Consultation on the revision of the Energy Performance of Buildings Directive 2010/31/EU

Fields marked with * are mandatory.

Introduction

As announced in the <u>European Green Deal</u>, the Commission adopted on 14 October 2020 a strategic Communication <u>"Renovation Wave for Europe - greening our buildings, creating jobs, improving lives"</u>. 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 <u>Renovation Wave</u> 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 <u>dedicated report</u>.

* Language of my contribution

- Bulgarian
- Croatian
- Czech
- Danish
- Dutch
- English
- Estonian
- Finnish
- French
- German
- Greek
- Hungarian
- Irish
- Italian
- Latvian
- Lithuanian
- Maltese
- Polish
- Portuguese
- Romanian
- Slovak
- Slovenian
- Spanish
- Swedish
- * I am giving my contribution as
 - Academic/research institution
 - Business association
 - Company/business organisation
 - Consumer organisation
 - EU citizen
 - Environmental organisation

- Non-EU citizen
- Non-governmental organisation (NGO)
- Public authority
- Trade union
- Other

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*Organisation name

255 character(s) maximum

Swedenergy/Energiföretagen Sverige

* Organisation size

- Micro (1 to 9 employees)
- Small (10 to 49 employees)
- Medium (50 to 249 employees)
- Large (250 or more)

Transparency register number

255 character(s) maximum

Check if your organisation is on the <u>transparency register</u>. It's a voluntary database for organisations seeking to influence EU decision-making.

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* Country of origin

Please add your country of origin, or that of your organisation.

- Afghanistan
- Djibouti
- Libya

- Åland Islands
- Dominica
- Liechtenstein
- Saint Martin
- Saint Pierre and Miquelon

Albania	Dominican Republic	Lithuania	Saint Vincent and the Grenadines
Algeria	Ecuador	Luxembourg	Samoa
American	Egypt	Macau	San Marino
Samoa			
Andorra	El Salvador	Madagascar	São Tomé and Príncipe
Angola	Equatorial Guinea	Malawi	Saudi Arabia
Anguilla	Eritrea	Malaysia	Senegal
Antarctica	Estonia	Maldives	Serbia
Antigua and Barbuda	Eswatini	Mali	Seychelles
Argentina	Ethiopia	Malta	Sierra Leone
Armenia	Falkland Islands	Marshall Islands	Singapore
Aruba	Faroe Islands	Martinique	Sint Maarten
Australia	Fiji	Mauritania	Slovakia
Austria	Finland	Mauritius	Slovenia
Azerbaijan	France	Mayotte	Solomon Islands
Bahamas	French Guiana	Mexico	Somalia
Bahrain	French Polynesia	Micronesia	South Africa
Bangladesh	French Southern and Antarctic Lands	Moldova	South Georgia and the South Sandwich Islands
Barbados	Gabon	Monaco	South Korea
Belarus	Georgia	Mongolia	South Sudan
Belgium	Germany	Montenegro	Spain
Belize	Ghana	Montserrat	Sri Lanka
Benin	Gibraltar	Morocco	Sudan
Bermuda	Greece	Mozambique	Suriname

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Bouvet Island	Guernsey	New Caledonia	Tajikistan
Brazil	© Guinea	New Zealand	Tanzania
British Indian Ocean Territory	Guinea-Bissau	Nicaragua	Thailand
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Brunei	Haiti	Nigeria	Timor-Leste
Bulgaria	Heard Island and McDonald Islands	Niue	Togo
Burkina Faso	Honduras	Norfolk Island	Tokelau
Burundi	Hong Kong	Northern Mariana Islands	Tonga
Cambodia	Hungary	North Korea	Trinidad and Tobago
Cameroon	Iceland	North Macedonia	Tunisia
Canada	India	Norway	Turkey
Cape Verde	Indonesia	Oman	Turkmenistan
Cayman Islands	Iran	Pakistan	Turks and Caicos Islands
Central African Republic	Iraq	Palau	Tuvalu
Chad	Ireland	Palestine	Uganda
Chile	Isle of Man	Panama	Ukraine

China	Israel	Papua New	United Arab
		Guinea	Emirates
Christmas	Italy	Paraguay	United
Island			Kingdom
Clipperton	Jamaica	Peru	United States
Cocos (Keeling)	Japan	Philippines	United States
Islands			Minor Outlying
			Islands
Colombia	Jersey	Pitcairn Islands	Uruguay
Comoros	Jordan	Poland	US Virgin
			Islands
Congo	Kazakhstan	Portugal	Uzbekistan
Cook Islands	Kenya	Puerto Rico	Vanuatu
Costa Rica	Kiribati	Qatar	Vatican City
Côte d'Ivoire	Kosovo	Réunion	Venezuela
Croatia	Kuwait	Romania	Vietnam
Cuba	Kyrgyzstan	Russia	Wallis and
	, .,		Futuna
Curaçao	Laos	Rwanda	Western
3			Sahara
Cyprus	Latvia	Saint	Yemen
		Barthélemy	
Czechia	Lebanon	Saint Helena	Zambia
		Ascension and	
		Tristan da	
		Cunha	
Democratic	Lesotho	Saint Kitts and	Zimbabwe
Republic of the		Nevis	
Congo			
Denmark	Liberia	Saint Lucia	

