

RESETTING THE ESG INVESTMENT PARADIGM TO SUPPORT EMERGING MARKETS & DEVELOPING ECONOMIES (EMDEs)

APRIL 2023



ABOUT

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EXECUTIVE SUMMARY

About the report

The mainstreaming of environmental, social, and governance (ESG) considerations is increasingly shaping the flow of capital to and among emerging markets and developing economies (EMDEs). This study assesses the nature and extent of this influence and documents how EMDEs are responding to shape the ESG paradigm to their specific objectives and market context. We also develop a set of recommendations to ensure any risks of capital diversion are mitigated, and to ensure that EMDE perspectives are well-represented in the global ESG debate.

The research combines a secondary evidence review with original data analysis and expert interviews with market participants. The purpose of this consultation was to hear practitioners' views on the impact of current ESG mainstreaming on capital allocation in EMDEs and to identify how EMDE policymakers, regulators, issuers, investors and intermediaries are responding. Representation across EMDEs in terms of geography and market development was central to the study, including interviews with experts experienced in markets such as Brazil, India, Kenya, Morocco, Pakistan, South Africa, Thailand and Uruguay.

Capital diversion from EMDEs

The report finds indicative evidence that ESG mainstreaming can reduce flows to EMDEs as growing pressures mount on asset managers to exclude assets with weak ESG scores. For example, in 2018 the MSCI EM ESG Leaders Index had a 68.2% weighting to countries classed by the OECD as EMDEs, a share that had declined to 62.9% by 2022. Excluding China and India, which together account for more than a third of all market capitalisation in the index, this share declined further from 33.2% in 2018 to 21.7% in 2022.

Critically, EMDEs' collective weight has fallen more significantly in ESG-focused indices than in mainstream benchmarks, suggesting that underperformance of EMDEs more generally was not the only driver of their declining share in ESG-focused indices. For example, EMDEs' weight in the MSCI Emerging Markets ESG Leaders Index was proportionately 5% greater than in the non-ESG MSCI Emerging Markets index in 2018, but was 2% smaller in 2022.

Capital diversion from EMDEs appears to have been less of an issue for the ESG-labelled bond market than for equity markets. While initially slow to adopt this financing tool, EMDEs have rapidly increased issuance in recent years, led by China. Total EMDE green, social and sustainability bond issuance is estimated at almost USD200bn in 2021, about four times the 2018 level. But EMDEs are still under-represented in the sustainable bonds market. EMDEs in 2020 accounted for a lower share of global sustainable debt issuance (20.1%) than they accounted for total bond issuance (30%), global equity market capitalisation (23.1%) or global GDP (42%).

Interviews with market participants confirmed the view that deficiencies in ESG data and scoring may exacerbate inefficiencies in capital allocation and reduce flows to the markets most in need of investment. Where company-level ESG data is missing, investors will often use proxies to fill the gaps in their analysis. For example, sovereign ESG data is frequently used to plug data gaps for entities. However, country-level ESG scores are highly correlated to per capita income. Consequently, an ingrained income bias, whereby rich countries generally have higher ESG scores, could contribute to an under-representation of EMDEs in global capital markets.

ESG determinants of capital flows to EMDEs

- Looking ahead, a combination of two aspects of the current ESG investment paradigm will impact how capital flows to EMDEs over the next five years.
 - A lack of comprehensive and comparable ESG data for EMDEs will have a significant bearing on investment flows as ESG data gaps and screening methods will exacerbate capital diversion from EMDEs.
 - Regulators are ramping up ESG disclosure requirements, exacerbating capital diversion by increasing compliance costs and risks associated with investing in EMDEs.
- The problems with ESG data for EMDEs can be broadly categorised into two: data gaps and data bias. A shortage of data makes it harder for potential investors to determine ESG compliance for themselves or to prove to regulators how ownership of an asset could impact the investor's ESG

¹ Multilateral Development Banks and Development Finance Institutions

² In defining frontier markets we have used the MSCI Frontier Index classification.

³ Source: <https://data.worldbank.org/indicator/CM.MKT.TRAD.CD>

profile. Standard ESG screening and regulatory frameworks were largely created in developed market contexts and are not necessarily appropriate for directing investment in EMDEs. For example, ESG metrics have tended to be backward looking and typically do not capture a company's ESG journey or relative performance. Therefore, when investors use ESG scores to screen assets suitable for investments, EMDEs may suffer as they can be perceived as higher risk and so less attractive from a risk-adjusted returns perspective.

- The risk of capital diversion away from EMDEs will also grow due to the planned introduction of more stringent ESG regulations. Proposed regulations in the EU, the UK and the US have two broad aims: (i) to prevent greenwashing and (ii) to expand the scale and scope of ESG disclosure. To support the first of these, new naming conventions are planned to be implemented, which will require asset managers to state more precisely the investment objective of their funds. Regulation will also seek to expand the amount of ESG-related data that listed firms and asset managers are required to publish. One of the consequences of these proposed regulations would be an increased cost of compliance, with firms and investors operating in the EU, the US and the UK having a greater burden of proof to satisfy their respective regulators that they are compliant with ESG disclosure requirements. All else equal, these costs will disproportionately affect smaller cap companies and companies in more data-scarce environments, both of which are more likely to apply in EMDEs.

Solutions – mitigating capital diversion from EMDEs

- EMDEs are pioneering their own pathways. The report outlines ways in which ongoing and future capital diversion from EMDEs is being mitigated. These solutions are drawn from EMDE case studies and are grouped into three categories:
 - Reforming market disclosures and frameworks
 - New data collection methods and sources
 - Innovative ESG investment products
- Expanding and improving the quality of ESG reporting across EMDEs will help to reduce capital diversion caused by ESG mainstreaming. More widespread and comparable ESG data for EMDE entities would reduce the perceived risks of investing in EMDE assets and prevent some of these assets from being filtered out of investment screening processes due to data gaps. The report highlights a number of important initiatives to support these aims.

- Adoption of the international framework created by the Task Force on Climate-Related Disclosures (TCFD) is encouraging the expansion of relevant data.
- The ASEAN Taxonomy for Sustainable Finance highlights the effectiveness of a regional taxonomy to adapt international frameworks to local EMDE contexts, making greater allowance for the specific economic and ESG characteristics of the 10 ASEAN members.
- The EU-China Common Taxonomy demonstrates how regulators can help investors navigate different regional or country-specific taxonomies.
- Removing some of the bias against EMDEs caused by current ESG data frameworks will require new types of data, not just more data from existing sources. ESG reporting requirements can thus only address part of the data problem. Data lags, a lack of forward-looking data and the shortage of transitional data reporting also represent very real challenges, especially in EMDEs. New techniques for gathering ESG data can help to mitigate the problems around data verification. The report outlines a number of solutions that are trying to improve the availability of ESG data for EMDE firms.
 - The IFC's esgNLP product illustrates that a natural language processing (NLP) tool can analyse vast amounts of unstructured data and text to produce ESG scores for companies.
 - The Transition Pathway Initiative shows how more forward-looking ESG company data can be provided, which would help to highlight those EMDE firms that are rapidly improving on weak legacy performance.
 - The World Wide Fund for Nature's geospatial project examines an innovative new way of reducing gaps in EMDE environmental data, which is a particularly important area for investors.
- Product innovation in the ESG investment space could also help to reduce capital diversion from EMDEs if it helps create a larger menu of ESG-aligned investable opportunities for global asset managers. These types of solutions are already being implemented and could be scaled further to more significantly impact capital flows. The report highlights several examples.
 - The Inter-American Development Bank and Uruguay's Ministry of Economy and Finance constructed a Sustainability-Linked Bond Framework, which creates incentives for Uruguay to perform strongly on environmental

performance metrics, such as reducing aggregate gross GHG emissions and maintaining native forest areas.

- The Thomas Lloyd Energy Impact (TLEI) Trust shows how private equity investors with an ESG impact mandate can raise funds on public equity markets.
- The Amundi Planet Emerging Green One (EGO) Fund is an example of how an equity listing can better connect institutional investors with green bonds in EMDEs. Not only are fixed income investment opportunities surfaced on a public equity market, but the IFC de-risks the fund to make it more attractive to investors.

Recommendations

More can and should be done to mitigate the risks of capital diversion and ensure that EMDE perspectives shape the global ESG debate. The report breaks out its recommendations into three categories.

- As flagship proposals in the US, the EU and the International Sustainability Standards Board (ISSB) are undergoing review, feedback and even pushback, there is an important window of opportunity for adapting international ESG regulations to local EMDE contexts and frameworks.
- EMDEs should contribute to ongoing consultations around any reforms to ESG regulations.
- Regional political and trade blocs should consider creating localised frameworks with tailored taxonomies that support the specific economic development of that region.
- Multilateral organisations and development finance institutions (DFIs) should provide capacity building support to the creation of localised frameworks and improvements in relation to data disclosure.
- These recommendations are mainly aimed at investors and data providers.
 - › Country and company performance should be assessed in terms of momentum and transition rather than the use of current and backward-looking data alone.
 - › The use of alternative data solutions – including AI and NLP technologies and geospatial data – would allow more unstruc-

tured data from company reports and more timely and independent data on environmental factors to be integrated within screening valuation models. However, technical challenges in EMDE contexts are identified in this report.

- These recommendations focus on bond issuance and utilising public equity markets.
 - › Theme-specific GSS+ bonds can be an effective tool for governments and companies in EMDEs as they look to raise capital to finance specific green, social and sustainable projects.
 - › DFIs and multilateral organisations should provide technical assistance and expertise in constructing GSS+ bond frameworks.
 - › Private equity funds should use public equity markets to raise capital that will be directed to a portfolio of ESG-focused investments in EMDEs.

4 We have used median rather than mean when calculating average volumes as frontier, emerging and developed market averages are distorted by massive outliers.

5 In defining frontier markets we have used the MSCI Frontier Index classification.

6 Source: <https://data.worldbank.org/indicator/CM.MKT.TRAD.CD>

7 Source: <https://data.worldbank.org/indicator/CM.MKT.TRAD.CD>

8 Source: <https://www.cnbc.com/2023/01/19/vietnams-market-risks-missing-upgrade-to-emerging-economy-status-2025.html>

CHAPTER 1: INTRODUCTION

MOBILIST research explores the factors shaping and constraining capital flows to emerging markets and developing economies (EMDEs) and seeks to identify products and policies that can increase the contribution of public markets to sustainable development. Prior MOBILIST research highlighted ESG considerations in shaping investment policy and asset allocation in this context¹. This study interrogates that finding further and questions the extent to which a current ESG mainstreaming paradigm enables greater investment in EMDEs, or actually hinders it. In this report, ESG mainstreaming describes the deepening integration of ESG factors into the investment decision-making process.

One of the challenges of analysing ESG-related trends in the financial industry is the lack of consensus about

what ESG means. According to the International Financial Reporting Standards (IFRS) Foundation, ESG analysis only assesses the materiality of ESG factors that impact a company's enterprise value (financial materiality)². This differs from the broader idea of "sustainability", which in addition to financial materiality, also assesses a company's impact on external stakeholders (double materiality). When referring to ESG mainstreaming, this report encompasses both ESG and sustainable investing trends. Indeed, the EU's new Sustainable Finance Disclosure Regulation (SFDR) regime for financial firms and corporates, which incorporates double materiality, is one of the most important regulations analysed in further detail in this report³.

WHY IS THE ESG MAINSTREAMING CHALLENGE IMPORTANT NOW?

The impact of ESG investment frameworks on global capital flows is set to increase significantly in the next three-to-five years. This is largely due to the introduction of more-stringent ESG disclosure requirements in both developed and emerging economies, which is outlined fully in the report (see Chapter 4).

It is very important that this issue is openly discussed now across stakeholders: indeed, there is a window of opportunity for governments, regulators, financial institutions, data providers and investors to help reshape the ESG investment paradigm so that it does not divert capital flows away from EMDEs.

ESG regulations are still at a formative stage, not least due to the political contestability of an ESG-informed approach to investing. Even in the EU, which is the jurisdiction most advanced in implementing comprehensive ESG reporting frameworks, there has been some pushback from regional stakeholders that could result in amendment to regulations. Financial service industry associations in Europe have raised concerns over the impending compliance burden for their members⁴, while the Russia-Ukraine war has focused attention on the appropriateness of ESG scoring

frameworks that punish European countries for increasing use of thermal coal power in order to reduce reliance on imports of Russian gas. Meanwhile, in the US, landmark regulations proposed by the SEC in early 2022 are facing legal challenges, which could result in amendments. Public opinion towards ESG regulations in the US are also becoming increasingly polarised along party political lines⁵.

This ongoing contestability of ESG regulations means that international best practice for ESG reporting is far from finalised. At a global level, a multilateral effort to standardise ESG reporting frameworks through the IFRS' International Sustainability Standards Board (ISSB) is still at consultation phase⁶. From the perspective of this report, it is important that the voice of EMDEs is clearly heard and carefully considered in these ongoing discussions.

"If regulators truly want to promote more investment in sustainable projects, they need to help and promote EMDEs."

Esther Law, Senior Investment Manager, Emerging Markets, Amundi Asset Management

¹ Drivers of Investment Flows to Emerging and Frontier Markets, Intellidex, 2022

² Double & Dynamic: Understanding the Changing Perspectives on Materiality, Sustainability Accounting Standards Board, 2020

³ Guidelines on non-financial reporting: Supplement on reporting climate-related information, European

Commission, 2021

⁴ SFDR Clarifications Could Cause Huge Burden for Asset Managers, Responsible Investor, 2022

⁵ SEC Climate Rules Pushed Back Amid Bureaucratic, Legal Woes, Bloomberg Law, 2022

⁶ Foundation Work Plan, IFRS, 2023

As well as contributing to ongoing consultations, regulators in EMDEs should work on adapting ESG regulations so that they can suit their local contexts. The Association of Southeast Asian Nations (ASEAN), for example, has developed a regional ESG taxonomy that has significant differences to the EU taxonomy. This is discussed further in this report (see Chapter 5).

Regulators are also starting to take a closer look at how ESG data providers generate and disseminate their data. In April 2022, the European Commission launched a consultation on measures to improve the

transparency of methodologies used by ESG rating providers⁷. In the UK, the Financial Conduct Authority (FCA) announced in November 2022 its intention to develop a code of conduct for ESG data and ratings providers⁸. This increased regulatory scrutiny of ESG data providers should create opportunities to develop and standardise data sources and screening frameworks that more accurately reflect ESG investment potential in EMDEs.

CHAPTER 2: RESEARCH METHODOLOGY

The research for this report is based on a combination of qualitative interviews with a range of subject matter experts on how ESG factors are determining capital allocation to EMDEs and detailed secondary research including a thorough review of relevant reports and

scrutiny of ESG data metrics and indicators. The Appendix lists the organisations interviewed, a guide to the interviews conducted and the data sources referenced.

QUALITATIVE INTERVIEWS

We conducted a total of 38 interviews. The purpose of these subject matter interviews was to hear from practitioners their views on the impact of the current ESG mainstreaming on capital allocation in EMDEs. The interviews set out to engage with four distinct groups: investors; data providers; inter-governmental bodies and industry experts or commentators.

Interviews used a semi-structured questionnaire based on observational research principles and the questions were different, depending on the interview group. The intentions of the interviews were as follows:

- to understand ESG investment behaviour as practised;
- to recognise the challenges around ESG investment from a policy and data perspective;
- to assess data tools used to support ESG screening methods;

- to understand perceptions on the quality of ESG data;
- to hear examples of ESG investment hotspots (by geography, product area or sector);
- to assess the implementation of market regulations that meet specific local contexts;
- to discuss ways to incentivise more ESG-related capital mobilization in EMDEs; and
- to appreciate the challenges faced around ESG data collection.

We felt it was very important to hear from investors to explore their current ESG investment behaviour and how it is evolving. Indeed, this group formed the largest number of interviews conducted, because it is harder to gauge these views from published reports. It was harder to find data providers to participate in

7 Sustainable Finance – environmental, social and governance ratings and sustainability risks in credit ratings, European Commission, 2023

8 Code of Conduct for ESG Data and Ratings Providers, Financial Conduct Authority, 2022

these interviews, and so in some cases it was necessary to open up the interview process to former senior employees (who had left the business in the last 12 months). This proved to be an advantage on occasions – for example, one former senior executive of an ESG data provider now sits on the board of several organisations (including traditional and non-traditional data providers).

All interviews were conducted by Fitch Solutions. Interviews were mostly done via Microsoft Teams or

Zoom and generally lasted for an hour. In many cases, interviewees followed up with further reading material from which data could be used in the report.

The majority of interviews were recorded and the resulting transcripts provide a rich tapestry of opinions and experiences. We draw on these throughout the report through direct quotes that help to provide operational colour.

SECONDARY REPORT & DATA RESEARCH

The review of literature and quantitative data provided context and evidence from which to interpret the interview findings. It was a wide-ranging review assessing insights from data providers; governments and inter-governmental associations; investors and research associations (see Appendix for a full list of sources). A wide range of perspectives was an important aim of the research. It was also important that the geographical coverage was broad, as shown by references to literature from markets including South Africa, Thailand, Uruguay and West Africa. Each piece of literature discovered during the research process was catalogued and summarised into a central database of insights highlighting further research avenues.

We have cited any written assertions with a data reference either from the literature review or from subject matter experts directing us to specific data findings. When assessing the performance of active and passive equity funds (where the central aim of the fund was stated as being aligned to ESG factors), we used Bloomberg as a source. We compared and

contrasted funds that were ESG-aligned with those that were non-ESG-aligned. Country-level allocations were also important in this research, so we assessed how each fund was allocated comparing EMDEs with developed markets for both ESG-aligned and non-ESG-aligned funds.

For the assessment of ESG data metrics at a country level, we used the World Bank's indicators on 67 ESG parameters covering 164 countries. This is a very large open source repository of ESG metrics. Each of the 67 parameters were classified by the Fitch Solutions team into separate E, S and G groupings. Scores were allotted per metric on the recency of data available from the database. Utilising principal component analysis (PCA) and machine learning (ML), we reduced the dimensionality of the data to produce country scores for data availability for the E, S and G parameters, for all 164 countries. From there, we can identify the biggest area of data gaps. The maps shown in the Annex are the results of this exercise.

SCOPE OF REPORT – EMDES

Throughout the report, our focus is on EMDEs. The list of countries included within the remit of this report are known as the Development Assistance Committee's (DAC) List of official development assistance (ODA) recipients, as defined by the OECD. A full list of these countries is shown in the Appendix.

This list of countries differs from some mainstream definitions of "emerging" and "frontier" markets. For

instance, MSCI includes 52 countries in the firm's "Emerging and Frontier Markets" category, compared to 141 in the ODA list¹. The MSCI category includes some high-income countries such as South Korea, Saudi Arabia and Taiwan, whereas the ODA list excludes all high-income economies.

⁹ Annual Market Classification Review, MSCI, 2023

CHAPTER 3: CAPITAL DIVERSION FROM EMDEs

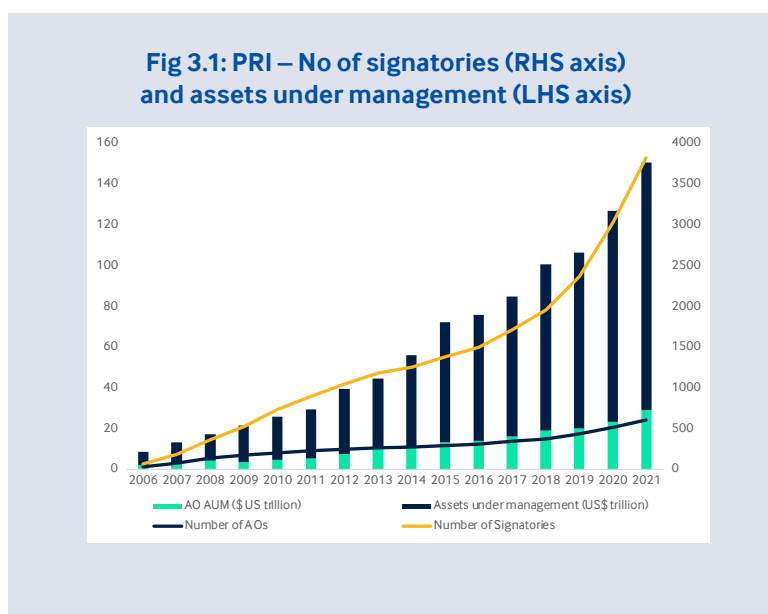
This chapter assesses whether the current ESG mainstreaming paradigm could be hindering capital flows to EMDEs. We suggest that deficiencies in ESG data and scoring mean that risk-adjusted returns in EMDEs are often understated, which might result in an inefficient allocation of capital. Moreover, it could reduce flows of capital to the very markets most in need of investment.

Isolating the impact of existing ESG frameworks on total flows of capital to EMDEs is challenging. Between 2020 and 2022, a variety of factors have slowed investment in EMDEs, including the global COVID-19 pandemic, rising global interest rates and deteriorating global economic prospects². However, this chapter suggests that at the very least, there is a correlation

ESG CONSIDERATIONS CENTRAL TO INVESTMENT PROCESS

ESG mainstreaming has become an additional input into the investment decision-making process for asset managers. Indeed, ESG considerations are increasingly at the centre of allocations being made by investors, and not just ESG-focused funds. The Principles for Responsible Investing (PRI) was established in 2005 as a UN-supported network of investors promoting sustainable investment practices. Their first principle is to “incorporate ESG issues into investment analysis and decision-making processes”. This commitment does not entail allocation of capital to ESG-related

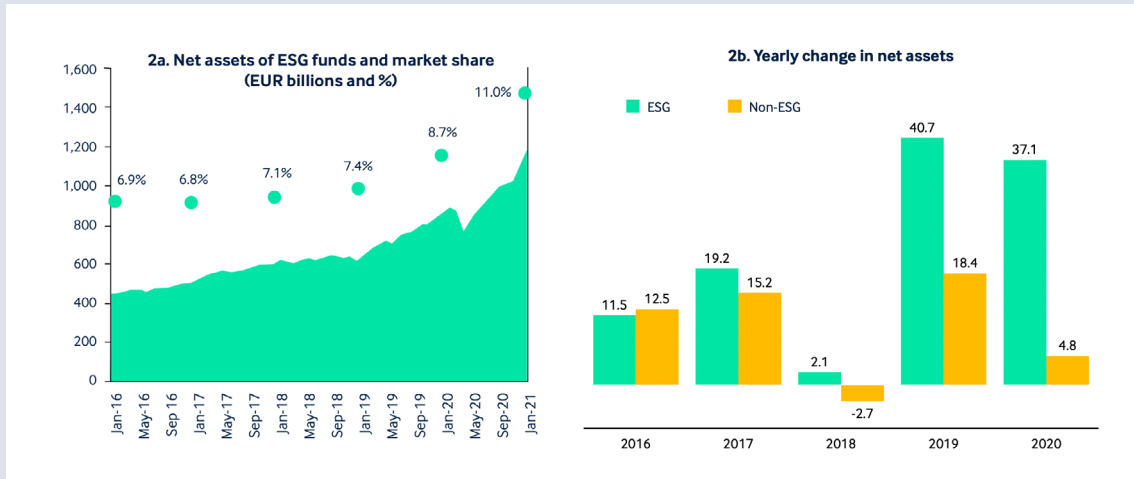
investments, but it does indicate the high volume of capital being overseen by entities that are part of the ESG paradigm. As illustrated in the below chart, the number of PRI signatories increased from 1,384 in 2015 to 3,826 at the end of 2021 (and stands at 5,179 as of the end of September 2022), increasing assets under management from USD59trn to over USD120trn over the period. PRI member assets under management thus accounted for 126% of global GDP, as of 2021.



An increased focus on ESG investing can also be illustrated by the popularity of ESG-labelled equity and fixed income investment products. Despite volatility in global capital markets since 2020, ESG-focused assets under management have continued to grow as a share of overall debt and equity assets. Using Europe-based

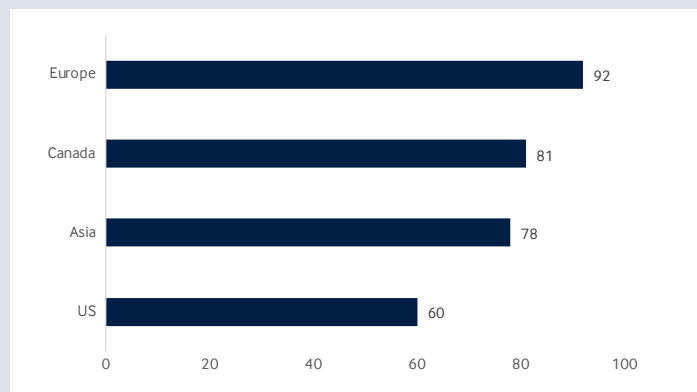
equity funds (UCITS) as an illustration, we note flows into ESG-labelled funds were consistently stronger over 2016-2020 than flows into non-ESG funds. This pushed up the share of ESG funds in overall funds to 11% by the end of 2020, compared to 6.9% in January 2016.

Fig 3.2: Europe fund flows (UCITS funds)



Source: Principles for Responsible Investing (PRI)

Fig 3.3: % of asset managers that use ESG principles during the investment decision-making process



Note: Data is taken from responses to the question "To what extent are ESG principles used as part of your investment approach and decision making?"

Source: RBC Responsible Investment Survey 2022

Europe appears to be at the forefront of ESG mainstreaming, certainly compared to the US. A 2022 survey from RBC Global Asset Management on ESG investing found that 92% of European respondents

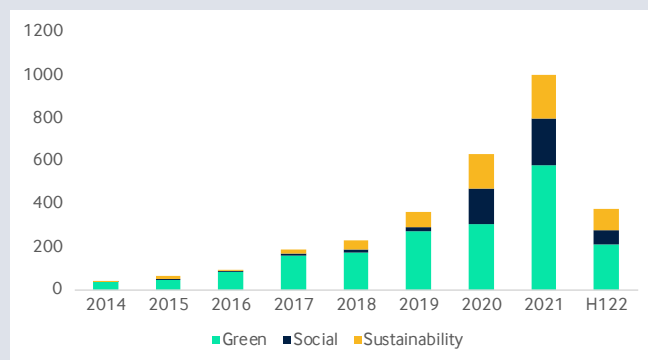
used ESG principles as a part of their investment and decision-making approach.¹ However, the sample size

11 Responsible Investment Survey, RBC Global Asset Management, 2022

of respondents in Europe was small and the percentage of global respondents that used ESG principles actually declined from 75% in 2020 to 67% in 2022, and to 60% in the US. Well over 80% of the respondents to the survey were from North America. It is noteworthy that the importance of ESG considerations for Europe-based asset managers aligns with the advanced ESG disclosure regulations being implemented by the EU, such as the Sustainable Finance Disclosures Regulation (SFDR), which is discussed in detail in Chapter 4.

