OMFIF Sustainable Policy Institute

LUXEMBOURG FOR FINANCE
THE FINANCIAL CENTRE DEVELOPMENT AGENCY

Forging the path to international standards in sustainable finance

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About OMFIF and The SPI

With a presence in London, Singapore, Washington and New York, OMFIF is an independent forum for central banking, economic policy and public investment – a neutral platform for best practice in worldwide public-private sector exchanges.

The OMFIF Sustainable Policy Institute is a community designed to meet the policy, regulatory and investment challenges posed by ESG factors.

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About Luxembourg for Finance

Luxembourg for Finance (LFF) is the Agency for the Development of the Financial Centre. It is a public-private partnership between the Luxembourg Government and the Luxembourg Financial Industry Federation (PROFIL). Founded in 2008, its objective is to develop Luxembourg's financial services industry and identify new business opportunities.

LFF connects international investors to the range of financial services provided in Luxembourg, such as investment funds, wealth management, capital market operations or advisory services. In addition to being the first port of call for foreign journalists, LFF cooperates with the various professional associations and monitors global trends in finance, providing the necessary material on products and services available in Luxembourg. Furthermore, LFF manages multiple communication channels, organises seminars in international business locations, and takes part in selected world-class trade fairs and congresses.

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FOREWORD

ESG TODAY, GROWTH TOMORROW

Sustainable finance requires being able to properly assess the climate impact of businesses and investors, writes Nicolas Mackel, CEO, Luxembourg for Finance.

AWARENESS of how important environmental, social and governance aspects are to a company's long-term growth and performance has skyrocketed in recent years. Not only do these companies need to ensure they are appropriately managing these factors today for growth tomorrow, but investors and other stakeholders need to do so as well.

While significant progress has been made on this front across the globe, it is not necessarily aligned across markets. There has been a proliferation of various disclosure-related initiatives, from the Sustainable Finance Directive Regulation in Europe to the Task Force on Climate-related Financial Disclosures recommendations that are being adopted in various forms and on varying levels in places such as Japan, Australia and Hong Kong.

Truly embedding sustainable finance within the global financial system requires being able to assess the impact of those companies and investment products that are deemed sustainable. In the European Union, the choice of a regulatory approach in defining a taxonomy is seen as setting a standard, while the US is taking a market-led approach.

True convergence between approaches is unlikely. This is not only due to the various frameworks or common languages being developed in parallel, but also due to market specifics and investor preferences. Rather, interoperability should be key in whatever approaches are taken.

It is necessary to ensure that financial services reduce the amount of time spent on regulatory-intensive tasks in different markets simply due to various standards as these will translate into higher costs for end-investors and weigh on the competitiveness of the products we want to push. Markets and standard setters should work together to ensure that whatever approach is followed, fluidity in terms of operations is not stifled.

Allow me to extend my thanks to OMFIF for the work they have done in putting this report together and providing a useful reference point for this important factor relating to sustainable finance. •

"Interoperability should be key in whatever approaches are taken.

INTRODUCTION

FINDING A COMMON BASELINE

Without convergence between standards and taxonomies, market fragmentation and investor uncertainty will delay climate action.

"The acceleration of reporting and disclosure standards demonstrates a real commitment to transitioning to a more sustainable financial sector globally.

REGULATORY bodies, policy-makers and the investor community across the globe are making efforts to transition to a sustainable finance model. The Network for Greening the Financial System has made huge strides in aligning sustainable monetary policy internationally and integrating climate into risk assessments. The Task Force on Climate-related Financial Disclosures has set a benchmark for financial and corporate disclosures and the reporting of climate-related financial information. Green taxonomy regulation has been introduced across several jurisdictions, spearheaded by the European Union.

A path is being forged to international standards for sustainable finance. However, the increase of standards and regulatory requirements brings challenges, including jurisdictional and sector differences, and varying principles, objectives, benchmarks and metrics in taxonomies and disclosure frameworks. As a result, many are calling for a baseline, common ground taxonomy and convergence of standards.