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Part A. Planning and policy instruments

Decarbonisation of buildings

Question 1. The <u>long-term decarbonisation strategy</u> 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

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 <u>first 13 LTRS</u> 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 on the Long Term Renovation Strategies be modified?



* If yes, how?

1000 character(s) maximum

LRTS should link to the increasing capacity challenge in the electricity system, be based on actual energy needs in buildings, equal treatment of on-site/off-site energy production and include the potential of making use of waste energy in DHC systems. We consider LRTS should be clearly linked to the comprehensive assessments of efficient heating and cooling which is required in art. 14 i EED.

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

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

General policy instruments as energy and carbon taxation or an amended EU ETS covering the building sector should be used for creating necessary conditions for the transition from fossil fuels in the heating sector. At local level DHC and CHP investments should be addressed as solutions that could meet capacity challenges in the electricity system together with circular economy measures making use of waste heat. Local municipal energy advisors and planning measures for infrastructure such as heating grids for enabling a transition in the heating sector at local level should also be promoted as complementary measures to general economic policy measures.

Resource efficiency and climate resilience in buildings renovation

The European Green Deal points to energy and resource efficiency. Following this, the new <u>Circular</u> <u>Economy Action Plan (CEAP)</u> 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

Comment:

500 character(s) maximum

We consider that life-cycle-analysis tools at EU level must take into account national differences in Member States and rapid transition in the energy system. In Sweden the use of fossil fuels for district heating and individual heating was only 1% of the total fuel mix in 2020. We consider construction phase from this point should be in focus rather than the including of the using-phase which is already covered by energy performance certificates.

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

Question 7. As announced in the Renovation Wave, the Commission will develop a 2050 whole life-cycle performance roadmap¹ 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

Life-cycle perspective could be introduced also in EPBD to link to national climate certification schemes that should reflect an energy system perspective and have equal treatment of energy production regardless onsite of a building or off-site. Energy should not be considered as a building product and there is a need to have calculation methods that are based on the energy system developments rather than building product methodologies. EPBD rules should be complementary to the main economic policy measures with energy and carbon taxation and an expanded EU ETS to the building sector. EPBD should also reflect the need of flexibility for Member States like Sweden that already managed to almost phase out fossil fuels (1% fossil fuels in DHC in 2020) in the heating sector to avoid administrative burdens and costs.

¹The 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.

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 <u>Article 2</u> "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

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

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

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 MEPS concept is too undefined at the moment to able to evaluate and it is too early to discuss mandatory standards before the concept is more developed. In general subsidiarity must be taken into account where Member States are able to adapt any further policy measures to their national context. In Sweden where fossil fules for heating were only about 1 % in 2020 further regulatory measures in buildings will have very little climate impact. Any further MEPS standards must ensure a common level-playing for heating supply solutions regardless on-site or off-site.

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 explain your answer:

1500 character(s) maximum

Possible complementary MEPS standards should address the capacity challenges in the electricity system when the share of volatile production from wind and PV is expected to increase rapidly. Possible MEPS standards should be based on actually used energy to ensure a common level playing field for heating supply solutions regardless if localised on-site or off-site.

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

at most 2 choice(s)

- 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

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

Question 15. In your view, what is the most important element 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 comment box
- I don't know / No opinion

* Please specify:

500 character(s) maximum

The possible introduction of MEPS levels must be based on cost-efficiency otherwise lack of funding would be a problem. MEPS must also take into account the huge differences in calculation methods for energy performance standards in Member States and that present levels in energy classes and NZEB definitions are varying to a very large extent.

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 comment box
- I don't know / No opinion

* Please specify:

500 character(s) maximum

The definition of public buildings is unclear. We consider that municipal housing companies should not be addressed with specific regulatory measures. Any regulatory measures should instead be applicable for all kind of buildings regardless of ownership. Any additional requirements must be based on cost-efficiency criterias and socio-economic assessments.

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	۲	0	0
For refurbished buildings	۲	0	0
For new non-residential buildings	۲	0	0
For refurbished non-residential buildings	۲	\bigcirc	0

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

	Yes	No	l 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	۲	۲	O
The inclusion of provisions for recharging points for vehicles other than cars (e. g. e-bikes)	0	0	۲
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)	0	۲	O

Other measures? Please specify:

500 character(s) maximum

We would like to qualify our NO in the first question. For a cost-efficient roll-out of charging infrastructure, we would like to see strengthened requirements in terms of ducting infrastructure for all the cases mentioned in question 17. If you install charging points before there is an actual demand, they might have become outdated when demand catches up. However if a building is prepared with ducting infrastructure, the cost of future installation of charging points is substantially reduced.

