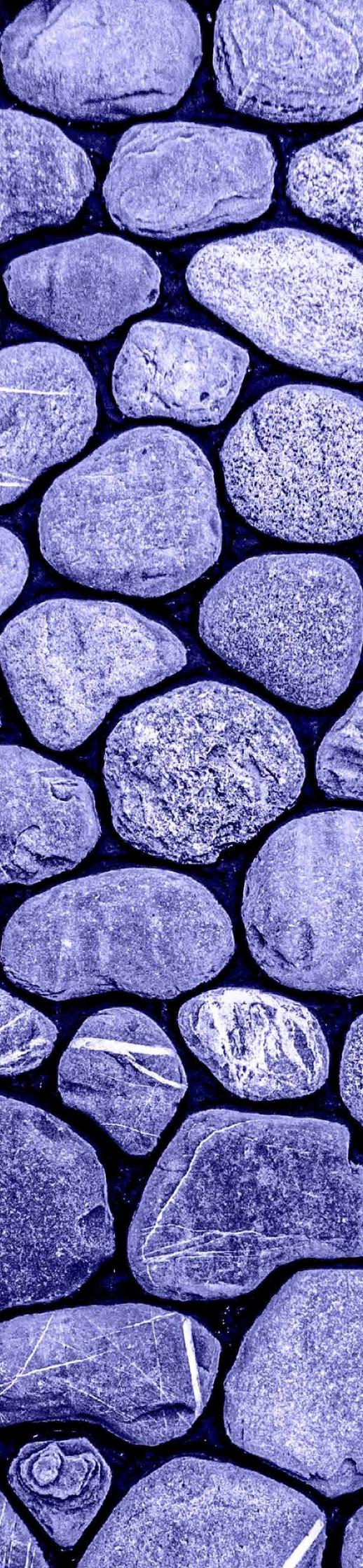


# ESG data list for real estate valuations

A practical reference document on legislative, market-driven and future ESG requirements for valuers and financial clients in the EU

February 2024



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A practical reference document on legislative, market-driven and future ESG requirements for valuers and financial clients in the EU

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# Supporters

The data list is supported by the following organisations and companies.





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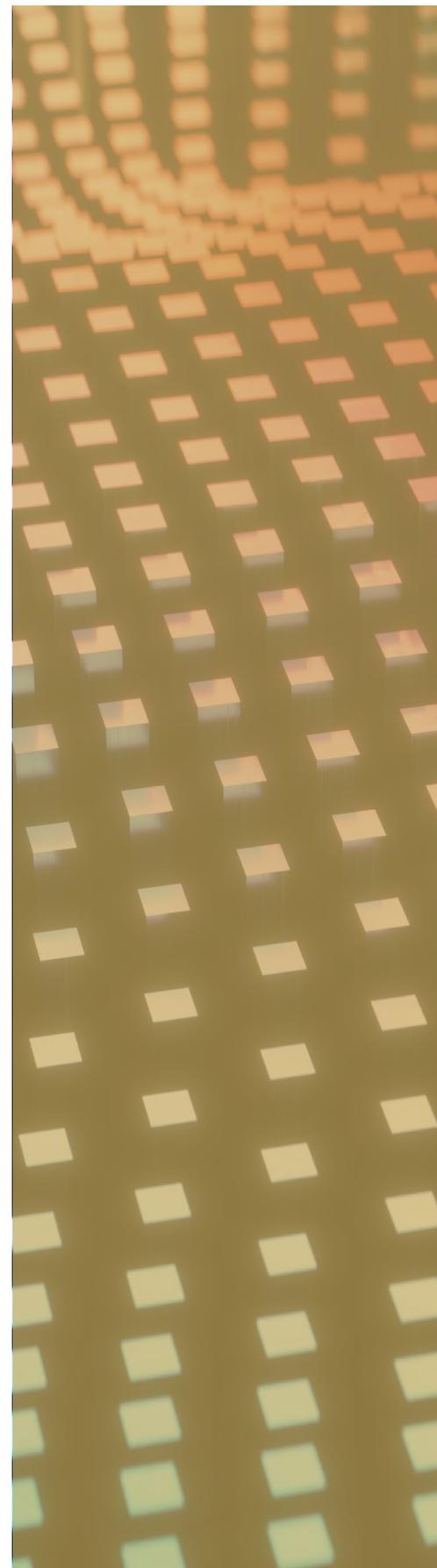


# Introduction

‘Close to 50% of respondents globally report a brown discount ... Almost three-fifths of Europe-based contributors report that buildings not classed as green or sustainable are subject to a discount in rents and prices. Around a third suggest the discount is likely to be up to 10%, while around a quarter suggests that it could be higher.’ (RICS World Built Environment Sustainability Report 2022)

‘A remarkable 77% of respondents believe the current valuations ‘do not accurately reflect all the challenges and opportunities impacting real estate, such as climate change, social impact and occupier demand fundamentals.’ (Emerging Trends in Real Estate Europe, 2024 – PWC & ULI)

Real estate valuations have come a long way in the last few decades, and so has the framework of standards and guidance within which valuation advice is provided. The valuation profession has made great advances; however, as the previous quotes acknowledge – and given the climatic and societal challenges the built environment sector has to address – we need to move from ‘believe’ and ‘suggest’ to data, facts, evidence and ultimately a market where ESG is an unequivocal part of valuations.





