

Report of the C-ESG Risk Roundtable Collateral Workstream

**January
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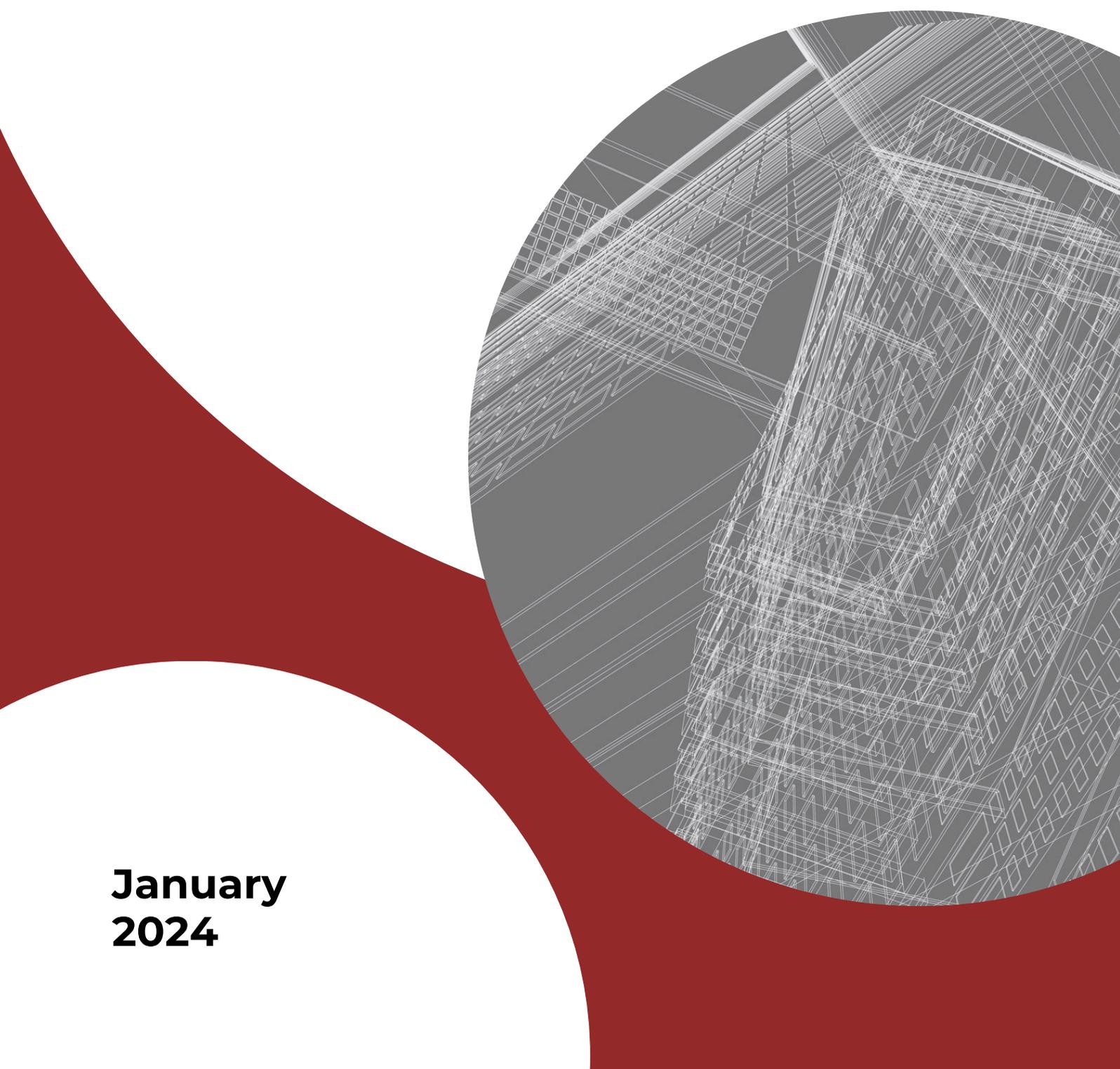


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Introduction

Sustainable finance has become a key priority for European banks. As billions of Euros are required to be directed towards reaching the European Union (EU) sustainability goals, European banks will play a crucial role in the transition. Management of financial risks will be a key element in the transformation of the EU economy to reach net zero targets.

