Public consultation for a roadmap for the reduction of whole life carbon emissions of buildings in the EU

Fields marked with * are mandatory.

Introduction

Background

In the European Climate Law, the EU has set the target to reduce its net greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels, and to become climate-neutral by 2050. The buildings and construction sector is a major consumer of both materials and energy, making it an important contributor to overall greenhouse gas emissions. While the operation of buildings is responsible for about 40% of the EU' s total energy consumption, and for 36% of its greenhouse gas emissions from energy[1], buildings also contribute to greenhouse gas emissions at other stages of their life cycle, before they are occupied (manufacture and construction) and afterwards, at end of life. The International Resource Panel (IRP), in its Resource Efficiency and Climate Change Report, 2020, and the UN Environment Emissions Gap Report 2019, conclude that the carbon emissions related to the use of materials in construction is estimated to account for about 10% of total yearly greenhouse gas emissions worldwide. The Renovation Wave called for the EU to make our buildings more energy-efficient and less carbon-intensive over their full life-cycle and more sustainable.

The so-called 'whole life carbon' approach to buildings combines the greenhouse gas emissions from the material production and transport, caused by the construction process phase and processes at end of life (also called "embodied carbon"), and the greenhouse gas emissions linked to the operation of the building during its lifetime (also called "operational carbon")[2]. This approach could support Europe's path to climate neutrality in the buildings and construction sector by promoting whole life carbon reduction solutions in the sector, complementary to the existing policies that decarbonise material production, electricity generation, and operation emissions of buildings.

As part of the Renovation Wave, the Commission committed to develop a roadmap leading up to 2050 for reducing whole life-cycle carbon emissions in buildings." The present consultation is designed to inform the Commission's work on this roadmap.

Public consultation

This open public consultation offers all stakeholders in the buildings value chain the opportunity to express their views on how they perceive the relevance of the matter and how to best address the whole life cycle

emissions associated with buildings. Your feedback, together with evidence from different sources including desk-research and other consultations, will contribute to the preparatory analysis and the development of the roadmap. The Commission has recently procured a study, which sheds new light on the building stock and its whole life carbon emissions. You can find a link to the final report of this study, next to the questionnaire.

Individual contributions to this public consultation will not be published. Instead, the contributions will serve as input for analysis by Ramboll Management Consulting SA/NV and an aggregated report will be delivered to the European Commission.

The Commission and Ramboll Management Consulting SA/NV are committed to protecting your personal data and to respecting your privacy. By filling out the questionnaire you agree to the collection, processing and use of your data in line with existing EU regulations, i.e. Regulation (EU) 2018/1725 on processing of personal data by the EU institutions. See the privacy statement, available under background documents for more information.

If you have any questions on the consultation, please contact WholeLifeCarbonRoadmap@ramboll.com

Your opinion matters and we are grateful to you for taking the time to complete this questionnaire.

[1] These figures refer to the use and operation of buildings, including indirect emissions in the power and heat sector, not their full life cycle. The embodied carbon in construction is estimated to account for about 10% of total yearly greenhouse gas emissions worldwide, see IRP, Resource Efficiency and Climate Change, 2020, and UN Environment Emissions Gap Report 2019.

[2] The applied system boundary is 'cradle to grave' as defined by EN 15978, i.e. from the production of building materials to the end of the building's useful life and the subsequent demolition and recovery of the building materials. It is defined in terms of life cycle stages, which are in turn split into modules as defined by EN 15978: the product stage (A1-5), the use stage (B1-6), the end of life stage (C1-4) and benefits and loads beyond the system boundary (D). Emissions are accounted for in the life cycle stage where they occur so, if for example a renovation takes place, the emissions associated with new building materials are allocated to the use stage

About you

This section ask for personal data about you as respondent to the questionnaire. This data will be used to enable the analysis of results in an aggregated way and to be able to reach out with clarification requests if necessary. Your personal data will not be published.

