitious enough
☒ No
☐ No opinion

If no,
☐ The current definition should be updated to put clear limits to energy use and minimum levels of renewables and incorporate green-house gas emissions targets
☐ The current definition should be replaced by a definition of "zero emissions buildings"
☐ Other – please specify in comment box

[1] *The Roadmap is one of the actions foreseen in the Renovation Wave Communication (COM(2020) 662 final) to make the construction ecosystem fit to deliver sustainable renovation.*

* *Please specify:*

500 character(s) maximum

The current state of the art in building newly built buildings is to build energy neutral or even net-energy producing buildings, that is both for areas with large amounts of free space and also in densely populated areas. Energy storage as a technology used to support energy efficiency and energy optimisation could be incorporated in these definitions.

Question 9. *Numeric thresholds or ranges for NZEBs are not defined in the EPBD. While this allows Member States to set their NZEB levels taking into account their national context, it also results in widely differing definitions from country to country. Is a more harmonised definition of NZEB necessary?*

☒ *Yes*

☐ *No, it is not necessary*

☐ *I don't know/ No opinion*

If yes,

☐ *Minimum thresholds for primary energy use in the building's operation should be defined in the EPBD for different climate zones*

☐ *Minimum renewable energy sources share should be introduced in the EPBD for different climate zones*

☐ *Both minimum thresholds for primary energy use and renewable energy sources share in the building's operation should be introduced in the EPBD for different climate zones*

☐ *Life-cycle greenhouse-gas performance should also be included*

☒ *Other – please specify in comment box*

* *Please specify:*

500 character(s) maximum

Both minimum thresholds for primary energy use and renewable energy share should be applied, however, for RES share to be considered, it should be taken into account the RES-E share from the electricity grid. A combination with the life-cyle GHG performance should also be considered, to provide for a complete evaluation of the carbon footprint of the building.

Deeper building renovations

Question 10. *Deep renovation is understood to be a renovation that should generate at least 60% energy savings, whether carried out in a single stage or in a number of staged renovations. In your view, would it be beneficial to provide a legal definition of "deep renovation" in the EPBD?*

☒ *Yes*

☐ *No, a definition would add further complexity*

☐ *I don't know/ No opinion*

If yes,

☐ *The definition should relate to energy savings only*

☒ *The definition should relate to energy savings also expressed in terms of greenhouse gas emissions related to the use of energy*

☐ *The definition should relate to both operational and embodied greenhouse gas emissions covering emissions from the full life-cycle of buildings*

☐ *The definition should cover broader aspects that have an impact on the quality of renovations, such as health and environmental standards, accessibility for persons with disabilities, climate resilience or others – please specify in comment box*

☒ *Other – please specify in comment box*

* *Other broad aspects? Please specify:*

500 character(s) maximum

It should be considered broadening the definition to cover more renovations falling under that category thereby increasing the number of renovations to become 'deep renovations' and thereby leading the owners to focus on energy savings of the particular building in the renovations they do with the overall goal towards zero energy use.

* *Please specify:*

500 character(s) maximum

Mandatory minimum energy performance standards ('MEPS')

Mandatory renovation/minimum performance requirements are one of the most impactful measures for increasing the rate of building renovation and have already been explored and implemented in some Member States. Their aim is to firm up investors' expectations by setting a path for the improvement of the energy performance of different classes of buildings thus gradually increasing the average performance of the national building stock. Mandatory renovation/minimum performance requirements could be introduced progressively and target specific segments as a priority.

Question 11. *In your opinion, should the EPBD introduce mandatory minimum energy performance standards to be applied in the EU, subject to specific conditions to be determined?*

☒ *Yes*

☐ *No*

☐ *I don't know/ No opinion*

Please explain your answer:

1000 character(s) maximum

The progressive introduction of minimum energy performance standards supports more rapid changes for the energy transition in the market and policy predictability in all EU Member States, aiding the development of technologies needed for building energy efficiency. For that, behind-the-meter storage, energy systems integration, and demand-side flexibility can greatly contribute to energy efficiency in buildings, and should be supported by the requirements/standards.

