

# Market Insights: ESG adoption and implementation in EU construction and real estate

## CPEA EU ESG Working Group



# ESG

Environment  
Social  
Governance

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# About the Climate Positive Europe Alliance (CPEA)

The Climate Positive Europe Alliance (CPEA) and its member organisations all share a common purpose: to collaboratively foster sustainability principles and practices within core built environment activities – ranging from planning and design, financing, construction, use and operation, and deconstruction. Apart from mobilising sector participants to adopt net-zero practices and a whole life cycle view, CPEA and its members are also actively working on transitioning the sector towards integrating circularity principles and social aspects within real estate and construction projects.

While CPEA's influencing activities are predominantly focused on EU policy development, it is also partnering with global platforms and initiatives.

## **About the CPEA EU ESG Working Group**

The acronym ESG stands for the Environmental, Social and Governance and has become one of the main reference points in the wider, global sustainability debate and related sustainability topics. ESG is a framework that helps stakeholders understand how an organisation is managing risks and opportunities related to environmental, social (and societal) and governance issues (Peterdy, 2022).

Against the background of a rapid rise in construction and real estate market engagement with ESG related topics and discourses and an equally growing number of ESG initiatives, the Climate Positive Europe Alliance decided to convene a dedicated EU ESG Working Group in May 2021. The objectives of the Working Group were threefold: facilitating a cross-border knowledge exchange, thus addressing the need for discussing ESG in a European context, building capacity around ESG issues and contextualising the term ESG for market participants by developing an understanding of the term ESG with reference to the construction and real estate sector.

Since its kick-off, the CPEA EU ESG Working Group has been steadily growing, highlighting the growing relevance of the topic of ESG for stakeholders and their information needs. At the time of publication of this report it comprised more than 40 organisations, covering 10 countries in Europe with members from finance and investment, real estate development, asset management, real estate consultancy and sustainability certification as well as from civil society organisations, professional bodies and industry associations.

## **About this report**

This ESG Market Insight Report represents the first output of the CPEA EU ESG Working Group, jointly developed during regular interactive sessions and through online surveys between May 2021 and September 2023. The overarching purpose of the report is to provide a snapshot of where different European players within the construction and the real estate industry currently stand in relation to ESG strategy development, implementation and related disclosures.



## About the Climate Positive Europe Alliance (CPEA)

### The aims of the report are:

- 1. To increase** understanding of the background, meaning and relevance of ESG amongst market participants, examining ESG drivers, challenges and potential solutions.
- 2. To stimulate** cross-border and cross-disciplinary debate.
- 3. To position** ESG within the context of existing and forthcoming EU legislation and other industry-led initiatives.

By featuring organisational case studies the report is illustrating what good practice implementation in construction and real estate can look like, focusing on how existing challenges can be overcome.

ESG is often being cited as a headline reference for three major sustainability dimensions. Unless otherwise indicated or specified, the acronym ESG is used in this report to reference this broad spectrum of topics. It stresses the need for a multi-dimensional approach by mapping the interlinkages and interdependencies between all ESG components, i.e. environmental, social and governance ESG impact areas and associated criteria, thus advocating coverage of the full ESG spectrum by sector participants rather than a one-dimensional approach. While this publication and the recommendations that were developed on the basis of market insights and expertise are primarily targeted at market participants wishing to expand their knowledge of ESG in construction and real estate, they are equally pertinent for policy makers and the Working Group hopes to have made a tangible and valuable contribution to the current dialogue around ESG and sustainable finance in general.



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## 1

# Introduction and background

## **Accelerating and scaling up the scope of sustainable investments in Europe's building sector**

Reducing Greenhouse Gas (GHG) emissions and addressing climate change are key priorities of the European Union (EU) and its Member States. As a signatory of the Paris Agreement (UNFCCC, no date), the EU committed to reducing GHG emissions by at least 55% by 2030 compared to 1990 under its wider 2030 climate and energy framework (Council of the European Union, 2023).

Going beyond the 2030 time horizon, the European Commission published its long term vision with the target of achieving net-zero GHG emissions by 2050 in 2018. This is to be achieved through a socially-fair transition in a cost-efficient manner. The 2019 European Green Deal (European Commission, 2019) presents a roadmap for a sustainable EU economy – equally stressing the need for a just and inclusive transition.

To set Europe's buildings on such a trajectory, the European Commission estimates that it will be necessary to close an investment gap of EUR 185 billion per annum over the next decade, translating into a financing need of EUR 115 billion for the residential and EUR 70 billion for the commercial market segments respectively (European Commission, 2020a). Achieving these ambitious EU targets and closing the aforesaid investment gap will only be possible by radically increasing and directing investment flows towards sustainable projects and activities from the public and the private sector. It is against this background that the EU has developed and adopted a package of sustainable finance legislative initiatives that is designed to both incentivise higher levels of investment in sustainable buildings and regulate market participants' sustainability disclosure, including ESG reporting.

## **Economic role of the construction and real estate sector**

Given its cross-sectoral reach and global economic weight, the construction and real estate sector could be a truly powerful agent for driving sustainable development. In economic terms, total global real estate reached a value of USD 326.5 trillion in 2020, making real estate more valuable than all global equities and debt securities combined, accounting for almost four times that of global GDP (Tostevin, 2021). For example, Europe's residential buildings are worth an estimated EUR 17 trillion (Sweatman, 2022). According to data published by the World Bank, the construction industry made up 28.3% of global GDP in 2021 (World Bank, no date). It is also traditionally one of the largest contributors to global employment (Forbes et al., 2012). According to Commission figures, the construction sector provides 18 million direct jobs and contributes to about 9% of the EU's GDP (European Commission, 2016).

Going forward, there is significant employment potential afforded by investment into energy efficient building renovation. A report prepared for Renovate Europe by the Buildings Performance Institute Europe (BPIE) states that for every EUR 1 million invested an estimated median of 18 jobs have been created (Renovate Europe, 2020).

# 1

## Introduction and background

### Real estate matters! – Sectoral impact

Unfortunately, all this economic wealth creation is not without environmental and societal impact which until very recently most market participants have tended to externalise and have avoided accounting for in market value estimates, risk assessments, investment decision-making and reporting.

According to the 2021 edition of the Global Alliance for Buildings and Construction's Global Status Report, buildings represented around 37% of global CO<sub>2</sub> emissions, including an estimated 3.6 GtCO<sub>2</sub> emissions from producing building materials, i.e. concrete, steel, aluminium, glass, and bricks (Global Alliance for Buildings and Construction, 2021).

In the EU, buildings are responsible for a staggering 40% of the bloc's energy consumption and 36% of greenhouse gas emissions (European Commission, 2020b). Increasingly, these impacts are not only of environmental but also of economic and geopolitical significance given the illegal invasion of Ukraine by Russia and historical dependence of major European economies on Russian energy supplies.

Beyond energy consumption and GHG emissions, construction and real estate are also extremely resource intensive. For example, waste generated during construction and demolition accounts for more than a third of all waste generated in the EU (European Commission, 2014). Every year, about 450 – 500 million tonnes of construction and demolition waste are generated in the EU through the construction and demolition of buildings and infrastructure and road maintenance (Interreg Europe, 2022).

However, what often gets forgotten, first and foremost, buildings' primary function is to provide places to live, work and play: be educated and looked after, for sport and other leisure activities and a range of community and cultural events. In short, buildings are for people and therefore always have had a strong social dimension which at building level includes issues such as occupant health, well-being and comfort and affordability aspects as well as accessibility and privacy.

But it is important to note that there are also labour and human rights issues arising from the construction process, e.g. health and safety on site, fair wages, bonded labour and use of forced and child labour practices in the supply chain (RICS, 2018).

And finally, apart from the environmental and social impact, a general lack of sectoral transparency opens potential loopholes for serious governance issues, resulting in unethical behaviour such as money laundering, bribery and other corrupt practices (ibid.).



## 1

## Introduction and background

### Some background on the use of the term ESG over time

The adoption of the UN Sustainable Development Goals (United Nations, 2015) and the Paris Climate Accord, followed by the rapid development of sustainable finance regulatory initiatives such as the EU Taxonomy Regulation (European Union, 2020), a dedicated framework for establishing a common understanding of the conditions under which an economic activity can be seen as ecologically sustainable, have resulted in sharpening the discourse – not only within the construction and real estate sector – on how to best reflect and address environmental, social and governance adverse impacts while availing of the opportunities of sustainable development.

In the course of the continuously intensifying sustainability debate, the acronym ESG is not only becoming increasingly visible but also increasingly being used as a reference point – often as a synonym – for the broader topical spectrum in relation to sustainability.

Even though it may seem that way, the concept of ESG and the approach and thinking that is behind it is actually not new. The term ESG has been around for some time and has its roots in so-called Socially Responsible Investing – SRI (Chen, 2022), also known as social investing, but it was not until 2004, when UN Secretary General Kofi Annan called on leading financial institutions to collaborate with the United Nations and the International Finance Corporation (IFC) to jointly work on integrating environmental, social and governance aspects into capital markets that the term ESG was first coined and explicitly being cited.

In June that year, a group of 20 financial institutions with combined assets under management of over USD 6 trillion, published and publicly endorsed a UN Global Compact-facilitated report “Who Cares Wins: Connecting Financial Markets to a Changing World” which marks the first mention of the term ESG: “Sound corporate governance and risk management systems are crucial prerequisites to successfully implementing policies and measures to address environmental and social challenges. This is why we have chosen to use the term “environmental, social and governance issues” throughout this report, as a way of highlighting the fact that these three areas are closely interlinked.” (The Global Compact, 2004).

One year later, at the subsequent conference “Investing for Long-Term Value – Integrating environmental, social and governance value drivers in asset management and financial research”, financial leaders endorsed the Global Compact report and published the conference findings and insights, including a set of recommendations, as a report that firmly establishes ESG as a strategic investment approach (The Global Compact, 2005).

Today, ESG plays an important role for an increasing share of total capital investments with an equally growing number of stakeholders from the investment and finance community now using the concept of ESG “Environmental, Social, Governance” as a point of reference for organisational sustainability performance, reporting and disclosure (see table 2 in section 8).

Within this overall trend, the construction and real estate sector that this report is focusing on is no exception.

## 2

# ESG – concept, context, stakeholder perspectives

## ESG in the wider sustainability context – concept, overlaps and boundaries

Corporate sustainability action is often labeled as “ESG”, which is commonly understood as “Environment”, “Social” and “Governance”.

As a strategic approach it describes a set of factors used by organisations concerning the management and measurement of environmental and social (and societal) non-financial impacts of their economic activities and how they ensure transparent, ethical, just and compliant management of their organisation (Bergman et al., 2020).

Nowadays, the terms ESG and sustainability are often interchangeably used as synonyms. Especially with regard to the financial community the wider debate started with sustainability but these days ESG tends to be the preferred term by investors and financing institutions.

Nevertheless, the boundaries between ESG and other initiatives and sustainability approaches, such as Socially Responsible Investing (SRI), Impact Investing or Social Impact Investing are often blurred, leading to confusion among market participants and despite ESG being the preferred reference for stakeholder engagement with sustainability related aspects, as yet, there is no broadly accepted definition for the acronym ESG and its boundaries and what it actually means in different sectoral and stakeholder contexts, leading to ambiguity in the use and of the term and the application of its underlying concept.

*“A lack of clear definition and boundaries lead to ambiguity in the use of the term ESG.”*

It is also worth noting that, while now firmly embedded as an approach to sustainability and acting as an associated reporting framework within investment and corporate strategies, both the ESG acronym and the overall ESG concept explicitly lack reference to the economic pillar of sustainable development as ESG gathers information on sustainability practices and not financial information.

However, this is rapidly evolving, as the European Sustainability Reporting Standards (European Union, 2022) which are expected to be adopted in the course of 2023 incorporate key elements of ESG and connect material risks, impacts and opportunities with pertinent financial information. This regulatory evolution, as well as growing investor demand for evidence of adequate assessment and engagement on sustainability issues, are drivers for an organisation’s ESG performance to be adequately connected to its financial performance.

*“Regulatory evolution and growing investor demand for evidence of adequate assessment and engagement on sustainability issues are drivers for an organisation’s ESG performance to be adequately connected to its financial performance.”*

## 2

## ESG – concept, context, stakeholder perspectives

Over the years, there has been a growing body of academic research covering ESG risks, opportunities and impacts. To support investors, the Principles for Responsible Investment (PRI), an investor initiative launched in 2004 based on six principles (UN PRI, 2004) in partnership with the UNEP Finance Initiative, founded in 1992 as the first organisation to engage the finance sector on sustainability (UNEP FI, no date) and the UN Global Compact, a voluntary initiative based on CEO commitments to implement universal sustainability principles (UN Global Compact, no date) have established an Academic Network Advisory Committee dedicated to sharing robust research regarding ESG issues and organising annual knowledge sharing conferences (UNEP FI, 2022).

How organisations engage with environmental, social and governance issues is now increasingly coming under scrutiny not only by academia and the investment community but also by civil society and policy makers. And yet, investors are definitely the key actors when it comes to pushing the ESG agenda. One example is Aviva Investors who in 2022 announced that it will start targeting company directors who fail to address climate change, biodiversity and human rights (Makortoff, 2022). One year later, Norway's sovereign wealth fund, the world's largest investment fund, took a similar stance by warning company directors that it will block their re-election to the company's board if they are not seen to make progress in relation to the climate crisis, human rights issues and boardroom diversity (Neate, 2023).