Meanwhile, turning to the bond market, data from Climate Bonds Initiative shows a rapid rise in ESG-labelled bonds. The annual issuance of green, social, sustainability and other labelled (GSS+) bonds increased more than five-fold to over USD1trn between 2018 and 2021. In 2021, green, social & sustainability bond issuance accounted for around 12% of global bond issuance, up from around 3% in 2018¹².

Fig 3.4: Global Green, Social & Sustainability bond issuance by type (USDbn)



Source: Climate Bonds Initiative, Fitch Solutions

HOW INVESTORS USE ESG DATA

ESG data and qualitative information on assets are available to investors from four main sources:

- Examples include company annual sustainability reports and pitch decks. This is primarily company-level data.
- Data vendors typically provide a mix of company and country-level indicators.
- Examples include the World Bank's ESG Data Portal and the IMF Climate Change Indicators Dashboard. This data is usually dominated by country-level ESG data.
- When available, direct access to company management helps investors obtain relevant ESG information.

Plugging data gaps

Where company-level ESG data is missing, investors will often use proxies to fill the gaps in their analysis. According to the World Bank, sovereign ESG data is frequently used to plug data gaps for entities in countries with patchy ESG data reporting.¹³ As discussed further below, country-level ESG scores are highly correlated to per capita income and consequently using sovereign ESG scores as proxies for companies in EMDEs can weaken a firm's ESG profile.

While direct access to company management is a more accurate method for plugging company-level ESG data gaps, this source of information is not available to all investors. Gathering ESG data through direct access to company management entails costs that can be prohibitive for mid- and small-sized asset managers.

¹² Climate Bonds Initiative, 2022

¹³ A New Dawn – Rethinking Sovereign ESG, World Bank & JP Morgan, 2021

Using the data

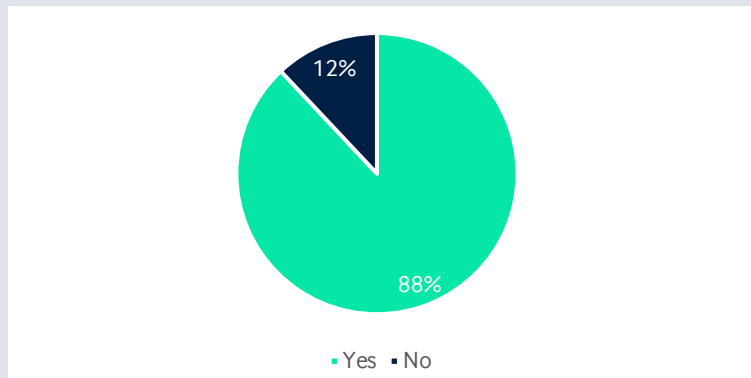
The mainstream approach to integrating ESG considerations into investment decisions is to use ESG data that has been transformed into an “ESG risk rating”, whereby assets with weak ESG scores are deemed to create reputational, compliance and financial risks for an investor.¹⁴

In practice, this decision typically involves the application of an ESG screen to investment opportunities, with positive screening (filtering out all but the highest ESG scores) and negative screening (excluding certain industries) serving as the most common approaches.¹⁵

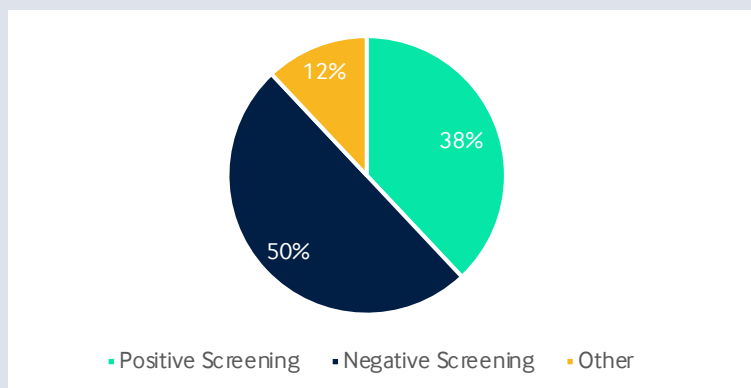
As a result, ESG mainstreaming adds a new layer of risk for an investor to consider when making an investment. According to research by Intellidex in 2022, most asset owners and managers employ positive or negative ESG screening in their investment processes (see below chart). While the sample size for the survey was small, the interviews conducted for this report supported the view that positive and negative screening are the dominant approaches. A more detailed summary of common approaches to incorporating ESG scores into the investment process can be found in Table 1 of the Annex.

Fig 3.5: Survey on ESG screening approaches employed by investors

Do you screen at country level in your investment decision process?



And if you do screen is your process positive or negative screening?



Note: Both asset owners and asset managers included (n=24)

Source: Drivers of Investment Flows to Emerging and Frontier Markets, MOBILIST and Intellidex

14 ESG Ratings: Status and Key Issues Ahead, European Securities & Markets Authority, 2021

15 Drivers of Investment Flows to Emerging and Frontier Markets, Intellidex, 2022

Weak ESG scores + screening = capital diversion

Mainstream approaches to ESG screening will exacerbate the under-representation of EMDEs in global capital markets as a result of the structurally weaker ESG scores of EMDE assets, compared to assets in developed economies. Factors that contribute to these generally lower ESG scores in EMDEs include the following, which are all examined in more depth in Chapter 4:

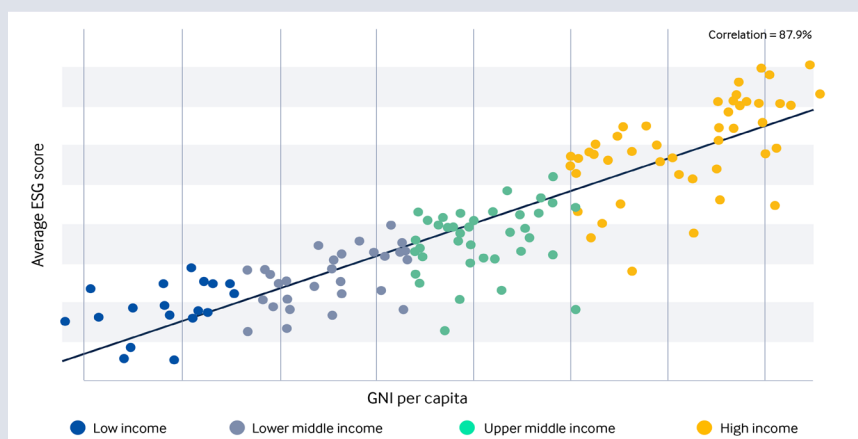
- an ingrained income bias, whereby rich countries generally have higher ESG scores (see below chart);

- the extensive ESG data gaps in EMDEs; and
- a myopic focus on certain metrics that many EMDEs score poorly on, such as GHG emissions per capita.

“It is not realistic to expect all EMDEs to transition at the same pace as their developed market peers, due to budget constraints, amongst others. Transition risks need to be shared by developed countries.”

Esther Law, Senior Investment Manager, Emerging Markets, Amundi Asset Management

Fig 3.6: Sovereign ESG scores and per capita Gross National Income (GNI)



Note: Sovereign ESG scores for each country are an average of seven ratings providers. Source: World Bank, JP Morgan¹⁶

On average, EMDE assets have weaker ESG scores than assets in developed economies. This is true for both country-level (see Fig 3.6) and company-level (see Fig 3.7) scores.

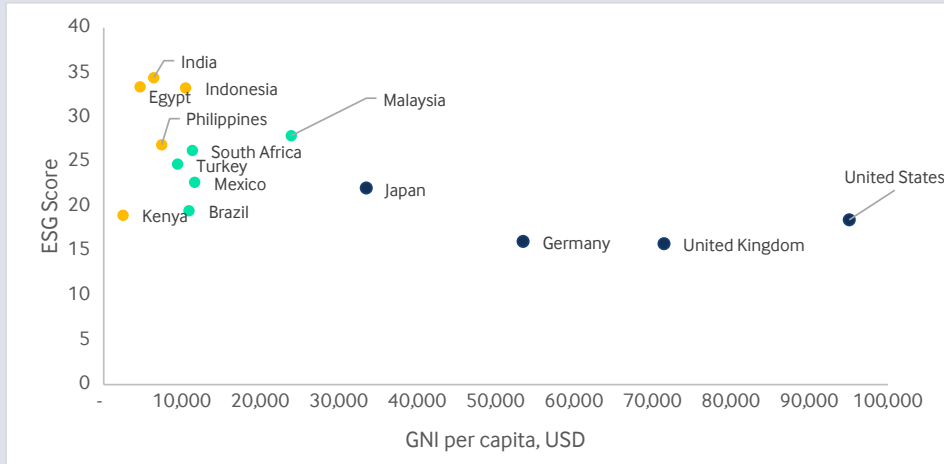
The chart below analyses ESG scores for a group of telecoms companies operating in developed, upper middle-income and lower middle-income economies. The telecoms firms based in developed markets generally have lower perceived ESG risks than those based in EMDEs. The highest perceived ESG risks are for companies listed in markets representing lower middle-income countries, such as India, Indonesia and Egypt.

The telecoms industry is chosen to illustrate the point as most countries with public equity markets have major telecoms firms listed. Moreover, telecoms firms have similar core business operations regardless of the market they serve. Indeed, the telecoms industry outperforms most other industries in terms of data disclosure¹⁷.

¹⁶ A New Dawn – Rethinking Sovereign ESG, World Bank & JP Morgan, 2021

¹⁷ Companies and Climate Change – a research application of the AIB-Amundi Climate Change Investment Framework, AIB/Amundi/Climate Bonds Initiative/Carbon Trust/Fitch Solutions, 2023

Fig 3.7: Telecoms corporate ESG scores and per capita Gross National Income (GNI)



Source: Sustainalytics, World Bank, Fitch Solutions

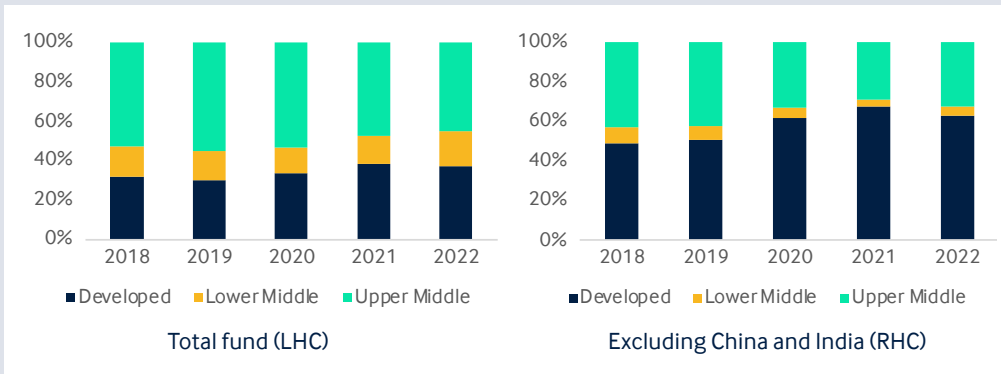
Note: see Annex Table 2 for ESG scores for individual telecoms operators. The higher the score on the y-axis, the higher the ESG risk, and the lower the score, the lower the ESG risk.

ESG FUNDS HIGHLIGHT SCREENING IMPACT

ESG-focused equity indices illustrate how applying an ESG screen is increasingly deterring investment in EMDEs. In particular, ESG indices have become less exposed to EMDEs over recent years. Given that EMDE assets generally have lower ESG scores, this has resulted in reduced weightings towards EMDEs. In 2018, the MSCI EM ESG Leaders Index had a 68.2%

market capitalisation weighting to countries classed by the OECD as EMDEs. This share had declined to 62.9% by October 2022. Excluding China and India, which together account for more than a third of all market capitalisation in the index, this share declined further from 33.2% in 2018 to 21.7% in October 2022. This means that less than a quarter of market

Fig 3.8: MSCI EM ESG Leaders Equity Index - % allocation by country category

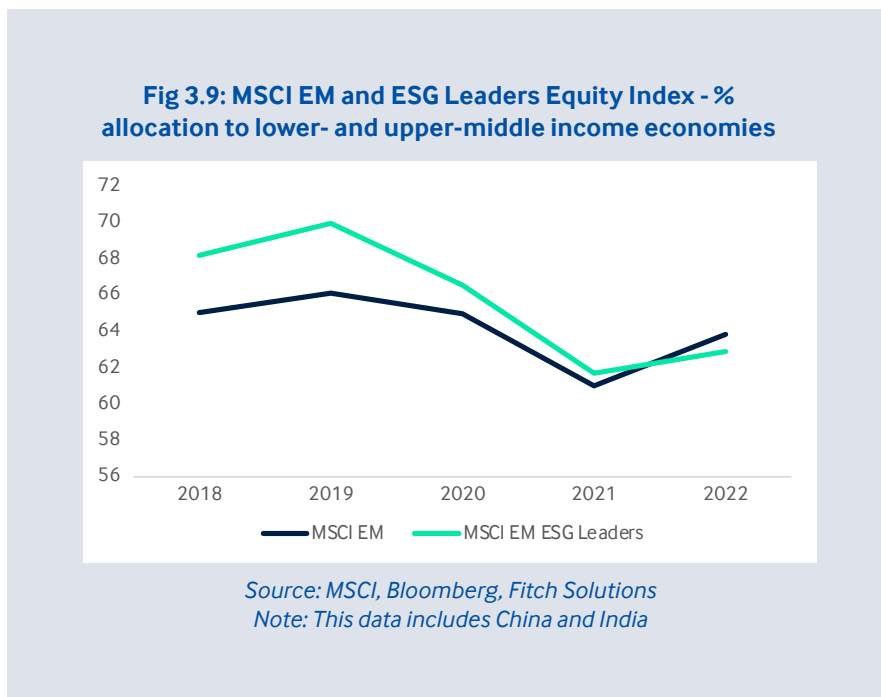


Source: MSCI, Bloomberg, Fitch Solutions

capitalisation in this EMDE ESG index was based in EMDEs other than China or India. In contrast, the share allocated to high-income markets such as South Korea, Taiwan and Qatar rose from 31.8% to 37.1% over the same period. Chapter 4 describes how anti-greenwashing regulations in developed economies including the EU, the US and the UK will likely accelerate this shift further away from EMDEs over the next five years.

A declining share of market capitalisation for EMDEs in ESG indices is partly due to a more general shift away from EMDE assets by global investors over 2018-2022.

For instance, the broad (non-ESG) MSCI Emerging Markets index also reduced the market capitalisation share of developing countries over the period. However, the below chart suggests that this reduction towards EMDEs has been more pronounced in ESG-focused indices. This supports the theory that applying an ESG screen to the investment process makes EMDE assets less attractive. The share of market capitalisation allocated to EMDEs in the MSCI Emerging Markets ESG index was proportionately 5% greater than the non-ESG index in 2018, but was 2% smaller in 2022.



ESG-LABELLED BONDS PARTLY INSULATED FROM CAPITAL DIVERSION

Capital diversion from EMDEs has so far been less of an issue for the ESG-labelled bond market than for equity markets. While initially slow to adopt this financing tool, EMDEs have rapidly increased issuance in recent years, led by China. Total EMDE green, social & sustainability bond issuance is estimated at almost USD200bn in 2021, about four times the 2018 level. Over 2018-2021, around 80% of EMDE issuance was by corporates.

more accurate method for plugging company-level ESG data gaps, this source of information is not available to all investors. Gathering ESG data through direct access to company management entails costs that can be prohibitive for mid- and small-sized asset managers.

Fig 3.10: EMDE Green, Social & Sustainability bond issuance by type (USDbn)



Source: Climate Bonds Initiative; Fitch Solutions

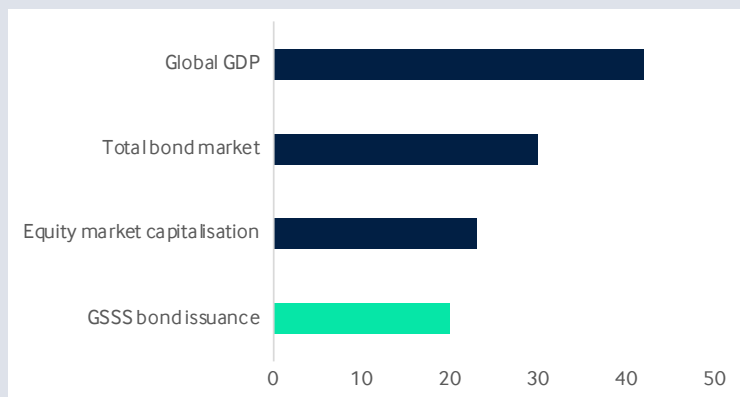
One reason that labelled bond issuance has grown so quickly in EMDEs is the relative low barrier to entry for attracting capital compared to equity investments. Many of the EMDEs that lack mature public equity markets nonetheless have capacity to issue corporate and sovereign debt¹⁸. Even for countries that have yet to issue labelled bonds, it is easier to set up this issuance framework through a top-down approach than it is to rapidly develop a mature local equity market.

But EMDEs are still under-represented in the sustainable bonds market. EMDEs in 2020 accounted for a lower share of global sustainable debt issuance (20.1% than they accounted for total bond issuance (30%),

global equity market capitalisation (23.1%) or global GDP (42%). If EMDEs accounted for the same proportion of global sustainable debt issuance as total bond issuance, sustainable debt issuance by EMDEs would be USD99bn higher¹⁹. ESG mainstreaming will exacerbate this under-representation for the same reasons that it will impact equity funds, as discussed above.

The ongoing mainstream ESG investment approach is increasingly likely to divert capital from EMDEs, resulting in profitable investment opportunities being missed. Chapter 4 assesses the main characteristics of ESG mainstreaming that will determine the significance of this capital diversion.

Fig 3.11: EMDE share of global markets, %



Source: Climate Bonds Initiative, IMF, PRI

18 Emerging Market Green Bonds Report 2021, IFC

19 Climate Bonds Initiative, 2022

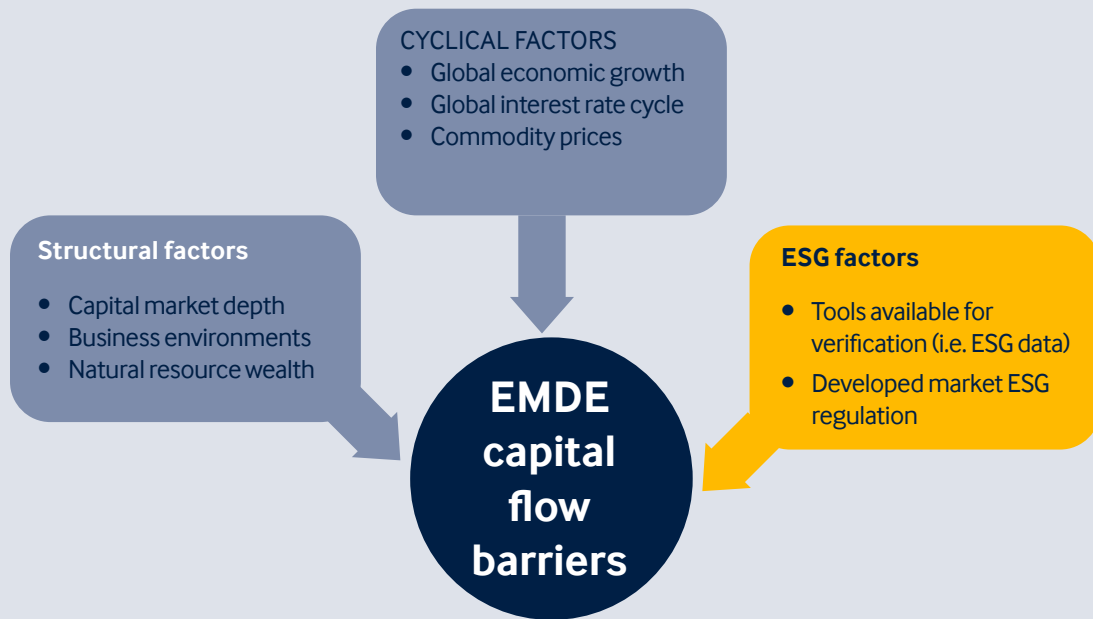
CHAPTER 4: ESG DETERMINANTS OF CAPITAL FLOWS TO EMDEs

Chapter 3 argued that ESG mainstreaming is diverting capital away from EMDEs. This chapter identifies the two main determinants that will exacerbate further capital diversion.

Capital flows to EMDEs are influenced by a range of structural and cyclical factors. This chapter focuses specifically on the characteristics of ESG investing that

impact capital flows to EMDEs. At the same time, we must note that there are broader emerging economy traits that determine capital flows, such as capital market depth, business environment and cyclical economic factors.²⁰

Fig 4.1: Factors affecting capital flows to EMDEs




Source: Fitch Solutions

²⁰ The Drivers of Capital Flows in Emerging Markets Post Global Financial Crisis by Swarnali Ahmed Hannan, IMF, 2017

Two aspects of the current ESG investment paradigm will significantly impact how capital flows to EMDEs in the next five years. First, the availability of comprehensive and comparable ESG data for EMDEs will have a significant bearing on investment. Data availability will be impacted by factors including gaps and inconsis-

encies in reported data, as well as the cost of data collection. Second, regulators in developed markets are ramping up ESG disclosure regulations, which will increase the compliance costs and risks associated with investing in some EMDEs.

Data



Determinant: The availability of extensive and comparable ESG data for EMDEs will have a significant bearing on investment flows.

Impact: ESG data gaps and inappropriate screening methods are set to increasingly divert capital from EMDEs.

Regulations



Determinant: Regulators in developed markets are ramping up ESG disclosure regulation.

Impact: Increases the compliance costs and risks associated with investing in EMDEs.

DETERMINANT 1: TOOLS FOR VERIFYING ESG PERFORMANCE

The verifiability of an asset’s ESG profile is increasingly central to the investment decision process. This is because, as discussed in Chapter 3, ESG factors are being considered more carefully by investors, and this verification requires data²¹.

The volume of ESG data available at both a company and country level has expanded rapidly over the past five years. For country-level data, this has mainly been due to the work of multilateral agencies including the UN and World Bank, which provide open source country data for a suite of environmental, social and governance topics. With regards to companies, data provision has been spearheaded by a raft of private data vendors.

Despite progress made by data providers, currently available ESG data is often patchy, can be unreliable and is not comparable across companies or geogra-

phies. Gaps are particularly prevalent for environmental and social metrics, as detailed later in this chapter. These data gaps are due to a range of factors, including limited ESG company disclosures and different ESG reporting frameworks used from country to country. This deficiency of data is particularly stark for EMDEs²². As ESG factors are more closely scrutinised by investors due to regulatory pressures and an increase in mandates, inadequate ESG data is set to become a very important barrier to flows of investment to EMDEs, with one asset manager telling us it will be a “serious impediment”.

The problems with ESG data for EMDEs can be broadly categorised into two: data gaps and data bias, each of which are examined in more detail in this chapter.

²¹ Closing the Funding Gap, PRI, 2022

²² A New Dawn – Rethinking Sovereign ESG, World Bank & JP Morgan, 2021

Data availability



They make it harder for potential investors to determine ESG compliance for themselves or to prove to regulators how ownership of an asset could impact the investor's ESG profile.

Data bias



When investors use ESG scores to screen assets suitable for investments, emerging markets suffer as they are perceived as less attractive from a risk-adjusted returns perspective.

ESG data availability in emerging markets

A lack of comparable data on the ESG profile of an asset will make it less attractive to investors that are increasingly concerned about that asset's ESG performance.²³ This is not necessarily because weak ESG data disclosure implies weak ESG performance. Rather, the information asymmetry created by any gaps in data makes it harder for investors to price risk-adjusted returns. When presented to investors, it is important that ESG data is comparable across EMDE assets and relative to developed market assets.

Dealing with data gaps: qualitative workarounds neither scalable nor sustainable

Challenges created by these gaps are sometimes navigated by active investors using a more- qualitative approach to their asset selection. Through direct engagement with companies in order to plug the gaps in ESG data provided by mainstream data vendors, some investors have become more prepared to invest in EMDEs that have patchy ESG data available. In particular, large asset managers are often able to bypass third-party data vendor scores and gain information on ESG performance directly from company management or local government and industry contacts in emerging economies. These sources can create a workaround, but only for those investors with the necessary resources²⁴.

"Investors relying solely on published information to assess EM companies' sustainability efforts and ambitions risk missing the mark significantly"

– Franklin Templeton Emerging Markets Equity
"Navigating ESG Disclosures in Emerging Markets",
October 2021

As an interviewee explained to us, two energy companies may both have very high carbon footprints but one of them may have a clear plan in terms of what they are doing for their transition. However, you will not see that in any financial statement analysis of backward-looking data. Only a discussion with company management will provide that information.

