WORKING PAPER

Investor Data Needs Regarding ESG

Delphine Dirat

Executive Summary

As of March 2024, more than 5,300 investors representing USD 121 trillion in assets have signed the Principles for Responsible Investment (PRI), reflecting a growing awareness of the importance of environmental, social, and governance (ESG) criteria in transforming economies toward sustainable models. As a tool for capital allocation, ESG data supports the financing of global climate objectives.

This study explores the ESG data needs of asset managers, banks, pension funds, and insurance companies (hereinafter referred to as "investors"), with the aim of understanding how such data contributes to informed investment decisions and accelerates capital flows toward sustainable and responsible projects. It also examines the influence of regulatory constraints and client expectations on investors' ESG data requirements.

The findings reveal that investors' expectations regarding ESG data are increasingly converging with those related to financial data, particularly in terms of accessibility, comparability, and standardization. A growing number of investors seek to monitor ESG indicators in real time, especially for alternative ESG investments. Moreover, investors focused on biodiversity and nature demand granular, location-specific environmental data. However, unlike financial data, investors acknowledge that, in the short term, the lack of thorough verification of ESG data remains a major challenge. At a minimum, they expect greenhouse gas emissions reduction targets to be externally validated.

Introduction

In the face of the climate emergency and evolving stakeholder expectations, the integration of ESG (Environmental, Social, Governance) criteria into investment decisions and shareholder engagement strategies is increasingly recognized as a driver of economic transformation toward more sustainable and equitable models. As of March 2024, over 5,300 investors have signed the United Nations Principles for Responsible Investment (PRI), representing USD 121 trillion in assets under management. This approach encourages investors to move beyond short-term profit seeking and adopt a long-term perspective that serves future generations.

Driven by growing interest in sustainable investments, the demand for ESG-related information and data has risen sharply over the past two decades (Dhaliwal et al., 2011; Cohen et al., 2015; Amel-Zadeh & Serafeim, 2018). A study by KPMG shows that ESG reporting has become a standard practice among nearly all of the world's 250 largest companies, as well as a large majority of the top 100 companies in each country, territory, or jurisdiction.

Within this context, our study aims to identify and analyze investors' ESG data needs. It draws on a review of academic literature and 16 interviews conducted with institutional investors, regulators, and ESG data providers. It also incorporates the three main ESG data challenges identified by the PRI: investors' internal constraints (resources, strategy, etc.), the regulatory obligations they must meet, and the specific requirements of their clients.

The findings indicate that investors' expectations regarding ESG data are increasingly aligning with those associated with financial data. Responsible investors require data that is easily accessible, comparable, and standardized. They seek more frequent monitoring of the ESG characteristics of their investments, along with greater access to up-to-date, real-time data. Regarding nature-related data, there is strong demand to structure existing databases and to obtain granular, location-specific information, which is essential for accurately assessing environmental impacts.

Unlike financial data, investors acknowledge that, in the short term, it is unrealistic to expect a comprehensive third-party audit of ESG data. However, they do expect externally validated greenhouse gas (GHG) emissions reduction targets, demonstrating alignment with science-based climate trajectories and consistency with the Paris Agreement.

1. The Availability and Accessibility of ESG Data: A Prerequisite

The availability and accessibility of ESG data is an essential prerequisite for enabling investors to fully integrate ESG criteria into their strategies. Investors primarily access ESG data in three ways.
Investors can collect data from companies' annual reports and sustainability reports.
If investors require more information, they may also submit specific requests to companies via questionnaires or by contacting them directly.
Finally, investors who are unable to collect this data themselves can purchase it from providers such as MSCI, Morningstar Sustainalytics, LSEG, Bloomberg, S&P, or Clarity AI, which specialize in collecting and selling ESG data and solutions. According to CDP, 94% of investors use ESG ratings and related data products at least once a month.