* **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

* **First name**

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* **Organisation name**

Glass for Europe

* **Organisation size**

- ◉ Micro (1 to 9 employees)
- ○ Small (10 to 49 employees)
- ○ Medium (50 to 249 employees)
- ○ Large (250 or more)
- ○ Do not know/not relevant

* **Please indicate the sector actor group that best describes your activity**

- ○ Architects, planners, and engineering
- ○ Construction, renovation, and demolition contractors
- ○ Logistics and transport services
- ◉ Material manufacturers and suppliers
- ○ Operational and maintenance service providers
- ○ Property developers, owners and managers
- ○ Property investors and financial institutions
- ○ Sub-contractors
- ○ Other

If other, please specify

* **Country of origin**

Belgium

* **Privacy statement**

☑ I agree with the personal data protection provisions in line with Regulation (EU) 2018/1725 described in the attached statement.

Your current engagement in this topic

* **Q1: How would you assess your own understanding of whole life carbon of buildings?**

- (●) Good understanding
- ( ) Some understanding
- ( ) Low or no understanding

* **Q2: How often do you or the teams you are working with take into account whole life carbon considerations?**

- (●) It is often taken into account ahead of decisions
- ( ) It can occasionally impact decisions
- ( ) It is rarely considered
- ( ) I don't know / Not applicable

EU policies addressing whole life carbon emissions of buildings

* **Q3: Do you feel that current EU policies [3] relevant to whole life carbon of the building sector are sufficient to ensure that the building stock is aligned with a climate neutral trajectory?**

[3] The EU Emissions Trading System (EU ETS), setting a carbon price and emissions cap on emissions, including from manufacturing installations for steel, aluminium, glass, mineral wool, cement, lime, ceramics; the Effort Sharing Regulation; the EU Emissions Trading System for fuel combustion in buildings and road transport; the Carbon Border Adjustment Mechanism; the Energy Performance of Buildings Directive; Ecodesign Directive; Energy labelling Regulation; Renewable Energy Directive; Construction Products Regulation; Energy Efficiency Directive; and Waste Framework Directive.

- ( ) Yes, there is a sufficient EU policy framework in place
- (●) There is a suitable EU framework in place, but it needs strengthening
- ( ) The current EU policies are not enough, additional policy is needed to complement the existing framework
- ( ) No opinion

Q3a: Please explain your answer [up to 200 words].

2000 character(s) maximum

In this consultation, we limit ourselves to analyzing the situation of the flat glass sector with regard to its potential contribution to the whole life carbon emissions of buildings.
To decarbonize the European building stock, high energy-efficient glazing is needed to provide heat gain in the winter and mitigate heat waves in the summer, while still offering the daylight needed by building users. Currently, there is legislation to drive down carbon emissions from European flat glass production. There are also policy ambitions to increase building energy efficiency, which will notably mean equipping them with efficient glazing.
For this policy setup to work, the legislation on reducing industrial emissions will need to result in low-carbon glass production in the EU instead of, e.g., increases in imports of non-EU-made carbon-intensive glazing. In this respect, more policy support for closed-loop recycling of flat glass products is needed to drive down CO2 emissions in glass manufacturing. In addition, the level of ambition to reduce the whole life carbon emissions of new or renovated buildings should be increased. This is especially the case with renovation, where more robust policy actions on cutting emissions from buildings are needed since the EU energy efficiency renovation rate is not in line with decarbonization objectives (see also https://glassforeurope.com/wp-content/uploads/2019/05/Glazing_potential_brochure_2019.pdf).

The existing policy framework is sufficiently comprehensive but needs to be strengthened to deliver results on recycling, energy-efficient renovation of buildings, and support for the uptake of low-carbon products made in the EU.

* **Q3b: What levels of governance do you think are the most appropriate to tackle whole life carbon emissions? Multiple answers possible.**

- [x] European
- [x] National or regional
- [ ] Local

Possible areas for actions to reduce whole life carbon in buildings

Q4: Please assess the following areas in terms of both their potential for reducing whole life carbon emissions and the feasibility to act (via policy or sector initiatives or other) to achieve substantial reduction of emissions.

