



Decarbonising the built environment in the EU

Leveraging RICS standards for effective policy interventions

November 2023

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Glossary

Term	Definition
Building life cycle	<p>The BS/EN 15978 standard divides the building life cycle into four stages:</p> <ul style="list-style-type: none"> • Stage A: Product and construction process • Stage B: Use • Stage C: End of life • Stage D: Benefits and loads beyond the system boundary. <p>Each stage is further divided into modules.</p>
Carbon emissions	<p>Although carbon dioxide is only one among a number of greenhouse gases, the term 'carbon emissions' is used throughout this paper as a proxy for human-produced greenhouse gases.</p>
Carbon intensity	<p>The quantity of carbon emissions associated with an activity or product, often compared to its alternatives. For example, travelling by car is more carbon-intensive than travelling by train.</p>
Embodied carbon	<p>The total greenhouse gas emissions and removals associated with materials and construction processes throughout the whole life cycle of a building.*</p>
Greenhouse gases (GHGs)	<p>Constituents of the atmosphere, both natural and anthropogenic (human-created), that absorb and emit radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere and clouds.</p>
Life cycle assessment (LCA)	<p>An assessment of the environmental impact of a product or service.</p>
Net zero whole-life carbon building	<p>A building where the sum total of all building-related greenhouse gas emissions over a building's life cycle, both operational and embodied, is minimised; meets local carbon, energy and water targets; and, with residual offsets, equals zero.*</p>

Term	Definition
Net zero carbon operational energy building	<p>A building where:</p> <ul style="list-style-type: none"> • no fossil fuels are used • all energy use has been minimised • it meets the local energy use target • all energy used is generated on or off site using renewables that demonstrate additionality (they are newly built for this purpose), and • any residual direct or indirect emissions from energy generation and distribution are offset (see Offset carbon emissions).*
Offset carbon emissions	Reduced or avoided emissions meant to compensate for an equivalent quantity of emissions occurring elsewhere.
Operational carbon	The GHG emissions arising from all energy and water consumed by an asset in use, over its life cycle.*
Whole life carbon emissions	The sum total of all building-related greenhouse emissions, both operational and embodied, over the life cycle of a building, including its decommissioning. Overall whole life carbon building performance includes separately reporting the potential benefit from future energy recovery, reuse and recycling.*

* Definitions adapted from RICS' [Whole life carbon assessment for the built environment](#), 2nd edition, 2023.



Introduction

Climate change poses the most significant environmental challenge of our era, as the rapid increase of human-generated greenhouse gas (GHG) emissions is already leading to adverse environmental, social and economic impacts worldwide. This policy paper addresses the pressing need to decarbonise the built environment, which accounts for approximately 40% of energy consumption and 37% of CO₂ emissions in the EU.

