BEHIND ESG RATINGS

Unpacking sustainability metrics

OECD

Foreword

In recent years, the demand for, and use of Environmental, Social and Governance (ESG) data have grown significantly. This has been driven by the development of the sustainable investment market, rapid evolutions in sustainable finance standards and policies, and calls for increased corporate transparency from regulators, investors, and society at large. Investors in particular are relying on ESG data, through individual metrics or aggregated in ratings, to assess and manage a range of impacts, risks, and opportunities, and/or direct capital towards sustainable economic activities.

Against this background, it is important for policy makers, investors, and corporates alike to understand the scope and characteristics of metrics used to measure business sustainability performance, as well as their comparability. The availability of consistent and reliable ESG data can help investors assess more accurately sustainability-related impacts, risks, and opportunities, make informed investment or voting decisions. This in turn enables the more efficient allocation of capital towards economic activities, projects and assets that are aligned with sustainability goals. On the contrary, a lack of meaningful and comparable sustainability-related information can hinder the alignment of corporate and financial sector activities with such goals.

In recent years government-agreed standards have been used as a reference point or imbedded as expectations in policies and regulations pertaining to sustainable business and finance. They support corporates in adopting more responsible practices and align business conduct with sustainability goals. In particular the *OECD Guidelines for Multinational Enterprises on Responsible Business Conduct* (the *OECD Guidelines*) have been reflected in, or have helped shape, the development of several policies pertaining to corporate sustainability disclosures and due diligence in supply chains and financial markets. The *OECD Guidelines* are recommendations jointly addressed by governments to multinational enterprises to enhance the business contribution to sustainable development and address adverse impacts associated with their activities on people, planet, and society.

This report aims to assess the scope and characteristics (and comparability thereof) of ESG metrics used by leading ESG data and rating providers as well as how they align with the *OECD Guidelines*. This report serves as an OECD contribution to the G20 Sustainable Finance Working Group (SFWG) roadmap. Under Focus Area 2 of the roadmap (Consistent, comparable, and decision-useful information on sustainability risks, opportunities, and impacts), the G20 SFWG encourages international organisations to undertake analytical work to improve “data quality, usefulness, and transparency of methodologies, such as metrics choices and weightings, from ESG rating agencies and other sustainability data providers”.

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Executive summary

Environmental, Social, and Governance (ESG) metrics, aggregated in rating products, increasingly inform a wide range of business and investment decisions. For policy makers, investors, business and other stakeholders, having sufficient levels of transparency and quality with respect to the ESG metrics used in these products is key to ensuring clarity, consistency, and accountability when it comes to measuring sustainability performance of business. For investors, this means making informed investment decisions and for policy makers being able to monitor and evaluate the impact of sustainable finance-related policies. Against this background, this report aims to assess the scope and characteristics of over 2 000 ESG metrics from eight major ESG rating products. The analysis helped identify four key findings as presented below.

Metric scope: significant imbalances and gaps across ESG topics

More nascent or less standardised ESG issues typically lack comprehensive and granular metrics compared to more established topics. For instance, over 20 different metrics are used on average to measure performance related to topics such as corporate governance, business ethics and environmental management, compared to less than five metrics for topics such as biodiversity, business resilience, and community relations. In some cases, certain topics are entirely omitted from ESG rating products, including human rights and corruption. While it cannot be assumed that a higher number of metrics leads to better measurement, an extremely limited number of metrics associated with a topic may infer that topical impacts, risks, and opportunities are not being captured in a meaningful and comprehensive way.

Metric comparability: Considerable divergences in measurement approaches across products

Significant divergences exist when comparing the scope of metrics for the same topic across rating products. For instance, one rating product uses 28 times more metrics to measure Corporate Governance performance compared to another. The range varies from 1 to 47 metrics to measure corporate GHG Emissions, and from 4 to 113 metrics to gauge a company's corporate governance. High variations in the number of metrics available per topic across rating products usually reflect distinct methodological approaches, divergent levels of granularity applied, and likely disagreement as to how performance ought to be measured.

Metric characteristics: ESG performance largely measured by focusing on business' effort rather than effect

ESG rating products rely primarily on input-based metrics (68%). These metrics capture self-reported policies and activities put in place to address potential and actual ESG impacts, risks, and opportunities. Meanwhile, a third of the metrics rely primarily on output-based metrics, focusing on the outcomes of these policies and activities. The reliance on input-based metrics could incentivise "tick-boxing" approaches over actual risk prevention and mitigation actions. It may also benefit large companies over SMEs, as multinational enterprises may have more resources to adopt, implement and disclose measures underpinned by such metrics.

Moreover, ESG performance is predominantly assessed using qualitative metrics (72%). Noticeably, input-based metrics account for the vast majority of qualitative metrics. These metrics may not always provide a reliable proxy of a company's ESG performance but rather infer ESG performance based on the existence of policies and measures to manage impacts, risks and opportunities related to that topic, irrespective of the actual effectiveness of such measures. Conversely, only 17% of all metrics are quantitative output-based metrics. For policy makers, the potential disconnect between the proxy metric and the performance measurement can also have implications with regard to assessing the effectiveness of public policies.

Lastly, there seems to be a positive correlation between low shares of quantitative data and low numbers of metrics per topic. For instance, biodiversity, climate resilience, taxation, and competition are among the topics with the lowest shares of quantitative data and the lowest number of metrics overall, further suggesting that assessment of performance against certain topics may not be sufficient.

Looking forward: metrics are insufficient to assess observance of OECD standards on responsible business conduct

OECD instruments on responsible business conduct promote risk-based due diligence, including the identification and prioritisation of adverse impacts. In contrast, ESG rating products tend to measure how companies manage impacts, risks, and opportunities with respect to a specific topic—not across topics—irrespective of their interlinkages and interdependencies. Less than 5% of input-based metrics could be associated with explicit risk-based due diligence measures and steps without being associated with one single topic. This siloed and topical structure is also at odds with recent sustainability-related standards structures (e.g. ESRS and ISSB), creating potential challenges for investors wishing to leverage ESG metrics to assess the quality and effectiveness of companies' due diligence across sustainability issues.

Moreover, most ESG rating products assess observance or "violations" of the *OECD Guidelines* through controversy-related metrics as a proxy. These metrics usually look at the existence and prevalence of controversies in a company's operations and/or supply chains, rather than evaluating a company's due diligence efforts and effectiveness in mitigating sustainability impacts. 15% of all metrics could be broadly identified as 'controversy-based'. Finally, measurement of ESG performance beyond an entity direct operation is limited, including measurement of how businesses identify, prevent, mitigate and account for adverse impacts in their business relationships and global supply chains. Only 7% of all metrics could be associated with supply chain risk management metrics across topics and products.

1. Background, objectives and methodology

1.1. The role of ESG data in financing a sustainable economy

Environmental, Social and Governance (ESG) metrics are **indicators underpinning the measurement of business performance** against a range of sustainability factors. When aggregated in ratings and scores, ESG metrics aim to provide an opinion on the performance of a company, asset or financial instrument in the context of indices[1] by assessing its **exposure to** and/or **impact on** environmental, social and governance factors, including the company's ability to **manage impacts, risks and opportunities** associated with such factors.

ESG data are derived from various sources. They are either **self-reported** (e.g. documents and information underpinning companies' inputs and outputs related to ESG factors), **reported by stakeholders** (i.e. documents and information derived from media, civil society organisations or government on companies' outputs related to ESG impacts and risks), or constitute **corporate characteristics** which are potentially affected by ESG factors (e.g. business model, product characteristics, site locations, and other types of exposure to specific ESG factors) (MSCI, 2024[1]).

The primary use of ESG data and ratings is to **inform a wide range of investment or voting decisions and strategies**. ESG data help identify material impacts, risks, and opportunities of an investment, minimise portfolios' exposure to financial and non-financial risks, support negative and/or positive screening, prioritise engagement and stewardship activities, determine executives' remuneration or demonstrate compliance with sustainable finance regulations. They can also be used in **corporate finance** to track sustainability performance against the use of proceeds of green, social and sustainability bonds (OECD, 2024[2]). They are increasingly used by companies themselves as a **sustainability management tool**, including with regards to their supply chains, as well as to see how they perform against ESG factors compared to peers (EU, 2023[3]).

The market for ESG data products and services is growing. The size of the ESG data and related services market is expected to grow at a rate of 23% through 2025 and has likely exceeded USD 1.5 billion in 2023 (Balluffi, 2023[4]). The costs of such data can also be significant. For instance, US-based institutional investors reported spending USD 487 000 a year on external ESG rating and data provider services in 2022 (ERM, 2023[5]), a cost which has also been estimated to be 2.5 times higher than the corresponding expenditure for credit rating services (Agefi, 2024[6]).

Against this background, **it has become important for investors to ensure transparency as well as quality with respect to the ESG metrics used in these rating products and services**, which are in turn being used to inform investment decisions. Incomplete or inconsistent ESG data may increase the risk of capital misallocation and prevent investors from making substantiated sustainability impact claims of their investments (HBR, 2022[7]).[2] Regulators are increasingly scrutinising potentially misleading sustainability claims, issuing record fines[3], and have recently turned their attention towards promoting more transparency and comparability across ESG rating providers (see section 1.2).

Concerns over ESG data reliability may also **hinder policy makers from monitoring and tracking private sector contributions and progress related to certain policy objectives on sustainability.** In recent years, businesses and investors have increasingly been called on to contribute to the Sustainable Development Goals (SDGs) and the climate transition aligned with the objectives of the Paris Agreement. The International Monetary Fund estimates that 90% of climate finance required for developing countries' transition will come from the private sector by 2030 (IMF, 2023[8]). In that regard, governments have taken steps to mobilise private finance at scale and align business conduct with the SDGs and climate objectives, through a mix of policy tools ranging from blended finance instruments (mobilisation) to sustainable finance taxonomies (alignment) (OECD, 2023[9]).

As a result, companies are increasingly **disclosing sustainability-related information on their exposure to, and management of, sustainability-related impacts, risks and opportunities**. In turn, investors are also seeking similar information from existing and prospective investee companies to better align their investments and portfolios with sustainable development objectives and international standards on responsible business conduct (RBC). In particular, **OECD standards on RBC are increasingly referenced in or drawn on in policies and regulations** on responsible business practices and corporate sustainability disclosure (see Box 1). The OECD Guidelines for Multinational Enterprises on Responsible Business Conduct (the *OECD Guidelines*) set out the expectation that businesses address adverse impacts of their operations while contributing to sustainable development where they operate. They call on businesses to conduct risk-based due diligence (or RBC due diligence) to address sustainability impacts associated with their own activities as well as their business relationships and global supply chains. RBC due diligence measures and steps are set out in the OECD Due Diligence Guidance for Responsible Business Conduct (the *OECD Due Diligence Guidance*) (OECD, 2018[10]).

Box 1. OECD instruments on RBC and sustainability disclosure standards and policies

OECD instruments are widely used by financial service practitioners. Over 950 asset managers and 235 asset owners use the *OECD Guidelines* to identify and report on human rights-related outcomes of their investments, representing USD 61.8 trillion and USD 13.2 trillion in assets under management respectively. They are also increasingly referenced in standards and regulations pertaining to sustainable finance and corporate sustainability reporting worldwide.

RBC due diligence in GRI Standards

RBC due diligence reporting has been built into the modular structure of the GRI Standards. The *GRI Universal Standards* embed disclosures on due diligence across *GRI 2: General Disclosures* and *GRI 3: Material Topics*. GRI 2 sets out disclosures on activities, governance, and policies related to due diligence. GRI 3 recommends companies to report on the outcomes of their due diligence process, i.e. the identification of material topics and impacts on people and planet. Companies are also prompted to report actions that prevent or mitigate potential adverse impacts, as well as actions to provide for or co-operate in the remediation of actual adverse impacts, including the effectiveness of these actions. Globally, GRI Standards are the most widely used reporting framework, including in Europe, Asia, and Latin America.

The *OECD Guidelines* in the EU sustainable finance regulatory framework

The *OECD Guidelines* and RBC due diligence are also part of the EU's regulatory framework on sustainable finance, including the **Sustainable Finance Disclosure Regulation** (SFDR) requiring financial market participants to report on Principle Adverse Impacts (PAIs), including the share of investments in "*violations of*"—or "*lack of processes to ensure compliance with*"—the *OECD Guidelines.* The **Taxonomy Regulation** (art. 18) sets minimum social safeguards to prevent activities and investments from being regarded as "*sustainable*" if they do not align with minimum standards on RBC, including the *OECD Guidelines*, and requires companies to disclose information related to their "due diligence and remedy procedures".

The *OECD Guidelines* in corporate sustainability reporting in the EU and China

The **Corporate Sustainability Reporting Directive** (CSRD) and associated **European Sustainability Reporting Standards** (ESRS) include disclosure expectations on the undertaking's due diligence process (GOV-4), including how such process helped inform the materiality assessment (IRO-1). The *OECD Guidelines* are also reflected in a few topical ESRS (i.e. ESRS S1-17, S2-1, S3-1, S4-1) which relate to "*non-respect of the OECD Guidelines*" with regards to the undertaking's own workforce, workers in value chains, affected communities, as well as consumers and end-users.

In April 2024, the Shanghai, Shenzhen, and Beijing stock exchanges released the **China Stock Exchanges' Guidelines for Sustainability Reporting**, introducing mandatory reporting requirements for major listed Chinese companies. Entities in scope should disclose measures put in place that relate to the RBC due diligence frameworks, including their methods for identifying and mitigating adverse sustainability impacts related to sustainable development in global supply chains.

Sources: GRI (2023[11]), Corporate Sustainability Due Diligence Policies and Sustainability Reporting, https://www.globalreporting.org/media/cqho34tm/corporate_sustainability-due_diligence_and_sustainability_reporting_final.pdf; EU (2022[12]), Commission Delegated Regulation (EU) 2023/363, https://eur-lex.europa.eu/eli/reg_del/2023/363/oj; EU (2023[3]), ESG rating activities, https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/esg-rating-activities_en; OECD (2024[13]), Global Corporate Sustainability Report 2024, https://doi.org/10.1787/8416b635-en; KPMG (2024[14]), China Stock Exchanges Finalised Mandatory Sustainability Reporting Requirements for Larger Listed Entities, https://kpmg.com/cn/en/home/insights/2024/04/china-stock-exchanges-mandate-sustainability-report-for-larger-listed-entities.html; UN PRI (2024[15]), Human Rights and Social Issues: Insights From the 2023 Reporting Cycle, https://www.unpri.org/investment-tools/human-rights-and-social-issues-insights-from-the-2023-reporting-cycle/12552.article.

1.2. Policy responses to promote better ESG data

The standardisation of ESG data pre-dates the development of ESG rating products but has accelerated in recent years, with heightened **regulatory** and **standard-setting developments**, both at the level of **ESG metrics design** and **ESG rating processes**. Policy makers and standard setters are increasingly taking action to mandate or recommend sustainability-related disclosure and enhance the availability, comparability, and quality of such information (OECD, 2024[13]). While ESG rating providers have been contributing to the design and issuance of ESG metrics to some extent, they are starting to increasingly collect data according to standards set by other regulators, moving from de facto **standard setters** to **standard takers**.

First, to support greater data **availability**, policy makers globally are mandating companies (and to some extent financial service providers) to report on sustainability-related information. The issuance of ESG data has become increasingly mainstream, e.g. in 2022, companies that disclosed some type of sustainability-related information represented 86% of the global market capitalisation (OECD, 2024[13]). Recent standard and regulatory developments are expected to drive further uptake of companies' sustainability reporting practices. These developments include the **EU's Corporate Sustainability Reporting Directive** (CSRD) and associated **European Sustainability Reporting Standards** (ESRS), Chinese stock exchanges' **Guidelines for Sustainability Reporting** and draft **Corporate Sustainability Disclosure Guidelines** from the Chinese Ministry of Finance (see Box 2), as well as the **International Sustainability Standards Board**'s (ISSB) first two disclosure standards[4] (IFRS S1 and IFRS S2).

Second, policy makers and standard setters are working towards greater **consistency** and **comparability** of metrics being disclosed across jurisdictions. Standards and policies help create common definitions of ESG issues, including shared expectations of the metrics needed to measure sustainability performance. One way of doing so is by leveraging existing well-established sustainability standards as **baselines for interoperability**. A recent OECD report highlights global sustainability standards uptake: the Global Reporting Initiative (GRI), the Task Force on Climate-Related Financial Disclosures[5] (TCFD) and the Sustainability Accounting Standards Board (SASB) Standards are used by companies representing 60%, 54% and 37% of the global market capitalisation respectively (OECD, 2024[13]). However, in contrast to financial data, these standards have various underlying approaches and are being used for different purposes such that 86% of companies employ multiple sustainability reporting standards at the same time (IFAC, 2023[16]).[6] As a result, even though ESG data providers largely retrieve information from the issuers' disclosures and similar base of information, ESG scores can vary greatly from one ESG provider to another (Boffo, 2020[17]).

Third, the **quality** of reported ESG information is increasingly being scrutinised to avoid **greenwashing**. To date, 31% of companies (accounting for 66% of global market capitalisation that disclose sustainability-related information) have obtained an external verification or assurance over their reporting exercise (OECD, 2024[13]). The use of assurance by independent, and qualified auditors in accordance with internationally recognised auditing standards is an important step for enhancing the **quality and reliability** of reported information, in line with the recommendations of the G20/OECD Principles of Corporate Governance (*G20/OECD Principles*) and the *OECD Guidelines*.

Moving beyond corporates and investors' role in producing ESG data, regulators are also paying closer attention to the activities of **ESG rating** and **data providers** (IOSCO, 2021[18]). Policy makers and financial market authorities have started enacting codes of conduct and regulations related to the methodologies and governance of ESG rating providers to increase transparency and credibility of ESG ratings and avoid any potential conflicts of interest. This is notably the case in jurisdictions such as the EU, Japan, India, and the United Kingdom (OECD, 2024[13]).

Box 2. ESG data availability, comparability, and meaningfulness: why does it matter?

To integrate sustainability criteria into decision making, investors need readily available, comparable, and meaningful ESG metrics. These characteristics are driven by multiple factors, and lack thereof can generate various challenges, as described below:

- Widespread **availability** of ESG metrics is key to ensuring the completeness of sustainability performance assessments. However, metric availability varies from one topic to another depending on multiple factors, including accessibility (i.e. the information is easily obtainable), confidentiality (e.g. the information is publicly available), cost (i.e. the information is costly to collect or generate) and is influenced by the degree of standardisation of the issue (e.g. performance measurement has already been defined). Availability is also affected by companies' size and location.
- To establish reliable benchmarks, companies' sustainability performance should be assessed against a **comparable** set of criteria, while considering their respective operating context. Ensuring that stakeholders, including data providers, have a common understanding of the different topics, and what performance against such topics means, is an important factor driving data comparability. Conversely, lack of consistency can result from diverging definitions (e.g. do labour rights issues cover supply chain workers? Does business ethics include considerations of political influence?) or diverging interpretations as to how performance should be measured (e.g. is human rights performance assessed through the existence of past controversies or the existence of a due diligence process?).
- Finally, it is important that ESG metrics are **meaningful** in the sense that they can contribute to accurately understanding the performance on a given issue. ESG metrics are often proxies which can provide indications of business performance more effectively. The correlation between the proxy and the performance it aims to measure can affect the overall meaningfulness of the metrics and associated data (see Section 2.2.6).