## The RICS Europe Leaders' Forum 'The future of real estate valuations: the impact of ESG'

On 12 October 2022, RICS established a Leaders' Forum consisting of the major European-wide valuation service providers, the financial industry (banks and investors) and like-minded relevant associations and organisations. The aim of the Leaders' Forum is to set the conditions for a consistent and transparent approach to embedding ESG requirements into valuations and the valuation process, supporting existing valuation outcomes, predominantly market value. This ESG and valuation data list is one of the outputs.

A full list of the Leaders' Forum members can be found in Appendix A. Following an open and transparent approach, we encourage any interested relevant organisation or company to join.

It is becoming increasingly clear that:

'corporate and investment requirements relating to sustainability; resilience; and environmental, social and governance (ESG) are some of the most important issues facing world financial markets. In a real estate context, these requirements influence investment approaches as they may affect prospects for rental and capital growth, and susceptibility to obsolescence.' (International Valuation Standards Council (IVSC) Perspectives Paper 'ESG and Real Estate Valuations' – October 2021)

This is why the Leaders' Forum specifically avoided 'proving' an ESG premium or discount in **value**. Instead, the focus is on raising awareness among valuers and financial clients, as well as increasing transparency and consistency. Ultimately this will increase data sharing and availability, which will allow valuers to better factor ESG requirements into their valuation reports. We are confident that, with the use of this data list, knowledge and awareness will increase and more evidence will emerge.

The companies and organisations that support this initiative have agreed in principle to proactively work on its uptake and dissemination, as well as providing feedback for future revisions. However, as this is an industry initiative, it is important to note this is a **voluntary** list, which can be used in its entirety or as guidance in relation to already existing lists on either the corporate or national level. No organisation or company is obliged to make use of this data list, unless this is by their own choice. The relevance of this data list will need to be proven through industry uptake, usability and feedback.



It is a journey with several evolving drivers, such as:

- future EU regulatory requirements or supervisory expectations
- reporting regulations for asset owners
- benchmarking and industry guidelines already in use by investors and banks, and
- the field of risk management, as what is measured also needs to be managed.

Due to these drivers and industry feedback, we envisage regular updates to the data list.

## Scope and content

This data list focuses on the real estate asset level, both existing assets and those under development or redevelopment. It consists of two sets of indicators.

- 1 A core **data list** containing ESG indicators we believe are important to cover in order to assess ESG performance. This data list is for valuers to present to their financial clients and encourage inclusion of the indicators in the terms of reference, valuation reports and ultimately in the market value. It takes into account the following:
  - The data list does not assume data availability, as this will differ per project and jurisdiction. Focus should be given to those indicators where the information is readily available and where it can reasonably be expected to have an impact on the valuation.
  - If data is not available, the required information is not shared with the valuer, or if a certain indicator is not relevant for the client or the property in question, this can be indicated in the valuation report following the **comply or explain** approach.
  - When used, including the data list indicators in valuation reports will follow the same valuation principles as current valuations, e.g. in relation to liability requirements and assumptions when data is not available or shared.
  - The indicators are there to be included into existing valuation practices and methods, such as to support the market value.
- 2 A **future potential indicator list** for ESG requirements that are likely become relevant in the near future. Valuers and financial clients should therefore be aware of and reflect on them.



The geographical scope of the data list is the EU. Where relevant, we make reference to EU regulatory requirements and supervisory expectations for each indicator. We encourage the uptake of this data list in other jurisdictions as appropriate.

It is recognised that not all markets are equally evolved, and ultimately it is up to the valuation service providers and their clients to determine how to best factor local market and regulatory requirements into the data list. However, to ensure market consistency and transparency when including ESG factors in valuations, using the data list as a reference point is strongly recommended.

This is not an RICS professional standard or practice information. This report and data list is for information purposes only. Its application is not mandatory or best practice for RICS members and regulated firms, and the detail is not prescribed. Professional judgement should always be applied regarding applicability and materiality when considering individual circumstances, including specific ESG considerations. Professional advice should be obtained before applying any information in this document to particular circumstances. No liability is accepted by RICS to users or any third parties in respect of the use of this data list.

Insight from the development of this report and data list will be used to inform future RICS standards development related to ESG.