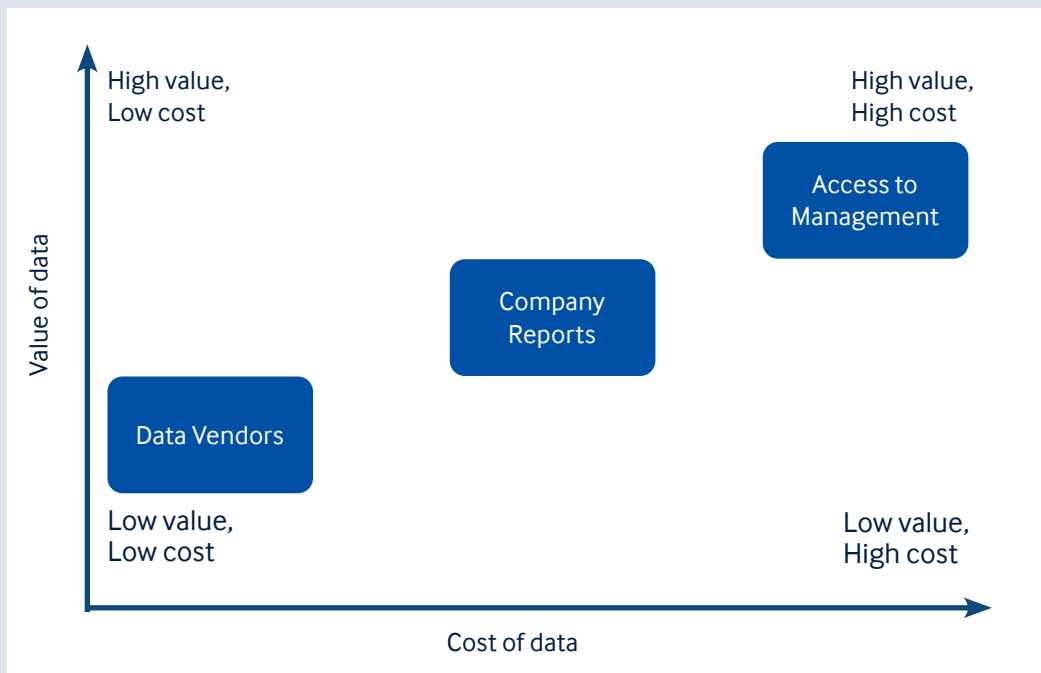
These qualitative methods for gaining insight into a company's ESG profile, however, highlight another cause of limited data availability, namely the high cost of collecting this data. Qualitative approaches such as investor engagement are costlier and more logistically challenging than relying on standardised data vendors; this creates barriers to entry for some investors. Routinely gathering ESG data through direct access to company management or local government and industry contacts will generate significant organisational, financial and headcount costs. This may not be a significant barrier for many of the large asset managers that we spoke to, but mid- and small-sized asset managers were more vocal on the need for verifiable EMDE ESG data to be available at a lower cost in order for investments to be viable.

A senior executive from a large asset management firm told us that in its asset allocation approach, published information is only ever used as a starting point to form a forward-looking view on a company's ESG profile. This interviewee said there is still significant additional work that includes in-depth local studies of individual markets and companies and access to management and other stakeholders. This activity is integral to an evaluation of sustainability commitment and an understanding of that asset's future ESG strategies. This is simply not something for which all firms will have the required capacity.

²³ Investor Attitudes on Company ESG Data, Benchmark ESG Survey, 2022

²⁴ ESG Investing Practices, Progress and Challenges by R Boffo and R Palatano, OECD, 2020

Fig 4.2: Cost-benefit of various ESG data sources



Source: Fitch Solutions

This approach of screening for ESG investment is potentially unsustainable given the pipeline of new regulations that will only serve to make qualitative methods of verification even less viable. Regulations being driven from the EU, the US and the UK will require firms to provide evidence regarding the ESG profile of their investments. Failure to provide adequate evidence to regulators will result in penalties for investors. The interviews that we conducted with asset managers during this research supported the view that such regulations will likely make investors more risk averse when it comes to utilising workarounds to gather non-standardised sources of ESG data.

“If you can’t get good data and you can’t get that data assured, there is a risk about that company. And if that risk exists, you have to plan for that or exclude it. Many will take the easy approach and exclude.”

ESG & Sustainability Director, US banking group

Company data gaps worse in EMDEs, especially SMEs

At a company level, data gaps are far more extensive in emerging economies, particularly in low-income countries²⁵.

A select few EMDEs, including South Africa, Malaysia and Brazil, have improved their levels of ESG disclosure significantly. Indeed, at a company level, a study of ESG disclosure scores from Bloomberg data conducted by Franklin Templeton actually suggests that, in absolute terms, Malaysia, India and Brazil disclose more data than the US²⁶. Moreover, Malaysia and China have had some of the fastest-improving ESG disclosures scores since 2017. This highlights that for some large EMDE-based firms, stricter ESG data requirements could actually make them more appealing investment propositions. For instance, three firms with some of the largest weighting on the MSCI Emerging Markets index are Infosys (India), Tata Consultancy (India) and Naspers (South Africa).

In all three cases, their ESG risks to investors are rated as low. To illustrate, Sustainalytics²⁷ scores their exposure to material ESG issues as low and their management of ESG material risk as strong. Nonetheless, looking beyond this layer of a few large EMDE-based companies operating in markets where data disclosure is encouraged, the majority of firms in EMDEs have significantly weaker ESG disclosure scores than their peers in developed markets

²⁵ Must ESG be Bad News for Emerging Markets? Financial Times, 2022
²⁶ Navigating ESG Disclosures in Emerging Markets, Franklin Templeton, 2021

²⁷ vCompany ESG Risk Ratings, Sustainalytics - <https://www.sustainalytics.com/esg-rating>

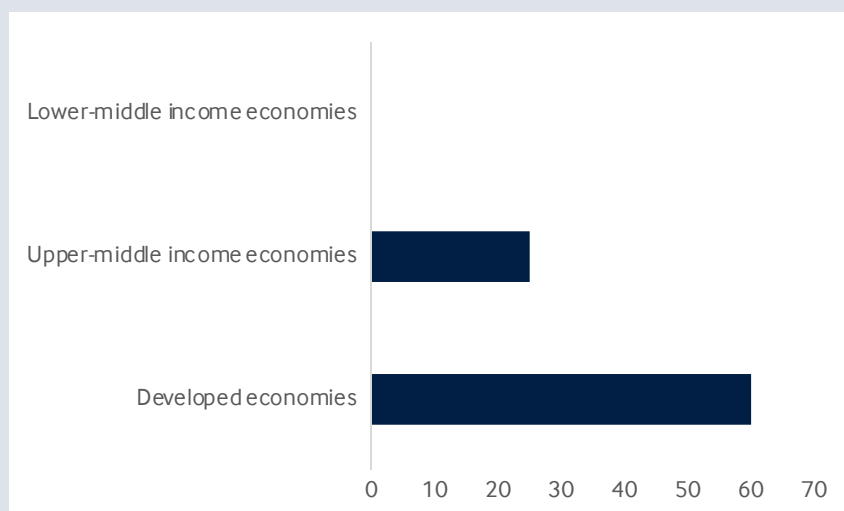
“The biggest barrier to investment (in EMDEs) is simply a lack of data. And if there is data, what’s the quality of it? The quality of the data is an issue: because it’s self-reported, how often is it being reported and who is doing the reporting? And how is it being verified?”

Former senior executive, Tier 1 ESG Data Provider.

The UN Sustainable Stock Exchanges (SSE) initiative tracks the levels of sustainable disclosure required by national stock exchanges. Focusing on environmental

disclosures, the Task Force on Climate-related Financial Disclosures (TCFD) reporting guidelines are rapidly becoming the norm for company-level reporting of decarbonisation metrics (see Table 3 in Annex for list of TCFD recommendation). SSE data illustrates that the proportion of EMDE stock exchanges requiring TCFD disclosures has significantly lagged that in developed markets. Aligning climate-related company disclosures to the TCFD framework increases the comparability of data between EMDEs and developed market assets that also use TCFD reporting. In contrast, lagging adoption of TCFD reporting in many EMDEs makes it harder for foreign investors to gauge risk-adjusted returns in these markets.

Fig 4.3: Share (%) of stock exchanges with TCFD-aligned disclosure requirements, by country income level



Source: UN Sustainable Stock Exchanges Initiative; Fitch Solutions

For ESG data in general, gaps are particularly prevalent in the case of SMEs, which place them at an additional disadvantage when attracting capital.²⁸ SMEs are especially important to the structure of emerging economies²⁹ and existing ESG disclosure regulations in EMDEs typically exempt SMEs, which means they will continue to have data gaps and be less attractive investments. For instance, in May 2021, India’s Securities and Exchange Board (SEBI) implemented new ESG disclosure requirements, but these regulations only apply to the largest 1,000 listed companies by market capitalisation.

“There is a regional bias – with European companies scoring best and frontier markets the worst – and a size bias, with larger companies able

to hire dedicated ESG teams including investor relations teams.”

Senior Executive, Tier 1 US-based Investment Fund

Country data gaps prevalent in EMDEs

At a sovereign level, ESG data gaps are also prevalent in EMDEs.

“If I wanted to invest in Bhutan, Bolivia or Bangladesh, there is no repository where I could find out standards for wastewater emissions or health and safety information on accident rates.”

Former senior executive, IFC

28 A New Dawn – Rethinking Sovereign ESG, World Bank & JP Morgan, 2021

29 www.worldbank.org/en/topic/sme/finance, IFC, 2020

We analysed World Bank open source data¹ for sovereign ESG performance in order to quantify the gaps in data availability at a country level, and where these are most prominent within environmental, social and governance. Table 4a in the Annex shows our grouping of the 67 ESG data indicators and offers a comparison with MSCI's ESG Government Ratings framework of indicators, shown in Table 4b. The data we assessed was for all 164 countries for which this data is aggregated by the World Bank.

The World Bank is improving the quality and scope of ESG data, with updates on new data sets and revised methodologies available via the organisation's ESG data portal². Our findings are therefore a snapshot of the World Bank's data availability, as of the fourth quarter of 2022. The gaps in the World Bank data highlighted by this analysis illustrate wider systemic issues with sovereign ESG data. We understand from our interviews that the World Bank is considered as an important repository for ESG data even if there were

some concerns expressed at the availability and timeliness of some metrics.

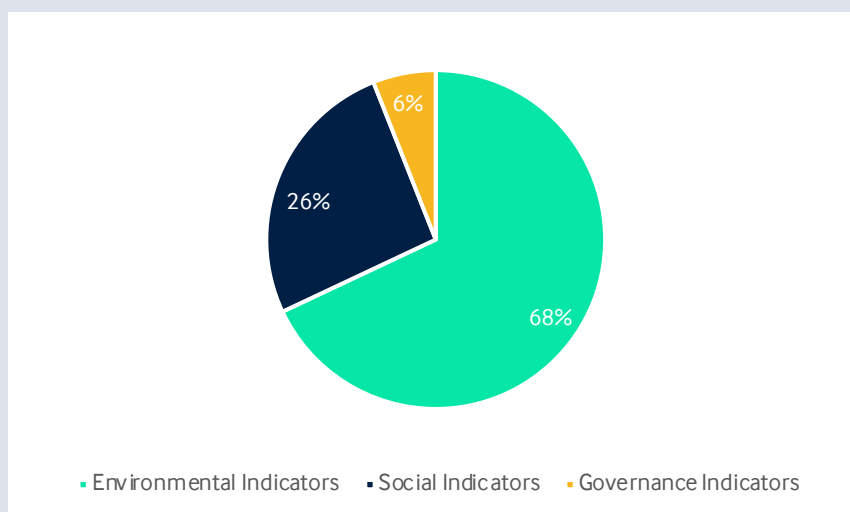
When assessing ESG data either at sovereign or company level, data gaps are most glaring for environmental and social indicators.

- Our analysis of the World Bank open source sovereign ESG data showed that 68% of all 1,851 data gaps across all 164 countries were for environmental indicators, compared to 26% for social and just 6% for governance. Notwithstanding that there are considerably fewer governance indicators on our list, these numbers show very clearly that sovereign ESG data gaps are most common within the environmental category.

"If I want to do proper E analysis on my portfolio of companies, it's really hard....the information is just not available."

Asset Manager, South Africa

Fig 4.4: ESG component gaps, by E, S and G



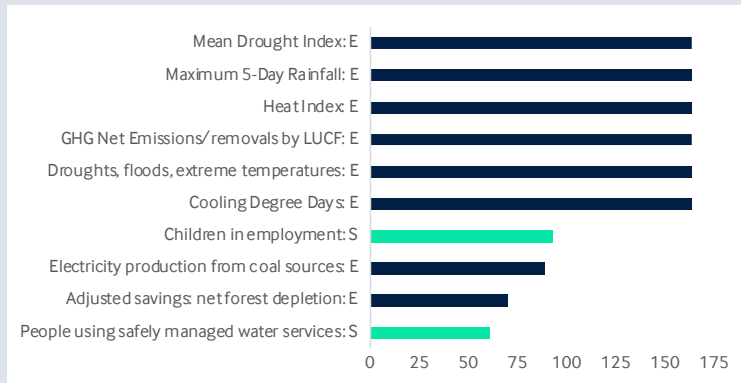
Source: World Bank

- From another perspective, the following chart ranks the individual ESG indicators by the number of countries with missing data. Eight of the 10 indicators with the largest number of omissions are environmental indicators, which once again highlights where the majority of ESG data omissions lie.

30 ESG DataBank, World Bank, 2022

31 World Bank Sovereign ESG Data Portal, 2023

Fig 4.5: ESG components – World Bank indicators with the most country data omissions (number of countries)



Source: World Bank; Fitch Solutions

From a geographical perspective, the maps shown in the Annex (Maps section) illustrate where sovereign ESG data omissions are most common. Unsurprisingly, following the above analysis, data omissions are most obvious for environmental indicators (the darker the colour on the maps, the more omissions there are), and are most widespread in Africa, South Asia and parts of Latin America. Comparatively, there are slightly fewer data omissions for social and especially governance indicators (as shown by the lighter colouring of this latter map). Data omissions – especially for social indicators – are most likely to be prevalent in Africa.

At a company level, ESG data gaps are also most common in the environmental and social categories. Analysis by the Future of Sustainable Data Alliance published in October 2022, shows that a third of environmental indicators have data gaps. This share has fallen from 40% in 2021, which makes environment the second-most problematic category after social. The share of social indicators with gaps actually rose from just over 30% in 2021 to nearly 40% in 2022, making it the category with the most ESG data gaps at company level.

Fig 4.6: Company ESG data – share of indicators with data gaps, % comparison of proportion of data gaps and holes in 2021 vs 2022

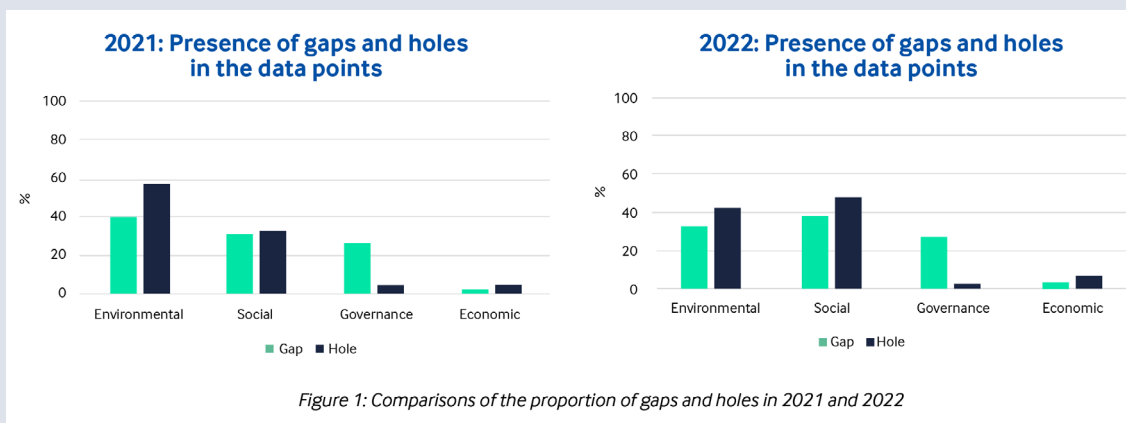


Figure 1: Comparisons of the proportion of gaps and holes in 2021 and 2022

Source: "Corporate ESG Data Gaps & Holes", Future of Sustainable Data Alliance, 2022

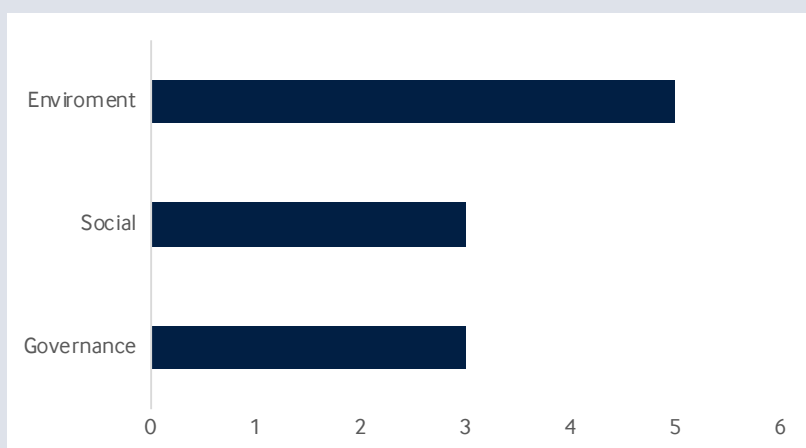
Note: Data gap definition: a framework exists and data sets are requested and collected but not adequately populated. Data hole definition: limited framework in place and uncertainty about what data is needed or would be most useful.

Assessing MSCI’s ESG corporate metrics, it is noteworthy that environmental indicators account for half of the categories listed in its framework (see Table 5 in Annex). Data gaps are again an issue: according to MSCI, fewer than 40% of the companies in its ACWI Investable Market Index reported Scope 1 and 2 GHG emissions, while fewer than a quarter reported Scope 3.³²

Lagged data is another major problem for investors trying to assess current and future risks. Even when

ESG data is available for a company or country, the information is at best backward-looking, and at worst comes with a multi-year lag. This is particularly problematic for sovereign data on rapidly changing environmental metrics, such as GHG emissions, deforestation and renewable energy generation. The graph highlights this point, showing that the median data lag for country-level environmental data is five years, compared to three years for both social and governance indicators.

Fig 4.7: Country-level ESG data – median data lags (number of years)



Source: World Bank

Data bias against EMDEs

The screening frameworks typically employed by investors to use ESG data have a structural bias against EMDEs. In this context, the term bias does not suggest that data vendors or investors are biased against EMDEs. However, the methods for creating ESG scores for EMDEs systematically make risk-adjusted returns in EMDEs appear lower, relative to developed economies, than is actually the case. As there is no objective measure of “actual” risk in any country, it is impossible to definitively show that any particular set of risk scores over- or understates risks in a market. Nonetheless, factors such as the high correlation between per capita income and ESG scores³³ suggests (see Fig 3.6) that a country’s income primarily drives ESG scores, rather than varied and nuanced risk-return factors. As a result, investors relying on these ESG scores to filter investment opportunities could be missing out on attractive risk-adjusted returns in EMDEs.

Standard ESG screening and regulatory frameworks were largely created in developed market contexts and are not necessarily appropriate for directing investment to EMDEs. Examples of potential analytical bias against emerging markets that can arise from the use of ESG data include:

- **Ingrained income bias** – A country’s or company’s ESG score is typically highly correlated to that country’s level of economic development. Research by the London Stock Exchange Group shows an 85% correlation between sovereign ESG scores and per capita income. Richer countries typically have stronger institutions, higher levels of equality and thus higher ESG scores, especially regarding governance and social metrics. The ingrained income bias is examined in detail by the World Bank’s Global Program on Sustainability³⁴. While it is hard to assess to what extent ESG scores reflect “actual” risks in EMDEs, such a high degree of correlation with income levels questions how

32 Reported Emission Footprints: The challenge is real, MSCI, 2022
33 Dealing with Income Bias in Sovereign ESG Scores, London Stock Exchange Group, 2022

34 A New Dawn – Rethinking Sovereign ESG, World Bank & JP Morgan, 2021

useful ESG scores are at indicating ESG-specific risks³⁵. It is possible, for instance, that part of the reason that EMDE corporates have lower ESG scores is that smaller firms find it harder to gather and publish comprehensive ESG data³⁶.

- No allowance for transition – ESG taxonomies created in developed economies make little allowance for transitional activities that are required for a just transition¹ away from fossil fuels in many EMDEs. Indeed, the EU Taxonomy uses a binary (“sustainable” or “not sustainable”) classification system for economic activities. Aside from normative judgements about the importance of encouraging transitional activities in EMDEs, this classification approach will often fail to highlight to investors those companies and countries pursuing transitional activities, such as shifting from coal power to natural gas, to investors. Both coal and gas power might be classified as unsustainable in a binary framework due to much higher carbon emissions than renewable energy, even though natural gas is a common bridge fuel for transitioning to renewables.

As an ESG investor told us:

“...for those companies that have high emission intensities, it will take decades to transform them into consumers of more efficient and sustainable energy, and incentives need to be put in place to help these companies accelerate their transition.”

Limited allowance for transitional activities in the EU Taxonomy led to ASEAN creating its own unique set of classifications for the ASEAN Taxonomy for Sustainable Finance. In its “traffic light” classification system, the taxonomy classifies transitional activities as “amber” rather than “red”. This approach is examined in more detail in Chapter 5.

- Not enough focus on momentum – Company- and country-level ESG scores are typically based on absolute data points for the latest time period. Investment opportunities in countries that might have weak scores but that are actually making rapid improvements across certain metrics are unlikely to be highlighted to investors, who tend to look at absolute numbers.

“If regulators want to promote more funding on sustainable development, then they need to help poorer countries. Emerging and frontier markets

should not be measured on ESG performance by absolute numbers but by speed of improvement.”

Senior Investment Manager, Emerging Markets, Tier 1 Asset Management

- Myopic use of data – Some ESG data points receive overwhelming attention, while other data points with arguably equal value are routinely ignored. As an example, historical liability for GHG emissions is a relevant factor in climate negotiations, for instance contributing to more-ambitious net-zero targets by many developed countries³⁸. Nonetheless, the suite of ESG emission scores available in most ESG products are almost exclusively based on the flow of new emissions, with little information about the relevant emissions stock. This biases aggregated emissions scores against industrialising emerging economies in favour of already industrialised, or post-industrial, developed economies. The below chart illustrates this paradox, as China and the EU score at similar levels for emissions per capita (vertical axis), while the EU has generated a far larger share of historic global emissions (horizontal axis).

Other examples include the common focus on territorial GHG emissions, which do not account for emissions embodied in imported products. For example, emissions embodied in the production of manufactured goods are counted only in the producing country (often an EMDE) and not in the consuming country (usually a developed country). According to the World Bank, developed countries outsource around 10% of their emissions in this way.

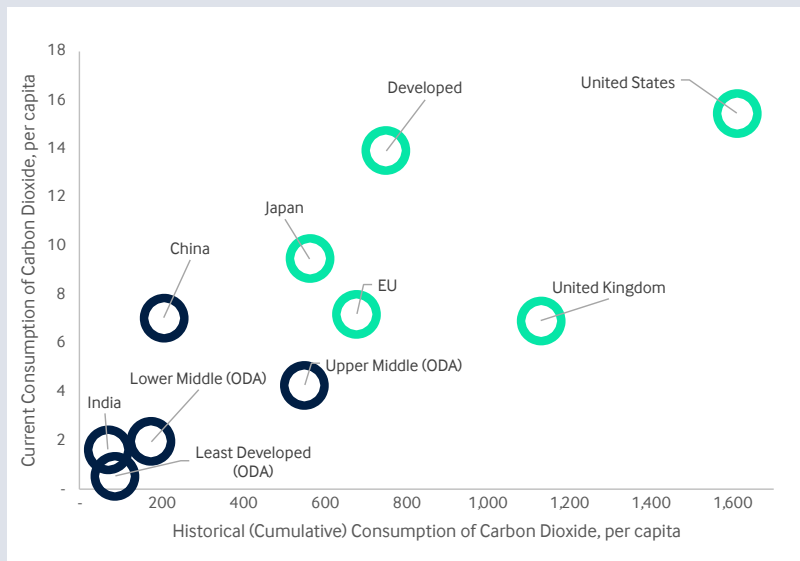
35 Demystifying Sovereign ESG, World Bank, 2020

36 The Influence of Firm Size on the ESG Score, Journal of Business Ethics, 2020

37 Based on the World Bank definition, a “Just Transition for All” puts people and communities at the centre of the energy transition. Just Transition for All initiatives work with stakeholders to mitigate environmental impacts while also supporting impacted people and building a new clean energy future.

38 Net Zero Tracker, 2023

Fig 4.8: Current & historical consumption of carbon dioxide per capita DMs are responsible for a disproportionate share of current and historical emissions

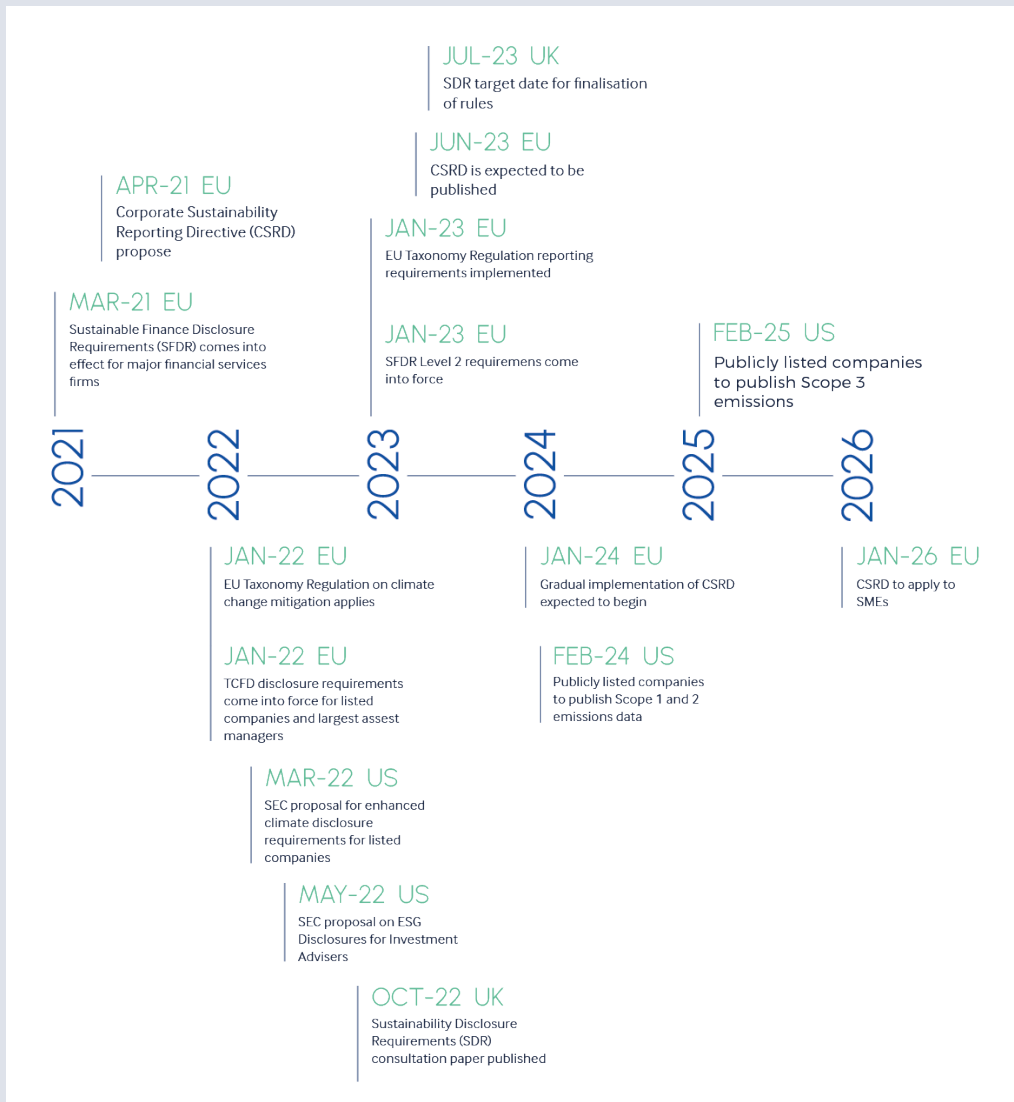


Source: www.tealemery.com; Fitch Solutions

DETERMINANT 2: ESG REGULATIONS IN DEVELOPED MARKETS

ESG regulations in many countries, notably in major economies including the EU, the US and the UK, are expanding in both scope and power. Recent and upcoming landmark regulations are displayed in the below timeline. Table 6 in the Annex shows this in tabular form. The chapter does not extensively describe the content of these regulations, but instead highlights the key impacts that they will have on capital flows to EMDEs.