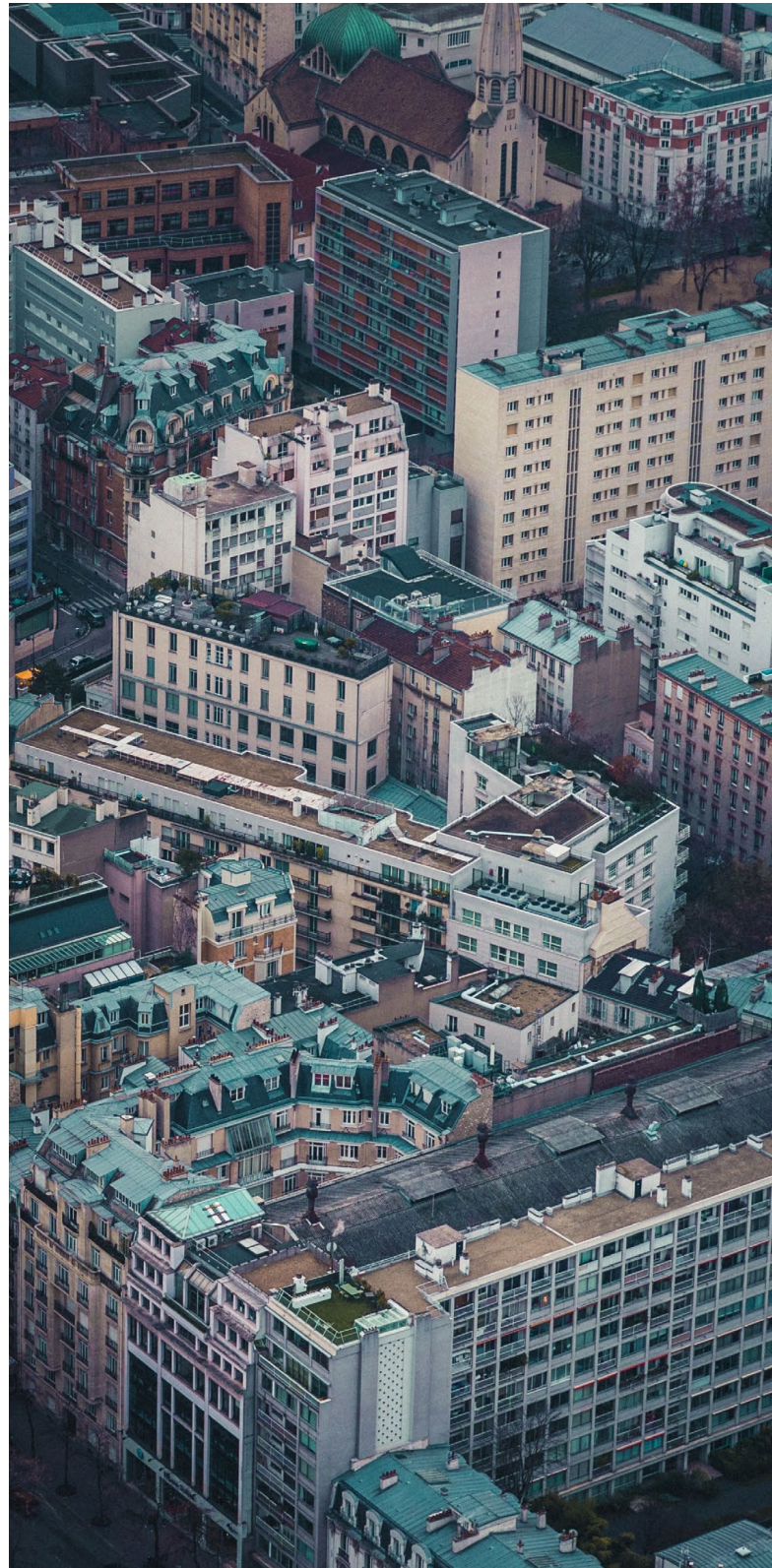
To achieve the EU's ambitious climate targets of net-zero GHG emissions by 2050, concerted efforts must be directed toward the real estate industry. This paper advocates for policy and regulatory enhancements to accelerate the decarbonisation of buildings in the EU by drawing upon the esteemed standards of RICS.

This paper covers the following.

- 1 The need to decarbonise:** This section provides an overview of the gravity of climate change and the pressing need for comprehensive measures to mitigate its consequences. It highlights the significance of decarbonising buildings and sets the context for subsequent policy recommendations.
- 2 European efforts to decarbonise buildings:** This section examines existing and forthcoming EU policy initiatives relevant to the decarbonisation of the built environment. By analysing these initiatives, it is possible to identify gaps and opportunities for further policy interventions.

- 3 Gap analysis:** This section delves into a comprehensive gap analysis to assess the current state of decarbonisation efforts in the EU built environment . It identifies existing shortcomings and challenges, paving the way for targeted solutions.
- 4 RICS standards for decarbonising the built environment:** This section describes RICS standards for real estate and construction that are relevant to the decarbonisation of buildings.
- 5 RICS recommendations:** Drawing upon the expertise of RICS, this section presents a set of recommendations to address the gaps identified, and offer tangible pathways to progress the decarbonisation of buildings in the EU.
- 6 Conclusions:** The final section summarises the key findings and highlights the urgency of adopting the proposed policy interventions. It reinforces the significance of RICS standards as catalysts for driving meaningful change and underscores the crucial role of government in effecting a sustainable and climate-resilient built environment.

Through this paper, RICS aims to advocate for enhanced policy instruments and regulations that will enable the EU to make substantial progress toward its climate targets and achieve a more sustainable future. By leveraging RICS standards, the way can be paved for transformative action and contribute to the global fight against climate change.



The need to decarbonise

The imperative to address climate change and its profound implications for the global environment, economies and societies is universally acknowledged. Carbon primarily resulting from human activities has led to a significant 1.1°C elevation in global surface temperature from 2011 to 2020, exceeding the average of 1850–1900. Over the last decade, unsustainable energy use, land-use alterations and consumption patterns have contributed to the continual rise of emissions.

Despite global intentions, significant disparities persist between declared national climate objectives and practical implementation, often prioritising short-term risk reduction over holistic mitigation strategies. To surmount these challenges and limit the impact of climate change, international accords and initiatives, notably the Paris Agreement, aim to curtail emissions. The Paris Agreement endeavours to restrict the rise in global temperature to under 2°C above pre-industrial levels, with a preference for 1.5°C. While the agreement lacks legally binding emissions reduction targets, it establishes transparency mechanisms for reporting and monitoring progress.

So far, 153 countries have made pledges to achieve net-zero emissions, covering over 90% of the world's GDP. Net-zero means that carbon emissions are balanced or surpassed by carbon removal methods, such as afforestation or carbon capture and storage. By reducing carbon emissions, we can also address resource depletion and pollution, contributing to a more sustainable future.