# Indicators

Each indicator in the data list contains the following information.

- The ESG indicator name.
- The data to be captured and analysed.
- The unit of measurement and/or indicative performance measure. When using the data list, we recommend specifying which measurements and definitions you use. An important aspect here is the floor space (m<sup>2</sup>) used to determine certain indicators. The way floor space is measured can vary between, and sometimes even within, countries. If in need of cross-border comparison, we recommend making use of internationally recognised standards such as [International Property Measurement Standards \(IPMS\)](#).
- An explanatory note containing the following information:
  - A definition: where available the most recognised EU definition, or when unavailable a definition from a relevant international organisation. Where needed, a specification for which asset classes or developments an indicator is particularly relevant. EU regulatory requirements and supervisory expectations from, for example, European Banking Authority (EBA) and European Central Bank (ECB) are our starting point, as these are globally leading the ESG debate. Notable examples include the EU Taxonomy for Sustainable Activities, the Sustainable Finance Disclosure Regulation (SFDR), the Corporate Sustainability Reporting Directive (CSRD) and the Capital Requirements Regulation (CRR).
  - A recommendation of the data source and who should be responsible for delivering the data: the valuer, client, owner or a third-party expert.
  - A recommendation on the preferred **valuation approach** for each indicator:
    - a **Comparative** (also known as ‘market’) approach: this measures the value of an asset by comparing recent sales or offerings of similar or substitute property and related market data to the business being valued.
    - b **Income** approach: this is based on the income that an asset is likely to generate over its remaining useful life or a specified period. This estimation is determined by reference to both historical performance and forecasts.



- c **Cost** approach: this calculates the value of an asset by the cost to create or replace it with another similar one, on the premise that a purchaser would not pay more for an asset than the cost to obtain one of equal usefulness.
- A recommendation on the main **valuation driver** for each indicator:
- a **Cash flow drivers** influence the cash flow related to a property. Examples include tenant demand, rental income, operating costs, cap rates, property finance costs and property tax incentives. Properties with strong ESG credentials may benefit from lower operating costs, higher tenant retention rates and access to lower-cost financing, resulting in higher cash flows and increased market value.
  - b **Risk drivers** elevate the property's risk profile, and include environmental hazards, social conflict, governance issues and regulatory compliance. Properties with higher ESG risks may face increased regulation, legal liability and reputational damage, potentially decreasing market value.
  - c **Value drivers** can directly impact the property's value, and can include factors like energy efficiency, location, green certifications and building design. Properties with robust ESG credentials may command higher rents and lower vacancy rates, thereby increasing their market value.



## Data list: overview of indicators

	ESG indicator	Data to be captured and analysed	Unit of measurement/indicative performance measure
01	Energy rating	<ul style="list-style-type: none"> <li>Energy Performance Certificate (EPC)</li> <li>Other energy ratings in the market</li> <li>Any improvements to the building made since the energy rating occurred?</li> </ul>	<ul style="list-style-type: none"> <li>Energy label (A–G)</li> <li>kWh/m<sup>2</sup></li> <li>Expiry date of EPC</li> <li>Yes/no; if yes, please specify</li> </ul>
02	Energy consumption	<ul style="list-style-type: none"> <li>Primary and final energy consumption</li> <li>Energy intensity</li> </ul>	<ul style="list-style-type: none"> <li>kWh/m<sup>2</sup>/year</li> <li>kWh/m<sup>2</sup></li> </ul>
03	Renewable energy production (onsite)	<ul style="list-style-type: none"> <li>Method of energy generation</li> <li>Quantity and specification of renewable energy systems (e.g. solar panels, heat pumps, biomass, wind turbines)</li> <li>Heating source</li> <li>Usage</li> </ul>	<ul style="list-style-type: none"> <li>kWh/m<sup>2</sup>/year</li> <li>% of primary/final energy demand met by renewable energy produced onsite</li> <li>% used on-site versus % delivered back to the grid</li> </ul>
04	Labels and certificates	<ul style="list-style-type: none"> <li>Green building certification schemes</li> <li>National-level certificates</li> <li>BREEAM, LEED, WELL, Fitwel, BOMA360, SHORE</li> </ul> <p>This is not an exhaustive list.</p>	<ul style="list-style-type: none"> <li>Label/certificate – yes or no; if yes, specify the level</li> <li>Date of issue and expiry</li> </ul>
05	Greenhouse gas emissions	CO <sub>2</sub> emissions, both excluding and including refrigerant gases, based on real energy consumption	<ul style="list-style-type: none"> <li>kgCO<sub>2</sub>e/m<sup>2</sup>/year</li> </ul>
06	Emissions pathway analysis	<ul style="list-style-type: none"> <li><a href="#">CRREM</a> pathway analysis</li> <li>Other pathway analysis (examples include ParisProof in The Netherlands, <a href="#">DGNB SYSTEM for Buildings In Use</a> (or <a href="#">DGNB AWARD 'Climate Positive'</a>) in Germany and beyond, <a href="#">BREEAM In-use</a> and <a href="#">UK Net Zero Carbon Buildings Standard</a>)</li> <li>Benchmark curve</li> <li>Stranding date</li> <li>Transition risk</li> </ul>	<ul style="list-style-type: none"> <li>Whether current property performance is on the pathway and in line with future targets</li> <li>Decarbonisation capex and updated stranded date</li> </ul>