### **The recent rise (and hype?) regarding ESG**

Engagement of investors and corporate stakeholders with environmental, social and governance issues has surged in recent years, and the current economic, public health and social justice crises have only intensified this focus (ibid.). At the same time, global sustainable investing has gained enormous traction. 2020 J.P. Morgan estimates point to a total value of assets of EUR 45 trillion that follow sustainable investing strategies, having doubled from 2016 figures (J.P. Morgan, 2020). According to a 2019 article in the Economist, this included more than EUR 2.5 trillion in institutional assets tracking ESG ratings (The Economist, 2019).

Whereas the rise of ESG was initially most marked in the United States, since the adoption of the European Commission Sustainable Finance Action Plan in 2018 and the start of the work on the EU Taxonomy Regulation (in vigor since 20 June 2020) there has also been a noticeable shift in ESG engagement in Europe and it can be expected that this trend will continue as more and more emphasis on sustainable finance reporting and disclosure requirements is being placed by policy-makers of which the Sustainable Finance Disclosure Directive (European Union, 2019) and the Corporate Sustainability Reporting Directive (European Union, 2022) are prominent examples.

A likely future continuation of this trend was also confirmed by Working Group participants in the framework of a Working Group member survey in which 97% of respondents predicted a continued rise of ESG over the next 5 years.

## 2

## ESG – concept, context, stakeholder perspectives

**Differing ESG stakeholder perspectives**

The fact that, at present, there is no commonly accepted industry-wide definition of ESG for the construction and real estate industry also means that, as a result, the understanding and interpretation of the term and the scope of ESG may greatly differ depending on the respective role and perspective of individual stakeholders. It is therefore crucial to take a closer look at the stakeholder groups involved in the construction and real estate industry and at their specific ESG perspectives and perceptions of ESG aspects.

*“At present, there is no commonly accepted industry-wide definition of ESG for the construction and real estate sector.”*

By distinguishing between ESG perspectives of investors and financial actors on the one hand and non-financial organisations and economic actors on the other, it becomes evident that each group is approaching ESG with differing levels of engagement, ambition and motivation which may ultimately necessitate “translation of ESG dimensions” between these two groups.

**a. Investor perspective**

From the perspective of investors, according to the OECD “ESG investing focuses on maximising financial returns, and utilises ESG factors to help assess risks and opportunities, particularly over the medium to long-term. What differentiates it from purely commercial investing is that it takes into account factors other than assessment of short-term financial performance and commercial risks to that performance. In this manner, ESG investing incorporates the risk assessment of long-term environmental, social and governance challenges and developments.” (Boffo and Patalano, 2020)

**b. Non-financial organisations and economic actor perspective**

From a non-financial organisation’s point of view, ESG can be used to describe a strategic approach for managing sustainability impacts and respective risks both of which are reflected in the analysis of market drivers in section 3.

**Distinguishing between demand and supply side ESG stakeholder cluster characteristics**

As mentioned above, the concept of ESG originally targeted the investment and finance community. Translated into a sectoral context this means real estate investors and financing institutions/ lenders which the Working Group decided to refer to as **the primary sectoral ESG cluster or the “demand side”** who ask for ESG products and assets, i.e. buildings or development projects.

These products are being delivered by what group members called **the secondary ESG cluster or the “supply side”** who develop, manufacture and assess these products and assets (buildings) and/or their components, in other words, the traditional built environment community and its supply chain (see Figure 1).

# 2

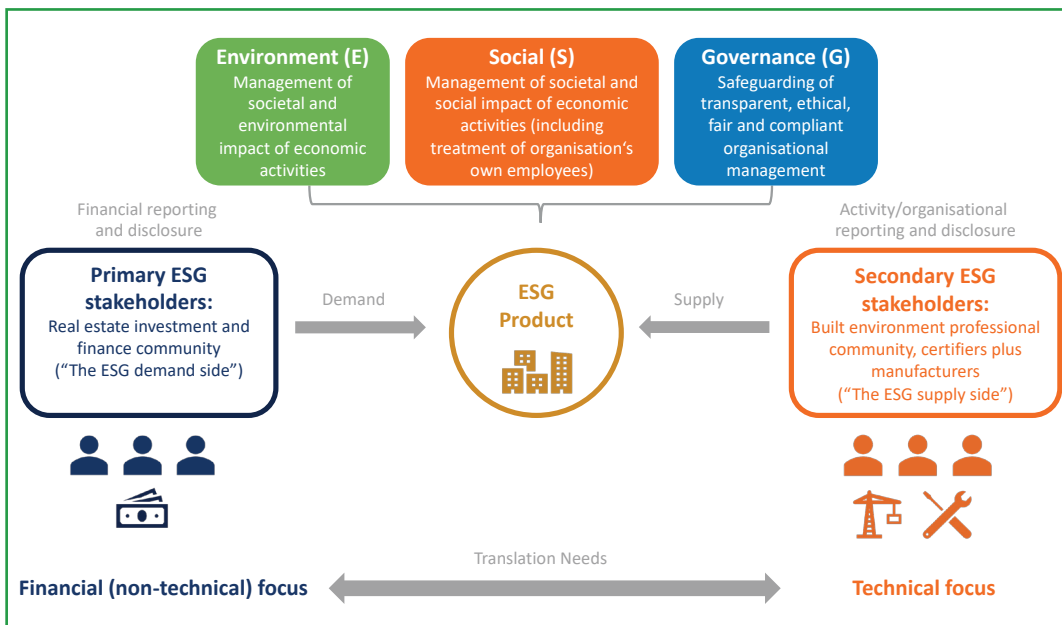
## ESG – concept, context, stakeholder perspectives

**Demand side stakeholder characteristics:** Given that ESG was first embraced by the finance community there tends to be more awareness and understanding around the concept of ESG and its implications for financial, non-technical reporting and disclosure within the demand side cluster but at the same time only limited insight into technical product-related ESG aspects.

*“There tends to be more awareness and understanding around the concept of ESG within the finance than within the built environment community.”*

**Supply side stakeholder characteristics:** There is generally a clear technical understanding with regard to “ESG product delivery” on the supply side but mostly limited awareness how the technical product features may relate to and translate into ESG ratings and financial performance and reporting. It is a classic case of not speaking the other one’s language.

This is not to say that certain members on the supply side, such as manufacturers of building components and materials are not familiar with the demands of ESG reporting – they may be subject to reporting or disclosure obligations themselves or may opt to report or disclose voluntarily. However, these disclosures tend to be more targeted at their organisational activities and to a lesser extent to the actual “final product” (the building). It is this gap between the demand and supply side that the EU Taxonomy is aiming to close by not only setting criteria for construction and real estate activities but also upstream activities such as manufacturing of building components.



**FIGURE 1:**  
Different stakeholder perspectives on ESG

Having examined the concept and context of ESG and different stakeholder engagement perspectives, section 3 is exploring the driving forces behind this engagement.

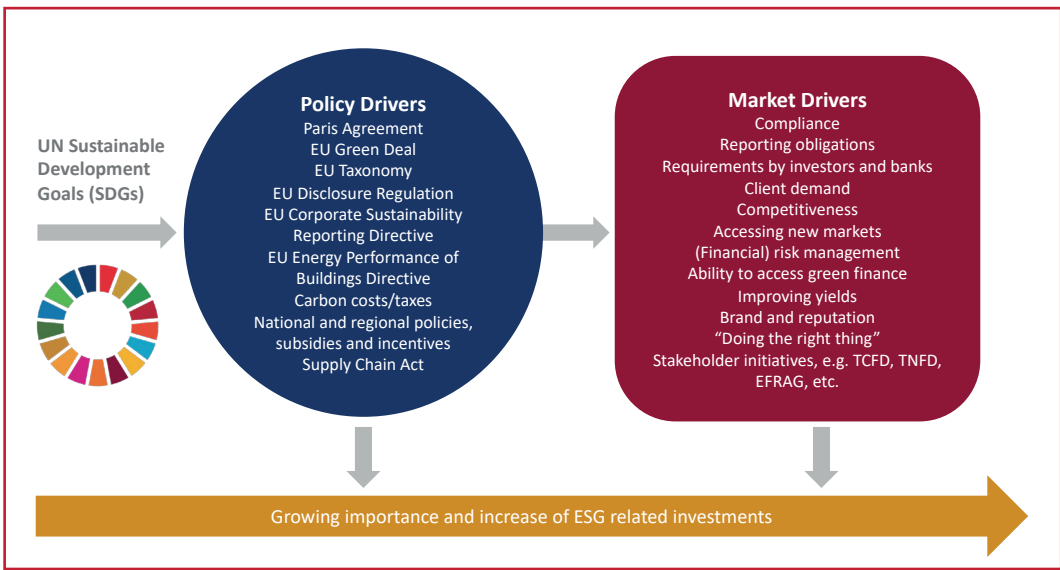
# 3 What is driving ESG?

There is a plethora of different drivers for adopting ESG strategies. They fall into two main (interdependent) categories: policy drivers and market drivers. The diagram in Figure 2 below shows the respective drivers ranked in order of importance as identified by Working Group members during a dedicated interactive workshop session.

*“The Paris Agreement is clearly seen as the overarching key policy driver for ESG.”*

Against the overarching backdrop of the adoption of the UN Sustainable Development Goals (SDGs), the signing and subsequent adoption of the Paris Agreement was clearly described as the key ESG policy driver by Working Group members (see Figure 2). It has not only triggered a flurry of other EU (mainly) climate related regulatory developments and policy frameworks, including the EU Green Deal which covers a range of economic strategies and environmental objectives and the sustainable finance package, comprising the EU Taxonomy, but has also resulted in a further tightening of existing legislation such as the proposed recasts of the EU Energy Performance of Buildings and Energy Efficiency Directives (European Commission, 2022).

All of these in turn have directly shaped and substantially impacted core ESG market drivers which can be broadly summarised as wanting to “manage, reduce and avert (existing and future) risks”, either in relation to compliance, the continued ability to access (green or conventional) finance or to averting reputational and liability risks.



**FIGURE 2:**  
ESG policy and market drivers

## 3

## What is driving ESG?

This confirms early stage Working Group survey results that cite “risk management and future proofing” as the main ESG drivers. The driver “client demand” may both be due to a growing awareness of the importance of sustainable development issues as well as the fact that the perception of the relevance of ESG is being stoked by the growing number of marked-led ESG initiatives.

Interestingly, “wanting to do the right thing” featured relatively low in the ranking amongst Working Group members. In view of the current policy context and focus in the EU, at least for the time being, market sentiment thus points to risk preoccupation as key driver for ESG engagement rather than purely ethical considerations.

*“ESG market drivers can be broadly summarised as wanting to “manage, reduce and avert (existing and future) risks.”*

As this section has shown market participants’ ESG agendas are heavily influenced by existing and emerging EU policy initiatives which act as triggers for increasing market interest also on the client side. These act as strong incentives for market participants to want to adopt ESG strategies. However, when it comes to implementation, section 4 will show that there remain significant challenges.

# 4 Challenges related to ESG implementation in construction and real estate

While the share of sectoral ESG investment is growing and an increasing group of construction and real estate stakeholders are developing ESG strategy plans, Working Group members described a number of challenges when implementing these strategies whereby group members differentiated between regulatory and structural and sectoral challenges. Figure 3 below lists the top 3 challenges in order of importance as identified for each category by the Working Group, while highlighting the interconnected nature and interdependencies between them.

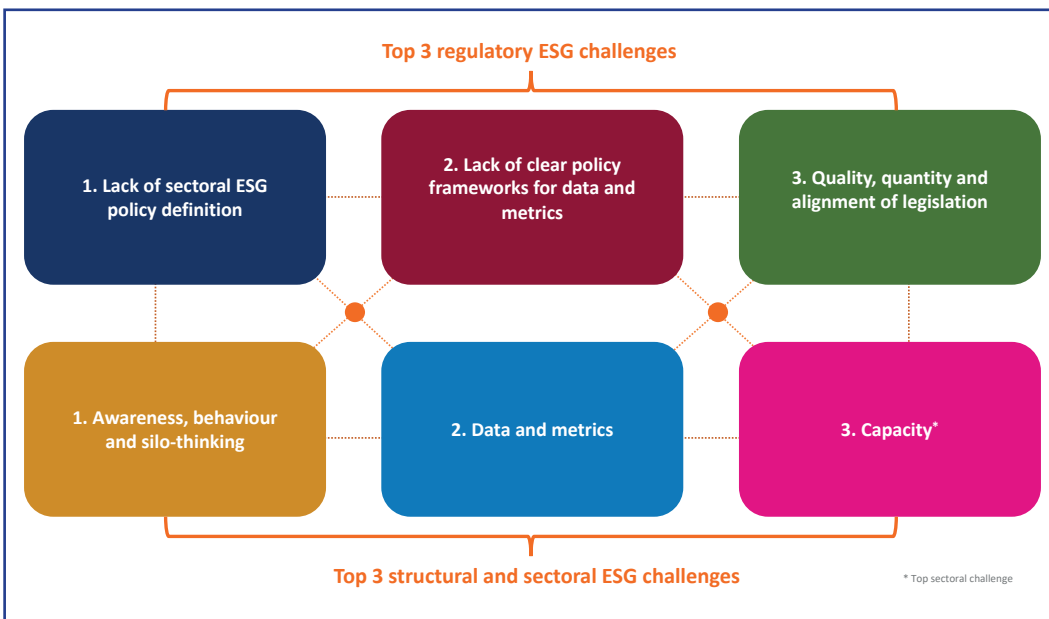


FIGURE 3: Regulatory, structural, and sectoral challenges in relation to ESG implementation

## 1. Regulatory challenges

Regarding quality, quantity and alignment of legislation, Working Group members felt that there is a general sense of lack of alignment between both regulatory initiatives and amongst the various involved policy stakeholder communities and stakeholder hierarchies.