In the context of ESG ratings, comparability, and meaningfulness can also be impacted by the scoring methodology, including through aggregation and weighting of individual metrics, which are defined by individual providers. Considerations around sustainability-related information consistency, comparability and credibility are laid out in the *OECD Guidelines*[*] and in the *G20/OECD Principles*.[†]

Notes: (*) See Chapter III (Disclosure), Commentary, para. 32. (2022[19]), Aggregate confusion: The divergence of ESG ratings, https://doi.org/10.1093/rof/rfac033; G20 (2021[20]), *G20 Sustainable Finance Working Group Roadmap, https://g20sfwg.org/wp-content/uploads/2021/10/G20-Sustainable-Finance-Roadmap.pdf*; Hardyment (2024[21]), *Measuring Good Business: Making Sense of Environmental, Social and Governance (ESG) Data, https://doi.org/10.4324/9781003457732*.(†) See Chapter VI (Sustainability and resilience), subprinciple VI.A.
Sources: Berg, Kölbel and Rigobon (2022[19]), Aggregate confusion: The divergence of ESG ratings, https://doi.org/10.1093/rof/rfac033; G20 (2021[20]), *G20 Sustainable Finance Working Group Roadmap, https://g20sfwg.org/wp-content/uploads/2021/10/G20-Sustainable-Finance-Roadmap.pdf*; Hardyment (2024[21]), *Measuring Good Business: Making Sense of Environmental, Social and Governance (ESG) Data, https://doi.org/10.4324/9781003457732*.

1.3. Objectives, scope, and methodology

1.3.1. Objectives and scope

Aligned with Action 8 of the G20 SFWG's roadmap (i.e. "improving data quality, usefulness, and transparency of methodologies, such as metrics choices and weightings, from ESG rating agencies and other sustainability data providers"), this report aims to assess the **scope and characteristics of ESG metrics (and comparability thereof)**. The **scope** of ESG metrics is understood as the **distribution**, in

terms of number and characteristics, of metrics across topics and across products. The **characteristic** of an ESG metric is understood as the **attribute** underpinning the metric, classified as either as inputs, outputs or factors, which are considered in the assessment of companies' ESG performance, as well as the nature of such attribute, either qualitative or quantitative. The report also aims to identify the main **areas of divergence and convergence** in the scope and characteristics of metrics across rating products. Finally, this report also considers how recommendations related to the *OECD Guidelines* are reflected in ESG rating products and underlying metrics.

To do so, the OECD collected a dataset of over **2 000 ESG metrics** from **eight ESG rating products** to better understand their characteristics as well as the convergence and divergence, both across ESG topics and across rating products. Metrics were collected in the fourth quarter of 2022. The OECD was unable to verify that all metrics used in the analysis are the most up-to-date versions used by ESG rating products and acknowledges that data providers update their metric sets on a regular basis.

Importantly, this analysis **does not consider ESG rating products' scoring methodologies**, including how they **weight and aggregate** metrics to construct a score. The analysis remains at the metric level (i.e. metrics' choice, design, scope and characteristics), acknowledging that aspects of the scoring methodology, including weighting, aggregation, and scoring scales, are important factors in measuring companies' ESG performance. However, this analysis further builds on **previous studies, which have shown that the main** driver of rating divergence and confusion occurs at the metric level (see Box 3).

Box 3. Previous studies on ESG ratings: divergence and drivers of ESG scores

In response to the rapid development of the ESG rating market, several empirical studies have analysed the divergence and convergence of ESG ratings across products. In particular, a previous study by Berg, Kölbel and Rigobon (Aggregate Confusion: The Divergence of ESG Ratings) has helped identify the main sources of divergence across four ESG rating products:

- **Scope divergence** refers to the situation where ratings are based on different sets of attributes (e.g. rating products are not rating the same things - one includes lobbying activities and the other not).
- **Measurement divergence** refers to a situation where rating products measure the same attribute using different indicators (e.g. a firm's labour practices could be evaluated on the basis of workforce turnover or by the number of labour-related court cases taken against the firm).
- **Weight divergence** emerges when rating products take different views on the relative importance of attributes (e.g. differences in weighting different or the same metric).

Empirical findings highlighted that "measurement divergence" is the main driver of rating divergence accounting for 56% of the divergence across products. Secondly, "scope divergence" is found to be responsible for 38% of rating divergence while "weight divergence" is a low driver of divergence (6%). This would mean that ESG rating products tend to diverge predominantly based on their choice of metrics underlying the measurement of ESG performance rather than divergence at the level of scoring methodologies.

Other studies conducted by the OECD have also analysed that some of the drivers of ESG scores are correlated to a company's size and market capitalisation. Companies with higher ESG scores are on average larger in terms of market capitalisation than the ones with lower scores.

Source: Berg, Kölbel and Rigobon, Aggregate confusion: The divergence of ESG ratings, https://doi.org/10.1093/rof/rfac033; OECD (2022[22]), Climate Change and Corporate Governance, https://doi.org/10.1787/272d85c3-en.Source: Berg, Kölbel and Rigobon (2022[19]), Aggregate confusion: The divergence of ESG ratings, https://doi.org/10.1093/rof/rfac033; OECD (2022[22]), Climate Change and Corporate Governance, https://doi.org/10.1787/272d85c3-en.

1.3.2. Methodology

This report is the result of an **empirical analysis of over 2 000 collected metrics used in eight ESG rating products**. Statistical findings do not extend beyond the dataset. The OECD conducted additional background research, literature review and complementary structured interviews with representatives from eight ESG rating providers and two sustainability reporting frameworks (i.e. GRI and SASB) to support and contextualise the empirical findings and ensure that these are more broadly applicable to the current landscape of ESG data.

Selection of ESG rating products and metric compilation

The OECD selected **eight comparable ESG rating products from eight prominent providers** based on their **market share,** while also aiming to cover a diversity of rating approaches and methodologies. One corporate ESG rating product was selected per provider based on broad adoption by the market as well as the number of companies covered. The dataset covers products from **eight ESG rating providers, representing over 80% of the total estimated ESG data providers market share in 2023** (Opimas, 2024[23]).

All selected ESG rating products assess **corporate ESG performance** as opposed to other types of ESG products (e.g. sovereign ESG ratings, ESG benchmark analysis, controversy screening and norms-breach products, climate-alignment products, etc.), although underpinning metrics can be found in multiple types of ESG products (e.g. controversy-based metrics are often found in both corporate ESG products and norms-breach products). The number of companies covered by the selected ESG rating products ranges between **2 000 and 20 000,** with significant variation in regional focus and size (see Box 4).

The resulting dataset consists of over **2 000 individual ESG metrics**. The number of metrics per ESG rating product ranges from **111 to 573 metrics**, with an average of **255 metrics per product**. Half of the products include sector-specific metrics, which were included in the overall analysis (but not in the topical-level assessment presented in Annex C). Some ESG rating providers adapt metric selection depending on how material the topic is deemed for a given industry (e.g. providers may add additional biodiversity-related metrics for agri-food companies or climate-related metrics for oil and gas companies).

ESG metrics classification framework

To evaluate how ESG performance is measured and how such measurements differ between products, the OECD classified the metrics both in terms of topics, as well as in terms of defining characteristics.

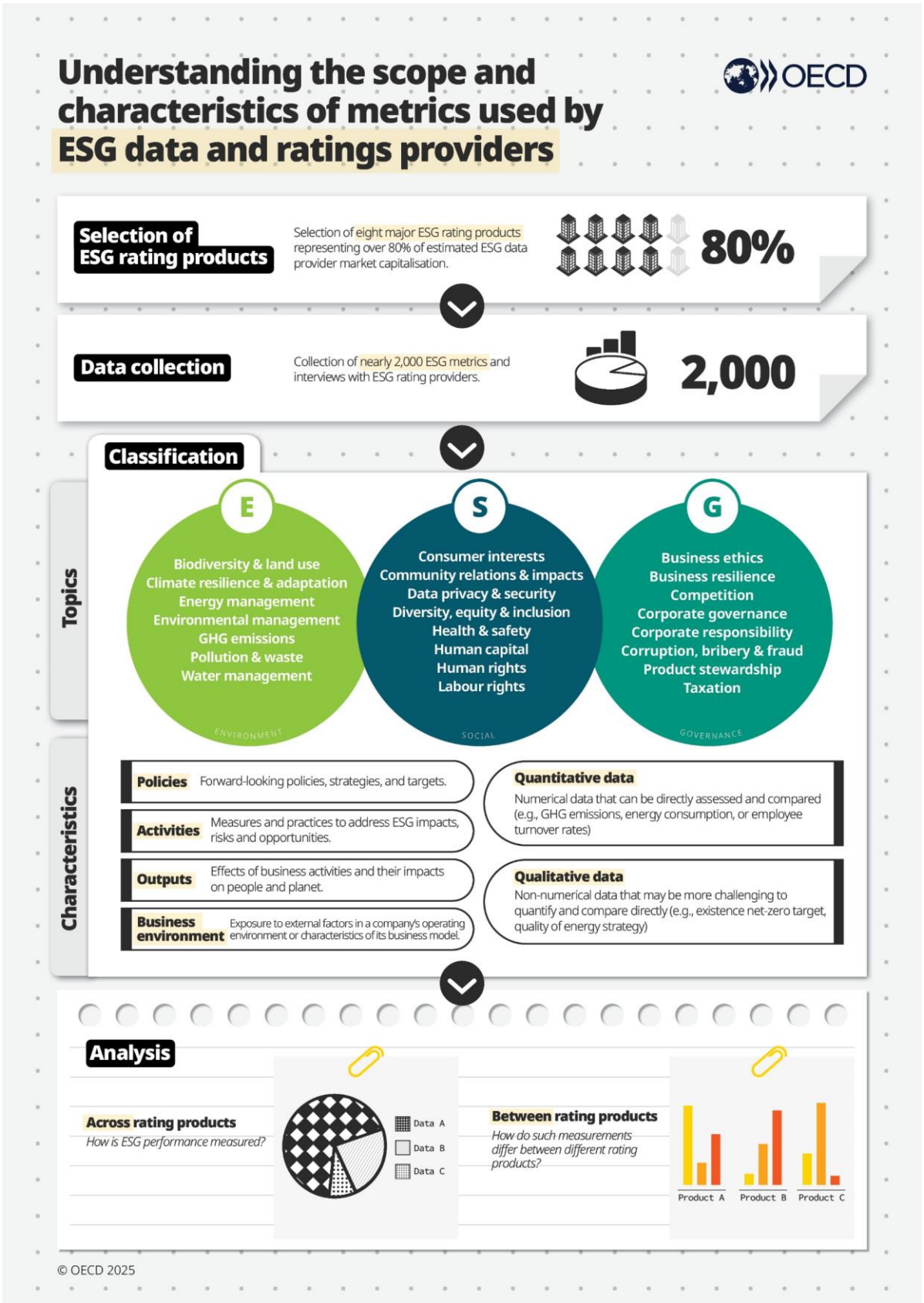
First**, the OECD classified ESG metrics according to topics.** This topic classification reflects **23 recurring ESG impacts, risks, and opportunities** against which business performance is commonly measured across products. ESG rating providers use various topical classifications that were mapped onto a single classification framework (see Figure 1) based on terminology employed by rating providers and standard setters (e.g. SASB, GRI) and informed by the grouping of similar and interrelated themes. This led to the identification of seven E-related topics, eight S-related topics and eight G-related topics. Annex B provides descriptions for each topic.

Second, the OECD identified a set of characteristics commonly shared across the 2 000 metrics and categorised the metrics accordingly. Metrics were first classified according to the type of input, output and factors that the metric is based on. These include four different types:

- Policy-based metrics
- Activity-based metrics
- Output-based metrics
- Business environment metrics

In addition, the OECD classified metrics according to their nature understood as either **qualitative** (including binary and criteria-based data) or **quantitative** data (including static and dynamic data).

Infographic 1. Overview of the report's methodology and classification framework



1.4. Prior considerations: data collection methods and materiality approaches

It is important to consider some methodological aspects of ESG rating providers, that can affect the scope and characteristics of ESG metrics, notably their data collection methods and materiality considerations.

1.4.1. Data collection and processing methods

ESG rating providers rely on two different methods to collect ESG information that feed into their rating products. These data collection methods are not mutually exclusive. They can be divided into **"internal"** and **"external"** approaches (also often called active and passive approaches) (ESMA, 2021[24]):

- **Internal data collection** (or active data collection) relies on companies actively completing a questionnaire or survey that covers the different ESG topics that the rating product assesses. In most cases, these questionnaires require the company to provide supporting materials to back their statement (e.g. human rights policy, climate transition plan, water consumption records). Certain ratings may allow the company to include confidential material, which are not publicly accessible.
- **External data collection** (or passive data collection) is conducted without any bilateral engagement and participation of the company being rated. It can ensue via automated scraping of media outlets, legal and regulatory filings, or companies' websites by computerised systems. It also often includes significant amounts of qualitative assessment from ESG analysts. This method relies on publicly available data.

Based on interviews with ESG rating providers, all rely on, at least to some degree, external data collection methods from public sources. While two rating products rely *exclusively* on external data collection methods (i.e. sourcing metrics solely from publicly available sources), the remaining products rely on both internal and external collection methods. These providers mentioned contacting companies for inputs before ratings are published, through complementary questionnaires or surveys.

1.4.2. Materiality approaches of rating products

ESG rating providers adopt various materiality approaches to assess companies' ESG performance. The European Securities and Markets Authority (ESMA), for instance, highlights two types of materiality approaches:

- **ESG risk ratings**, based on the notion of financial materiality, are the most common form. They measure the financial exposure of companies to ESG risks and opportunities, and to some extent how these risks are managed.
- **ESG impact ratings**, based on the notion of impact materiality, measure the impact of companies on ESG topics, or in other words on people, planet, and society (ESMA, 2021[24]).

During interviews with ESG rating providers, five identified their rating products to have a "financial materiality" approach to measuring companies' exposure to, and impact of, financially material ESG risks. Two ESG rating providers noted that they follow a "double materiality" approach, considering both the company's ability to manage financial ESG risks and opportunities and their ability to manage their material impacts on people and planet. One product in scope stated adopting an "impact materiality" only approach, i.e. assessing business impacts on people and planet.

In practice, **the difference between "risk" and "impact" ratings may be limited** as they rely on a combination of similar ESG metrics, looking at both risks of and impacts on ESG factors (ESMA, 2021[24]). In addition, some ESG risks, impacts and opportunities are mixed in nature. For instance, controversy-based metrics typically relate to both a company's reputational risk as well as impacts on people and planet. Similarly, a number of input-based metrics which capture a company's ability to manage financially

material ESG risks can provide insights into its capacity to identify or prevent impacts on people and planet (e.g. upgrading facilities to reduce exposure to climate hazards may also reduce physical impacts on workers). Eventually, different approaches to materiality may lead to similar investment strategies and outcomes such as exclusion or divestment from high-risk companies (Larcker et al., 2022[25]).

Importantly, **materiality considerations also apply at the scoring stage,** which is outside the scope of this report. For example, materiality weighting can be applied based on how a risk is perceived to be financially material to a specific industry, product or geography. Similarly, estimations of time horizons with respect to materiality (i.e. how long a given risk is considered material) are often based on how long the risk is perceived to have financial implications. These considerations are often applied at the scoring stage.

2. Scope and characteristics of ESG metrics: Key findings

This section outlines the main findings of the analysis in terms of the **scope and characteristics of ESG metrics** used by ESG rating providers. It results from an assessment of approximately 2 000 ESG metrics from eight rating products, which have been classified in terms of topics and characteristics.[7] This section aims to identify **metrics' distribution and coverage** (scope) across topics and products and the **distribution of metrics characteristics,** also across different topics and rating products (for an overview of findings, see Table 4).

2.1. Key findings: scope of ESG metrics

2.1.1. Coverage and distribution of metrics across topics

The distribution of metrics across the E, S and G categories is broadly comparable. On average, the eight ESG rating products provide 87 E-related metrics, 74 S-related metrics, and 83 G-related metrics. **The disparity in the number of available metrics is however more pronounced at the topic level** (see Figure 1). While on average, ESG rating products provide 11 metrics per topic, some topics have significantly more metrics than others. ESG topics with the most metrics on average per product are:

- Corporate Governance (35 metrics per product)
- Business Ethics (24 metrics per product)
- Environmental Management (20 metrics per product)
- GHG Emissions (19 metrics per product)
- Pollution & Waste (18 metrics per product)

These are broad, process- and management-oriented topics. They can be broken down into various sub-topics for which performance can be interpreted in various ways (e.g. Corporate Governance encompasses aspects of board structure and ownership, financial and non-financial reporting and accounting, risk management systems and processes, stakeholder engagement practices, etc.). They also tend to be topics with already well-established and standardised reporting expectations (e.g. GHG emissions accounting, corporate structure and governance). These topics are covered by all products.

Conversely, the five ESG topics with the least number of available metrics on average per product are:

- Biodiversity & Land Use[8] (5 metrics per product)
- Business Resilience (5 metrics per product)
- Community Relations & Impacts[9] (4 metrics per product)
- Taxation[10] (2 metrics per product)
- Competition[11] (1 metric per product)

These tend to be topics with a narrower scope or otherwise with less standardised reporting practices. They are not always covered by ESG rating products and may be considered outside ESG frameworks (as compliance-related topics).

Figure 1. ESG metric coverage by ESG pillars and topics

Note: The above sunburst chart illustrates the distribution of metrics across 23 ESG topics across eight ESG rating products, with slice sizes representing each topic's share of the total number of metrics. The "Other" slice of the Governance pillar encompasses the two topics Competition and Taxation. The topics reflect the author's categorisation.

Environmental topics
Social topics
Governance topics

2.1.2. Coverage and distribution of metrics compared across rating products

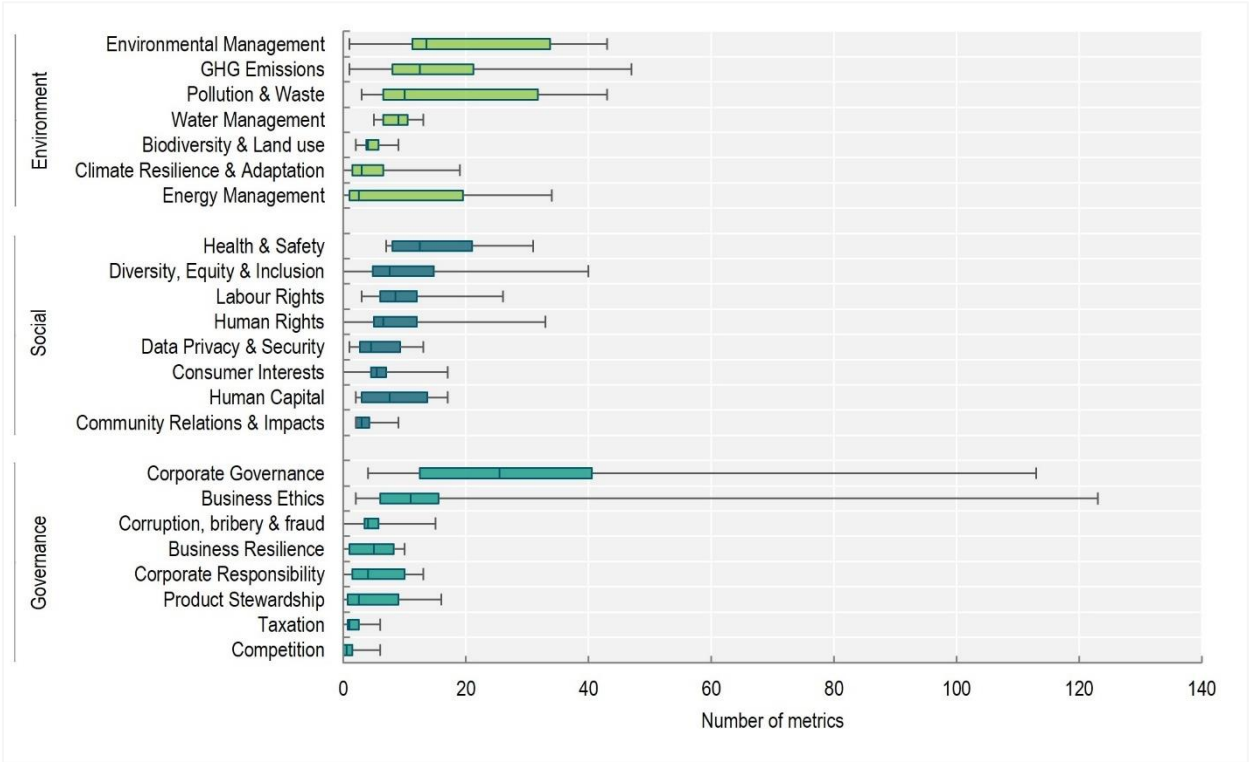
There is broad consistency with respect to the general coverage of ESG topics across rating products. Over half of the 23 topics identified are covered by all rating products, while only four topics are excluded by more than one product. This suggests a broad alignment and common understanding of what ESG impacts, risks and opportunities encompass among rating providers.