	ESG indicator	Data to be captured and analysed	Unit of measurement/indicative performance measure
07	Physical climate risk	<ul style="list-style-type: none"> <li>Climate risk (such as flood, heat, drought, sea level, precipitation) analysis issued by a recognised source (e.g. MSCI, Moodies, R4R)</li> <li>Mitigation measures already in place?</li> </ul>	<ul style="list-style-type: none"> <li>Has the client done a study indicating whether the property is subject to climate risk by 2050 (yes/no)?</li> <li>If no, or not entirely, are the mitigation measures taken into account in the capex budget?</li> </ul>
08	Location characteristics	<ul style="list-style-type: none"> <li>Local infrastructure (including utilities for its occupants)</li> <li>Connectivity (e.g. highways, distance from public transport, mass transit services/routes, frequency)</li> </ul>	<ul style="list-style-type: none"> <li>Amenities in and around the building</li> <li>Walkability score (how easy it is to reach certain essential places on foot)</li> <li>Types of buildings in the proximity</li> <li>Public transport proximity and frequency</li> </ul>
09	Mobility	<ul style="list-style-type: none"> <li>Number of EV charging points</li> <li>Bicycle parking spaces for residents/occupiers</li> </ul>	<ul style="list-style-type: none"> <li>Charging points per FTE/total number of parking spaces</li> <li>Number of bicycle parking spaces per FTE</li> </ul>
10	Building access	<ul style="list-style-type: none"> <li>Access for people with disabilities</li> </ul>	<ul style="list-style-type: none"> <li>Confirmation of compliance</li> </ul>
11	Landlord-tenant relationship	<ul style="list-style-type: none"> <li>Tenant activity</li> <li>Rental contract types</li> <li>Green leases in place</li> </ul>	<ul style="list-style-type: none"> <li>Description of current tenants</li> <li>Contracts and/or green leases in place</li> </ul>
12	Material use	<ul style="list-style-type: none"> <li>Materials used for construction or renovation</li> </ul>	<ul style="list-style-type: none"> <li>% of material by total weight/volume/value</li> <li>% of material certified for their sustainable qualities</li> </ul>



## Data list: detailed indicator descriptions

	ESG indicator	Data to be captured and analysed	Unit of measurement/ indicative performance measure	Explanatory note
01	Energy rating	<ul style="list-style-type: none"> <li>Rating of building issued in accordance with Directive 2010/31/EU - Energy Performance Certificate (EPC)</li> <li>Other energy ratings in the market</li> <li>Any improvements to the building made since the energy rating was calculated?</li> </ul>	<ul style="list-style-type: none"> <li>Energy label rating</li> <li>kWh/m<sup>2</sup></li> <li>Expiry date of EPC</li> <li>Yes/no; if yes, please specify</li> </ul>	<p>Is the property EPC grade aligned with regulation expectations?</p> <p><b>Paragraph 12 of Article 2 of <a href="#">Directive 2010/31/EU on the Energy Performance of Buildings (recast) (EPBD)</a>:</b> ‘energy performance certificate’ means a certificate recognised by a Member State or by a legal person designated by it, which indicates the energy performance of a building or building unit, calculated according to a methodology adopted in accordance with Article 3.</p> <p>EPC is also referenced in <a href="#">Directive on energy efficiency and amending Regulation (EU) 2023/955</a></p> <p>This indicator applies to all asset classes, unless specified otherwise by national legislation.</p> <p>Data source: third-party providers/professionals.</p> <p>Preferred approach: comparative.</p> <p>Main drivers: risk, cash flow.</p>