Corporate Data Disclosure: A Crucial Issue for Investors

The disclosure of data by companies is a critical issue for investors.
Despite attempts to standardize corporate reporting, even basic environmental data remains largely missing, incomplete, or unavailable. According to the London Stock Exchange Group, 42% of companies in the FTSE All-World Index, representing the 4,000 largest publicly listed companies worldwide, still do not disclose their Scope 1 and 2 greenhouse gas emissions. Reporting on Scope 3 emissions is even more limited. These emissions, covering a company's entire value chain, require collecting data from hundreds or even thousands of entities. However, these companies exhibit widely varying levels of reporting maturity.

Several academic studies have shown that the volume of published data varies according to company size—larger companies with more resources typically disclose more ESG information—as well as by sector and applicable regulations. For example, companies in the alcohol, tobacco, and firearms sectors disclose more information about their social and community actions than companies in non-controversial sectors (Byrd et al., 2016). Similarly, companies in "polluting" sectors tend to publish more information on environmental issues (Gamerschlag et al., 2011). Additionally, during our interviews, investors highlighted that ESG data is generally limited or even absent for companies located in developing countries and for small and medium-sized enterprises (SMEs).

This heterogeneity and lack of standardization make it difficult to assess and compare companies' ESG performance, which mechanically hinders the growth of investments in sustainable activities (European Commission, 2019; CFA Institute, 2020).

However, two major factors are expected to improve the availability and standardization of ESG data in the coming years: new regulations and technological advances.

On one hand, regulations will have a structuring impact on reporting practices and ESG data harmonization. In Europe, the Corporate Sustainability Reporting Directive (CSRD) will require nearly 50,000 European and non-European companies with revenues exceeding €150 million in Europe to publish their

ESG risks, opportunities, and impacts in accordance with European reporting standards by 2029. In the United States, the Securities and Exchange Commission (SEC) climate disclosure rules and California's Climate Corporate Data Accountability Act will require U.S. companies to disclose detailed climate information starting in 2026. Finally, in China, Chinese stock exchanges will require over 5,000 listed companies to publish ESG information from 2026.

On the other hand, the use of new technologies such as machine learning and artificial intelligence will enable the processing of large volumes of data quickly and the exploitation of unstructured sources such as news articles or social media, making ESG data more accessible and relevant to investors. Satellite technologies, which offer the ability to monitor environmental indicators in real time such as deforestation, greenhouse gas emissions, and natural resource use, can also assist companies in their ESG reporting. For example, Nestlé has used satellite imagery to monitor its supply chain and ensure its suppliers comply with sustainability standards: Nestlé was able to detect and address illegal practices such as deforestation and land grabbing.

The Cost of ESG Data

Another challenge raised by investors during our interviews is the cost of ESG data. A study conducted by ERM Research found that institutional investors spend an average of $487,000 per year on ESG ratings and data. Investors report that these costs have been steadily increasing over the past decade, partly due to the oligopolistic nature of this market (Efama, 2024) and the lack of transparency in pricing policies applied by providers.

2. Quality and Comparability: Two Essential Qualities for Integrating Data into Investment Decisions

For data to be integrated into the investment process, it must not only be accessible but also of sufficient quality, reliable, and comparable (IFRS, 2001). According to the European Commission, ESG information is comparable "when it can be compared with information provided by the company over previous periods as well as information provided by other companies, particularly those engaged in similar activities or operating in the same sector."

However, ESG data published by companies today lacks structure, and reporting practices vary widely from one company to another, making comparisons difficult. Differences in calculation methodologies for the same indicator, as well as variations in the scope of calculation, result in ESG data that is inconsistent and hard to use. For example, social indicators (related to human capital, human rights, etc.) are defined differently depending on the country, sector, and company, which renders comparability almost nonexistent.

