

IIGCC Response to EU Commission’s Consultation on the Revision of the Energy Performance of Buildings Directive

The Institutional Investors Group on Climate Change (IIGCC) is the leading European membership body enabling the European investment community in driving significant and real progress by 2030 towards a net zero and resilient future. IIGCC’s 300 members, representing €37 trillion AUM, are in a position to catalyse real world change through their capital allocation decisions, stewardship and engagement with companies and the wider market as well as through their policy advocacy. IIGCC’s members includes many of the largest global and European institutional investors and asset managers.

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Many real estate investors have signalled their intent to drive the transition to net zero across their portfolios. In addition, through IIGCC, more than 110 investors representing \$33 trillion assets under management have contributed to the development of the Net Zero Investment Framework¹ to align their portfolios to the Paris Agreement for key asset classes, including real estate. While many real estate investors are taking action to reduce their emissions, we advise that step-change is needed in EU buildings policy to align this sector with the EU’s climate goals.

In summary, IIGCC recommends:

- setting science based, mandatory minimum energy and carbon performance standards for buildings, leveraging the EU-funded Carbon Risk Real Estate Monitor
- developing green mortgage portfolio requirements for mortgage lenders
- aligning definitions of deep renovation with EU Renovation Wave Strategy
- aligning incentives between commercial building owners and tenants
- strengthening the comparability, accuracy and climate science basis of energy performance certificates (EPCs)
- monitoring emissions performance of buildings across the whole lifecycle
- accurately measuring the time and location of energy/carbon savings
- enabling energy utilities to write procurement contracts for energy efficiency and retrofits
- using accurate, market-based costs of capital and updated technology costs in impact assessments.

Recommendation 1: Setting science-based, mandatory minimum energy and carbon performance standards for buildings, leveraging the Carbon Real Estate Risk Monitor

The revised EPBD should introduce an EU-wide mandatory minimum energy and carbon performance standard for buildings differentiated by building type and member state. Minimum energy performance standards are “the strongest measure to increase the rate of renovations providing a clear signal to

¹ Information on the IIGCC Net Zero Investment Framework, available [here](#) and [here](#).

investors”² according to the European Commission’s own analysis undertaken for previous legislative proposals.

We recommend that the emission reduction pathways created by the EU and investor-funded Carbon Risk Real Estate Monitor (CRREM)³ inform this standard. CRREM has developed a model for downscaling climate science to emission reduction pathways for different building types. The CRREM tool is currently the recommended methodology for assessing the net zero alignment of real estate holdings under IIGCC’s Net Zero Investment Framework.

We also recommend the CRREM pathways are integrated into the EU Taxonomy’s technical screening criteria for sustainable renovation activities, based on a building’s carbon/energy intensity declining below the relevant CRREM curve for at least five years. A major renovation could qualify as sustainable under the Taxonomy if a building’s carbon/energy intensity declines below the relevant CRREM curve for at least 12 years.

Recommendation 2: Developing green mortgage portfolio standard requirements for mortgage lenders

IIGCC recommends that Article 10 of the EPBD be amended to include a requirement on mortgage lenders to improve the energy efficiency of mortgage portfolios. This type of regulatory approach is used in other sectors - for example, Renewable Portfolio Standards for electricity generation.

A working group of the Energy Efficiency Financial Institutions Group (EEFIG) has identified growing evidence from a number of major banks that energy efficiency in mortgage portfolios reduces financial risk for lenders.⁴ Many European banks are actively participating in the Energy Efficient Mortgage Initiative, and a growing number of banks are setting net zero goals.

Recommendation 3: Aligning definitions of deep renovation with EU Renovation Wave Strategy

IIGCC recommends that any definition of ‘deep renovation’ introduced under the revised EPBD align with the definition in the EU’s Renovation Wave Strategy, which classifies a deep renovation as delivering a reduction in energy consumption of “at least 60%”.⁵

This could help to encourage a higher level of climate ambition across other regulatory initiatives. For example, the Taxonomy screening criteria for renovation projects that contribute to climate change mitigation is currently aligned with the definition of major renovations under the existing EPBD, or alternatively a reduction of primary energy demand of at least 30%.⁶ These thresholds are not yet aligned with net zero trajectories and do not reflect the pathways established by science-based tools used by investors, such as CRREM. The introduction of more stringent criteria for deep renovation under the revised EPBD could help encourage higher ambition in revised Taxonomy thresholds and support the achievement of the EU’s climate goals.