Fig 4.9: Timeline – landmark ESG regulations in the EU, the US and the UK



Source: European Commission, UK FCA, US SEC, Fitch Solutions

EU: roadmap in place for steadily expanding disclosure requirements

The EU remains at the forefront of implementing ESG and sustainability-related regulations, although both the UK and the US have also made significant strides since 2021. Key EU regulations in the pipeline include the EU Taxonomy, the Sustainable Finance Disclosure Regulation (SFDR) and the Corporate Sustainability Reporting Directive (CSRD).

- EU Taxonomy: All ESG sustainability regulation in

the bloc is supported by the “EU taxonomy of sustainable economic activities” (EU Taxonomy). The taxonomy is the European Commission’s main way of preventing “greenwashing”, because it defines criteria for determining whether an activity can be described as “sustainable”³⁹.

- SFDR: The SFDR implemented mandatory ESG disclosure obligations for asset managers and some other financial market participants. A large part of the SFDR’s reporting requirements applies to all asset managers, whether or not they have an

<?> EU Taxonomy for Sustainable Activities, European Commission, 2023

express ESG or sustainability focus. The first stage of the SFDR came into force in January 2022 and the second phase was implemented in January 2023⁴⁰. A key part of the SFDR is the classification of all funds into one of three categories:

- Article 6 funds: Do not significantly integrate ESG or sustainability considerations into their decision-making process.
- Article 8 funds: Use strategies that promote ESG factors in investments.
- Article 9 funds: Use strategies that have sustainable investments as the primary objective.
- CSRD: The CSRD will require affected firms to report on how their operations are impacted by ESG factors (financial materiality) and how their operations impact sustainability (double materiality), which would be a significant expansion in scope. The requirements will apply to 50,000 companies across the EU when fully implemented in 2026, accounting for around three-quarters of total company turnover in the bloc⁴¹. Impacted companies will include all EU-listed firms and large companies⁴².

UK: sustainability disclosure requirements taking shape

In the UK, the Financial Conduct Authority (FCA) has accelerated progress towards more-stringent regulation of ESG disclosures through the Sustainability Disclosure Requirements (SDR) consultation, which was published in October 2022 and closed at the end of January 2023. The FCA aims to publish the final set of rules by mid-2023.⁴³

The main impacts of the FCA proposal would be to make UK asset managers submit more-detailed ESG information about their products. There would be tighter restrictions and definitions for the use of terms including “ESG”, “green” and “sustainable” in product names and marketing. More disclosures would be required on the sustainability characteristics of ESG and sustainability-related products for consumers. This includes the incorporation of double materiality factors, such as for “Sustainable Impact” funds.

UK asset managers would also have to classify all of their funds into one of four groups:⁴⁴

- **No sustainable label:** invests in assets that do not meet the criteria for a sustainable label;

- **Sustainable focus:** invests in assets that could reasonably be considered “sustainable” or that align with a sustainability theme, in line with the product’s objective;
- **Sustainable improver:** invests in assets that are on a path to becoming more sustainable over time, including through the stewardship influence of the product provider;
- **Sustainable impact:** Products that aim to achieve a positive, measurable real-world impact.

US: SEC accelerated regulatory momentum in 2022

Meanwhile, in the US, previously a laggard in terms of ESG reporting requirements, the SEC proposed three key new rules in 2022, which would significantly expand the ESG and sustainability reporting requirements for listed firms if they survive legal and legislative challenges in 2023. Two are aimed at tackling greenwashing in the asset management industry (“ESG Disclosures for Investment Advisers” and amendments to the fund “Names Rule”) and another is designed to increase emissions disclosures by publicly listed companies (“Climate Disclosure Bill”).

- **ESG Disclosures for Investment Advisers:** In May 2022, the SEC proposed requiring enhanced disclosures on the sustainability and ESG strategies in fund prospectuses, annual reports and adviser brochures. For instance, this would include a standard table for ESG funds to disclose information allowing investors to compare ESG funds. The level of detail required in disclosures would depend on the degree to which ESG factors are advertised as core to a fund’s strategy. The SEC proposes three categories of ESG funds: Integration Funds (ESG factors are included in the fund’s analysis, but are not decisive), ESG-Focused Funds (ESG factors are the central focus of the fund’s analysis), and Impact Funds (the fund explicitly targets improvements in specific ESG metrics such as emissions or social outcomes)⁴⁵.
- **Fund Names Rule:** In May 2022, the SEC also suggested extending an existing “Names Rule” for funds to ESG and sustainability-labelled funds. This would require funds that fall under the three ESG categories listed above to invest 80% of their assets in investments that are aligned with the fund name⁴⁶.
- **Climate Disclosure Bill:** In March 2022, the SEC proposed a timeline for expanding the amount of

40 Eurosif, 2023]

41 Corporate Sustainability Reporting, European Commission, 2023

42The CSRD classifies a large company as one that meets two out of three of the following criteria: more than 250 employees, a turnover of over €40 million and over €20m total assets

43 SDR and Investment Labels, FCA, 2023

44 Improving Consumer Comprehension of Financial Sustainability Disclosures, FCA, 2022

45 SEC Proposes to Enhance Disclosures by Certain Investment Advisers and Investment Companies

46 Amendments to the Fund Names Rule, SEC, 2022

47 SEC Proposes Rules to Enhance and Standardise Climate-Related Disclosures for Investors, SEC, 2022

climate-related data that public companies are required to disclose, and increasing the number of public companies that are subject to these requirements. The bill would require all publicly listed US entities to publish Scope 1 and 2 emissions data by 2024 and Scope 3 by 2025. The largest listed companies would be subject to the earliest reporting deadline, with smaller firms given more time before reporting is required⁴⁷.

Overlapping, but not identical aims

In broad terms, the existing and proposed regulations in the EU, the US and the UK have two aims:

- To prevent greenwashing: Regulators in the EU, the UK and the US are attempting to tackle greenwashing in the financial services industry. New naming conventions are to be implemented in all three jurisdictions, which will require asset managers to state more precisely the investment objective of their funds. For instance, in the UK, the FCA has proposed that ESG-labelled funds must commit to aligning with one of three categories (Sustainable Focus, Sustainable Improver or Sustainable Impact) and has provided an accompanying taxonomy to define these labels. In the EU, funds will be classified as compliant to either Article 6 (non-green funds), 7 (integration funds) or 8 (impact funds).
- To expand the scale and scope of ESG disclosures: Regulators are also seeking to expand the amount of ESG-related data that local firms are required to publish. For instance, the SEC's Climate Disclosure Bill would require all publicly listed US entities to publish Scope 1 and 2 emissions data by 2024 and Scope 3 by 2025. In the EU, the CSRD will eventually require most firms in the bloc to report regularly on their environmental and social impact activities.

One of the main differences between the ESG and sustainability reporting frameworks taking shape in the EU, the US and the UK is the approach to what is material for companies to disclose. In the US, financial materiality will remain the main aim of ESG reporting and thus ESG factors only need to be reported if they could impact the reporting company's enterprise value. While this does include emissions data, it can exclude other factors that influence the company's sustainability impact, such as the firm's gender pay gap or negative impacts on biodiversity-sensitive areas¹.

In the EU, the CSRD and SFDR adopt a "double materiality" approach, which will be a significant expansion in scope from the narrower financial materiality approach previously used by most firms in the bloc. In

addition to financial materiality, companies are required to report on the firm or financial product's "Principal Adverse Impacts". These are defined as "negative, material, or likely to be material effects on sustainability factors that are caused, compounded by, or directly linked to investment decisions and advice performed by the legal entity". The EU has classified 64 adverse impact indicators that must be calculated and 18 of these will be compulsory to report. These sustainability indicators are spread across environmental (for example, GHG emissions, water pollution), social (for example, gender pay gap, exposure to controversial weapons) and governance (for example, corruption score, use of tax havens) categories².

Regulatory impact on capital flows to EMDEs

Most of the capital that flows into EMDEs stems from developed markets and is thus subject to regulations in developed markets. In 2021, developed markets accounted for almost three-quarters (74%) of all foreign direct investment outflows. Changes to developed market regulations thus have the potential to greatly impact allocation of capital to EMDEs³.

One of the consequences of these new regulations will be the increase in the cost of providing adequate ESG disclosures to regulators. This was a recurring theme that came out of the interviews conducted with asset managers during this research. Firms operating in the EU, the US and the UK will have a greater burden of proof to satisfy their respective regulators that they are compliant with ESG disclosure requirements. There are also significant differences between regulations being drafted and implemented in these three jurisdictions, which increases both compliance costs and the risks of investing in markets with weak ESG data, such as in many EMDEs.

In November 2022, major European financial market industry bodies, the European Fund and Asset Management Association (EFAMA) and the European Sustainable Investment Forum (Eurosif) raised significant concerns with the European Commission regarding a lack of clarity and potential compliance burden that existing SFDR regulatory proposals will impose on their members.⁴

"A developed market regulatory mentality is being exposed on EMDEs. Regulators need to be realistic, EMDEs are starting from a low base."

Senior Investment Manager, Emerging Markets, Tier 1
Asset Management

- More-stringent ESG reporting requirements are

48 ESG Investing Needs to Expand its Definition of Materiality, Stanford Social Innovation Review, 2022
49 Sustainability-related Disclosure in the Financial Services Sector, European Commission, 2023

50 World Investment Report 2022, UNCTAD
51 SFDR Clarifications Could Cause Huge Burden for Asset Managers, Responsible Investor, 2022

likely to increase the compliance risks for asset managers and non-financial firms investing in EMDEs that have limited ESG data disclosure. The reality is that, in many cases, investment into EMDEs is currently happening in spite of the data challenges and regulations described above. Should US firms be required to provide Scope 3 GHG emissions data for their global supply chain in 2025, as is currently proposed, this will increase the significance of firms involved in their supply chain disclosing reliable emissions data. If a listed US firm includes an EMDE firm in its global supply chain, then that US firm will need to provide data on the GHG emissions from this part of its supply chain in order to fully report Scope 3 emissions. Limited or unreliable GHG reporting by the EMDE-based firm would undermine the US firm's ability to comply with its US reporting requirements. US firms will have an incentive to include only firms in their supply chain that have reliable GHG reporting, ideally aligned to global reporting frameworks such as the TCFD, which may make them less likely to invest in some EMDEs.

"With the SEC Climate Disclosure Bill firms will have to report information, not just in some (vague) fashion within a corporate social responsibility report. Firms will have to say, here's the numbers and here's what they are. And they have to be assured...It's huge. It would be a big change, a big move."

Senior executive, US Asset Management Fund

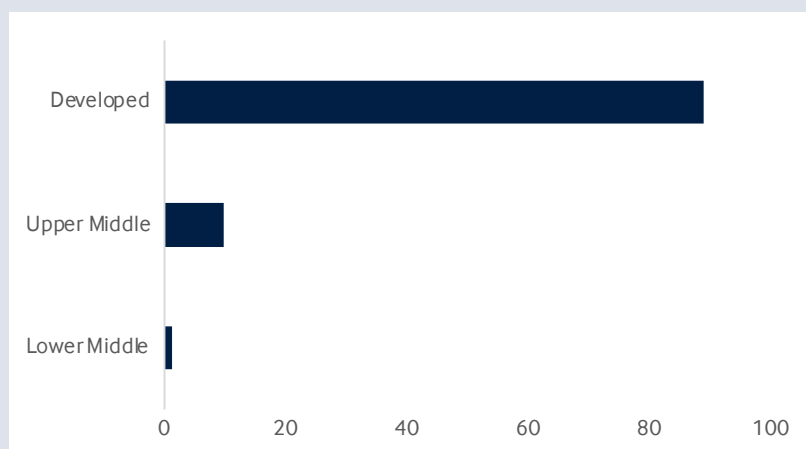
At the same time, asset managers will be under increased pressure to prove to regulators that ESG-labelled funds achieve investment outcomes aligned with local ESG taxonomies. An EU fund labelled as an "Article 9" will be required to show that assets in its portfolio are improving their sustainability impact metrics (for example, through GHG emissions, impact on water quality, gender pay gaps). This will again raise the compliance risks associated with weak ESG data collection and disclosure.

Listening for an emerging market voice

An absence of input by EMDE-based stakeholders in the drafting of these regulations only serves to increase the potential for capital diversion. Landmark regulations such as those shown in the timeline above include extensive consultation processes, which are intended to represent feedback from key stakeholders. Indeed, the SEC's climate disclosure proposals made in March 2022 were followed by a 90-day consultation window, which was eventually extended until November 2022. At the time of publication, the SEC is working to incorporate and address feedback gathered during the consultation. In theory, the consultations are open to any stakeholder, regardless of nationality.

However, regulators from developed economies typically have far greater capacity to contribute to international or multilateral consultations. This means that even when consultations are open to stakeholders from many developed and EMDEs, the developed market voice still tends to dominate. Data from the PRI shows that 89% of responses to a consultation paper

Fig 4.10: Principles for Responsible Investing – Responses to consultation on "PRI Strategic Plan 2021-24" by country income level (% of total)



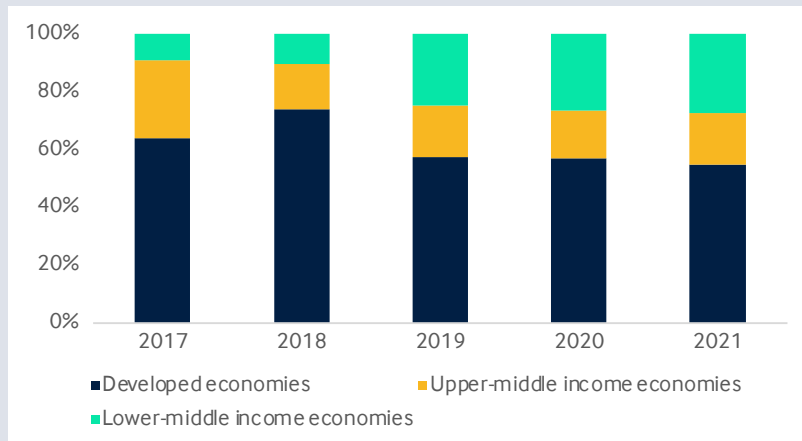
Source: PRI

outlining the organisation’s strategy for 2021-2024 came from developed countries. Only 12 EMDEs contributed to the consultation and two of them (Brazil and China) accounted for more than half of all EMDE responses.

Moreover, international ESG reporting frameworks such as the TCFD were originally designed and

adopted by developed markets. This is illustrated by the much slower pace at which stock exchanges in EMDEs have joined the TCFD network as supporters. Developed markets dominate the list of supporters and this dominance was particularly extreme in the early years of the network, when the reporting framework was created.

Fig 4.11: TCFD supporters – share of total, %



Source: UN Sustainable Stock Exchanges Initiative

CHAPTER 5: SOLUTIONS – MITIGATING CAPITAL DIVERSION FROM EMDEs

This chapter outlines ways in which ongoing and future capital diversion from EMDEs can be mitigated through changes to the existing ESG investment paradigm. Solutions are grouped into three broad categories, each of which is discussed in more detail below:

- Reforming EMDE market disclosures and frameworks
- New data collection methods and sources

- Innovative ESG investment products

These solutions draw heavily from existing examples of how market participants are currently navigating ESG data and regulations. This chapter includes case studies, which are often geography- or issue-specific solutions, and have been chosen because they could be scaled and perhaps replicated to address the broader ESG determinants of capital diversion from EMDEs.

1. REFORMING EMDE MARKET DISCLOSURES AND FRAMEWORKS

Expanding and improving the quality of ESG reporting across EMDEs will help to reduce capital diversion caused by ESG mainstreaming. Enhanced ESG reporting would serve to increase the availability of data to verify ESG performance, as discussed in Chapter 4. In particular, more comparable ESG data would reduce the perceived risks of investing in EMDE assets. More widespread and standardised reporting of ESG metrics by companies in EMDEs would prevent some of these assets from being filtered out of investment screening processes due to data gaps.

In this section of the report, we highlight a number of case studies that support the aims of expanding and improving the quality of ESG reporting:

- The adoption of the international reporting framework created by the Task Force on Climate-related Financial Disclosures (TCFD) highlights how international cooperation can encourage the standardisation of reporting norms.
- The ASEAN Taxonomy for Sustainable Finance demonstrates how such norms can be adapted to more regional contexts.

- The EU-China Common Taxonomy highlights how regulators can work together to improve the comparability of respective ESG reporting frameworks.
- Initiatives such as the UN Sustainable Stock Exchanges can support local stock exchanges by providing guidance and capacity building support on ESG reporting.

“Improving the quality of the data and getting companies to disclose more information is important in improving access to investors. I don’t think EMDEs need to be necessarily at a disadvantage for those companies that want to disclose information. Many want to be noticed and meet global standards.”

Former senior executive, Dow Jones S&P

The International Financial Reporting Standards (IFRS) Foundation is leading a wide-ranging initiative to standardise ESG reporting frameworks. Its general (non-ESG) financial reporting standards are already used in 140 countries. In November 2021, IFRS

announced the creation of the International Sustainability Standards Board (ISSB), which aims to unify a variety of different ESG-related reporting frameworks to provide firms with a single framework for reporting climate and other sustainability risks. In March 2022, the ISSB made preliminary proposals and has since been developing the plan for a public consultation on these proposals, which has yet to begin. This provides an avenue for EMDE stakeholders to voice their perspectives on how the proposals could be amended

to reduce any adverse impacts on investment into their respective economies. The final set of new standards are scheduled for release in 2023⁵². As of January 2023, it appears that the ISSB recommendations will maintain the IFRS’ pre-existing approach of only requiring firms to report on financial materiality.⁵³ This is in line with the SEC recommendations, but contrasts to the EU’s more far-reaching double materiality requirements for local firms, embodied in the EU’s SFDR and CSRD.



The ISSB could accelerate the adoption of ESG reporting norms in EMDEs, given that some regulators, including in Brazil, Malaysia and South Africa, have already been receptive to some of the existing frameworks that will be incorporated into the ISSB. In particular, regulators have been quick to adopt the guidelines for the reporting of environmental performance outlined by TCFD.

From a slightly different perspective, UNCTAD’s International Standards of Accounting and Reporting

(ISAR) programme is working to align sustainability reporting through its Guidance on Core Indicators for Sustainability and SDG Reporting (GCI).⁵⁴ The GCI was published in 2016 and updated in 2022 based on three years of consultations, particularly with EMDE stakeholders.⁵⁵ It is specifically designed to assess a company’s contribution to the UN Sustainable Development Goals (SDGs) and operates based on double materiality rather than just financial materiality. As a result, the framework will be particularly useful for investors evaluating impact investments. More generally, the

52 ISSB Consultation on Agenda Priorities, IFRS, 2022

53 ISSB Stakeholders Want More Information about Materiality, Environmental Finance, 2022

54 ISAR website, 2023

55 Guidance on Core Indicators for Sustainability and SDG Impact Reporting, UNCTAD, 2022

GCI will help streamline the process for EMDE entities to report on sustainability issues in a consistent and comparable manner. particularly useful for investors evaluating impact investments. More generally, the

GCI will help streamline the process for EMDE entities to report on sustainability issues in a consistent and comparable manner.

CASE STUDY: RAPID ADOPTION OF TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

Significance: TCFD is an example of how international cooperation can lead to the rapid rollout of standardised ESG reporting norms in EMDEs.

Summary: In 2015, the Financial Stability Board, which is an international body that monitors and makes recommendations about the global financial system, established the TCFD. Its aim is to improve the reporting of climate-related financial information in order to help financial markets more accurately price risk. In 2017, the TCFD released its recommendations on the types of information companies should disclose to support the assessing and pricing of climate change risks.

Global adoption of the TCFD framework has accelerated in recent years. With respect to EMDEs, an increasing number of governments,

regulators and stock exchanges are incorporating TCFD recommendations into laws, rules and guidance on climate-related financial disclosure, or reference the recommendations as a basis for their disclosure requirements. Of the 37 EMDE stock exchanges that are members of the Sustainable Stock Exchanges Initiative, 15 are now supporters of the TCFD framework.

Table 7 in the Annex illustrates recent developments towards integrating TCFD regulations in a variety of major emerging economies including India, Egypt, South Africa and Thailand. While in Egypt TCFD guidelines have been fully incorporated into local regulations, in South Africa regulatory guidance only incorporates aspects of TCFD recommendations. This illustrates that TCFD guidelines can be incorporated into frameworks to best suit the local context.

Existing frameworks require reform

Expanding mainstream ESG reporting frameworks to EMDEs is not the whole solution. While mainstream reporting frameworks would partially mitigate ESG data gaps, the other problems with ESG data outlined in Chapter 4 would be unresolved. Most glaringly, the wholesale importing of developed market ESG frameworks would “lock in” inherent biases against investing in emerging economies.

Window of opportunity to improve global reporting norms

ESG taxonomies around the world are still evolving and this creates a window of opportunity for EMDEs to help shape global reporting norms. The map below illustrates the early stage of ESG taxonomy development around the world. Even in the EU, which is the jurisdic-

tion most advanced in its journey towards implementing comprehensive ESG reporting frameworks, there has been significant pushback from regional stakeholders that could result in amendments to regulations. As mentioned above, European financial industry associations such as EFAMA and Eurosif have written to the European Commission, highlighting their concerns about the impending regulatory burden for their members. Specifically, the associations cite the administrative costs of showing that each fund satisfies the criteria for Article 8 and 9 designation, as laid out in the SFDR.

The Commission is due to respond to these comments in early 2023⁵⁶. In other major economies including the US and the UK, ESG taxonomies and reporting requirements are still at their formative stage.

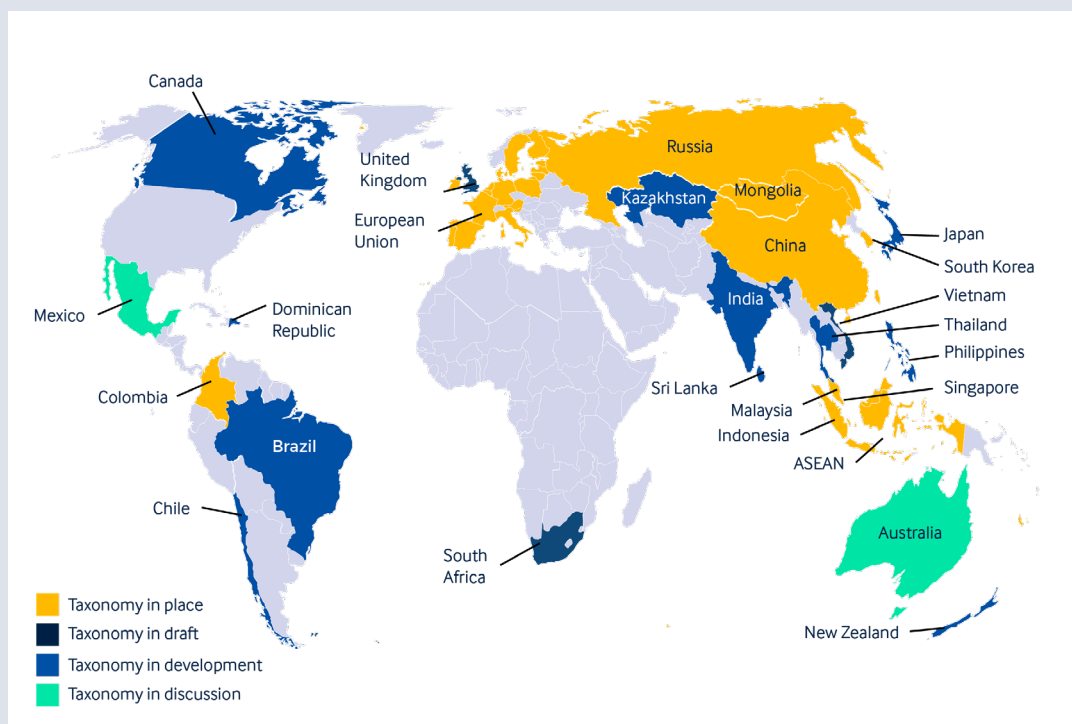
If represented at regulatory consultations, stakeholders in EMDEs could encourage developed market

56 SFDR Clarifications Could Cause Huge Burden for Asset Managers, Responsible Investor, 2022

regulators to take a greater account of the impact of local ESG regulations on investment to their markets. The ISSB's aforementioned programme to unify ESG reporting guidelines began with this approach, as a "Technical Readiness" Working Group included EMDE stakeholders. Moreover, the ISSB Partnership Frame-

work intends to have "tailored jurisdictional engagement in selected developing and emerging economies".⁵⁷ It is important that EMDE opinions continue to be integrated during the later stages of the programme.