Globally, the building sector is responsible for around 27% of operational energy-related CO₂ emissions. According to estimates from the International Energy Agency (IEA), direct use of fossil fuels in buildings contributed to 8% of carbon emissions in 2021, while electricity consumption was responsible for 19% of emissions. Manufacturing construction materials like concrete, steel and aluminium constituted approximately 6% of global emissions. Other building materials, including glass and bricks, contributed to 2–4% of global emissions. In combination, these factors accounted for roughly 9% of global process-related emissions. Added to emissions from operational energy use, buildings and construction contribute to 37% of global emissions. To follow a trajectory of reaching net-zero emissions by 2050, it is imperative that the built environment overall emissions decrease to about 5 GtCO₂e (giga-tons of CO₂) by 2030, requiring an annual reduction rate of 8.3%.

According to the Global Buildings Climate Tracker (GBCT) annual index, global operational emissions from buildings rose around 5% in 2021 compared to 2020 and 2% compared to 2019. This undermines the aim for a zero-carbon building stock by 2050. The Global Buildings Climate Tracker presented in the 2022 Global Status Report for Buildings and Construction (UNEP 2022, p.36) illustrates this gap.

Although the tracker is at 8.1 points in 2021, it should be over 17.1 points. The construction sector's slowdown during the COVID-19 pandemic made the 2020 improvement seem misleadingly positive. Despite a 68% improvement in the GBCT index from 2019 to 2021, the gap between actual progress and desired trajectory has widened since 2018, signalling a need for more decisive actions by policymakers and the private sector. The slowdown in decarbonisation is evident, highlighting that the 2020 emissions reduction was temporary and did not lead to lasting progress.

In 2021, operational emissions from buildings saw a 5% increase compared to the previous year, reaching approximately 10 GtCO₂. This surge surpassed the 2019 peak of 9.6 GtCO₂ by 2%, following a notable 10% reduction in carbon emissions in 2020 due to the impact of the COVID-19 pandemic.

Together, operational and embodied carbon are known as building whole-life carbon. Efforts in the EU – and the rest of the world – to reduce carbon emissions have traditionally focused on operational carbon and neglected the importance of embodied carbon, which is particularly relevant in new constructions. Acknowledging the significance of both forms of carbon is crucial for achieving substantial reductions at the earliest opportunity. Operational carbon savings are spread over years, while upfront embodied carbon reductions occur during the initial life cycle stages. It is essential to consider potential trade-offs between operational and embodied emissions when striving to decrease overall carbon footprints.

Decarbonising the electricity grid plays a role in reducing both operational and embodied carbon in buildings, although it should not be the sole method for decarbonising the built environment. Minimising energy demand through efficient design and operations offers additional benefits like cost savings, increased asset value, job creation and reduced national energy demand.

Retrofitting, which involves upgrading existing buildings for energy efficiency and carbon reduction, can yield energy savings of 20–50%. However, retrofitting costs may pose challenges in terms of costs. Improving the energy efficiency of buildings is a key strategy for reducing operational carbon reduction, since reduced energy consumption directly translates into fewer emissions. Typical measures to improve energy efficiency include thermal insulation, high-performance windows and efficient lighting systems. Despite these benefits, slow adoption persists due to barriers such as a lack of information and high upfront costs.

European efforts to decarbonise buildings

The EU established climate and energy targets for 2020 within the framework of the climate and energy package adopted in 2008. One of the objectives was a 20% reduction in carbon emissions compared to 1990 levels. Remarkably, EU emissions in 2020 were 31% lower than in 1990, surpassing the target by 11 percentage points. Verified data indicates a 24% reduction by 2019 compared to 1990, with a substantial decline in emissions between 2019 and 2020 primarily attributed to the effects of the COVID-19 pandemic.

However, Member States' latest projections, based on existing measures, suggest that the net emission reduction would reach only about 41% by 2030. This falls short of the EU's emissions target for 2030, which aims for at least a 55% reduction compared to 1990 levels. The forthcoming legislative package, Fit for 55, seeks to achieve the European Green Deal objectives, ultimately guiding Europe towards climate neutrality by 2050.

The EU is committed to achieving climate neutrality by 2050, aligning with the Paris Agreement's global climate commitment. The European Climate Law, published in July 2021, legally enforces the objective of making Europe climate-neutral by 2050 and sets an intermediate target of reducing net carbon emissions by at least 55% by 2030, compared to 1990 levels. The law also calls for a proposal to set an intermediate EU-wide climate target for 2040. This comprehensive approach aims to involve all sectors in cutting emissions, investing in green technologies and protecting the environment to ensure the achievement of climate neutrality. By establishing clear targets and policy actions, the EU aims to pave the way towards a sustainable, climate-neutral future while driving international climate cooperation under the Paris Agreement.