However, there is divergence in the granularity of assessment across different ESG topics. For instance, on average over 20 different metrics are used to measure performance related to Corporate Governance, Business Ethics; and Environmental Management compared to less than five metrics for Biodiversity & Land Use, Business Resilience, Community Relations & Impacts, Taxation, and Competition. Similarly, 11 topics—namely Climate Resilience & Adaptation, Human Rights, Corruption, Bribery & Fraud, Consumer Interests, Business Resilience, DEI, Energy Management, Corporate Responsibility, Taxation, Product Stewardship and Competition—**are absent and not measured at all from at least one rating product, creating potential blind spots in ESG performance measurement**.

Additionally, there is divergence across ESG rating products in their granularity of assessment across different ESG topics. This variation is particularly pronounced for the two G topics Corporate Governance and Business Ethics. For example, Corporate Governance comprises four metrics for one product and 113 metrics for another. E topics such as Environmental Management (1 to 43 metrics), GHG Emissions (1 to 47 metrics) and Pollution & Waste (3 to 43 metrics) also display significant variation in the number of metrics between the assessed rating products. Previous empirical studies support similar findings, highlighting rating products' divergence in terms of scope (i.e. ratings are based on different sets of topics and/or topics are not defined the same way) and measurement (i.e. measuring the same ESG topics but using different metrics) as key drivers for rating divergence (see Box 3) (Berg, Kölbel and Rigobon, 2022[19]).

Figure 2. Topic coverage across ESG rating products

Topic coverage differs substantially across topics and ESG rating products.



Note: The above plot illustrates the absolute coverage of 23 topics across eight ESG rating products. Boxes represent interquartile ranges (IQRs), with the bottom and top edges corresponding to the first and third quartiles, respectively. The vertical lines within each box represent the median number of metrics for each topic across the eight rating products. Whiskers extend from the boxes to indicate the range of values for each topic. Note that coverage of individual topics is inherently driven by the chosen topic classification (see Annex B).

Environmental topics
Social topics
Governance topics

2.1.3. Considerations with regard to findings related to the scope of metrics

Coverage and distribution of ESG metrics increasingly diverge with granularity. While the distribution of metrics across E, S and G categories is broadly similar, significant disparities exist in the number of metrics available for specific topics within these categories. Similarly, while there is broad consistency with respect to the general coverage of ESG topics across rating products, divergence increases with granularity in the measurement of such topics, illustrated by the wide range of metrics available to measure performance for similar topics.

A high number of metrics, on the other hand, can indicate broad accessibility of metrics (e.g. reporting may already be mandated by law), illustrate a heterogeneity of approaches to measuring ESG performance, or otherwise disagreement among products as to which metric constitutes an adequate proxy for measuring performance (when performance is not directly measurable).

In this respect, however, it cannot be assumed that a higher number of metrics available leads to better ESG performance measurement. Some ESG topics are more easily broken down into a limited number of metrics (e.g. GHG Emissions or Energy Management) without impacting the overall quality of the assessment; while others encompass a broad range of business inputs and outputs, which are more difficult to encapsulate in a smaller set of metrics (e.g. Corporate Governance, Environmental Management). Conversely, a high number of metrics **may also illustrate uncertainty or a lack of consensus among rating products** as to what concretely constitutes ESG performance. In such cases, providers may include an expanded set of metrics to capture ESG performance through multiple proxies. In fact, across topics, the scorecards in Annex C show that ESG rating products differ substantially in their selection of ESG metrics, with few metrics being consistently available across more than a handful of rating products. Notably, this study finds evidence that a higher number of metrics usually correlates with greater divergence in measurement approaches across products. The combination of different metric characteristics in a meaningful performance measurement is further explored in section 2.2.3).

Low numbers of metrics can be partially explained by **nascent reporting practices and limited or recent standards and guidance to support businesses in reporting against metrics related to the above-listed ESG topics.** In addition, low availability can also be affected by challenges in accessing data associated with certain metrics, including metrics related to impacts, risks, and opportunities associated with business relationships and supply chains. In the context of Biodiversity & Land Use metrics for instance, the Taskforce on Nature-related Financial Disclosures (TNFD) has recently started standardising and harmonising metrics for nature and biodiversity risks, impacts and dependencies (including in the value chain) which is likely to increase the availability of metrics for this specific topic in the short term (TNFD, 2023[26]) (See Box 4).

Where there are no metrics or extremely limited metrics associated with a specific topic, it is probable that impacts, risks, and opportunities related to that topic are not being measured or captured in a meaningful way and thus not considered in the assessment of ESG performance. For instance, Biodiversity & Land Use is assessed using only two to nine metrics by rating products. These metrics are usually related to the existence of biodiversity policies, open-ended measures to mitigate adverse impacts, and various proxies for ecosystem impacts (see scorecard in Annex C). This limited scope raises questions about whether current metrics capture the full extent of biodiversity-related risks and opportunities meaningfully.

Similarly, the high variations in the number of metrics available per topic across products may reflect distinct methodological approaches and divergent levels of granularity applied to measure performance. For example, some providers may place a greater emphasis on G topics as a structural driver of performance on E and S topics, while others may place a greater emphasis on specific components of E or S performance itself. Additionally, this may also reflect longstanding and more structured corporate reporting practices for specific ESG topics, for which individual metrics are already

readily available and easily provided by companies. Conversely, it may also highlight persistent blind spots in capturing performance on other topics which have more recently been considered material through individual metrics.

Box 4. Availability of metrics according to businesses' size and location

Various studies have found that data availability is affected by companies' location and size. While these characteristics are not part of the empirical analysis presented in this report, these two factors are important to take into consideration for users of ESG metrics, including policy makers and standard setters.

- **Size and market capitalisation**: small and medium-sized enterprises (SMEs) tend to disclose less ESG information and are less covered by ESG rating products. Recent estimates indicate that the level of market capitalisation can be a factor in companies' coverage by ESG rating products. 95-100% of companies with market capitalisations exceeding USD 10 billion are covered by ESG rating products globally compared to 19-26% for companies with capitalisations from USD 50 million to 300 million (Berenberg, 2024[27]). Previous OECD research also indicates that larger companies have greater (regulatory) incentives and capacity (e.g. financial resources and expertise) to collect and report on sustainability-related information.
- **Location:** coverage of developing country-based companies is often lower than developed economy ones. Their share in ESG rating products and indices coverage does not exceed 30% and is often limited to a few large companies from middle-income countries. Investors are citing the mismatch between data availability on companies based in emerging markets and what is required by ESG screens as one of the main challenges for sustainability investing in emerging markets and developing economies.

Sources: IMF (2022[28]), Global Financial Stability Report, https://doi.org/10.5089/9798400219672.082; UNCTAD (2024[29]), World Investment Report 2024, https://unctad.org/system/files/official-document/wir2024_ch03_en.pdf; OECD (2024[13]), Global Corporate Sustainability Report 2024, https://doi.org/10.1787/8416b635-en; Morningstar (2024[30]), ESG Risk Around the World: A Comparative Analysis Between Developed and Emerging Markets, https://connect.sustainalytics.com/esg-risk-around-the-world; MSCI (2024[31]), MSCI Emerging Markets Index (USD), https://www.msci.com/documents/10199/c0db0a48-01f2-4ba9-ad01-226fd5678111.Sources: IMF (2022[28]), Global Financial Stability Report, https://doi.org/10.5089/9798400219672.082; UNCTAD (2024[29]), World Investment Report 2024, https://unctad.org/system/files/official-document/wir2024_ch03_en.pdf; OECD (2024[13]), Global Corporate Sustainability Report 2024, https://doi.org/10.1787/8416b635-en; Morningstar (2024[30]), ESG Risk Around the World: A Comparative Analysis Between Developed and Emerging Markets, https://connect.sustainalytics.com/esg-risk-around-the-world; MSCI (2024[31]), MSCI Emerging Markets Index (USD), https://www.msci.com/documents/10199/c0db0a48-01f2-4ba9-ad01-226fd5678111.

2.2. Key findings: characteristics of ESG metrics

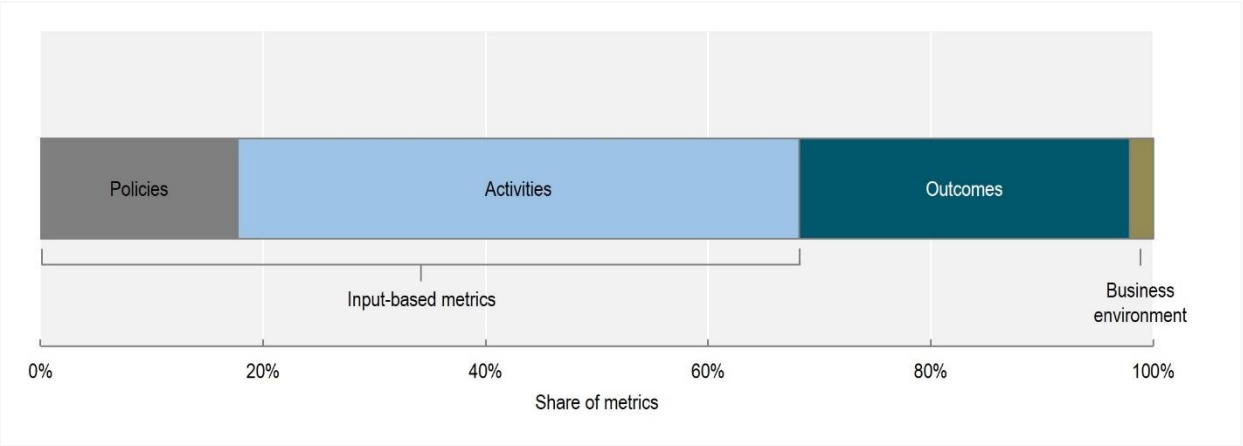
Looking at the underlying characteristics of different metrics sheds light on how performance is measured across various sustainability topics. Under this report's classification framework, metric characteristics are distributed first in terms of inputs, outputs and business environment metrics (attribute), and second in terms of quantitative and qualitative metrics (nature).

2.2.1. Distribution of policy, activity, output and business environment metrics

ESG rating products rely primarily on input-based metrics (68% of all metrics), which include activity-based metrics (50%) and policy-based metrics (18%). **Conversely, output-based metrics constitute**

nearly a third of all ESG metrics (30%), with the remaining **2% representing business environment metrics** (see Figure 3). As such, metrics used to assess ESG performance are primarily based on companies' inputs and to a more limited extent based on outcomes (including impacts of such measures) on people and planet or the impact of the operating environment on companies.

Figure 3. Distribution of metric characteristics



Note: This chart displays the distribution of policy, activity, output and business environment metrics across eight ESG rating products and approximately 2 000 metrics.

Distribution of input-based metrics (policies and activities)

Activity-based metrics are the most common type of metrics, constituting half of the dataset (50%). These metrics relate to companies' measures and practices to manage ESG factors. They capture the various management systems, processes, and activities that companies use to identify, prevent, and mitigate potential and actual ESG impacts, risks, and opportunities, such as providing trainings to workers or suppliers, establishing and formalising procedures and contingency plans, conducting stakeholder engagement, making targeted investments and expenditures, or measures to improve energy efficiency. They also capture the comparative quality of such measures, including companies' level of disclosure and transparency related to their activities and performance on different ESG topics. This includes the scope and quality of their annual and sustainability reporting, third-party certifications and accreditations, audit and assurance processes, participation in surveys, sustainability initiatives and benchmarking exercises, transparent and proactive communication of ESG-related information, and accessibility of data for media and other stakeholders to independently assess ESG performance and impacts. As such, this type of metric extends beyond the more aspirational nature of policy-based metrics, which it aims to operationalise.

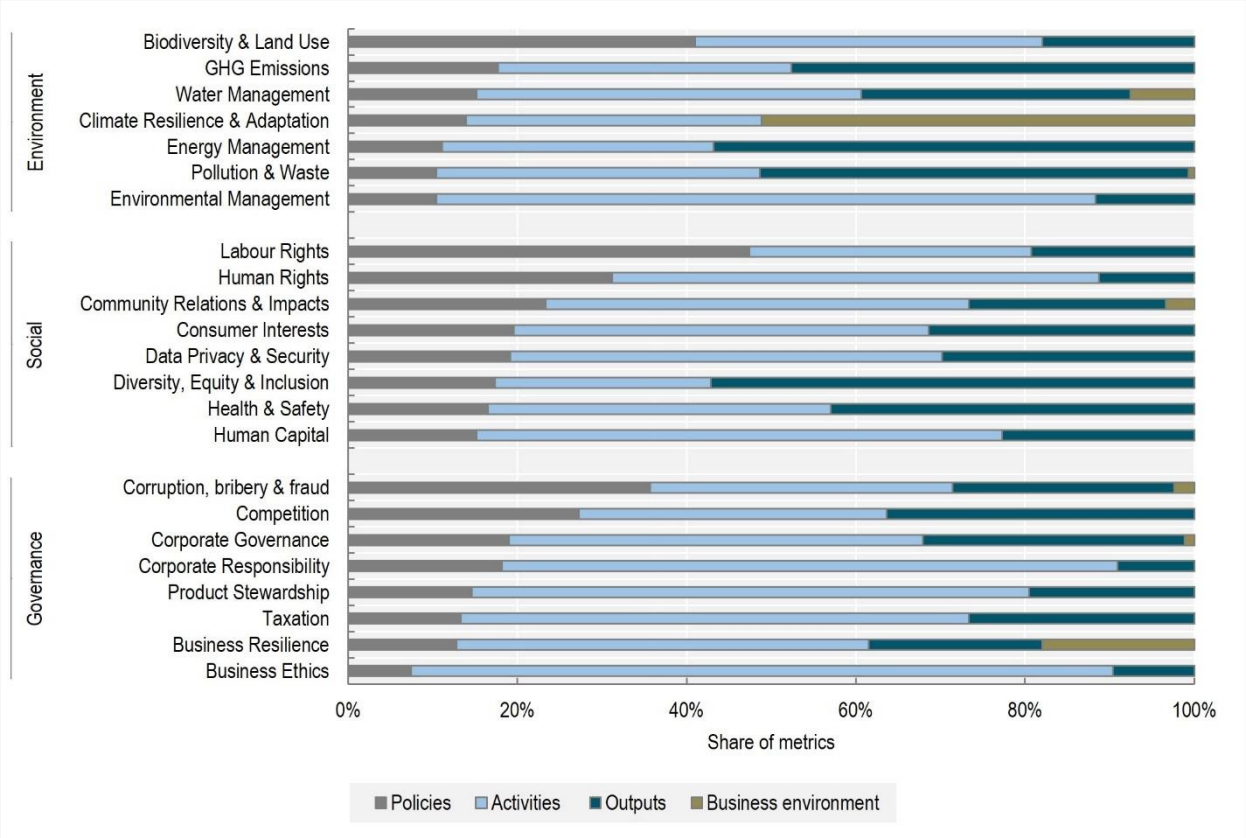
Activity-based metrics are used throughout the 23 ESG topics (see Figure 4) and are most widely available for G-related topics, including:

- Business Ethics (83%)
- Corporate Responsibility (73%)
- Product Stewardship (66%)
- Corporate Governance (49%)

These metrics often relate to structural and procedural indicators such as the separation of chairman and CEO, shareholder rights, and approval procedures for sensitive transactions. They also relate to generic notions of corporate philanthropy. Besides G-related topics, Environmental Management (78%) is also

measured through a high share of activity-based metrics. Conversely, DEI (26%), Energy Management (32%) and Labour Rights (33%) have the lowest shares of activity-based metrics.

Figure 4. Distribution of policy, activity, output and business environment metrics across topics



Note: This chart displays, for each ESG pillar and topic, the distribution of policy, activity, output and business environment metrics across eight ESG rating products and 1 836 metrics.

Policy-based metrics, as a subset of input-based metrics, account for 18% of the total share of metrics. This metric characteristic encompasses more aspirational aspects of ESG performance, including corporate strategies, plans, and targets that set the direction for the organisation's actions in the context of specific ESG considerations, such as net-zero commitments or board diversity targets. It also encompasses more normative prescriptions by businesses, such as guidelines or codes of conduct. Such policies may outline the organisation's stance on various sustainability issues and provide guidance on how employees and business relations should conduct themselves to uphold these principles. During the rating process (which is not analysed in the context of this report), this type of metric can be further assessed based on its level of disclosure and/or on the quality of the policy or target being disclosed against peers or best practices. Across topics, policy-based metrics are more widely available for the following ESG topics:

- Labour Rights (47%)
- Biodiversity & Land Use (41%)
- Corruption, Bribery & Fraud (36%)
- Human Rights (31%)

Distribution of output-based metrics

Output-based metrics constitute nearly a third of all metrics (30%). These encompass all metrics associated with the outputs of business activities (e.g. salaries, employee health and safety indicators as well as various aspects of companies' resource use and transformation, including GHG emissions or wastewater treatment) as well as their associated impacts on people, planet, and society (e.g. impacts on their physical and social environment, usually assessed through the existence of controversies) covering the full spectrum of impacts and risks covered by the *OECD Guidelines*.[12] **Output-based metrics represent a large share of available metrics for topics which are associated with more readily measurable and standardised outputs**, including:

- Diversity, Equity, and Inclusion (DEI) (57%)
- Energy management (57%)
- Pollution & Waste (51%)
- GHG Emissions (48%)
- Health & Safety (43%)

Outputs associated with these topics tend to be more standardised and comparable, including through sector-level benchmarks (e.g. Energy Management) or legally or internally set thresholds and KPIs (e.g. DEI). These are also topics more often assessed using quantitative data (e.g. emission intensity, board gender diversity ratio) as data is more easily collectable and translated in numerical figure.

However, the **availability of output-based metrics is noticeably low for some other ESG topics often associated with business' adverse impacts and risks on people and planet**, including:

- Climate Resilience & Adaptation (0%)
- Corporate Responsibility (9%)
- Human Rights (11%)
- Biodiversity & Land Use (18%)
- Labour Rights (19%)
- Product Stewardship (20%)

Availability of business environment metrics

Lastly, 2% of metrics are business environment metrics. This type of metric relates to a company's exposure to external factors in its operating environment or characteristics of its business model. As such, it is neither considered an input nor output-based metric. Examples of this type of metric include risks of stranded assets, exposure to water stress, or effects of climate events, regulations, and long-term market trends on a company's product and service demand. Two topics are primarily assessed through business environment metrics: Climate Resilience & Adaptation (51%) and Business Resilience (18%). By way of definition, these topics predominantly address a company's operating environment which may affect its valuation, risk profile or bottom line (e.g. exposure to climate-related risks, shift in regulation, demand volatility, etc.).

