



EUROPEAN PRIVATE MARKETS

# The financing of real estate decarbonisation as a source of value creation



Real estate has historically been a major pillar of institutional investors' asset allocation strategies. Given its high capital intensity and its ability to generate relatively stable income streams over the long term, it occupies a prominent place in the portfolios of insurers, mutual insurance companies and pension funds. Indeed, within private markets, real estate is probably the asset class with the longest institutional history, having become firmly established as a core component of asset allocation alongside equities and bonds.

The value of a real estate asset is fundamentally based on its ability to secure high and sustainable net rental income. In a changing economic, regulatory and financial environment, the long-term resilience of these investments nevertheless requires an appropriate understanding of the various factors that may affect asset valuations. It is therefore becoming essential, for both asset managers and lenders, to identify the levers that can preserve and enhance the market value of their portfolios, while integrating emerging risks linked to the environmental transition.

While traditional criteria such as geographical location, the intrinsic quality of the building, the range of services offered and suitability for local uses remain essential, carbon performance interacts with these factors and is increasingly becoming an additional determinant of occupier appeal. Improved energy efficiency may therefore help reduce certain operating costs for occupiers, limit future upgrading requirements and, by extension, strengthen the competitiveness of the building in the market. Conversely, insufficient consideration of a building's climate trajectory may expose investors to a heightened risk of obsolescence or depreciation.

In a capital-intensive sector, financing the energy transition is therefore not solely a matter of compliance or responsibility: it is also an matter of resilience, preservation and even

enhancement of the value of each asset. It also contributes to the decarbonisation of the financial system as a whole. Decarbonisation directly helps to reduce exposure to carbon-intensive activities. It thereby limits the risk of stranded assets, abrupt valuation adjustments and concentrated losses on financial balance sheets. In doing so, it strengthens the resilience of the financial system by supporting a more sustainable and diversified allocation of capital, aligned with long-term economic pathways compatible with climate objectives.

The challenge is all the more significant as the buildings sector plays a central role in Europe's climate transition. Made up largely of an old and energy-inefficient building stock, it accounts for a significant share of the continent's energy consumption and greenhouse gas emissions, as well as a substantial share of its potential for sustained emissions reduction. This article aims to help investors gain a clearer understanding of the decarbonisation challenges facing the real estate sector as a whole and to identify the main levers available to real estate lenders to support and accelerate this transition.

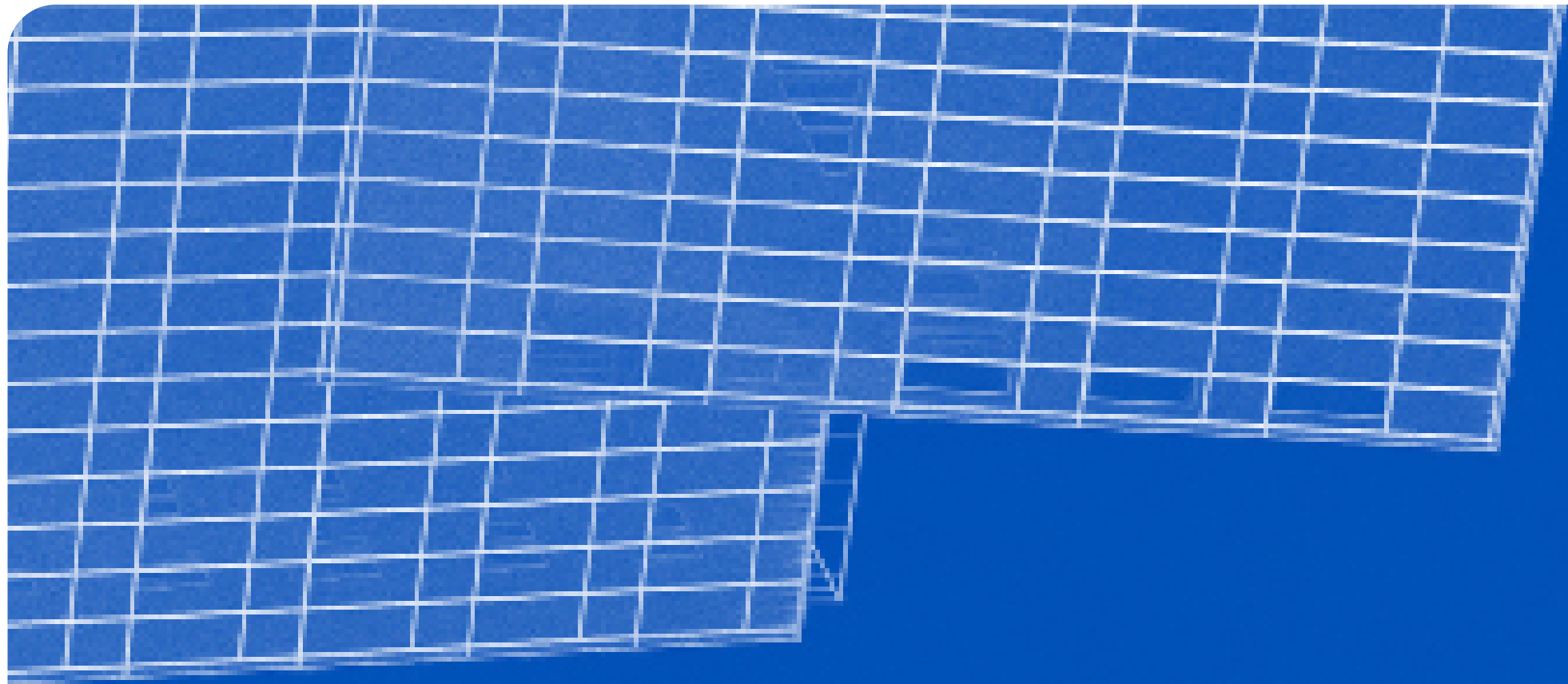


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# **1. The real estate sector at the heart of the energy transition and European regulations**

## 1. The real estate sector at the heart of the energy transition and European regulations

### 1.1 The European Union's ambitions for the energy transition

At the intersection of the European Union's broader decarbonisation objectives, national sector-specific regulations and evolving market expectations, real estate now lies at the heart of the energy transition. The issue is not limited to an environmental agenda: it entails a far-reaching transformation of Europe's economic, energy and social models.

In response to this challenge, the EU has committed to an ambitious pathway to reduce its greenhouse gas emissions, driven in particular by the Fit for 55 legislative package<sup>1</sup> and the Green Deal<sup>2</sup>. These initiatives aim to achieve a net reduction of at least 55% in GHG emissions by 2030, compared with 1990 levels, before reaching carbon neutrality by 2050.

The latest reports from the European Commission point to encouraging momentum towards achieving these objectives: the assessment of integrated national energy and climate plans indicates that the EU is now in a position to achieve a 54% reduction in emissions by 2030<sup>3</sup>, subject to the full implementation of the measures announced.

Real estate plays a leading role in this overall trajectory, with the 43%<sup>4</sup> reduction in its emissions between 2005 and 2023 demonstrating its significant contribution to European climate objectives, according to the European Environment Agency.

1. <https://www.consilium.europa.eu/fr/policies/fit-for-55/>

2. [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en)

3. The EU is moving closer to its 2030 climate and energy targets.

4. <https://www.eea.europa.eu/en/analysis/indicators/greenhouse-gas-emissions-from-energy>

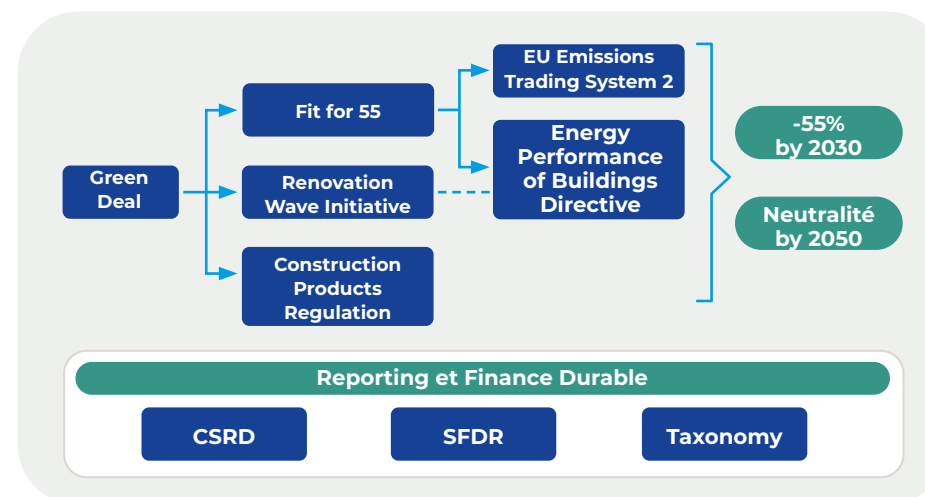
5. <https://www.horizon-europe.gouv.fr/fit-55-adoption-des-nouveaux-objectifs-climat-energie-europeens-pour-2030-36213>

### 1.2 Europe : a regulatory framework combining requirements and incentives

To translate these political ambitions into concrete action within the sector, the EU and its Member States have deployed a structuring framework combining regulatory requirements and incentive mechanisms. This framework brings together sector-specific directives, non-financial reporting obligations and various regulations designed to support the sector's decarbonisation pathway while preserving the economic viability of the stakeholders concerned.