The EU has made significant progress in the energy and industry sectors to meet the 2020 targets. The EU's Emissions Trading System (ETS) covers emissions from large-scale facilities in the power, industry and aviation sectors, collectively accounting for around 40% of the EU's total emissions. Notably, carbon from power plants and covered factories within the ETS decreased by 40% between 2005 and 2020, surpassing the initially-set 2020 target of 23% reduction. A distinct and novel ETS II aimed at regulating emissions stemming from fuel utilisation in road transport and buildings is set to be established by 2027.

Regarding national targets, EU countries outlined emission reduction goals under the Effort Sharing Decision for sectors such as housing, agriculture, waste and transport (excluding aviation). Emissions from these sectors, covered by national targets, achieved a 15% reduction in 2020 compared to 2005, surpassing the 2020 target of 10% reduction. The reduction was primarily attributed to improved energy efficiency and the transition to less carbon-intensive fuels. However, transport emissions increased annually until the onset of the COVID-19 pandemic.

As the EU strives to achieve its ambitious climate targets and transition to a carbon-neutral future by 2050, the decarbonisation of buildings has emerged as a critical imperative. Buildings account for a significant portion of greenhouse gas emissions and energy consumption, making their transformation essential in the pursuit of a sustainable and low-carbon built environment.

In this context, the built environment assumes a pivotal role in achieving significant emissions reductions and fostering climate-resilient progress. With the built environment contributing over 36% of greenhouse gas emissions in Europe, it presents a substantial avenue for implementing effective mitigation strategies across life cycle stages, from design and construction to the utilisation and disposal of buildings. By incorporating carbon reduction requirements into urban and rural planning, and adopting standardised approaches for measuring and reporting carbon emissions, industry professionals can collaborate to mitigate environmental impacts and chart a course towards a more sustainable future.

In 2020, the building sector accounted for 35% of operational energy-related emissions in the EU, mainly stemming from fossil fuel use and electricity production for building purposes. As shown in Figure 1, Member State projections suggest that the trend of decreasing emissions from buildings will persist.

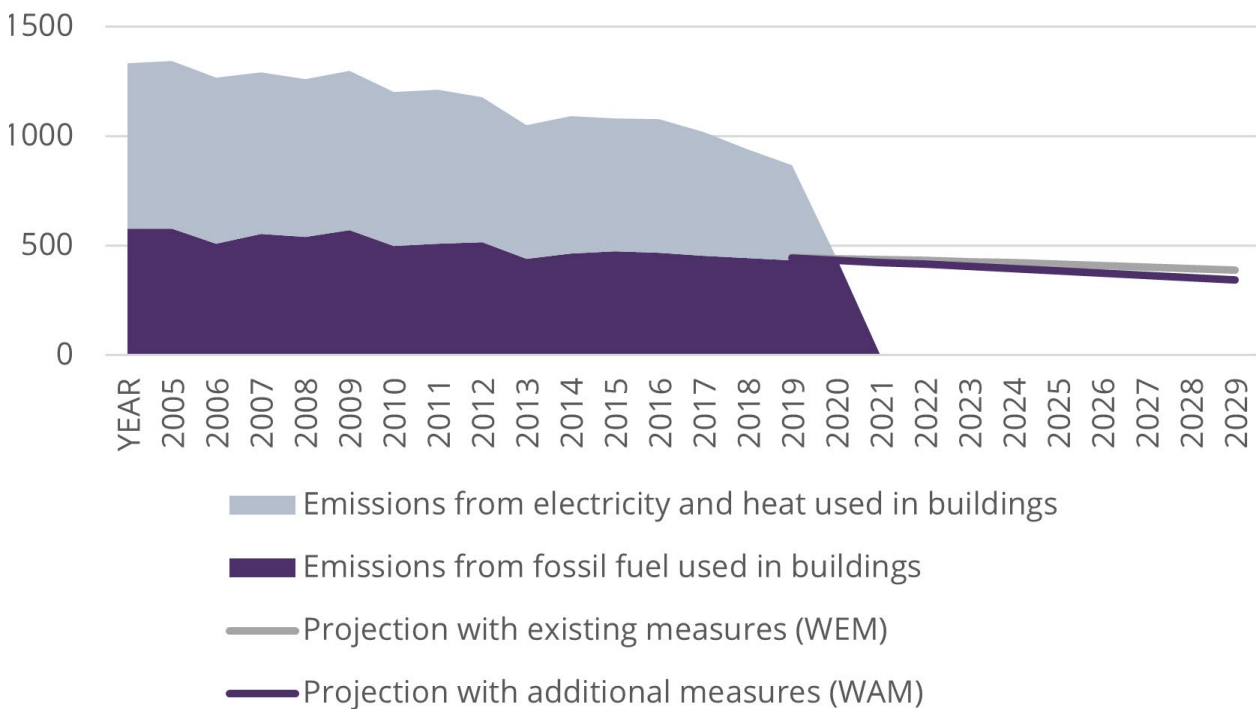


Figure 1: Greenhouse gas emissions from energy use in buildings in the EU (source: EEA 2022)