Minimum energy performance standards (MEPS) can be a useful tool to meet EU climate targets. The EPBD should set a harmonised building energy performance standard (EPS)

across the EU with the best category as zero energy buildings
New buildings could have binding trajectory for implementing a MEPS. By 2025 all new buildings to be zero energy buildings
Fore existing buildings to set a binding trajectory for implementing the MEPS and have an EPS by 2024

- By 2030 MSs improve the average EPS of their existing building stock by at least two levels of categorisation, compared to 2021
- By 2040, MSs ensure that at least 70% of existing buildings must be zero energy buildings to achieve 100% by 2050

Question 12. *What type of minimum energy performance standards do you consider most appropriate?*

☒ *Building-level performance standards, focusing on the overall energy efficiency of the building (for example linked to an Energy Performance Certificates ('EPC') class or the energy codes, specific energy consumption, another carbon metric, etc.)*

☐ *Building element-level performance standards, setting specific minimum levels of building elements (for the envelope and/or the technical building systems including heating and cooling)*

☐ *Minimum quality standards, including also other aspects beyond energy performance, such as thermal comfort - please specify in comment box*

☐ *Others - please specify in comment box*

☐ *I don't know/ No opinion*

* *Please specify:*

500 character(s) maximum

The EPC's are a more complete and effective approach, however, these should always be complemented with adequate thermal comfort thresholds.

Please explain your answer:

1500 character(s) maximum

Setting element level performance standards can help to target the worst performing systems in buildings, give more specific feedback to the customer. EASE highlights the value of energy systems integration for improving efficiency for the building technical systems, and the ability of energy storage to improve each systems such as heating and cooling. Energy storage technologies can provide many benefits to building owners, tenants, and users. This can apply to both residential buildings and commercial/industrial buildings, due to the diversity and scalability of storage technologies. Buildings with solar PV can benefit from installing energy storage (e.g. batteries) in order to maximise renewable self-consumption and provide grid flexibility. Thermal energy storage can help support renewable or low-carbon heating and cooling solutions such as heat pumps or solar-thermal panels, increasing efficiency and facilitating the provision of flexibility services. Another important aspect of energy storage is its ability support the roll-out of electric vehicle charging infrastructure in buildings. Stationary storage co-located with charging infrastructure can reduce peaks in demand and facilitate smart charging in response to signals from the grid. All these benefits should be integrated as a part of the performance-standard to support the energy system integration and also raise awareness among the customers.

Question 13. *In your view, for which category of buildings should mandatory minimum energy performance standards be applied?*

☒ All residential and non-residential buildings
☐ All residential buildings being sold and/or rented out
☐ All residential buildings
☐ A subset of residential buildings to be defined (please specify in comment box)
☐ All non-residential buildings
☐ All non-residential buildings being sold and/or rented out
☐ A subset of non-residential buildings to be defined (please specify in comment box)
☒ All public buildings (with a total floor area of more than 250 m2)
☐ Only to worst-performing buildings irrespective of their ownership and use profile
☐ Other (please specify in comment box)
☐ I don't know/ No opinion

** Please specify subset of residential buildings:*
500 character(s) maximum

** Please specify subset of non-residential buildings:*
500 character(s) maximum

** Other? Please specify:*
500 character(s) maximum

Question 14. *Do you think that mandatory minimum energy performance standards should be introduced:*

☒ Yes
☐ No, I don't believe that mandatory minimum standards are appropriate
☐ I don't know/ No opinion

If yes,

☐ Linked to specific moments in the life cycle of a building, for example a transaction (e.g. the sale, rental or lease of a building)
☒ On the basis of a timetable for a staged approach to achieve specific energy performance levels
☐ Other – please specify in the comment box
** Please specify:*
500 character(s) maximum

Question 15. *In your view, what are the most important elements that could guarantee a successful roll-out of mandatory minimum energy performance standards?*

☒ The availability of financial support to buildings owners
☐ The correct identification of the worst-performing buildings

☐*The presence of a stable legal framework*
☐ *The availability of adequate workforce capacity to do renovations*
☐ *The availability of emerging technologies facilitating rapid renovation works*
☐ *Other – please specify in the comment box*
☐ *I don't know/ No opinion*

* *Please specify:*
500 character(s) maximum

A stable and just green taxonomy/financial support approach is the best way to promote energy efficiency in buildings. Building owners should be incentivised and be supported in the investments needed for building renovation. Of course, this needs to work in parallel with a stable legal framework.