Banks as well as supervisors recognize that environmental factors could be a source of financial risk, thus it is essential to step up efforts to ensure that such risks are properly identified, understood, measured, managed, and supervised. To achieve this, banks are in the process of revisiting their internal systems, models, and processes, particularly those related to data collection, risk management and credit approval processes. As the risk profile of banks' portfolios are reflective of those of their clients, to mitigate the risk, banks are also rapidly deepening engagement with clients to understand their transition plans and assist them in the necessary business transformation. However, while banks are making tangible progress, they are facing numerous operational and implementation challenges, many of which neither originate, nor are inherent in the banking industry. While some will need to be addressed at the level of individual organisations, others will benefit from collaborative approaches and collective solutions and discussions among banks, regulators and supervisors.

To further strengthen the dialogue within the banking sector and to facilitate the discussion with the European Central Bank (ECB), a high level Environmental, Social, and Governance Risk Roundtable (C-ESG Risk RT) was set up by the European Banking Federation under the existing CEO Roundtable (CEO

RT), with the participation of 13 European banks, and the EBF and the ECB as observers. The C-ESG RT is focusing on climate risks with the objective to discuss current practices, identify gaps and promote pragmatic and practical approaches, including interim solutions, that will be shared with the entire banking industry to support and facilitate their implementation efforts and enhance harmonization where relevant and possible.

In its inaugurating meeting in February 2023, the C-ESG Risk RT identified four initial areas to work on in the following workstreams:

- Data Workstream
- Scenario analysis – ICAAP – Risk materiality Workstream
- Physical Risk Workstream
- Collateral Workstream

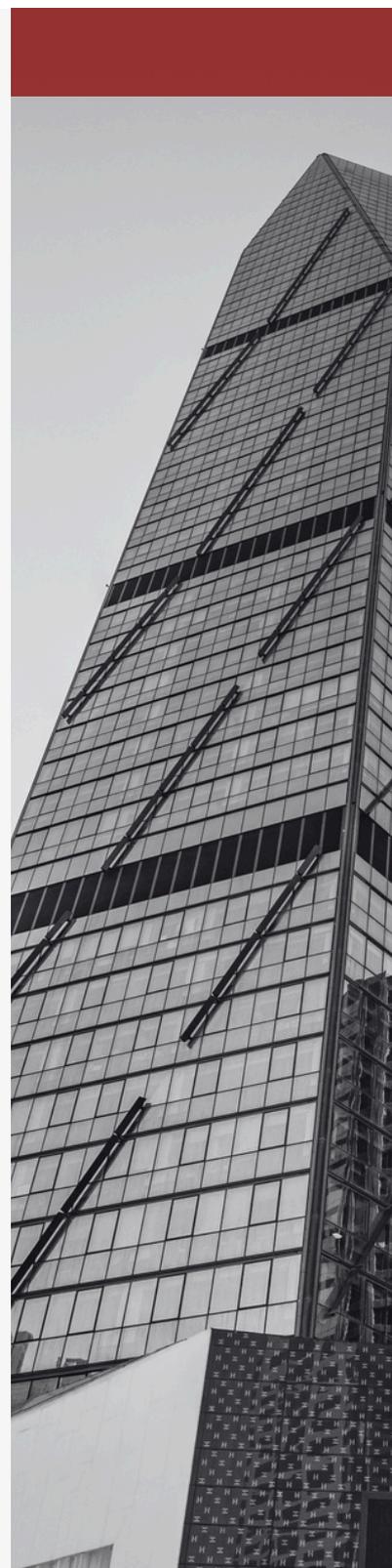
The results of the Workstreams' (WS) deliberations will be presented publicly via a series of EBF webinars and will be available on the EBF website in the format of four thematic papers published between Q4 2023 and Q1 2024.

The views in these papers reflect the discussions of the WS members (contributors) and any suggestions in these publications will be of a voluntary nature. The sole purpose of the initiative is to identify existing gaps and approaches shared by the WS members and share such experience and knowledge to increase the level of collective awareness and deepen future dialogues on these topics that are expected to further evolve over time. Individual institutions are free to consider the relevance of a particular approach for potential implementation within their own organization.