While the EU achieved a 35% reduction in carbon emissions from the building sector between 2005 and 2020, further efforts are required to meet the ambitious 2030 target of a 55% emissions reduction below 1990 levels. However, the projected decline is not sufficient to meet the overall 2030 GHG emissions reduction target of net 55%, compared with 1990 levels, which would require a reduction in emissions from the building sector of 60%. To achieve this, the EU's Renovation Wave strategy aims to at least double the annual energy renovation rate of residential and non-residential buildings (which is currently at 1%) by 2030, and to foster deep energy renovations to reduce energy consumption and achieve a 60% operational emissions reduction by 2030 as compared to 2015. The Renovation Wave, launched in 2020, is a major buildings-related strategy under the EU Green Deal, with targets aiming to double renovation rates within ten years and enhance energy efficiency. By 2030, up to 35 million buildings could be renovated, creating around 160,000 new green jobs.

EU policy framework on the built environment

Fit for 55 is a comprehensive set of proposals designed to align EU policies with the goal of reducing net carbon emissions by at least 55% by 2030, in line with the EU's climate-neutrality objective. The package includes the following new and updated policies:

- **Energy Performance of Buildings Directive (EPBD):** The EPBD is the main instrument through which the EU regulates energy use and carbon emissions from buildings. Being a directive and not a regulation, its principles and objectives are transposed into national laws by each Member State. Among other things, the first version of the EPBD (2002) mandated the use of Energy Performance Certificates (EPCs) and required regular inspections of heating and cooling systems.



The second version (2010) introduced the target of Near Zero-Energy Buildings (NZEB) for new constructions, which came into force in 2021. The current update of the EPBD proposed under the Fit for 55 package aims to mandate net-zero operational carbon ('Zero Emission Buildings') and disclosure of whole-life carbon assessment results (calculated with the Level(s) framework) for all new constructions by 2030. Practically, this means mandatory assessment and reporting of embodied carbon. To increase the renovation rates of the worst-performing sections of the building stock, the proposed EPBD update introduces the requirement to meet Minimum Energy Performance Standards (MEPS) and to strengthen financial support for retrofit measures. For both new constructions and renovations, the exact timelines, methodologies and performance levels of the revised EPBD are now the subject of negotiations between the EU Commission, the Council and the Parliament.

- **Construction Product Regulation (CPR):** The CPR lays down harmonised rules for the publication of technical information of construction products in the EU. The Regulation provides a common technical language to assess the performance of construction products. It ensures that reliable information is available to professionals, public authorities and consumers so they can compare the performance of products from different manufacturers in different countries.
- **Renewable Energy Directive (RED):** The proposal aims to increase the EU-level target for renewable energy sources in the overall energy mix from at least 32% to at least 40% by 2030. The directive emphasises sector-specific sub-targets and measures, particularly in transport, buildings and industry, to enhance progress in integrating renewables. In June 2022, EU energy ministers agreed on their joint position, and in March 2023 the Council and European Parliament reached a provisional political agreement on the revised directive.
- **Energy Efficiency Directive (EED):** The EED's primary goal is to achieve an 11.7% reduction in final energy consumption at the EU level by 2030, compared to 2020 levels. The proposed rules include increased annual energy savings obligations and measures to decrease energy consumption in public buildings. In June 2022, the Council adopted its 'general approach' and in March 2023, a provisional political agreement was reached between the Council presidency and European Parliament negotiators on the directive's revision.
- **EU Emissions Trading System I and II (ETS):** The EU ETS is a key policy tool for reducing carbon emissions and represents the world's largest carbon market. A distinct and novel ETS II, aimed at encompassing emissions stemming from fuel utilisation in road transport and buildings, is set to be established by 2027, requiring the sector to pay for its emissions through credits purchased on the ETS market. An allowance system will be set up in 2025 and distributed in 2026. RICS is part of the European Commission working group developing the new ETS II.

- **Level(s) Framework:** Level(s) is a voluntary framework designed to assess the sustainability performance of buildings. Developed as part of the EU's transition towards carbon neutrality, Level(s) serves as a free framework to assess, report and improve sustainability performance from design to the end of a building's life cycle. It offers core sustainability indicators to measure materials, water, health, comfort and climate impacts throughout the life cycle. Level(s) effectively incorporates the principles of EN 15978 by addressing whole-life carbon considerations (in indicator 1.2, 'Life cycle Global Warming Potential'). By utilising Level(s), professionals can ensure that buildings' environmental impacts are measured and reduced throughout their life cycle, aligning with the overarching goal of decarbonisation.