Public Buildings

Question 16. *In your view, which of the following regulatory measures should be envisaged to increase the rate and depth of renovation of public buildings in a sustainable manner?*
☐ *Introduction of more stringent minimum energy performance requirements for renovation of public buildings*
☒ *Introduction of minimum energy performance standards in public buildings, with an obligation to achieve progressively more ambitious levels*
☐ *Introduction of life cycle aspects in the design, construction and operation of refurbished public buildings (e.g. circular approaches like extension of service life, adaptability and flexibility, reuse and recycling of materials)*
☐ *Introduction of climate resilience aspects in the design and operation of new and refurbished public buildings*
☒*Other – please specify in the comment box*
☐ *I don't know/ No opinion*

* *Please specify:*
500 character(s) maximum

Introduction of minimum energy performance standards with binding improvement trajectory applied to the specific administration assets linked to reinforced annual deep renovation rates (to reach 6% by 2030). Phase-out fossil fuels alternatives for heating by 2022 in new buildings and by 2025 in existing.
Make sure that all new public administration buildings have the highest energy performance category (zero energy buildings) by 2023, and all the building stock by 2030.

Electromobility

Question 17. *The provisions on electromobility in Article 8 of the EPBD targeting the installation of recharging points in car parks adjacent to buildings were recently introduced. With the strengthened climate ambition and the increased incentives towards the uptake of electric cars but also with the strong increase in (electric) bike /cargo-bike use, do you think there is a need to strengthen the requirements?*

	Yes	No	I don't know/ No opinion
For new residential buildings	☒	☐	☐
For refurbished buildings	☒	☐	☐
For new non-residential buildings	☒	☐	☐
For refurbished non-residential buildings	☒	☐	☐

Question 18. *In your view, what kind of requirement would be needed?*

	Yes	No	I don't know/ No opinion
The installation of recharging points to support smart charging, allowing to monitor, control and optimise energy usage when recharging electric vehicles	☒	☐	☐
The inclusion of provisions for recharging points for vehicles other than cars (e. g. e-bikes)	☒	☐	☐
To give owners of an apartment in multi-dwelling buildings the right to install a recharging point for their parking spot in the shared parking garage (right to plug)	☒	☐	☐

Other measures? Please specify:

500 character(s) maximum

EU must adopt a coordinated approach to defining grid connection conditions and electricity pricing configurations. Fragmented local and national approaches create undue barriers for storage developers. V2G, interoperability, harmonised protocols, and standards among the infrastructures and systems should be implemented to enable seamless communication. Access to energy consumption data should be ensured, with protection of consumer privacy and security and the consumers' access to their own data.

Question 19. *Are you aware of administrative barriers preventing the deployment of charging points in buildings in your country?*

☒ *Yes*

☐ *No*

* *If yes, please elaborate:*

1000 character(s) maximum

Interoperability is essential in order to foster the use of public charging infrastructure. It is also paramount for V2G solutions: V2G can support the future energy system and empower customers to participate.

Recommendations to support a framework that would encourage interoperability:

- Legislation on EV charging should avoid leading to varying national implementation.
- Charging of EVs should be clearly defined as a service.
- Guaranteeing interoperability between the different assets involved is essential to extract the full value from their connectivity.
- Energy tariffs and pricing structures should be smart and enable V2G integration.
- Double-charging of taxes and levies should be avoided.
- Standard and codes on metering should be harmonised and simplified, in order to reduce hardware costs and allow EU wide tariff structures.
- Simplify negotiations to install meters for the chargers & address lack of capacity to install large number of chargers in one building when the need arises.

Part B. Information provision and energy performance certificates

Energy performance certificates (EPCs)

Energy performance certificates (EPCs) is an instrument aimed at informing building owners, tenants and users about the cost of heating and cooling, savings that investments would bring and offer benchmarks to compare similar buildings. EPCs are also needed to link preferential financing conditions to quality renovations. Under the existing EU regulatory framework, EPCs are compulsory for buildings being built, sold or rented and the energy class of the EPC must also be shown in advertisement media. They are also compulsory for buildings over 250 m2 occupied by a public authority and frequently visited by the public. EPCs can also be used to plan policy or to monitor the performance of measures when these are implemented. However, the coverage of such certificates strongly differs across Member States.

Question 20. *Do you agree that the framework for Energy Performance Certificates should be updated and their quality improved?*

☒ Yes
☐ No, it's not necessary
☐ Other – please specify in the comment box
☐ I don't know/ No opinion

** Please specify:*
500 character(s) maximum

The coverage of the certificates strongly differs across Member States therefore it should be needed to harmonise that in the update.