At the heart of this framework, the European Green Deal sets the overall direction of the transition, while the Fit for 55 package forms one of its legislative foundations and sets out the main operational tools<sup>5</sup>.

This framework also includes the revision of the Energy Performance of Buildings Directive (EPBD)<sup>5</sup>. The directive entered into force in May 2024 and strengthens requirements applicable to both new and existing buildings, improves the quality and comparability of energy performance certificates **across the EU**, and sets a **pathway towards a zero-emission building stock by 2050**. It also provides for Member States to prepare national building renovation plans, supported by clear objectives, intermediate milestones and concrete measures.



The EPBD<sup>6</sup> is one of the main instruments for implementing the Renovation Wave<sup>7</sup>, whose objective is to accelerate the pace of energy renovations in Europe, notably by aiming to double the annual renovation rate and renovate 35 million buildings by 2030.

In parallel, the extension of the Emissions Trading System (EU ETS2)<sup>8</sup>, by targeting fuel suppliers, seeks to progressively strengthen the price signal in favour of lower-carbon solutions. Its entry into force may, however, be postponed to 2028 in the event of exceptionally high gas or oil prices in 2026.

This momentum is not limited to building operations; it also extends to the materials used in construction. In this respect, the revision of the Construction Products Regulation (CPR)<sup>9</sup> aims to complete the framework by further integrating sustainability, circularity and transparency considerations. It therefore contributes to better reflecting the environmental footprint of construction materials and, more broadly, the weight of embodied carbon in the life-cycle analysis of assets.

Finally, this sector-specific framework is part of a broader regulatory architecture applicable to the financial system. The European Taxonomy<sup>10</sup>, the Corporate Sustainability Reporting Directive (CSRD) and the Sustainable Finance Disclosure Regulation (SFDR) help structure the information available and strengthen transparency, with the aim of gradually channelling capital flows towards more sustainable activities.

For investors and lenders alike, this regulatory framework increases visibility on the sector's trajectory, while reinforcing the need for consistency between climate strategy, capital allocation and risk management.

**In real estate, these texts reinforce the need for reliable data, robust methodologies and more precise documentation of the sustainability strategies applied both to assets and to investment vehicles.**

6. [https://energy.ec.europa.eu/topics/energy-efficiency/energy-performance-buildings/energy-performance-buildings-directive\\_en](https://energy.ec.europa.eu/topics/energy-efficiency/energy-performance-buildings/energy-performance-buildings-directive_en)

7. [https://energy.ec.europa.eu/topics/energy-efficiency/energy-performance-buildings/renovation-wave\\_en](https://energy.ec.europa.eu/topics/energy-efficiency/energy-performance-buildings/renovation-wave_en)

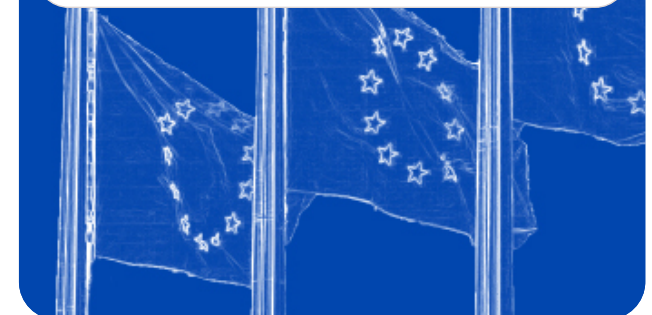
8. [https://climate.ec.europa.eu/eu-action/carbon-markets/ets2-buildings-road-transport-and-additional-sectors\\_en](https://climate.ec.europa.eu/eu-action/carbon-markets/ets2-buildings-road-transport-and-additional-sectors_en)

9. [https://single-market-economy.ec.europa.eu/sectors/construction/construction-products-regulation-cpr\\_en](https://single-market-economy.ec.europa.eu/sectors/construction/construction-products-regulation-cpr_en)

10. [https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities\\_en](https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en)

### Focus on

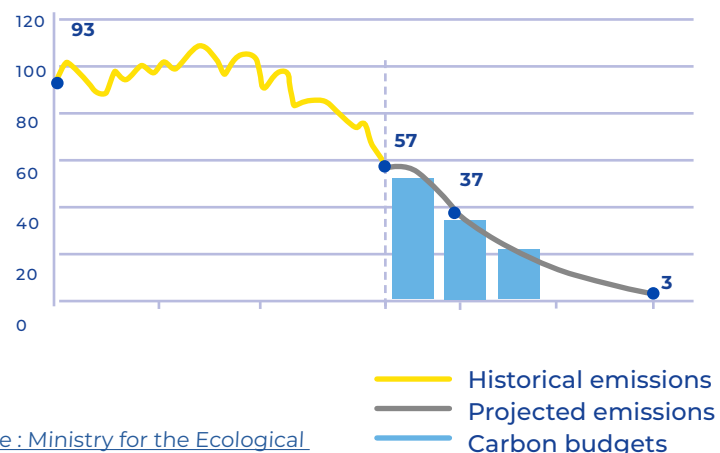
- **The CSRD** requires companies within its scope to publish sustainability information on their risks, opportunities and the impacts of their activities on the environment and society, thereby helping to improve the availability and comparability of ESG data useful to investors.
- **The SFDR** governs the transparency of financial products in relation to sustainability, requiring the publication of information on how sustainability risks are taken into account and, where applicable, on the environmental or social characteristics or sustainable investment objective of the products concerned.
- **The European Taxonomy** is a classification system defining technical criteria applicable to certain real estate activities, notably in relation to construction, renovation and the acquisition or operation of assets. It therefore provides a common reference framework designed to enhance market transparency.



In France, the decarbonisation of buildings forms part of the National Low-Carbon Strategy (Stratégie nationale bas-carbone – SNBC)<sup>11</sup>, which sets out the French government's roadmap for achieving climate neutrality by 2050. The draft SNBC 3<sup>12</sup>, published at the end of 2025, sets a target for the buildings sector to reduce direct emissions by 60% by 2030 compared with 1990 levels.

The buildings sector emitted 57 MtCO<sub>2</sub>e in 2023, representing 15% of France's gross emissions. These emissions will need to be reduced by 60% by 2030, to 37 Mt, and by 97% by 2050, to 3 Mt, compared with their 1990 level of 93 Mt.

**Emissions from the buildings sector  
(observed and projected, in MtCO<sub>2</sub>e)**



In France, the decarbonisation of buildings forms part of the National Low-Carbon Strategy (Stratégie nationale bas-carbone – SNBC), which sets out the French government's roadmap for achieving climate neutrality by 2050.

This trajectory is reflected in several sector-specific measures. The **Éco Énergie Tertiaire**<sup>13</sup> scheme, introduced under the French tertiary decree, requires the relevant tertiary buildings to gradually reduce their final energy consumption by at least 40% by 2030, 50% by 2040 and 60% by 2050, compared with a reference year that cannot be earlier than 2010, or to meet absolute performance thresholds. The **RE2020**<sup>14</sup> environmental regulation governs new construction by incorporating energy performance, thermal comfort in summer and carbon emissions across the full life cycle of buildings, with successive strengthening milestones in 2025, 2028 and 2031.

In addition, France has strengthened several levers designed to support the integration of renewable energy into the built environment. The **law on the acceleration of renewable energy production (APER)**<sup>15</sup> aims in particular to develop photovoltaic installations on outdoor car parks of more than 1,500 sq m, requiring, in certain cases, the installation of canopies fitted with renewable energy generation systems over at least half of their surface area.

More broadly, renovation policies also encourage the use of low-carbon equipment, such as heat pumps, solar thermal systems or connections to district heating networks.

Furthermore, green mobility policies have a direct influence on urban and real estate development. The deployment of charging infrastructure for electric vehicles and planning obligations in low-emission zones reinforce the links between real estate, energy and mobility.

11. <https://www.ecologie.gouv.fr/politiques-publiques/strategie-nationale-bas-carbone-snbc>

12. <https://concertation-strategie-energie-climat.gouv.fr/les-grands-enjeux-de-la-snbc-3>

13. <https://www.gers.gouv.fr/Actions-de-l-Etat/Transition-ecologique-et-energetique/Lutte-contre-le-changement-climatique/Le-Dispositif-Eco-Energie-Tertiaire-DEET>

14. <https://www.ecologie.gouv.fr/politiques-publiques/reglementation-environnementale-re2020>

15. <https://www.legifrance.gouv.fr/dossierlegislatif/JORFDOLE000046329719/>

In Spain, the decarbonisation of the buildings sector forms part of the National Energy and Climate Plan (Plan Nacional Integrado de Energía y Clima – PNIEC 2023–2030)<sup>16</sup> and the Long-Term Decarbonisation Strategy, which set the objective of achieving climate neutrality by 2050. The revised PNIEC provides for a reduction of at least 32% in greenhouse gas emissions by 2030 compared with 1990 levels, to which both the residential and tertiary buildings sectors are expected to make a substantial contribution.

The buildings sector accounts for around one quarter<sup>17</sup> of final energy consumption in Spain, with emissions mainly linked to heating and cooling needs in the residential sector and to the diversity of activities in the tertiary sector. The national trajectory is therefore based on a gradual reduction in energy consumption, greater electrification of uses and the increased integration of renewable energy into the built environment.