Demand for new built space

Q4a: Making use of currently empty buildings

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	○	◉	○	○	○
* Feasibility to act	○	◉	○	○	○

Q4b: Extending the lifespan of buildings through e.g. flexible, future-proof design and layout, use of durable materials, climate change resilience, adaptive building systems regular maintenance

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	○	◉	○	○	○
* Feasibility to act	○	○	◉	○	○

Q4c: Using buildings more intensively (e.g. by encouraging different activities taking place in a building at different times of day or week)

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	○	○	○	○	◉
* Feasibility to act	○	○	○	○	◉

Q4d: Ensuring that residential buildings do not remain under-occupied over the long term by facilitating change of residence through various means (e.g. reduced transaction costs, practical support, urban planning, accessibility of affordable housing, review of rental and ownership models)

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	○	○	○	○	◉
* Feasibility to act	○	○	○	○	◉

Q4e: Prioritising of renovation, repair and maintenance over demolition and new construction

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	○	◉	○	○	○
* Feasibility to act	○	○	◉	○	○

Demand for materials

Q4f: Construct with less material overall while achieving the same functional result (i.e. resource efficiency)

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	○	◉	○	○	○
* Feasibility to act	○	○	◉	○	○

Q4g: Design and use elements that can be easily dismantled for re-use at the end of their service life

	Very high	High	Low	None	No opinion

* Potential for reducing whole life carbon emissions	○	○	◉	○	○
* Feasibility to act	○	○	◉	○	○

Q4h: Apply waste prevention strategies, such as waste audits and selective demolition, to divert material from landfill and encourage reuse and recycling

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	◉	○	○	○	○
* Feasibility to act	◉	○	○	○	○

Q4i: Increase the share of re-used construction products on the market

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	○	○	◉	○	○
* Feasibility to act	○	○	◉	○	○

Supply of materials

Q4j: Reduce the carbon footprint of materials and construction products in their manufacturing processes, e.g. through the use of renewable energy

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	◉	○	○	○	○
* Feasibility to act	○	○	◉	○	○

Q4k: Increase the recycled content of new construction products

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	○	◉	○	○	○
* Feasibility to act	○	○	◉	○	○

Q4l: Encourage the use of carbon storage in construction products, contributing to carbon removals

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	○	○	○	○	◉
* Feasibility to act	○	○	○	○	◉

Use of energy in buildings

Q4m: Reduce the greenhouse gas intensity of energy supply

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	○	○	○	○	◉
* Feasibility to act	○	○	○	○	◉

Q4n: Improve the management of energy use in existing buildings

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	○	○	◉	○	○
* Feasibility to act	○	○	○	○	◉

Q4o: Promote energy efficient renovation to reduce the energy use of existing buildings

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	◉	○	○	○	○
* Feasibility to act	◉	○	○	○	○

Q4p: Ensure that any new buildings are designed to be high energy performing

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	◉	○	○	○	○
* Feasibility to act	◉	○	○	○	○

Other sources of emissions relating to whole life carbon

Q4q: Reduce emissions from the construction site, e.g. from machinery

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	○	○	○	○	◉
* Feasibility to act	○	○	○	○	◉

Q4r: Minimise transport related emissions of material and waste

	Very high	High	Low	None	No opinion
* Potential for reducing whole life carbon emissions	○	○	◉	○	○
* Feasibility to act	○	○	◉	○	○

Q5: If you have examples of other areas for action to reduce the whole life carbon emissions of buildings, please share them here [up to 200 words]:

Supportive policies for reducing whole life carbon

Q6: Please assess the following factors in terms of both their potential effectiveness for driving reduction of whole life carbon emissions and the feasibility for policy to be enacted.

Market push

Q6a: Mandatory reporting of whole life carbon

	Very high	High	Low	None	No opinion
* Potential effectiveness for driving reduction of whole life carbon emissions	○	◉	○	○	○
* Feasibility for policy to be enacted	○	◉	○	○	○

Q6b: Requirements to set national whole life carbon roadmaps with quantified targets

	Very high	High	Low	None	No opinion
* Potential effectiveness for driving reduction of whole life carbon emissions	○	◉	○	○	○
* Feasibility for policy to be enacted	○	◉	○	○	○

Q6c: Include consideration of whole life carbon in national construction and new housing plans and targets

	Very high	High	Low	None	No opinion

* Potential effectiveness for driving reduction of whole life carbon emissions	◉	○	○	○	○
* Feasibility for policy to be enacted	○	◉	○	○	○