Question 21. *Is harmonization of EPCs needed to accelerate the increase of building performance and how can it be achieved?*

☐ Yes, it is needed and can be achieved by introducing a common template
☐ Yes, it is needed and can be achieved by other means – please specify in comment box
☒ Yes, it is needed but some national specification should be retained – please specify in comment box
☐ No, harmonisation is not needed
☐ I don't know/ No opinion

* *Other means? Please specify:*

1500 character(s) maximum

* *National specifications? Please specify:*

500 character(s) maximum

National specifications should be retained to account for climate conditions in the member state. Different states/geographical areas have specific energy-related challenges and, consequently, different smart building solutions are required. For instance, buildings in Northern Europe may have more of a need for heat storage to support effective heating, while buildings in Southern Europe may benefit more from cold storage solutions.

Please explain your choice:

500 character(s) maximum

Question 22. *How would you rate the following elements in order to improve the quality and impact of EPC requirements?*

0 – No opinion
1 – Not important
2 – Of little importance
3 – Moderately important
4 – Important
5 – Very important

	0	1	2	3	4	5
Improve training for independent experts	☒	☐	☐	☐	☐	☐
Develop professional qualification schemes or labels for installers of technical buildings systems	☒	☐	☐	☐	☐	☐
Improve quality control mechanisms	☐	☐	☐	☒	☐	☐
Include further information on estimated costs, energy savings or cost savings	☐	☐	☐	☐	☒	☐
Include information on non-financial benefits such as increased comfort and climate resilience	☐	☐	☐	☐	☒	☐
Tailor the recommendations towards deep renovations	☐	☐	☐	☒	☐	☐
Develop an accessible EPC database with further information on the EPC, explanation of the different terms,	☐	☐	☐	☐	☒	☐

benchmarks and comparison with similar buildings						
Increase the number of mandatory indicators to include: greenhouse gas emissions, generation of renewable energy, breakdown of different energy uses (e.g. heating, ventilation, lighting, etc.) or type of systems installed	☐	☐	☐	☐	☐	☒
Increase the interoperability with other tools such as digital building logbooks, SRIs and renovation passports.	☐	☐	☐	☐	☐	☒

Comment:

500 character(s) maximum

EASE believes EPCs should go hand in hand with SRIs. This would reduce administrative burden, and improve the energy efficiency of buildings while raising awareness for building owners. They should be adapted to use the same scales, making the score clearer and easier to interpret for users. In addition, EPCs should provide several indicators to allow for the user to have actionable information, and raise awareness by system.

Question 23. *Which elements are the most important to ensure compliance with EPC requirements?*

At most 3 choice(s)

☐ *Provision of detailed guidelines for EPC (including use of visual identity, common logo, recommended indicators)*

☐ *More stringent penalties in case of non-compliance, for instance in relation to the advertisement of sales or rent of buildings*

☒ *Extend liability to all the market actors involved in the selling/renting of properties*

☒ *Making EPCs mandatory to access any financial incentive targeting buildings renovations*

☒*Accessible EPC database with benchmarks allowing comparison with similar buildings*

☐ *Introduce information flow and cross-checks between EPC databases and other databases containing information on buildings or products (e.g. national building registry or cadastre, energy labelling database for products, digital building logbooks, other national statistics, etc.)*

☐ *Other measures - please specify in comment box*

* *Please specify:*

500 character(s) maximum

Smartness of buildings and wider modernisation

Question 24. *The objective of the Building Renovation Passport (BRP) is to provide a long-term, step-by-step renovation roadmap for a specific building based on quality criteria,*

following an energy audit, and outlining relevant measures and renovations that could improve the energy performance and the quality of the building. The BRP schemes and initiatives in the EU are diverse and most of them have not reached their full potential, while some are still at the research phase. Which measures do you think could best support the uptake of a building renovation passport?

At most 3 choice(s)

☒ *1) Guidelines and best practice exchange on how the BRP can support the objectives of the Long-Term Renovation Strategy.*

☒ *2) National/regional communication campaigns to increase awareness of the BRPs.*

☐ *3) Training of energy experts.*

☐ *4) Making funds, such as the European Energy Efficiency Fund or ELENA, available to the Member States for BRP development and implementation.*

☒ *5) Guidelines on how to support and enable banks to offer a favourable interest rate on loans/mortgages which are linked to a BRP.*

☐ *6) Legal requirement to be introduced in the EPBD review for the Commission to develop a common template for BRPs.*

☐ *7) Legal requirement to be introduced in the EPBD review for the Commission to develop a voluntary BRP scheme.*

☐ *8) Legal requirement to be introduced in the EPBD review stating that BRP becomes mandatory for certain building types (replicating the EPC regulations, buildings for sale, etc.) after 2030.*

☐ *9) No measure is necessary.*

☐ *10) Other – please specify in comment box.*

☐*11) I don't know / No opinion.*

* *Other? Please specify:*

500 character(s) maximum

Question 25. *The Commission has created a uniform scheme for Smart Readiness Indicators in the EU. The scheme is currently voluntary, and has the potential to promote the digitalisation of buildings and the role that buildings can play in smart sector integration.*

What would you consider to be the best ways in which the Smart Readiness Indicator could support the role of buildings in smart sector integration?