While the last three years have seen the revision of key policy files and the introduction of a set of new ones with changes which may admittedly be difficult for stakeholders to navigate and “digest” as they require the development or adaptation of associated internal organisational processes, skills sets and ultimately, wider industry practices, this also poses an opportunity to improve the coherency and ambition of the policy landscape.

*“The absence of a clear sectoral policy definition of ESG is perceived as the biggest challenge.”*

However, within the set of regulatory challenges it is the absence of a clear sectoral policy definition of ESG and of requirements in relation to which processes and evidence constitute ESG and Taxonomy alignment which was perceived as the biggest challenge of all alongside the lack of clear frameworks for data and metrics.



# 4

## Challenges related to ESG implementation in construction and real estate

### 2. Structural and sectoral challenges

Lack of awareness, behaviour and silo-thinking were ranked as the top structural ESG challenges across all industry sectors by Working Group members.

*“Lack of awareness, behavior and silo-thinking are the top structural ESG challenges across all industry sectors.”*

#### Other structural challenges mentioned by Working Group members:

- As in relation to the policy challenges, the **lack of an ESG definition** was seen as key in addition to the lack of international alignment, lack of cross-sectoral collaboration and interdisciplinary working.
- A **one-dimensional focus on environmental issues** was also highlighted alongside the **challenge of having to accommodate multiple reporting tools and a multitude of reporting requirements**, often with unclear cross-category weighting, undermining transparency and thus potentially leading to risks of greenwashing.
- A central theme both from a structural and a sectoral perspective was the **lack of relevant data and metrics**, especially against a background of investors becoming more demanding for ESG information as a basis for their investment decision-making.
- Linked to the data issues, the **lack of standardisation of metrics and benchmarks** were listed as well as **low levels of digitisation** within the sector. Working Group members were also very critical about data quality, reliability and consistency and of stakeholders self-verifying their own performance data and information. The insufficient connection between financial and sustainability-related KPIs was also mentioned as an important challenge.

*“There is insufficient connection between financial and sustainability-related KPIs.”*

Top sectoral challenge was clearly the issue of capacity, including the lack of knowledge, skills, and dedicated training as well as a lack of understanding of technical aspects among senior staff within the finance community and additional stress on existing IT structures, especially within SMEs.

*“Top sectoral challenge is lack of capacity.”*

Having identified both policy-related, structural and sectoral ESG challenges, section 5 will provide a set of practical recommendations on how these might be best addressed for and by construction and real estate stakeholders to facilitate easier and successful ESG implementation.

# 5 Overcoming ESG policy and sectoral challenges

Working Group members were keen to identify challenges to ESG implementation, but first and foremost they wanted to reflect upon solutions of how these challenges might be best overcome – both by policy-makers and by private sector ESG ecosystem stakeholders.

## Recommendations for policy makers on how to successfully address regulatory “ESG” challenges

### Overcoming challenge 1

#### Successfully addressing the lack of an ESG policy definition

**a. Develop** a sectoral ESG definition and define requirements for what constitutes ESG and Taxonomy alignment (including criteria and target values to be met, processes, evidence, supporting tools, such as mandatory digital building logbooks or passports). This may be accomplished within the sectoral-specific European Sustainability-related Reporting Standards (ESRS) developed by EFRAG.

**b. Define** a regulatory materiality matrix and continuous alignment with clear and measurable objectives.

### Overcoming challenge 2

#### Successfully addressing the lack of clear policy frameworks for data and metrics

**a. Undertake** a wide-range study of the life cycle impact of buildings to obtain baseline values, benchmarks and use it to set targets in line with carbon budgets and other environmental objectives.

**b. Develop** building and product environmental databases and roll-out digital building logbooks or passports to address the lack of common data availability and transparency within the sector.

**c. Address** the existing landlord-tenant split incentives dilemma related to data sharing and data access by introducing an incentive chain through life cycle carbon reporting requirements, making all value chain actors report emissions from upstream and downstream activities.

### Overcoming challenge 3

#### Successfully addressing policy alignment

**a. Develop** an “all in one” Sustainable Buildings Directive based on Level(s), potentially broadening macro-objectives or indicators if necessary, defining a clear course of action and a roadmap with incrementally tightened key mile stones leading up to 2050.

**b. Aggregate and prioritise** policies whilst addressing the interconnectedness of the life cycle environmental and social objectives (e.g. CO2 before kWh, or reduced emissions connected with protection of biodiversity, etc.).

# 5

## Overcoming ESG policy and sectoral challenges

Given that the single most important challenge identified by the group is related to the lack of a sector-focused ESG definition, Working Group members came together to jointly develop a proposal for what a potential future ESG definition might look like, fully cognisant of the fact that many organisations and initiatives may already have their own tailored interpretation and definition of what their understanding of ESG is or should be. The proposal covers the whole spectrum of ESG related issues, taking a multi-dimensional approach with a weighting that is evenly balanced across all three ESG dimensions yet also considering economic considerations across the whole life cycle:

**An ESG construction and real estate activity is based on a holistic, balanced, regenerative and long-term approach that has a lasting positive impact and incorporates environmental, social-cultural, economic and governance aspects into all corporate business practices and strategies and financial decision-making across the entire sectoral life cycle.**

As basis of construction and real estate sector activity classification the group used the respective sector classification in the draft European Sustainability Reporting Standard SEC1 (EFRAG, 2022).

To support market endorsement of the proposed ESG definition, the working group felt it was essential to equally stress the various benefits of active ESG engagement and adoption of ESG strategies for sectoral market participants:

**Engaging with ESG (Environmental, Social, Governance) in construction and real estate enhances the understanding of local and global sustainability challenges, associated regulatory requirements and market preferences. Adopting an ESG strategy directly supports due diligence, helps to mitigate the risk of future obsolescence and stranded assets and the development of practical, sectoral sustainability solutions.**

### Practical recommendations for addressing sectoral ESG challenges by construction and real estate market participants

#### Overcoming challenge 1

#### Successfully addressing lack of awareness, behavioural and silo-thinking related challenges

##### 1. Definition, guidelines and rules:

- a. **Translate** a future policy ESG definition into a practical sectoral context (covering “the what, the how, the who”), including scope, benchmarks and targets relevant to differing asset classes with a view towards global application.
- b. **Develop** clear ESG sectoral guidelines, referencing existing material on how to make buildings sustainable and defining greenwashing.
- c. **Create** a new “market rule book” with the obligation to prove the case “ESG compliant” on the basis of third-party verified data with penalties for greenwashing.

# 5

## Overcoming ESG policy and sectoral challenges

### 2. Organisational structures:

- a. **Organise** ESG via a matrix structure.
- b. **Create** an internal corporate management ESG cockpit or dashboard.
- c. **Nominate** ESG expert ambassadors from different departments within the organisation.
- d. **Set** macro-objectives with ongoing monitoring and regular reviews as part of a longer-term perspective ESG roadmap.
- e. **Hold** regular knowledge exchange and training events within the company.
- f. **Develop** an internal overlapping company and asset class matrix based upon the ESG definition.
- g. **Develop** and maintain an internal ESG database.

### Overcoming challenge 2

#### Successfully addressing data and metrics related issues:

- a. **Adopt** a more systematic and coherent approach to building data capture and management.
- b. **Take** a whole lifecycle view by introducing digital building logbooks or passports.
- c. **Develop and maintain** a holistic ESG database, linking environmental, social and governance performance data with financial performance data.
- d. **Support and engage** in building data transparency and data sharing industry initiatives, using sectoral synergies when capturing and processing building-related information.

### Overcoming challenge 3

#### Successfully addressing capacity related issues:

##### 1. Training and (cross-border) knowledge exchange:

- a. **Develop** an industry-wide standardised certificate for sustainability training with the obligation for companies to carry out annual training across all employees accompanied by records/certificates of completion.
- b. **Compile** a “glossary” to broaden understanding within but also beyond sector (creation of a “common language”).
- c. **Develop** and provide training to key employees to widen the use and application of the LCA-LCC methodology.

##### 2. Cross-sectoral and inter-sectoral collaboration:

- a. **Involve** regulators and energy sector operators at national and sub-national levels.
- b. **Foster** non-biased communication.
- c. **Nominate** sectoral ESG ambassadors.

A final recommendation to market participants from the Working Group would be to stop looking at ESG aspects in one-dimensional silos and to adopt holistic and integrated strategies. The rationale for this will be explored in the next section.

# 6 Taking an integrated approach to ESG criteria

## Current ESG criteria focus

When asked about the thematic focus of their current ESG engagement, two thirds of Working Group respondents stated that, at present, they, or their organisation, are predominantly focusing on environmental issues and only one third reported engagement with all ESG aspects. However, as will be explored in more depth in relation to reporting and disclosure patterns in section 7, even within that environmental focus, the scope of issues covered may actually be even narrower as most environmental ESG efforts being undertaken are in relation to climate change related issues, such as energy efficiency and carbon and to a much lesser extent in relation to circularity, pollution and biodiversity aspects (see Figure 4).

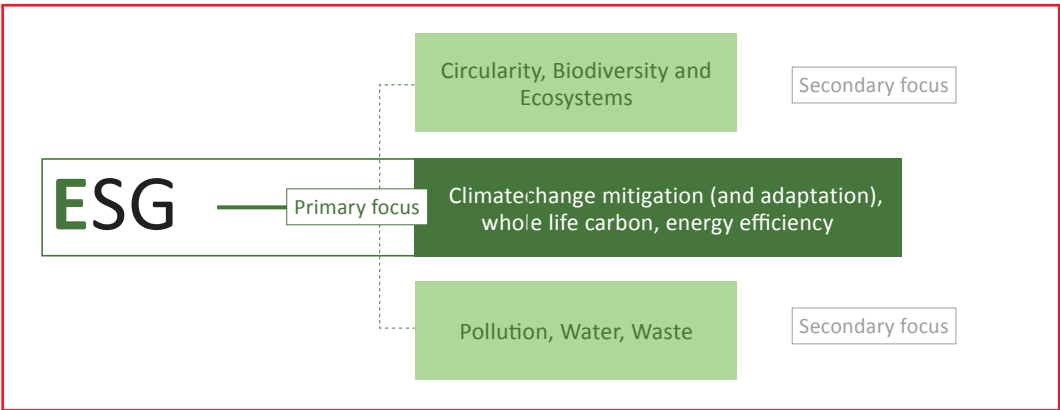


FIGURE 4:  
Current environmental  
ESG focus

## A future shift regarding ESG focus: the rise of social issues

Initially, active sectoral engagement with social ESG aspects was limited. This was (and probably to a certain extent still is) partly due to a lack of awareness and understanding of what these social issues actually are, partly due to the perception that, unlike for energy efficiency and climate, there are no adequate and reliable metrics available and, finally, due to the fact that the overriding perception amongst stakeholders is that these issues are not regulated.

And yet, when asked which ESG aspects they deemed likely to gain more importance in the future, a third of all Working Group members cited social issues and another third all ESG issues, forecasting a heightened focus on social issues in years to come.

*“A heightened focus on social issues is forecast for years to come.”*

This projected trend was also confirmed by a global survey on social value and ESG undertaken by the Urban Land Institute (Urban Land Institute, 2021) which found that real estate practitioners and investors have developed a strong interest in better understanding social issues and how to measure and manage them but that to date there is no common understanding of what constitutes social value in real estate – nor is there a common approach to describe and measure it.

Figure 5 summarises headline social ESG issues with sectoral relevance identified by the Working Group.

# 6

## Taking an integrated approach to ESG criteria



FIGURE 5:  
The "S" in ESG in real estate and construction

The common understanding around social ESG issues could potentially be established by an EU Social Taxonomy (Platform on Sustainable Finance, 2022) for which scoping work has already been undertaken but which now appears to seem to have been postponed indefinitely (Ainger and Arons, 2022), jeopardising a holistic stance on ESG at EU level. However, apart from being delayed, the first scoping document for a prospective EU Taxonomy is focusing at the corporate (governance) and not yet at the economic activity (sectoral) level. Even though there is currently no official EU-wide sectoral standard framework for social indicators available, there are multiple good practice examples of how to consider social ESG on projects and how to assess the rate of achievement based on sustainable building certification tools across Europe.

### The role of "G" in ESG

With environmental issues having dominated sectoral ESG engagement in recent years and social considerations now on the rise, it is often easy to forget or to take for granted the crucial role of the "G" – corporate governance – in making a success of implementing organisational environmental and social ESG strategies (Krebbbers, 2020).