Q6d: Include consideration of whole life carbon in national plans for renovation

	Very high	High	Low	None	No opinion
* Potential effectiveness for driving reduction of whole life carbon emissions	◉	○	○	○	○
* Feasibility for policy to be enacted	◉	○	○	○	○

Q6e: Mandatory carbon footprint declaration of construction products

	Very high	High	Low	None	No opinion
* Potential effectiveness for driving reduction of whole life carbon emissions	○	◉	○	○	○
* Feasibility for policy to be enacted	○	◉	○	○	○

Market pull

Q6f: Public sector leading by example

	Very high	High	Low	None	No opinion
* Potential effectiveness for driving reduction of whole life carbon emissions	◉	○	○	○	○
* Feasibility for policy to be enacted	◉	○	○	○	○

Q6g: Link public funding to whole life carbon performance

	Very high	High	Low	None	No opinion
* Potential effectiveness for driving reduction of whole life carbon emissions	◉	○	○	○	○
* Feasibility for policy to be enacted	○	○	◉	○	○

Q6h: Use of sustainability scores such as the EU Taxonomy for Sustainable Actvities to identify sustainable whole life carbon

	Very high	High	Low	None	No opinion
* Potential effectiveness for driving reduction of whole life carbon emissions	○	○	○	◉	○
* Feasibility for policy to be enacted	○	○	○	◉	○

Knowledge

Q6i: Support capacity building of public authorities and their mandated bodies to assess whole life carbon

	Very high	High	Low	None	No opinion
* Potential effectiveness for driving reduction of whole life carbon emissions	○	◉	○	○	○
* Feasibility for policy to be enacted	○	○	○	○	◉

Q6j: Targeted support to facilitate upskilling and/or reskilling of different parts of the supply side (engineers, architects, construction workers etc)

	Very high	High	Low	None	No opinion
* Potential effectiveness for driving reduction of whole life carbon emissions	○	◉	○	○	○
* Feasibility for policy to be enacted	○	◉	○	○	○

Q6k: Capacity building, education and training for stakeholders not directly involved on-site (e.g. administration, managers, financial sector)

	Very high	High	Low	None	No opinion
* Potential effectiveness for driving reduction of whole life carbon emissions	○	◉	○	○	○
* Feasibility for policy to be enacted	○	○	○	○	◉

Q6l: General awareness raising and media campaigns

	Very high	High	Low	None	No opinion
* Potential effectiveness for driving reduction of whole life carbon emissions	○	◉	○	○	○
* Feasibility for policy to be enacted	○	○	○	○	◉

Q7: If you have examples of policies to reduce the whole life carbon emissions of buildings at national, regional or local level whole life carbon, please share them here [up to 200 words]:

2000 character(s) maximum

The following policy options should be considered:
- A focus on overall building and complete life-cycle is needed. Relevant policy cases are that of France and Denmark (byggeriogklima.dk). In France, industry and national players have been encouraged to explore possibilities before introducing a regulation (E+C- pilot experiment that preceded RE2020). It is also necessary to use harmonized LCA methodologies across Europe (EN15978, EN15804, Level(s)) to ensure comparable results. Looking at one element only can have adverse effects from a whole life carbon emissions perspective.
- Maximizing the energy efficiency of buildings during the use phase is a highly impactful element (this is linked to operational carbon). A relevant policy case to contribute to buildings' energy efficiency is that of Italy and the Ecobonus scheme.
- Support recovery and recycling of construction materials more thoroughly can help drive down emissions. In the Netherlands, a glass recovery scheme (VRN - vlakglasrecycling.nl) provides glass waste (cullets) to produce lower-carbon glass. On this kind of policy, the EU framework is still poor.

Please also note some comments to clarify our answers to the questions above:
Q6e: Flat glass' Environmental Product Declarations (EPD) are an effective first step to inform stakeholders about products with similar characteristics, using EN 15804. The indispensable second step is to consider the whole life carbon emissions of buildings and drive their reduction. To ensure fairer competition regarding EPDs, effective controls on the declared embodied carbon of imported products are also needed.
Q6i to l: All elements addressed by these questions can all positively impact the whole life carbon emissions of buildings, but Glass for Europe cannot assess this from a policy perspective.