☐ *Continue with the current framework and focus on its implementation on a voluntary basis*

☐ *Introduce SRI as mandatory requirement for non-residential buildings*

☐ *Introduce SRI as mandatory requirement for all new buildings*

☐ *Introduce SRI as mandatory requirement for all buildings*

☒ *Support the development of links between the SRI and other schemes (e.g. EPCs, building renovation passports, building logbooks, etc.)*

☐ *Other – please specify in comment box*

☐ *I don't know / No opinion*

* *Please specify:*

500 character(s) maximum

As previously stated, EASE believes that SRI should be used alongside EPCs. The EPBD should support the link between the SRI and other schemes, to highlight the importance of flexibility and digitalisation in buildings. SRI alongside other schemes like the EPC can raise awareness and increase the uptake of smart building technologies and systems integration, to increase building efficiency and aided with the proper technology, such as behind-the-meters storage to promote nearly-zero energy buildings. We also see SRI as mandatory requirement for all new buildings.

Question 26. *Do you think that the EPBD can contribute in making a wider range of building-related data on the energy performance of a building and its related construction and renovation works, across its life cycle, available and accessible? (note: building related data can come from a variety of sources: SRI, logbook and EPCs, Level(s), grant schemes, building permits, digital models)*

☒ *Yes*

☐ *No*

☐ *No opinion*

Please explain your answer:

1000 character(s) maximum

The EPBD can contribute to making a wider range of data on energy performance available, allowing for building owners to make better informed decisions on the necessary renovations. EASE believes the EPC, along with wider deployment of SRI can accomplish this, while incentivising energy systems integration, flexibility, and behind the meter storage systems. The information provided by these measures contributes to a goal of the directive to aim for near zero energy buildings.

Part 3. Enabling more accessible and affordable financing for building renovation

Question 27. *The Renovation Wave Communication identify the need of sensible additional investments in building renovation in order to double the yearly renovation rate across Europe, decarbonise the building stock and achieve 2030 energy efficiency targets. Public financing alone will not be enough to achieve these objectives; it will be seminal to enable more accessible and affordable private financing options for building renovation. How would you rate the following possible forms of support to renovations?*

0 - No opinion

1 - Not important

2 - Of little importance

3 - Moderately important

4 - Important

5 - Very important

	0	1	2	3	4	5
Public guarantee for commercial banks to offer low-interest loans for renovation of worst performing buildings	☐	☐	☐	☐	☒	☐
Direct grants support to low-income citizens living on worst performing buildings	☐	☐	☐	☐	☒	☐
ESCOs financing of low-interest loans payback through on-bill recovery	☐	☐	☐	☐	☒	☐
Tax incentives during a period of time to provide additional economic support	☐	☐	☐	☐	☐	☒
One stop shops for all types of renovation advice	☐	☐	☐	☐	☐	☒
Support the development of energy efficiency mortgages and other innovative financing options that will enable private financing institutions to offer low-interest loans based on the improvements of energy performance of buildings or on building renovation passports	☐	☐	☐	☐	☒	☐
Technical assistance facilities supporting the development of building renovation project for the building stock of local and regional authorities	☐	☐	☒	☐	☐	☐

Other kind of support? Please specify:

500 character(s) maximum

The technical assistance should be also directed to private buildings, not only to buildings from local and regional authorities.

Question 28. *Deep renovations do not always result in a rapid return on investment. In your opinion, how public financial incentives can be used to stimulate deeper renovations across the EU?*

1000 character(s) maximum

To encourage more effectively investment in energy efficiency actions we suggest:

1) implement stable regulations establishing minimum efficiency standards for equipment and insulations (to be implemented through advanced ecolabel for most efficient appliances, in particular for H&C);
2) facilitate information to enable citizens and companies to make the most appropriate decisions; The return of the investment could not be clearly visible for everyone before deep renovation which is why there should be some awareness raising if the

opportunities that energy saving, especially through different energy storage technologies could provide;

3) review energy taxation, to reflect carbon price across all fuels and to remove taxes from cleaner energy sources.