In total, 41 metrics could be identified as business environment metrics (see Table 1 for non-exhaustive examples). **This type of metric could be identified in only four rating products, and over two-thirds of these types of metrics are associated with one product only.** As such, most rating products do not, or barely, consider this aspect when assessing ESG performance. Business environment metrics are also almost completely absent from the S pillar. Such metrics, for example, could include the location of operations in conflict-affected or institutionally weak geographies or metrics related to labour or skills shortages. While used mostly to assess financially material risks (e.g. climate-related risks, regulatory

change), they still provide useful indicators of the root causes of sustainability impacts and risks, when appropriately contextualised.

The lack of business environment metrics may be driven by a combination of factors that are outside the scope of this study and that may warrant additional research. Material business environment considerations, including with regards to industry and geography, may be factored in at different stages of the rating process (by adding industry-specific metrics to better contextualise the assessment or by applying a higher weighting to specific ESG topics that are deemed more material for specific sectors, products, materials, or geographies). This can in part explain the low level of business environment identified. It however warrants users of ESG data and ratings to appropriately contextualise individual metrics, which can hold different materiality depending on geography, products, sector and enterprise risk profile.

Table 1. Examples of business environment metrics in ESG rating products

Type of risk factors	Metrics
Exposure to financial risk factors	Risk of stranded assets
	Presence of core physical assets in areas subject to weather- and climate-related hazards
	Reliance on highly specialized workforce
	Tax or investment costs related to policy and regulatory change
	Trends in social values that could affect demand for enterprise's products and services or access to capital
	Business reliance (incl. throughout the supply chain) on GHG-intensive products, assets, or operations
Exposure to geographic risk factors	Exposure to water stress areas
	Asset location
	Headquarter location
	Level of regional corruption
Exposure to product risk factors	Percentage of products sold that are recyclable
	Revenue from products "third-party certified" to environmental and/or social sustainability standards
	Percentage of sale revenue from products with health-related risks

2.2.2. Distribution of quantitative v. qualitative metrics

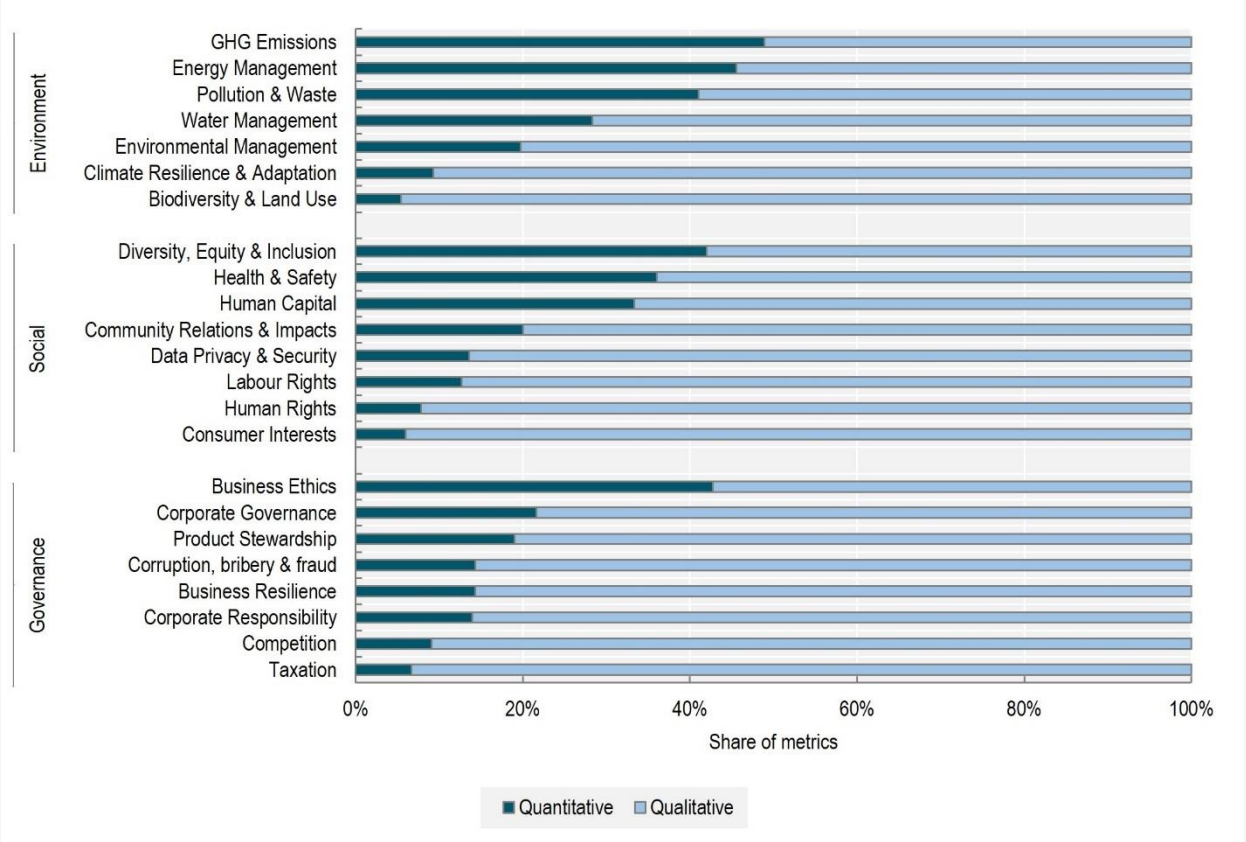
ESG performance is predominantly assessed using qualitative metrics (72%) (see Figure 5). Qualitative ESG metrics are non-numerical data used to evaluate a company's performance, practices, or policies related to ESG factors. These metrics often provide descriptive insights rather than quantitative data and are used to assess aspects of performance that are difficult to measure with numbers alone. (e.g. existence or quality of companies' strategies and policies, or membership to specific initiatives). Qualitative metrics are either **binary indicators** (sometimes referred to as "Boolean"; or yes/no answers) or follow a **criteria-based** scoring methodology (e.g. assessing the quality and effectiveness of a company's corporate governance on a scale from 1 to 10). The availability (and share) of qualitative data is high across all topics, especially for S (76%) and G-related topics (74%) for which performance is less often measured using numerical data than E-topics (67%).

A quarter (28%) of ESG metrics rely on quantitative data to measure performance. Quantitative ESG metrics are numerical metrics that reflect performance measurements and can typically be directly compared against one another (e.g. GHG emissions, energy consumption, or employee turnover rates). GHG Emissions (49%) and Energy Management (46%) are the two topics with the highest share of quantitative data. Interestingly though, even readily quantifiable ESG topics are assessed using mostly qualitative data (e.g. GHG Emissions is assessed predominantly with regards to net zero commitments, the existence and quality of GHG-related disclosure and decarbonisation actions rather than using

numerical data of actual emissions, including emissions reduction achieved). The topic with the lowest share of quantitative metrics is Biodiversity & Land Use (5%).

In addition, there seems to be a **positive correlation between low shares of quantitative data and low numbers of metrics per topic**. For instance, Biodiversity & Land Use, Climate Resilience & Adaptation, Taxation and Competition are among the topics with the lowest shares of quantitative data and the lowest number of metrics overall (see Figure 5). The low availability of quantitative metrics may be due to nascent standardisation and measurement methodologies on these topics in ESG standards and reporting frameworks.

Figure 5. Qualitative v. quantitative metrics by ESG topic



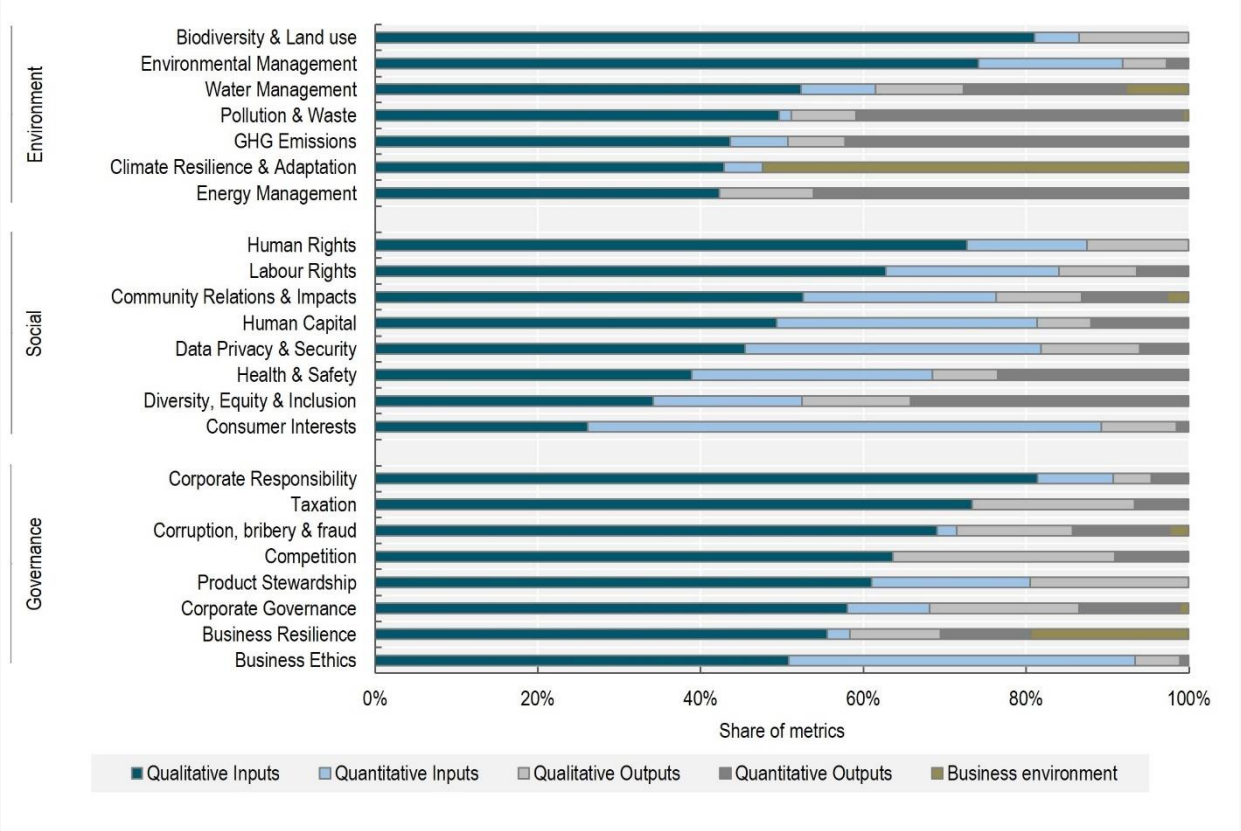
Note: This chart illustrates for each topic the usage of qualitative and quantitative metrics across eight ESG rating products. Topics are grouped according to their respective ESG pillars and sorted in descending order within a given pillar (E, S and G).

2.2.3. Combinations of metric characteristics and implications for performance measurement

Using different sets of metric characteristic combinations (qualitative input-based; quantitative input-based; qualitative output-based and quantitative output-based) **has implications in terms of how performance is being measured. Noticeably, qualitative input-based metrics account for nearly 60% of all metrics**. Most qualitative input-based metrics are considered proxies as they do not provide a direct measurement of a company's performance on a specific topic but rather **infer the performance based on the existence of policies and measures to manage impacts, risks and opportunities related to that topic, irrespective of the actual effectiveness of such measures.** These metrics can be complemented with quantitative input-based metrics, which help provide a more granular assessment of

the measures being implemented, notably in terms of **coverage** (e.g. share of sites audited, share of suppliers that received training, number of training hours per employee) or in terms of **forward-looking aspects** of such policies and measures, including targets, investments, or other expenditures. However, quantitative input-based metrics account for only 11% of the total number of metrics.

Figure 6. Prevalence of different combinations of metric characteristics per topic



Note: This chart illustrates the prevalence of different combinations of metric characteristics for the measurement of ESG performance per topic.

Conversely, quantitative output-based metrics, which account for 17% of all metrics, usually provide **for a strong correlation between the metric and the actual performance being measured,** especially when comparing businesses with similar characteristics (e.g. sector, size, geographies). This combination of metric characteristics is used by all products but one to measure performance against a limited number of topics (i.e. GHG Emissions, Energy Management and Pollution & Waste as well as DEI and Health & Safety) (see Figure 6). The different levels of correlations between the choice of metric characteristic combination and the performance measurement are presented in Table 2.

Table 2. Examples of metric characteristics that impact performance measurement

Pillar	ESG topics	ESG metric characteristics combination		
		Quantitative output metrics	Quantitative input metrics	Qualitative input metrics
Environment	GHG Emissions	Scope 3 emissions intensity	Absolute scope three reduction target	Existence of Scope 3 GHG emissions reporting
	Environmental Management	Cost of environmental fines	Total amount of expenditure allocated to environmental management	Existence of a certified Environment Management System
	Water Management	Freshwater withdrawal (total in litres)	KPIs on water use reduction	Water risk management system
	Pollution & Waste	Waste recycled to total waste	Target waste reduction	Internal recycle and reuse awareness programme
	Energy Management	Transmission and distribution losses as a % of total energy entering the system	Reduction target for energy transmission leakages	Measures to minimise environmental impacts of electricity transmission and distribution
Social	Human Rights	N.A.	Share of suppliers subject to human rights training programme	Existence of a human rights training programme
	Human Rights	Share of complaints with remediation provided	Share of suppliers covered by grievance	Existence of a grievance mechanism
	Community Relations & Impacts	Share of local hiring	Investment (in USD) in community relation programmes	Local procurement policy
	Health & Safety	Contractor fatalities rate	Costs related to employee safety protection, health, and safety	Supplier factory monitoring and auditing programme
	Human Capital	Employee turnover rate	Share of employees who responded to survey	Existence of surveys to monitor employee satisfaction
	Diversity, Equity, and Inclusion	Gender-pay gap	Gender-pay gap reduction target	Gender pay equality programme
Governance	Corruption, bribery & fraud	Cost of fines, penalties, settlements in relation to corruption	Percentage of suppliers subject to anti-corruption due diligence processes	Anti-corruption due diligence programme on third party
	Corporate Governance	Number of ESG-related resolutions	Voting cap in percentage	Disclosure of voting results

Note: Each line associates three metrics with similar performance measurement outcomes. Metrics can be from distinct products.

2.2.4. Distribution of dynamic and static metrics

Under this report's classification framework, **less than 5% of total metrics were found to be dynamic,** i.e. metrics that capture progress and evolution of the performance on a specific ESG topic over time. ESG metrics have been classified as dynamic when explicitly presented as such, i.e. requesting companies' information on reduction, progress, trends, pathways, or targets. This also includes a number of quantitative and qualitative activity-based metrics that have dynamic effects, including metrics related to research & development (R&D), capital and operational expenditures or planned investments.

Table 3 provides a non-exhaustive list of dynamic metrics, classified into five different approaches.

Such considerations can, however, be applied at the scoring stage, for example, in the context of assessing topical ESG performance, ESG analysts may compare trends in performance across time, based on static indicators (e.g. share of women in executive positions is a static indicator than can be compared year-on-year to assess dynamic performance). Therefore, in practice, many "static" ESG metrics can be dynamic when compared to past comparable metrics.

When measuring ESG performance across topics, **dynamic metrics are more frequently used with regard to E-related topics**. Apart from Health & Safety and DEI, dynamic metrics are less frequently used in the context of S- and G-related topics, which are less associated with numerical data, including targets,

key performance indicators (KPIs) and trends. In addition, two out of eight rating products do not provide dynamic metrics at all.

Table 3. Types and examples of dynamic and forward-looking metrics

Types of dynamic data	Topics	Examples of metric
Forward-looking and **self-referenced targets** (e.g. short- or long-term reduction targets or progress)	GHG Emissions	Absolute scope 1; scope 2 or scope 3 emission reduction targets
		Entity progress towards GHG emission reduction targets (annual, absolute or %)
		Intensity reduction targets
	Energy Management	Time-bound action plan to reduce energy consumption
		Time-bound action to increase renewable energy use
	Water Management	Freshwater use reduction targets and action plans
	Pollution & Waste	Waste reduction targets
		Resources use reduction targets
	Health & Safety	Work-related incident reduction targets
		Health & Safety performance targets
	DEI	New Women Employees
Benchmarking against past performance (e.g. achieved reduction against past performance or past industry performance).	GHG Emissions	GHG emissions and energy reduction
		Reduction of carbon emission in logistics and fleet efficiency
		Reduction in methane emissions
	Energy Management	Reduction in energy consumption per production units
		Reduction in energy consumption of heating, ventilation, and air conditioning
	Water Management	Reduction of water consumption through innovative equipment and technologies
	Pollution & Waste	Reduction of total use of substances of concern in production process
		Particulate Matter Emission reduction
Benchmarking against targets (e.g. quantified progress against targets)	GHG Emissions	Quantified progress against emissions reduction targets
		Demonstrated track record of achieving carbon emission reduction target
	Pollution & Waste	Progress against resource use and management efficiency target
		Progress on toxic emissions and waste reduction targets based on ISO 140001
	Health & Safety	Performance and progress against health and safety indicators
	Corporate Responsibility	Progress towards specific SDGs
Trends (e.g. average over a defined period)	GHG Emissions	Carbon Intensity Trend
	Water Management	Water Intensity Trend
	Human Capital	Trends in employee engagement
	Health & Safety	Lost Time Incident Trend
Measures with expected dynamic effects (e.g. investments, expenditure)	Environmental Management	Total environmental-related R&D in revenue (in million)
	Climate Resilience & Adaptation	Financial quantification of costs and R&D linked to climate change
		EU Taxonomy Alignment – Capex and Opex
	Business Ethics	Share of Lobbying Expenditure

2.2.5. Characteristics of metrics compared across rating products

Rating products tend to have more convergence when it comes to using qualitative or quantitative data for assessing performance than with respect to the type of metrics used (e.g. input, output etc.) generally and across topics. Some of the **divergence can be primarily attributed to one or two rating products only**, which may account for a disproportionate share of a specific metric characteristic in the measurement of a given topic that is not actually reflected across the majority of rating products (e.g. two rating products account for 78% of all Human Rights activity-based metrics and one product accounts for 72% of all Climate Adaptation & Resilience business environment metrics).

There is a positive correlation between ESG topics with a higher metric-level divergence and topics with a high number of metrics available. This would imply that a **high number of available metrics can lead to greater confusion as to how the topic is assessed by different rating products**, especially in a context in which the topic has not been previously standardised. This is aligned with previous findings (Christensen, Serafeim and Sikochi, 2021[32]) showing that increased sustainability disclosure on a given topic may amplify scoring divergence, instead of reducing it.

Figure 7. Variance in metric characteristics between rating products

Note: The above side-by-side dot charts illustrate, for each ESG topic, the share of quantitative and output-based metrics across rating products. Each rating product is represented by a single dot to illustrate the varying prevalence of metric characteristics in the assessment of ESG performance.