Reporting frameworks and support mechanisms

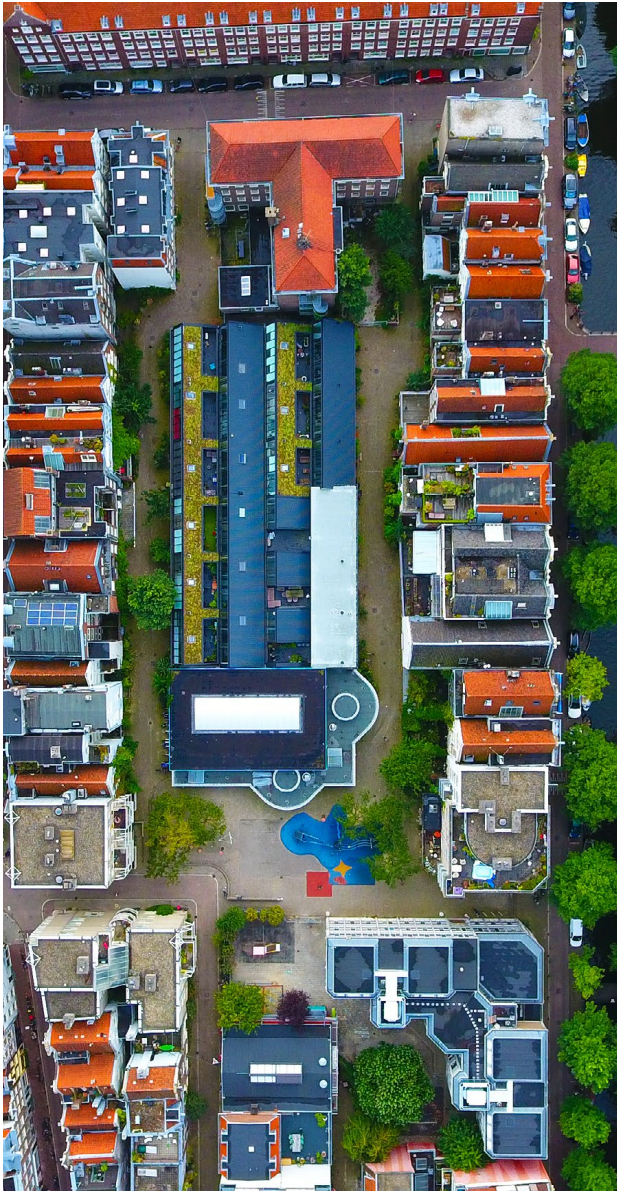
The EU has also deployed a series of complementary policies to support building decarbonisation:

- **EU Taxonomy for Sustainable Finance:** The EU Taxonomy establishes a framework for sustainable investments, pushing financial and industrial sectors toward climate neutrality. It provides transparent criteria for identifying sustainable investments in buildings, including construction, renovation, energy-efficient equipment installation and manufacturing in the supply chain.
- **Horizon Europe:** This flagship research and innovation program offers funding opportunities for research aimed at decarbonising buildings. Projects focus on developing low-carbon building materials and technologies, contributing to sustainable building practices.
- **EU Building Projects:** The Commission supports building renovation projects and research initiatives, including the BUILD UP initiative, a knowledge-sharing platform for enhancing building energy efficiency, and the BUILD UP Skills initiative, aimed at training qualified building professionals for energy-efficient renovations and near-zero-energy buildings.
- **New European Bauhaus:** Launched in October 2020, the New European Bauhaus fosters collaborative discussions on climate-friendly architecture. The initiative's co-design, delivery and dissemination phases provide a platform for sharing ideas and driving innovative solutions.
- **Social Climate Fund:** The Social Climate Fund, funded by upcoming ETS II revenues, addresses the social impacts of the ETS extension. It supports citizens, particularly vulnerable households, in investing in renovations and heating systems, ensuring a just transition. Additionally, the fund aids emissions reduction in road transport and buildings, reducing costs for vulnerable households and micro-enterprises.

Gap analysis

Focusing on buildings and considering the policies discussed earlier, significant shortfalls can be identified in the current approach:

- 1 There is a lack of current regulation addressing embodied carbon. Once approved, the proposed update of the EPBD is likely to mandate measurement and reporting of embodied emissions for new constructions by 2030. However, reporting alone is not sufficient to drive reductions, and it is possible that the updated EPBD will include at least a roadmap of successive regulatory steps, including the introduction of caps on embodied carbon. Since these steps will take additional years to be implemented, it is arguable that 2030 is too late to begin mandating the measurement and reporting of embodied carbon.
- 2 The proposed update of the EPBD refers to the calculation of indicator 1.2 (global warming potential) detailed in the Level(s) framework as the official methodology to measure and report embodied carbon. While correct in its overall approach, the methodology for indicator 1.2 lacks detailed guidance on a few key aspects of the assessment process, such as the choice of appropriate product-level data. Moreover, it prescribes a reporting template that aggregates the results of the assessment into broad categories, losing the details provided by disaggregated results. It is likely that each Member State will need to supplement the Level(s) guidance with additional details, in a similar way to how the details of the EPC methodology were left to each Member State to define. This led to some significant differences in how EPCs were calculated, which made it extremely complex to compare them and use them as regulatory instruments at the EU level. A similar 'light approach' in defining the methodology for embodied carbon assessments at the EU level may lead to similar issues.
- 3 Renovating 35 million buildings by 2030 remains a formidable challenge. While the EU may have ambitious renovation targets, the availability of funding to kickstart these initiatives in Member States is crucial. Without adequate financial support, these targets will remain unattainable.