Map 5.1: Status of ESG taxonomy development around the world⁵⁸



Source: Climate Bonds Initiative; Fitch Solutions

Importance of adaptation to local contexts

In addition to lobbying for developed economy ESG reporting standards to take any impact on EMDEs into account, regulators in EMDEs need to have the ability to adapt these frameworks before adopting them. This issue is increasingly being raised by stakeholders in both developed and emerging economies. At the annual Sibos (a global financial industry network organised by SWIFT) conference in Amsterdam in September 2022, representatives from institutions including Standard Chartered, Citigroup and Ernst & Young highlighted the need for adapting developed market ESG reporting standards for EMDEs. The companies argued that ESG standards need to allow for different starting points in energy transition in

EMDEs, or else capital flows to profitable and climate-positive transitional projects in these countries could be disrupted⁵⁹.

Furthermore, in September 2022, the International Trade and Forfeiting Association (ITFA) published a report stating that ESG reporting standards created in developed economies were primarily created with large, multinational firms in mind. The report argued these standards are unworkable for SMEs in many developing economies, which do not have sufficient reporting capacity.⁶⁰

Admittedly, tailoring ESG reporting frameworks to local contexts will make it more difficult for investors to compare ESG data across countries. However, this

57 Partnership Framework for Capacity Building in Developing and Emerging Economies, IFRS, 2022
58 Sustainable Debt Market, Climate Bonds Initiative, 2022

59 Global Banks Call for Flexible Green Finance Approach in Emerging Markets, S&P Global, 2022
60 Sustainable Trade Finance and Africa Trade, ITFA, 2022

challenge can be partly mitigated by (i) developing regional reporting standards in order to have enough weight behind a framework and (ii) clearly signposting differences to mainstream frameworks, such as the EU Taxonomy, to international investors. These efforts combined would encourage developed market frameworks to recognise these variations and create contingencies and accommodations for them. These two approaches are elaborated on below.

Regional frameworks increase volume of EMDE voice

The development of regional reporting norms allows the local context to be reflected, while at the same time limiting country-specific variations in reporting standards. Recent regional reporting frameworks include those published by ASEAN and the West African and Economic Monetary Union (WAEMU). By adopting a regional framework, ASEAN has created a unique taxonomy that applies to a large enough share of the global economy (3.4% of global GDP in 2021) for global regulators and investors to take notice. While the WAEMU taxonomy has far less economic clout, it has nonetheless paved the way for inaugural green

CASE STUDY: ASEAN TAXONOMY

Significance: The ASEAN Taxonomy for Sustainable Finance is an example of how international ESG reporting norms can be adapted to local contexts.

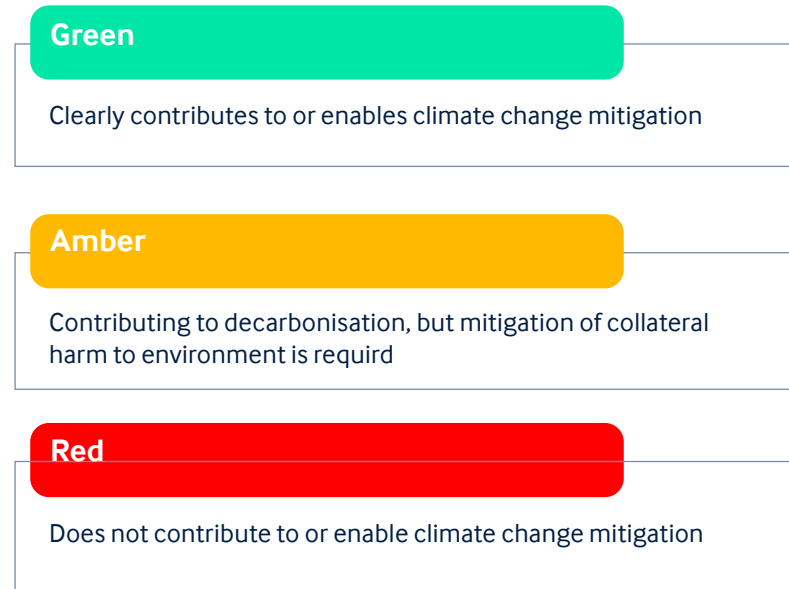
Summary: ASEAN released the first version of the taxonomy in November 2021. Although the ASEAN Taxonomy has environmental objectives that broadly align with the EU Taxonomy, there are differences in the detail. Most significantly, the ASEAN Taxonomy uses a multi-tiered approach to classify the sustainability of an activity, which contrasts to the binary (sustainable/not sustainable) approach inherent in the EU Taxonomy. ASEAN uses a “traffic light” system (green, amber or red) to classify how much an activity contributes towards the taxonomy’s environmental objectives (climate adaptation, mitigation, protection of ecosystems, and promotion of resource resilience).

This multi-tiered approach makes greater

allowance for the different economic development of the 10 ASEAN members and their respective pathways to lower-carbon energy systems. For example, natural gas power generation is classified as a transitional (amber) activity rather than unsustainable (red) activity like coal power. This classification tiering allows coal-dominant power markets such as Indonesia to encourage investment in natural gas as a lower-carbon bridge fuel, while still deterring investment in coal power and encouraging investment in sustainable (green) renewable energy capacity.

The Taxonomy intends to publish a more detailed set of “Plus” criteria, which will provide further detail on how to classify individual activities. For instance, while fully electric vehicles will be classed as sustainable (green), emission thresholds will be specified for categorising hybrid vehicles into transitional (amber) and unsustainable (red) categories.

Fig 5.2: ASEAN Taxonomy – “traffic light” classification of activities



Source: ASEAN Sustainable Finance Taxonomy

Signposting helps investors navigate different reporting frameworks

Guidance can help international investors compare different ESG reporting frameworks and thereby lower the cost of cross-border investments⁶¹. Cooperation between country or regional regulators can facilitate this signposting by highlighting similarities and differences compared to mainstream frameworks such as the EU Taxonomy.

To this end, the European Commission has created the International Platform on Sustainable Finance (IPSF), which provides a forum for dialogue between policy-makers that are in charge of developing sustainable finance regulatory measures globally. IPSF members can collaborate, exchange and disseminate information to “promote best practices, compare their

different initiatives and identify barriers and opportunities of sustainable finance, while respecting national and regional contexts”. The 24 national IPSF members include seven EMDEs (China, India, Indonesia, Kenya, Malaysia, Morocco and Senegal).

The IPSF’s flagship contribution thus far has been the Common Ground Taxonomy Instruction Report, which was published in November 2021. The Common Ground Taxonomy (CGT) highlights areas of overlap and differences between the EU and China’s classifications of climate change mitigation activities in their respective green taxonomies. Investors based in the EU will still be subject to the EU’s own taxonomy, but the CGT will make it easier for them to assess and report on whether companies based in China are aligned with EU definitions for sustainable activities.

CASE STUDY: EU-CHINA COMMON GROUND TAXONOMY

Significance: EU-China CGT is the most prominent example of regulators working together to improve the comparability of respective ESG reporting frameworks. The EU is at the forefront of ESG reporting regulations, while China has by far the largest sustainable finance assets under management among EMDEs.

Summary: EU-China CGT does not advocate the adoption of an identical ESG-reporting framework in both the EU and China. Instead, it highlights and explains the similarities and differences between the

jurisdictions’ existing green taxonomies for investors.

Although China and the EU’s taxonomies have converged in recent years – for instance, China removed clean coal from the list of activities eligible for green bonds in 2021 – the taxonomies retain significant differences. The CGT is intended to facilitate the comparability and interoperability of the two taxonomies. If replicated elsewhere in the world, it should serve to reduce confusion (and costs) of investing in EMDEs.

Rollout reporting requirements

Once a taxonomy has been created, disclosures can be encouraged via incentives and regulations (for example, creation of green bond investment regulations or legal disclosure requirements for listed firms). Legally mandating extensive ESG reporting from local firms might be unfeasible in some of the least-developed economies in the world, where many firms have

limited reporting resources available. In those cases, positive incentives can be effective in encouraging greater ESG data disclosures from those firms that have the capacity to meet voluntary standards⁶². Thailand has developed strong ESG reporting and this was initially driven by voluntary standards.

61 Annual Report 2022, International Platform on Sustainable Finance

62 Toolkits for Policymakers to Green the Financial System, World Bank, 2021

CASE STUDY: ENCOURAGING ESG DISCLOSURES IN THAILAND

Significance: Encouraging local firms to buy into new ESG reporting frameworks is especially important in EMDEs, where the relative administrative cost for companies can be high. Thai authorities have shown that positive incentives can be successful in increasing ESG disclosures by local businesses.

Summary: A combination of approaches has been used to encourage local firms to enhance their ESG disclosures. As early as 2014, corporate social responsibility reporting was made mandatory for firms listed on the Stock Exchange of Thailand (SET), while the reporting of ESG metrics was left voluntary. ESG reporting only became mandatory for listed firms in

January 2021. Until that point, the SET encouraged firms to improve disclosure by highlighting the resulting investment that disclosure can attract. The SET started publishing the Thailand Sustainability Investment (THSI) list in 2015, which is used by institutional investors, such as the Government Pension Fund, to guide investment decisions. The SET launched a corresponding sustainability-themed index known as the SETTHSI in 2018.

Thailand has the fourth-highest number of companies in the Dow Jones Sustainability EM Index.

Capacity building facilitates regulatory rollout

The regulatory steps outlined above will be challenging for many lower-middle and least-developed economies, where institutional capacity is typically weaker than in upper-middle income countries. Adapting international ESG frameworks to local contexts, signposting differences to international investors and driving ESG compliance among local companies have to compete with other government functions for scarce institutional resources. At the same time, local issuers and investors have more-limited reporting resources than their peers in developed economies. This issue was highlighted with respect to African SMEs by a 2022 report published by IFTA.⁶³

Assistance with capacity building will become essential if ESG reporting frameworks are to be developed and implemented in the majority of EMDEs⁶⁴. This capacity building can take many forms and the following list, while not exhaustive, provides examples of existing programmes:

- **Regional trade blocs:** As highlighted above, Benin and Togo benefitted from WAEMU's capacity to draft a regional sustainability framework. Benin subsequently issued Africa's first sovereign sustainability bond in July 2021 (USD588mn), while Ecobank of Togo issued a USD350mn sustainability bond in June 2021.

- **Developed market regulators:** The precedent of the IPSF's EU-China CGT suggests that the IPSF can help other EMDEs signpost differences between their local taxonomies and mainstream frameworks to investors.
- **UN Sustainable Stock Exchanges initiative:** The UN's Sustainable Stock Exchanges Initiative provides model guidance and technical assistance to stock exchanges in EMDEs seeking to develop and implement their ESG reporting guidelines for local firms (see case study, map and Table 8 in Annex).
- **World Bank toolkits:** The World Bank published a range of resources aimed at lowering the costs of developing sustainable finance regulations in EMDEs¹. The toolkit provides an extensive overview of approaches available to public authorities for promoting green finance and managing climate-related risks. The toolkit summarises the key characteristics of each approach, provides roadmaps and references sources for more-detailed guidance.
- **ISSB Partnership Framework** – To support the implementation of the ISSB's impending new ESG reporting framework in EMDEs, the organisation has developed a "Partnership Framework" that will

⁶³ Sustainable Trade Finance and Africa Trade, ITFA, 2022

⁶⁴ Deepening ESG Focus in Emerging Markets will Spur Growth in Sustainable Debt, Moody's 2020

⁶⁵ Toolkits for Policymakers to Green the Financial System, World Bank, 2021

engage with select EMDE stakeholders, create structured partnerships with EMDE industry organisations and promote key initiatives that help translate the ISSB ambition into tangible action.⁶⁶

- Sustainable Development Goal reporting toolkit – The UN Sustainable Development Goal 12.6.1⁶⁷ aims to increase the number of companies publishing sustainability reports by 2030. In support of this goal, UNCTAD’s ISAR programme

produced its GCI in 2016, with an updated version published in 2022. The GCI is a toolkit for private sector firms to enhance sustainability reporting based on double materiality. ISAR has also published guidance for governments on how to align this company-level SDG data with relevant SDG indicators for country-level reporting, which will enhance the availability of sovereign-level sustainability data.

CASE STUDY: ASSISTANCE WITH CAPACITY BUILDING – UN SUSTAINABLE STOCK EXCHANGES INITIATIVE

Significance: The UN Sustainable Stock Exchanges initiative has helped to increase the number of stock exchanges around the world that have written ESG reporting guidance, including 29 based in EMDEs.

Summary: The UN Sustainable Stock Exchanges initiative is co-convened by the United Nations Global Compact, PRI, United Nations Conference on Trade and Development (UNCTAD) and United Nations Environment Programme Finance Initiative (UNEP FI).

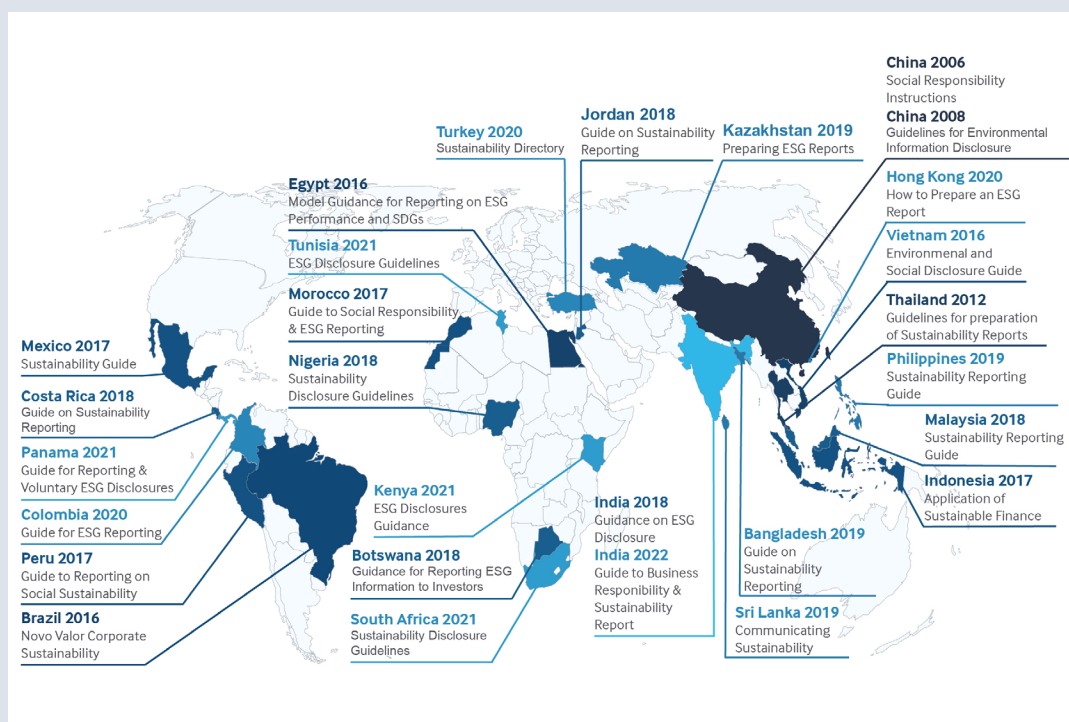
The goal is for all stock exchanges to provide listed companies with guidance on sustainability reporting. The initiative provides a model guidance template for exchanges to begin developing their own guidance. It also provides more-bespoke technical assistance and advisory services to stock exchanges.

In September 2015, when the Sustainable Stock Exchanges initiative launched its model guidance for exchanges, fewer than 10% of the world’s stock exchanges were providing guidance on reporting ESG information for their market. As of October 2022, 67 of the 120 global exchanges tracked by the Sustainable Stock Exchanges had written ESG reporting guidance, 28 of which are based in EMDEs (see Map 5.2).

The initiative’s activities are not only relevant to developed economies and the more-developed EMDEs, it also works with partners in some of the least-developed economies including Rwanda, Tanzania and Uganda. In Rwanda, the Sustainable Stock Exchanges initiative is collaborating with the Rwanda Capital Market Authority and Stock Exchange to revise the country’s Corporate Governance Code and develop ESG reporting guidelines.

⁶⁶ Partnership Framework for Capacity Building in Developing and Emerging Economies, IFRS, 2022
⁶⁷ <https://sdg12hub.org/sdg-12-hub/see-progress-on-sdg-12-by-target/126-sustainability-reporting-businesses>

Map 5.2: EMDE stock exchanges with written ESG reporting guidance



Source: Sustainable Stock Exchanges Initiative, Fitch Solutions

2. NEW DATA COLLECTION METHODS AND SOURCES

Removing some of the bias against EMDEs caused by current ESG data frameworks will require new types of data, not just more data from existing sources. ESG reporting requirements can thus only address part of the data problem. As discussed in Chapter 3, mainstream ESG data and screening frameworks have more problems than just data gaps. Data lags, a lack of forward-looking data and the shortage of transitional data reporting also represent very real challenges, and especially in EMDEs. New techniques for gathering ESG data can help to mitigate the problems around data verification. This part of the chapter highlights a number of examples on how new types of ESG data can help to improve the availability of ESG data in EMDEs.

- The IFC's esgNLP product illustrates that a natural language processing (NLP) tool can analyse vast amounts of unstructured data and text to produce

an accurate ESG score for a company.

- The Transition Pathway Initiative shows how more forward-looking ESG company data can be provided; this would help to profile firms in EMDEs that are rapidly improving their ESG performance.
- The World Wide Fund for Nature's study on geospatial data examines how this can provide significant insights into the environmental performance of specific assets.

AI can reduce cost of gathering ESG data

Technologies such as artificial intelligence (AI) and natural language processing (NLP) can reduce the cost of gathering information from text and data sources, especially company reports. Not all information contained in unstructured company publications is captured and disseminated by ESG data aggregators.

This is particularly the case for EMDEs, where company disclosures are less standardised. Trawling through vast quantities of company reports can thus yield high-value ESG data insights for investors. However, doing this at scale has a high labour cost⁶⁸.

Although the use of AI and NLP to facilitate analysis of company disclosures is at an early stage, indications are that these technologies can both reduce the cost of gathering data from company publications and uncover ESG data that would otherwise be difficult to find covering EMDEs. Amundi and IFC collaborated to develop an ESG-domain-specific NLP application

(esgNLP) in 2021. The programme achieved high levels of accuracy identifying ESG risks from unstructured data and is described in more detail in the case study. In the same study, IFC also references other NLP algorithms, such as one being utilised by UBS Wealth Management, which can reportedly reduce hours of human-led due diligence research on firms to a few seconds, freeing asset managers to focus on other tasks.

It should be noted that using AI for gathering ESG data could disproportionately benefit assessment of those companies that have the resources to publish high

CASE STUDY: IFC AND AMUNDI'S AI PROJECT (ESGNLP)

Significance: IFC's esgNLP illustrates that an NLP tool can analyse vast amounts of unstructured data and text to produce an accurate ESG score for a financial institution.

Summary: In 2021, IFC reported results of an NLP model being developed called esgNLP. The model is Google BERT pretrained and identifies ESG-specific risks in unstructured text data. esgNLP could identify around 1,200 ESG risk terms in text and classify sentences according to positive, negative and neutral ESG sentiment. The pie chart below highlights the type of documents processed by the model.

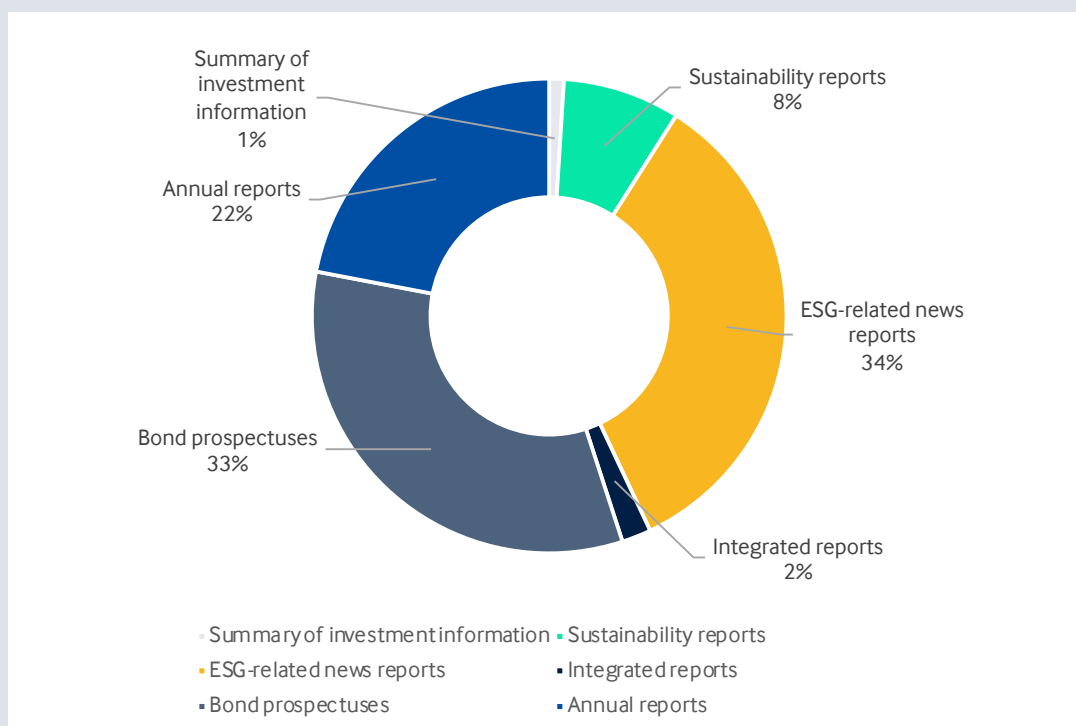
The accuracy of the esgNLP model was tested by comparing Amundi's pre-existing ESG scores for 205 financial institu-

tions around the world with ESG scores generated by the model. The study found that esgNLP sentiment scores were positively correlated with Amundi's aggregate ESG and disaggregated E, S and G scores. Institutions with higher esgNLP sentiment scores also had higher Amundi ESG scores. Overall, the esgNLP model exhibited a strong accuracy of 87%.

IFC does highlight limitations of the NLP process. Most significantly, AI and NLP cannot analyse text or data that has not been published. Fragmented reporting standards and lack of harmonisation of ESG terminologies also complicate sentiment analysis. The scalability of AI and NLP tools will thus benefit from efforts to standardise ESG reporting norms across EMDEs.

⁶⁸ Artificial Intelligence Solutions to Support Environmental, Social and Governance Integration in Emerging Markets, IFC, 2021

Fig 5.3: esgNLP Project – ESG documents processed by type



Source: IFC

New sources of forward-looking data

A lack of forward-looking ESG data means that ESG scores often focus on either weak current or historical ESG metrics. Because it is harder to measure, there is less attention paid to ambitious plans devised by many companies and governments in EMDEs to improve ESG metrics. According to an October 2022 report by the Future of Sustainable Data Alliance, less than 10% of sovereign ESG data is forward-looking, while the rest is either contemporary or backward-looking. This is particularly problematic for environmental metrics, which tend to evolve more quickly than social or governance metrics⁶⁹. Creating forward-looking metrics, particularly for environmental indicators, was a primary recommendation of the OECD’s recent policy guidance on market practices to strengthen ESG investing⁷⁰.

Part of the difficulty in creating forward-looking ESG data is the need to apply subjective assessments of company- or country-level commitments and progress towards stated goals. This process is becoming

easier thanks to work by organisations such as Climate Action Tracker, Transition Pathway Initiative (see below case study) and new initiatives such as the UK Treasury’s Transition Plan Taskforce (TPT).

Climate Action Tracker and Transition Pathway Initiative are non-governmental initiatives, while the TPT is a government-led programme to improve forward-looking data globally. TPT was launched by UK’s Treasury in April 2022 and aims to develop a “gold standard” for an economy-wide decarbonisation strategy. The TPT held a consultation period in May-July 2022 for a “Sector-Neutral Framework” for transition plans and aims to publish a finalised set of disclosure and implementation guidance by the end of 2023. As the TPT will be a UK-specific initiative in the first instance, consultation has thus far been restricted to UK companies and stakeholders. The TPT aims to eventually influence development and the convergence of transition plan disclosures in other countries. To this end, the TPT will be working closely with the ISSB and financial regulators in other jurisdictions.⁷¹

69 Taking Stock of Data in Sovereign ESG Analysis, Future of Sustainable Data Alliance, 2022
70 Policy Guidance on Market Practices to Strengthen ESG Investing and Finance a Climate Transition, OECD, 2022

71 Developing a Gold Standard, Transition Plan Taskforce, 2022

CASE STUDY: TRANSITION PATHWAY INITIATIVE (TPI)

Significance: TPI is a scalable model for providing more forward-looking ESG data at a company level.

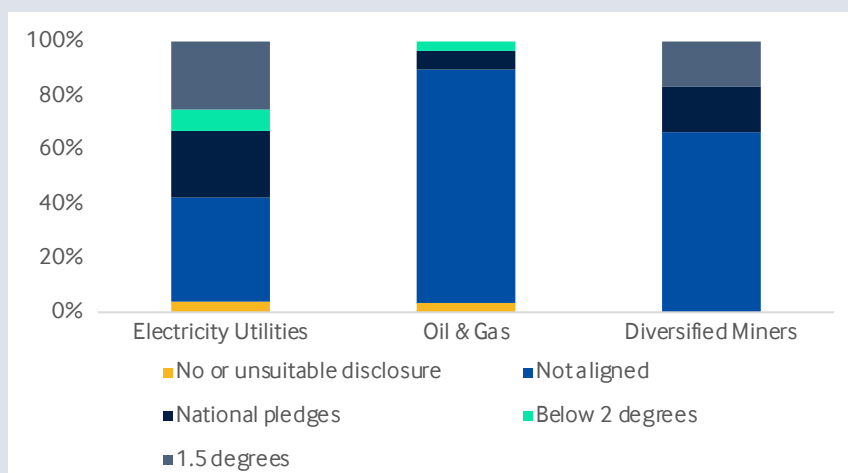
Summary: The Transition Pathway Initiative Global Climate Transition Centre (TPI Centre) was established in June 2022 at the Grantham Research Institute. It is a global initiative supported by asset managers with USD50trn of assets under management.