² EU Commission Staff Working Document “Good Practice in Energy Efficiency” , available [here](#).

³ Information on CRREM tool, available [here](#) and [here](#).

⁴ EEFIG Working Group 8 final report will be published in Q4 2021.

⁵ EU Renovation Wave Communication, available [here](#).

⁶ Technical screening criteria for climate change mitigation under the Taxonomy, available [here](#).

Recommendation 4: Align incentives between commercial building owners and tenants

The revision of the EPBD provides the opportunity to align incentives between commercial building owners and tenants, which could help increase the rate of building renovations.⁷ For example, retrofit costs can be shared between building owners and tenants through building service charges, with higher service charges offset by lower energy costs. It is noted that some member states (Austria, Finland, Germany, Sweden) do not allow costs of retrofits to be shared between building owners and tenants through building service charges; other member states do not have this restriction (Belgium, France, Italy, Netherlands, Poland, Portugal, Spain).

Investors do not always have access to data on tenants' energy use, which makes it difficult to plan retrofits. The revision of the EPBD could require tenants with smart meters to securely share data with building owners and third parties, which could in turn encourage investment. For example, the EU could publish member state guidance that, as part of smart meter roll-out, encourages or requires tenants to share energy use data with their building owners, while appropriately addressing data privacy issues

Recommendation 5: Strengthen the comparability, accuracy and climate science basis of energy performance certificates (EPCs)

IIGCC recommends updating and strengthening the framework for EPCs. The reform of EPCs could utilise smart meter data so that EPCs are based on actual energy consumption and emissions (rather than estimates), to provide a more accurate insight into energy and carbon savings. IIGCC would support the full disclosure of EPCs in a central and useable database to ensure EPCs are available to building owners, the renovation industry and to financial institutions (including banks) to assess real estate investing or lending portfolios.

In addition, IIGCC recommends that harmonised methodologies for EPCs across member states should be introduced. At present, the use and availability of EPCs varies considerably across member states, reducing the ability to compare the energy performance of buildings across the EU. For example, under the Taxonomy's technical screening criteria, building stock constructed before 31 December 2020 must have a class A EPC to be considered sustainable. However, as the criteria for class A EPCs differs between member states, investors cannot be certain that their real estate holdings are consistently aligned with robust net zero trajectories.

Recommendation 6: Defining net zero emissions for the building sector

IIGCC recommends that the concept of zero emissions buildings by 2050 should be defined in the revised EPBD, and this definition should include emissions generated across the whole building lifecycle, i.e. covering both embodied and operational carbon. Compared to operational emissions, embodied carbon has been historically overlooked in emissions reporting. Embodied carbon covers emissions

⁷ DWS Group 2020 'Green, healthy buildings as economic stimulus', available [here](#).

released during the manufacturing, transportation, construction and decommissioning of built assets.⁸

We recommend that any net zero definition for operational emissions should be based on the relevant CRREM building type/country energy and carbon reduction curves.

Recommendation 7: Monitoring emissions performance of buildings across the whole lifecycle

IIGCC recommends that measures to report on whole lifecycle carbon emissions from buildings are introduced under the revised EPBD. While we acknowledge that data and methodologies relating to embodied carbon are still developing, these measures could initially draw on the EU's Level(s) framework, which provides a transparent and harmonised reporting framework to measure and account for the sustainable performance of buildings across their whole lifecycle.⁹ The work of organisations to support the development of embodied carbon data and methods should be integrated into EU policies (such as upcoming outputs from Laudes Foundation).