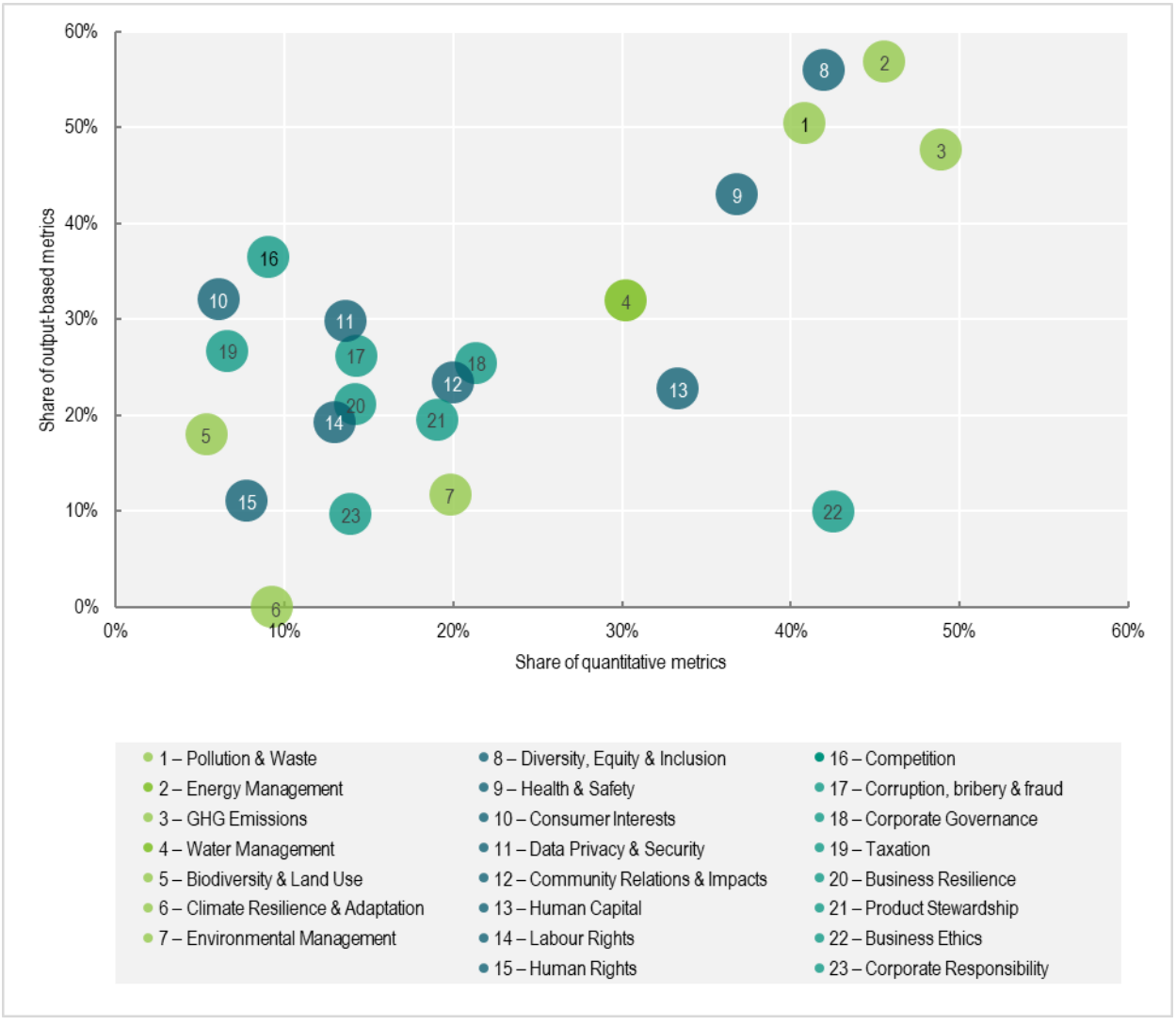
Environmental topics
Social topics
Governance topics

For some topics, there is a high level of consistency across rating products with respect to different metric characteristics used, including the use of input and output-based metrics as well as the use of qualitative and quantitative data. For example, across the majority of products, performance with respect to Biodiversity & Land Use, Climate Resilience & Adaptation, and Environmental Management as well as Labour Rights, Human Rights and Community Relations & Impacts is primarily assessed by qualitative input-based metrics. This combination of metric characteristics represents between 39 and 84% of metric shares across all eight rating products. However, the convergence remains limited when looking at the individual metric selected, as highlighted across Annex C.

Similarly, across products, performance with respect to Pollution & Waste, Energy Management, GHG Emissions, DEI, and Health & Safety is measured using a considerable share of quantitative output-based metrics. This combination represents 17% of all metrics (and is applicable to a small number of topics).

These tend to be more established and standardised ESG topics, more easily and readily translatable into comparable numerical metrics (e.g. GHG Emissions, Energy Management, DEI). It also indicates that the more a topic is measured through output-based metrics, the more it tends to rely on quantitative data (i.e. 61% of metrics related to company outputs are based on quantitative data, well above the overall average share of quantitative metrics at 28%).

Figure 8. Two approaches through which ESG topics are assessed across rating products



Note: Averages are based on the entire set of topics as opposed to averages per ESG rating product.
Environmental topics
Social topics
Governance topics

2.2.6. Considerations with respect to findings related to the characteristics of metrics

Depending on their usage, users of ESG data may rely on metrics that focus on different aspects of ESG performance. For instance, to address reputational risks, an investor may want to collect qualitative output-based metrics, which often relate to adverse impacts and controversies in which companies are involved. Conversely, an investor wishing to identify companies with robust risk management systems may in turn focus on qualitative and quantitative activity-based metrics.

As such, assessing the share of these different combinations in the measurement of ESG performance can shed light on the **degree of reliance on proxies in the overall performance measurement** (see also Figure 8). **Overreliance on one combination can lead to partial or skewed ESG performance measurement** and potential blind spots on specific aspects of ESG performance. Empirical findings highlight that performance measurement for all topics is driven by a combination of qualitative and **input-based** metrics (nearly 60% across topics and providers).[13] This is aligned with previous findings (NYU Stern Centre, 2017[33]; Christensen, Serafeim and Sikochi, 2021[32]), which have identified that rating products usually rely on qualitative input-based metrics (i.e. companies' efforts) to measure performance, rather than measuring past or actual impacts of such efforts. Carefully reviewing the underlying metrics underpinning performance measurement of ESG topics is important to understand if a rating product aligns with the intended investment strategy (from mitigating risks to impact investing).

Importantly, the reliance on self-reported qualitative input-based metrics as a proxy for measuring performance could incentivise "**tick-boxing" approaches** over actual risk prevention and mitigation actions. It may also benefit MNEs over SMEs, as MNEs may have more resources to adopt, implement and disclose measures underpinned by input-based metrics. Previous research, including by the OECD, has shown a positive correlation between companies' size and high ESG scores (OECD, 2022[22]).

For policy makers, the potential disconnect between the proxy metric and the performance measurement can have implications with regard to assessing the effectiveness of public policies. With regards to RBC-related policies for instance, a greater disconnect between the metric and performance measurement can increase the risk of greenwashing and capital misallocation – as investors may not have sufficient data to properly identify adverse impacts or allocate financing toward responsible and sustainable economic activities (see Box 5).

The low number of quantitative output-based metrics (17%), **and the use of this combination of metric characteristics for a limited number of topics** (i.e. Pollution & Waste, Energy Management, and GHG Emissions as well as DEI and Health & Safety) **should also draw the attention of policy makers and standard setters.** These metrics provide meaningful indicators that reflect the tangible outcomes or results of business activities. They are valuable in setting benchmarks, tracking progress, and assessing impact across topics and sectors, without focusing solely on past controversies. Admittedly, such type of metric may be challenging to collect (e.g., requiring sophisticated internal monitoring and tracking systems, and expertise) or relate to not yet standardised topics, reducing their comparability.

Finally, the low level of available business environment metrics (2%) highlights the need for greater contextualisation from users of ESG data. Industry specificity as well as geographical considerations have likely material implications for measuring business' sustainability performance. Additional research may be warranted to understand the extent to which external factors (e.g. location, sector) are considered to measure both the exposure of business to, and impact on, ESG impacts and risks.

Box 5. OECD research on ESG rating and climate alignment

The OECD has conducted research to assess the alignment of companies' E pillar scores with actual low-carbon transition objectives. Research assessed the selection of climate-related metrics expected to align with a low-carbon transition (based on international frameworks and benchmarks) and the extent to which these are captured in, and influence the outcomes of, high E pillar scores in 2 500 companies assessed through four different ESG rating products.

Findings suggested that high E pillar scores are not correlated with factors such as reduced GHG emissions and emission intensity or increased use of and investment in renewable energy. As a result, the E pillar and associated rating are not useful tools to assess or indicate a company's current level of short-term reductions in GHG emissions, emission intensity or investments in renewable energy.

The study further identified disclosure as a factor leading to such findings. Companies perform more favourably on metrics that assess a company's disclosure of key decarbonisation goals, policies, and commitments. This means that metrics on disclosure often only measure the existence of company policies rather than the quality of targets and objectives in line with the latest climate science or GHG reduction scenarios consistent with the Paris Agreement temperature goal. Findings suggested that ESG rating products' E pillar scores tend to be correlated with factors not directly related to climate transition actions such as market capitalisation and the resources dedicated to disclosure, suggesting that these factors play a greater role than current or forward-looking climate-related metrics in contributing to high E pillar scores of ESG ratings.

Source: OECD (2022[34]), *ESG ratings and climate transition: An assessment of the alignment of E pillar scores and metrics*, https://doi.org/10.1787/2fa21143-en

Table 4. Overview of metrics distribution throughout the analytical framework

	Basic information					Metric characteristics							
	Number of metrics	Share of metrics	Average per provider	Min.	Max.	Policies	Activities	Outputs	Business environment	Unclassifiable	Qualitative	Quantitative	Unclassifiable
Environmental													
Environmental Management	161	8%	20.1	1	43	16	120	18	0	7	122	30	9
GHG Emissions	148	8%	18.5	1	47	26	51	70	0	0	82	57	8
Pollution & Waste	147	8%	18.4	3	43	15	55	73	1	4	73	70	5
Energy Management	83	4%	10.4	0	34	9	26	46	0	2	43	36	4
Water Management	70	4%	8.8	5	13	10	30	21	5	4	48	19	3
Climate Resilience & Adaptation	45	2%	5.6	0	19	6	15	0	22	2	39	4	2
Biodiversity & Land Use	39	2%	4.9	2	9	16	16	7	0	0	35	2	2
Social													
Health & Safety	125	6%	15.6	7	31	20	49	52	0	4	78	44	3
Diversity, Equity & Inclusion	103	5%	12.9	0	40	17	25	56	0	5	58	42	3
Human Rights	82	4%	10.3	0	33	25	46	9	0	2	71	6	5
Labour Rights	82	4%	10.3	3	26	37	26	15	0	4	69	10	3
Human Capital	69	4%	8.6	2	17	10	41	15	0	3	44	22	3
Consumer Interests	52	3%	6.5	0	17	10	25	16	0	1	47	3	2
Data Privacy & Security	47	2%	5.9	1	13	9	24	14	0	0	38	6	3
Community Relations & Impacts	30	2%	3.8	2	9	7	15	7	1	0	24	6	0
Governance													
Corporate Governance	280	14%	35.0	4	113	51	131	83	3	12	217	60	3
Business Ethics	191	10%	23.9	2	124	14	155	18	0	4	106	79	6
Product Stewardship	45	2%	5.6	0	16	6	27	8	0	1	34	8	0
Corporate Responsibility	42	2%	5.3	0	13	8	32	4	0	1	37	6	2
Corruption, bribery & fraud	42	2%	5.3	0	15	15	15	11	1	0	36	6	0
Business Resilience	39	2%	4.9	0	10	5	19	8	7	0	30	5	4
Taxation	15	1%	1.9	0	6	2	9	4	0	0	14	1	0
Competition	11	1%	1.4	0	6	3	4	4	0	0	10	1	0

Note: Cells are colour-coded in green, blue, and teal to indicate the three ESG pillars, respectively. Shading is applied separately for the number of metrics per topic, the prevalence of policy, activity, output, and business environment-based metrics, and the use of quantitative and qualitative data. For each category, the darkest (brightest) shade represents the highest (lowest) prevalence.
Environmental topics Social topics Governance topics

3. ESG metrics: relevance for responsible business conduct

This section explores to what extent ESG metrics can be used to understand or measure business performance against international standards on responsible business conduct, primarily the *OECD Guidelines* and *Due Diligence Guidance*.

The *OECD Guidelines* provide recommendations from governments to businesses on how to maximise private sector contribution towards sustainable development, including by addressing adverse impacts on people and planet. As part of these recommendations, they call on businesses to carry out risk-based due diligence, a process through which businesses can identify, prevent, mitigate, and account for adverse risks and impacts associated with their activities, supply chain and other business relationships. *OECD Due Diligence Guidance* has been developed to further elaborate upon this expectation.

In recent years, these standards have been used as a reference point or embedded as expectations in policies and regulations on sustainability disclosure and responsible business practices (see Box 1). As such understanding whether ESG metrics align with key expectations in the *OECD Guidelines* and *OECD Due Diligence Guidance* can be relevant to understanding to what extent ESG rating providers can play a role in assessing business performance against these standards and the policies and regulations into which they have been embedded.

3.1. Controversy screens as a proxy for compliance with the OECD Guidelines

ESG rating providers often provide dedicated products assessing a company's involvement in an ESG-related controversy or incident. They provide users with a view of a company's involvement in a controversy and subsequently associated reputational, legal, and financial risks. Four ESG rating providers in scope provide this specific service offering. Increasingly, these types of ESG rating products, also called "Controversy Screening" or "Global Norms Breach" are being designed to respond to regulatory developments that directly reference the *OECD Guidelines,* such as the EU Taxonomy Regulation's Minimum Social Safeguards and SFDR's Principal Adverse Impacts (see Box 1). Under SFDR's principal adverse impacts, for instance, research indicates that the *OECD Guidelines*-related indicator is the second[14] most considered by ESG-labelled funds, reported at 95% by Articles 8 and 9 funds (Morningstar, 2024[35]). These ratings are sometimes used to design investments' exclusion lists or remove companies from ESG indices and ESG-labelled exchange-traded funds (see Box 6).

To identify a company's adverse impacts on people and planet through controversy-based ESG data or products, ESG rating providers have developed dedicated methodologies, which include an identification of controversies in which the company is involved and mapped against the thematic chapters of the *OECD Guidelines* (or broader ESG topic classification). Controversy identification is conducted by screening news media outlets, reports by civil society organisations, caselaw databases and various other

publicly available information, sometimes complemented by manual analyst reviews. This is followed by an assessment of the controversy, which is usually based on the following criteria:

- The **status** of the controversy (ongoing or concluded), typically based on the time elapsed and the level of remediation undertaken by the associated company.
- The **severity** of the impacts associated with the controversy, typically evaluated based on a predetermined set of criteria evaluating the scope (e.g. widespread, limited); scale (e.g. gravity, serious, minimal) and irremediable character (e.g. the ability to restore the individuals or environment affected to a situation equivalent to their situation before the adverse impact) of the controversy.
- The extent of the company's **involvement** in the controversy, whether directly (e.g. through business activities) or indirectly (e.g. through business relationships, ownership, and supply chains).

Some providers include an **assessment of the company's response to the controversy**, including engagement with affected stakeholders or co-operation in the remediation process. Others also include dialogue with the company to fact-check the findings. Such assessment is turned into a binary score or grade ("aligned" and "non-aligned"; Pass, Fail, Watchlist or from 1 [no allegation] to 10 [verified failure]).

On their own, controversy screens will generally not be sufficient to assess compliance with the recommendations of the *OECD Guidelines*. The absence or low number of controversies can indicate a robust RBC management process but can also be the result of limited public attention and scrutiny over a specific company, RBC issue, sector, or geography (e.g. business-to-business companies and/or SMEs often receive less media coverage). Importantly, OECD standards on responsible business conduct do not expect perfect results or 100% risk-free value chains, as currently assessed through controversy-based metrics. The risk-based approach of the OECD standards is intended to not penalize companies for the presence of risks or adverse impacts in their operations and supply chains. Instead, it expects enterprises to prioritise appropriately, to target their highest-risk operations and business relationships, and to demonstrate meaningful and measurable progress over time against specific, time-bound targets and indicators (see Section 3.2) (OECD, 2022[36]). In this respect, other metrics can be leveraged to assess a company's performance. For example, 17% of all metrics are output-based quantitative metrics, which provide information – not on actual impacts of companies– but rather on the outputs of activities and measures put in place to address such impacts. In particular, these metrics can provide a more forward-looking assessment of a company's ESG performance and progress.

Box 6. ESG data, controversy screening and responsible disengagement

Many investors have exclusion or divestment policies tied to specific conducts (e.g. breach of international human rights law) or products (e.g. weapons, tobacco, coal). Exclusion and divestment policies are tools used by asset managers to avoid being involved in financing adverse risks and impacts on people and planet while also providing a medium to express clients' commitments, motivations, and ambitions on specific ESG topics.

As sustainable investing practices grow, the criteria for exclusion and triggers of divestments have become stricter, including to respond to regulations around sustainability-labelled funds.* Global norms-breach and controversy screening have become widely used tools to exclude companies from portfolios and sustainability-labelled funds. Exclusion and divestment may be a first response to potential and actual risks and impacts. The Financial Exclusions Tracker, for instance, identified that 40% of exclusion decisions are motivated by climate-related concerns and 7% are by human rights (based on an assessment of 87 financial institutions and 4 532 companies excluded).

Under the *OECD Guidelines*, once adverse impacts have been identified, divestment is only considered an appropriate response after failed attempts at mitigation, where the investor deems mitigation unfeasible, or due to the severity of the adverse impact. Divestment as a direct response may reduce investors' exposure to risks and their ability to exert leverage without reducing the adverse impact on people, planet, and society. RBC due diligence, as a tool for engagement, provides investors with additional options for preventing and mitigating impacts while addressing trade-offs of potential divestment decisions on other sustainability objectives (e.g. considering a just transition).

Note: (*) SFDR Article 8 and 9 funds collectively accounted for over EUR 6 trillion in assets in 2023, representing 55% of European assets under management (MSCI, 2024[37]).
Source: Financial Exclusion Tracker (2023[38]), OECD (2017[39]), MSCI (2024[37]).

3.2. Leveraging ESG data for assessing quality RBC due diligence

3.2.1. Topical approach to measuring risk management performance

Most ESG metrics and associated products measure how companies manage impacts, risks, and opportunities with respect to a specific topic. Only 4.4% of input-based metrics (58 metrics in total) could be associated with explicit RBC due diligence measures and steps without being associated with a specific topic. These are metrics related to the existence of risk assessments, codes of conduct, supply chain risk management, audits or broader ESG trainings, which were generally classified under the Corporate Governance topic.

This can create challenges for investors wishing to leverage ESG metrics to assess the quality and effectiveness of RBC due diligence of companies across topics, as the availability of ESG metrics pertaining to RBC due diligence measures and steps are usually **scattered** around different ESG topics (see Table 5). For instance, ESG metrics on the existence of a grievance mechanism (six metrics in total) are all related to the topics Human Rights and Community Relations and Impacts. Similarly, out of 14 metrics assessing the existence of a due diligence process (irrespective of the steps), only one is topic agnostic (while four relate to each Human Rights, Corruption, Bribery & Fraud and Labour Rights). Under the *OECD Guidelines* however, due diligence steps apply across topics (e.g. stakeholder engagement and remediation are important steps of a sound environmental management system and should not be limited to human rights risks and impacts).[15]

This topical structure is also at odds with recent sustainability-related standards structures. For instance, both the ESRS and ISSB standards make the distinction between overarching and process-based sustainability information such as governance processes, strategy, impact, risk and opportunity

management and targets (e.g. ESRS 1 and 2 and IFRS S1) and topical information related to impacts, risks, and opportunities (e.g. ESRS E1 – E5, S1 – S4 and G1 and IFRS S2). With the introduction of these reporting frameworks, more metrics related to broader enterprise-level management of ESG risks might make their way into metrics used by ESG rating providers.