	ESG indicator	Data to be captured and analysed	Unit of measurement/ indicative performance measure	Explanatory note
02	Energy consumption	<ul style="list-style-type: none"> <li>Primary and final energy consumption</li> <li>Energy intensity</li> </ul>	<ul style="list-style-type: none"> <li>kWh/m<sup>2</sup>/year</li> <li>kWh/m<sup>2</sup></li> </ul>	<p>Where is the property in relation to others in terms of energy consumption and efficiency?</p> <p>This should cover both landlord and tenant consumption.</p> <p>Referenced in Directive 2010/31/EU on the Energy Performance of Buildings (recast) [EPBD]</p> <p><a href="#">Primary energy consumption</a> covers energy consumption by end users such as industry, transport, households, services and agriculture, plus energy consumption of the energy sector itself for production and transformation of energy, losses occurring during the transformation of energy (e.g. the efficiency of electricity production from combustible fuels) and the transmission and distribution losses of energy.</p> <p><a href="#">Final energy consumption</a> is the total energy consumed by end users, such as households, industry and agriculture. It is the energy that reaches the final consumer's door and excludes what is used by the energy sector itself.</p> <p>This indicator applies to all asset classes, unless specified otherwise by national legislation.</p> <p>Data source: energy audit provided by, for example, the building owner, asset manager or constructor.</p> <p>Preferred approach: comparative, income.</p> <p>Main drivers: risk, cash flow.</p>



	ESG indicator	Data to be captured and analysed	Unit of measurement/ indicative performance measure	Explanatory note
03	Renewable energy production (onsite)	<ul style="list-style-type: none"> <li>• Method of energy generation</li> <li>• Quantity and specification of renewable energy systems (e.g. solar panels, heat pumps, biomass, wind turbine)</li> <li>• Heating source</li> <li>• Usage</li> </ul>	<ul style="list-style-type: none"> <li>• kWh/m<sup>2</sup>/year</li> <li>• % of primary/final energy demand met by renewable energy produced onsite</li> <li>• % used on-site versus % delivered back to the grid.</li> </ul>	<p>Is the property producing renewable energy onsite? Procurement of offsite renewable energy is not considered.</p> <p>Definition of renewable energy sources: <a href="#">Article 2(1) of Directive (EU) 2018/2001 of the European Parliament and of the Council on the promotion of the use of energy from renewable sources (recast)</a>.</p> <p>Referenced in Sustainable Finance Disclosure Regulation (SFDR) Annex 1 Table 1 Universal PAI.</p> <p>This indicator applies to all asset classes, unless specified otherwise by national legislation. Particularly pertinent for industrial logistics sector.</p> <p>Data source: building owner.</p> <p>Preferred approach: comparative, income.</p> <p>Main driver: cash flow.</p>



	ESG indicator	Data to be captured and analysed	Unit of measurement/ indicative performance measure	Explanatory note
04	Labels and certificates	Certificates and labels containing ESG components (examples include green building certification schemes, national-level certificates, BREEAM, LEED, WELL, Fitwel, BOMA360, SHORE)	<ul style="list-style-type: none"> <li>• Label/certificate – yes or no</li> <li>• If yes, specify the level or rating</li> <li>• Date of issue and expiry</li> </ul>	<p>Which certificate/label is present and at what level?</p> <p>Which environmental indicators does the certificate/label cover?</p> <p>Does it measure health and well-being metrics of the asset? Is the property adapted for the wellness of the employees?</p> <p>Does it measure operational risk, resilience and governance of the asset?</p> <p>This indicator applies to all asset classes, unless specified otherwise by national legislation.</p> <p>Data source: third-party providers/professionals, building owners.</p> <p>Preferred approach: comparative.</p> <p>Main drivers: value, risk.</p>



	ESG indicator	Data to be captured and analysed	Unit of measurement/ indicative performance measure	Explanatory note
05	Greenhouse gas emissions	CO <sub>2</sub> e emissions, excluding and including refrigerant gases, based on real energy consumption	<ul style="list-style-type: none"> <li>kgCO<sub>2</sub>e/m<sup>2</sup>/year</li> </ul>	<p>Where is the property in relation to others in terms of greenhouse gas emissions?</p> <p>Definition of greenhouse gas emissions: <a href="#">(1) of Article 3 of Regulation (EU) 2018/842 of the European Parliament and of the Council (12)</a>.</p> <p>Referenced in <a href="#">Regulation on the Governance of the Energy Union and Climate Action</a>.</p> <p>Referenced in SFDR Annex 1 Table 1 Universal PAI.</p> <p>Referenced in SFDR Annex 1 Table 2 Additional Real Estate PAI.</p> <p>Scope 1 covers emissions from sources that an organisation owns or controls directly.</p> <p>Scope 2 covers emissions that a company causes indirectly and comes from where the energy it purchases and uses is produced.</p> <p>This indicator applies to all asset classes, unless specified otherwise by national legislation.</p> <p>Data source: third-party providers/professionals.</p> <p>Preferred approach: comparative.</p> <p>Main driver: risk.</p>