# 6

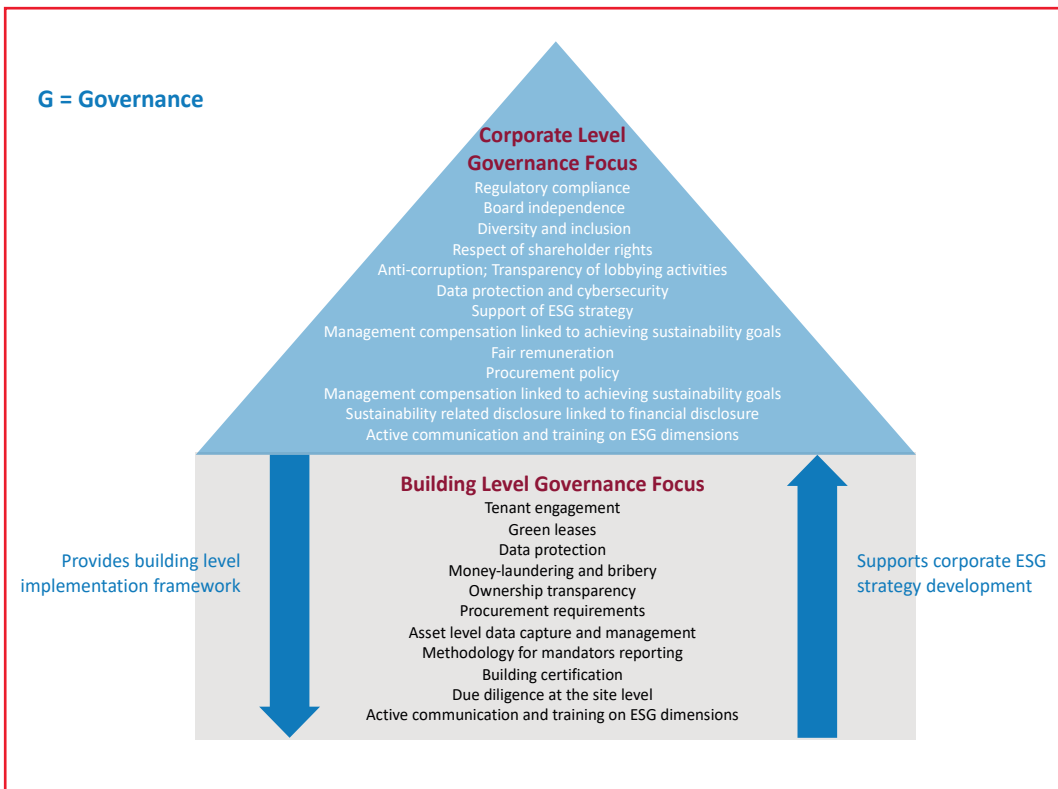
## Taking an integrated approach to ESG criteria

Corporate governance is mainly associated with boards of directors who are responsible for the governance of their companies. This goes to explain why some stakeholders perceive the “G” as more of a removed, overarching ESG pillar and, in contrast to managing environmental issues which tend to be building-focused, some stakeholders are somewhat struggling with relating the “G” to the asset level and asset-based decision-making.

*“The perception is that corporate governance is mainly associated with boards of directors.”*

Figure 6 distinguishes between corporate and building level governance ESG criteria identified by the Working Group but as the diagram shows both levels depend on each other with a constant interplay of “top down” and “bottom up” action. The corporate level governance structure sets the overall policy and strategy framework for implementation at the building or site level. Data and documentation from the latter help inform strategy development, provide proof of compliance and support delivery on top-level existing policies and commitments.

What often gets overlooked is that governance may not only apply to an entire company as governance structures and associated processes must also be defined for and implemented within smaller units, such as business divisions or locations, and, equally for a company’s product range which in the case of construction and real estate would then ultimately be the building or its components.



## 6

## Taking an integrated approach to ESG criteria

**Taking a multi-dimensional integrated approach to ESG**

There is now growing realisation, also amongst policy makers, that there are direct linkages between achieving decarbonisation targets and social outcomes and that the envisaged green transition may cause potentially negative impact in other areas.

*“There are direct linkages between decarbonisation targets and social outcomes.”*

In recognition of these linkages, the European Commission has set up a so-called “Just Transition Fund” (European Union, 2021) to avoid increasing levels of inequality caused by transition activities and to support economic diversification.

From a sectoral perspective, **it is therefore crucial to take and adopt a holistic approach when looking at the three ESG dimensions as these are inextricably linked to each other.** To stress the imperative for a multi-dimensional approach to ESG, the Working Group went beyond developing a list of criteria for the three respective ESG dimensions by mapping existing linkages between environmental, social and governance issues. This is reflected in Figure 7 which systematically analyses the cross-impact between the various ESG criteria categories. For the linkages between decarbonisation and social issues the map is drawing on the 2021 Institute for Human Rights and Business report Better Building(s): Financing Human-Rights-Based Decisions in Europe’s Built Environment which identifies six critical inter-connected thematic areas in the context of financing Europe’s decarbonisation: the right to housing; the right to health; workers’ rights; equality and non-discrimination; participation; and technology and human rights (Institute for Human Rights and Business, 2021).

**Selected examples of ESG criteria cross-impact:****Example 1: Renovation**

Large-scale energy efficient renovation of individual low-performing buildings or even whole urban districts is widely being promoted as an important move towards reducing emissions and meeting climate targets, corresponding to the environmental ESG criterion “Whole life cycle GHS-emissions and GWP (CO<sub>2</sub> intensity)” in Figure 10. While renovation and regeneration efforts are undoubtedly contributing to improved performance levels in terms of energy performance and CO<sub>2</sub> reductions, in places with already existing housing shortages this may lead to so-called “green (or environmental or low carbon) gentrification” (Bouzarovski et al., 2018) whereby residents and small businesses are priced out of their areas post renovation as they can no longer afford buying or renting, translating into negative consequences in relation to ESG social criterion “Social and economic inclusion” and to ESG governance criteria “Tenant engagement” and “Diversity & Inclusion” (see Figure 7).



# 6 Taking an integrated approach to ESG criteria

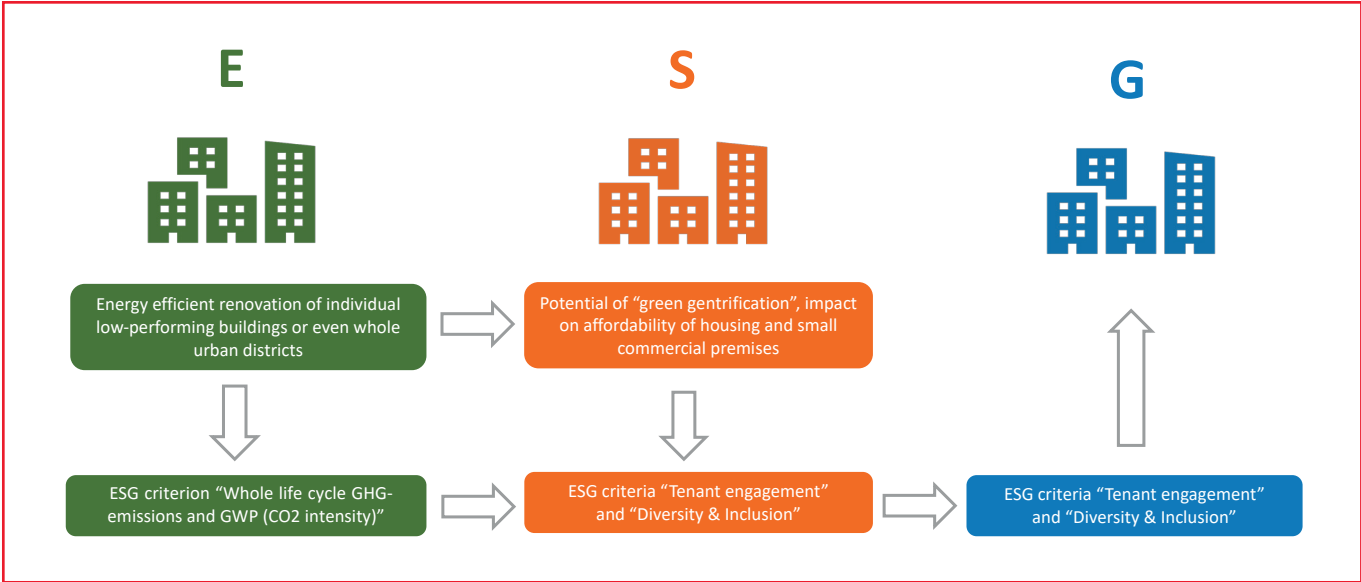


FIGURE 7: Potential cross-impact between energy efficient renovation and affordability

## Example 2: Climate adaptation & resilience (physical and economic)

In recent years, hitherto unknown occurrences of extreme weather events have been putting buildings and infrastructure physically at risk through flooding, high winds, droughts, landslides, wild fires and extreme temperatures, as outlined under environmental ESG criterion "Climate adaptation & resilience". Apart from the environmental impact of these events, they also have a bearing on social ESG criterion "End-user/occupant mental and physical health" and overall building safety as built structures may no longer guarantee well-being, thermal comfort or structural stability. Ultimately, this increases insurance risk and therefore economic resilience of the asset which in turn directly affects ESG governance criterion "Shareholder rights" (see Figure 8).

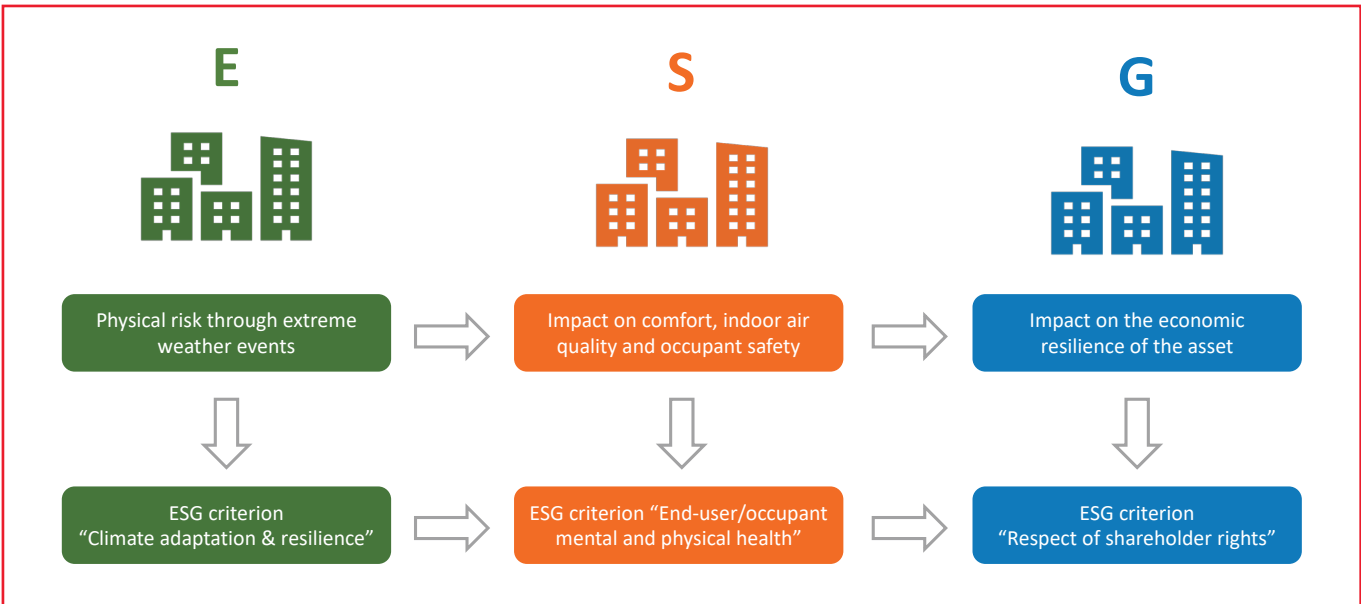


FIGURE 8: Potential cross-impact between physical environmental, social and governance risks

# 6

## Taking an integrated approach to ESG criteria

### Example 3: Environmental data capture and management

In comparison with other industries, the construction and real estate sector has still some ground to cover when it comes to systematically capturing and managing asset-level data. This has had repercussions not only on the ability to measure and track environmental performance but also on building investor trust and channeling more investment towards sustainable buildings. In other words, building data and information are absolutely key for achieving market transformation. The introduction and use of digital building logbooks and passports, automation, smart metering, etc., are valuable support tools for helping sector participants to collect and manage building level data. However, while in transparency and decision-making terms this is obviously a good thing, the deployment and use (or abuse) of these tools may also impinge on social ESG social criterion “Digital rights” and governance ESG criterion “Data protection and cyber security”(see Figure 9).