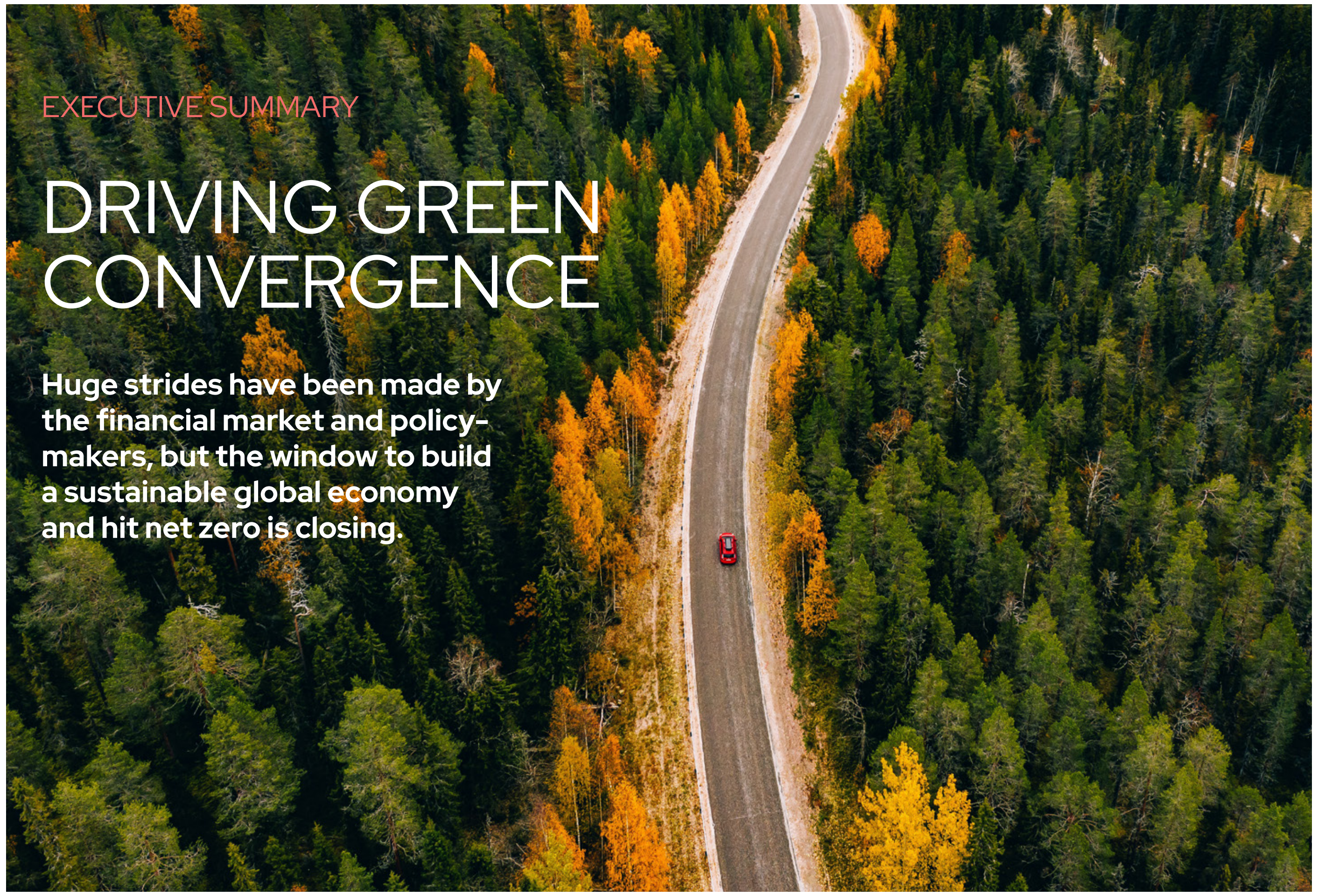
To address these challenges, OMFIF's Sustainable Policy Institute has joined forces with Luxembourg for Finance to consider what is required for the standardisation of sustainable finance. Taking insight from interviews with experts across the financial sector and real economy, this report explores the latest developments in taxonomy regulation and reporting frameworks, including the TCFD, Sustainable Finance Disclosure Regulation and the Corporate Sustainability Reporting Directive. These are integral to transitioning the financial sector and wider economy to net zero by 2050.