	ESG indicator	Data to be captured and analysed	Unit of measurement/ indicative performance measure	Explanatory note
06	Emissions pathway analysis	<ul style="list-style-type: none"> <li>• <a href="#">CRREM</a> pathway analysis</li> <li>• Other pathway analysis (examples include ParisProof in The Netherlands, <a href="#">DGNB SYSTEM for Buildings In Use</a> (or <a href="#">DGNB AWARD 'Climate Positive'</a>) in Germany and beyond, <a href="#">BREEAM In-use</a> and <a href="#">UK Net Zero Carbon Buildings Standard</a>)</li> <li>• Benchmark curve</li> <li>• Stranding date</li> <li>• Transition risk</li> </ul>	<ul style="list-style-type: none"> <li>• Whether current property performance is on the pathway and in line with future targets</li> <li>• Decarbonisation capex and updated stranded date</li> </ul>	<p>Is the property on the pathway to achieve net zero in 2050? If not, which measures have been, or should be, taken in order to achieve net zero in 2050?</p> <p>This indicator applies to all asset classes, unless specified otherwise by national legislation.</p> <p>Data source: third-party providers/ professionals.</p> <p>Preferred approach: comparative, cost.</p> <p>Main driver: risk.</p>



	ESG indicator	Data to be captured and analysed	Unit of measurement/ indicative performance measure	Explanatory note
07	Physical climate risk	<ul style="list-style-type: none"> <li>Climate risk (e.g. flood, heat, drought, sea level, precipitation) analysis issued by a recognised source (e.g. MSCI, Moodies, R4R)</li> <li>Mitigation measures already in place?</li> </ul>	<ul style="list-style-type: none"> <li>Has the client done a study indicating whether the property is subject to climate risk by 2050 (yes/no)?</li> <li>Yes/no. If no, or not entirely, are the mitigation measures taken into account in the capex budget?</li> </ul>	<p>Is the property exposed to a significant climate risk from now to 2050 (and potentially to 2100)?</p> <p>For classification of climate-related hazards, see <a href="#">Appendix A of Annex I of EU Taxonomy Delegated Acts</a></p> <p>For physical risk definition see <a href="#">European Central Bank - Guide on climate-related and environmental risks (2020)</a></p> <p><a href="#">EBA report on Management and Supervision of ESG Risks For Credit Institutions And Investment Firms (2021)</a></p> <p>This indicator applies to all asset classes, unless specified otherwise by national legislation.</p> <p>Data source: third-party providers/professionals; other sources, including flood maps, heat maps, global earthquake model (GEM), global seismic hazard map, European atlas of the seas.</p> <p>Preferred approach: comparative.</p> <p>Main driver: risk.</p>



	ESG indicator	Data to be captured and analysed	Unit of measurement/ indicative performance measure	Explanatory note
08	Location characteristics	<ul style="list-style-type: none"> <li>Local infrastructure (including utilities for its occupants)</li> <li>Connectivity (e.g. highways, distance from public transport, mass transit services/routes, frequency)</li> </ul>	<ul style="list-style-type: none"> <li>Amenities in and around the building</li> <li>Walkability (how easy it is to reach certain essential places on foot)</li> <li>Types of buildings in the proximity</li> <li>Public transport proximity and frequency</li> </ul>	<p>Is the property sufficiently well served by public transport to optimise the impact of accessing the property?</p> <p>This indicator applies to all asset classes, unless specified otherwise by national legislation.</p> <p>Data source: valuer knowledge.</p> <p>Preferred approach: comparative.</p> <p>Main driver: cash flow.</p>
09	Mobility	<ul style="list-style-type: none"> <li>Number of EV charging points</li> <li>Bicycle parking spaces for residents/occupiers</li> </ul>	<ul style="list-style-type: none"> <li>Charging points per FTE/total number of parking spaces</li> <li>Number of bicycle parking spaces per FTE</li> </ul>	<p>Is the property adapted to favour the use of bicycles or electrical cars for its occupiers, to help reduce the necessity to use a combustion engine car?</p> <p>What types of chargers are available (fast, rapid, ultra-rapid)?</p> <p>This indicator applies to all asset classes, unless specified otherwise by national legislation.</p> <p>Data source: building owners, asset managers.</p> <p>Preferred approach: comparative.</p> <p>Main driver: cash flow.</p>



	ESG indicator	Data to be captured and analysed	Unit of measurement/ indicative performance measure	Explanatory note
10	Building access	<ul style="list-style-type: none"> <li>Access for people with disabilities</li> </ul>	<ul style="list-style-type: none"> <li>Confirmation of compliance</li> </ul>	<p>Is the property accessible for people with disabilities?</p> <p>This indicator applies to all asset classes, unless specified otherwise by national legislation.</p> <p>Data source: building owners.</p> <p>Preferred approach: comparative.</p> <p>Main drivers: value, risk.</p>
11	Landlord-tenant relationship	<ul style="list-style-type: none"> <li>Tenant activity</li> <li>Rental contract types</li> <li>Green leases in place</li> </ul>	<ul style="list-style-type: none"> <li>Description of current tenants</li> <li>Contracts and/or green leases in place</li> </ul>	<p>Is the landlord putting in place green leases and regular meetings with occupiers to create the best possible conditions to achieve high ESG performance?</p> <p>This indicator applies to all asset classes, unless specified otherwise by national legislation.</p> <p>Data source: tenants and landlords.</p> <p>Preferred approach: income.</p> <p>Main driver: value, cash flow.</p>