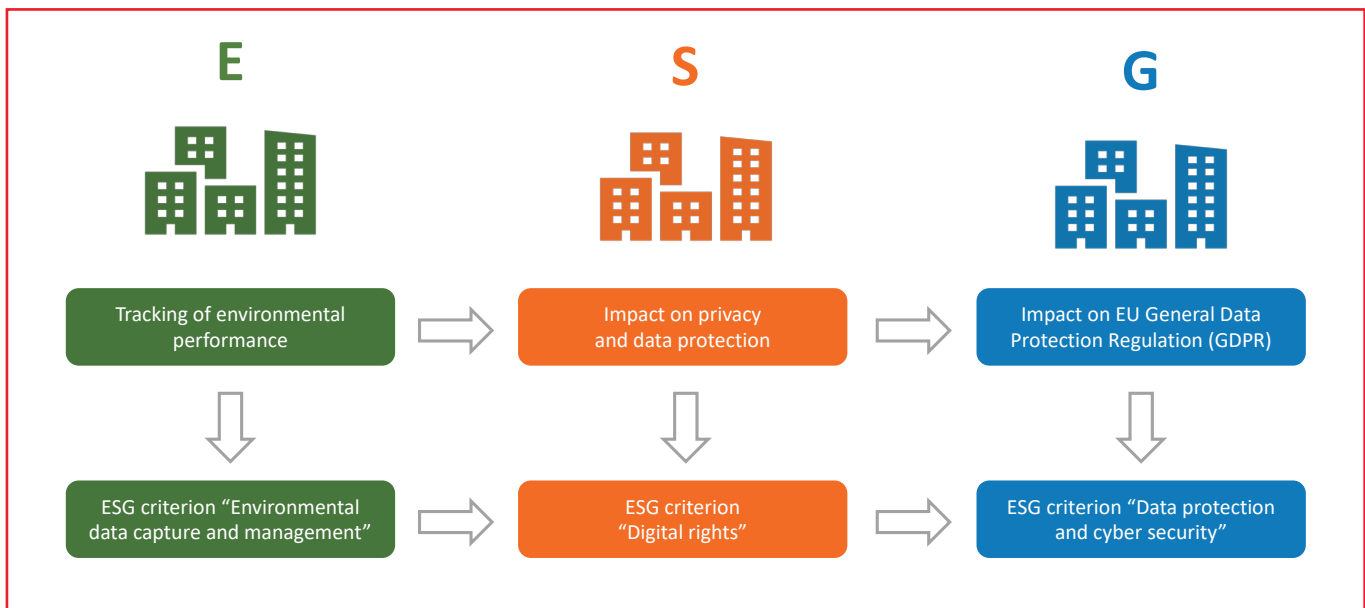


FIGURE 9: Potential cross-impact regarding building data capture, privacy and data protection

In short, these three examples demonstrate the complexity of ESG related issues illustrated in Figure 10 and stress the necessity for stakeholders to take a ESG wider view if they want to avoid risks of perceptions of ESG-washing in the future.

*“Stakeholders need to take a wider view if they want to avoid risks of perceptions of ESG-washing in the future.”*

# 6

## Taking an integrated approach to ESG criteria

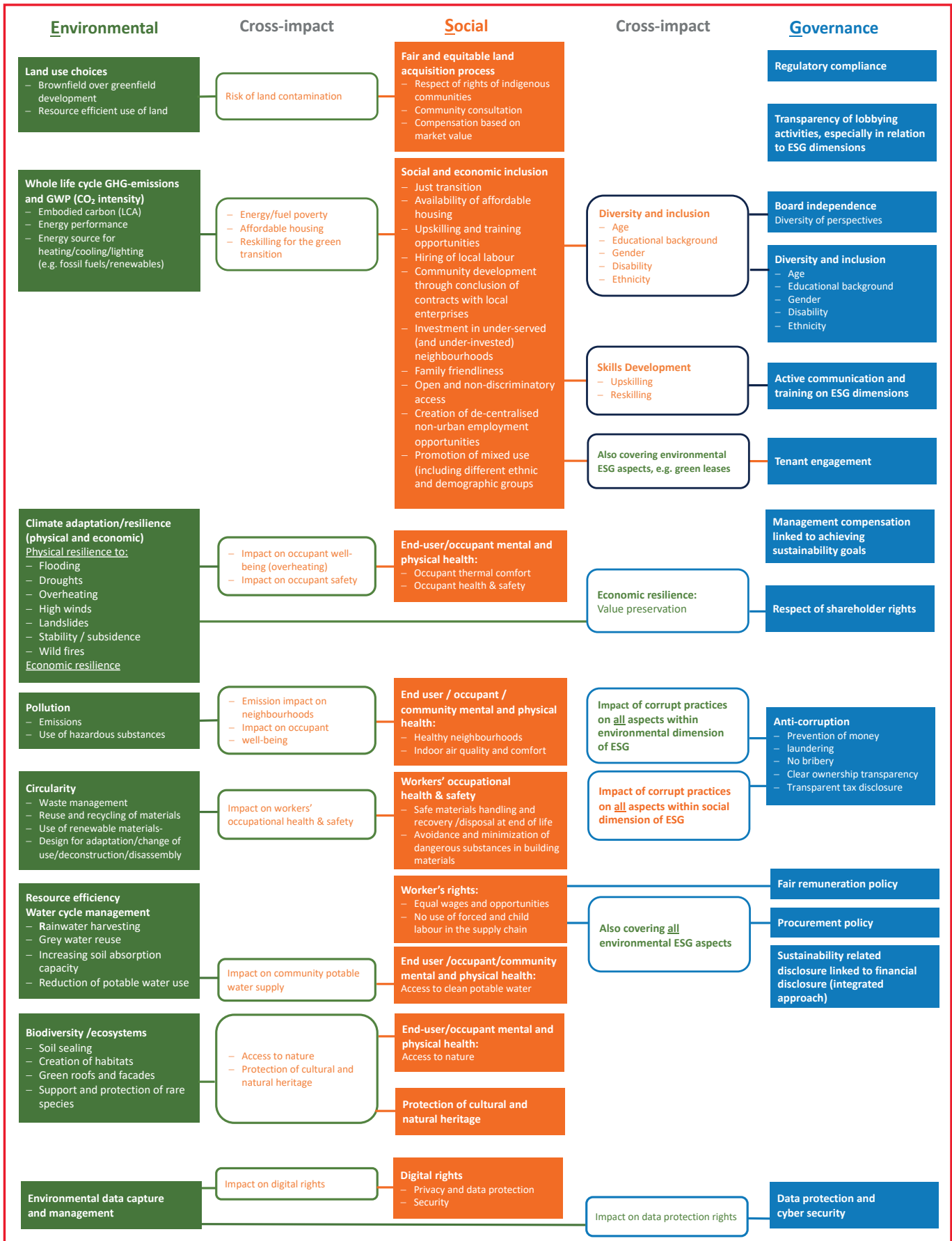


FIGURE 10: Mapping linkages and interdependencies between the three ESG pillars

# 6

## Taking an integrated approach to ESG criteria

### Supporting tools for taking an integrated ESG approach

As illustrated by Figure 11, there are a number of existing tools and processes that can help organisations adopt integrated and holistic ESG strategies, taking into account potential cross-criteria impacts and thus avoiding undesired outcomes in relation to one ESG dimension caused by a one-dimensional focus in another.

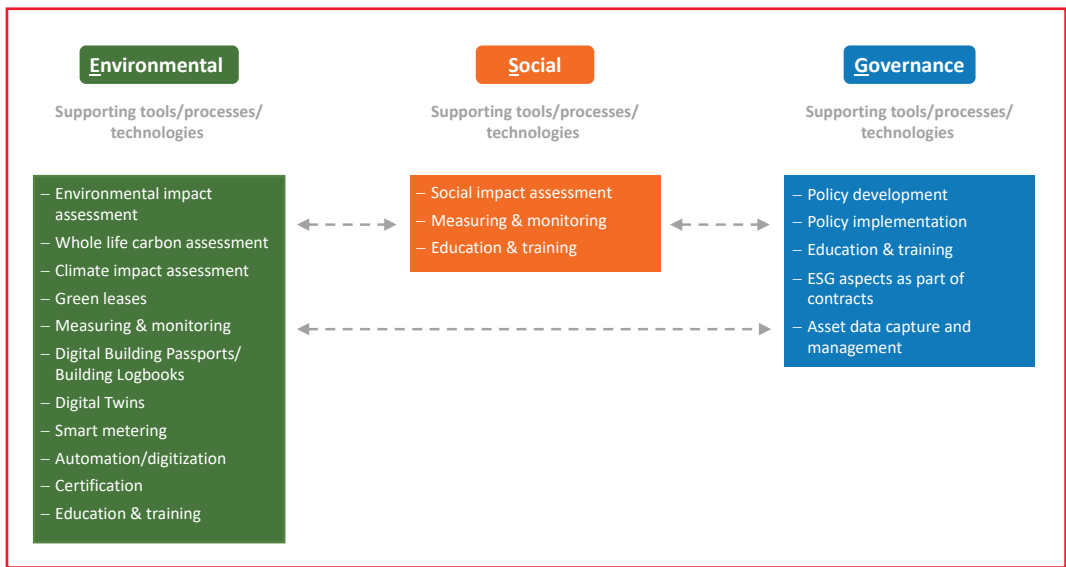


FIGURE 11: Supporting tools and processes for ESG implementation

The introduction and use of the tools mentioned above not only support the development of ESG strategies but equally ESG-related reporting, disclosure and verification processes which will be closely examined in section 7.

## 7

# ESG reporting, disclosure and verification

The rise of ESG and the demand for ESG disclosure has also led to a proliferation of ESG reporting and rating tools. ESG ratings are offered by companies aiming to provide investors with an objective data-driven third-party assessment of ESG-related aspects. However, at present, these assessments remain unregulated and rating organisations are largely commercially orientated. In addition, there is a general lack of comparability and reliability of individual ratings and an official or common definition of ESG ratings does not exist (ESMA, 2021).

*“There is a general lack of comparability and reliability of individual ESG ratings.”*

The European Securities and Market Authority (ESMA) distinguishes between two types of ESG ratings: ESG risk ratings, looking at the exposure to and management of ESG risks and ESG impact ratings, focused on assessing the impact of companies and their activities on ESG aspects. Most ESG ratings are an aggregate of sub-scores derived from assessing the three different ESG dimensions. However, this aggregation is not unproblematic as data availability across the three ESG dimensions is not homogenous and weighting of dimensions is also not standardised (ibid.).

This goes to explain the findings of the 2021 Edelman Trust Barometer “Special report: Institutional Investors” according to which “investors are skeptical of ESG disclosures and commitments and foresee an increase in ESG-related litigation” and think that “companies frequently overstate or exaggerate their ESG progress when disclosing results.” (Edelman, 2021)

According to the report, 32% of responding global investors and 46% of U.S. investors are in favour of mandatory disclosure, 31% (global) and 34% (U.S.) feel that companies are not disclosing enough ESG information and 35% (global) and 48% (U.S.) would like to see more regulatory pressure to ensure ESG compliance. With regard to specific ESG issues, most investor skepticism concerns climate and diversity and inclusion pledges made by organisations.

## Reporting patterns by Working Group members

As already mentioned in section 5, Working Group members’ current primary ESG focus is on environmental issues, driven by regulation and greater data availability. This is also reflected in their respective ESG reporting focus which follows this pattern with Working Group members mainly reporting against environmental criteria, i.e. CO<sub>2</sub>, energy, water, waste, etc., with some additional coverage of social and governance dimensions by some members, including the enhancement of social diversity in housing, accessibility for the disabled, occupant health, mitigation of corruption, transparency, and communication.

*“Working Group members’ primary ESG reporting focus is on environmental issues.”*

Cross-border reporting tools and frameworks used by individual Working Group members include the ratings listed in Table 1 which fall into two main categories: non-regulatory and regulatory reporting and disclosure tools. Among the non-regulatory tools are: Global ESG Benchmark for

# 7

## ESG reporting, disclosure and verification

Real Estate (GRESB), the Carbon Risk Real Estate Monitor (CRREM), the UN Global Compact, Global Reporting Initiative (GRI), the UN Principles for Responsible Investment (UN PRI), the Science based Targets Initiative, (SBTi) and the Energy Efficient Mortgage (EEM) label.

Regulatory reporting and disclosure requirements include the EU Taxonomy, the EU Corporate Sustainability Reporting Directive (CSRD), formerly the Non-Financial Reporting Directive – NFRD (European Union, 2014) and the Sustainable Finance Disclosure Regulation (SFDR) (European Union, 2019).

It is important to note that, unlike the EU Taxonomy technical screening criteria which have been developed for assessing economic activities, the CSRD (the former NFRD) and the SFDR are setting disclosure requirements at the corporate level with the exception of articles 6, 8 and 9 of the SDFR which focus on the product level.

Working Group members’ choice of reporting tools is determined by their efficiency and technical quality, the potential of scalability across the portfolio, their alignment and synergies with regulation, such as the CSRD and the EU Taxonomy and how well they are addressing the risk of greenwashing. Those reporting against GRI and the UN Global Compact are doing so because of the reporting and disclosure frameworks’ international dimension and their direct link with the SDGs. Table 1 represents an overview and analysis of the aforementioned reporting tools used by Working Group members according to respective coverage and focus of ESG dimensions, whether the tools are assessing risk or impact and whether disclosure guidance is provided.

The majority of the tools listed below have a multi-dimensional ESG issue focus – albeit to varying degrees - whereas CCREM, SBTi and EEM have a sole environmental focus. Reporting and disclosure against SBTi, GRI, UN PRI and UN Global Compact reporting is clearly impact focused. At regulatory level, the same applies to the CSRD and impact is also a consideration within the SFDR. All other tools tend to be more risk-orientated.