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

- Yes
- No

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

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

Please explain your choice:

500 character(s) maximum

We consider that national flexibility should remain for EPC to take into account the varying building codes and calculation metods applied in Member States. Energy classes used in EPC for instances vary to a large extent between Member States and any harmonisation effort must take into account the complexity of different standards used in the existing building stock within EU. However increased sharing of experiences of EPC rules should be encouraged. Consider cost-efficiency of developing EPC. **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	۲	۲	۲	۲	۲	۲
Develop professional qualification schemes or labels for installers of technical buildings systems	0	0	0	0	۲	0
Improve quality control mechanisms	۲	۲	۲	۲	۲	0
Include further information on estimated costs, energy savings or cost savings	0	0	0	0	۲	0
Include information on non-financial benefits such as increased comfort and climate resilience	0	0	0	۲	0	0
Tailor the recommendations towards deep renovations	۲	۲	۲	۲	۲	0
Develop an accessible EPC database with further information on the EPC, explanation of the different terms, benchmarks and comparison with similar buildings	0	0	0	۲	0	0
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		۲	۲	۲	۲	0
Increase the interoperability with other tools such as digital building logbooks, SRIs and renovation passports.	0	0	0	0	۲	0

Comment:

500 character(s) maximum

Building classification should be based on primary energy and include all energy regardless produced onsite or off-site of a building. This means that energy production on building roofs or within the building boundaries must be reported as energy production in the EPC.

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

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)

- Guidelines and best practice exchange on how the BRP can support the objectives of the Long Term Renovation Strategy
- National/regional communication campaigns to increase awareness of the BRPs
- Training of energy experts
- Making funds, such as the European Energy Efficiency Fund or ELENA, available to the Member States for BRP development and implementation
- Guidelines on how to support and enable banks to offer a favourable interest rate on loans/mortgages which are linked to a BRP

Legal requirement to be introduced in the EPBD review for the Commission to develop a common template for BRPs

- Legal requirement to be introduced in the EPBD review for the Commission to develop a voluntary BRP scheme
- 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.
- No measure is necessary
- Other please specify in comment box
- I don't know / No opinion

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

SRI is a new instrument and it needs more time to be implemented by market actors and share practices and prove its effectiveness before taking further decisions on how to develop the scheme.

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

A holistic perspective where different buildings data are available and could be integrated could contribute to more energy efficient system solutions.

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	0	0	0	۲	۲	0
Direct grants support to low-income citizens living on worst performing buildings	0	۲	0	0	0	O
ESCOs financing of low-interest loans payback through on-bill recovery	0	0	0	۲	0	0

Tax incentives during a period of time to provide additional economic support		۲				0
One stop shops for all types of renovation advice	0	۲	۲	۲	۲	0
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	0	0	0	۲	0	0
Technical assistance facilities supporting the development of building renovation project for the building stock of local and regional authorities	0		۲	۲	۲	۲

Other kind of support? Please specify:

500 character(s) maximum

We consider that general economic policy instruments as energy and carbon taxation and an expanded EU ETS to cover also the building sector should give the right price signals to phase out fossil fuels and invest in cost-efficient energy efficiency measures in buildings. Any further measures should be complementary to the price signals.

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

Financial incentives should focus on promoting as cost-efficient energy savings as possible to contribute to the energy efficiency and climate targets. Focus should be on an overall energy perormance of the building and with decreased energy needs rather than support to single heating solutions that could distort the heating market for sustainable heating solutions.

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

- Yes
- No, it is not necessary
- 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

* Please specify:

500 character(s) maximum

Support should not be given to conversion from any efficient and sustainable heating solutions. In heating markets such as Sweden with only about 1 % remaining fossil fuels for heating focus on renovation shemes should rather be on actual less energy needs with more efficient climate-shells in buildings etc.

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

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

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

A revised EPBD should regarding heating supply ensure equal treatment of heat and cold produced on-site and off-site. A uniform carbon price across the whole heating sector should be ensured with an expanded EU ETS to cover the building sector or with uniform energy and carcon taxation for heating. EPBD should be complementary to the general economic policy instruments. For countries such as Sweden which have already almost completely decarbonised the heating sector any further detailed regulation to address fossil fuels in buildings should be avoided to ease administrative burdens and costs. All new provisions from the latest revision of EPBD which is just being implemented in Member States should also be taken into account and focus should rather be to build on those measures as a basis rather than inventing several new measures as indicated in this consultation.

Contact

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