	ESG indicator	Data to be captured and analysed	Unit of measurement/ indicative performance measure	Explanatory note
12	Material use	<ul style="list-style-type: none"> <li>Materials used for construction or renovation</li> <li>Reuse of old materials</li> </ul>	<ul style="list-style-type: none"> <li>% of material by total weight/volume/value</li> <li>% of material certified for their sustainable qualities</li> </ul>	<p>Construction product regulation.</p> <p>Material use for construction/renovation? An indicator can be found in the <a href="#">EU Level(s) frameworks</a>.</p> <p>EU Taxonomy 2nd Delegated Act (upcoming and in force as of 2024).</p> <p>Certification schemes.</p> <p>Asset class: for development purposes.</p> <p>Data source: owner or technical specialist.</p> <p>Preferred approach: comparative, cost.</p> <p>Main drivers: value, risk.</p>



## Future potential indicators

The future potential indicators list contains justifications of why we believe these may become relevant in the near future, as well as some initial thoughts on data points and units of measurement where appropriate. These are for discussion only, but it stands to reason that some of these will move to the core data list in future updates.

We will work together with the valuation community, the financial sector and other associations to embed ESG requirements into valuations, ensuring uptake and seeking feedback. The data list will not be static; we foresee regular updates. As we are in a transition phase, this first edition (2024) of the data list will be the start of a journey to help valuers, banks and investors to broaden their knowledge and move towards a consensus approach.

Future potential indicator	Description
Waste management	<p>Is there a waste management system to separate waste flows, and are they managed appropriately?</p> <p>Data to be captured can include volumes and type of waste disposed, and non-recycled waste ratio.</p> <p>Units of measurement can include the waste recycling rate, proportion of waste to landfill and cost of waste disposal per annum.</p>
Carbon footprint	<p>Has the property been constructed using low-carbon construction principles? This is linked to whole life carbon assessment and can include embodied, operational and usage carbon.</p>
Biodiversity	<p>Any actions or property attributes that impact, either positively or negatively, on biodiversity. Biodiversity is already mentioned in the <a href="#">Corporate Sustainability Reporting Directive (CSRD)</a> and the <a href="#">EU Taxonomy Environmental Delegated Act (Taxonomy)</a>.</p> <p>Data to be captured can include land artificialisation (share of non-vegetated surface area compared to the total surface area of the plots of all assets), activities negatively affecting biodiversity-sensitive areas, use of pesticides, existence of a biodiversity action plan and the approximate area of planting or any roof coverings.</p> <p>Units of measurement can include the percentage of non-vegetated surface (green walls, or open ground land that can be differentiated), presence of bee hives and biodiversity labels.</p> <p>Some biodiversity aspects will be anchored in local laws, whereas other considerations will be market-driven. An important consideration is that the new buildings are not built on greenfield sites, taking into the account the EU Taxonomy 'do no significant harm' criterium for biodiversity.</p>



Future potential indicator	Description
Indoor air quality	<p>Indoor air quality can be both a social (health) and environmental issue. It is currently not regulated, but in 2021 the European Parliament adopted a <a href="#">resolution</a> on the implementation of the Ambient Air Quality (AAQ) Directives, in which it calls on the European Commission to regulate indoor air quality as well.</p> <p>Data to be captured can include the ventilation rate (air flow), filtration, CO<sub>2</sub> level and temperature.</p> <p>A unit of measurement that can be included is CO<sub>2</sub> parts per million.</p>
Affordability	<p>Is the landlord favouring activities requiring rents below market rent, to facilitate diversity of use in a location?</p> <p>Data to be captured and units of measurement can include the number of affordable dwellings as part of the total.</p>
Community impact	<p>What is the impact of the building on the surrounding community?</p> <p>Data to be captured could include green spaces and active recreation amenities (m<sup>2</sup>), commercial or retail infrastructure projected to be built or renovated, percentage of relationships with local businesses in the supply chain or registered crime rates.</p>
Diversity, equality and inclusion (DEI)	<p>Does the design of the building encourage an inclusive use, e.g. for neurodivergent individuals, different generations, gender-neutral lavatories or a ground floor facade design that enhances the feeling of security?</p>
Adaptability	<p>The ease with which the building is adaptable for different needs. Examples include conversion (e.g. from office to residential) or generational (lifetime homes).</p>
Water usage	<p>Is the property adapted to reduce water consumption? References are already made in <a href="#">Annex I</a> of the EU Taxonomy Delegated Act, SFDR Annex 1, Table 2 on Additional Real Estate PAI, and Council Directive <a href="#">91/271/EEC</a> concerning urban wastewater treatment. Use-stage water consumption is referenced in the <a href="#">EU Level(s) Framework</a>.</p> <p>Data to be captured and analysed can include whether there is a water management system in place (yes/no) and the water consumption (m<sup>3</sup>/m<sup>2</sup>/year).</p>
Lighting	<p>What efficient lighting systems are in place?</p> <p>Units of measurement can include the percentage of energy-efficient lighting (e.g. LED) in place, or hours of lighting used per day.</p>
Safety	<p>Is the property respecting safety regulations?</p> <p>Units of measurement can include adherence to safety standards.</p>