Whole life carbon values for individual buildings

* **Q8: Do you think that whole life cycle emissions of individual buildings should be measured in the same way across the EU?**

- ◉ Yes
- ○ No, regional or national variations should be allowed
- ○ No opinion

* **Q9: Do you think it is necessary to define maximum values for whole life carbon for some or all categories of individual buildings?**

- ○ Yes, mandatory
- ◉ Yes, but start with voluntary and later on make them mandatory

- ○ Yes, but keep them voluntary
- ○ No
- ○ No opinion

Q9a: Please explain your answer [up to 200 words]:

2000 character(s) maximum

A common methodology to measure emissions of buildings across the EU is needed to allow comparison of measurements and permit obtaining global overviews at EU level. Such methodology should also allow for the upload of regional data in order to reflect local realities.
Defining maximum values is a challenging task since it is difficult to generalize universal whole life carbon emission thresholds when discussing buildings. Each building has specific needs and is situated in a specific environment (climate, surroundings, access to infrastructure, future prospects in terms of energy-related carbon emissions, etc.). Defining the maximum threshold must account for these aspects. With regards to glazing, finding the one that will have the best whole life carbon emissions efficiency (lower whole life carbon emissions for the right performance) depends on numerous other building design features and must be part of a reflection for each building project.
Defining thresholds per category of buildings could help reduce the emissions of buildings in the EU but this will request defining categories for which a single threshold could generate realistic requirements for all buildings falling into the category (taking all necessary environmental/design aspects into account). This is a complex task, and it would be sensible to keep the defined maximum values as voluntary at first. Once it has been demonstrated that they are appropriate and respond to long-term needs, they could be made mandatory.

* **Q9b: At what level of governance should these maximum values be set?**

- ○ At EU level
- ◉ At national level with guidance from suggested indicative EU values
- ○ At national level, with no particular role to play for the EU
- ○ Other
- ○ No opinion

* **Q10: If maximum whole life carbon values were to be applied, what type(s) of values do you consider most appropriate?**

- ○ Building-level maximum values combining operational and embodied emissions in a single indicator of whole-life carbon
- ◉ Building-level maximum values with separate indicators for embodied and operational emissions
- ○ Building-level maximum values with separate indicators for embodied and operational emissions and a combined whole-life carbon indicator
- ○ Others, including whole life carbon maximum values for groups of buildings or at the entire building stock level, as opposed to on individual buildings – please spell out in the comment box
- ○ No opinion

Q11: If maximum whole life carbon values were to be applied, for which categories of buildings should they apply?

* **Q11a: New residential buildings**

- ○ All new residential buildings
- ◉

A subset of new residential buildings to be defined – please explain your answer

- No maximum thresholds should be applied
- No opinion

Please briefly explain your answer [up to 200 words]

2000 character(s) maximum

A staged approach focusing on the most impactful projects and beginning with non-residential buildings seems most appropriate when setting maximum whole life carbon emissions values. This process is similar to what is followed by certain Member States locally implementing maximum whole life carbon emissions indicators

* **Q11b: New non-residential buildings**

- All new non-residential buildings
- (•) A subset of new non-residential buildings to be defined – please explain your answer
- No maximum thresholds should be applied
- No opinion

Please briefly explain your answer

2000 character(s) maximum

A staged approach focusing on the most impactful projects and beginning with non-residential buildings seems most appropriate when setting maximum whole life carbon emissions values. This process is similar to what is followed by certain Member States locally implementing maximum whole life carbon emissions indicators

* **Q11c: Renovations of residential buildings**

- All major renovations of residential buildings
- (•) A subset of major renovations of residential buildings – please explain your answer
- No maximum thresholds should be applied
- No opinion

Please briefly explain your answer [up to 200 words]

2000 character(s) maximum

A staged approach focusing on the most impactful projects and beginning with non-residential buildings seems most appropriate when setting maximum whole life carbon emissions values. This process is similar to what is followed by certain Member States locally implementing maximum whole life carbon emissions indicators