Reporting tool/framework	Coverage of environmental	Focus	Coverage of social	Focus	Coverage of governance	Focus	Assessing risk or impact	Guidance on public disclosure provided?
<b>GRESB</b>	YES	Energy, waste, water, GHG emissions	YES	Tenant engagement and community, including health and well-being	YES	ESG commitments, decision-making processes, policies, monitoring reporting, governance risk assessment, due diligence, employee engagement	Risk	YES
<b>CCREM</b>	YES	Energy efficiency, decarbonisation, GHG mitigation	NO	NA	NO	NA	Risk	YES
<b>UN Global Compact</b>	YES	Fully aligned with relevant SDGs and associated targets	YES	Fully aligned with relevant SDGs and associated targets	YES	Fully aligned with relevant SDGs and associated targets	Impact	YES
<b>UN PRI</b>	YES	Fully aligned with relevant SDGs and associated targets	YES	Fully aligned with relevant SDGs and associated targets	YES	Fully aligned with relevant SDGs and associated targets	Impact	YES

# 7

## ESG reporting, disclosure and verification

Reporting tool/framework	Coverage of environmental	Focus	Coverage of social	Focus	Coverage of governance	Focus	Assessing risk or impact	Guidance on public disclosure provided?
<b>GRI</b>	YES	Fully aligned with relevant SDGs and associated targets	YES	Fully aligned with relevant SDGs and associated targets	YES	Fully aligned with relevant SDGs and associated targets	Impact	YES
<b>SBTi</b>	YES	GHG emissions reduction	NO	NA	NO	NA	Impact	YES
<b>EEM</b>	YES	Energy efficiency	NO	NA	NO	NA	Risk	YES
<b>EU Taxonomy</b>	YES	Climate change mitigation and adaptation, transition to a circular economy)	Partially covered in DNSH Social and Governance Taxonomy still pending	Health and well-being (indoor air quality, protection during construction works: noise and dust)	Social and Governance Taxonomy still pending	NA	Risk	YES
<b>EU CSRD/NFRD</b>	YES	Transition to a sustainable economy and with the limiting of global warming to 1,5 °C in line with the Paris Agreement and the objective of achieving climate neutrality by 2050	YES	Working conditions, social partner involvement, collective bargaining  Equality, non-discrimination, diversity and inclusion, and human rights  Forced and child labour in the value chain  Human health  Accessibility for people with disabilities  Gender equality and equal pay for work of equal value	YES	Resilience of business model and strategy in relation to risks related to sustainability matters  Implementation with regard to sustainability matters  Existence of incentive schemes linked to sustainability matters  Evidence of due diligence process and target setting	Impact	YES
<b>EU SFDR (disclosure via Principal Adverse Impact templates – PAI)</b>	YES	Key resource efficiency indicators on the use of energy, renewable energy, raw materials, water and land, on the production of waste, and greenhouse gas emissions, or on its impact on biodiversity and the circular economy	YES	Fostering of social cohesion, social integration and labour relations  Investment in human capital or economically or socially disadvantaged communities	YES	Sound management structures, employee relations, remuneration of staff and tax compliance;	Risk plus adverse and positive impact	YES

TABLE 1: Coverage and focus of reporting tools and frameworks used by Working Group members

# 7 ESG reporting, disclosure and verification

Out of the above, the last three warrant closer scrutiny as, unlike the others on the list, they do not represent industry or non-governmental ESG-relevant initiatives but (EU) regulatory frameworks that are increasingly impacting investor and company level ESG strategy development (see Figure 12).

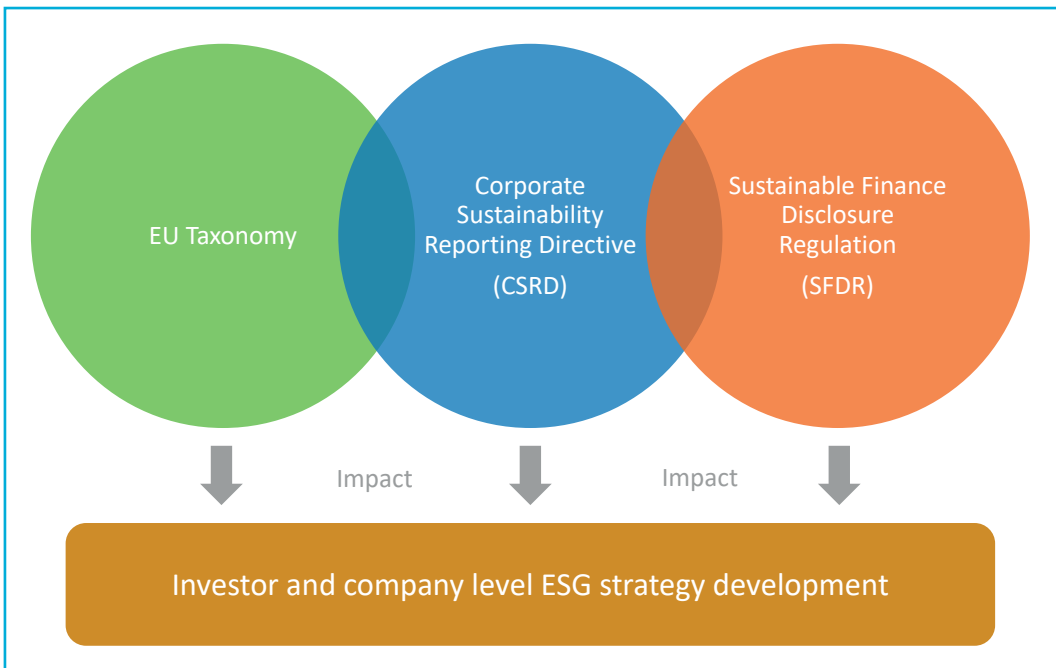


FIGURE 12: Core EU sustainable finance regulatory initiatives with impact on ESG strategy development

Section 8 will examine ESG reporting and disclosure against the EU’s recent sustainable finance legislation with mandatory reporting requirements for non-financial and financial companies.



## 8

# ESG reporting in the context of the EU Taxonomy and the wider EU sustainable finance regulatory framework

## The EU Taxonomy and ESG

The EU Taxonomy is a classification system to help investors assess whether an economic activity is environmentally sustainable and to navigate the transition to a low-carbon economy. It creates a common language for investors, issuers, companies, project promoters and policy makers through technical screening criteria in relation to six environmental objectives:

1. Climate change mitigation
2. Climate change adaptation
3. The sustainable use and protection of water and marine resources
4. The transition to a circular economy
5. Pollution prevention and control
6. The protection and restoration of biodiversity and ecosystems

To be Taxonomy-aligned, an economic activity has to make a substantial contribution to at least one of the listed environmental objectives while not doing significant harm to any of the other five. In addition, minimal social safeguards need to be met. To date, three Taxonomies have been fully developed and adopted for construction and real estate activities: climate change mitigation, climate change adaptation and transition to a circular economy. In addition, the European Commission has started the process of assessing the possibility of developing criteria for a potential Social Taxonomy.

*“The EU Taxonomy reporting requirements have further intensified market participants’ engagement with ESG.”*

The introduction of EU Taxonomy reporting requirements as of 2022 have further intensified market participants’ engagement with ESG. And indeed, going forward, once fully developed, the EU Taxonomy could potentially serve as a ESG reporting framework or at least as a guiding compass for reporting. This would almost certainly apply to environmental ESG aspects and possibly also to a wide range of social ESG issues identified. While probably not fully meeting the range of governance related ESG issues in Figure 7 in section 6, the EU Taxonomy “is the starting point for the development of the regulatory labelling of businesses” (Pettingdale et al., 2022).

The common language based on agreed objective screening criteria will allow assessing organisations’ actual ESG delivery and not just their ESG reporting. Within a completed set of Taxonomies the “Do no Significant Harm” provision could also ensure an integrated approach across construction and real estate ESG dimensions, avoiding the scenario of meeting criteria in one area at the expense of doing harm in another (Maples Group, ELS Europe, Frankfurt School – UNEP Collaborating Centre for Climate & Sustainable Energy Finance, 2021).

Figure 13 illustrates how the Taxonomy will be used as central cornerstone, supporting a wider framework of EU sustainable finance regulation, i.e. vis-à-vis the Sustainable Finance Disclosure

# 8

## ESG reporting in the context of the EU Taxonomy and the wider EU sustainable finance regulatory framework

Regulation and the Corporate Sustainability Reporting Directive both of which will also have an impact on current ESG reporting.

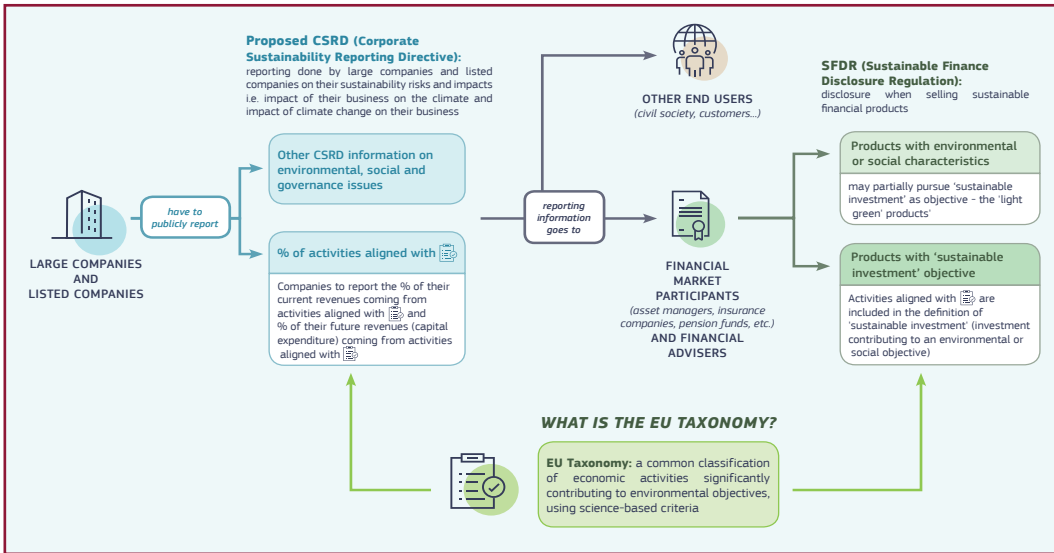


FIGURE 13:  
Two examples of how the Taxonomy will be used in disclosures of financial products and reporting by large companies and listed companies (European Commission, 2021)

### The EU Corporate Sustainability Reporting Directive and ESG

On 5 January 2023, the EU Corporate Sustainability Reporting Directive (CSRD) entered into force, updating and tightening the rules regarding companies’ environmental and social information while at the same time requiring more large companies, as well as listed SMEs, to report on sustainability. In total, this will apply to approximately 50 000 companies, starting in financial year 2024 for the first companies, with reports having to be published in 2025.

The rationale behind the directive is to increase transparency about the social and environmental impact of companies and to provide investors and other stakeholders with access to the information they need to assess investment risks arising from climate change and other sustainability issues. Under the CSRD, audits of reported sustainability information will become mandatory for companies, in other words, mere self-reporting against ESG issues will no longer be acceptable for those organisations’ falling within the scope of the CSRD. Reporting will need to be undertaken against the European Sustainability Standards (ERS) which have been developed by the European Financial Reporting Advisory Group (EFRAG, 2020), building on EU policies and international standardisation initiatives. The EU Commission is expected to adopt the first set of standards in the course of the second half of 2023.

The CSRD will require organisations to:

- Disclose sustainability risks, including climate change risks
- Detail the organisation’s impact on society and environment
- Identify material sustainability topics for stakeholders
- Include targets and progress
- Report in line with Sustainable Finance Disclosure Regulation (SFDR) and the EU Taxonomy Regulation

# 8

## ESG reporting in the context of the EU Taxonomy and the wider EU sustainable finance regulatory framework

For the time being, until companies have to start applying the new rules under the CSRD, the provisions of the Non-Financial Reporting Directive (NFRD) will remain in force. The NFRD requires large companies to publish the information in relation to environmental and social matters, respect for human rights, and governance aspects such as anti-corruption and bribery and diversity of company boards and is applicable to large public-interest companies with more than 500 employees, including listed companies, banks, insurance companies other companies designated by national authorities as public-interest entities.

### The EU Sustainable Finance Disclosure Regulation (SFDR) and ESG

The SFDR was developed to improve transparency in the market of sustainable investment products. It comprises sustainability disclosure obligations for manufacturers of financial products and financial advisers towards end-investors in relation to the integration of sustainability risks by financial market participants, i.e. asset managers, institutional investors, insurance companies, pension funds, etc., all organisations offering financial products that involve the management of clients’ money, and financial advisers in all investment processes and for financial products with a sustainable investment objective (Eurosif, 2022).

In addition, disclosure obligations as regards potential negative impacts on sustainability aspects at organisational and financial product levels were included, i.e. whether financial market participants and financial advisers take into account negative impacts of investment decisions or the investment advice provided in relation to the environment and social justice and how this is reflected at the product level.

The comprehensive sustainability disclosure requirements cover environmental, social and governance ESG issues – both at organisational as well as at financial product level.

In addition to increasing reporting obligations, central to the SFRD is the classification requirement of ESG-related products and non-ESG products as either article 6, 8 or 9 funds or products (see Table 2) depending on the level of respective ESG integration.

Research carried out within four months after the labels were first publicly disclosed found that the SFDR’s requirement for increased transparency had led to increased efforts by mutual funds to intensify their ESG efforts and that EU funds, impacted by the SFDR increased their ESG scores more than funds in the non-EU control group (Becker, Martin and Walter, 2022).