## Appendix A Leaders' Forum members

Valuation service providers	Finance, investment and real estate associations and companies	Organisations/industry bodies	Observers
Avison Young	Generali Real estate	RICS	European Banking Authority (EBA)
CBRE	Altera Vastgoed	IVSC (International Valuation Standards Council)	European Central Bank (ECB)
Colliers		EMF (European Mortgage Federation)	
Cushman & Wakefield		EPRA (European Public Real Estate Association)	
JLL		INREV (European Association for Investors in Non-Listed Real Estate)	
Knight Frank		PropTech for Good	
Savills		ULI (Urban Land Institute)	
		WBCSD (World Business Council for Sustainable Development)	
		WorldGBC (Green Building Council)	
		European Real Estate Society (ERES)	



## Appendix B Comparison to INREV guidelines/ESG SDDS

This appendix aligns the data list with the INREV guidelines/ESG SDDS. INREV is the European Association for Investors in Non-Listed Real Estate Vehicles.

The [INREV ESG SDDS \(Standard Data Delivery Sheet\)](#) reporting template is designed to facilitate ESG data exchange and standardise the way ESG KPIs are reported for real estate investment vehicles.

This ESG reporting template covers the ESG KPIs required by the INREV guidelines, as well as recommended ESG KPIs. It contains vehicle- and asset-level data fields and definitions.

	ESG indicator	INREV
01	Energy rating	RG73 Required KPIs: ENV27, 28
02	Energy consumption	RG73 Required KPIs: ENV4, 6, 7
03	Renewable energy production (onsite)	RG73 Required KPIs: ENV8, 9, 10
04	Labels and certificates	RG73 Required KPIs: ENV26 (ESG SDDS identifier: AL9.1) RG78 Recommended KPIs: ENV70, 71 RG78 Recommended KPIs: SOC 11 (ESG SDDS identifier: ESG5.5.2)
05	Greenhouse gas emissions	RG73 Required KPIs: ENV 18, 20,21 (ESG SDDS identifier: AL4.10, 4.13)
06	Emissions pathway analysis	RG78 Recommended KPIs: ENV47, 48, 49, 50, 51 (ESG SDDS identifier: RAL4.1, 4.2, 4.3)
07	Physical climate risk	RG73 Required KPIs: ENV23 (ESG SDDS identifier: AL6.1) RG78 Recommended KPIs: ENV53
08	Location characteristics	RG78 Recommended KPIs: SOC33, 34, 35 (ESG SDDS identifier: ESG5.5.8, 5.5.8.1, 5.5.9)
09	Mobility	RG78 Recommended KPIs: SOC31, 32 (ESG SDDS identifier: ESG5.5.6, 5.5.7)
10	Building access	
11	Tenant-landlord relationship	RG78 Recommended KPIs: SOC20, 21 (ESG SDDS identifier: ESG5.3.6, 5.3.6.1)
12	Material use	RG78 Recommended KPIs: ENV68 (ESG SDDS identifier: RAL6.14)



## Appendix C References

- Carbon Risk Real Estate Monitor (CRREM): [CRREM Global](#) and [CRREM Project](#)
- European Mortgage Federation (EMF): [Energy Efficient Mortgage Initiative \(EEMI\)](#), including a valuation data list
- [EPRA Sustainability Reporting](#)
- [INREV ESG Standard Data Delivery Sheet \(SDDS\)](#) and guidelines on [valuation](#) and [sustainability](#)
- INREV Guidelines Model 10 [Sustainability](#)
- [International Property Measurement Standards \(IPMS\)](#)
- RICS' [International Building Operation Standard \(IBOS\)](#)
- RICS' [Sustainability and ESG in commercial property valuation and strategic advice](#) professional standard
- RICS' [Environmental risks and global real estate](#) professional standard
- [ULI C-Change](#)
- [Taloen](#) European database



## Appendix D Acknowledgements

For more information on the data list, please contact:

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