- 4 The implementation of the ETSII carries the risk of escalating energy costs for consumers, which could have dire consequences for both individuals and the EU's reputation. To mitigate this, there should be increased financial resources allocated to Member States to assist vulnerable households.
- 5 Decarbonising buildings requires a skilled workforce capable of designing, installing and maintaining energy-efficient technologies and renewable energy systems. However, there is currently a shortage of skilled workers in the built environment, particularly in the areas of energy efficiency and renewable energy.
- 6 The absence of effective measures to control operational emissions during the use phase can undermine the progress made in constructing and retrofitting high-performance buildings.

In conclusion, while the EU has a comprehensive set of policies to decarbonise buildings, there are still several challenges. Addressing these gaps will be critical to achieving the EU's decarbonisation goals for the built environment.

RICS standards for decarbonising the built environment

RICS is working with members and key stakeholders across the built environment to ensure we collectively reduce carbon emissions across the building life cycle. RICS holds the distinction of establishing global standards for the built environment. Among its endeavours, RICS has been instrumental in formulating key international standards focused on property measurement, and carbon and cost management and reporting. These standards enable consistent measurement that will positively influence design and construction decisions by providing consistent and reliable data to enable benchmarking and target setting.

- **Whole life carbon assessment for the built environment:** The recently-published (September 2023) second edition of this RICS professional standard can serve as critical tool in advancing EU's ambitions. This standard, aligned with life cycle assessment principles, enables professionals to comprehensively measure and transparently report carbon emissions occurring throughout the building life cycle. It allows professionals to engage in globally-consistent carbon measurement and reporting across diverse construction projects, covering both buildings and infrastructure assets. In comparison to the methodology set out to calculate and report whole-life carbon in the Level(s) framework (indicator 1.2), this RICS standard provides much more detailed guidance on scope definition, key assumptions, data requirements and reporting format.
- **International Cost Management Standard (ICMS):** Alongside 49 prominent global organisations, RICS developed the new ICMS 3, which aligns carbon and cost reporting practices through an established framework.
- **International Property Measurement Standards (IPMS):** In response to the imperative to harmonise property measurement practices, RICS played a central role in establishing the International Property Measurement Standards Coalition. This coalition, comprising 90 global organisations, creates international standards for property measurement, facilitating transparent and consistent building measurement practices. The EU Level(s) framework incorporates IPMS as a reference standard for calculating core sustainability indicators. The EU-funded Carbon Risk Real Estate Monitor (CRREM) refers to IPMS as a widely adopted floor area measurement standard, underpinning uniformity and consistency within portfolios.
- **International Building Operation Standard (IBOS):** This global framework serves as a tool to measure and manage building performance in the use phase, considering a range of different environmental, social and economic criteria.

Recommendations

In the face of increasing demands for secure housing and workspaces, the growth of the building sector is anticipated to continue. However, this growth must align with the objectives outlined in the Paris Agreement. Achieving a sustainable and resilient built environment necessitates the implementation of effective policy tools and instruments by policymakers across different governance levels.

Once approved, the updated EPBD will play a significant role in efforts to decarbonise the built environment in Europe. Therefore, it is vital that the ambitions of the current EPBD proposals are not weakened or compromised during the ongoing negotiation process. In particular, the updated EPBD should retain these key ambitions:

- mandating all new buildings to be net-zero operational carbon by 2030
- introducing MEPS to boost the renovation rates of worst-performing buildings
- encouraging the integration of renewable energy sources into buildings, while ensuring that this does not enable inefficient buildings to achieve net-zero status without improving their fabric efficiency, and
- requiring whole-life-cycle carbon assessment and reporting for all new buildings by 2030.

More generally, RICS recommends the following actions to embed the measurement and reduction of embodied carbon in design and construction practices:

- 1 Integrating the Level(s) indicator 1.2 methodology with relevant details from the second edition of the RICS professional standard Whole life carbon assessment for the built environment, with the aim to provide Members States with a precise and ready-to-use methodology.
- 2 Mandating assessment and reporting of embodied carbon at both design and post-completion stages sooner than 2030, to be used to verify regulatory compliance against future caps on embodied carbon. The current EPBD update proposal means to mandate assessment and reporting for all new buildings by 2030, which means that further regulatory steps, notably the introduction of caps on embodied carbon, will require more years to be implemented. There is no reason why measurement and reporting should not begin sooner than 2030, at least for large projects.
- 3 Taking advantage of mandatory disclosure by collecting all the reported assessments into a consistent database, and using this data as evidence to establish achievable caps on embodied carbon for different buildings and infrastructure types. Curtailing embodied carbon (and particularly upfront carbon) through regulation should be a priority, as every delay means that an increasing share of our limited carbon budget is spent on emissions that could otherwise be avoided.