Estimated ESG data provided by data vendors and ESG ratings do not necessarily guarantee better comparability. Their quality is uneven and varies significantly from one data provider to another (Berg et al., 2019). Investors, companies, and regulators highlight the lack of transparency in the methodologies used to produce these ESG data and ratings (IOSCO, 2021). For this reason, the European Union, Hong Kong, Singapore, the United Kingdom, India, and Japan have recently adopted codes of conduct and regulations aimed primarily at improving the transparency, reliability, and integrity of ESG data. These measures seek to address concerns related to methodological divergences, lack of standardization, and opacity in the collection and analysis of data, particularly those estimated by ESG data and rating providers.

3. Quantitative Data Facilitate Comparability Between Companies

Companies publish both qualitative and quantitative ESG information, which is useful for investors as it helps them better understand the companies' ESG approaches. However, corporate ESG reports still contain a large amount of narrative data, often presented in a heterogeneous manner, making the information difficult to compare across companies (AMF, 2019).

The length of ESG reports can also increase the risk of greenwashing by diluting essential information amidst a large volume of less relevant data. According to a PwC study, 94% of investors believed that corporate ESG reports contained unsubstantiated claims in 2023.

To improve the comparability of information and reduce the risk of greenwashing, European regulations have required companies and investors to publish increasing amounts of quantitative ESG data. For example, investors must disclose the carbon footprint of their portfolios, the alignment of their portfolios with the European taxonomy, and their exposure to sectors that significantly contribute to climate change.

To calculate these indicators, European regulators have also restricted the use of estimated data, requiring investors to primarily use data published by the companies in which they invest (ESMA, 2023). This requirement has consequently increased investors' demand for quantitative indicators directly provided by companies.

4. The Challenge of Verifying ESG Data

The verifiability of ESG information by an independent third party gives users assurance that the data is complete, neutral, and accurate.

Today, it is primarily large companies that voluntarily engage independent verification. According to KPMG, 69% of the world's 250 largest companies and 54% of the top 100 companies in each country underwent an independent audit in 2023. Unsurprisingly, sustainability assurance is most widespread among European companies, with 59% obtaining some level of assurance. However, this verification covers only a very limited amount of information, such as greenhouse gas emissions.

Several factors complicate the auditing of ESG data, including insufficient reliable data and standardized metrics, the lack of regulatory frameworks for data collection, the predominance of narrative and forward-looking information compared to financial data, and the immaturity of audit practices in this field (IOSCO, 2023).

Investors are increasingly expecting the implementation of external verification of ESG data (IOSCO, 2023) to identify and reduce misleading behaviors and the risk of greenwashing (Clarke, 2021; Kaplan et al., 2021).

While investors consider reasonable assurance as the long-term goal, they acknowledge that limited assurance is more realistic in the short term (IOSCO, 2023). Limited assurance involves a more superficial audit than reasonable assurance, on a narrower scope with fewer indicators. This is the approach adopted by Europe under the CSRD, which requires limited assurance to be implemented by October 1, 2026. Reasonable assurance may be required starting from October 2028. The proportion of companies receiving an external audit of their ESG data is therefore expected to increase in Europe in the coming years.

Moreover, the validation of greenhouse gas emission reduction targets by the Science-Based Targets Initiative (SBTi) — which is neither comparable to nor a substitute for an audit of a company's ESG practices — has become a common practice valued by investors. In 2023, 4,205 companies worldwide received SBTi validation, representing a 102% increase compared to the previous year.

Pending mandatory audits of companies' own ESG data, satellite technologies provide an alternative means to verify companies' self-reported information. For example, BNP Paribas uses data from the company Kayrros to measure methane emissions related to oil and gas operations in order to better identify environmental risks associated with their clients' activities.

5. Real-Time Updating of Data

The ESG data published by companies is mainly "historical." It is released once a year in their annual report or sustainability report and relates to the previous financial year. This practice can lead to unintended consequences when

calculating companies' ESG performance. For example, companies like Orpéa and Volkswagen had high ESG ratings reflecting strong ESG performance until scandals emerged regarding the mistreatment of elderly residents in Orpéa facilities and emissions cheating by Volkswagen.