The report examines whether there should be convergence of standards internationally, the implications of standardisation and potential benefits of divergence and the market-led approach being taken by the US. It assesses the need for a common language across standards and looks at the expected role of the newly created International Sustainability Standards Board in providing a global baseline and convergence for disclosure standards.

Before conducting research for this report, we anticipated that conversations would revolve around innovative products, tools and strategies in sustainable finance. Instead, we found that some of the biggest challenges are closely linked with the real economy: in greening the supply chain, managing corporate disclosures and ensuring capital is allocated towards truly sustainable projects and activities.

The vast majority of progress in sustainable finance has been made on climate and environment-related initiatives but there is movement to go beyond the 'E' in ESG. This is evident with the EU now developing a social taxonomy. While emphasis is placed on the financial sector as a driver of transition, the report also explores the role of the real economy and how to bridge the disconnect between requirements and actions being taken by financial institutions and corporations.

The acceleration of reporting and disclosure standards demonstrates a real commitment to transitioning to a more sustainable financial sector globally. There has been tremendous effort, yet more coordination is required. This report explores how sectors and institutions can better collaborate to ensure a just and principled transition. •



EXECUTIVE SUMMARY

DRIVING GREEN CONVERGENCE

Huge strides have been made by the financial market and policy-makers, but the window to build a sustainable global economy and hit net zero is closing.

IN a global economy and financial market, there is a clear need for interoperability between the burgeoning international sustainable finance standards. With the rise of multiple green taxonomies, disclosure and reporting frameworks, regulators and policy-makers must establish a common language on green products, investments and how ESG is reported to avoid market fragmentation.

Green bonds and loans have become mainstream, driven by the market and clients, and there are massive growth opportunities for ESG investments. The US demonstrates the importance of a market-led approach, becoming the largest green loan and bond issuer. Nevertheless, the US still looks to Europe for guidance on ESG regulation and lags in green equity development.

The financial sector has enormous potential to influence divestment from dirty industries and reallocation of capital. However, this cannot be achieved by the market and client demand alone. ESG cannot be further integrated into financial markets without clear structures, frameworks and definitions established by regulators and policy-makers.

This report shows efforts are being made to drive convergence. The International Sustainability Standards Board was announced at COP26 to drive a global baseline of sustainability-related disclosure standards. Europe and China have collaborated to develop the Common Ground Taxonomy. The Network for Greening the Financial System is making huge strides in creating stress testing and scenario analysis frameworks to understand and mitigate physical and transitional climate risk. Yet much remains to be done.

The financial sector is still failing to adequately disclose the material impact of climate change on their risk profiles. Issues surrounding ESG data and climate-related information persist, hindered by inconsistent disclosures. Regulators and policy-makers must work to align ESG disclosure and reporting requirements for the financial sector and the real economy.

A global disclosure and reporting framework that is mandatory for both the financial sector and corporations will encourage alignment and produce more data and ESG-related risk information. The Task Force on Climate-related Financial Disclosures is becoming mandatory in various jurisdictions and seems primed to fulfil this role, helping drive the development and use of forward-looking data and projections. This is crucial for setting short- to medium-term targets for transitioning to net zero.

Huge strides have been made by the financial market and policy-makers, but the window to build a sustainable global economy and hit net zero is closing. Rapid action must be taken.

KEY FINDINGS

In-depth interviews with stakeholders across the financial sector revealed the main challenges and opportunities for ESG investment, as well as the range of approaches being taken around the world.