Table 5 provides a non-exhaustive list of available metrics, which are associated with the six-step process of due diligence as outlined in the *OECD Guidelines*. It can be challenging to assess the availability of metrics associated with Step 4 of the due diligence process (Tracking) as a number of metrics can be part of an RBC due diligence monitoring and evaluation process when used to track the performance of due diligence on specific risks and impacts year-on-year. Similarly, a high number of metrics pertain to the existence and/or quality of targets but the extent to which how progress on such targets is assessed is not always clear. A vast number of metrics focus exclusively on communication and reporting, including on disclosure related to other steps, risks, and impacts, and to some extent on the quality of such disclosure. In an RBC due diligence process, companies are expected to communicate externally on the adverse impacts identified, and on the activities put in place to address such impacts.

Table 5. Examples of ESG metrics in relation to RBC due diligence steps

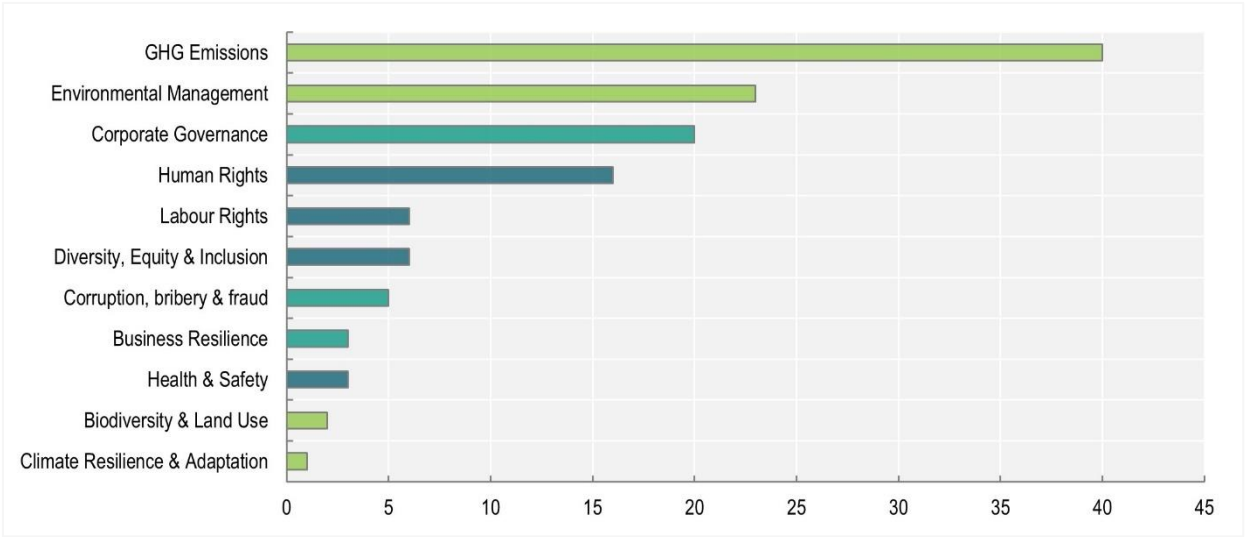
RBC Due Diligence Step	Non-exhaustive list of ESG metrics	Associated ESG topics
Step 1: Embed responsible business conduct into policies and management systems.	Existence of a Human Rights Policy (approved by senior management; and communicated to suppliers).	Human Rights
	Stakeholder engagement plan	Community Relations & Impacts
	Environmental risk management system	Environmental Management
	GHG emission reduction target	GHG Emissions
	Net-zero commitment	GHG Emissions
	Zero deforestation commitment	Biodiversity & Land Use
Step 2: Identify and assess adverse impacts in operations, supply chains, and business relationships.	Risk assessment to identify human rights risks and impacts in supply chains	Human Rights
	Human Rights Impact Assessment (HRIA)	Human Rights
	Project lifecycle assessment	Environmental Management
	Energy audit	Energy Management
	Water stress test and risk management	Water Management
	Biodiversity risk and impact assessment	Biodiversity & Land use
	Anti-corruption due diligence programs on third parties	Corruption, Bribery & Fraud
Step 3: Cease, prevent or mitigate adverse impacts.	Livelihood and restoration plan	Community Relations & Impacts
	Certification of Health & Safety Management	Health & Safety
	Health and safety standard training	Health & Safety
	Measures to reduce use of pollutant	Pollution & Waste
	Measures to safely dispose of hazardous waste	Pollution & Waste
	Adoption of technologies for carbon efficiency	GHG Emissions
Step 4: Track implementation and results.	Monitoring process to track effectiveness of the Human Rights Policy	Human Rights
	Workers' voice survey	Labour Rights
	Percentage of suppliers that have received training on sustainable procurement	Labour Rights
	Energy audit	Energy Management
	Net zero target	GHG Emissions
Step 5: Communicate how impacts are addressed. †	Public reporting on human rights impacts	Human Rights
	Reporting on Environmental expenditure	Environmental Management
	Reporting on total water consumption	Water Management
	Reporting on Scope 3 emissions	GHG Emissions
Step 6: Provide for or co-operate in remediation when appropriate.	Existence of a grievance mechanism and other remediation procedure	Human Rights
	Environmental restoration initiatives	Environmental Management
	Remediation procedure against discriminatory practice	DEI
	Existence of an escalation procedure	Labour Rights

3.2.2. Limited supply chain-related metrics' availability

In total, **7% of all metrics could be associated with supply chain risk management metrics across topics and products**.[16] RBC due diligence expects companies (and investors) to address adverse risks and impacts that may be associated with their operations, supply chains and other business relationships. The majority of ESG metrics collected address impacts, risks and opportunities that occur at the level of businesses' direct operations with limited focus on business relationships or supply chain-related impacts, risks, and opportunities.

The majority of supply chain-related metrics are input-based (77%) and relate predominantly to the existence of a supply chain risk management system, supplier audits, trainings, and capacity-building programmes (which can be topic-specific or agnostic), which were generally classified under the Corporate Governance topic. The remaining 23% are output-based metrics, and all relate to Scope 3 emissions. Figure 9 provides an overview of the number of supply chain-related metrics available per ESG topics and highlights that over half of the topics are not covered by any supply chain-related metrics. No output-based metrics related to social supply chain factors were identified. Similarly, two rating products account for two-thirds of supply chain-related metrics (e.g. four rating products include environmental supply chain management metrics, four human rights and labour rights supply chains management metrics and three Scope 3 emissions-related metrics), illustrating the limited coverage of such performance measurement aspects across products. On average, ESG rating products mostly focus on impacts, risks and opportunities at the entity level, measuring the performance of its direct operations.

Figure 9. Number of supply chain metrics per ESG topic



Note: This chart illustrates the number of supply chain-related metrics available per topic
Environmental topics
Social topics
Governance topics

4. Conclusions and policy considerations

In the past years, **investors' interest in ESG investing has grown exponentially, with global ESG-labelled assets on track to surpass USD 40 trillion in 2030** (Bloomberg, 2024[40]). This has both been shaped by and generated increased attention to ESG data to inform investment and voting decisions, improve the credibility of sustainability impact claims, support risk management processes and increasingly for regulatory compliance. In that context, calls for **improving ESG data availability, comparability, and meaningfulness** have multiplied, including from the G20 SFWG (G20, 2021[20]). The report aims to contribute to answering this call, providing insights on the **coverage** (scope) and **distributions of characteristics** (nature) of metrics used by ESG rating providers, and thus better understanding the **completeness and accuracy of businesses' ESG performance measurement**.

First, there are significant variations in the coverage and distribution metrics across topics. More nascent and less standardised ESG topics tend to have less readily available metrics compared to more established and standardised ones. For instance, some topics like Corporate Governance have seven times more metrics to measure business performance against them than others, such as Biodiversity & Land Use or Community Relations & Impacts. In addition, some topics are not covered at all by some products or assessed on the basis of very limited metrics, offering a partial assessment of companies' performance.

Second, there is divergence across providers with respect to the availability and distribution of metrics and the characteristics of the metrics used to measure performance. As such, one rating product can use as much as 28 times more metrics to assess the same topic compared to another product. Going into the details of the metrics used across products, there is little convergence and very few comparable individual metrics identified across products (see Annex C). Overly divergent approaches can lead to confusion amongst investors or other users of ESG ratings on what constitutes "good" ESG performance—hindering their ability to meaningfully manage ESG impacts, risks, and opportunities—and lead to greenwashing or capital misallocation.

Third, over two-thirds of metrics used to assess ESG performance are input-based metrics (e.g. policies, targets and measures put in place to respond to ESG impacts, risks, and opportunities). Business environment metrics constitute small shares of available metrics (approximately 2%), while dynamic, forward-looking metrics, which are essential for monitoring and tracking progress against specific goals and targets are largely absent from the dataset (5%). Input-based, self-reported metrics can lead to partial ESG performance assessment, with limited information on how companies effectively manage impacts, risks, and opportunities holistically, in their supply chains, and beyond disclosure practice.

Lastly, **available metrics are generally not sufficient to measure observance of recommendations of the *OECD Guidelines*** in that they rely on controversy-based metrics which risk penalising companies simply for the presence of risks or adverse impacts in their operations and supply chains, have very limited coverage of policies and performance beyond direct operations (e.g. supply chains and other business relationships) and often capture due diligence measures only with respect to specific topics.

Against this backdrop, a number of tools exist for policy makers and standard setters to address and respond to existing gaps and challenges identified.

First, it is important to sustain efforts towards **greater coverage of material sustainability topics,** including through corporate sustainability disclosure and reporting frameworks. Findings from Section 2.1 indicate that already standardised and codified ESG topics usually have a higher number of available metrics, than more nascent ones. Recently, governments and standard setters have taken important steps in that regard and worked towards greater standardisation for a broader set of ESG topics, beyond climate. Roll-out and implementation of the ESRS, GRI, ISSB's IFRS 1 and 2, and more recently of TNFD and the upcoming Taskforce on Inequality and Social-related Financial Disclosures (TISFD), will certainly increase the **availability and comparability data globally**, which will in turn inform ESG rating products. These different reporting frameworks provide a set of consistent metrics regarding impacts, risks, and opportunities (as well as dependencies) and are accompanied by guidance on how both businesses and investors can set targets, interpret, and use data.

However, data availability must be further **assessed beyond topical blind spots and gaps**. It is therefore important for both standard setters, but also for policy makers and ESG rating providers drawing on existing reporting standards, to ensure sufficient availability of diverse metrics serving different measurement objectives. This is important for topics that rely primarily on one combination of metrics (notably qualitative input-based metrics) and to be able to offer a more diverse overview of a business sustainability performance.

Second, to improve the consistency of measurement approaches, **clearly stating what "performance" means and the objective being pursued by a rating product is an important prerequisite**. Findings from Section 2.2 highlight that divergence across products is not only an issue of varying definitions and scopes but more fundamentally a divergence in the choice of metrics selected to measure performance. As such, comparable performance measurement approaches have been identified for a small number of topics across ESG rating products and are often associated with topics with higher shares of quantitative metrics. It is therefore important for ESG data providers to be transparent as to how they define "performance" and how they intend to measure it. This would allow ESG data users to choose the most appropriate products to fit their desired strategy knowingly.

Furthermore, **more transparency around the availability and use of metrics by providers would also be useful in informing users of where there are potential data gaps** that could be further addressed through independent analysis or bilateral engagement with companies to gather more information. Currently, very few ESG rating providers make the underlying metrics they use to measure corporate performance publicly available.

Similarly for products that claim to measure or are used to assess compliance with - or violation of - international norms and standards, notably the *OECD Guidelines,* providers need to be clear and transparent about the scope and possible limitations of such products. **The *OECD Guidelines* are a broad and complex instrument, compliance with which cannot be captured by a controversy screen or a limited set of metrics**. Where such approaches are used, they should be presented as proxy indicators and more nuanced approaches can be developed over time.

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Annex A. Key terms and definitions

Table A A.1. List of key terms and definitions

Terms	Definitions
ESG metric	A single measurement or indicator (often in the form of a datapoint) of individual E, S, or G impacts, risks and opportunities.
ESG rating	An assessment of the impact of E, S, and/or G factors on an organisation and/or the organisation's impact on the outside world (including through its ability to manage E, S and G impacts, risks or opportunities).
ESG rating provider	Any organisation compiling and/or offering ESG ratings and related services, irrespective of any explicit labelling as such. Financial institutions also develop in-house ESG ratings and analysis as well as civil society and non-profit organisations which increasingly provide publicly available benchmarks and assessments of companies' ESG performance.
ESG standards	A set of specific criteria or metrics, serving as a reference and quality benchmark for entities reporting ESG data (GRI, 2022[41]).
ESG topics	Sustainability issues (across E, S and G pillars), often characterised as impacts, risks, and opportunities, against which businesses are commonly assessed and benchmarked by ESG rating providers.
Metric characteristics	Classification reflecting the different attributes, either input, output, or factor, considered in the assessment of companies' ESG performance, as well as the nature of such attributes, including qualitative and quantitative nature of the metric.
Metric scope	Distribution, in terms of number and characteristics, of metrics across topics and across products, from which coverage can be assessed.
Responsible business conduct (RBC)	Responsible business conduct sets out an expectation that businesses – regardless of their legal status, size, ownership, or sector – avoid and address negative impacts of their operations, while contributing to sustainable development (OECD, 2023[42]).
RBC due diligence	Due diligence is the process that a business (including an investor or lender) carries out to identify, prevent, mitigate, and account for how they address actual and potential adverse impacts related to their operations, products and services, including their suppliers, investments and other business relationships) (OECD, 2018[10]).

Note: These definitions aim to clarify language used throughout the report.

Annex B. ESG topic descriptions

Table A B.1. ESG topic classification used for this paper

Pillar	Topic	Description
Environmental	Biodiversity & land use	Impacts (including management thereof) on ecosystems, including habitats and species on both land and water.
	Climate resilience & adaptation	Exposure to and resilience against climate-related physical and transition risks.
	Energy management	Energy production, procurement, transmission, distribution, storage, and consumption.
	Environmental management	Environmental aspects not included in any other topic. Includes companies' circularity and lifecycle management, Environmental Management Systems (EMS), usage and management of hazardous substances, levels of resource intensity and efficiency, and deforestation management (incl. sourcing of high deforestation risk products). Includes aspects of animal treatment.
	GHG emissions	GHG emissions accounting and participation in associated schemes such as carbon offsets and emissions trading.
	Pollution & waste	Disposal of harmful substances to the environment and management of waste, including waste treatment, handling, storage, and disposal. Includes non-GHG emissions impacting air quality and human health. Excludes product design for recyclability (*see Product stewardship*).
	Water management	Water consumption, treatment, and discharge as well as exposure to water stress. Excludes water pollution (*see Pollution & Waste*).
Social	Consumer interests	Company practices that affect the interests of consumers, including product quality and safety, consumer satisfaction and health, responsible marketing and selling practices, the avoidance of harmful consumer incentives, and responsible pricing and transparency. Excludes product accessibility and affordability *(see Diversity, equity, and inclusion).*
	Community relations & impacts	Community engagement and development (e.g. through local employment, procurement, and investments) as well as adverse community impacts and the management thereof.
	Data privacy & security	Protection of data privacy and security, including the prevention of unauthorised access to customer and company data.
	Diversity, equity & inclusion (DEI)	Non-discrimination, gender equality, minority inclusion, board and management diversity, and DEI initiatives.
	Health & safety	Occupational health and safety for employees and contractors, including physical hazards (e.g. radiation, noise, air quality, etc.), psychological hazards (e.g. stress and mental health), and ergonomic hazards.
	Human capital	Employee recruitment, engagement, retention, and development, including aspects of co-ownership, workplace flexibility, and strategic workforce planning. Excludes aspects covered by human and labour

Pillar	Topic	Description
		rights (e.g. salaries, working hours, etc.).
	Human rights	Management of risks and impact on human rights, including child and forced labour, the protection of vulnerable groups and availability of grievance mechanisms. Includes aspects of armed conflict (e.g. conflict minerals).
	Labour rights	Employee salaries and benefits, working conditions, employee representation, collective bargaining, freedom of association, employment stability. Includes aspects of companies' supply chain management.
Governance	Business ethics	Questions of ethical business conduct, including companies' involvement in controversial products and activities. Includes political influence and lobbying activities.
	Business resilience	Ability to withstand non-environmental risks, including operational, financial, regulatory, and supply chain resilience. Includes aspects of emergency preparedness, for instance through scenario planning and stress testing.
	Competition	Aspects of (anti-)competitive behaviour, i.e. actions taken by businesses that prevent or reduce competition in a market.
	Corporate governance	Management and board effectiveness, including companies' organisational structure, shareholder rights, financial and non-financial reporting, auditing, and the integration of ESG aspects into corporate decision-making.
	Corporate responsibility	Responsible company practices beyond legal requirements, including fair trade, donations, philanthropy, and generic ESG and/or sustainability certifications.
	Corruption, bribery & fraud	Corruption, bribery, fraud, and questions of ethical employee behaviour.
	Product stewardship	Product design, delivery, offering, and packaging. Includes product recyclability and lifecycle impacts.
	Taxation	Tax strategy, transparency, and compliance, including incidents of tax avoidance and evasion.

Annex C. ESG metrics underpinning RBC risks and impacts

This Annex provides a more in-depth view as to how topics (including impacts and risks) covered by the *OECD Guidelines* Chapters IV to VII (i.e. Human Rights; Employment and Industrial Relations; Environment and Combatting Bribery & Other Forms of Corruption) are being assessed by ESG rating products in scope, as well as the characteristics and patterns associated with their metrics.

Chapter IV. Human Rights

Under the ESG topic classification, the OECD Guidelines' Human Rights Chapter is covered by the topics Human Rights and Community Relations & Impacts.

Human rights metrics

Coverage of Human Rights issues varies across ESG rating products. Seven products contain human rights-related metrics, with on average 10 Human Rights metrics (ranging from 5 to 33 metrics across the seven products). Overall, human rights performance is mostly assessed vis-à-vis **policy-based metrics** throughout the seven products. Activity-based metrics are also found in five products, with two products accounting for 80% of them (i.e. denoting that this is not a prevalent way of assessing this topic). Finally, Human Rights metrics are mostly qualitative (87%), with one product that includes quantitative metrics.[17]

ESG rating products assess various aspects of companies' impacts, risks and opportunities related to Human Rights, including general human rights risk management, child and forced labour, and the recognition and protection of vulnerable groups:[18]

- **General management of human rights** is assessed by all rating products but one. It is primarily assessed through metrics capturing the existence and quality of a company's human rights policy and/or commitments as well as activities related to the identification, prevention and mitigation of human rights risks and impacts. About half of the rating products include metrics related to human rights trainings, monitoring of companies' human rights policies, or impact assessments and the existence of human rights-related controversies and incidents. Only two rating products include metrics related to companies' implementation of a grievance mechanism.
- **Forced and child labour** metrics are explicitly included in less than half of the rating products. Two products assess the existence of child and or forced labour policies, while almost all activity-based metrics relate to one product, including the existence of risk assessments to identify child and/or forced labour, remediation procedures, audits and internal controls, formal collaborations with NGOs, and the provision of awareness trainings on child and/or forced labour. Three products have controversy-based metrics on child and forced labour.
- **The recognition and protection of vulnerable groups** is explicitly included in metrics in less than half of the products assessed. It is typically assessed through the existence of a policy or code of conduct on Indigenous Peoples. Other metrics include the existence of programmes or investments to support vulnerable groups and communities, as well as controversies related to adverse impacts on such groups, specifically Indigenous Peoples.