Article 6: All funds and products	Article 8: General ESG – “Light Green” funds and products	Article 9: “Deep Green” funds or products that have a sustainable investment outcome objective
No or very low level of integration of sustainability into investment decisions – not promoted as having ESG objectives	Promotes ESG aspects and promotes environmental and social characteristics but does not have an explicit sustainable investment objective	Aims to create real environmental and social impact alongside financial return in line with the Paris Agreement (reduction in carbon emissions and low carbon emission exposure) and the UN Sustainable Development Goals (SDGs)
Increasing level of detail required in reporting 		

**TABLE 2:**  
ESG reporting levels under the SFDR

## 8

## ESG reporting in the context of the EU Taxonomy and the wider EU sustainable finance regulatory framework

However, there has been ambiguity regarding the SFDR. Guidance issued by the Commission over the summer of 2022 has led to uncertainty among financial market participants about what qualifies as a “deep green” fund that would fulfill article 9 criteria within the regulation. The Commission guidance essentially raised the bar for article 9 products by stating that these funds must not only prioritise making environmental, social and governance impacts but that all issuers included in the funds must already be sustainable thus eliminating all so-called transition investments from the article 9 category down to article 8 level. The absence of a clear Commission definition of what qualifies as sustainable has left many fund managers in doubt as to whether their funds still qualify or not. According to data from Bloomberg Intelligence roughly \$57bn of assets across more than 70 ETFs were reclassified from “dark green” Article 9 to “light green” Article 8 in the last three months of 2022 (Andrew, 2023).

In summary, within the EU, a significant body of legislation has been introduced since the adoption of the EU Sustainable Finance Action Plan in 2018 (European Commission, 2018) which has substantially affected organisations’ ESG strategies and associated reporting and disclosure by introducing a set of regulatory rules which are likely to be further tightened over time.

*“There is still a high degree of uncertainty amongst market participants.”*

However, as has become evident with the downgrading of article 9 funds under the SFDR, there is still a high degree of uncertainty amongst market participants around a lot of the details, especially given the amount of new legislation that is now set to enter into force.

# 9 Operationalising ESG: Practice examples

The following practice examples illustrate how different organisations with different market perspectives are operationalising and implementing ESG with regard to both their own organisational approach and for their clients, including drivers, challenges, reporting frameworks used and helpful tools.

## Practice example 1: Construction company, Spain

“011h Sustainable Construction is an SME impact start up focused on climate change mitigation and providing access to affordable, healthy and sustainable housing.

While we may still be at the beginning of our journey, our ESG strategy is very much driven by wanting to achieve emissions reduction. To support our ESG efforts we have developed an Impact Thesis which sets out our strategic organisational approach regarding net zero and wider sustainability in line with the Level(s) framework and the requirements of the EU Taxonomy. Our target is to certify all our buildings with VERDE-GBCe certification with a minimum level of 3 leaves. In addition, we are currently working on a series of social and governance internal policies to improve the ESG KPIs in these areas.

A major driving force are our investors who ask us to disclose our ESG KPIs for their internal portfolios which is why we are currently working towards becoming BCorp ESG certified with the objective of achieving certified status this year.

In terms of reporting, for the time being we are reporting against our investors ESG KPIs but going forward we want to produce our own company ESG report every year.”

**011h Sustainable construction CL, Barcelona, Spain**

## Practice example 2: Real estate investment and management firm, Germany

“PATRIZIA is a real estate investment and management company headquartered in Germany with globally 28 offices and over 1,000 employees.

Our current main ESG focus is on decarbonisation and energy intensity reduction. We want to achieve net zero carbon status across our corporate operations and real asset portfolio by 2040 or earlier, with a clear ambition to make this happen as fast as external and stakeholder requirements permit.

Our ESG strategy is being driven by wanting to become a leading global impact investor in the real assets sector with a meaningful part of our AuM in impact investments by 2035 and a consistent UN PRI 5-star rating from 2025 onwards with the majority of our assets certified under our Create Better programme and by being an employer of choice in the real assets sector.

We use a variety of both regulatory and non-regulatory reporting and disclosure tools: the EU Taxonomy, SFDR, PAI, UN PRI, CRREM and GRESB but are also making use of internal reporting standards.

Our main ESG challenges are related to harmonisation and collection of different types of data and standardisation across ESG KPIs, e.g. energy reference areas, gap-filling assumptions, comparability of funds and assets.

## 9

## Operationalising ESG: Practice examples

To address strategic and practical challenges we have established a series of processes and programmes. These cover ESG strategy for all funds, an evaluation of ESG criteria in the acquisition phase and regulatory reporting and checks. At a more practical level we have introduced the provision of energy audits, building certifications, tenant engagement programs, green leases, roll-out of smart meters, photovoltaic, and the provision of regular ESG trainings for our colleagues just to name only a few.”

**Patrizia AG, Germany**

### Practice example 3: ESG advisory and Carbon Due Diligence services provider

“Wüest Partner are a consultancy specialising in sustainability and ESG advisory and Carbon Due Diligence services in Germany, France and Switzerland.

Our investor and real estate holder clients’ ESG focus is on climate related issues. Their agenda is driven by the EU Taxonomy (EU) and country-specific regulation.

Our clients’ ESG implementation is hindered by a number of issues which include unclear provisions and definitions within regulations and the current speed at which regulation is changing and restrictive local data protection laws that make consumption data acquisition difficult – in particular with regard to tenant consumption data. In addition, the lack of structured data about the building portfolio on the part of the owner and the use of different CO2 coefficients by the market (local vs. national) are acting as barriers.

To support our clients and to assess their ESG environmental performance, we have developed a set of tools and processes and are also using external tools. Our own ESG support tools include a property data documentation and recording App, a database and valuation software for e.g. calculating ESG-CAPEX measures and recommendations for the next 10 years, site risks and a CO2 emissions tool which we use like CRREM to determine carbon emissions and stranding points of the assets.

Seeing that data availability and access are absolutely crucial, we strongly advocate collecting structural data (building envelope, windows, roof, etc.) in a central database and setting up data management rooms that would facilitate detailed asset documentation.

To ease access to consumption data, we also see installing remotely accessible smart meters and implementation of Green Leases as practical solutions that could help overcome existing challenges with ESG implementation and reporting.”

**Wüest Partner, Germany**

# 10 Summary and outlook

As this report has shown, new rules for sustainability disclosure and reporting, including the EU Taxonomy, the EU Corporate Sustainability Reporting Directive and Sustainable Finance Disclosure Regulation coupled with increasing client and investor demand for sustainable built assets have led to significant growth of ESG investment and reporting in Europe amongst construction and real estate market participants over the past years.

However, the rise of ESG as a means to engage with environmental, social and governance issues has not been without challenges, and, in fact some of these challenges, such as a lack of a sectoral ESG definition, a lack of ESG related building level data and a general lack of understanding and skill sets still remain unresolved and will require further work both by policy-makers and sector participants.

This report set out to formulate recommendations and explore practical solutions for sector stakeholders on the basis of insights and expertise of their Working Group peers.

With the majority of market participants currently predominantly focusing their ESG efforts on environmental aspects, a core element of the work behind this report has been the mapping of linkages between the three ESG pillars, especially in view of social and governance ESG issues now moving more into focus.

Going forward, all of the above will necessitate a shift in industry practices and thinking. Closer scrutiny by regulators, investors and civil society and the introduction of reporting standards with regard to ESG products means transparency and accountability based on robust building data will be even more of a key requisite for market participants if they want to avoid their products and activities being perceived as “ESG washing”.



# 11 Working Group Member Testimonials

“It has been a great pleasure to be part of the CPEA EU ESG Working Group. Discussing one of the most pressing topics in the construction industry with experts from all over Europe was very fruitful. We hope to contribute with the elaborated paper to create a better understanding of the context and relevance as well as the challenge we are facing in ESG implementation. Many thanks to Ursula and CPEA for initiating and coordinating this initiative.”

**Leonie Wipf, Project Manager, WBRE WATERBOUND Real Estate Berlin GmbH, Germany**

“The CPEA report provides a comprehensive overview of the growing importance of ESG frameworks and regulations in the construction and real estate sectors, and offers practical recommendations to address the main challenges identified by the working group members as currently hindering a wider adoption of ESG reporting practices.

The report will undoubtedly be useful to those approaching this topic for the first time as well as to those wanting to better understand the complex and evolving landscape of ESG in the context of construction and real estate investments.”

**Fabrizio Varriale, Place and Space Analyst, Royal Institution of Chartered Surveyors (RICS), United Kingdom**

“For Europe to meet its ambitious climate and social goals, major shifts are needed in the influential real estate sector. This includes reducing the climate footprint of buildings and their supply chains; deepening affordability and access to housing; generating opportunity and training for construction workers; and curbing corruption. It is encouraging to see growing awareness of the need for joined-up action. CPEA’s report, developed through a collaborative process with industry leaders, provides a much-needed shared understanding of environmental, social and governance factors – and crucially, the connections between them – across the real estate finance and built environment industries. In so doing, it clarifies the path forward.”

**Annabel Short, Senior Advisor, Built Environment, Institute for Human Rights and Business (IHRB), United Kingdom**

“Organisations operating within the construction and real estate sectors present a unique sustainability value proposition to investors and other stakeholders. Each organisations’ sustainability strategy must consider a number of intersecting goals, such as execution of project development stages, sustainable procurement, compliance including alignment with the EU Taxonomy, as well as use of voluntary green finance frameworks – all in the context of their unique business model and value proposition. Our ESG Market Insights Report helps those organisations to pull together multiple sustainability-related aspects, throws a light on current key challenges and identifies solutions that speak to many stakeholder perspectives.”

**Dawn Slevin, Managing Director, Environmental Liability Solutions Europe Ltd. (ELS Europe), Ireland**

“The real estate ESG community is not alone in addressing the important environmental and social impacts of the sector. Executing any kind of ESG strategy over the long-term requires a supportive policy framework. This is a timely report as key pieces of EU legislation are being revised as part of the Renovation Wave strategy which presents opportunities to better articulate a coherent framework for the adoption ESG practices in construction and real estate.”

**Zsolt Toth, Team Leader, Buildings Performance Institute Europe (BPIE), Belgium**

“We were very happy to have been involved in the development of this report as it contextualises ESG in the wider sustainability and EU policy landscape, especially with regard to recent sustainable finance regulatory initiatives such as the EU Taxonomy, the Corporate Sustainability Reporting Directive and the Sustainable Finance Disclosure Regulation.

While the concept of ESG may now be firmly established in real investment circles, this is less so when it comes to awareness and knowledge levels amongst developers who are often still struggling to apply ESG criteria to individual projects. This report not only highlights the various ESG drivers and challenges but also puts forward tangible and practical solutions both from a policy-making and a market and customer perspective and as such it will make a tangible contribution to fostering a more proactive engagement with ESG issues across the sector.”

**Hubert Rhomberg, CEO, Rhomberg Group, Austria**



# 12 References

- Ainger, J. and Arons, S., 2022, EU puts key plank of ESG rulebook on hold amid infighting, Bloomberg  
Available at: <https://www.bloomberg.com/news/articles/2022-07-31/europe-to-put-key-plank-of-esg-rulebook-on-hold-amid-infighting?leadSource=uverify%20wall>
- [Andrew, T., 2023, Over 70% of Article 9 ETFs downgraded to Article 8](#)  
Available at: <https://www.etfstream.com/news/over-70-of-article-9-etfs-downgraded-to-article-8/>
- Becker, M.G., Martin, F. and Walter, A., 2022, The power of ESG transparency: The effect of the new SFDR sustainability labels on mutual funds and individual investors, in: Finance Research Letters, Volume 47, Part B, June 2022, 102798, published by: Elsevier  
Available at: <https://www.sciencedirect.com/science/article/abs/pii/S1544612322000332>
- [Bergman, M. et al., 2020, Introduction to ESG, Havard Law School Forum on Corporate Governance](#)  
Available at: <https://corpgov.law.harvard.edu/2020/08/01/introduction-to-esg/>
- Boffo, R., and Patalano, R., 2020, ESG Investing: Practices, Progress and Challenges, OECD, Paris  
Available at: <https://www.oecd.org/finance/ESG-Investing-Practices-Progress-Challenges.pdf>
- [Bouzarowski, S., et al., 2018\), Low-Carbon Gentrification: When climate encounters residential displacement, International Journal of urban and regional research, Volume 42, Issue 5, pp.845-863, published by: Wiley Online Library](#)  
Available at: <https://onlinelibrary.wiley.com/doi/full/10.1111/1468-2427.12634>
- Chen, J., 2022, What is a Socially Responsible Investment (SRI)?  
Available at: <https://www.investopedia.com/terms/s/sri.asp>
- [Council of the European Union, 2023, Fit for 55](#)  
Available at: <https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/>
- Edelman, 2021, Edelman Trust Barometer, Special Report: Institutional Investors, U.S. Report  
Available at: [https://www.edelman.com/sites/g/files/aatuss191/files/2021-11/2021%20Investor%20Trust%20Report\\_FINAL.pdf](https://www.edelman.com/sites/g/files/aatuss191/files/2021-11/2021%20Investor%20Trust%20Report_FINAL.pdf)
- [European Commission, 2022, Proposal for a Directive of the European Parliament and of the Council amending Directive \(EU\) 2018/2001 on the promotion of the use of energy from renewable sources, Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency](#)  
Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022PC0222&from=EN>
- European Commission, 2021, How does the EU Taxonomy fit within the sustainable finance framework?  
Available at: [https://finance.ec.europa.eu/system/files/2021-04/sustainable-finance-taxonomy-factsheet\\_en.pdf](https://finance.ec.europa.eu/system/files/2021-04/sustainable-finance-taxonomy-factsheet_en.pdf)
- [European Commission, 2020a, Commission staff working document. Identifying Europe's recovery needs. Brussels, 27.5.2020. SWD\(2020\) 98 final.](#)
- European Commission, 2020b, In focus: Energy efficiency in buildings  
Available at: [https://commission.europa.eu/news/focus-energy-efficiency-buildings-2020-02-17\\_en](https://commission.europa.eu/news/focus-energy-efficiency-buildings-2020-02-17_en)
- [European Commission, 2019, The European Green Deal](#)  
Available at: [https://eur-lex.europa.eu/resource.html?uri=cellar:b828d165-1c22-11ea-8c1f-01aa75ed71a1.0002.02/DOC\\_1&format=PDF](https://eur-lex.europa.eu/resource.html?uri=cellar:b828d165-1c22-11ea-8c1f-01aa75ed71a1.0002.02/DOC_1&format=PDF)
- European Commission, 2018, Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions Action Plan: Financing Sustainable Growth  
Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0097&from=EN>
- [European Commission, 2016, The European construction sector, A global partner](#)  
Available at: [https://single-market-economy.ec.europa.eu/sectors/construction\\_en](https://single-market-economy.ec.europa.eu/sectors/construction_en)