1 THERE ARE GROWING CALLS FOR A COMMON INTERNATIONAL REGULATORY FRAMEWORK

Sustainability standards and regulations have mushroomed over the past few years. The European Union and China have both developed their own taxonomies, and the ASEAN bloc launched its own in late 2021. There are growing calls for a global baseline taxonomy for sustainable activities in the form of a common international framework that allows for some degree of interoperability and local specification. Standardisation of ESG terminology and definitions will be key.

The EU-China Common Ground Taxonomy could provide a foundation for building interoperability across jurisdictions, but these efforts for international harmonisation are complicated by the US opting for a market-led approach.

2 MORE AND MORE JURISDICTIONS ARE IMPLEMENTING MANDATORY DISCLOSURE FRAMEWORKS

Mandatory disclosure of ESG activities and risk would close data gaps, increase transparency and drive convergence in ESG investment and risk understanding, though respondents disagree on the ideal degree of global harmonisation. While the EU has led the way thus far with the SFDR coming into force in 2021, it appears that the TCFD will become the global baseline. While the TCFD is regarded as a necessary first step, it will need to be scaled up.

Data, labels and ratings remain a challenging but necessary element to standardisation of disclosure and reporting frameworks. Despite advancements in these areas, stakeholders believe a more holistic framework is needed to ensure transparency and clarity around an entity's ESG standing.

3 THE ROLE OF THE PUBLIC SECTOR IS MOVING BEYOND REGULATION

Regulators set the language and tone for conduct and practice in sustainable finance. Huge strides have been made in improving climate stress testing and risks analysis tools, and NGFS membership now totals 108 central banks around the world. At the same time, the public sector's scope is also expanding beyond the introduction and enforcement of taxonomy guidance, disclosure and reporting frameworks. Nevertheless, there is a general consensus among market actors that more international coordination in ESG regulation is needed.

Though the scope of the public sector's role in ESG finance varies by geography, US funds are increasingly turning to the EU for guidance on ESG regulation and standards, signalling the need for regulatory structure--even within jurisdictions which are pursuing a market-led approach.

4 MORE GUIDANCE IS NEEDED FOR THE REAL ECONOMY

There is a disconnect between requirements for the financial sector and for the real economy in both content and timing of ESG initiatives. In large part, this is due to the complexities of the real economy, such as supply chain links and sectoral interconnectivities, which pose significant challenges for the standardisation of transition frameworks. Although disclosures have become mandatory for financial actors in the UK, EU and other jurisdictions, more guidance and capacity building are needed for non-financial corporations, particularly for small- and medium-sized enterprises. Stakeholders diverge in opinion on whether divestment or responsible active ownership is the most effective way of transitioning 'dirty', emissions-intensive industries.

5 MOVING BEYOND THE 'E' IN ESG IS THE NEXT CHALLENGE

Beyond climate-related disclosures, most progress has been made on other environmental concerns, namely nature- and biodiversity-related impacts, but this still lags far behind climate. Stakeholders are now seeking additional disclosures around social and governance issues relating to gender diversity, equity and inclusion, labour practices, human rights and others, but these issues are difficult to capture concretely through science-based metrics

CHAPTER 1

TAXONOMY PROGRESS

The European Union and China are leading the way in taxonomy development, while the US favours a market-led approach.

TAXONOMY regulation is becoming a key tool in the transition drive, providing guidance for green finance activities, including bond issuance. In the last two years alone, green taxonomies have been established to define sustainable and transitional activities in the financial sector, with the European Union, China, Russia and Malaysia having established taxonomies, and Canada, the UK and Australia in the process of developing their own (Figure 1).