This trajectory is implemented through several sector-specific regulatory measures. The central framework is the **Technical Building Code** (*Código Técnico de la Edificación – CTE*)<sup>18</sup>, which governs new construction as well as major renovation works by setting requirements relating to energy performance, the limitation of heating and cooling needs, thermal comfort and the integration of renewable energy, with thresholds strengthened through successive revisions

For the tertiary sector, Spain has reinforced the obligations applicable to non-residential buildings as part of the transposition of European directives on the energy performance of buildings. These measures impose, in particular,

enhanced requirements for monitoring consumption, the use of energy performance certificates, and the gradual renovation of the least efficient buildings, following a logic similar to energy consumption reduction schemes observed in other Member States.

The residential sector is primarily governed by national energy renovation strategies, integrated into the PNIEC and the national building renovation plan, which aim to accelerate the scaling-up of renovations by 2030. These measures primarily target improvements to the thermal envelope, the replacement of heating and cooling equipment with low-carbon solutions, and the deployment of solar thermal and photovoltaic systems on existing buildings<sup>20</sup>.

In addition to the Technical Building Code, the **Regulation on Thermal Installations in Buildings** (*Reglamento de Instalaciones Térmicas en los Edificios – RITE*)<sup>21</sup> governs thermal comfort conditions through heating, cooling and ventilation systems. Introduced by Royal Decree 1027/2007<sup>22</sup> and strengthened through successive revisions, the RITE defines requirements for summer comfort, indoor temperature regulation and the management of technical installations, thereby contributing both to the protection of occupants during periods of intense heat and to the control of energy consumption.

16. <https://www.miteco.gob.es/en/prensa/pniec.html>

17. <https://www.odyssee-mure.eu/publications/efficiency-trends-policies-profiles/spain-country-profile-english.pdf>

18. <https://www.codigotecnico.org/>

19. [https://energy.ec.europa.eu/topics/energy-efficiency/energy-performance-buildings/energy-performance-buildings-directive\\_en](https://energy.ec.europa.eu/topics/energy-efficiency/energy-performance-buildings/energy-performance-buildings-directive_en)

20. [https://www.boe.es/diario\\_boe/txt.php?id=BOE-A-2019-18528](https://www.boe.es/diario_boe/txt.php?id=BOE-A-2019-18528)

21. <https://www.idae.es/en/technologies/energy-efficiency/building/regulations-thermic-installations-buildings-rite>

22. <https://www.boe.es/buscar/act.php?id=BOE-A-2007-15820>

## Focus Germany

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In Germany, the decarbonisation of the buildings sector forms part of the Federal Climate Change Act (Klimaschutzgesetz) <sup>23</sup>, which sets a target to reduce greenhouse gas emissions by 65% by 2030 compared with 1990 levels and to achieve climate neutrality by 2045.

Buildings are subject to specific sectoral targets, given their significant weight in national emissions, historically linked to fossil-fuel heating. In 2024, the buildings sector accounted for 32.5% of final energy consumption in Germany <sup>24</sup>.

This situation has led the German authorities to progressively strengthen the regulatory framework applicable to buildings, both for new construction and for the existing stock.

The central pillar of this policy is the Buildings Energy Act (Gebäudeenergiegesetz – GEG) <sup>25</sup>, which governs the overall energy performance of buildings and their technical systems. Since 2024, the GEG has required any newly installed heating system to cover at least 65% <sup>26</sup> of needs using renewable energy, supporting the deployment of heat pumps, low-carbon district heating networks and solar thermal systems, according to arrangements adapted to different types of buildings.

In addition to technical requirements, Germany has introduced a structuring economic signal through national carbon pricing on heating fuels (BEHG) <sup>27</sup>, in force since 2021. This mechanism gradually increases the cost of gas and heating oil and strengthens the incentive for energy renovation and the electrification of uses.

Finally, the integration of renewable energy into buildings is being reinforced through photovoltaic installation obligations, mainly decided at Länder level, in particular for new buildings, certain renovation projects and large car parks <sup>28w</sup>.

23. <https://www.gesetze-im-internet.de/ksg/>

24. <https://www.umweltbundesamt.de/en/data/environmental-indicators/indicator-energy-consumption-for-buildings#assessing-the-development>

25. <https://www.bmwsb.bund.de/DE/bauen/innovation-klimaschutz/gebäudeenergiegesetz/GEG-Top-Thema-Artikel.html>

26. <https://www.bmwsb.bund.de/DE/bauen/innovation-klimaschutz/gebäudeenergiegesetz/GEG-Top-Thema-Artikel.html>

27. <https://www.cleanenergywire.org/factsheets/germanys-planned-carbon-pricing-system-transport-and-buildings>

28. <https://clean-energy-islands.ec.europa.eu/countries/germany/legal/electricity-support/res-e-building-obligations-obligation-pv-new-buildings>



## 1. The real estate sector at the heart of the energy transition and European regulations

### 1.3 An encouraging European trajectory, but a challenge of considerable scale

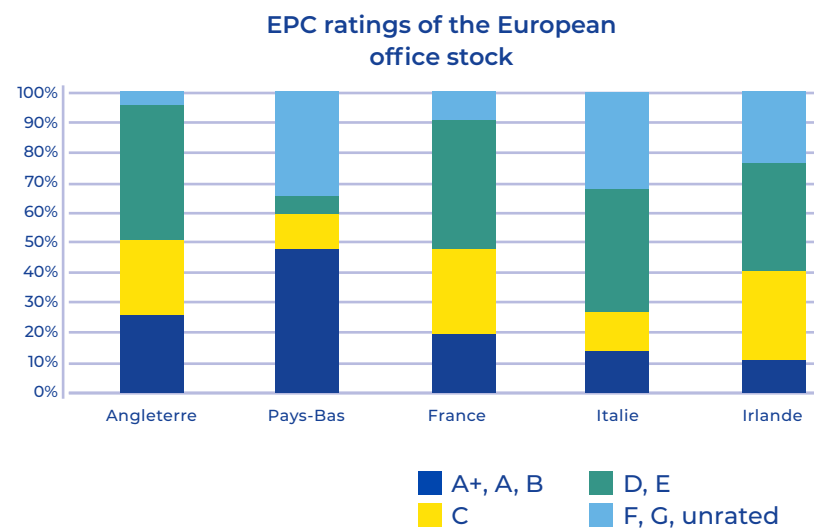
According to the European Environment Agency, GHG emissions from energy use in buildings in the EU fell by 43% between 2005 and 2023<sup>29</sup>. This decrease can be explained in particular by the strengthening of energy efficiency standards for new buildings, the gradual improvement of the existing stock, the electrification of certain uses and the decarbonisation of electricity and heat generation.

The real estate sector is therefore among the sectors that have achieved the most significant emissions reductions in Europe<sup>30</sup>.

**Despite this progress, buildings still accounted for around 33% of energy-related emissions in the European Union in 2023, illustrating the scale of the thermal renovation challenge that remains for the existing stock.**

In Europe, 85% of buildings were built before 2000, nearly 75% have low energy performance<sup>31</sup>, and more than 85% of the current building stock is expected to still be in use in 2050. **In other words, the bulk of the decarbonisation effort lies less in new construction than in the transformation of the existing stock.**

The risk of obsolescence concerns both the residential and tertiary sectors. According to Savills<sup>32</sup>, more than half of Europe's office stock has an EPC rating of class D or below<sup>33</sup>, although the situation varies across countries and market segments, as shown in the chart below.



29. Greenhouse gas emissions from energy use in buildings in Europe | Indicators | European Environment Agency (EEA)

30. TH-01-25-025-EN-N Europe's environment and climate LR\_2.pdf

31. [https://energy.ec.europa.eu/topics/energy-efficiency/energy-performance-buildings/energy-performance-buildings-directive\\_en?prefLang=sv](https://energy.ec.europa.eu/topics/energy-efficiency/energy-performance-buildings/energy-performance-buildings-directive_en?prefLang=sv)

32. Savills, European Office Obsolescence, décembre 2022.

33. Les méthodologies de certification diffèrent cependant selon les pays.

## 1. The real estate sector at the heart of the energy transition and European regulations

### 1.4 GHG emissions in the sector: distinguishing between operation and life cycle

For an investor, understanding the origin of emissions is a prerequisite for any asset management, acquisition, disposal or renovation strategy. At building level, GHG emissions fall into two main phases, which are closely linked but different in nature: construction and operation.

#### The impact of construction: embodied carbon

**The energy and GHG impact of a building must, however, be assessed over its entire life cycle, from the production of materials through to renovation works and, where applicable, end-of-life treatment.**

In France, ADEME estimates that in 2019 around one third of the carbon footprint of the buildings value chain came from construction products and equipment<sup>34</sup>. As embodied carbon is particularly significant in new-build projects, the choice of materials, construction processes and the origin of materials — and, more broadly, the management of asset life cycles— represent a material issue.