Table A C.1. Examples of human rights metrics

Subtopic	Metric characteristics		Examples of metrics	Occurrence
General management of human rights	Policies	Qualitative	Policy on human rights	
			Policy reference to and alignment with relevant international standards, such as the UN Universal Declaration of Human Rights	
			Policy coverage of specific stakeholders and business activities (e.g. suppliers, procurement)	
			Human rights expectations for staff and suppliers	
			Company commitment to provide grievance mechanisms and/or remediation for negative human rights impacts	
			Quantitative and/or qualitative targets and objectives	
			Policy approval at most senior level of the company	
	Activities		Awareness raising or trainings on human rights	
			Human rights reviews or impact assessments	
			Reporting and communication on human rights incidents, processes, and similar indicators	
			Monitor the effectiveness of human rights polices or practices	
			Human rights due diligence procedures	
			Grievance mechanism in place	
		Quantitative	Share of operational sites subject to human rights reviews or impact assessments	
Forced and child labour	Policies	Qualitative	Policy on child and/or forced labour	
	Activities		Risk assessments to identify operations or supply chain relationships with potential child and/or forced labour	
			Remediation procedures for identified cases of child and/or forced labour	
			Audits of internal controls to prevent child and/or forced labour	
			Formal collaborations with (local) NGOs and other advocacy groups to address child and/or forced labour issues	
			Awareness trainings for employees and suppliers on child and/or forced labour	
	Outputs	Quantitative	Instances of or operations associated with high risk of child or forced labour	
Protection of vulnerable groups	Policies	Qualitative	Policy on Indigenous Peoples	
	Activities		Programmes to support vulnerable groups	
		Both	Controversy or impact indicators related to Indigenous Peoples	

Note: The above table displays an illustrative and non-comprehensive selection of common ESG metrics as well as their associated metric characteristics. The frequency of the metric across providers is colour-coded as shown below.
Highest occurrence
Lowest occurrence

Community relations & Impacts metrics

Coverage of Community Relations & Impacts issues varies significantly across products. The topic is covered by all rating products, with four metrics on average (topic coverage ranges from two to nine metrics across all products). The topic is commonly assessed using activity-based metrics—which represent approximately half of this topic's metrics across all products. Policy-based metrics come second, used by nearly half of assessed products, while output-based metrics are included in three products. 80% of

Community Relations & Impacts metrics are qualitative, present in all products, while three products include quantitative ones.

ESG rating products assess various aspects of companies' adverse impacts, risks and opportunities related to that topic, including aspects of community engagement and development:

- **Community engagement** is addressed by all rating products but one and is primarily assessed through qualitative activity-based metrics. Such metrics relate to the existence of stakeholder engagement plans and local community consultations which are covered by the vast majority of products. Some rating products have metrics on the existence of measures to protect the rights of local communities and relocation or resettlement programmes. Metrics by four rating products capture the existence of a policy on and commitment to engage stakeholders, while three products capture controversies and adverse impacts on local communities.
- **Community development** is assessed by more than half of the assessed ESG rating products. Metrics on this topic measure either community support and development in a more open-ended manner, or target local investment, employment, and procurement more specifically. For instance, three rating products assess the existence of company policies and commitments on local employment, four rating products assess more open-ended programmes to support local community development more, while three exhibit quantitative output-based metrics related to the share or extent of community investments, community lending, and local hiring.

Table A C.2. Examples of community relations & impacts metrics

Subtopic	Metric characteristics		Metrics	Occurrence
Community engagement; adverse risk and impacts	Policies	Qualitative	Stakeholder engagement policy	
	Activities		Stakeholder engagement plans and consultations	
			Company measures to protect the rights of local communities (including land rights), through impact assessment	
			Relocation Programme, Resettlement Action Plan, Livelihood Restoration Plan, or other company-wide approaches to project-related physical and economic displacement	
	Outputs	Both	Based on media screening, company involvement in activities that adversely impacted communities, including negative impacts on livelihoods and employment opportunities, land- and water-grabbing, and safety impacts	
Community development	Policies	Qualitative	Local purchasing/procurement policy, i.e. policy to support and/or give preference to goods and services produced by local suppliers	
	Activities		Company efforts to hire and/or purchase locally	
	Outputs	Quantitative	Investments in philanthropic programmes supporting local community development (e.g. investments in hospitals, schools, or other local infrastructure)	
			Total or relative monetary value invested in community development, for instance measured relative to the company's profits (e.g. does the company invest at least *x*% of its annual profits in such programmes?)	
			Total value of community lending, financing and investments that are not considered donations (e.g. provided to low-income households, minorities, small businesses, community-based facilities, etc.)	
			Extent of local hiring (e.g. were over *x*% of the workforce hired locally?)	

Note: The above table displays an illustrative and non-comprehensive selection of common ESG metrics as well as their associated metric characteristics. The frequency of the metric across providers is colour-coded as shown below.
Highest occurrence
Lowest occurrence

Chapter V. Employment and Industrial Relations

Under the ESG topic classification, the *OECD Guidelines'* Employment and Industrial Relations Chapter is covered by the topics Labour Rights and Health & Safety.

Labour rights metrics

Labour Rights is covered by all products, using on average ten metrics per product (and ranging from three metrics to 26 metrics across products). This topic is primarily assessed through the existence of policies (nearly half of metrics across seven products).[19] The existence of a labour rights-related controversy is looked into by more than half of the products whereas no business environment metrics could be identified. Moreover, approximately 80% of Labour Rights metrics are based on qualitative data, with only three products using quantitative metrics.

ESG rating products assess various aspects of companies' impacts, risks and opportunities related to Labour Rights, including more generic labour rights risks and impacts management, labour relations and workers representation, working conditions including working hours and living wages:

- **General labour rights management** is addressed by five out of eight rating products. Two products assess the existence and quality of labour rights policies and commitments, for instance in line with relevant ILO Conventions. Another three products address the existence of labour rights-related risk assessments and due diligence processes in company operations and supply chains, while two products include metrics on labour rights-related incidents and cases of non-compliance with regulation.
- **Labour relations and worker representation** are captured, in different ways, by the majority of rating products, representing one-third of Labour Rights metrics. These metrics generally address the quality of employer-employee relationships and the level of worker representation, with metrics typically referring to notions of trade and labour unions, workers' councils, and other collective bargaining organisations. Half of the rating products assess workers' rights to organise or join collective bargaining organisations as well as the existence of collective bargaining agreements, trade unions and other employee representative bodies. Another commonly used metric relates to the level of incidents and controversies related to workers' freedom of association and violations of their rights to collectively bargain.
- **Working conditions including working hours** are measured by six out of eight rating products, primarily in the form of policy-based metrics. These metrics capture working hours and workplace flexibility (i.e. flexible working hours, remote work, etc). Two rating products further assess the availability and extent of healthcare coverage and the existence of family-friendly programmes, while others for instance measure responsible layoff management and restructuring. Metrics also cover a diverse range of non-salary benefits and services, including work/life balance, additional leave beyond standard vacation days, dependent care and special leave, and employee co-ownership. Two quantitative output-based metrics also capture absolute layoffs and layoffs relative to total employees, respectively.
- **Living wages** are addressed by four rating products, primarily through output-based metrics. For instance, two rating products have metrics indicating the existence of controversies associated with living wage, while two other products measure output-based notions of reported living wage in the company's operations and supply chains. Policy and activity-based metrics also exist, assessing for instance the existence of policies or commitment to living wage or measures and methodologies to ensure a living wage.

Table A C.3. Examples of labour rights metrics

Subtopic	Metric characteristics		Metrics	Occurrence
General	Polices	Qualitative	Labour rights policy, including commitment to ILO Conventions	
	Activities		Labour-related risk assessment and due diligence (incl. in supply chains)	
			Worker voice survey and related grievance mechanism	
	Outputs	Both	Incidents and non-compliance of labour standards and action taken (including in supply chains)	
Labour relations and worker representation	Policies	Qualitative	Workers' rights to organise or join a collective bargaining organisation	
	Outputs		Existence of collective bargaining agreements	
		Both	Violations of workers' freedom of association and/or rights to collectively bargain (e.g. by interfering with union formation and participation, retaliating against workers, refusing to comply with union agreements)	
		Quantitative	Share of total workforce across sites currently covered by formally elected employee representatives	
Working conditions and working hours	Policies	Qualitative	Policy on working hours	
			Health care coverage	
			Additional leave beyond standard vacation days	
			Workplace flexibility (e.g. flexible working hours, remote work)	
			Family-friendly programmes (e.g. parental or care leave, childcare services and/or allowances)	
			Employee stock ownership and/or stock purchase plans	
	Policies / Activities	Qualitative	Layoff management and restructuring	
	Outputs	Quantitative	Layoffs and layoff ratio	
Living wages	Policies	Qualitative	Policy and commitment to living wages	
	Activities		Level of transparency related to employees' salaries and wages (e.g. remuneration policies are transparently communicated to employees)	
	Outputs		Statutory minimum wages	
		Both	Wage-related controversies	

Note: The above table displays an illustrative and non-comprehensive selection of common ESG metrics as well as their associated metric characteristics. The frequency of the metric across providers is colour-coded as shown below.

Highest occurrence

Lowest occurrence

Health & Safety metrics

The coverage of Health & Safety issues varies significantly across ESG rating products, ranging from 8 to 31 metrics between products. However, all products cover this topic to some degree (with on average 16 metrics). Except for one rating product, which considers only output-based metrics, rating products display a variety of different policy, activity, and output-based metrics. Health & Safety metrics typically refer to notions of Occupational Safety and Health (OSH), addressed either more generically or targeted specifically at a company's own workforce or its contractors and suppliers:

- **General OSH management** represents the vast majority of OSH metrics and is covered by all rating products but one. It is primarily assessed through activity-based metrics which consider company measures to prevent OSH risks and impacts (e.g. OSH management systems, health and safety certification, emergency response programme, staff training, OSH committees). Output-based metrics on general health and safety performance constitute the second most used approach to assess this topic (including fatalities and fatality rates, accidents and accident rates, lost days, and absentee rates). Similarly, the majority of rating products assess the existence of OSH-related controversies, representing the most commonly used metric used for the OSH topic.
- **Employee and contractor OSH** specifically are assessed by the majority of ESG rating products, primarily relating to the same aspects described above in a similar proportion. Notably, this includes metrics by seven of the eight rating products specifically targeted at health and safety for *contractors*. Such metrics cover the existence and quality of contractor OSH policies, contractor safety programmes, and contractor accidents and fatalities rates.

Table A C.4. Examples of health & safety metrics

Metric characteristics		Metrics	Occurrence
Policies	Qualitative	Existence of OSH policy, including on specific health aspects (e.g. radiation, unplanned plant shutdowns, etc.)	
		Scope of OSH policy (e.g. applies to contractors, at group level, supply chain, etc.)	
		Collective agreement on employees' health and safety	
Activities	Qualitative	Certification of health and safety management system (e.g. ISO 45001)	
		Mental health management and measures on stress	
		Health and safety risk assessments	
	Quantitative	Share of sites with certified health and safety management system (HSMS)	
		Number of staff trained on health and safety standards	
Outputs	Quantitative	Fatalities and fatality rate (including specifically for contractors and/or employees)	
		Number of incidents and incident rate	
		Lost-time injury rate	
		Number of unplanned plant shutdowns over *x* years	
	Both	Health and safety controversies	

Note: The above table displays an illustrative and non-comprehensive selection of common ESG metrics as well as their associated metric characteristics. The frequency of the metric across providers is colour-coded as shown below.
Highest occurrence
Lowest occurrence

Chapter VI. Environment

Under the ESG topic classification, the *OECD Guidelines'* Environment Chapter is covered by the topics Environmental Management, GHG Emissions, Pollution & Waste, Climate Resilience & Adaptation, Water Management, Biodiversity & Land Use and Energy Management.

Environmental Management metrics

While the topic is covered by all eight assessed rating products, the number of metrics used to assess this topic ranges substantially from 1 metric to 43 metrics between rating products, while using on average 20 metrics. The topic represents one of the topics most measured through activity-based metrics, used by all rating products but one and representing approximately three in four metrics.

The Environmental Management topic encompasses various aspects of companies' impacts, risks and opportunities related to that topic, some of which are notably only covered by few ESG rating products. Environmental Management subtopics encompass generic notions of environmental management (including environmental supply chain management), companies' resource use, circularity and lifecycle management, the use and management of hazardous substances, forest management and deforestation, and animal welfare.

- **General environmental management,** including in supply chains, is covered by a large body of metrics across most rating products. It is primarily assessed through activity-based metrics related to the use and implementation of Environmental Management Systems (EMS). Metrics on this topic also frequently cover environmental certifications, environmental management trainings and programmes, as well as environmental inspections and audits. The majority of rating products look at the existence and quality of environmental management policies, while half of the rating products assess the level of environmental incidents, fines, and controversies. Approximately 20% of metrics on Environmental Management relate to supply chain management, included in four rating products.
- **Resource use, circularity, and lifecycle management** is covered by more than half of the rating products. These metrics tend to measure the existence and quality of policies or targets for reducing the use of natural resources or to use resources more efficiently, including the procurement of environmentally certified resources. One rating product includes a metric on the existence of circular economy programmes while lifecycle assessments are covered by one other rating product.
- **Hazardous substance uses and management** is addressed by two rating products, one of which includes over 20 metrics. These metrics are predominantly activity-based and relate to measures taken by companies to improve the safety of chemical and hazardous substance management, touching upon various aspects such as certification, disposal, and treatment.
- **Forest management and deforestation** is assessed by more than half of the rating products. Metrics on this topic are almost exclusively activity-based and relate to the responsible sourcing of different high-deforestation risk commodities, assessing company performance on product traceability and certifications.
- **Animal welfare** is barely reflected across the eight ESG metrics products reviewed (as only two ESG rating products in scope explicitly mention animals). One metric assesses if the company has a policy to protect health and well-being of animals and whether animal well-being criteria are considered in procurement. One provider considers measures by companies to mitigate impacts on the environment or animals, while another provider covers animal testing (classified under Business Ethics).

Table A C.5. Examples of environmental management metrics

Metric characteristics		Metrics	Occurrence
Policies	Qualitative	Sustainable procurement policy	
		Existence and quality of environmental policy and EMS	
		Policy and targets for reducing the use of natural resources and/or more efficient resource use, including certified product use	
		Commitment to consulting with relevant stakeholders on environmental issues	
Activities		Environmental Management System (including its certification)	
		Environmental supply chain management activities	
		Reporting on environmental expenditures	
		Partnerships or participation in initiatives with civil society or other stakeholders to co-operate on environmental issues	
		Action to reduce use of chemicals and pollutants	
		Environmental management training	
		Project or asset environmental lifecycle assessment	
	Quantitative	Total amount of expenditures to prevent and mitigate adverse environmental impacts	
Outputs	Quantitative	Percentage of sites covered by environmental certification	
		Percentage of suppliers certified against environmental standards	
	Both	Company involvement in controversies relating to environmental issues and impacts	
	Quantitative	Fines or penalties related to the environment in the past *x* fiscal years	

Note: The above table displays an illustrative and non-comprehensive selection of common ESG metrics as well as their associated metric characteristics. The frequency of the metric across providers is colour-coded as shown below.
Highest occurrence
Lowest occurrence

GHG Emissions

This topic is covered by all products. They include, on average, 17 metrics for this topic, ranging from 1 metric to 47 metrics. With 47%, half of the metrics, GHG Emissions lists among the topics most associated with output-based metrics. GHG Emissions is also the topic most frequently assessed through quantitative metrics.

The GHG Emissions topic encompasses various aspects of companies' impacts, risks and opportunities related to their emissions, including GHG emissions policies, commitments and targets, company activities to reduce and measure GHG emissions, as well as measured GHG emissions levels and associated controversies:

- **GHG emission targets** are assessed by the majority of ESG rating products. These metrics tend to consider the existence and quality of GHG emission policies (e.g. time-bound action plans, GHG mitigation strategies, etc.) as well as associated targets (e.g. absolute, and relative targets, short and long-term quantitative targets, scope 1-3 targets, etc.). While net-zero commitments are likely to factor into the scoring of such metrics, only few metrics were identified that explicitly assess companies' commitments to carbon neutrality.
- **Activities to reduce GHG emissions** are addressed by more than half of rating products, assessing a wide array of GHG-related measures such as the adoption of scalable technologies for carbon efficiency, measures to reduce CO_2 emissions from transport, or the use of alternative sources of energy. These typically qualitative and activity-based metrics represent a "bridge"

between strategic and aspirational GHG policies and measured emission levels (see subtopic below). Two ESG rating products notably include governance-based metrics on GHG emissions, assessing for instance whether there exists a separate team and/or budget dedicated to GHG emissions reductions or if climate-related management incentives are in place.

- **Measured GHG emission levels** represents nearly half of GHG Emissions metrics, featured in nearly all assessed products. These output-based metrics predominantly consider emissions in terms of absolute emissions or emission intensity, measured for instance per unit of revenue or per Megawatt hour of energy (MWh). Metrics also assess progress towards companies' GHG reduction targets, carbon intensity trends, or carbon emissions performance relative to peers. These metrics do not focus on emissions overall, but specify specific activities (scope 1, 2 or 3), substances (e.g. ozone-depleting substances), and emission sources (e.g. car fleet). Scope 3 emissions constitute, by far, the largest aspect of such metrics, explicitly referred to by three rating products.
- **GHG emissions monitoring and reporting,** including for specific scopes, is covered by three rating products. These activity-based metrics assess either the quality or scope of GHG emissions inventories and accounting (e.g. does the company use industry-average data to estimate Scope 3 emissions?) or the quality and level of GHG reporting (e.g. are GHG emissions independently verified? Are GHG inventories updated regularly? Does the company in question respond to CDP's Climate Change Questionnaire?).
- **GHG emissions related controversies**[20] are covered by six ESG rating products.

Table A C.6. Examples of GHG emissions metrics

Metric characteristics		Metrics	Occurrence
Policies	Qualitative	Existence of GHG emission targets, including from specific sources	
		Existence or strength of emissions policy, time-bound GHG mitigation strategy, or action plan to transform into a low-carbon business model	
		Aggressiveness of the company's reduction target relative to its current performance	
		Management compensation linked to progress towards GHG reduction targets	
	Quantitative	Absolute scope 1-3 GHG reduction targets	
		Relative GHG reduction targets	
		GHG intensity reduction target	
Activities	Qualitative	Measures to reduce GHG emissions, including from specific sources	
		Scope of GHG emissions monitoring (e.g. tracking of upstream and/or downstream Scope 1-3 emissions)	
		Independent verification of GHG or energy	
		Measures to offset GHG emissions (e.g. purchasing verified carbon credits)	
		Company responds to CDP's Climate Change Questionnaire	
		Adoption of scalable technologies for carbon efficiency	
		Management team dedicated to GHG emissions reductions	
		Dedicated budget for GHG management	
		Consideration of GHG emissions intensity or GHG reduction efforts in company purchases of products and services	
		GHG inventory updated at least once per year	
Outputs	Qualitative	Carbon intensity trend	
		Demonstrated record of achieving carbon reduction targets	
	Quantitative	Total gross Scope 1-3 GHG emissions in tons of CO_2e, including from specific sources (e.g.	

Metric characteristics		Metrics	Occurrence
		Scope 1-3, transportation, business travel, etc.)	
		Emission intensity (e.g. per unit of revenue, per MWh, etc.)	
		Progress towards GHG reduction targets, including from specific sources	
	Both	Emissions-related controversies	

Note: The above table displays an illustrative and non-comprehensive selection of common ESG metrics as well as their associated metric characteristics. The frequency of the metric across providers is colour-coded as shown below.
Highest occurrence
Lowest occurrence

Energy Management

One provider does not cover Energy Management, while other rating products use on average 12 metrics, ranging from 1 to 34. More than half of Energy Management metrics are output-based, constituting the topic most associated with this metric characteristic. The topic is also highly associated with quantitative data, albeit slightly less so compared to GHG Emissions.