* **Q11d: Renovations of non-residential buildings**

- All major renovations of non-residential buildings
- (•) A subset of major renovations of non-residential buildings – please explain your answer
- No maximum thresholds should be applied
- No opinion

Please briefly explain your answer

2000 character(s) maximum

A staged approach focusing on the most impactful projects and beginning with non-residential buildings seems most appropriate when setting maximum whole life carbon emissions values. This process is similar to what is followed by certain Member States locally implementing maximum whole life carbon emissions indicators

Q11e: Do you have other comments on the categories of buildings for which maximum values should apply? [up to 200 words]

2000 character(s) maximum

Q12: Are existing European standards and methodologies sufficiently mature to define whole life carbon reporting formats and maximum values?

- ○ Yes, they are ready to be used for this purpose
- ◉ Yes, with some harmonisation work, this will be ready to apply
- ○ No, much more work is needed to develop a new methodology for this purpose
- ○ No opinion

Q12a: Please explain what further work is needed [up to 200 words]

2000 character(s) maximum

Existing standards and methodologies, such as EN15978, EN15804, and Level(s), are mature enough to be used. It should now be ensured that these harmonized rules are used when accounting for whole life carbon emissions in buildings everywhere in the EU. It should also be ensured that all phases of the life cycle are taken into account on an equal footing and that all components and systems are considered.

Concluding question

Q13: Do you have any further comments on policy aspects relevant to whole life carbon of buildings, which are not covered in your answers? [up to 200 words]

2000 character(s) maximum

Comments to clarify our answers to the following questions:
Q4a: Regarding the feasibility, suitable policies and financial incentives to renovate buildings could encourage greater use of currently empty buildings, e.g., by making them (more) habitable.
Q4e: Such question should be studied per project, considering all impacts, but renovation seems more likely to permit reducing whole life carbon (WLC) emissions than demolition/new construction. Whether discussing renovation or demolition, it is of prime importance to always segregate old glazing to enable flat glass closed-loop recycling and help reduce manufacturing emissions.
Q4f: Achieving the same glazing performance using less glass is a technical challenge but when achievable, it can diminish products' embodied emissions.
Q4g: From a WLC emissions perspective, an old insulated glass unit (IGU) should not be reused. The embodied carbon won through reuse is likely to generate high operational carbon due to the poor performance of the old glazing. Reusing and remanufacturing glass can only happen for specific applications with adapted safety and performance requirements.

Q4h: The potential and feasibility to act are “very high” for recycling IGUs, not for re-use where the options are more limited (see Q4g)
Q4j: Using renewable energy for manufacturing flat glass would help reduce emissions during production, but accessing it at reasonable prices for all EU plants is currently not feasible.
Q4k: Using more recycled content to make flat glass can reduce emissions during production, providing that enough high-quality pre & post-consumer glass is available. This is not the case today.
Q4r: Flat glass transportation’s emissions are not highly significant from a WLC emissions perspective. Yet, manufacturers are working at reducing them and policies like the Weights & Dimensions Directive could be revised to generalize the max weight of 5-6 axles trucks to 44 tonnes and reduce transportation emissions.

Q14: Do you have any other remarks? [up to 200 words]

2000 character(s) maximum

The European flat glass sector is committed to producing the materials needed to build and renovate Europe's buildings at a competitive price. Although it already supplies products that help reduce operational carbon emissions in buildings, the flat glass sector is looking for ways to massively increase its contribution to the transition to carbon neutrality, notably by developing new methods to reduce its industrial emissions and thus lower the embodied emissions of its products.
For this to happen, a well-adjusted regulatory framework is needed. Policies that focus on buildings and their whole life cycle are needed. In addition, existing legislation should ensure that the energy efficiency of buildings is maximized. Finally, the recovery and recycling of construction materials should be supported as a measure for reducing production-related emissions.
Please consider the documentation on our website, which addresses every piece of legislation impacting the sector, for more details on specific topics related to whole life carbon emissions of buildings: https://glassforeurope.com/positions/

Useful links

Final technical study report (https://c.ramboll.com/whole-life-carbon-reduction)

Background Documents

Privacy Statement

Contact

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