OBJECTIVE AND SCOPE OF THIS REPORT

This report is the result of the collaborative work of the Collateral WS members, facilitated by Santander in its role as chair of the WS. The scope of the work in this phase of the collaboration was to identify common practices in collateral valuation, key sources of challenges in the regulatory and supervisory landscape, the different valuation standards and the gaps identified in their applicability, as well as the role of the different stakeholders in the integration of ESG risks in the valuation process (appraisers, insurance companies, etc.).

The Collateral Workstream (CWS) participants also sought to identify the main barriers encountered by banks in the collateral valuation process and to propose certain initiatives to improve valuation methodologies, data accuracy and a consistent approach to collateral valuation.





Methodological approach

The CWS work was initiated in April 2023. A total of 11 participating banks agreed to participate in the CWS with the objective of identifying the key challenges and feasible solutions in relation to collateral valuation to ensure that ESG risks (particularly climate-related risks as explained below) are incorporated in collateral valuation. The initial phase of the CWS work focused on collecting experience and perspectives from WS members in order to identify the scope of the CWS work by means of two questionnaires:

- The **first questionnaire** sought information on the types of collateral and ESG risks that are critical for banks in their collateral valuations, as well as the main methodologies and pieces of regulation or standards that play a role in the valuation of collateral.
- The **second questionnaire** was designed to confirm the scope of the CWS's work and to provide specific lines of work and suggestions on the gaps identified in the collateral valuation process.

Scope of the analysis

As a result of both surveys and follow up interactions, the CWS members agreed to focus this report on Real Estate (RE) collateral (both commercial and residential) and the integration of climate-related risks into its valuation. The balance sheets' composition of the banks surveyed, the evolving regulatory landscape, the supervisory scrutiny and the momentum of the climate agenda in different jurisdictions, were key considerations in determining the scope of this report.

Also, physical risk considerations are not in the scope of this report since physical risk will be addressed in the report of the Physical Risk WS, which is expected to be issued later in 2024 and should be read in conjunction with this report. In reference to climate risk, this report is therefore focusing on analysing how transition risks are incorporated into RE collateral valuations including the main barriers identified in practice.

Collateral is the most common type of credit risk mitigator for the banking industry. As stated by the ECB in its expectations[1], institutions should consider climate-related and environmental risks at all relevant stages of the credit-granting process and monitor these risks in their portfolios. When granting a loan, among a wide spectrum of considerations throughout the clients' creditworthiness assessment, financial institutions need to have available and take into account the collateral provided by clients (secured lending). Since ESG risks are considered drivers to the traditional financial risks, any form of credit risk mitigation might also need to consider these factors in its valuation. Among the three aspects of Sustainability (Environmental, Social, and Governance) the environmental

issues and particularly climate change considerations are identified as a priority by CWS members.

Considering the climate focus, the relevance of real estate collaterals within the banks' balance sheets, and the ECB expectation to give particular consideration to the physical locations and the energy efficiency of commercial and residential real estate, this report aims to:

-  **Provide an overview on how real estate collateral valuations are potentially affected by climate-related risks and;**
-  **Identify gaps or shortcomings to be addressed, as well as the levers to pull to incorporate climate considerations into the collateral valuation process in a more homogeneous and consistent manner.**

Key conclusion

As an overall conclusion of the CWS discussion, it can be stated that, although clear progress has been made towards the inclusion of climate considerations in institutions' business strategy, governance, risk management and collateral valuation, there is still room for improvement from a methodological development and pragmatic perspective to ensure a common and consistent approach.

A homogeneous framework, together with increased transparency in the value chain of the collateral valuation process are the most critical aspects to improve a consistent integration of climate-related risks in collateral valuation.



Analysis of Real Estate (RE) collaterals

Challenges in the regulatory and supervisory landscape:

The objective of this section is to provide an overview of:

- How the regulatory and supervisory framework shapes the way climate-related risks are incorporated in the RE collateral valuation; and
- Sources of uncertainty within the regulatory framework that hinder the valuation of RE collaterals.