<sup>34</sup>. [Indicateur - Emissions de GES sur l'ensemble de la chaîne de valeur du bâtiment en 2019](#)





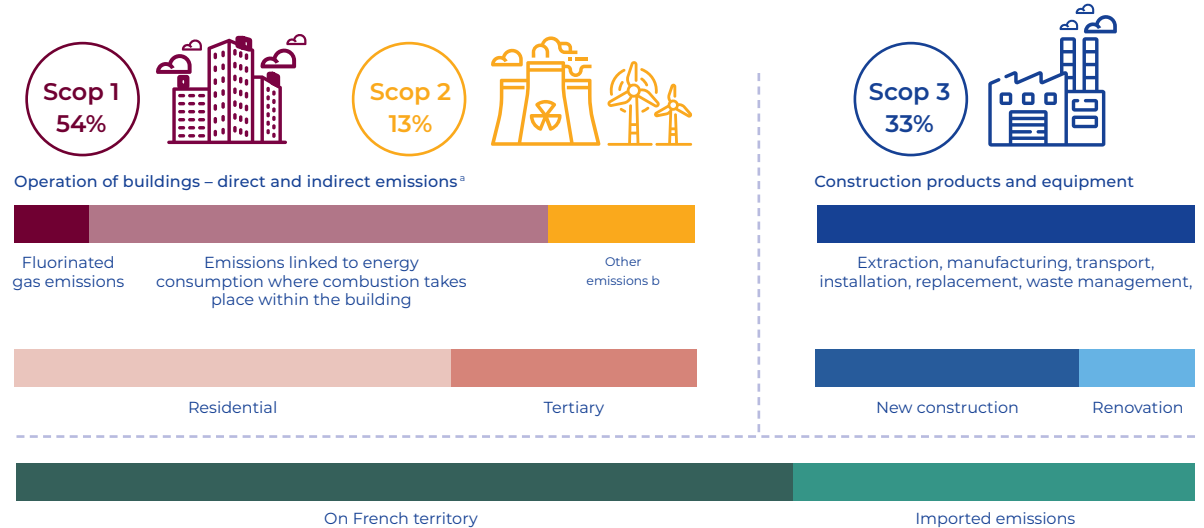
## The impact of building use: operational carbon

The operational phase is a central lever for decarbonisation, particularly within the existing stock. Heating, cooling, domestic hot water, lighting and, more broadly, the day-to-day operation of buildings still account for a major share of energy consumption and associated emissions<sup>35</sup>.

In France, direct emissions linked to the operation of buildings represented 57.1 MtCO<sub>2</sub>e in 2024, equivalent to 15.5% of national emissions<sup>36</sup>.

Beyond the technical characteristics of the building itself, user behaviour also plays an important role: temperature settings, equipment management and more restrained patterns of use can have a significant influence on the actual performance of an asset.

### Breakdown of carbon emissions across the buildings value chain (reference year : 2019) <sup>37</sup>



- a. Emissions calculated based on the life cycle of energy carriers. The use of domestic products is partially included. Excluded: domestic waste and burning, wastewater, and domestic machinery, such as gardening equipment.
- b. Other emissions linked to energy consumption: those relating to the use of electricity and district heating/cooling networks.

35. Plus de 60 % de l'énergie utilisée dans les logements sert au chauffage, au refroidissement et à l'eau chaude

36. Ibid.

37. [https://www.ecologie.gouv.fr/sites/default/files/documents/Feuille\\_de\\_route\\_decabonation\\_batiment.pdf](https://www.ecologie.gouv.fr/sites/default/files/documents/Feuille_de_route_decabonation_batiment.pdf)

Overall, in France, ADEME estimates<sup>38</sup> the footprint of the entire buildings value chain at around 153 MtCO<sub>2</sub>e in 2019, representing nearly one quarter of the national carbon footprint. Around 67% of these emissions came from the operational phase, i.e. scopes 1 and 2, while approximately one third related to other stages of the life cycle, mainly linked to materials, equipment and new construction.

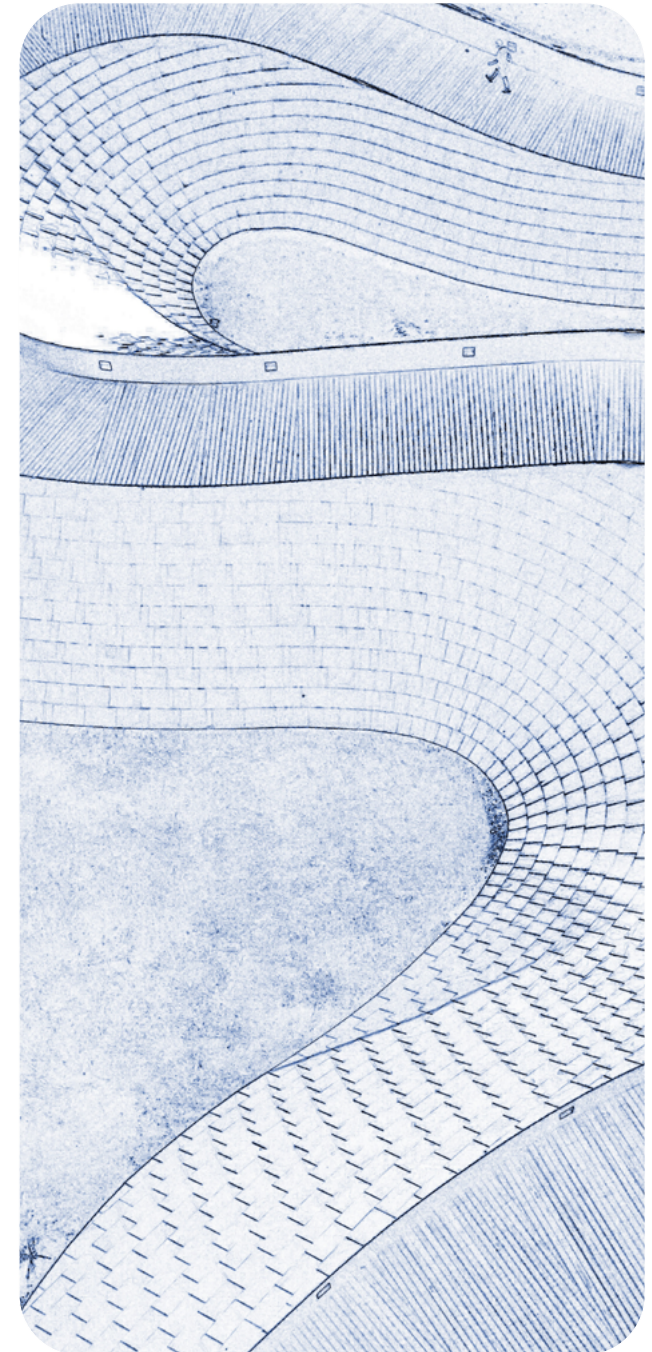
These orders of magnitude underline the need to act both on materials and construction practices, as well as on energy renovation, equipment efficiency and more energy-conscious usage patterns.

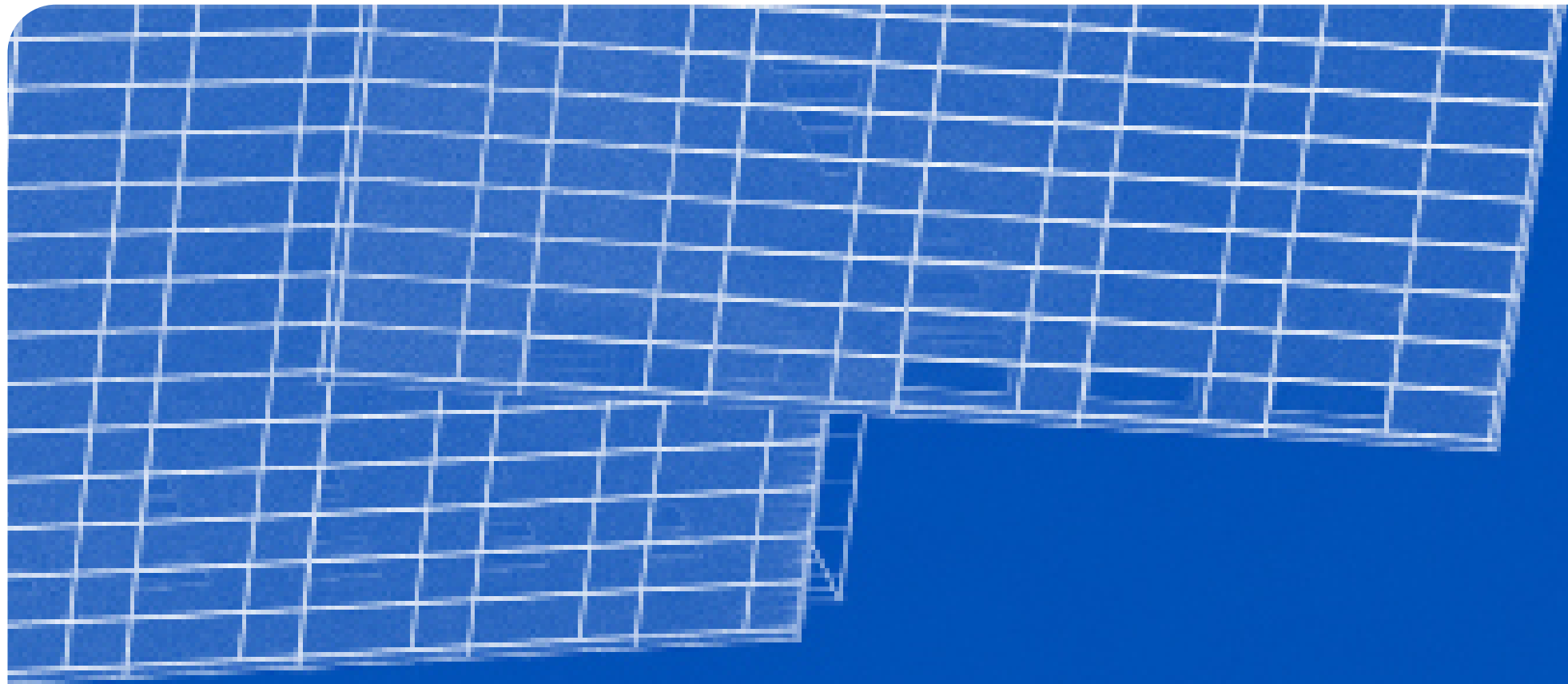
Although this transition will take place over time and involves a wide diversity of situations and assets, the real estate sector stands out for the immediate availability of a broad range of levers that can significantly reduce its carbon footprint.