Aimed at investors, TPI assesses company transitions to a low-carbon economy and aims to improve the visibility and comparability of progress of companies by providing independent, open-access data. As of December 2022, data was available for about 600 companies, spanning 47 countries and accounting for USD10trn in market capitalisation. Around a quarter of the companies analysed by the TPI were based in EMDEs as of January 2023.

The forward-looking element of TPI data stems from comparisons of the planned or expected future carbon emissions of companies with international targets and national pledges, made as part of the 2015 Paris Agreement on climate change. Publicly available information is used to assess the “Management Quality” (governance of GHG emissions and the risks and opportunities arising from any low-carbon transition) and the “Carbon Performance” (a test of the alignment of company targets with Paris Agreement goals) of companies.

As an example, the below chart is taken from TPI’s November 2021 assessment of the carbon emissions performance of energy companies. The study found that electricity utilities showed the best carbon performance among energy firms, while oil and gas companies were on track to transition significantly slower.

Fig 5.4: Energy companies – alignment of carbon emissions performance with 2030 scenarios



*Note: Study covered 140 companies
Source: Transition Pathway Initiative, November 2021*

At a sovereign analysis level, TPI also leads the Assessing Sovereign Climate-related Opportunities and Risks (ASCOR) project. ASCOR aims to create a tool for investors to better understand and compare sovereign exposure to climate risk and how governments plan to transition to a low-carbon economy. ASCOR aims to have identified an initial set of metrics to be used in the tool by early 2023, with its public consultation ongoing at the time of going to press⁷².

Geospatial techniques unlock new types of data

Geospatial techniques are based on the aerial observation (typically via satellites) of ground-based features and activities. Geospatial ESG analysis involves combining these aerial observations with known asset data (location, ownership, function) to provide insight into a specific company, portfolio or geographic area. Geospatial observations can provide real-time insights into important areas of ESG such as GHG emissions, biodiversity protection (for example, deforestation) and climate-related risks such as drought, floods and wildfires, and would be especially relevant in EMDEs, where data gaps are most prevalent⁷³.

“There’s a whole world of geospatial information out there that nobody is paying attention to. I could talk about livestock operations in Colombia, fisheries in Ecuador or infrastructure investment in Africa. I am continually amazed that geospatial analytical capabilities are not built into these projects. The art of where is critical, and a lot of that information is not being used.”

Former senior executive, IFC

Geospatial techniques could significantly improve ESG data for EMDEs in three main ways.

- **Timeliness** – Rather than relying on company reporting schedules, ESG data can be gathered, analysed and disseminated in real time.
- **Independence** – Not only can ESG data be gathered and disseminated in real time, but without any reliance on reporting by companies or governments. This could be the most significant long-term benefit of using geospatial techniques: weak ESG disclosures would no longer prevent an investor from gathering ESG data on an asset. The cost of providing ESG data would also be shifted away from businesses in EMDEs that have limited resources, and onto geospatial firms and the investors that use the data.

“The advantage of geospatial measurements is everything is available and you can hide nothing.”

Senior executive, Geospatial data provider

- **Open source** - this data lends itself well to open source provision of data as a public good. Multilateral, governmental and non-governmental non-profit organisations are often well placed to gather insights from geospatial data, particularly with regards to the environment. According to a study on geospatial ESG data carried out by the World Wide Fund for Nature (WWF) in January 2022, existing open sources of geospatial data are limited, but are expanding rapidly.⁷⁴

There are drawbacks of geospatial techniques for supporting ESG: their cost and the fact that such data would be skewed towards environmental concerns. A senior executive from a geospatial data provider told us that costs will come down in time, and that although most of the data being collected may work to improve information on emissions and biodiversity it would not be suitable in solving gaps for social and governance data. However, as discussed in Chapter 4, most of the data gaps are for environmental indicators.

⁷² A Framework to Assess Sovereign Bond Issuers on Climate Change, Transition Pathway Initiative, 2023
⁷³ Geospatial ESG: The Emerging Application of Geospatial Data for Gaining “Environmental” Insights on the Asset, Corporate and Sovereign Level, WWF, 2022

⁷⁴ Geospatial ESG: The Emerging Application of Geospatial Data for Gaining “Environmental” Insights on the Asset, Corporate and Sovereign Level, WWF, 2022

CASE STUDY: WORLD WIDE FUND FOR NATURE (WWF) STUDY ON GEOSPATIAL ESG

Significance: This study illustrates how geospatial techniques can provide significant insights into the environmental performance of particular assets.

Summary: In January 2022, WWF published a study on how geospatial techniques can enhance environmental data. The study focused on three case studies in Brazil: at asset level (mining operations), company level (soybean production) and national level (Brazil sovereign debt analysis).

Focusing on the mining sector example, 763 mines were identified for the study. Geospatial observations of the mines were compared against existing environmental data on the relevant geographic areas. This included data on environmentally protected areas, key biodiversity areas, World Heritage Sites, ground carbon resources and local forest structure. The process produced a ranking of all mines in terms of what risks they posed to the local environ-

ment. This degree of asset-specific insight would not have been possible using only non-geospatial sources of information.

WWF concluded that it is possible to “generate robust geospatial ESG insights” using current geospatial resources and open source data. The approaches used in Brazil could be used in other geographies to help financial institutions better assess environmental impacts.

Limitations of the geospatial approach were also evident in the report. For instance, the availability of asset-level data determines how easily geospatial techniques can provide insight. Asset ownership information is required in order to link geospatial observations to specific assets, companies and portfolios. The study also illustrated that geospatial resources are currently limited by a variance in temporal consistency, accuracy and spatial resolution.

Adapting screening frameworks

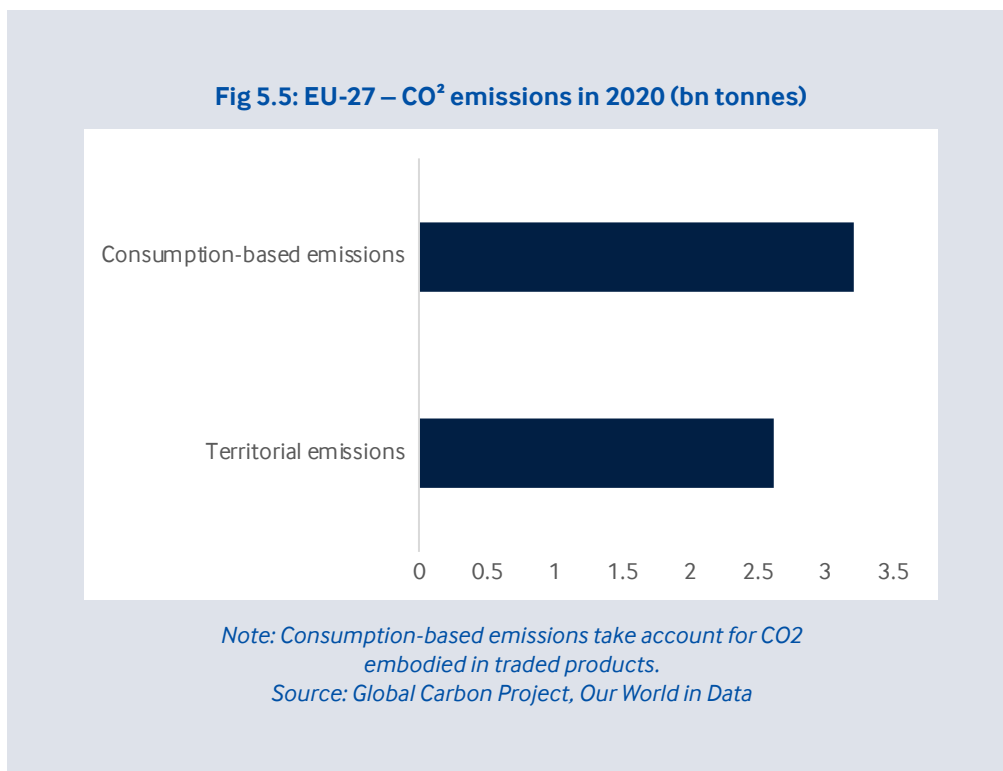
More nuance is required when screening for ESG opportunities in EMDEs. As discussed in Chapter 3, the dominant approach to integrating ESG factors into the investment process is to view ESG as a risk that needs to be mitigated. The majority of ESG ratings products available are inherent “ESG risk ratings”. Using this approach, EMDEs with weak ESG scores are filtered out of the investment selection process. Weaker ESG scores in EMDEs means that many companies in emerging economies will miss out on investment, despite many having made improvements in their ESG performance or having strong sustainability credentials compared to their peers of a similar per capita income.

Below are three potential methods to make screening frameworks better reflect the sustainability performance of underlying assets. All three were recommended by the World Bank’s Global Program on Sustainability in its “Sovereign ESG 2.0” initiative, but this is not intended to be an exhaustive list.

- **Adjust for income** – As discussed in Chapter 4, ESG scores suffer from an ingrained income bias because they are highly correlated to the per capita income level of the respective country. This threatens both an understatement of risk in developed economies and an exaggeration of risk in EMDEs. When comparing ESG scores across different income groups, ESG screens should pay more attention to income- or peer-group adjusted ESG scores.
- **Reward momentum** – Rather than focusing on absolute ESG scores for the latest time period available, ESG screens should pay more attention to the change in ESG scores over time, in other words “momentum”. This approach is reliant on the availability of timelier and more-frequent ESG data.
- **Integrate new data points** – As new sources of ESG data become available, it is important that ESG screening frameworks adapt to include the metrics that most closely reflect ESG performance. As one example, the Global Carbon Project (in partnership

with the World Climate Research Programme) now publishes consumption-based GHG emissions for over 100 countries. Consumption-based emissions

data can complement territorial-based emissions data to give a fuller picture of a country's emissions profile.



3. INNOVATIVE ESG INVESTMENT PRODUCTS

Product innovation in the ESG investment space could also help to reduce capital diversion from EMDEs if it helps create a larger menu of investable opportunities for global asset managers. There are several such examples of solutions being implemented, which could be scaled further to impact capital flows:

- Sustainability-linked bonds, such as the one issued by Uruguay in 2022, can reduce issuance costs compared to regular labelled debt, while also creating an attractive asset for thematic and impact investors.
- The ThomasLloyd Energy Impact (TLEI) Trust shows how private equity investors with an ESG impact mandate can raise funds on public equity markets.
- The Amundi Planet Emerging Green One (EGO) Fund is an example of how an equity listing can connect institutional investors with green bonds in EMDEs.

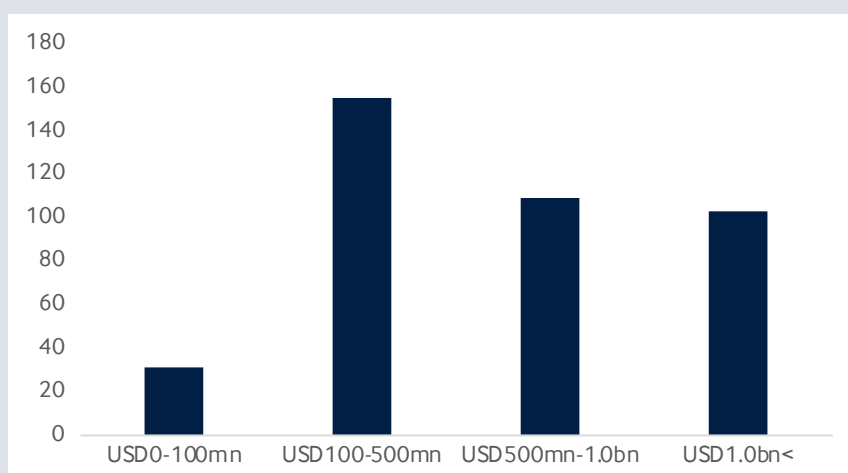
Labelled-bonds are a highly scalable solution

Sovereign and company GSS+ bonds can help to address the challenge of surfacing ESG investment opportunities in EMDEs, as discussed in Chapter 3. The rapid growth in GSS+ bond issuance in EMDEs over recent years illustrates that they are a highly scalable solution. Global GSS bond issuance rose to USD1trn in 2021 compared to USD66bn in 2015. EMDEs' share of this annual issuance increased from 5.6% to 19.4% over this period.

GSS+ bonds can surface ESG investment opportunities in EMDEs that would not otherwise be accessible to mainstream investors. While the structure of GSS+ varies by issuer, a broadly common feature of these assets is the pooling of smaller investment opportunities into one larger product. Pooling projects not only lowers the financial risk for investors but also creates investable assets of a large enough size to be attractive to institutional investors¹. For instance, 53% of the green bonds issued by EMDEs between 2014 and mid-2022 were valued at more than USD500mn and a quarter at more than USD1bn.

75 Climate Finance Innovation for Africa, Climate Policy Initiative, 2022

Fig 5.6: EMDE green bond issuance by deal size



*Note: Deals cover 2014-H122
Source: Climate Bonds Initiative*

Expanding GSS+ issuance would help to create a larger menu of investable assets for asset managers seeking to invest in EMDEs. At the same time, new types of GSS+ bonds can attract a wider variety of investors. Issue-specific bonds and sustainability-linked bonds are two recent innovations in the GSS+ bond market that appeal to different types of investors, and these are discussed in more detail below.

Issue-specific bonds reduce investment roadblocks

The majority of capital invested in GSS+ bonds is not invested in sustainability-labelled bonds that seek to address broad ESG concerns. Instead, most capital is invested in either green or social bonds. Green bonds are particularly popular and accounted for USD122bn (63%) of total EMDE green, social & sustainability bond issuance in 2021. While only accounting for 14.5% of EMDE green, social & sustainability bonds issued in 2021, social bond issuance increased by almost ten-fold between 2019 and 2021 to reach USD28.3bn.

By focusing on one area of ESG, issue-specific bonds can strengthen the case for investing in an emerging economy. For instance, a global asset manager using a broad ESG screen may exclude an emerging economy based on a poor overall ESG score; however, if that country issues a green bond with a clear set of metrics attached, it allows the investor to isolate the green element of the screen. Issue-specific bonds can thus limit the extent to which weak scores for one ESG

category prevent investment in another aspect of a company's or country's ESG profile.

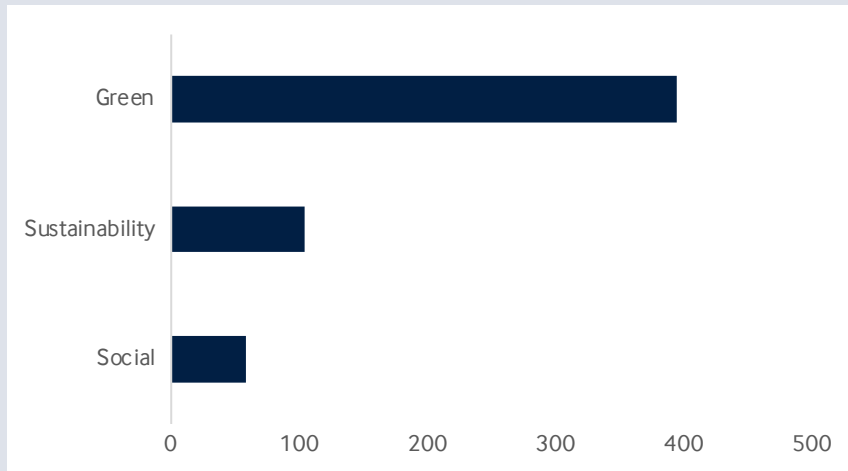
Sustainability-linked bonds can reduce issuance costs

Sustainability-linked bonds (SLBs) have lower set up costs, because unlike green and social bonds the issuer does not need to specify the list of projects or companies that the funds will be allocated towards, prior to issuance⁷⁶. Instead, the issuer commits to improving a specified set of sustainability metrics and the bond yield paid by the issuer to investors is linked to these metrics. The issuer therefore has more freedom to decide the precise use of funds. This does raise the potential for greenwashing but close regulatory oversight and target-setting can mitigate this risk. Given its potential for raising capital in EMDEs, improving oversight would be preferable to reducing their use.

For investors, SLBs create an additional avenue for theme-based and impact investing. The labelling of these bonds and the associated reporting of key performance metrics can help asset managers assess the sustainability impact of these investments. This type of double materiality reporting will be particularly important to investors based in the EU (due to the SFDR), and to a lesser extent in the US (due to the SEC's proposed changes to the "fund names rule") and the UK (due to the Sustainability Disclosure Requirements), as described in Chapter 4.

76 Emerging Market Green Bonds Report 2021, IFC

Fig 5.7: Cumulative EMDE Global, Social & Sustainability bond issuance by type (USDbn)



Note: 2014-H122. Source: Climate Bonds Initiative

CASE STUDY: URUGUAY SUSTAINABILITY-LINKED BOND

Significance: Uruguay is one of the earliest EMDE-based issuers of a SLB. The innovative product structure creates incentives for Uruguay to perform strongly on the relevant environmental key performance metrics, while also providing compensation to investors if Uruguay fails to meet its environmental goals.

Summary: Uruguay developed a Sustainability-Linked Bond Framework and issued its first SLB in October 2022. The innovative structure linked bond repayment rates to two environmental key performance indicators (KPIs):

- reduction of aggregate gross GHG emissions per real GDP unit; and
- maintenance of native forest area.

The interest rate repaid to investors will increase if Uruguay fails to meet the stated KPI targets, while the rate will decline if

Uruguay outperforms these targets.

In contrast to the typical approach to green and social bonds, Uruguay’s bond funds were not earmarked for any particular projects or companies prior to issuance. Although Uruguay’s government is tied to the aforementioned KPIs, it has significant flexibility in deciding how to achieve these goals. The investment roadmap did not need to be explicitly laid out prior to issuance.

Uruguay’s SLB attracted 188 investors and was more than two-times over-subscribed. Investors included asset managers in Europe, Asia, the US and Latin America, of whom a fifth were first-time buyers of Uruguay’s debt.

“Sustainability-linked bonds are starting to become more popular in emerging markets – they provide an incentive for the issuer as well as the investors.”

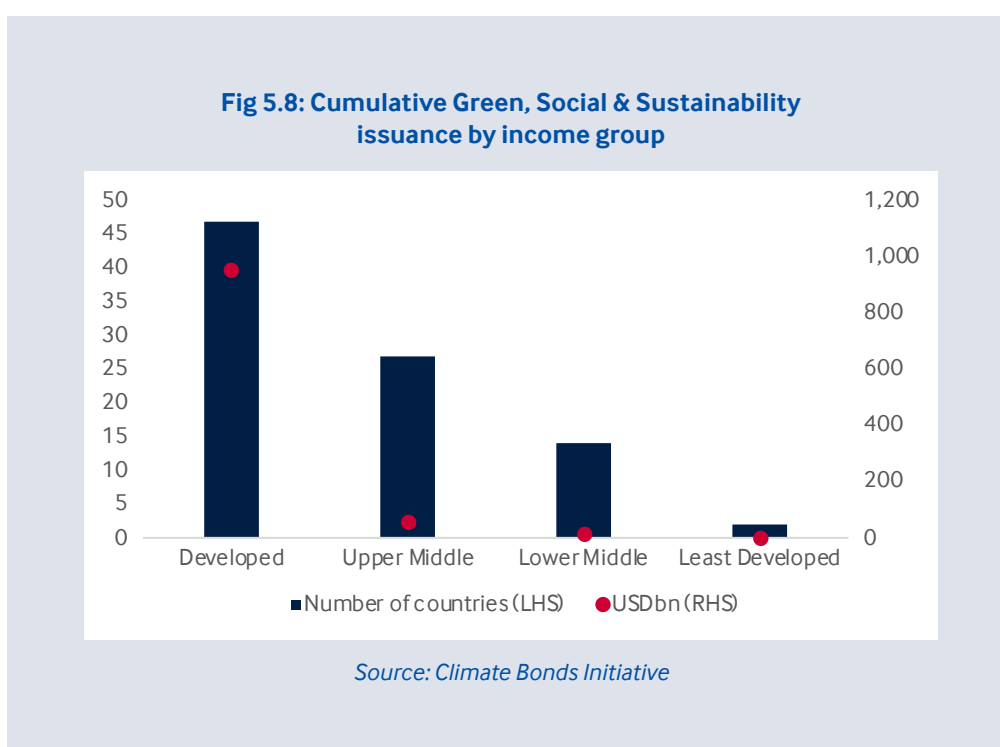
Senior executive, Climate Policy Initiative

Capacity building important for scaling bond issuance

Despite greater issuance in many EMDEs over recent years, assistance with capacity building is still required to scale issuance in the least-developed markets. Without such assistance, issuance in these least-developed economies will be constrained by factors such as immature existing local bond markets, regulatory

set up costs and currency risk for investors⁷⁷. So, in the above example of Uruguay, the Inter-American Development Bank (IADB) worked closely with Uruguay’s Ministry of Economy and Finance to construct a suitable Sustainability-Linked Bond Framework and first bond issuance⁷⁸. Such involvement from multilateral organisations in GSS+ issuance by EMDEs is important. In another example, Belize issued an innovative USD364mn “Blue Bond” in November 2021, with assistance from the US environmental organisation, The Nature Conservancy (TNC). The bond was uniquely structured to fund both debt sustainability and marine conservation in the country⁷⁹.

As the chart illustrates, the least-developed countries have only issued two GSS bonds and account for just 2% of total EMDE issuance.



More-innovative equity products

Turning to public equity markets, more-innovative ESG investment products could help connect capital with profitable and impactful investments in EMDEs. Some of our interviewees discussed how asset managers seeking to make impact-oriented investments in EMDEs are sometimes forced to invest in developed markets due to limited impact investment opportunities listed on public EMDE markets. To illustrate, one interviewee commented that it is easier to find a liquid, listed renewable energy producer in a developed

economy such as the US, than it is to find one in a least-developed country such as Tanzania.

This is partly due to immature public markets in many EMDEs only listing a small proportion of the potential impact investments in the country. In order to combat further capital diversion, new types of EMDE-focused equity funds need to channel more capital to a wider range of ESG investments in EMDEs.

77 Deepening ESG Focus in Emerging Markets will Spur Growth in Sustainable Debt, Moody’s, 2020
78 Uruguay Issues Global Sustainability-Linked Bond, Inter-American Development Bank, 2022

79 Belize: Swapping Debt for Nature, IMF, 2022

“Investors have to ask themselves how much they can invest in a market.....if that market does not give the right volume of opportunities, that investor will move to another market. And this is what is happening with smaller markets where there is only an opportunity to invest in one or two companies. Investors will move to markets where they can generate a bigger ticket return and a higher volume of transactions.”

Head, Asia & Africa, Impact Investment Fund, Kenya

Partnerships with private equity

Products are currently being developed that will allow EMDE-focused private equity investors raise more capital in public markets. Private equity firms have significant knowledge and experience of investment opportunities that are not listed on public exchanges in EMDEs. By raising capital through public equity markets, private equity firms can act as a bridge between institutional investors and non-listed investment opportunities in EMDEs. This will tap into the wave of capital in developed markets that is seeking to make impact investments.

This is the approach taken by organisations including ThomasLloyd Group (TLG) and Helios Investment Partners, both of which are supported by the UK Foreign, Commonwealth and Development Office’s (FCDO) MOBILIST programme. TLG listed the ThomasLloyd Energy Impact Trust (TLEI Trust) on the premium segment of the main market of the London Stock Exchange in December 2021. Helios will reportedly list the Helios Climate Energy Access Resilience (CLEAR) Fund on a major public stock exchange in the near future, having received financial backing from the FCDO in August 2022. Both funds will increasingly use public equity markets to raise new capital that will be directed to a portfolio of ESG-focused investments in EMDEs.

Speaking to TLEI, we understand that raising capital via the public equity market helped to reach a wider pool of potential investors, as many retail investors prefer equities to fixed income. This is important at a time when there is growing investor interest in making impact investments. The most significant challenge to raising this capital was the higher perceived risk by investors, due to the novelty of this type of equity product. Being listed on the premium segment of the main market of the London Stock Exchange, and

CASE STUDY: ASIAN ENERGY IMPACT TRUST (AEIT)

Significance: AEIT is one of the first examples of a listed equity product solely dedicated to investing in sustainable energy infrastructure projects. The company is listed on the premium segment of the main market of the London Stock Exchange (LSE) and links institutional capital to sustainable energy infrastructure assets in the fast-growing economies of Asia. It is classified as an Article 9 product with a sustainability objective under the EU SFDR.

Summary: Formerly known as ThomasLloyd Energy Impact Trust, AEIT was created in 2021 and benefited from seed capital and technical assistance from the UK government. MOBILIST supported its listing on the LSE through a £24.5 million investment, contributing to an initial public offering sized at £87.5 million.

The company has a “Triple Return” investment objective, which aims to provide investors with positive financial, social and environmental returns.

According to the Company’s website, it seeks to fulfil these objectives by constructing and operating a portfolio of sustainable energy infrastructure assets and investing in construction ready and operational assets across renewable power generation, transmission infrastructure, energy storage and sustainable fuel production in the countries where it is most needed.

AEIT holds a portfolio consisting of 12 solar assets in the Philippines, Vietnam, and India. These assets have a total generation capacity of 520MW.

Anchor investors in equity funds

Anchor investors can also increase the scalability of equity products by reducing perceived risks for investors. Equity funds may benefit from blended finance, such as when anchor investors take junior tranches and absorb a fund’s initial losses, thus buffering other shareholders from potential losses. This improved risk-adjusted return profile can help to crowd-in investment from the private sector. At the same time, anchor investors can help to provide technical assistance and increase confidence in listed equity products. This is the approach taken by IFC in creating three large bond funds focused on EMDEs. These funds are Amundi Planet Emerging Green One (EGO) fund (see case study); HSBC Real Economy Green Investment Opportunity (REGIO) fund, which is focused on green bonds issued by non-financial firms; and the upcoming Build-Back-Better Emerging Markets Sustainable Transaction (BEST) fund announced in November 2021.