With the ambition of incorporating climate-related risks in every form of traditional financial risks, when it comes to collateral, two specific ‘Guidances’ are of particular relevance for EU Banks:

- the EBA Guidelines on Loan Origination and Monitoring, published in May 2020,
- and the ECB Guide on Climate-related and Environmental Risks, released in November 2020.

The EBA Guidelines on Loan Origination and Monitoring introduce environmentally sustainable lending dimensions and set requirements for institutions ‘to consider ESG factors, environmentally sustainable lending and associated risks in their credit policies and procedures’. This includes the fact that, “when applicable, institutions should also consider ESG factors affecting the value of the collateral, for example the energy efficiency of buildings”. Those valuations, in any case, have to be in accordance with applicable international, European and national standards.

In parallel to the EBA Guidelines on Loan Origination & Monitoring, the ECB Guide on Climate-related and Environmental Risks also expects institutions to consider C&E risks in collateral valuations. Both, physical and transitions risks could potentially impact credit risks through different avenues. For instance, the potential materialisation of physical risks (such as an increased flood risk) could lower collateral valuations in real estate portfolios. When it comes to transition risks, higher mitigation costs triggered by the ambition of improving energy efficiency standards, could potentially jeopardise debtors' financial strength, eventually leading to higher Probability of Default (PD)s as well as lower collateral values.

The high-level character of the guidance on the incorporation of climate-related risks in collaterals' valuation, both by the ECB Guide on Climate-related and Environmental Risks and in the EBA Loan Origination and Monitoring Guidelines do not provide for the incorporation of climate considerations into collateral valuation in a homogeneous manner.

In the assessment of the regulatory landscape in relation to RE collateral, the Energy Performance of Building Directive (EPBD) also needs to be considered - in particular the existence of divergent levels of Energy Performance Certificate (EPC) classes due to the incorporation of countries' specificities. Since EPCs are developed by the EPBD, which leaves certain discretion to Member States, EPCs will continue to lack consistency across Europe. Although it would be partly mitigated once the revised EPBD is transposed into national law.

Although the revised EPBD is currently being discussed, with ambitious goals for residential and non-residential buildings to become more energy efficient and for EPCs to become more

stringent and comparable among geographies, some uncertainties will remain in its practical application.

In particular, regarding EPCs, which are the main tool for measuring and incorporating transition risk in collateral valuation, there is a:

- lack of common estimation methodologies for energy efficiency;
- lack of local rules making the EPCs compulsory in the valuation report;
- lack of widespread availability of EPCs across the housing stock and
- lack of clarity on the final efficiency targets to be achieved (based on the EPBD still under discussion)

All of the above hinder the financial institutions' capacity to measure transition risk in the short term.

Suggestions for regulatory enhancement

For a comprehensive and coherent incorporation of climate-related risks into the RE collateral valuations, several regulatory enhancements should be undertaken at different levels:

- **Further homogenization** of EPC criteria is necessary to make the resultant EPCs more comparable at EU-level (although this is one of the objectives of the new EPBD).
- In addition to the high-level guidance provided in the EBA Guideline on Loan Origination and Monitoring, specific considerations need to be defined to ensure a **common approach in collateral valuations standards** through European Valuation Standards widely used and adopted by local standard-setters, as further explained in this document.
- Regarding the role of appraisers, more **stringent requirements for appraisers to include EPC in the valuation report** could result in a widespread integration of climate-related risks within the appraisal process.

Aligned with this enhancement process of the regulatory landscape, it would be critical that the ECB's expectations evolve in parallel, adjusting its pace and aligning its approach with the current and foreseeable regulatory tools, reinforcing a framework fit for the purpose of including climate-related risks in banks' balance sheets.

Depending on the final drafting of regulations currently under discussion the uncertainties identified could consequently evolve in the upcoming months.

Heterogeneity of valuation standards

Valuation methodologies facilitate financial institutions' measurement of the impact of climate-related risks on collaterals. Typically, such valuation is based on internationally recognized valuation standards.