Since investors are sensitive to negative ESG information (Krueger, 2015), they need to regularly monitor the evolution of the ESG characteristics of their investments. This is especially true for so-called alternative investments, such as unlisted companies, agriculture, or real estate, which are inherently more opaque and volatile.

For this reason, data providers are developing tools known as ESG controversies, which integrate in real-time the negative externalities of companies on society and the environment. ESG ratings incorporate these controversy scores to make their assessments more dynamic and responsive to current events affecting organizations.

Localized and Granular Data to Measure Environmental and Planetary Impacts

Investments in solutions aimed at protecting and restoring Nature are expected to triple each year until 2030 to meet the climate goals set by the United Nations (WEF, 2023), which will create a strong demand for data. To invest in natural capital assets, our interviews revealed that investors need a wide range of granular and precise indicators.

Today, risks and opportunities related to Nature are often analyzed by investors using a combination of internal methodologies to aggregate data from companies and third-party providers.

According to KPMG, only half of the 250 largest global companies disclose information on biodiversity. This number drops significantly for smaller companies, and disparities remain significant across different regions of the world.

Although many biodiversity databases exist and are generally available as open data (Natural History Museum, ENCORE, GBIF, UNEP-WCMC, NASA, WWF, World Resources Institute, etc.), they remain poorly standardized and highly fragmented, making their use difficult. They are managed by a variety of actors, ranging from NGOs to private providers, and generally address only one dimension of Nature-related issues. Our interviews indicate that few investors and data providers have made the necessary infrastructure and resource investments to manage all Nature-related data.

Furthermore, localized information is necessary to measure the impacts of investments on the planet. The LEAP approach (see Box 1 below) adopted by the TNFD highlights this need and calls for precise localization of assets, operations, and supply chains that are vulnerable to Nature-related risks.

Box 1: The TNFD's LEAP Approach

LEAP is an acronym representing four key steps in the process of assessing nature-related risks and opportunities:

L – Locate: Identify the company's dependencies and impacts on ecosystems and environmental services within its value chains and operations. This includes the geographical location of assets, operations, and supply chains that are particularly vulnerable to nature-related risks.

E – Evaluate: Assess exposure to natural risks and associated opportunities. This includes analyzing physical risks (such as natural disasters) and transition risks (such as regulatory changes or consumer expectations around sustainability). It also involves evaluating opportunities linked to adopting sustainable practices, such as products or services addressing nature preservation challenges.

A – Assess: Analyze the magnitude of risks and opportunities in financial terms. This step involves evaluating the short-, medium-, and long-term financial impacts these risks or opportunities may have on the company, including effects on profitability, reputation, and competitiveness.

P – Prepare: Prepare the company to respond to these risks and seize these opportunities. This entails developing risk mitigation and adaptation strategies related to nature, as well as implementing sustainable management practices, such as reducing ecological footprints or integrating biodiversity into business models.

To meet this need, geospatial information is particularly useful as it describes the physical location of surrounding entities and the relationships between these "geographical" entities and other related entities and information. It therefore enables real-time monitoring and measurement of indicators such as water sources, lakes, forests, oceans, coastal areas, national parks, as well as crop yield forecasts. However, it also presents challenges related to image quality and costs.

Conclusion :

In conclusion, investors rely on significant progress in the quantity and quality of ESG data published by companies, following the implementation of mandatory ESG reporting regulations. These frameworks offer hope for increased transparency and harmonization of essential information for informed investment decisions.

However, recent political announcements, both in the United States and Europe, place greater emphasis on economic competitiveness and reducing administrative burdens for companies, which could lead to a future relaxation of ESG reporting obligations.

This new context may affect regulatory requirements and force investors to rethink their strategies, potentially compromising the quality and impact of their sustainable investments in the long run.