- 4 Improving access to and quality of product-level data (mainly through the existing Environmental Product Declarations scheme), which is essential to produce accurate and reliable assessments at the building level.
- 5 Devising policy mechanisms to maximise the utilisation of existing assets and prioritise renovations of existing buildings over new constructions.

Establishing suitable processes to offset remaining carbon emissions where necessary through verified offset schemes.

We also recommend the following actions to continue the reduction of operational carbon emissions through effective policy intervention:

- 1 Setting clear and ambitious targets for new constructions (through ZEB) and renovations (through MEPS), ensuring that fabric efficiency is prioritised over other measures (following the 'energy-efficiency first' principle).
- 2 When setting targets, favouring the use of absolute thresholds in place of relative criteria, in order to promote transparency and ensure comparability with science-based climate targets.
- 3 Devising policy mechanisms to address the 'performance gap' and incentivise, possibly through economic means, the efficient operation of buildings during the use phase.
- 4 Scaling up financial and technical support for building renovation in pursuit of the targets set by the Renovation Wave.

Finally, the incorporation of the RICS professional standard Whole life carbon assessment for the built environment into EU policy offers a strategic approach to advancing decarbonisation goals in the built environment. By integrating robust standards, EU policymakers can leverage expert insights and promote consistent, transparent and sustainable practices across the built environment. Through collaboration, engagement and integration, these standards can serve as vital tools to ensure consistency, transparency and sustainability in the built environment. In this manner, the EU can progress towards its climate targets and pave the way for a greener and more sustainable future.

Conclusions

Decarbonising the built environment stands as a paramount imperative in the pursuit of the EU's climate targets. To this end, a comprehensive and multifaceted approach is warranted, encompassing a spectrum of strategies. The EU is poised to embark on a transformative journey towards decarbonisation, one that entails the revitalisation of existing buildings, the promotion of zero-energy and zero-carbon constructions, the adoption of low-carbon building materials, the embrace of smart buildings and digital technologies, the enhancement of heating and cooling system energy efficiency, and the fortification of building codes and standards. These holistic and proactive actions, underpinned by a profound understanding of their far-reaching implications, hold the promise of not only safeguarding the environment but also of bequeathing future generations with cities that exude enhanced liveability and well-being.

This endeavour is further bolstered by the provision of financial incentives and steadfast support for research and development initiatives, all aimed at expediting the transition towards a low-carbon built environment. In the resolute pursuit of a sustainable, resilient and carbon-neutral future for the built environment, governments are also primed to play a pivotal role.

It is worth acknowledging that the EU has made substantial strides in implementing progressive policies, positioning itself as a global leader in climate action and sustainability. This commendable endeavour, however, poses the challenge of potentially burdening its Member States with ambitious targets. It is important to recognise that the EU's proactive approach is far ahead of many regions worldwide, showcasing a commitment to addressing climate change head-on. Furthermore, it is essential to consider the historical context, as European nations, alongside North America, were significant contributors to carbon emissions in the past. This historical responsibility underscores the need for robust climate policies and efforts to mitigate the environmental legacy of the past.

The strategic integration of RICS standards into EU policy initiatives serves as a potent mechanism to advance these laudable objectives. This integration could manifest through the incorporation of RICS standards into existing policies, the formulation of novel policies and programs grounded in RICS standards, the active promotion of their adoption across various stakeholders, the development of rigorous training and capacity-building initiatives, and robust collaboration with RICS and other stakeholders. By orchestrating such symbiotic efforts, the EU is poised to harness the wealth of expertise and knowledge that RICS brings to the table, thereby charting an accelerated course towards the decarbonisation of the built environment and the attainment of the EU's ambitious climate targets.

The journey towards decarbonisation is one of profound significance, calling for unwavering commitment, transformative actions and collaborative engagement. The confluence of RICS standards, EU policies and global partnerships has the potential to sculpt an indelible legacy – an enduring testament to the harmonious coexistence of sustainability, progress and stewardship in the built environment.

Delivering confidence

We are RICS. Everything we do is designed to effect positive change in the built and natural environments. Through our respected global standards, leading professional progression and our trusted data and insight, we promote and enforce the highest professional standards in the development and management of land, real estate, construction and infrastructure. Our work with others provides a foundation for confident markets, pioneers better places to live and work and is a force for positive social impact.

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