According to the EBA Guidelines on Loan Origination and Monitoring, as well as the recent EBA Report on Environmental and Social Risks in the Prudential Framework (October 2023)[1], institutions should ensure that the property collateral is valued in accordance with applicable international, European and national standards. These standards all state that, as long as there is not yet full transparency regarding ESG characteristics, there would not be an impact on value, but as legislation, market sentiment and potentially taxation increasingly enforce minimum sustainability standards, some properties may lose value, while others may find value as a consequence of incorporating ESG considerations.

The CWS mapped the valuation standards mentioned specifically by the EBA in its Guidelines on Loan Origination and Monitoring and some challenges associated with their application as follows:

 **International Valuation Standards (IVS):** on ESG and Real Estate Valuation (2021): As the impact of ESG is at early stages, market data is limited. Currently, the obligation to consider ESG within the tangible asset valuation process is implicit in the IVS. When considering ESG in the valuation of real estate, according to the following excerpts, valuers may use the following approaches:

- **Cost Approach:** while the Cost Approach could be used for part of the valuation to calculate the retrofitting costs to make buildings more ESG compliant, since 'cost' does not always equal value, this approach cannot be considered as a main approach for quantifying ESG considerations for collateral valuation.
- **Sales Comparison Approach:** As there is not yet full transparency regarding ESG characteristics for buildings, it is very challenging to find comparable market transactions reflecting full ESG adoption.
- **Income approach:** Buildings with better ESG ratings may benefit from higher rents, lower vacancies, and shorter void periods between tenants. To the extent this occurs, this increases the price investors would pay to acquire such real estate.
- **Discounted Cash Flows:** Buildings with higher ESG ratings may be rented for higher rent and/or benefit from higher occupancy levels (higher demand for such rental real estates). For the moment, it could be assumed that the overall effect on non-recoverable operating costs is not material. The impact of ESG in less sustainable buildings may increase both capitalisation and discount rates, reflecting the higher risks and the lower forecasted investment appeal.



European Valuation Standards (EVS) state that a valuer can only provide an opinion on value based on evidence that reflects market experience. The main insights drawn from the excerpts of the EVS 6 include:

- A legal obligation to renovate a building to a higher level of energy efficiency by a fixed date or at a certain inflection point (e.g., rental, sale) creates an unavoidable major cost that impacts market value, as the owner at that date or inflection point will have to pay for renovation works.

Valuers must be aware of these legal deadlines and inflection points and, when they occur, must estimate the cost of a renovation deep enough to meet the required new level of energy efficiency or future requirements that are sufficiently close to coming into force and consider the extent to which these costs affect the market value at the date of valuation.

- There can be no general rule as to any typical pattern of premiums or discounts accounting for environmental issues. Even where such issues are significant in the marketplace, much will depend on factors such as the state of the market, transparency of information, location, sector, exposure to environmental risk in the region, and consumer awareness.
- As legislation, market sentiment and perhaps taxation increasingly enforce sustainability issues, the costs of compliance and improvement for many existing properties may adversely affect their values.
- Less compliant properties may need to incur greater costs of adaptation in "retrofitting" to meet rising standards when this may be required, whether by market expectations or by legislation developments, that may derive into a value discount, versus more compliant properties.
- Discounted Cash Flow (DCF) can be a way of taking into account and comparing differing profiles of operating and refurbishment costs.
- Factors to be considered in the valuation report include, among others (5.29 EVS): Contamination, risks of natural disasters, compliance with building standards, insulation, EPC, water efficiency, operating expenses, floor area in terms of usability, impact on users' productivity and well-being, likely cost of refurbishment, requirements of legislation, etc.

- Some properties threatened by the effects of climate change or unable to meet new standards may lose value, while others may find value as a consequence of incorporating ESG considerations.



The RICs (Royal Institution of Chartered Surveyors) Red Book states that only where existing market evidence would support this, should sustainability characteristics directly influence value reported. In its guidance note: “Sustainability and ESG in commercial property valuation and strategic advice” valuers are recommended to:

- Assess the extent to which the subject property currently meets the sustainability and ESG criteria typically expected within the context of its market standing, and arrive at an informed view on the likelihood of these impacting on value (e.g., how a well-informed purchaser would take account of them in making a decision as to offer price),
- Provide a description of the sustainability-related property characteristics and attributes that have been collected,
- Provide a statement of their opinion on the relationship between sustainability factors and the resultant valuation, including a comment on the current benefits/risks that are associated with these characteristics, or the lack of risks and
- Provide an opinion on the potential impact of these benefits and/or risks to relative property values over time.