Most of these levers rely on solutions that are already proven, whether renovation technologies, the integration of lower-impact materials or more efficient operating practices. This contrasts with other sectors of the economy, where decarbonisation options remain limited, costly or insufficiently deployed at scale.

**The decarbonisation of the real estate sector is therefore both a priority and a complex undertaking, due to the diversity of assets, the length of real estate cycles and the multiplicity of levers to be mobilised.**

38. [Analyses thématiques - Émissions de Gaz à Effet de Serre \(GES\)](#)





## **Decarbonisation and valuation : a growing factor of différenciation for real estate assets**

**2.**

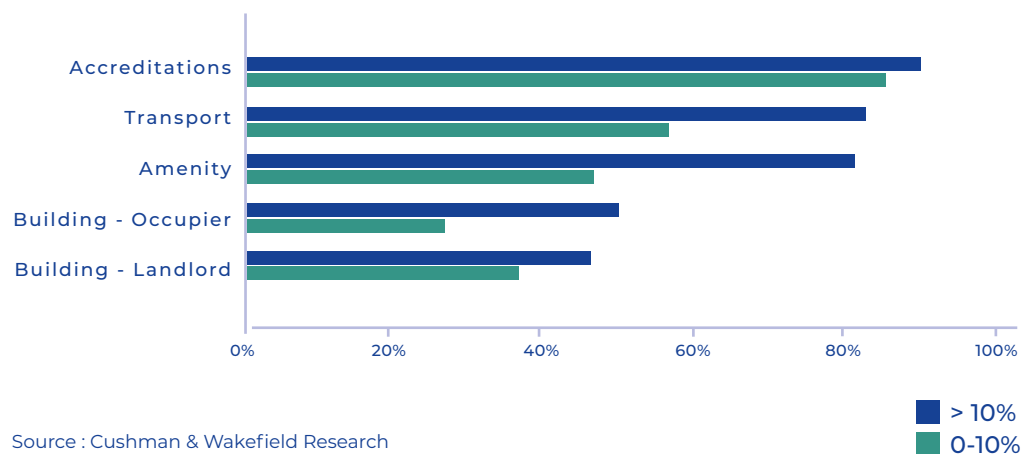
## 2. Decarbonisation and valuation: a growing factor of differentiation for real estate assets

Investors have all the more reason to act as the environmental performance of a real estate asset is becoming a key factor in its valuation, based on its ability to generate sustainable rental income and to meet the level of return required by investors.

### 2.1 Optimising intrinsic return through performance

The intrinsic return of a real estate asset derives from the net rent received by the owner. In Europe, Cushman & Wakefield<sup>39</sup> **highlights higher rents for assets with environmental certification** such as HQE, BREEAM, LEED or DGNB.

Above prime 2020-24h1 transactions by broad category score



This rental premium, which may be described as a “green premium”, is explained by three main factors:

- **A better trade-off between rent and service charges.** Greater energy efficiency, lower water consumption and better control of operating costs more generally reduce the charges borne by the occupier. From a total cost perspective, this reduction can improve the asset's leasing competitiveness and support a higher rent for a comparable overall budget.
- **Enhanced user experience.** Thermal comfort, indoor air quality, natural light and acoustics all contribute to the attractiveness of spaces for occupiers. In hybrid working environments or flex-office formats, these criteria are playing an increasingly important role in companies' real estate decisions.
- **Greater compatibility with tenants' commitments.** For some companies, particularly those subject to formalised ESG or CSR policies, an environmentally efficient building can help meet their internal objectives, both in terms of real estate strategy and in terms of the tenant's appeal as an employer, in much the same way as location does.

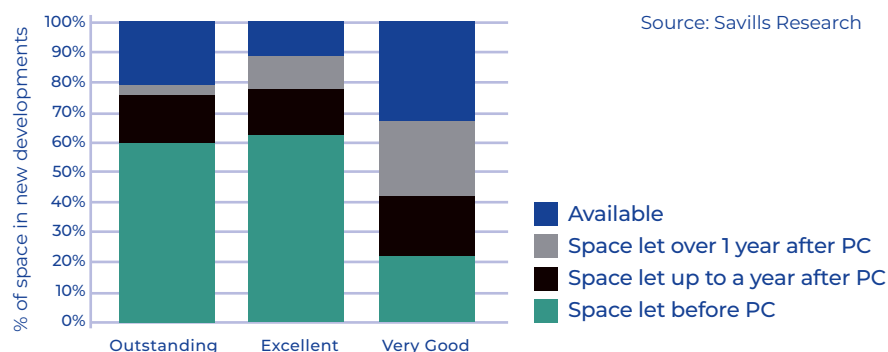
39. Cushman & Wakefield, *Rethinking European Offices 2030, risks and opportunities from obsolescence*, décembre 2024

## 2.2 Leasing appeal and visibility on cash flows

A higher level of environmental certification also supports letting activity and therefore increases the probability of securing tenants after completion of works. High-performing spaces are more likely to attract large corporate occupiers subject to stringent ESG requirements.

This is confirmed by Savills<sup>40</sup> at European level in a study based on BREEAM certifications: the highest-rated buildings benefit from stronger leasing momentum, with a higher probability of being let before or upon practical completion. Savills also notes that occupiers are seeking higher-quality office buildings and that leasing risk is increasing for office buildings that do not meet environmental criteria.

City leasing velocity by BREEAM rating for developments (2018–2023)



This finding is echoed by the French Sustainable Real Estate Observatory (Observatoire de l'Immobilier Durable – OID)<sup>41</sup>, which highlights the market's growing interest in credible decarbonisation pathways and in assets capable of meeting higher ESG requirements. According to the observatory, 33.3% of respondents consider asset liquidity to be the main driver of commitment to net zero, compared with 25.7% in 2024 and 15% one year earlier.

40. Savills, *Spotlight: European Office Development*, 11 juin 2024.

41. *Baromètre bas carbone dans l'immobilier de septembre 2025*.

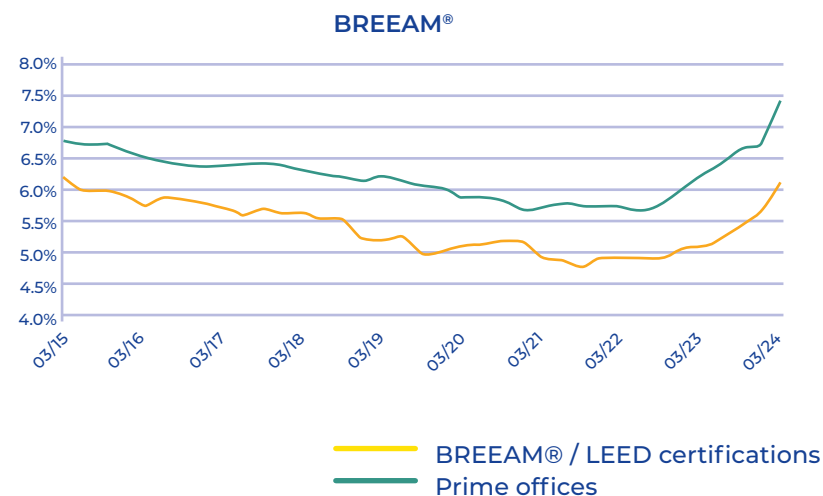
42. Savills, *Polarisation in the European office sector*, juillet 2024.

## 2.3 Yield compression and liquidity premium

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Beyond leasing appeal, the benefit of environmental certification is also reflected in the yield required by the market. The capitalisation yield for certified assets is therefore lower than that for prime buildings, which can enable these assets to achieve higher valuations.

Over the 2015–2024 period, Savills<sup>42</sup> shows that in Europe there was a gap in expected yields between non-certified assets and those with BREEAM or LEED certification. We also observe that this yield premium increased over the period, rising from approximately 60 to 130 basis points.



The expectation of a lower capitalisation yield for certified assets can be explained by several factors :

- **Greater visibility on future capex.** An asset already following an energy or environmental performance improvement pathway requires lower future capital expenditure to meet regulatory requirements or market standards.
- **Lower exposure to obsolescence risk.** Certification, or more broadly the quality of the decarbonisation pathway, can strengthen a building's ability to maintain its market positioning against an increasingly high-performing new or refurbished supply.
- **More favourable liquidity.** Assets that are better positioned from an environmental perspective benefit from a broader universe of buyers and lenders, in a context where environmental performance is now widely integrated into investment and credit processes.

Environmental performance can therefore contribute, depending on the markets and assets concerned, to improving visibility on future capex and limiting certain obsolescence risks, thereby supporting additional valuation potential.