CASE STUDY: AMUNDI PLANET EMERGING GREEN ONE (EGO) FUND

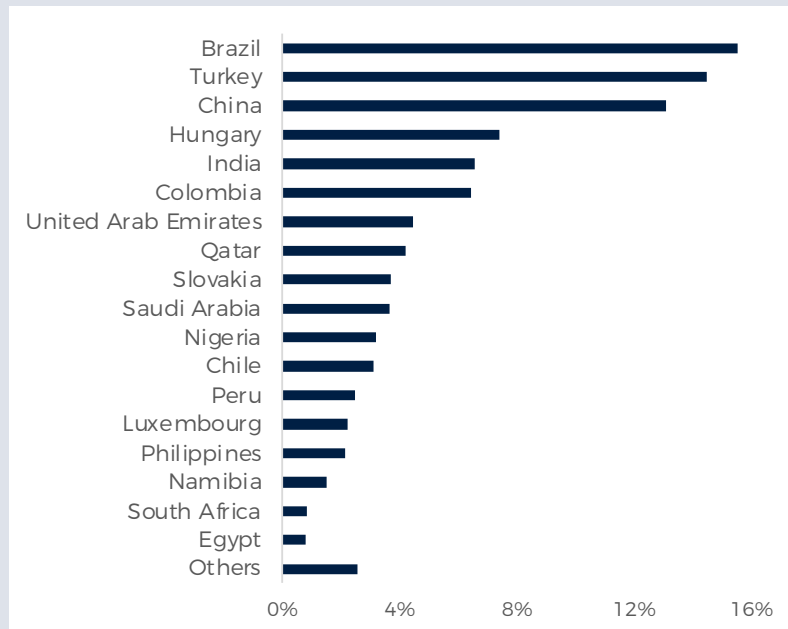
Significance: The Amundi Planet Emerging Green One (EGO) Fund is an example of how an equity listing can connect institutional investors with green bonds in EMDEs. Not only are fixed income investment opportunities surfaced on a public equity market, but IFC de-risks the fund to make it more attractive to investors.

Summary: In 2018, IFC and Amundi launched the Amundi Planet Emerging EGO fund. At the time of launch, it was the world’s largest green bond fund focused on EMDEs. The fund is listed on the Luxembourg Stock Exchange and aims to encourage institutional capital flows to the green bond market in EMDEs. The fund raised USD1.4bn at launch, including a USD256mn cornerstone investment from IFC.

One of the innovative aspects of the Planet EGO fund is its de-risking mechanism. IFC and other developmental finance institutions have junior tranches, which are structured so that they will absorb the first losses in the case of significant fund losses. This risk cushion is intended to increase the attractiveness to investors.

As of October 2022, the fund had invested more than 80% of its capital in green bonds spread across a variety of EMDEs, as shown by the graph below. In addition to large EMDEs such as Brazil, China and India, investments have been made in smaller EMDEs such as the Philippines, Nigeria and Peru.

Fig 5.10: Amundi Planet EGO fund – portfolio breakdown by country (% of assets)



Source: Climate Bonds Initiative

CHAPTER 6: CONCLUSION & RECOMMENDATIONS

One interviewee – a specialist in debt investments at an impact investment firm active in 70 countries – told us quite simply “the biggest barrier to ESG investment in emerging and frontier markets is a lack of local knowledge”. Our recommendations from this report focus on improving knowledge. Whether it is local regulators educating their counterparts in developed markets about the importance of regional variations in disclosure criteria, or investors applying transition and momentum metrics to improve their existing screening processes, or development banks advising governments on the construction of bond frameworks, in one way or another our recommendations are about improving knowledge of ESG factors in EMDEs or tailoring information requirements to facilitate investment in EMDEs.

None of these actions taken on their own will resolve the central challenge of capital being diverted from EMDEs. Instead, they need to be taken together to ensure that these markets are not shut out of capital flows as a result of ESG mainstreaming.

The task of solving the ESG investment challenge in EMDEs is substantial. However, this study makes clear there are solutions that can help mitigate the ongoing and any future capital diversion from EMDEs, and crucially many of these solutions are originating from EMDEs themselves, be it the ASEAN Taxonomy for Sustainable Finance, the Stock Exchange of Thailand’s Sustainability Investment Index or Uruguay’s issuance of a Sustainability-linked bond. These all highlight that in order to ensure capital allocation is being mobilised to and within developing economies, policymakers in EMDEs have the opportunity to adapt regulations to local needs, encourage improved local data reporting and issue GSS+ bonds, all of which can have a positive impact on investment flows to EMDEs.

Below, we highlight three specific sets of recommendations. The “traffic light” system on each table communicates the importance of the roles to be played by various stakeholders (governments, multi-lateral organisations, development finance institutions (DFIs), investors and data providers) in realising these solutions.

MARKET REGULATIONS

Solution Category	Recommendation			
Market Regulations	<ul style="list-style-type: none"> Regional political and trade blocs should create localised frameworks with a tailored taxonomy that can apply to a group of countries that represent a large enough share of the global economy for global regulators and investors to take notice. 			
	<ul style="list-style-type: none"> Regulators need to make their voice heard in ongoing international consultations on reforms to ESG regulations. 			
	<ul style="list-style-type: none"> Local stock exchanges should encourage firms to improve data disclosure by highlighting the potential investment that such disclosure can attract. 			
	<ul style="list-style-type: none"> Multilateral organisations and DFIs should provide capacity support to local exchanges and corporates to develop and implement ESG reporting guidelines for local firms. 			
Stakeholder				
Government	Non-government institutions	DFIs	Investors	Data Providers
●	●	●	●	●
<ul style="list-style-type: none"> ● Important Influence ● Some Influence ● Little Influence 		<p>* Multilateral organisations include inter-governmental associations, regional blocs and industry bodies.</p>		

Adapting global standards to EMDE needs

- Creating tailored ESG regulations and taxonomies that are suited to the needs of specific EMDEs, but also leverage global standards and best practises to ensure they are internationally credible and comparable, should be considered as a blueprint for adapting ESG taxonomies to EMDEs. Cross-taxonomy recognition across jurisdictions should be sought through greater dialogue between regulators in order to help the investability and recognition of EMDE taxonomies.
- Regional blocs are an effective way to create tailored taxonomies and sustainable bond frameworks because countries within political and trade blocs face similar challenges in mobilising finance and they should use their power to share knowledge and signal policy commitments. They also work in increasing the overall scale of opportunity for investors and enhancing the recognition of the framework on a global scale. Joining with local DFIs and international regulatory bodies that have green finance-related groups or taskforces is also an option, including the Basel Committee on Banking Supervision, the International Organisation of Securities Commissions or the International Accounting Standards Board.
- There is an important window of opportunity for adapting international ESG regulations to local EMDE contexts and frameworks, as flagship proposals in the US, the EU and the ISSB are undergoing review, feedback and even pushback.
 - Stakeholders in EMDEs need to be engaged in consultation processes and be aware of the organisation of roundtables and webinars as part of these processes. For example, it is expected that the EU will review disclosure frameworks under the SFDR in 2023 with consultations and workshops likely. Meanwhile the ISSB is looking to consult on its two-year agenda priorities in 2023. Working together with local stakeholders, such as large corporates, SMEs and financial service providers during these consultation processes can also be effective.
 - Advocacy and engagement during international meetings in relevant forums such as the upcoming UN Climate Ambition Summit in September 2023 or at COP28 in November-December 2023 can provide an opportunity for EMDEs to participate in the development and evolution of regulations.

Encouraging disclosure to attract investment

- Domestic stock exchanges in EMDEs should encourage firms to improve their ESG reporting by highlighting the investment that better disclosure can attract. Publishing indices of local firms that make disclosures can help guide investment allocations, and serve as an incentive for local companies to improve their reporting, as illustrated by the Stock Exchange of Thailand through the creation of its Sustainability Index. Stock exchanges should also encourage financial institutions to actively engage with organisations (such as data providers and credit rating agencies) that can help fill data gaps.
- Inter-governmental associations and local DFIs should provide capacity support to stock exchanges and corporates so that they can fulfil any reporting requirements imposed on them. Capacity building should take several forms and include (a) technical expertise to develop frameworks, (b) training and workshops to build expertise, and (c) advocacy to support investor awareness. Capacity building workshops for example, could improve familiarity with disclosure processes, especially in those cases where mandatory disclosure regimes are already or soon to be implemented.

DATA & SCREENING FRAMEWORKS

Solution Category	Recommendation			
Data & Screening Frameworks	<ul style="list-style-type: none"> Investors should assess company performance as much as possible based on forward-looking data in making allocation decisions. This includes reviewing plans and targets as a way of understanding the proposed strategy of a business and then evaluating progress made according to those targets. Data providers should focus more on transition and momentum in assessing the performance of corporates and sovereigns. Investors and data providers should use alternative data solutions (e.g. geospatial data, AI, NLP) where possible to support their screening and evaluation of company and country performance. 			
Stakeholder				
Government	Non-government institutions	DFIs	Investors	Data Providers
<ul style="list-style-type: none"> Important Influence Some Influence Little Influence 		<p>* Multilateral organisations include inter-governmental associations, regional blocs and industry bodies.</p>		

- Investors should attempt to improve their screening processes by assessing forward-looking data as much as possible and improving the standardisation and transparency of such data. Adjusting ESG ratings for income and industry groupings would also improve the usefulness of these metrics to investors seeking to assess the profiles of EMDE firms. We outline the capacity of the TPI in this report and encourage investors to use this and other such emerging tools to fine-tune their decision-making processes over potential ESG capital mobilisation in EMDEs.
 - Approximately 70% of respondents in a TCFD consultation on forward-looking data stated that improved data transparency and standardisation, as well as a focus on GHG emissions and standardised emission pathways would improve the usefulness of forward-looking data⁸⁰ Investors will find transparent, comparable and standardised forward-looking data important for their risk management, portfolio allocation and engagement. Market participants should engage with organisations, such as TCFD or TPI, that are looking to standardise and integrate this process.
- Investors should also explore and leverage alternative data solutions, which may allow forward-looking information to be integrated within screening valuation models. Despite their limitations, utilising AI and NLP technologies will allow investors to search unstructured data in company reports to provide more information about corporate strategy. Similarly, accessing geospatial data will allow greater access to more timely, accurate and independent data on environmental factors.
 - Investors and data providers must accelerate their efforts in capturing and integrating momentum and transitional metrics as a better illustration of the performance of countries and companies. The focus of data reporting and assessment should be broadened to include future targets and commitments; indicators of future external conditions that may impact operations; and projections on performance. This means an evaluation of the following information:
 - corporate or government targets or planned commitments;
 - forward-looking data that captures the economic or physical conditions within which companies or countries need to deliver the above targets; and
 - projections around performance (for example, specific operations, financial performance).

⁸⁰ <https://assets.bbhub.io/company/sites/60/2021/03/Summary-of-Forward-Looking-Financial-Metrics-Consultation.pdf>

INVESTMENT OPPORTUNITIES

Solution Category	Recommendation									
Surfacing opportunities	<ul style="list-style-type: none"> EMDEs should leverage existing sovereign debt infrastructure to issue GSSS bonds. DFIs in EMDEs and multilateral <u>organisations</u> need to play an important part in advising on the construction of bond frameworks and managing bond issuance. Private equity funds should use public equity markets, particularly markets based in developed economies to raise new capital that could be directed to a portfolio of ESG-focused investments in EMDEs. 									
	Stakeholder									
	<table border="1"> <thead> <tr> <th>Government</th> <th>Non-government institutions</th> <th>DFIs</th> <th>Investors</th> <th>Data Providers</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> </tr> </tbody> </table>	Government	Non-government institutions	DFIs	Investors	Data Providers	●	●	●	●
Government	Non-government institutions	DFIs	Investors	Data Providers						
●	●	●	●	●						

● Important Influence
● Some Influence
● Little Influence

* Multilateral organisations include inter-governmental associations, regional blocs and industry bodies.

- Theme-specific GSS+ bonds can be an effective tool for EMDE governments and companies as they look to raise capital to finance their Nationally Determined Contributions (NDCs) or specific green, social and sustainable projects. The initial issuance of a GSS+ bond requires upfront and ongoing resources to identify, measure and track use of proceeds in addition to the usual costs associated with the preparation of a regular bond. However, there are benefits to EMDEs in utilising this tool.
 - Whilst there is some debate over the 'greenium' of such bonds, in 2020 and 2021 the average 'greenium' on the secondary market for EMDE bonds was 3.4 basis points.⁸¹ If this is reflective of the primary market, it indicates lower funding costs for EMDEs raising capital this way. In addition to the cost incentive, debt issuance capabilities are often more developed than equity markets in many EMDEs, meaning it is an important route for raising capital for social, sustainability or green projects. For investors, EMDE GSS+ bonds are attractive due to their impact profiles and the reputation of green bonds as defensive investments.⁸²
- Theme-specific bonds require a governance framework, reporting and monitoring systems, and external verification to support the issuance. Local DFIs and multilateral organisations have an important part to play by providing technical

support tools at the policy and transaction levels, including framework development, structuring and reporting. As an example, IFC played an important enabling role in the development of sustainable debt bond issuance in many EMDEs, including Colombia, the Philippines and Morocco⁸³.

- Pooling assets into listed equity funds is a scalable approach that could open up ESG opportunities in EMDEs to a broader audience. Listed equity products are the dominant product for institutional and retail investors, and are therefore key to unlocking large pools of capital for EMDEs. Currently a lack of track-record of risk-adjusted returns for EMDE ESG-focused funds provides a barrier to investment, however more proof of concept funds, such as the TLEI Trust, should provide a model to scale and replicate. This, in turn, will provide investors with more opportunities that offer both development impact and risk-adjusted returns. Anchor investors can prove crucial in helping to scale and de-risk proof of concept equity products by reducing perceived risks. Anchor investors such as DFIs can also help to provide technical assistance and increase confidence in listed equity products.

81 Emerging Market Green Bonds Report, IFC/Amundi, 2022
 82 Greenium: new catalysts in 2022, Natixis, 2022

83 Perspectives: Capital Markets, Climate Finance, IFC, 2022

APPENDIX

SECONDARY RESEARCH – REPORTS & ANALYSIS

Abrdn, Sustainable Investment Approach: Emerging Markets Sustainable and Responsible Investing Equity Fund, 2021

ASEAN, Sustainable Finance Taxonomy, 2021

Asian Development Bank, Green Bond Market Survey for Thailand, 2022

Benchmark ESG Survey, Investor Attitudes on Company ESG Data, 2022

Bloomberg Intelligence, Global ESG Midyear Outlook, 2022

Bloomberg Law, SEC Climate Rules Pushed Back Amid Bureaucratic Legal Woes, 2022

BOAD Sustainability Framework, <https://www.boad.org/wp-content/uploads/2021/01/FrameworkBOAD.pdf>

Centre for Social & Economic Progress, Climate Change Policy for Developing Countries, 2022

Climate Bonds Initiative, Sustainable Debt Market, 2022

Climate Policy Initiative, Climate Finance Innovation for Africa, 2022

Climate Policy Initiative, Global Landscape of Climate Finance, 2021

Emso Asset Management Limited, Another Way of Looking at a Country's Carbon Footprint – A Tale of Switzerland and South Africa, by J Leadbetter, S Farooqui, T Emery, 2021

Environmental Finance, ISSB Stakeholders Want More Information about Materiality, 2022

European Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information, 2021

European Commission, Sustainable Finance – environmental, social and governance ratings and sustainability risks in credit ratings, 2023

European Commission, EU Taxonomy for Sustainable Activities, 2023

European Commission, Corporate Sustainability Reporting, 2023

European Commission, Sustainability-related Disclosure in the Financial Services Sector, 2023

European Fund and Asset Management Association, Market Insights, 2021

European Securities & Markets Authority, ESG Ratings: Status and Key Issues Ahead, 2021

Eurosif, 2023

Financial Conduct Authority, Code of Conduct for ESG Data and Ratings Providers, 2022

Financial Conduct Authority, Improving Consumer Comprehension of Financial Sustainability Disclosures, 2022

Financial Conduct Authority, SDR and Investment Labels, 2023

Financial Times, Must ESG be Bad News for Emerging Markets, 2022

Franklin Templeton, Navigating ESG Disclosures in Emerging Markets, 2021

FTSE Russell, Fixed Income Innovation: Applying ESG and Carry Factors to an Emerging Markets Portfolio, 2022

Future of Sustainable Data Alliance, Corporate ESG Data Gaps & Holes, 2022

Global Carbon Project, <https://www.globalcarbonproject.org/>

Global Sustainable Investment Alliance, Global Sustainable Investment Review, 2020

Green Bond Transparency Platform, www.greenbondtransparency.com/bonds/

IFC, Perspectives: Capital Markets, Climate Finance, 2022

IFC, Artificial Intelligence Solutions to Support Environmental, Social and Governance Integration in Emerging Markets, 2021

IFC, Emerging Market Green Bonds Report 2021

IFC, Small and Medium Enterprises (SMEs) Finance, 2020

Inter-American Development Bank, Uruguay Issues Global Sustainability-Linked Bond, 2022

International Financial Reporting Standards, ISSB Consultation on Agenda Priorities, 2022

International Financial Reporting Standards, Partnership Framework for Capacity Building in Developing and Emerging Economies, 2022

International Financial Reporting Standards, Foundation Work Plan, 2023

IMF, The Drivers of Capital Flows in Emerging Markets Post Global Financial Crisis by Swarnali Ahmed Hannan, 2017

IMF, Sustainable Finance in Emerging Markets: Evolution, Challenges and Policy Priorities, 2022

IMF, Belize: Swapping Debt for Nature, 2022

International Platform on Sustainable Finance, Annual Report, 2022

International Trade & Forfeiting Association, Sustainable Trade Finance and Africa Trade, 2022

Intellidex & MOBILIST, Drivers of Investment Flows to Emerging and Frontier Markets, 2022

Investment & Pensions Europe, 2022

JP Morgan, Asia's Coming of Age: Recent Progress in ESG Regulation, 2022

Johannesburg Stock Exchange, <https://www.jse.co.za/our-business/sustainability/jses-sustainability-and-climate-disclosure-guidance>

Journal of Business Ethics, The Influence of Firm Size on the ESG Score, 2020

London Stock Exchange Group, Dealing with Income Bias in Sovereign ESG Scores, 2022

Moody's, Deepening ESG Focus in Emerging Markets Will Spur Growth in Sustainable Debt, 2020

Morningstar, Global Sustainable Fund Flows, 2022

MSCI, Reported Emission Footprints: The challenge is real, 2022

MSCI, Emerging Markets ESG Focus Index, 2022

MSCI, Annual Market Classification Review, 2023

Natixis, Greenium: new catalysts, 2022

Net Zero Tracker, 2023

OECD, FDI in Figures, 2022

OECD, ESG Investing Practices, Progress and Challenges by R Boffo and R Patalano, 2020

OECD, Policy Guidance on Market Practices to Strengthen ESG Investing and Finance a Climate Transition, 2022

PIMCO, GIS Emerging Markets Bond ESG Fund, 2022

Principles for Responsible Investing, Closing the Funding Gap, 2022

Refinitiv, More LatAm Sovereigns Consider SLBs, 2022

RBC Global Asset Management, Responsible Investment Survey, 2022

Responsible Investor, SFDR Clarifications Could Cause Huge Burden for Asset Managers, 2022

SDG 12 Hub, Target 12.6, Sustainable Business

SEC, Comments on Climate Change Disclosure, 2021

SEC, Amendments to the Fund Names Rule, 2022

SEC, SEC Proposes to Enhance Disclosures by Certain Investment Advisers and Investment Companies about ESG Investment Practices, 2022

SEC, SEC Proposes Rules to Enhance and Standardise Climate-Related Disclosures for Investors, 2022

S&P Global, Global Banks Call for Flexible Green Finance Approach in Emerging Markets, 2022

Stanford Social Innovation Review, ESG Investing Needs to Expand its Definition of Materiality, 2022

Stock Exchange of Thailand, Thailand Sustainability Index, 2018

Sustainability Accounting Standards Board, Double & Dynamic: Understanding the Changing Perspectives on Materiality, 2020

T RowePrice, Frontier Markets Equity Fund – ESG Report, 2022

Task Force on Climate-Related Financial Disclosures (TCFD), Summary-of-Forward-Looking-Financial-Metrics-Consultation, 2021

TCFD, Annual Report, 2021

ThomasLloyd, Energy Impact Trust, <http://tenergyimpact.com/>

Transition Pathway Initiative, Carbon Performance of Energy Companies, 2021

Transition Pathway Initiative, A Framework to Assess Sovereign Bond Issuers on Climate Change, 2023

Transition Plan Taskforce, Developing a Gold Standard, 2022

UN Sustainable Stock Exchanges Initiative, Action Plan to Make Markets Climate Resilient, 2021

UNCTAD, World Investment Report, 2022

Uruguay, Sovereign Sustainability-Linked Bond (SSLB) Framework, For Sustainability-linked Bonds Focused on Climate and Nature-based Targets, 2022

Vanguard Asset Management, Emerging Markets Index Fund, 2022

William Blair, Why ESG Matters in Emerging Markets, 2020

World Bank, Toolkits for Policymakers to Green the Financial System, 2021

World Bank, Demystifying ESG, 2020

World Bank & JP Morgan, A New Dawn – Rethinking Sovereign ESG, World Bank, 2021

WWF, Geospatial ESG: The Emerging Application of Geospatial Data for Gaining “Environmental” Insights on the Asset, Corporate and Sovereign Level, 2022

RESEARCH INTERVIEWS – BY ORGANISATION

All interviews were conducted anonymously with either existing or recent (no more than 12 months) senior executives. The views reflect those of the subject matter experts rather than the organisations.

abrdn

Amundi Asset Management

Aon

Asian Development Bank *

BlackRock

Climate Bonds Initiative

Climate Policy Initiative

Credit Suisse

Developing World Markets (DWM)

EBRD

Edhina Capital

Effectus Capital Management

Financial Times

Fitch Group

Flagstar Bancorp

Franklin Templeton

GW&K Investment Management

IFC

IIX Global

Leadenhall Capital Partners

LGT Partners

London Stock Exchange Group

Natwest Markets

NINT

OECD

Pictet Group

PRI

Raiffeisen Capital Management

RS Metrics

S&P

SCOR Specialty Insurance

Spinosa Wealth Management

Standard Chartered **

The Index Standard

ThomasLloyd Group

USS Investment Management

World Bank *

*Consultant/co-author of commissioned report

**Two interviews

RESEARCH INTERVIEW QUESTIONS GUIDE

This is a breakdown of the range of questions used to lead discussions with subject matter experts. The questions were slightly different based on the per-

spective and expertise of the interviewee, as shown below.

Interview Group	Sample Questions
Investors	<p>To what extent is ESG part of your investment mandate/screening process?</p> <p>What are the largest barriers to ESG investment in EMDEs?</p> <p>Do you factor all elements of E, S, G equally, and if not, which are most important?</p> <p>Which ESG or related tools do you use to assess investments?</p> <p>Which work best? What are the shortcomings especially in assessing EMDEs?</p> <p>What are the main metrics applicable to EMDEs that are not covered by data providers? What would you find most useful to add?</p> <p>If you wanted to increase your investment to EMDEs what would you need in order to do this?</p> <p>Are ESG labelled bonds the best way for EMDEs to gain investment?</p> <p>What do you see as the EMDE investment hotspots for ESG (by country/region/sector) shown?</p>
Multilaterals/ Government	<p>How do you/should you encourage more ESG investment to EMDEs?</p> <p>What restrictions do ESG have on potential investment to EMDEs?</p> <p>How do you align the need to invest in EMDEs with doing so in a sustainable way?</p> <p>To what extent are the private sector, policymakers and regulatory authorities working to improve the coverage of ESG data in EMDEs? Where do you see best practice?</p> <p>Which markets have been successful in developing and implementing sustainable finance policy frameworks? How have they done this?</p> <p>What should regulators be doing to incentivize more ESG-related private capital mobilization towards EMDEs?</p> <p>How should regulators incentivize companies to improve disclosure on ESG metrics?</p>
Data Providers	<p>What challenges do you face in data collection for EMDEs?</p> <p>How do you overcome these issues? (eg use of proxies)</p> <p>Which metrics present the biggest challenge and within which regions? Do these typically sit within E, S or G areas?</p> <p>To what extent do you change methodology for EMDEs? (standardized, curated)</p> <p>How do you go about scoring improvements in data?</p>
ESG Commentators/ Consultants/Thought Leaders	<p>What is the outlook for ESG investing on public markets in EMDEs?</p> <p>What are the challenges facing investors in EMDEs in relation to ESG investment?</p> <p>How do you see the outlook for ESG investing in EMDEs? Which are receiving the most investment and why?</p> <p>Why does investment on social and governance issues in EMDEs tend to lag behind environmental?</p> <p>What should regulators and policymakers in EMDEs be doing to encourage more ESG investment?</p> <p>How should frameworks be developed that can align the needs of EMDEs with ESG investment?</p> <p>How useful are data tools, such as ESG Indexes for EMDEs? How should they be improved methodologically?</p> <p>How should a standardised taxonomy for ESG investment be created for EMDEs and is a standard taxonomy a good idea?</p>

COUNTRIES IN SCOPE OF REPORT

Development Assistance Committee's (DAC) List of official development assistance (ODA) recipients

Least Developed & Low-Income Countries	Afghanistan; Angola; Bangladesh; Benin; Bhutan; Burkina Faso; Burundi; Cambodia; CAR; Chad; Comoros; DRC; Djibouti; Eritrea; Ethiopia; Gambia; Guinea; Guinea-Bissau; Haiti; Kiribati; Laos; Lesotho; Liberia; Madagascar; Malawi; Mali; Mauritania; Mozambique; Myanmar; Nepal; Niger; North Korea; Rwanda; Sao Tome & Principe; Senegal; Sierra Leone; Solomon Islands; Somalia; South Sudan; Sudan; Syria; Tanzania; Timor-Leste; Togo; Tuvalu; Uganda; Yemen; Zambia
Lower Middle-Income Countries	Algeria; Belize; Bolivia; Cabo Verde; Cameroon, Congo; Cote d'Ivoire; Egypt; El Salvador, Eswatini; Ghana; Honduras; India; Indonesia; Iran; Kenya; Kyrgyzstan; Micronesia; Mongolia; Morocco; Nicaragua; Nigeria; Pakistan; Papua New Guinea; Philippines; Samoa; Sri Lanka; Tajikistan; Tokelau; Tunisia; Ukraine; Uzbekistan; Vanuatu; Vietnam; West Bank & Gaza Strip; Zimbabwe
Upper Middle-Income Countries	Albania; Argentina; Armenia; Azerbaijan; Belarus; Bosnia & Herzegovina; Botswana; Brazil; China; Colombia; Costa Rica; Cuba; Dominica; Dominican Republic; Ecuador; Equatorial Guinea; Fiji; Gabon; Georgia; Grenada; Guatemala; Guyana; Iraq; Jamaica; Jordan; Kazakhstan; Kosovo; Lebanon; Libya; Malaysia; Maldives; Marshall Islands; Mauritius; Mexico; Moldova; Montenegro; Montserrat; Namibia; Nauru; Niue; North Macedonia; Palau; Panama; Paraguay; Peru; St Helena; St Lucia; St Vincent & Grenadines; Serbia; South Africa; Suriname; Thailand; Tonga; Turkey; Turkmenistan; Venezuela

Table 1: Common Approaches to Incorporating ESG Scores into the Investment Process

ESG Integration	Systematic & explicit inclusion by investment managers of ESG factors into financial analysis.
Corporate Engagement & Shareholder Action	Using shareholder power to influence corporate behaviour, including direct engagement (ie communicating with senior management), filing shareholder proposals, proxy voting etc.
Norms-based Screening	Screening of investments vs minimum standards of business or issuer practice, based on norms of UN, ILO, OECD, NGOs etc.
Negative (or Exclusionary) Screening	Excluding certain sectors, companies, countries or issuers from a fund based on activities not considered as investible (e.g tobacco, arms, company practice such as animal testing/ violation of human rights etc).
Positive Screening	Investment in sectors, companies or projects selected for positive ESG performance relative to industry peers and have a rating above a defined threshold.
Sustainably-themed	Investing in them or asset specifically contributing to sustainable environmental or social solutions (eg sustainable agriculture, green buildings, gender equity, diversity).
Impact/Community Investing	Investing to achieve positive social/ environmental impact requiring measurements and reporting against specific impacts, demonstrating intention of investor and investor contribution. Investing where capital is specifically directed to traditionally underserved communities.