Although the RICs provide detailed guidelines to evaluate an asset, only qualitative guidelines are included but no quantitative analysis to be incorporated in the appraisal process.

In its chapter 2.6, the Red Book details the main ESG matters that impact real estate value, including:

- Potential or actual constraints on the enjoyment and use of property caused by sustainability and ESG factors may be triggered by natural causes, non-natural causes (such as contamination) or sometimes from a combination of both or/and sustainability and ESG factors beyond directly physical causes, such as carbon emissions. The key question is always the extent to which the factors identified affect value. In appropriate cases, the valuer may recommend making further enquiries and/or obtaining further specialist or expert advice in respect of these matters.
- Only where existing market evidence to support this, or where in the valuer's judgment market participants expressly reflect such matters in their bids, sustainability characteristics would directly influence value(s) reported.
- Valuers are often asked to provide additional comments and strategic advice. In these cases, the valuer should, subject to their competence and expertise, consult with the client on the use and applicability of sustainability and ESG metrics and benchmarks that are applicable in each case. For example, when preparing valuations based on investment value or worth, sustainability and ESG factors that could influence investment decision-making may properly be incorporated, even though they are not directly evidenced through transactions.

Suggestions to improve consistency of valuation standards

Due to this fragmented landscape, the CWS members identified a need of defining homogeneous valuation methodologies at European level that could be reflected by national standards setters in the EU to allow all financial institutions to measure climate and environmental risks in a comparable way and to avoid market distortions due to different climate and environmental risk measurements among entities.

Additionally, since some European banks undertake financing activities collateralized by RE collaterals located outside of Europe, a certain level of interoperability among European and international valuation methodologies would ensure a comparable approach and a level playing field for international banks.

A common valuation methodology would set a starting point to incorporate climate-related risks into collateral valuation in a standardized manner. However, in those cases where the entity had enriched its valuation models with specific features to assure their suitability for the specificity of its businesses or portfolios, these specific enhancements would be admitted.

Incorporation of transition risks in RE collateral valuations

As already stated in the introduction, physical risk considerations are not in the scope of this report since physical risk will be addressed in the report of the Physical Risk WS expected to be issued later in 2024 and should be read in conjunction with this report.

The following section therefore focuses on incorporation of transition risks into RE collateral valuations, the main barriers identified in practice and suggestions for improvements:

 **Lack of EPC actual data:** financial institutions in some jurisdictions are not entitled to ask for Energy Performance Certificates (EPC) as a compulsory document for loan origination as financial institutions' clients are not obliged to provide EPC certificates. Such obligation exists only for the seller / tenor.

The lack of market transparency, as sellers do not always include the EPC in home sale advertisements, hinders appraisers from measuring the impact of energy efficiency on the RE collateral value.

Suggestions to improve the availability of EPC data

- Including EPCs as a compulsory document for valuation reports, as per local appraisal regulations in those countries where transparency on EPCs is not complete.
- When designing the database foreseen in the new EPBD draft, it would be necessary to include the immovable property unique ID, such as its validated cadastre ID, so that financial institutions can properly and periodically update EPC real data to be able to monitor their collaterals most updated EPCs. For transition risks assessment, the inclusion

of the recommended cost-effective improvement value as per the current Energy Performance of Buildings Directive (EPBD), Art. 11.2 into the collateral valuation could help with the lack of homogeneous criteria. This value estimation is regulated within the EPBD and it is performed by independent experts following an on-site visit. This value is preferred to be included in the valuation report, and the full real EPC report should be attached as a compulsory document for all valuation reports. This value could be considered in determining effects on LGD and expected credit losses.

➤ **Lack of quality assurance in the EPC databases:** While public databases do not exist in all Members States, where they do, they are often subject to errors. This issue is being addressed in the new EPBD[1] draft (article 19), which will take time before it enters into force (beyond 2025).

Suggestions to to increase reliability of data

The CWS members recommend that EPCs should be randomly audited and follow data quality measures before being included in public databases, to allow massive building identification to collect EPC data, such as a verified cadastral code.