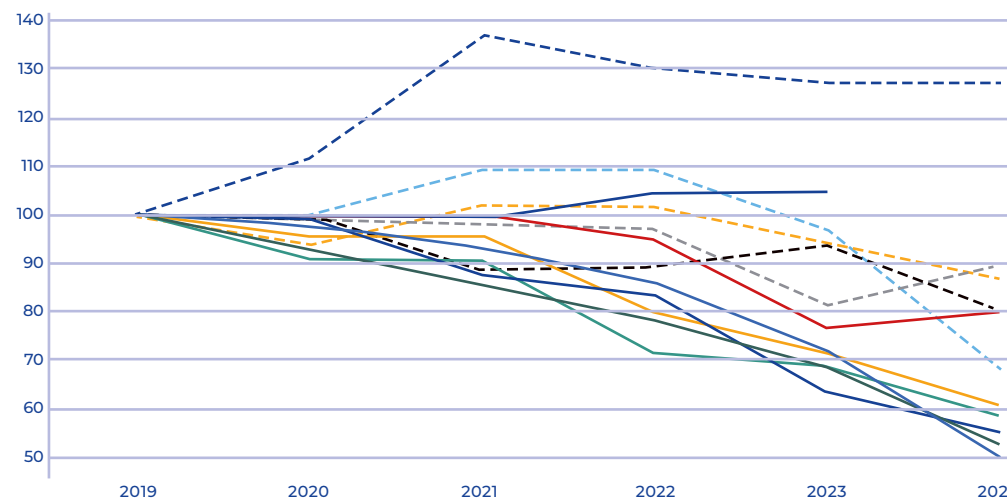
## 2. Decarbonisation and valuation: a growing factor of differentiation for real estate assets

Overall, in the case of a building benefiting from environmental certification(s), valuation can therefore be supported by a dual lever :

1. **An effect on income,** as the asset benefits from stronger leasing resilience and, generally, a higher level of rent thanks to the green premium.
2. **An effect on the capitalisation yield,** as the market requires a lower return for these assets, which are perceived as better prepared for future requirements.

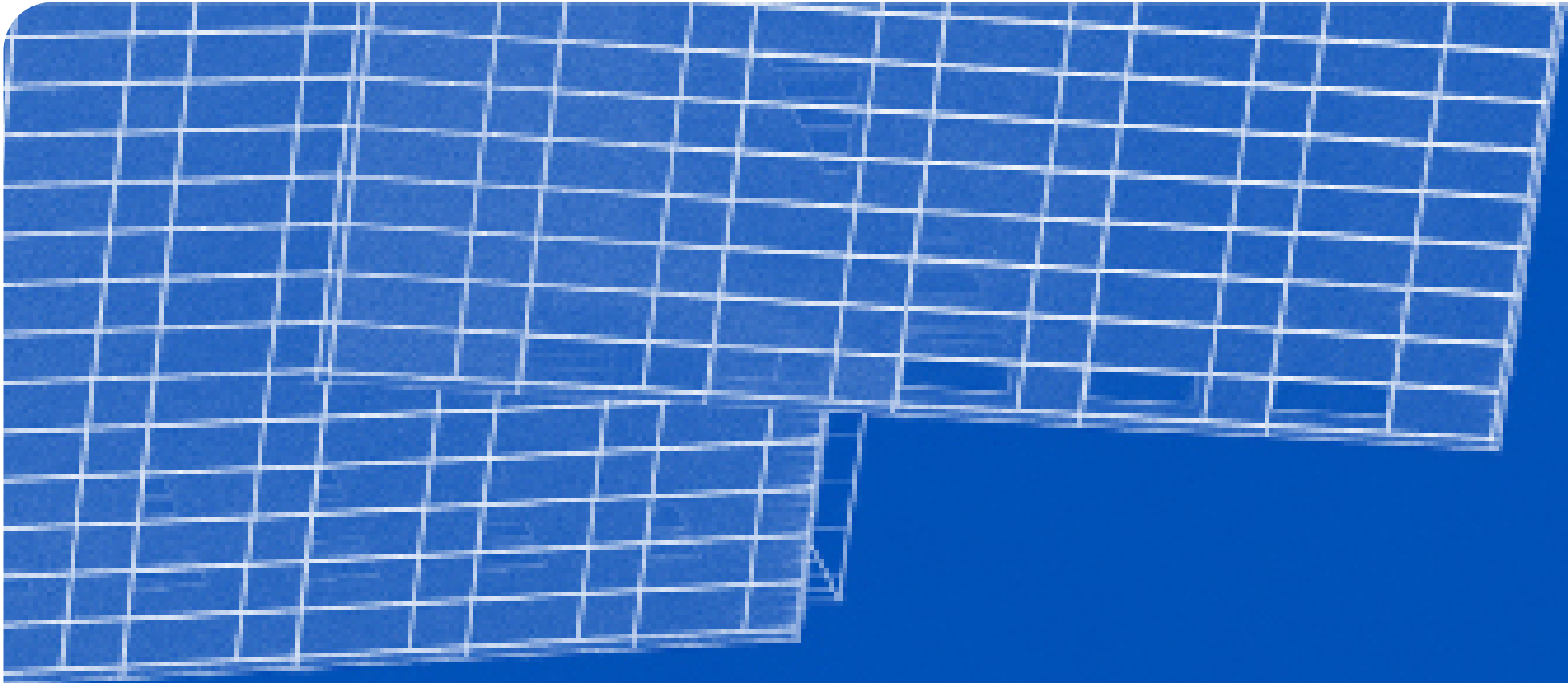
At LBP AM, we have thus observed a real difference in the evolution of values, in a context of rising interest rates, between assets **with identified capex requirements** and assets **without identified capex requirements**.

Influence of capex on building values <sup>43</sup>



Solid line: change in valuations for office assets **without capex**  
Dotted line: change in valuations for office assets **with capex**

43. LBP AM, based on transaction data representative of the office real estate market in France, the Netherlands, and Germany. Index = 100 in 2019.



**3.**

**Levers of action  
for real estate lenders**

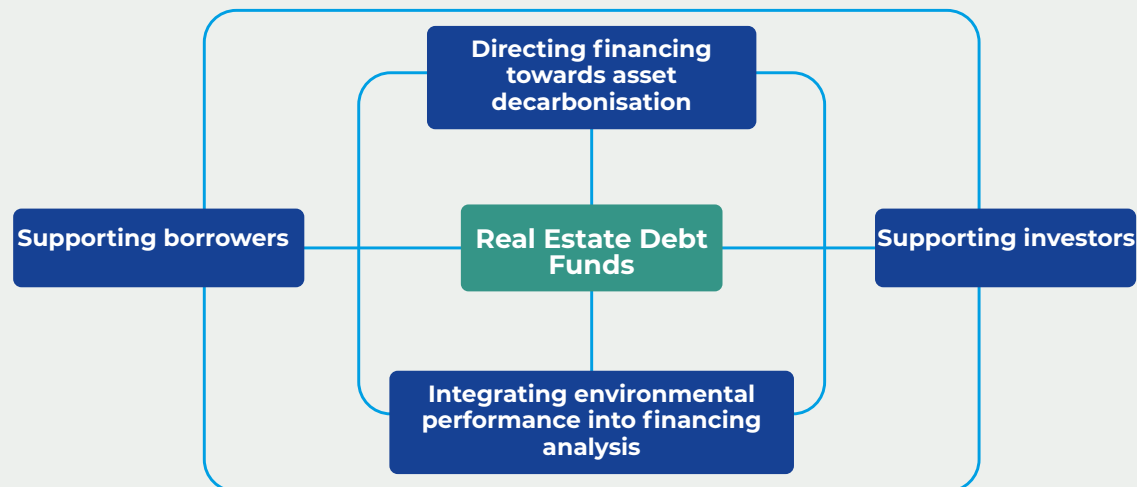
### 3. Levers of action for real estate lenders

18

The financial sector also plays a key role in this transformation by channelling capital flows towards lower-carbon real estate projects. This mobilisation comes against a backdrop of growing expectations from stakeholders. According to Ipsos' People and Climate Change 2025 report<sup>44</sup>, 74% of respondents across 32 countries say they are concerned about the impacts of climate change in their country. At the same time, recent publications by the SBTi show that companies with validated targets or commitments to set climate pathways now account for more than 40% of global market capitalisation.

**Lenders, whether banks or debt funds, can play a decisive role by structuring their actions around four pillars :**

1. **Integrating environmental factors** into financing analysis;
2. **Directing financing** towards decarbonisation;
3. **Supporting and incentivising** borrowers in the transition of the existing stock;
4. **Structuring real estate debt investment vehicles** that meet institutional investors' sustainability requirements.



44. [People&ClimateChange2025.pdf](#)

45. [Redefining Resilience: 40% of Global Market Cap Now Aligned with SBTi Standards](#)

### 3. Levers of action for real estate lenders

#### 3.1 Integrating energy and carbon performance into credit decisions

Since the early 2000s, certain sustainability criteria have been assessed by lenders through the analysis of real estate risk, as they make it easier to secure tenants and help maintain a degree of asset value in the event of borrower default: location, services offered within the building and environmental certifications are incorporated into credit risk rating methodologies.

**In recent years, the market has moved a step further**, with the introduction of exclusion criteria for certain highly exposed assets, particularly where their energy performance is insufficient and no corrective capex is planned, as well as with the widespread adoption of dedicated analytical frameworks among most lenders. At the end of 2023, the French real estate finance industry association IFPIImm<sup>46</sup> proposed a grid for identifying the key information required for the ESG analysis of a transaction, with the aim of familiarising borrowers with lenders' information needs. The value of this type of tool lies in improving the comparability of information requested from borrowers and structuring dialogue between stakeholders.

This growing importance of environmental criteria is also reflected in the priorities expressed by market participants. According to OID's 2025 Responsible Real Estate Barometer<sup>47</sup>, carbon has become the top priority for finance providers, ahead of overall energy performance. This reflects the view that the energy performance and decarbonisation trajectory of assets are no longer solely a reporting matter, but require a more detailed analysis of transition risk.