Source: Global Sustainable Investment Alliance

Table 2: Telecoms Company ESG Scores

Country	ODA Classification	Company	ESG Risk Rating	ESG Risk Rating
United Kingdom	Developed	Vodafone	15.8	Low Risk
Germany	Developed	Deutsche Telekom	16	Low Risk
Japan	Developed	KDDI	22	Medium Risk
United States	Developed	Verizon	18.5	Low Risk
Brazil	Upper Middle-Income	Telefonica Brasil	19.5	Low Risk
Malaysia	Upper Middle-Income	Axiata	27.9	Medium Risk
Mexico	Upper Middle-Income	America Movil	22.6	Medium Risk
Turkey	Upper Middle-Income	Turkcell	24.7	Medium Risk
South Africa	Upper Middle-Income	MTN	26.2	Medium Risk
Indonesia	Lower Middle-Income	Indosat	33.3	High Risk
Egypt	Lower Middle-Income	Telecom Egypt	33.4	High Risk
Kenya	Lower Middle-Income	Safaricom	19	Low Risk
Philippines	Lower Middle-Income	PLDT	26.9	Medium Risk
India	Lower Middle-Income	Vodafone Idea	34.4	High Risk

Source: Sustainalytics

Table 3: TCFD Recommendations

Category	Summary	Recommended Disclosures
Governance	Disclose the organisation's governance around climate-related risks and opportunities	Describe the board's oversight of climate-related risks and opportunities. Describe management's role in assessing and managing climate-related risks and opportunities.
Strategy	Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material	Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term. Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning. Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.
Risk Management	Disclose how the organisation identifies, assesses, and manages climate-related risks	Describe the organisation's processes for identifying and assessing climate-related risks. Describe the organisation's processes for managing climate-related risks. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.
Metrics and Targets	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material	Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process. Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks. Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

Source: TCFD

Table 4a: World Bank Sovereign Data - ESG indicators by ESG category

Environmental	Social	Governance
Adjusted savings: natural resources depletion (% of GNI)	Access to clean fuels and technologies for cooking (% of population)	Control of Corruption: Estimate
Adjusted savings: net forest depletion (% of GNI)	Access to electricity (% of population)	Ease of doing business rank
Agricultural land (% of land area)	Annualized average growth rate in per capita consumption or income, total population (%)	GDP growth (annual %)
Agriculture, forestry, and fishing, value added (% of GDP)	Cause of death, by communicable diseases and maternal, prenatal and nutrition conditions (% of total)	Government Effectiveness: Estimate
Annual freshwater withdrawals, total (% of internal resources)	Children in employment, total (% of children ages 7-14)	Net migration
CO2 emissions (metric tons per capita)	Fertility rate, total (births per woman)	Patent applications, residents
Cooling Degree Days (projected change in number of degree Celsius)	Gini index	Political Stability and Absence of Violence/Terrorism: Estimate
Droughts, floods, extreme temperatures (% of population, average 1990-2009)	Government expenditure on education, total (% of government expenditure)	Proportion of seats held by women in national parliaments (%)
Electricity production from coal sources (% of total)	Hospital beds (per 1,000 people)	Ratio of female to male labour force participation rate (%) (modelled ILO estimate)
Energy imports, net (% of energy use)	Income share held by lowest 20%	Regulatory Quality: Estimate
Energy intensity level of primary energy (MJ/\$2017 PPP GDP)	Individuals using the Internet (% of population)	Research and development expenditure (% of GDP)
Energy use (kg of oil equivalent per capita)	Labour force participation rate, total (% of total population ages 15-64)	Rule of Law: Estimate
Food production index (2014-2016)	Life expectancy at birth, total (years)	Scientific and technical journal articles
Forest area (% of land area)	Literacy rate, adult total (% of people ages 15 and above)	Strength of legal rights index
Fossil fuel energy consumption (% of total)	Mortality rate, under-5 (per 1,000 live births)	Voice and Accountability: Estimate
GHG net emissions/removals by LUCF (Mt of CO2 equivalent)	People using safely managed drinking water services (% of population)	
Heat Index 35 (projected change in days)	People using safely managed sanitation services (% of population)	
Mammal species, threatened	Population ages 65 and above (% of total population)	
Maximum 5-day Rainfall, 25-year Return Level (projected change in mm)	Poverty headcount ratio at national poverty lines (% of population)	
Mean Drought Index (projected change, unitless)	Prevalence of overweight (% of adults)	

Methane emissions (metric tons of CO2 equivalent per capita)	Prevalence of undernourishment (% of population)	
Nitrous oxide emissions (metric tons of CO2 equivalent per capita)	School enrolment, primary (% gross)	
PM2.5 air pollution, mean annual exposure (micrograms per cubic meter)	School enrolment, primary and secondary (gross), gender parity index (GPI)	
Population density (people per sq. km of land area)	Unemployment, total (% of total labour force)	
Renewable electricity output (% of total electricity output)	Unmet need for contraception (% of married women ages 15-49)	
Renewable energy consumption (% of total final energy consumption)		
Terrestrial and marine protected areas (% of total territorial area)		

Source: World Bank

Table 4b: MSCI Government ESG Ratings

Pillar	Risk Factor	Sub-Factors (Exposure)	Sub-Factors (Management)
Environmental Risk	Natural resource	<ul style="list-style-type: none"> • Energy Security Risk • Water Resources • Productive Land & Mineral Resources 	<ul style="list-style-type: none"> • Energy resource management • Resource conservation • Water resource management
	Environmental externalities & vulnerability	<ul style="list-style-type: none"> • Vulnerability to environmental events • Environmental externalities 	<ul style="list-style-type: none"> • Environmental performance • Impact of environmental externalities
Social Risk	Human capital	<ul style="list-style-type: none"> • Basic human capital • Higher education & technological readiness • Knowledge capital 	<ul style="list-style-type: none"> • Basic needs • Human capital performance • Human capital infrastructure • Knowledge capital management
	Economic environment	<ul style="list-style-type: none"> • Economic environment 	<ul style="list-style-type: none"> • Employment • Wellness
Governance Risk	Financial governance	<ul style="list-style-type: none"> • Financial capital 	<ul style="list-style-type: none"> • Financial management
	Political governance	<ul style="list-style-type: none"> • Institutions • Judicial and penal system • Governance effectiveness 	<ul style="list-style-type: none"> • Political rights and civil liberties • Corruption control • Stability and peace

Source: MSCI ESG Government Ratings

Table 5: MSCI ESG Metrics Framework

	Risk Exposure	Controversies	Performance	Practices
Climate Change	<p>Geographic exposure to carbon regulation</p> <p>Business exposure to carbon-intensive operations</p> <p>Geographic exposure to climate vulnerable regions</p> <p>Reliance on carbon-intensive supply chain</p>	Climate change controversies	<p>3-yr trend of average carbon emissions intensity</p> <p>3-yr average carbon emissions intensity (CO2/USD million sales) relative to industry peer median</p>	
Natural Capital	<p>Business exposure to operations with land or ecosystem disturbance</p> <p>Geographic exposure to fragile ecosystems</p> <p>Geographic exposure to water stressed regions</p> <p>Business exposure to water-intensive operations</p>	<p>Environmental impact on community controversies</p> <p>Operation impacts on ecosystems controversies</p> <p>Environmentally controversial investments</p> <p>Water stress controversies</p>		
Pollution & Waste	<p>Business exposure to operations producing high levels of packaging waste</p> <p>Business exposure to operations producing high levels of toxic emissions and waste</p>	Toxic emissions & waste controversies		
Environmental Opportunities				<p>Alternative energy products and services</p> <p>Energy efficiency products and services</p> <p>Green Building products and services</p> <p>Pollution prevention and control products and services</p> <p>Sustainable water products and services</p>
Human Capital	<p>Business exposure to injury-prone operations</p> <p>Geographic exposure to poor workplace safety standards</p> <p>Reliance on highly-skilled workforce</p> <p>Business exposure to labour-intensive operations</p> <p>Geographic exposure to frequent work stoppages</p>	<p>Workplace accidents controversies</p> <p>Discrimination and diversity controversies</p> <p>Working conditions controversies</p> <p>Collective bargaining and union labour controversies</p> <p>Supply chain labour controversies</p>		

Product Liability	Geographic exposure to chemical safety regulations Involvement in business commonly reliant on high concern chemicals Exposure to business prone to data breaches or handles high volumes of customer data Geographic exposure to privacy regulations Exposure to business with product safety	Chemical safety controversies Data security breach controversies Customer fraud controversies Discriminatory access to basic service Controversies Marketing controversies Product safety & quality controversies		
Stakeholder Opposition		Social impacts on community controversies Social impacts of raw materials controversies Human rights concerns controversies		
Corporate Behaviour	Geographic exposure to corruption & instability Business exposure to operations commonly associated with corrupt practices	Anti-Competitive behaviour controversies Bribery and corruption controversies Business ethics controversies Taxes and subsidies controversies	Tax gap greater than 20% Foreign market revenue greater than 20%	

Source: MSCI ESG Government Ratings

Table 6: Landmark ESG Regulations In the EU, the US and the UK

Date	Geography	Regulation	Comment
Mar 2021	EU	Sustainable Finance Disclosure Regulation (SFDR) came into effect for most major financial services firms.	Requirements for sustainability-related disclosures on websites and in pre-contractual information for products in the market.
Apr 2021	EU	EU Corporate Sustainability Reporting Directive (CSRD) proposed.	CSRD intends to expand ESG reporting requirements for all large companies and most listed companies.
Jan 2022	EU	EU Taxonomy regulation reporting requirements on climate change mitigation apply.	EU Taxonomy sets out the classification criteria for activities deemed to contribute to climate change mitigation and adaptation.
Jan 2022	UK	TCFD disclosure requirements come into force for listed companies, as well as largest asset managers.	Climate-related financial disclosures need to be consistent with TCFD recommendations and recommended disclosures. Deadline for first reports is end of June 2023.
Mar 2022	US	Securities and Exchanges Commission (SEC) proposes enhanced climate disclosure requirements for publicly listed companies.	All companies publicly listed in the US will be required to publish Scope 1, 2 and 3 GHG emissions data. Consultation period ended in November 2022.

May 2022	US	SEC proposed rule change on naming conventions for fund managers (ESG Disclosures for Investment Advisers).	ESG and sustainability funds will have to be categorised as "Integrations funds", "ESG-Focused Funds" or "Impact funds".
May 2022	US	SEC proposes amendments to the fund "Names Rule".	ESG and sustainability funds will need to invest 80% of assets in investments that are aligned with the fund name ("Integration", "ESG-focused" or "Impact").
Oct 2022	UK	Sustainability Disclosure Requirements (SDR) consultation paper published.	Includes proposals to tackle greenwashing by defining the naming criteria that can be used by funds. The Financial Conduct Authority (FCA) aims to finalise the rules by mid-2023.
Jan 2023	EU	SFDR - "Level 2" disclosure requirements come into force.	Imposes mandatory ESG disclosure obligations for asset managers and other financial markets participants.
Jan 2023	EU	EU Taxonomy regulation reporting requirements on four remaining environmental objectives (Water and Marine Resources, Circular Economy, Pollution Prevention and Biodiversity and Ecosystems) to apply	EU Taxonomy regulation reporting requirements on climate change mitigation and adaption have applied since January 2022.
Jun 2023	EU	Corporate Sustainability Reporting Directive reporting standards are expected to be published.	Impacted entities include listed companies, which are public interest entities, listed firms, large firms, some financial institutions and some non-EU companies.
Jul 2023	UK	Sustainability Disclosure Requirements (SDR) target date for finalisation of rules.	Consultation process began in October 2022.
Jan 2024	EU	Gradual implementation of EU Corporate Sustainability Reporting Directive expected to begin.	Large companies liable from 2025, listed SMES from 2026 and non-EU firms with significant turnover in EU from 2028.
Feb 2024	US	Publicly listed firms required to publish Scope 1 and 2 emissions data.	This date may be pushed back by legal challenges.
Feb 2025	US	Publicly listed firms required to publish Scope 3 emissions.	Scope 3 emissions relate to a firm's supply chain. This date may be pushed back by legal challenges.
Jan 2026	EU	Corporate Sustainability Reporting Directive to apply to SMEs.	Expected to apply to 50,000 companies in the EU.

Source: European Commission, UK FCA, US SEC

Table 7: Latest TCFD developments in select EMDE jurisdictions

Jurisdiction	Authority	Date	Notes	Timeframe
Brazil	Securities and Exchange Commission	Dec-21	Amended its rules to require securities issuers to indicate 1) whether they disclose environmental, social and corporate governance information in their annual reports or other specific documents; 2) whether the report or document considers the TCFD recommendations or recommendations for financial disclosures from other recognised entities; and 3) an explanation if the securities issuers have not adopted the TCFD recommendations or ones from other recognised entities.	FY 2023
Egypt	Egyptian Financial Regulatory Authority	Jul-21	Issued resolutions requiring companies listed on the Egyptian Stock Exchange and companies operating in non-bank financial activities to submit disclosure reports related to sustainability and the financial impacts of climate change in line with the TCFD recommendations	FY 2022
India	Reserve Bank of India	Jul-22	Released a Discussion Paper on Climate Risk and Sustainable Finance to seek feedback on several topics, including climate-related financial disclosure. In the discussion paper, the RBI highlights the TCFD recommendations “as a desirable framework [for regulated entities] to rely upon, at least at the initial stage”.	na
Malaysia	Joint Committee on Climate Change	Jun-22	Published a guide to support implementation of climate-related disclosures aligned with TCFD recommendations. The guide is aimed at financial institutions regulated by the Bank Negara Malaysia and the Securities Commission Malaysia and includes commercial banks, investment banks, insurance and reinsurance companies, and fund management companies.	na
Thailand	Bank of Thailand	Feb-22	Issued a consultation paper on the financial landscape that describes policies to support three objectives for the financial sector. One of the objectives relates to the financial sector helping businesses and households to transition to a digital economy and effectively manage environmental risks. The consultation paper describes several potential policies to support this objective, one of which is to set disclosure standards for financial institutions that are consistent with international frameworks such as the TCFD.	na
South Africa	Johannesburg Stock Exchange	Jun-22	Issued two guidance documents that incorporate aspects of the TCFD recommendations — Sustainability Disclosure Guidance and Climate Change Disclosure Guidance.	na
Mexico	Central Bank of Mexico	Dec-21	Initiated efforts to establish a Mexican TCFD Consortium, in conjunction with the Japan TCFD Consortium and Mexican industry leaders. The main goal of the consortium is ‘to promote an increase in the disclosure of financially material ESG risks, starting with climate risks in accordance with the recommendations of the TCFD’. Preliminary efforts to establish a pilot structure for the Mexican TCFD Consortium are currently underway.	na

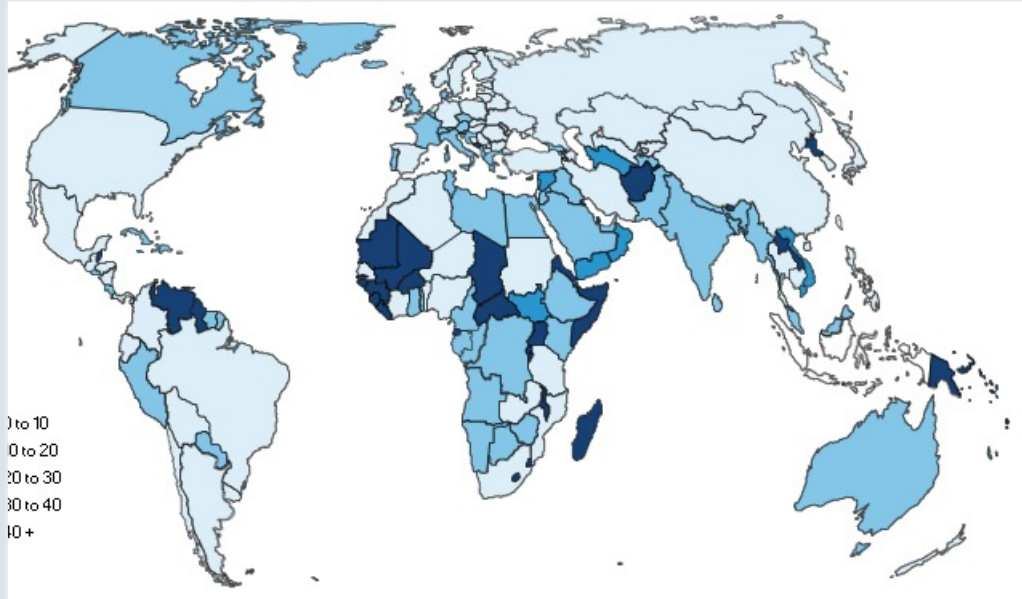
Source: TCFD 2021 Annual Report

Table 8: EMDE stock exchanges with written ESG reporting guidance

Market	Stock Exchange	Year	ESG Guidance
India	National Stock Exchange of India	2022	NSE-SES Integrated Guide to Business Responsibility & Sustainability Report (BRSR)
South Africa	Johannesburg Stock Exchange	2022	JSE Sustainability Disclosure Guidance
Kenya	Nairobi Securities Exchange	2021	ESG Disclosures Guidance Manual
Panama	Latin American Stock Exchange	2021	Guide for Reporting and Voluntary Disclosure of ESG
Tunisia	Bourse des Valeurs Mobilières de Tunis	2021	TSE-ESG Disclosure Guidelines
China	HKEX	2020	How to Prepare an ESG Report
Turkey	Borsa Istanbul	2020	Sustainability Directory for Companies
Colombia	Bolsa de Valores de Colombia	2020	Guía para la Elaboración de Informes ASG para Emisores en Colombia
Bangladesh	Dhaka Stock Exchange	2019	Guidance on Sustainability Reporting
Philippines	Philippine Stock Exchange	2019	Sustainability Reporting Guidelines for Publicly Listed Companies
Sri Lanka	Colombo Stock Exchange	2019	Communicating Sustainability: Six Recommendations for Listed Companies
Kazakhstan	Kazakhstan Stock Exchange	2019	Methodology of preparing an Environmental, Social and Governance report
Malaysia	Bursa Malaysia	2018	Sustainability Reporting Guide
Botswana	Botswana Stock Exchange	2018	Guidance for Listed Companies on Reporting ESG Information to Investors
Costa Rica	Bolsa Nacional de Valores	2018	Guía voluntaria para la creación de reportes de sostenibilidad
India	Bombay Stock Exchange	2018	BSE Guidance Document on ESG Disclosures
Jordan	Amman Stock Exchange	2018	Guidance on Sustainability Reporting
Nigeria	Nigerian Exchange	2018	Sustainability Disclosure Guidelines
Indonesia	Indonesia Stock Exchange	2017	Application of Sustainable Finance for Financial Services Institutions, Issuers and Public Companies
Mexico	Bolsa Mexicana de Valores	2017	Sustainability Guide: Towards Sustainable Development of Companies in Mexico
Morocco	Bourse de Casablanca	2017	Guide sur la Responsabilité Sociétale des Entreprises et le reporting ESG
Peru	Group BVL	2017	Guía de Usuario para facilitar el llenado del Reporte de Sostenibilidad Corporativa
Brazil	B3	2016	Novo Valor Corporate Sustainability
Egypt	Egyptian Exchange	2016	Model Guidance for Reporting on ESG Performance and SDGs
Vietnam	Ho Chi Minh Stock Exchange	2016	Environmental and Social Disclosure Guide
Thailand	Stock Exchange of Thailand	2012	Guidelines for the preparation of sustainability reports
China	Shanghai Stock Exchange	2008	Guidelines for Environmental Information Disclosure of Listed Companies in Shanghai Stock Exchange
China	Shenzhen Stock Exchange	2006	Social Responsibility Instructions to Listed Companies

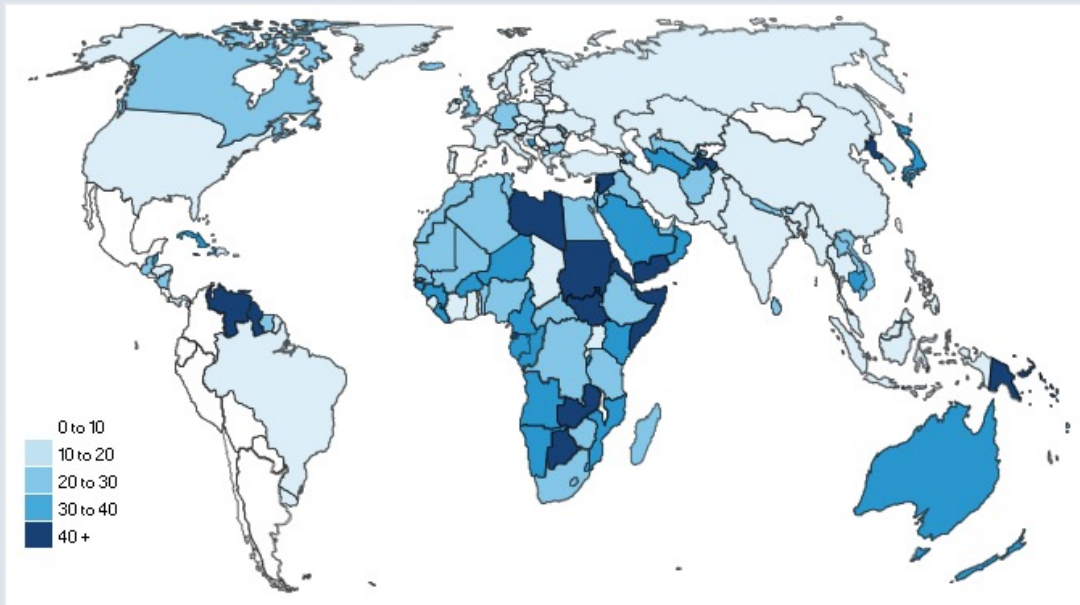
Source: Fitch Solutions

Map 1: ESG Data omissions – Environmental



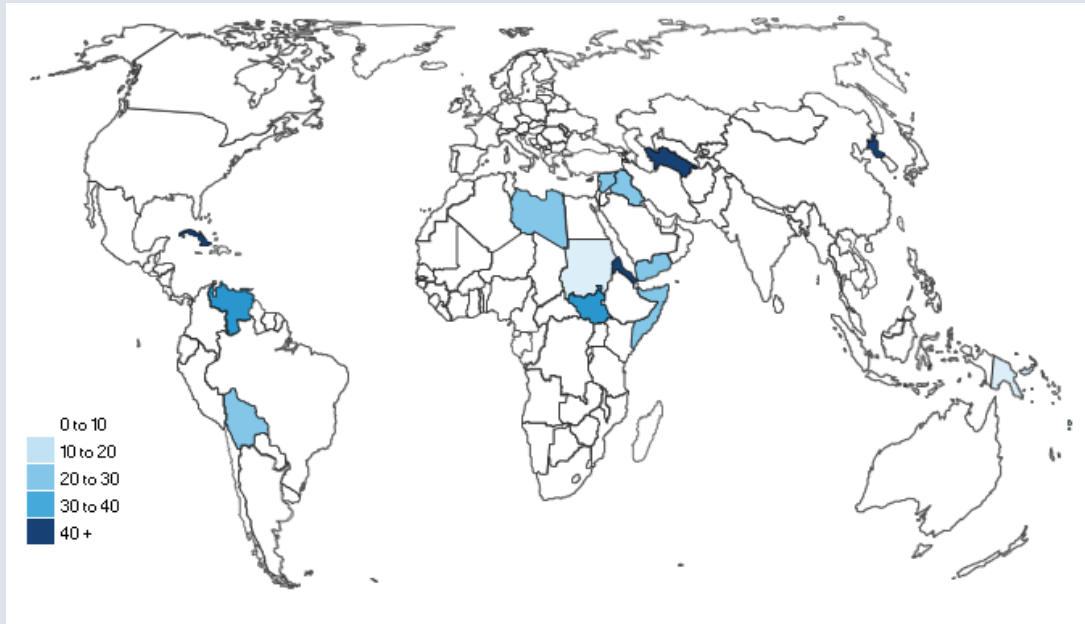
Source: World Bank; Fitch Solutions

Map 2: Data omissions – Social



Source: World Bank; Fitch Solutions

Map 3: Data omissions – Governance



Source: World Bank; Fitch Solutions

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