Sources

Amel-Zadeh, A., and G. Serafeim. (2018). Why and how investors use ESG information: Evidence from a global survey. Financial Analysts Journal 74 (3): 87–103

Autorité des marchés financiers. (2019). Rapport sur la responsabilité sociale, sociétale et environnementale des sociétés cotées.

Berg, F., Koelbel, J. F., and Rigobon, R. (2022) Aggregate confusion: The divergence of ESG ratings, Review of Finance, forthcoming.

Byrd, J., K. Hickman, C.R. Baker, and B. Cohanier. (2016). Corporate social responsibility reporting in controversial industries. International Review of Accounting, Banking & Finance 8 (2-4): 1–14.

CDP. (2023). Data for Public Good: Steering the role of ESG ratings and data product providers.

CFA Institute. (2020). Corporate Governance and ESG Disclosure in the EU.

Cohen, J.R., L. Holder-Webb, and V.L. Zamora. (2015). Nonfinancial information preferences of professional investors. Behavioral Research in Accounting 27 (2): 127–153.

Cohen, J.R., and R. Simnett. (2015). CSR and assurance services: A research agenda. Auditing: A Journal of Practice & Theory 34 (1): 59–74.

Commission Delegated Regulation (EU) 2023/2772 of 31 July 2023 supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards sustainability reporting standards.

EFAMA. (2024). Cross-cutting issues on EU data, available at https://www.efama.org/newsroom/news/cross-cutting-issues-eu-data

European Securities and Markets Authority (ESMA). (2023). Concept of estimates across the EU Sustainable Finance framework.

ESMA. (2024) : Final Report on Greenwashing : Response to the European Commission's request for input on "greenwashing risks and the supervision of sustainable finance policies"

European Commission (2019) Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions. The European Green Deal.

Gamerschlag, R., K. Möller, and F. Verbeeten. (2011). Determinants of voluntary CSR disclosure: Empirical evidence from Germany. Review of Managerial Science 5 (2-3): 233–262.

Ghitti, M., Gianfrate, G., & Palma, L. (2023). "The agency of greenwashing."

IFRS. (2020). Hope for a new paradigm—sustainability reporting, available at: https://www.ifrs.org/news-and-events/news/2020/10/hope-for-a-new-paradigm-sustainability-reporting/.

IOSCO (2021). Environmental, Social and Governance (ESG) Ratings and Data Products Providers

IOSCO (2023). Report on International Work to Develop a Global Assurance Framework for Sustainability-related Corporate Reporting.

KPMG (2024). The move to mandatory reporting. Survey of Sustainability Reporting 2024.

Krueger (2015) ESG Corporate Goodness and Shareholder Wealth.

Lee et al (2022), SustainAbility Institute by ER. Costs and Benefits of Climate Related Disclosure Activities by Corporate Issuers and Institutional Investors,", available at https://www.sustainability.com/globalassets/sustainability.com/thinking/pdfs/2022/costs-and-benefits-of-climate-related-disclosure-activities-by-orporate-issuers-and-institutional-investors-17-may-22.pdf

LSEG (2024), Scope for improvement: Solving the Scope 3 conundrum, available at https://www.lseg.com/en/ftse-russell/research/solving-scope-3-conundrum

PRI (2024). PRI Annual Report.

PRI (2023). Understanding the data needs of responsible investors available at *Understanding the data needs of responsible investors*

PwC (2023). Global Investor Survey.

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

Regulation (UE) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.

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

Senate Bill (2024). SB-253 Climate Corporate Data Accountability Act.

Securities and Exchange Commission (2024). The Enhancement and Standardization of Climate-Related Disclosures for Investors.

STBi (2024). SBTi Monitoring Report.

Taskforce on Nature-related Financial Disclosures (2024). Taskforce on Nature-related Financial Disclosures (TNFD) Recommendations.

UBS (2020) "Future Reimagined: Will ESG Data and Services Demand Accelerate Post-COVID & Who Will Win?", available at https://www.ubs.com/global/en/investment-bank/in-focus/covid-19/2020/esg-data-and-services.html.