As a result, investors' ESG analysis has evolved to assess the underlying economic and environmental performance of an asset. At LBP AM, a granular approach is now applied to :

- **Technical building management** : control systems, sub-metering, LED lighting ;
- **The thermal envelope** : quality of insulation, glazing, centralised regulation ;
- **The energy mix** : presence of on-site renewable energy or connection to district heating or cooling networks ;
- **The capex trajectory** : detailed analysis of planned investments to keep the asset aligned with decarbonisation pathways.

In order to ensure a minimum level of sustainability performance and avoid significant negative impacts, the structure of this assessment now includes minimum performance thresholds. **An increased weighting of criteria linked to the energy transition** makes it possible to better distinguish resilient assets from those that remain more exposed to climate, regulatory or technical risks.

Reference tools can usefully complement this analysis. The **CRREM — Carbon Risk Real Estate Monitor**<sup>48</sup> is now one of the main market frameworks for assessing the climate alignment of a real estate asset or portfolio. It makes it possible to position a building's carbon trajectory against sectoral decarbonisation objectives and thereby enhance the understanding of transition risk.

46. [Accueil - IFPIImm](#)

47. [8311\\_BIR\\_2025\\_VDEF.pdf](#)

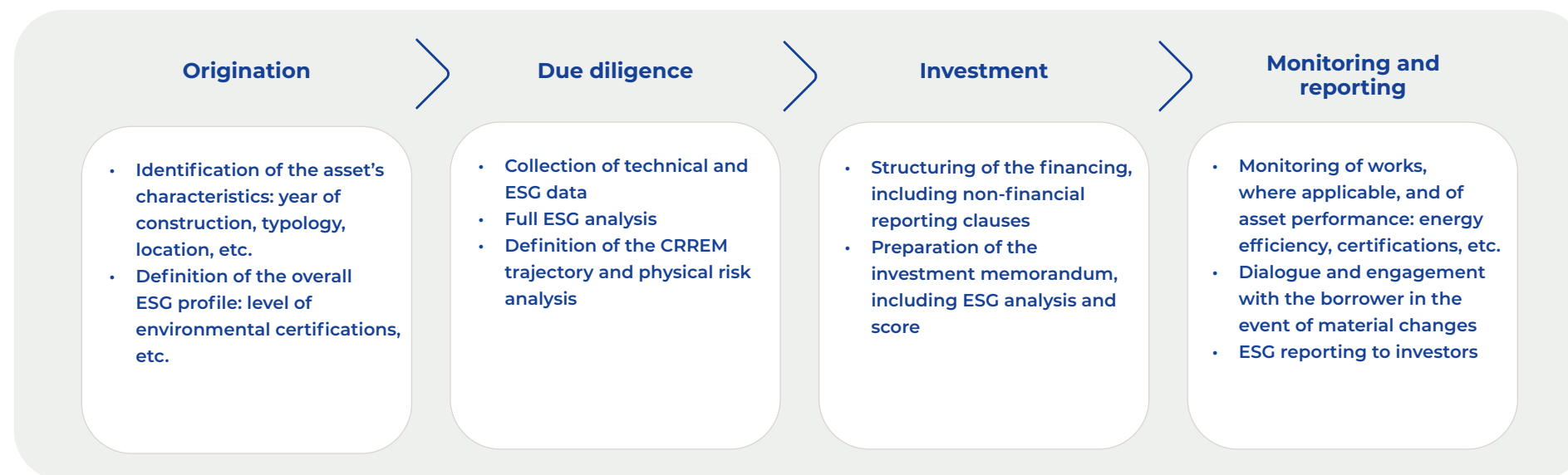
48. [Carbon Risk Real Estate Monitor – CRREM Project](#)

Alongside CRREM, physical risk analysis also deserves to be integrated more systematically. The Bat-ADAPT tool<sup>49</sup> provides a climate risk diagnosis at building level, based on an address and simple technical characteristics, with projections for 2030, 2050, 2070 and 2090. It can therefore serve as an initial entry point for assessing the sensitivity and vulnerability of an asset in Europe, although it does not replace a full technical assessment.

By way of illustration, thermal and energy renovation works — by improving the insulation of the envelope, solar protection, ventilation or the use of passive cooling solutions — can not only reduce energy consumption and associated emissions, but also increase buildings' resilience to rising average temperatures and more frequent heatwaves, by limiting overheating phenomena and the risk of loss of use.

Ultimately, the challenge for finance providers is not to accumulate criteria, but to build a sufficiently differentiated and selective analytical framework to distinguish assets engaged in a credible pathway from those that remain more exposed to climate, regulatory or technical risks, and to ensure that these factors are taken into account throughout the investment structuring and monitoring process.

Overall, the integration of energy and carbon performance, as well as broader non-financial considerations relating to ESG issues, into the analysis, decision-making and monitoring process for a real estate debt investment may take the following form :

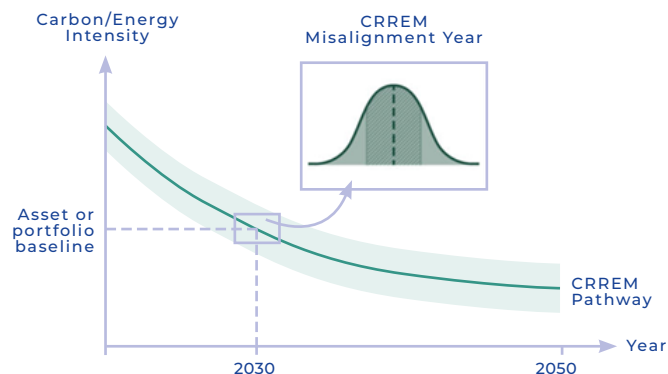


49. [Bat-ADAPT : une cartographie des risques liés au changement climatique | Plan Bâtiment Durable](#)

## Focus CRREM

CRREM is now a market reference for monitoring and managing the decarbonisation of real estate assets. It provides emissions reduction and energy intensity pathways compatible with +1.5°C and +2°C warming scenarios, covering 44 countries and a broad range of real estate typologies, including offices, residential, retail, healthcare and logistics.

It enables investors and asset managers to identify climate misalignment risks where an asset exceeds its allocated carbon budget according to CRREM pathways, to plan targeted renovations and to integrate these issues into their allocation or financing strategy.



Source : CRREM

## 3. Levers of action for real estate lenders

21

### 3.2 Energy renovation and development of low-carbon projects

Beyond the ESG analysis of a building, the choice of the financed transaction is equally decisive. Should financing be provided for an older asset, whether occupied or not, with no identified works despite the fact that they may be necessary ? Should preference be given to financing a new building that already meets high standards ? Or to an older asset accompanied by a credible energy renovation programme ?

accompanied by a credible energy renovation programme?

The renovation of the existing stock appears to be the priority lever in a strategy aimed at supporting the sector's decarbonisation. Europe's building stock remains predominantly old and energy-intensive: 85% of buildings in EU countries were built before 2000, 75% have poor energy performance, and the annual renovation rate stands at around 1%.

In this context, **financing works to improve the energy performance of existing assets is the most direct and effective way to support the transformation of the sector.**

#### Examples of energy performance improvement measures <sup>51</sup>



The refinancing of new or already high-performing, "best-in-class" buildings can also help consolidate existing trajectories, by reassuring initial equity investors as to the ability of these assets to be refinanced under favourable conditions.

The main challenge is therefore to ensure that financing flows intended to improve the performance of the existing stock cover the necessary capex or provide refinancing for newly restructured assets.

51. <https://architecteo.com/travaux-renovation-energetique.html>

### 3.3 Supporting borrower-owners

Lenders can support borrower-owners in defining their real estate renovation project. They can also provide financial incentives to encourage them in this process.

**At real estate project level,** finance providers can help clarify the ESG objectives of the transaction, particularly carbon-related objectives, raise borrowers' awareness of regulatory requirements, prioritise works and direct them towards relevant expertise in renovation, energy or consumption management. Their role is not to replace the borrower or project sponsor, but to improve the clarity and credibility of the proposed trajectory, and potentially to put borrowers in contact with experts in energy transition, sustainable renovation or consumption management.

**At financing level,** a loan that follows the *Green Loan Principles*<sup>52</sup> or takes the form of a *sustainability-linked loan* can be a useful lever for real estate borrowers, enabling them to demonstrate their commitment to decarbonisation. Green loan financing ensures **the allocation of proceeds to projects with high environmental performance**. A sustainability-linked loan structure, meanwhile, supports the renovation pathway of an asset, notably through the implementation of a **carbon-linked margin grid**, enabling the borrower to benefit from a lower margin if it meets emissions reduction targets. Conversely, a significant deviation from the targets or a lack of commitment to the project may result in a margin increase. This incentive mechanism strengthens the alignment between environmental performance and financial performance.

Where an energy renovation programme is planned, **monitoring its execution is essential**. For a lender, this means ensuring that capital is directed towards a works programme without any dilution of the energy performance improvement requirements set out in the initial programme, or any delay in the timetable. This monitoring may be carried out directly by the lender or with **the support of an external project management adviser** acting alongside it.

52. <https://www.lsta.org/content/green-loan-principles/>



#### 3.4 Supporting investors

In this context, **real estate debt funds dedicated to decarbonisation represent a strategic opportunity for investors** seeking to combine financial performance — yield and preservation of asset value — with a contribution to the transition towards carbon neutrality.