Recommendation 8: Accurately measuring the time and location of energy/carbon savings

IIGCC recommends a shift away from the 'deemed' energy savings approach described in Article 1 of EPBD, and towards a framework which is based on actual, metered savings.

The time and location of energy use and energy savings matters. However, time and location of energy use is not accounted for in traditional project-level deemed carbon savings assumptions. While 'deemed' energy savings approaches can be relatively simple to implement, these do not provide accurate figures for energy and carbon savings. Electricity carbon intensity changes within a day, between months, and over years as generation capacity is built and retired.

Ensuring the location and time (24 hours a day x 7 days per week x 365 days per year) of energy and carbon savings are accurately measured, using smart meters wherever possible, would strengthen incentives for the retrofit industry to deliver high quality projects and encourage shifts in behaviour.

A number of initiatives to support assessments of metered savings already exist. These include methodologies that enable the dynamic measurement and verification of energy savings,¹⁰ as well as projects exploring opportunities to develop a market for hourly electricity certificates that allow energy users to verify the source of their electricity and carbon emissions in real time.¹¹ It is recommended that the Commission convene relevant stakeholders, including energy regulators, through the Association for the Cooperation of Energy Regulators (ACER) to enhance stakeholders' knowledge, build on the work of existing initiatives, and create a European metered savings methodology.

⁸ World Green Building Council report on embodied carbon, available [here](#).

⁹ Level(s) framework overview, available [here](#).

¹⁰ Sensei methodology for the dynamic measurement and verification of energy savings, available [here](#).

¹¹ EnergyTag initiative, available [here](#).

Recommendation 9: Enabling energy utilities to write procurement contracts for energy efficiency and retrofits

IIGCC recommends energy utilities be enabled to write procurement contracts for energy efficiency and retrofits. This could be supported through revisions to the EPBD (such as under Article 10), revisions to the EED, reforms to the Internal Market in Electricity Directive and Regulations, changes to market practices and by facilitating support from the EFIG potential new working group on data.

Today, energy efficiency investments are often funded by individuals, and/or via government-led subsidy schemes. This means the energy efficiency industry is supported largely by a combination of consumer credit and government subsidy, unlike virtually any other part of the energy system. At present, electricity supply companies cannot invest in or contract for reductions in electricity use in the same way that they invest in or contract for renewable energy (or fossil fuels). Heating supply companies are not able to contract for deep thermal retrofits as an alternative to contracting for imported natural gas.

In addition, energy networks are not able to view energy efficiency as an alternative to expanding network infrastructure. In contrast, energy companies and network operators are able to understand the probability that a particular wind farm will generate a particular amount of electricity at a particular time of day and time of year. But companies and network operators are not able to make such a calculation for energy efficiency.

Utility companies in California and several U.S. states are changing this paradigm by understanding and financially valuing how energy efficiency contributes to their energy requirements. These utility companies are creating the first ‘pay for performance’ contracts with aggregators of residential energy efficiency projects, with payments only occurring if energy is reduced at the desired time and location.¹² By creating contracts for portfolios of energy efficiency projects, a revenue source or cash flow is created.

Recommendation 10: Using accurate, market-based costs of capital and updated technology costs in impact assessments

IIGCC recommends that the Commission reconsider the current 10% interest rate assumed within impact assessment for 2030 energy and climate policies. This does not accurately reflect the actual equity or debt costs of capital faced by development banks, governments, companies, banks, investors and individuals. Overestimating the upfront capital cost of low carbon technologies can bias results in favour of fossil fuel technologies, creating a risk of dampening climate ambition due to cost concerns.

For the buildings sector, this could disincentivise and discourage investment in energy efficiency and retrofits, rather than drive momentum towards achieving the EU’s 2030 energy and climate targets.

In addition, technology cost estimates being used within impact assessments should be kept as up to

¹² CalTRACK methods, available [here](#).

date as possible, reflecting technology learning curves and the risk of stranded assets for fossil fuel technologies.

IIGCC would welcome the opportunity to discuss our response in more detail with the Commission. Please contact Emelia Holdaway, IIGCC Policy Programme Director at eholdway@iigcc.org.