Therefore, financing options should be there to encourage the owners to take care about major energy savings of the particular building that is being renovated going towards zero energy use highlighting that in the end, lower monthly payments will make up for a large portion of the investments.

Question 29. *Do you think that funding support to renovations should be linked to the depth of renovation?*

☒Yes

☐ No

☐I don't know/ No opinion

If yes,

☒ The intensity of funding should depend on the depth of renovations based on the Energy Performance Certificates ('EPC') class achieved

☐ All public funding scheme for private building renovation should consider a mandatory minimum requirement of at least 60% energy savings

☒ All public funding scheme for private building renovation should consider a mandatory minimum requirement of at least 30% energy savings

☐ Other – please specify in the comment box

If no,

☐ It is not necessary, deeper renovation will result in greater savings on the energy bills, the market will regulate itself and adjust in the most cost-efficient way

☐ Other – please specify in the comment box

** Please specify:*

500 character(s) maximum

Question 30. *In your view, which of the following measures would help to further support the renovation of public buildings?*

☒ Technical assistance for public authorities (national, regional, local) to design and implement comprehensive renovation programmes (ELENA model), including linkages other related climate-resilience policies in urban and rural areas

☒ Enhanced deployment and capacity building for energy performance contracting in the public sector (including accounting rules)

☐ Financial incentives to support companies providing energy performance contracting

☒ Public-private partnerships to inform and assist efforts of public authorities for building renovation and ease access to financing

☒ Framework contracts at national, regional or local level with the specific objective of renovating public buildings

☐ Other measures – please specify in comment box

☐ *I don't know/ No opinion*

* *Please specify:*

1500 character(s) maximum

Question 31. *As part of their Long-Term Renovation Strategies (LTRS), Member States must outline relevant national measures to reduce energy poverty. The Renovation Wave Communication indicates a number of measures to tackle energy poverty and renovate worst-performing buildings, including social housing. It also states that vulnerable households must be shielded from rent increases that may follow renovations. What do you think are the most important policy areas addressing energy poverty to be further reinforced?*

At most 3 choice(s)

☒*Targeted financial support for lower- and middle-income households*

☒*Minimum energy performance standards coupled with financing that limits the monthly net expenditure of the inhabitants*

☐ *Other additional legislative measures (please specify in the comment box)*

☒*The Affordable Housing Initiative*

☒*The Energy Poverty Observatory Other measures (please specify in the comment box)*

☐ *I don't know / No opinion*

Other legislative measures? Please specify:

500 character(s) maximum

Targeted financial support should be given towards lowering energy expenditures and provided towards increasing thermal comfort to adequate levels.

Other measures? Please specify:

500 character(s) maximum

Further comments

Question 32. *Do you have any further comments on policy aspects relevant for the decarbonisation of building which are not covered above?*

1000 character(s) maximum

EASE welcomes the revisions to boost building renovation and emphasizes its support for the energy efficiency first principle to be applied in its measures. However, EASE believes that energy storage should have a stronger focus in the EPBD, considering energy systems integration and the widespread deployment of SRIs are key to increasing energy efficiency. Energy storage technologies can provide many benefits to building owners, tenants, and users, as well as to energy networks (electricity, heat). This can apply to both residential buildings and commercial/industrial buildings, due to the diversity and scalability of storage technologies. In addition, the EPBD should aim to reward the benefits that energy storage brings and encourage its uptake for behind-the-meter flexibility and network flexibility (peak-shaving, congestion management). The revision should also aim to remove the barriers to energy storage, by implementing ways to reduce the upfront cost, and raising awareness and expertise for its use in buildings.

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About EASE

The European Association for Storage of Energy (EASE) is the voice of the energy storage community, actively promoting the use of energy storage in Europe and worldwide. It supports the deployment of energy storage as an indispensable instrument within the framework of the European energy and climate policy to deliver services to, and improve the flexibility of, the European energy system. EASE seeks to build a European platform for sharing and disseminating energy storage-related information and supports the transition towards a sustainable, flexible and stable energy system in Europe.

For more information, please visit www.ease-storage.eu

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Disclaimer

This response was elaborated by EASE and reflects a consolidated view of its members from an energy storage point of view. Individual EASE members may adopt different positions on certain topics from their corporate standpoint.

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