These vehicles, underpinned by alignment with demanding and recognised frameworks such as CRREM pathways or the European Taxonomy, make it possible to finance real estate assets engaged in greenhouse gas emissions reduction pathways through ambitious energy renovations, or assets that are already highly efficient and resilient.

The role of the real estate debt fund manager is notably to support investors in understanding the investment thesis and eligibility criteria, to provide transparency on the ESG methodologies used and to monitor the results achieved. For an institutional investor, the credibility of such a vehicle rests on a few clear elements: an explicit investment approach, clear selection criteria, indicators monitored over time and sufficiently detailed reporting to document the use of funds and the pathway pursued.

#### Two non-exclusive approaches can currently be considered :

1. **Funds classified as Article 9 under SFDR.** Under the current regulatory framework, these funds pursue an explicit sustainable investment objective. In a decarbonisation thesis, this means, in practice, demonstrating the consistency of the portfolio with an emissions reduction pathway, based on frameworks and criteria defined *ex ante*<sup>53</sup>.
2. **Impact funds.** These go further by seeking a **measurable and additional improvement in the environmental performance** of the assets financed. This requires objectives to be defined *ex ante*, measurement tools to be put in place and transparent, verifiable reporting of the results achieved. In other words, the impact logic does not rest solely on selecting assets that are already virtuous, but on the vehicle's ability to demonstrate an effective and measurable transformation. This approach is consistent with the GIIN<sup>54</sup> definition of impact investing, based on the intention to generate a positive, measurable impact alongside a financial return.

These approaches tend to converge, and it is now possible to structure **real estate debt funds that are both classified as Article 9 and/or designed with an impact objective**, combining regulatory rigour with transformative ambition. Finance providers can therefore offer investors robust, traceable solutions aligned with their climate commitments.

The “impact” nature of a fund nevertheless implies that all transactions must meet the fund's impact criteria and that the fund should finance only assets undergoing restructuring, rather than assets that are already aligned.

53. However, caution is warranted regarding the future evolution of this category. In November 2025, the European Commission proposed a revision of the SFDR; therefore, any potential future reclassification should, at this stage, be considered as still under discussion.

54. Voir : [INVESTISSEMENT À IMPACT - UNE DÉFINITION EXIGEANTE POUR LE COTÉ ET LE NON- COTÉ](#)

### 3. Levers of action for real estate lenders

#### 3.5 Opportunities for real estate debt investors

The benefits for investors of participating in the decarbonisation of the building stock, notably by financing renovation works, are multifaceted.

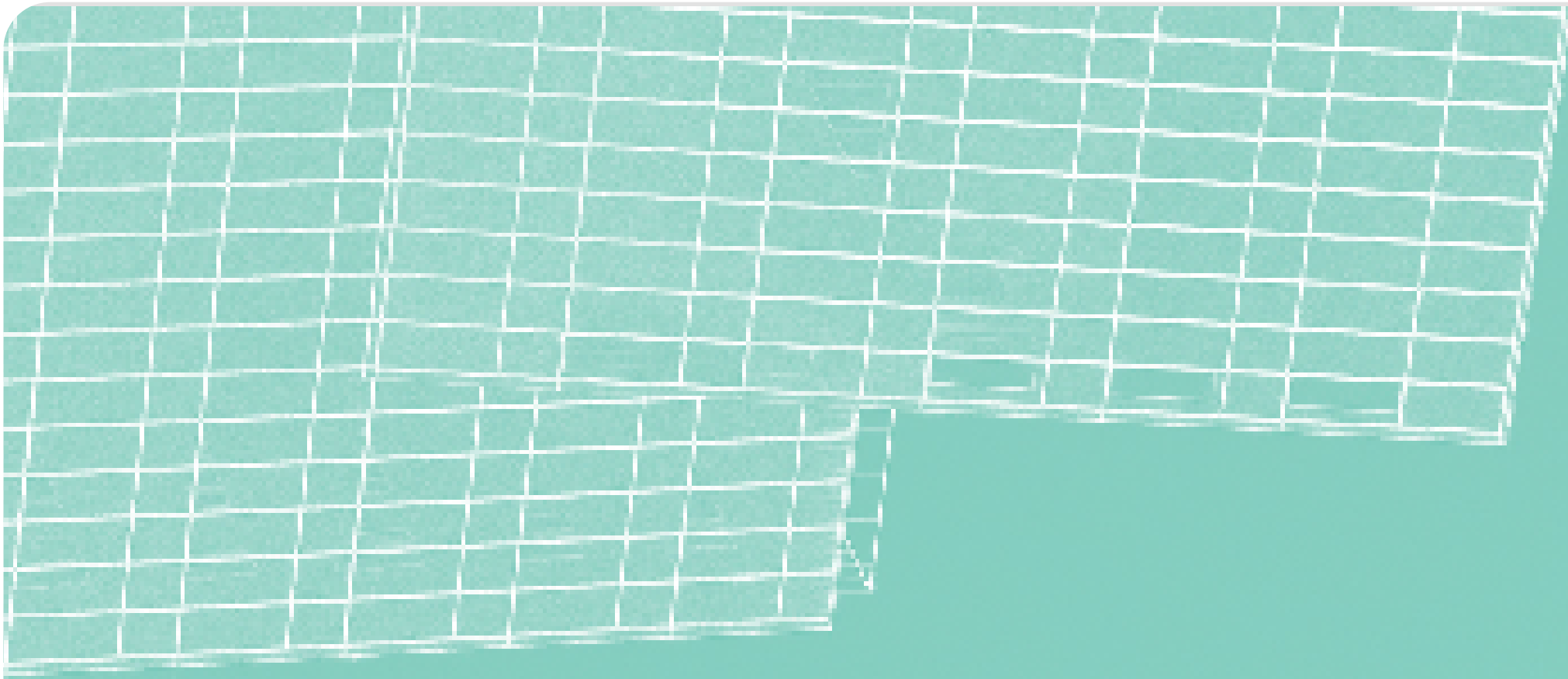
More generally, financing the decarbonisation of the real estate sector represents a **tangible strategic positioning opportunity** for investors seeking to assert their role as stakeholders committed to reducing the sector's greenhouse gas emissions. By directing capital towards aligned real estate assets, or assets with greenhouse gas emissions reduction pathways, they can position themselves as **participants in the environmental transition**, capable of anticipating structural market developments and meeting stakeholder expectations in relation to climate responsibility.

This strengthens their credibility with stakeholders — regulators, partners and clients — while actively contributing to the transformation of the existing building stock. Adopting such an approach also makes it possible to demonstrate a **long-term vision**, based on responsibility, innovation and the creation of sustainable value

**Long-term financial value creation** is another key consideration for investors seeking diversified sources of return. By financing renovation works, the risk profile is improved from a creditor's perspective :

- **A reduction in physical risk.** Although the building cannot reduce the climate hazard or pressure itself, which are external to it, it can reduce both its vulnerability and its exposure to damage.
- **A reduction in the risk of asset value erosion.** An environmentally efficient building may be more attractive from a leasing perspective, with an impact on the occupancy rate and/or the level of net rent, while the value creation generated by the works will serve as a buffer in the event of unfavourable interest-rate movements.

Beyond the tools deployed, one final factor underpins the credibility of the overall approach: **the expertise of the management teams**. Beyond the strength of the shareholder base, the quality of the teams that analyse, structure and monitor investments is a differentiating factor for LBP AM. Diverse experience, **ESG expertise** applied to real estate, and **continuous training** on climate and regulatory issues are essential conditions for implementing a coherent carbon strategy over time.



**Conclusion**

At European level, market experience suggests that decarbonised buildings are more resilient, particularly in a market environment affected by rising interest rates and slower growth. For an investor, investing in a real estate debt fund that finances decarbonisation works offers a dual benefit. On the one hand, the loans granted benefit from **enhanced remuneration**, linked to the fact that the financed building may be vacant during the works. On the other, they involve **lower risk** on the underlying asset, due to stronger leasing appeal, better valuation and therefore greater liquidity.

Moreover, the decarbonisation of the European real estate sector represents a major challenge, but also a strategic opportunity to accelerate the continent's ecological transition. Against a backdrop of an **old, energy-intensive and heterogeneous building stock**, the European Union has set ambitious objectives, supported by a structuring regulatory framework and significant financial levers. The revision of the EPBD, the extension of the ETS, the regulation of construction materials and the sustainable finance architecture are all tools being mobilised to drive a far-reaching transformation of the sector.

Debt funds and, through them, the investors that support them, have several levers at their disposal to support this transformation: strengthening non-financial analysis, directing financing towards decarbonisation transactions, structuring appropriate support mechanisms and offering investors strategies that are clearer and better documented.

The success of this transition nevertheless depends on collective mobilisation: public authorities, local authorities, construction-sector stakeholders, investors and users. The objective is not only to reduce emissions, but also to reshape usage patterns, business models and, more broadly, the quality of the building stock over the long term.

In this respect, building decarbonisation is more than a climate imperative: it is a lever for resilience.

### Scientific and institutional references :

- **EPBD Directive 2024/1275** : EUR-Lex
- **GlobalABC 2024 Report** — **UNEP** : 2022 Global Status Report for Buildings and Construction | UNEP - UN Environment Programme
- **Low Carbon Building Initiative (LCBI)** : LCBI Report
- **ADEME – Key Climate Figures 2024** : SDES
- **EY – European Taxonomy 2024w** : EY Insights



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