This topic goes beyond general notions of sound energy management (e.g. implementation and certification of an energy management system, regular energy audits, etc.) and covers aspects such as energy consumption and efficiency, energy procurement and—for some companies—production, as well as energy storage and transmission:

- **Energy consumption and efficiency** is covered by the large majority of ESG rating products and spans across input and output-based metrics. Approximately half of metrics capture energy policies and company activities to reduce energy consumption or improve energy efficiency (e.g. through trainings or equipment upgrades) while the other half captures energy performance through output-based metrics (i.e. energy use and intensity, renewable energy share, asset consumption, energy breakdown per usage type, etc.).
- **Energy procurement** (and production, where applicable) is covered by nearly half of the rating products, albeit two products only have a single metric. These metrics are predominantly output-based and quantitative. For instance, they frequently assess the share of energy procured (or produced) from specific energy sources, including primarily renewable energy. One metric captures controversies related to energy generation.
- **Energy transmission** is addressed by two rating products, assessing energy and electricity transmission and distribution, including transmission and distribution losses as a percentage of energy entering the system, grid loss percentages, and controversies relating to electricity transmission and distribution.

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Table A C.7. Examples of energy management metrics

Subtopic	Metric characteristics		Metrics	Occurrence
General	Activities	Qualitative	Implementation of an energy management system (EMS)	
			Certification of such EMS to an international standard	
			Regular energy audits	
Energy consumption and efficiency	Policies	Qualitative	Existence and quality of energy consumption policy	
			Targets and/or time-bound action plan to reduce energy consumption	
	Activities		Actions or work practices to reduce company's energy consumption (including training, change in equipment, and other initiatives to promote energy efficiency)	
	Outputs	Quantitative	Total energy use, including from specific sources such as lighting systems or heating	
			Energy intensity of the company's operations (e.g. per unit of revenue) and value chains (upstream and downstream)	
			Reduction of energy consumption per specific sources	
			Renewable energy consumption	
Energy procurement (and production)	Policies	Qualitative	Company strategy to promote the generation of renewable energy, including planned investments in renewable energy sources	
	Activities		Activities to promote use of alternative fuels	
	Outputs	Quantitative	Share of energy procured or produced from specific energy sources (e.g. renewable energy, nuclear energy, biomass, etc.)	
Energy transmission	Outputs	Quantitative	Transmission and distribution losses relative to energy entering the system	

Note: The above table displays an illustrative and non-comprehensive selection of common ESG metrics as well as their associated metric characteristics. The frequency of the metric across providers is colour-coded as shown below.
Highest occurrence
Lowest occurrence

Water Management

Except for one rating product, Water Management is covered by all ESG rating products relatively consistently. On average, ESG rating products include nine metrics on this topic, ranging from 5 to 13 metrics between various products. This topic has a comparable metric profile to Energy Management, covering various water-related impacts, risks and opportunities related to water consumption and efficiency, treatment, recycling, and controversies, with the additional inclusion of water stress:

- **Water consumption and efficiency** is covered by six rating products. Three of them consider policies, commitments, and targets aimed at water use efficiency while four include activity-based assessments of company measures to reduce their water consumption and enhance water efficiency. Quantitative and output-based assessments of water usage and intensity are the most common category of metrics used for this subtopic, included by the majority of ESG rating products.
- **Water treatment and recycling** is addressed by three ESG rating products, considering a mix of measures to recycle wastewater and quantitative output-based metrics on absolute and relative measurements of water recycling and treatment.
- **Exposure to and management of water stress** is covered by five rating products. These metrics typically reflect a mix of activity-based indicators related to water stress testing and risk assessments as well as company exposure to water stress (e.g. through business activities in

water-stressed geographies). As such, Water Management constitutes one of the few topics with a significant share of business environment metrics.

- **Water-related controversies** are measured by five rating products.

Table A C.8. Examples of water management metrics

Subtopic	Metric characteristics		Metrics	Occurrence
Consumption and efficiency	Policies	Qualitative	Policy and strategy around water-use reduction and efficiency	
			Implementation of KPIs and targets on water consumption	
	Activities		Implementation of water-efficient production processes or other actions taken to reduce water use or increase water use efficiency (including through technologies, infrastructure investment, etc.)	
			Accounting and reporting on total water consumption, including freshwater use inventories	
	Outputs	Quantitative	Water use and withdrawal (e.g. water use per unit of revenue, relative to peers, etc.)	
Treatment and recycling	Activities	Qualitative	Wastewater treatment units and other measures to reduce pollutants discharged into water	
	Outputs	Quantitative	Amount of water recycled or reused	
Water stress	Activities	Qualitative	Water stress and risk management (i.e. identification, assessment, and management of water-related risks and impacts, particularly in water-stressed regions)	
	Outputs		Water-related stakeholder conflict	
			Risk of or exposure to water stress in geographies where businesses consume or depend on water for their operations	
Other	Outputs	Both	Water-related litigation and regulatory notices and mandates	
			Controversies relating to water consumption; discharge or restrictions	

Note: The above table displays an illustrative and non-comprehensive selection of common ESG metrics as well as their associated metric characteristics. The frequency of the metric across providers is colour-coded as shown below.
Highest occurrence
Lowest occurrence

Climate Resilience & Adaptation

Climate Resilience & Adaptation focuses predominantly on climate risks and impacts on the company (as opposed to the company's impacts on climate). Concurrently, the topic represents one of the least frequently covered environmental topics, with 45 metrics across six ESG rating products. These products have six metrics on average on Climate Resilience & Adaptation, with coverage ranging anywhere between 2 to 19 metrics per product.

This topic consists mostly of metrics on companies' policies and activities put in place to mitigate and adapt to climate (financial) risks (representing activity-based metrics), as well as metrics on companies' exposure to climate physical and transition risks (representing business environment metrics):

- **Climate change adaptation** is covered by six rating products. These metrics assess companies' policies and activities targeted at enhancing business resilience with respect to environmental and climate risks. Common examples include the existence and quality of companies' adaptation strategies, internal carbon pricing processes, and the total amount of investments undertaken to harden or replace assets exposed to climate risks.

- **Exposure to climate risks** is covered by three ESG rating products, albeit one provider accounts for more than two-thirds of metrics. These metrics assess companies' risks—and, in some cases, opportunities—with respect to climate change. This includes physical (e.g. floods, hurricanes, sea level rise, wildfires, etc.) and transition risks (e.g. exposure to stranded assets, regulatory change, technology change, reliance on fossil fuels, etc.) associated with climate change.

Table A C.9. Examples of climate resilience & adaptation metrics

Subtopic	Metric characteristics		Metrics	Occurrence
Climate change adaptation	Policies	Qualitative	Strategy on adaptation to physical impacts	
	Activities		Internal carbon pricing	
			Investment undertaken or required to harden assets or to build replacement assets elsewhere, technological deployment	
Exposure to climate risks	Business environment	Qualitative	Exposure to physical risks including heat stress, water stress, floods, hurricanes, sea level rise and wildfires	
			Exposure to transition risks including business reliance (incl. through supply chain) on carbon-intensive/GHG-intensive products, assets, or operations	
			Current and future effects of climate change on company's business model, including the impact of long-term trends on product demand, productivity and/or operating costs	
			Dependency on goods and services derived from nature (agriculture, fibre, fish, etc.)	
			Trends in demand for carbon-intensive products; availability and pricing of lower-carbon substitutes	
			Presence of core physical assets, including development/construction, in areas subject to weather- and climate-related hazards	

Note: The above table displays an illustrative and non-comprehensive selection of common ESG metrics as well as their associated metric characteristics. The frequency of the metric across providers is colour-coded as shown below.
Highest occurrence
Lowest occurrence

Pollution & Waste

The ESG topic Pollution & Waste is covered by all eight ESG rating products, representing one of the most widely covered topics of this study. Rating products have on average 18 metrics on Pollution & Waste, ranging from 3 to 43 metrics across rating products. The topic is predominantly assessed through output-based metrics (50%). Such metrics measure in similar proportions companies' performance on waste and pollution, respectively:

- **Pollution management** is covered by all assessed rating products, two-thirds of which are output-based metrics on air and water pollutant emissions (e.g. total or compound specific non-GHG emissions), soil pollution, and pollution-related controversies. The remaining third relates to measures on pollution prevention and mitigation, including policies and Key Performance Indicators (KPIs) on local pollution and various activities such as regular soil testing training and certifications, investments in pollution mitigation technologies, and other measures to monitor air, soil, and water contamination.
- **Waste management** is similarly covered by all rating products. Policies and targets on waste management and reduction (e.g. policies and KPIs on end-of-life impacts from products) are assessed by more than half of rating products. Metrics that assess companies' waste management performance through activity-based and output-based metrics are also widely available across

products (together representing nearly nine in ten metrics of this subtopic). Examples of such metrics include the implementation of recycling processes, wastewater assessment and treatment, and the management of hazardous waste. Output-based metrics are mostly quantitative metrics, for instance relating to waste intensities, recycling ratios, or total waste in tons, while the remaining third relates to waste-related controversies.

Table A C.10. Examples of pollution & waste metrics

Subtopic	Metric characteristics		Metrics	Occurrence
Pollution	Policies	Qualitative	Existence and scope of policy on local pollution	
			Targets and KPIs on local pollution	
	Activities		Regular soil testing to monitor soil contamination	
			Monitoring and mitigation of impacts on freshwater resources	
	Outputs	Qualitative	Progress on targets for pollution	
			Demonstrated track record of achieving its toxic emissions targets	
		Quantitative	Total or compound-specific non-GHG emissions (e.g. NOx, SOx, VOCs)	
			Incidents and related remediation costs related to non-GHG and land-based pollution issues (e.g. leaks, spills, and other accidents)	
			Intensity of overall and compound-specific non-GHG emissions (e.g. per unit of revenue)	
		Both	Pollution-related controversies	
	Business environment	Qualitative	Risk of pollution-related regulatory violations	
Waste	Policies	Qualitative	Existence and scope of policy on waste, including targets	
			Policy on environmental end-of-life impacts from products	
			KPIs on product end-of-life	
	Activities		Implementation of recycling processes	
			Wastewater assessment and treatment	
			Measures to treat and dispose hazardous waste	
	Outcomes	Quantitative	Total weight or volume of waste, including for specific types of waste (hazardous waste, radioactive waste, etc.)	
			Ratio of recycled to non-recycled waste	
			Number of recovered products for recycling	
		Both	Waste and wastewater controversies	

Note: The above table displays an illustrative and non-comprehensive selection of common ESG metrics as well as their associated metric characteristics. The frequency of the metric across providers is colour-coded as shown below.
Highest occurrence
Lowest occurrence

Biodiversity & Land Use

Biodiversity & Land Use is covered by all ESG rating products, being however the E-topic with the lowest number of metrics. ESG rating products have on average five metrics on this topic, coverage ranging from two metrics to nine metrics across products. 82% of metrics are input-based (policies or measures used by companies to address nature-related risks and impacts). With an 18% share, the topic is among the least associated with output-based metrics. It is also among the most heavily assessed through qualitative data.[21] Biodiversity & Land Use covers various aspects of a company's impacts, risks and opportunities related to that topic, featuring predominantly policies and activities to address adverse impacts on nature:

- **Policy-based metrics** are covered by six rating products and usually assess company policies and targets on biodiversity. Other examples of policy-based metrics include assessments of company commitments and targets related to biodiversity and land use, such as assessments of no-deforestation commitments or policy alignment with international biodiversity standards.

- **Activity-based metrics** are assessed by seven rating products, typically addressing company measures to identify, prevent and mitigate impacts on nature, including ecosystems and endangered species. Some products assess biodiversity-related certifications and audits. Four products assess the extent of biodiversity and land use-related disclosure, including assessments of a company's reporting and overall transparency on ecosystem disturbance and rehabilitation and participation in biodiversity certification schemes.
- **Output-based metrics** are included in five rating products, aiming to assess adverse impacts on nature, for instance through the assessment of biodiversity-related controversies, lawsuits, and reported impacts. Some quantitative metrics were identified, assessing for instance operating costs incurred through the prevention of damage to natural resources.

Table A C.11. Examples of biodiversity & land use metrics

Metric characteristics		Metrics	Occurrence
Policies	Qualitative	Policy on biodiversity	
		Targets on biodiversity	
		Commitment to maintain, enhance, or conserve biodiversity or ecosystems across the company's supply chain	
		No-deforestation commitment	
		Policy with reference to international standards (e.g. Convention on Biodiversity, SDGs explicitly related to biodiversity, such as SDG 14 (life below water) or SDG 15 (life on land) etc.)	
Activities		A priori and/or ex post assessments of biodiversity risks and impacts	
		Measures to mitigate the company's impact on the local environment, including protected areas, wildlife, and endangered species	
		Active monitoring and evaluating of adverse biodiversity impacts	
		Employee awareness trainings on biodiversity-related issues	
Outputs		Ecosystem impacts	
		Reputation for stewardship and compliance with biodiversity-related regulations	
		Biodiversity-related controversies	
	Quantitative	Operating costs to prevent damage to natural resources	
		Terrestrial acreage disturbed; percentage of impacted area restored	

Note: The above table displays an illustrative and non-comprehensive selection of common ESG metrics as well as their associated metric characteristics. The frequency of the metric across providers is colour-coded as shown below.
Highest occurrence
Lowest occurrence

Chapter VII. Combating Bribery and Other Forms of Corruption

Under the ESG topic classification, Chapter VII of the *OECD Guidelines* is covered by the topic Corruption, Bribery & Fraud. One ESG rating product in scope does not include metrics on this topic. The other seven products display on average six metrics on Corruption, Bribery & Fraud, ranging from 2 to 15 metrics across products. Three rating products account for two-thirds of all Corruption, Bribery & Fraud topical metrics. While some metrics consider individual corruption-related aspects such as bribery, fraud, money laundering, or insider trading, individually, over 90% of metrics consider these interrelated issues jointly. Metrics of this topic are also more qualitative data, representing nearly 90% of metrics. Corruption, Bribery & Fraud display a balanced mix of policy-based, activity-based, and output-based metrics, although this can vary at the product level:

- **Policy-based metrics** are included by six rating products, addressing for instance the existence and quality of company policies on Bribery and Corruption.
- **Activity-based metrics** are used by five rating products, assessing aspects of due diligence, prevention programmes, certification schemes, disciplinary sanctions, or audits on anti-corruption.
- **Output-based metrics** are used by seven rating products, including criteria relating to incidents and reported cases of corruption as well as the level of company controversies.
- **Business environment metrics** are considered by a single metric by one provider, considering geography-based corruption risk in the company's operating environment.

Table A C.12. Examples of corruption, bribery and fraud metrics

Metric characteristics		Metrics	Occurrence
Policies	Qualitative	Formal policy on corruption, bribery and/or related concepts (e.g. fraud, conflicts of interests, money laundering, etc.)	
		Scope of corruption and bribery policy (e.g. are all suppliers required to have anti-corruption policies and programmes to verify compliance?)	
Activities	Qualitative	Anti-corruption due diligence programmes on third parties	
		Level of managerial responsibility on bribery and corruption (e.g. what is the highest authority responsible for managing corruption and bribery issues (e.g. executive committee, special task force, CSR/sustainability team, etc.?)	
		Regular risk assessments related to corruption and bribery	
		Internal monitoring systems to detect corruption and bribery subject to audits	
		Specific approval procedures for sensitive transactions (e.g. gifts, travel)	
		Regular trainings and/or awareness programmes on bribery and corruption	
	Quantitative	Percentage of suppliers subject to due diligence processes, including monitoring (e.g. none, selected critical suppliers, all suppliers)	
		Percentage of operational sites with certified anti-corruption management systems	
Outputs	Qualitative	Level of corruption-related fines, penalties, and settlements	
	Quantitative	Number of confirmed corruption incidents in the last *x* fiscal years	
		Level of corruption-related fines, penalties, and settlements	
		Number of staff dismissals due to non-compliance with anti-corruption policy	
	Both	Corporate controversies relating to corruption, bribery and fraud, including insider dealings, extortion, and money laundering	

Note: The above table displays an illustrative and non-comprehensive selection of common ESG metrics as well as their associated metric characteristics. The frequency of the metric across providers is colour-coded as shown below.
Highest occurrence
Lowest occurrence

Notes

[1] The study focuses on company-based ESG rating products and not ESG indices and related financial products.

[2] Incomplete and inconsistent ESG data has been identified as the main barrier to greater ESG adoption by 420 institutional investors surveyed in 2023 (BNP Paribas, 2023[44]).

[3] In 2023, DWS agreed to a USD 19 million fine to settle the charges, marking the largest-ever greenwashing penalty imposed on an asset manager by the United States Securities and Exchange Commission (Storbeck, 2023[46]). More recently, Australia's federal court has fined Vanguard Investments Australia Ltd. USD 8.9 million for making misleading claims about its “ethical fund” (Bainbridge, 2024[43]).

[4] At the time of writing, over 20 jurisdictions have taken steps to introduce ISSB into their own policy and regulatory frameworks (Feijao, 2024[47]).

[5] TCFD is currently being integrated into the ISSB framework (IFRS, 2023[49]).

[6] Based on a survey of 1 400 companies representing the largest market capitalisation across 22 jurisdictions.

[7] 96% of all metrics could be mapped to the topic classification, 94% could be mapped to either policy, activity, output and business environment metrics, and 95% could be mapped to either quantitative or qualitative data. The remaining percentages relate to metrics that did not match the scope of the classification framework or that lacked sufficient information to be reliably attributed.

[8] See Annex C for an overview of Biodiversity & Land Use metrics.

[9] See Annex C for an overview of Community Relations & Impacts metrics.

[10] Metrics related to Taxation include policies and strategies on tax transparency (a total of two metrics across two rating products), measures related to tax transparency and verification (e.g., tax-related disclosure and statements) (a total of eight metrics across eight rating products, tax-related controversies (a total of three metrics across two rating products) and tax performance (a total of three metrics across two rating products).

[11] Metrics related to Competition include policies on anti-competitive practices (three metrics across three rating products), anti-competition controversies (five metrics across four rating products), and measures in place to address anti-competitive behaviour (e.g., awareness training, whistleblower procedure, audits, etc.) (four metrics across one rating product).

[12] Outputs-based metrics group together both activities' outputs and impacts on people and planet as more precise delineation may be challenging for certain topics (e.g., are wages, board diversity, GHG emissions, etc. the results of companies' policies and measures or indicators of their impacts on people and planet?).

[13] It is worth noting that one ESG rating product accounts for 40% of all quantitative output metrics.

[14] The first most cited Principal Adverse Impact indicator relates to exposure to controversial weapons.

[15] See *OECD Guidelines,* Chapter VI, para. 1e) and 2.

[16] This does not include the 10% of controversy-related metrics, which can encompass both direct operations as well as supply chain risks and impacts.

[17] E.g. percentage of operational sites subject to a human rights review; percentage of the workforce that received human rights training; percentage of suppliers certified ISO 45001 (or against other human rights and labour standards).

[18] In addition to the abovementioned topics, one product focused on conflict-affected and high-risk areas (i.e., assessing the existence of policies and programmes related to operations in conflict-affected areas, as well as metrics related to responsible sourcing of conflict minerals).

[19] While activity-based metrics account for circa one-third of assessed metrics for this topic, two rating products account for three-quarters of these metrics.

[20] GHG emissions-related controversies usually include media or civil society reports involving the company's contribution to climate change, including historical emissions, coal-fired power plants, gas flaring, carbon credits, etc.

[21] TNFD's Tools Catalogue lists 102 different nature-related data tools for business and investors, and over 40 different biodiversity measurement tools or frameworks have been developed for use by business.