➤ **Lack of homogeneity in EPC estimation among countries:** The lack of homogeneity is also being addressed in the new EPBD draft, however as above, it will also be implemented after 2025.

Suggestions to improve homogeneity

Random audits should be performed to assure that certifiers properly follow the methodology set for EPCs, both for efficiency and retrofitting cost estimation.

- **EPC at origination may be obsolete**, as many real estate owners retrofit the collaterals but do not update their EPCs. After transposition of the new EPBD, public databases will be accessible with more updated data, however this will also take time.

Additional suggestions to improve incorporation of transition risk into collateral valuations

Considering the identified challenges, as well as the fact that the implementation of the EPBD will take time, the following initiatives could enhance market transparency and facilitate a common approach in the incorporation of transition risks into collateral valuations:

- Retrofitting cost included in the EPC: including the cost-effective improvement of the energy performance included in the EPC (as stated on Directive 2010/31/UE, Art. 11.2) could mitigate a fragmented incorporation of transition risks into the collateral valuation.
- Compulsory energy refurbishment cost to comply with the EPBD: Define a matrix for energy retrofitting costs per sqm, asset type and climate zone, and EPC class improvement, when actual EPC costs are not available (defined ideally by Member States' Energy Ministries or Central Banks).
- Another approach to impact value may include discounting higher energy costs: according to this approach, the collateral value could be reduced as a consequence of discounting higher energy costs in the upcoming years as compared to an energy class A prototype, taking into account the NZBA 1.5° energy costs scenario. The extra

energy cost associated with the collateral energy inefficiency may impact the collateral valuation. However, this approach needs to estimate the elasticity of energy demand, which depends on the client's income and needs further assumptions, such as discount rates to be used (the EPBD draft suggests a maximum discount rate of 3% for cost-optimal levels of energy performance).

Role of the appraiser

In accordance with the EBA Guidelines on loan origination and monitoring and the Capital Requirements Regulation (article 208(3)(b)), the review of an immovable property collateral has to be carried out by a valuer who possesses the necessary qualifications, ability and experience to execute a valuation and who is independent from the credit decision process.

This task is typically performed by authorized appraisers on which financial institutions rely for the valuation process, although it is not necessarily a common practice in all markets.

Suggestions to harmonize the role of appraisers at EU level

The CWS members recommend that existing and upcoming requirements to incorporate climate & environmental drivers into collateral valuation are part of the appraisal process. The role of the appraisers and the applicable methodologies would benefit from a common approach and definition at a European level, although local specificity would continue nurturing the appraisal report.

The periodical updates of the valuation assessment should be consistent with the appraisal requirements, unless a study of the climate-related risks suggests it changes less frequently than other factors impacting the valuation. The result of the valuation process, and the impact of climate and environmental factors on it, should be made available to financial institutions at no additional cost.

Insurance of Climate and Environmental Risks and its role on credit risk mitigation

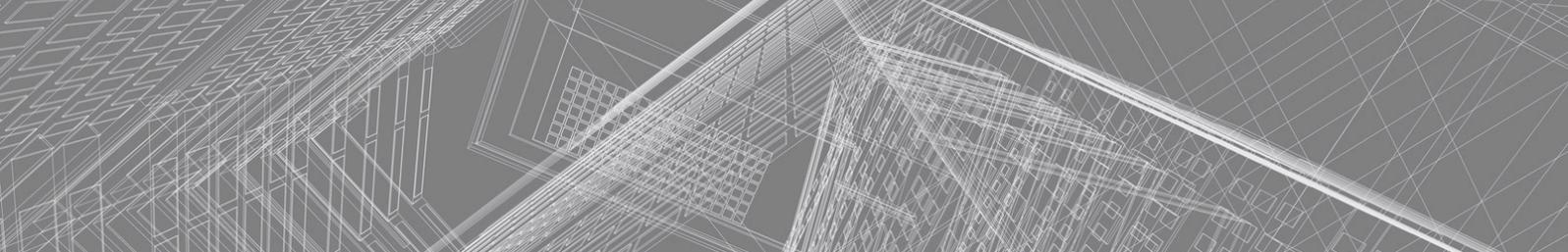
It was agreed that since the ECB best practices stated that “This assessment is used to integrate physical risks in the valuation of collateral for all new financing (unless sufficient insurance coverage is in place)”, greater clarity would be needed to understand in practice what ‘sufficient insurance coverage’ would mean.