# 12

## References

European Commission, 2014, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on resource efficiency opportunities in the building sector, p.2

Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014DC0445&from=en>

[European Financial Reporting Advisory Group \(EFRAG\), 2022, \[Draft\] European Sustainability Reporting Standard SEC1 Sector classification standard](#)

Available at: <https://www.efrag.org/Assets/Download?assetUrl=%2fsites%2fwebpublishing%2fSiteAssets%2fWorking%2520Paper%2520Draft%2520ESRS%2520SEC1%2520Sector%2520Classification%2520Standard%5b1%5d.pdf>

European Financial Reporting Advisory Group (EFRAG), 2020, Progress report published for project on preparatory work for the elaboration of possible EU non-financial reporting standards

Available at: <https://www.efrag.org/News/Project-449/Progress-report-published-for-project-on-preparatory-work-for-the-elaboration-of-possible-EU-non-financial-reporting-standards?AspxAutoDetectCookieSupport=1>

[European Insurance and Occupational Pensions Authority \(EIOPA\), 2023, Principal adverse impact and product templates for the Sustainable Finance Disclosure Regulation](#)

Available at: [https://www.eiopa.europa.eu/publications/principal-adverse-impact-and-product-templates-sustainable-finance-disclosure-regulation\\_en](https://www.eiopa.europa.eu/publications/principal-adverse-impact-and-product-templates-sustainable-finance-disclosure-regulation_en)

European Securities and Markets Authority (ESMA), 2021, ESG ratings: Status and key issues ahead, ESMA Report on Trends, risks and vulnerabilities, No. 1, 2021

Available at: [https://www.esma.europa.eu/sites/default/files/trv\\_2021\\_1-esg\\_ratings\\_status\\_and\\_key\\_issues\\_ahead.pdf](https://www.esma.europa.eu/sites/default/files/trv_2021_1-esg_ratings_status_and_key_issues_ahead.pdf)

[European Union, 2022, Directive \(EU\) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation \(EU\) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting](#)

Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022L2464&from=EN>

European Union, 2021, Regulation (EU) 2021/1056 of the European Parliament and of the Council 24 June 2021 establishing the Just Transition Fund

Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R1056&from=EN>

[European Union, 2020, Regulation \(EU\) 2020/852 of The European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation \(EU\) 2019/2088](#)

Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R0852&from=EN>

European Union, 2019, Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector

Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R2088&from=EN>

[European Union, 2014, Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups](#)

Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0095&from=EN>

Eurosif, 2022, EU Sustainable Finance & SFDR : making the framework fit for purpose, Eurosif Policy Recommendations for Article 8 & 9 product labels

Available at: <https://www.eurosif.org/wp-content/uploads/2022/06/Eurosif-Report-June-22-SFDR-Policy-Recommendations.pdf>

# 12

## References

Forbes, D. et al., 2012, Forecasting the number of jobs created through construction

Available at: [https://www.arcom.ac.uk/-docs/proceedings/ar2012-0317-0326\\_Forbes\\_El-Haram\\_Horner\\_Lilley.pdf](https://www.arcom.ac.uk/-docs/proceedings/ar2012-0317-0326_Forbes_El-Haram_Horner_Lilley.pdf)

Global Alliance for Buildings and Construction, 2021, Global Status Report for Buildings and Construction 2021  
Available at: <https://globalabc.org/resources/publications/2021-global-status-report-buildings-and-construction>

Institute for Human Rights and Business, 2021, Better Building(s): Financing Human-Rights-Based Decisions in Europe’s Built Environment

Available at: [https://www.ihrb.org/uploads/reports/Financing\\_Inclusive\\_Decarbonisation\\_in\\_EU\\_Built\\_Environment\\_-\\_IHRB%2C\\_June2021.pdf](https://www.ihrb.org/uploads/reports/Financing_Inclusive_Decarbonisation_in_EU_Built_Environment_-_IHRB%2C_June2021.pdf)

Interreg Europe, 2022, Collection and recycling of construction and demolition waste: Key learnings

Available at: <https://www.interregeurope.eu/find-policy-solutions/webinar/collection-and-recycling-of-construction-and-demolition-waste-key-learnings>

J.P.Morgan, 2020, Why COVID-19 could prove to be a major turning point for ESG investing

Available at: <https://www.jpmorgan.com/insights/research/covid-19-esg-investing>

Krebbers, A., 2020, There’s no successful ‘E’ or ‘S’ without a functioning ‘G’ in ESG

Available at: <https://www.natwest.com/corporates/insights/sustainability/theres-no-successful-e-or-s-without-a-functioning-g-in-esg.html>

Markortoff, K., 2022, £262bn investor says it will target bosses who fail on climate or human rights, The Guardian, 24 January, 2022

Available at: [https://www.theguardian.com/business/2022/jan/24/investor-bosses-climate-human-rights-aviva-investors?CMP=Share\\_iOSApp\\_Other](https://www.theguardian.com/business/2022/jan/24/investor-bosses-climate-human-rights-aviva-investors?CMP=Share_iOSApp_Other)

Neate, Rupert, 2023, World’s biggest investment fund warns directors to tackle climate change or face sack, The Guardian, 3 February 2023

Available at: [https://www.theguardian.com/business/2023/feb/03/worlds-biggest-investment-fund-warns-directors-to-tackle-climate-crisis-or-face-sack?CMP=Share\\_iOSApp\\_Other](https://www.theguardian.com/business/2023/feb/03/worlds-biggest-investment-fund-warns-directors-to-tackle-climate-crisis-or-face-sack?CMP=Share_iOSApp_Other)

Peterdy, K. (2022), ESG (Environmental, Social and Governance)

A framework for understanding and measuring how sustainably an organization is operating

Available at: <https://corporatefinanceinstitute.com/resources/esg/esg-environmental-social-governance/>

Pettingdale, H. et al., 2022, EU Taxonomy and the future of reporting, Harvard Law School Forum on Corporate Governance

Available at: <https://corpgov.law.harvard.edu/2022/04/04/eu-taxonomy-and-the-future-of-reporting/>

Platform for Sustainable Finance, 2022, Final Report on Social Taxonomy

Available at: [https://finance.ec.europa.eu/system/files/2022-08/220228-sustainable-finance-platform-finance-report-social-taxonomy\\_en.pdf](https://finance.ec.europa.eu/system/files/2022-08/220228-sustainable-finance-platform-finance-report-social-taxonomy_en.pdf)

Renovate Europe, 2020, Building Renovation: A kick-starter for the EU recovery

Available at: [https://www.renovate-europe.eu/wp-content/uploads/2020/06/BPIE-Research-Layout\\_FINALPDF\\_08.06.pdf](https://www.renovate-europe.eu/wp-content/uploads/2020/06/BPIE-Research-Layout_FINALPDF_08.06.pdf)

Available at: [https://www.renovate-europe.eu/wp-content/uploads/2020/06/BPIE-Research-Layout\\_FINALPDF\\_08.06.pdf](https://www.renovate-europe.eu/wp-content/uploads/2020/06/BPIE-Research-Layout_FINALPDF_08.06.pdf)

RICS, 2018, Advancing Responsible Business in Land, Construction and Real Estate Use and Investment – Making the UN Sustainable Development Goals a Reality

Available at: <https://www.rics.org/about-rics/responsible-business/un-sustainable-development>

Sweatman, P., 2022, Mortgage portfolio standards and the European Renovation Loan: Innovative financial instruments to renovate EU, prepared for European Economic and Social Committee

Available at: [https://www.eesc.europa.eu/sites/default/files/files/3.5\\_peter\\_sweatman\\_revised.pdf](https://www.eesc.europa.eu/sites/default/files/files/3.5_peter_sweatman_revised.pdf)

# 12

## References

The Economist, 2019, Climate change has made ESG a force in investing

Available at: <https://www.economist.com/finance-and-economics/2019/12/07/climate-change-has-made-esg-a-force-in-investing>

The Global Compact, 2005, Investing for Long-Term Value - Integrating environmental, social and governance value drivers in asset management and financial research— A state-of-the-art assessment

Available at: [https://www.ifc.org/wps/wcm/connect/9d9bb80d-625d-49d5-baad-8e46a0445b12/WhoCaresWins\\_2005ConferenceReport.pdf?MOD=AJPERES&CVID=jkD172p](https://www.ifc.org/wps/wcm/connect/9d9bb80d-625d-49d5-baad-8e46a0445b12/WhoCaresWins_2005ConferenceReport.pdf?MOD=AJPERES&CVID=jkD172p)

The Global Compact, 2004, Who cares wins – Connecting financial markets to a changing world, Recommendations by the financial industry to better integrate environmental, social and governance issues in analysis, asset management and securities brokerage

Available at: [https://www.unepfi.org/fileadmin/events/2004/stocks/who\\_cares\\_wins\\_global\\_compact\\_2004.pdf](https://www.unepfi.org/fileadmin/events/2004/stocks/who_cares_wins_global_compact_2004.pdf)

The Maples Group, ELS Europe and Frankfurt School UNEP Collaborating Centre for Climate & Sustainable Energy Finance, 2021, Do No Significant Harm Handbook – What, Why and How of ‘DNHS’ across environmental and social sustainability factors

Available at: <https://www.fs-unep-centre.org/wp-content/uploads/2021/11/Do-No-Significant-Harm-Handbook.pdf>

Tostevin, P., 2021, The total value of global real estate

Available at: <https://www.savills.com/impacts/market-trends/the-total-value-of-global-real-estate.html>

UNEP FI, 2022, Academic Network Week 2022: papers and presentations

Available at: <https://www.unpri.org/academic-network-week-2022-papers-and-presentations/10675.article>

United Nations, 2015, Transforming our world: The 2030 Agenda for Sustainable Development

Available at: <https://sdgs.un.org/sites/default/files/publications/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>

UNFCCC, The Paris Agreement

<https://unfccc.int/process-and-meetings/the-paris-agreement>

United Nations Global Compact

Available at: <https://unglobalcompact.org/about>

UN PRI, 2004, Principles for Responsible Investment

Available at : <https://www.unpri.org/about-us/what-are-the-principles-for-responsible-investment>

Urban Land Institute, 2021, Zooming in on the “S” in ESG: A road map for social value in real estate.

London: Urban Land Institute

World Bank Data, no date, Industry (including construction), value added (% of GDP)

Available at: <https://data.worldbank.org/indicator/NV.IND.TOTL.ZS>

# 12

## References

### Abbreviations of relevant organisations, initiatives and rating tools referred to in this report:

<b>EFRAG</b>	European Financial Reporting Advisory Group <a href="https://www.efrag.org">https://www.efrag.org</a>
<b>ESMA</b>	European Securities and Markets Authority <a href="https://www.esma.europa.eu">https://www.esma.europa.eu</a>
<b>CRREM</b>	Carbon Risk Real Estate Monitor (CRREM) <a href="https://www.crrem.eu">https://www.crrem.eu</a>
<b>CSRD</b>	Corporate Sustainability Reporting Directive <a href="https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en">https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en</a>
<b>EEM Label</b>	Energy Efficient Mortgage Label <a href="https://www.energy-efficient-mortgage-label.org">https://www.energy-efficient-mortgage-label.org</a>
<b>GDPR</b>	General Data Protection Regulation <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679&amp;from=EN">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679&amp;from=EN</a>
<b>GRESB</b>	Global Real Estate Sustainability Benchmark <a href="https://www.gresb.com/nl-en/">https://www.gresb.com/nl-en/</a>
<b>GRI</b>	Global Reporting Initiative <a href="https://www.globalreporting.org">https://www.globalreporting.org</a>
<b>NFDR</b>	Non-Financial Reporting Directive <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014L0095">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014L0095</a>
<b>SBTi</b>	Science Based Targets Initiative (SBTi) <a href="https://sciencebasedtargets.org">https://sciencebasedtargets.org</a>
<b>SFDR</b>	Sustainable Finance Disclosure Regulation <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32019R2088">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32019R2088</a>
<b>SRI</b>	Socially Responsible Investment <a href="https://www.investopedia.com/terms/s/sri.asp">https://www.investopedia.com/terms/s/sri.asp</a>
<b>TCFD</b>	Task Force on Climate-related Financial Disclosures <a href="https://www.fsb-tcfd.org">https://www.fsb-tcfd.org</a>
<b>TFND</b>	Task Force on Nature-related Disclosures <a href="https://tnfd.global">https://tnfd.global</a>
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change <a href="https://unfccc.int">https://unfccc.int</a>
<b>UNEPF FI</b>	United Nations Environment Programme Finance Initiative <a href="https://www.unepfi.org/about/">https://www.unepfi.org/about/</a>
<b>UN PRI</b>	United Nations Principles for Responsible Investment <a href="https://www.unpri.org">https://www.unpri.org</a>



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