Article 208(5) CRR requires institutions to hold adequate insurance against the risk of damage to the immovable property and have in place procedures to monitor the adequacy of the insurance. Financial institutions should therefore access the updated insurance status of their collateral from public databases. Otherwise, institutions may ask borrowers to provide up-to-date insurance documents on a regular basis and to ask insurance contracts to be assigned to the bank for all properties held as collateral to assure that in case of a hazard taking place, that the insurance is used in restoring the collateral optimal status.

According to ‘Expectation 7’ in the ECB guide on climate-related financial risks, institutions are expected to incorporate climate-related and environmental risks as drivers of existing risk categories into their risk management framework, with a view to managing, monitoring and mitigating these over a sufficiently long-term horizon, and to review their arrangements on a regular basis. Institutions are expected to identify and quantify these risks within their overall process of ensuring capital

adequacy. In line with this expectation, the insurance of climate-related risks as a mitigating factor would be a time-sensitive issue and it would therefore need to be clarified how the financial institution can ensure that this insurance is maintained on an ongoing basis.

Regarding the use of sufficient insurance coverage to mitigate physical risks, its analysis will be addressed in the specific WS devoted to Physical Risk.



Conclusions & Improvement Levers

Although definite progress has been made towards the inclusion of climate-related considerations into the RE collaterals valuation, there is still room for improvement from a methodological and pragmatical perspective as portrayed by the following considerations:

- **Need for a coherent and feasible regulatory framework.** Amendments to guaranteeing a comprehensive and coherent incorporation of climate-related risks into the RE collateral valuations, should be undertaken at different levels (EPCs homogeneous criteria; common approach in collateral valuations standards; and more stringent requirements for appraisers to include EPC in the valuation report).
- **The role of insurance in the collateral valuation process needs to be further clarified** in two ways: defining when sufficient insurance coverage is in place to mitigate climate-related risks, and developing tools to ensure that this sufficient mitigation is in place throughout the life of the collateralised exposure.
- **Further homogenization of EPC levels.** Although proposed measures in the EPBD provide a clearer definition of EPC levels, the current room for improvement in enhancing comparability among countries would be mitigated once the EBPD is transposed.

- **A minimum requirement standard with regard to the content of the valuation report needs to be set.** Including the EPC in the appraisal report is key to enhance the EPC availability across the EU.
- **Creating a European public source of providers of information to be used in the valuation process would be a valuable tool to achieve a coherent playing field.** For instance, the national office of French statistic is working on a study to identify the impact of the EPC on the price of the assets for the residential market). This kind of assessment could be taken as an example since it covers both the residential and the commercial real estate and it should produce some quantitative and reliable data. The more data is collected the more accurate the statistic will be. Hence, valuations based on this data should result in consistent and coherent outcomes).
- **Need of reinforcing control systems over the EPC providers** (audit of EPC providers) would ensure that their approach is consistent and compliant with common standards.
- **Need to have homogeneous public EPC databases with sufficient collateral identification [1]quality that allow periodic energy efficiency update of the whole collateral stock.**



Glossary

Climate-related risks: Climate-related risks are the financial risks posed by the exposure of institutions to counterparties that may potentially contribute to or be affected by climate change.

ESG factors: Environmental, social or governance matters that may have a positive or negative impact on the financial performance or solvency of an entity, sovereign or individual.

ESG risks: ESG risks are the risks of any negative financial impact on the institution stemming from the current or prospective impacts of ESG factors on its counterparties or invested assets.

Physical risks: The risks of any negative financial impact on the institution stemming from the current or prospective impacts of the physical effects of environmental factors on its counterparties or invested assets.

Risk drivers: Avenues through which ESG factors can lead to negative financial impacts.

Transition risks: The risks of any negative financial impact on the institution stemming from the current or prospective impacts of the transition to an environmentally sustainable economy on its counterparties or invested assets.