This multitude of frameworks and environmental, social and governance tools has created challenges for the global economy. This chapter focuses on the latest developments in taxonomy regulation, the need for a common language and advances in

1. G20 countries that have developed sustainable taxonomies

G20 countries	Sustainable Taxonomy	Relevant authority
China	Yes	People's Bank of China
France	Yes	European Union
Germany	Yes	European Union
Indonesia	Yes	Financial Services Authority (OJK)
Italy	Yes	European Union
South Korea	Yes	Financial Services Commission
Russia	Yes	State Development Corporation (VEB. RF)
Canada	Under development	Canadian Standards Association
Indonesia	Under development	Financial Services Authority (OJK)
South Korea	Under development	Financial Services Commission
UK	Under development	Green Technical Advisory Group
Australia	Under consideration	Australian Sustainable Finance Initiative
Mexico	Under consideration	Banco de Mexico
South Africa	Under consideration	National Treasury

Source: OMFIF Sustainable finance tracker

> In the last two years, the EU, China, Russia and Malaysia have established taxonomies, and Canada, the UK and Australia are in the process of developing their own.

a common baseline taxonomy. We start with the differing approaches of two major economic blocs – the EU and China – before assessing the market-led approach of the US.

EU taxonomy

The EU's taxonomy (Figure 2), which began the movement to set taxonomy frameworks for sustainable finance, is a classification system of economic activities that make a substantial contribution to the EU's climate and environmental goals. It can be used to support investments in sustainable actions and ultimately prevent greenwashing.

As described by an interview respondent from the European Commission, the taxonomy is a 'voluntary tool to help companies and investors identify sustainable activities and plan their transition' through setting criteria, safeguards and conditions for capital markets and investors. This gives green capital markets and products trustworthiness, using science-based targets and objectives. The EU taxonomy is a list of activities which can be used by any type of entity, but there are legally required applications. These apply to EU member states, public measures, standards and labels related to the taxonomy criteria, financial market participants that issue and invest in sustainable financial products and large companies (over 500 employees) under the Non-Financial Reporting Directive.

Within the taxonomy, the Commission has established delegated acts which set compliance conditions, including the Sustainable Finance Disclosure Regulation, which came into effect in March 2021. The SFDR is a mandatory requirement for investors to disclose annually on green products defined in articles 8 and 9 of the taxonomy. A second

2. EU taxonomy objectives and conditions

Objectives	Delegated acts	Conditions	High-level explanation
1. Climate change mitigation **2. Climate change adaptation** **3. The sustainable use and protection of water and marine resources** **4. The transition to a circular economy** **5. Pollution prevention and control** **6. The protection and restoration of biodiversity and ecosy**	**1.** First delegated act on sustainable activities for climate change adaptation and mitigation objectives *(adopted 4 June 2021)*	**1.** 'Substantial contribution' to one or more of the environmental objective(s)	The definition of SC depends on each environmental objective (e.g. for CCM it is the stabilisation of the greenhouse gas concentrations in line with the Paris agreement's long-term goal with activities related to the renewable energy, energy efficiency, clean mobility). Concrete requirements for what constitutes 'substantial' are established by the technical screening criteria.
		2. 'Do no significant harm' to other environmental objectives	An SC to an environmental objective should not come at the cost of significantly harming another one. Concrete requirements for what constitutes 'significant' are established by the TSC.
	2. Delegated act supplementing article 8 of the taxonomy regulation *(adopted 6 July 2021)*	**3.** Compliance with the minimum safeguards	This constitutes the social dimension of the taxonomy and relates to how an economic activity is conducted rather than what it is. It requires compliance (by undertaking the 'green' activity) with the Organisation for Economic Co-operation and Development's guidelines for multinational enterprises and the United Nations' guiding principles on business and human rights, including the relevant International Labour Organisation's texts and the International Bill of Human Rights.
	3. Complementary climate delegated act *(approved in principle 2 February 2022)*	**4.** Compliance with the technical screening criteria	This is the implementation part of the taxonomy. It provides concrete requirements for both the SC and the DNSH. It is introduced via delegated acts. The taxonomy regulation provides design requirements and limitations for the TSC, which need to be based on technological neutrality (i.e. do not favour or discriminate against any specific technology), refer to the EU labelling and certification schemes, follow conclusive scientific evidence, take into account the nature of the activity (i.e. enabling or transitional), avoid the risk of creating stranded assets and distorting competition in the market.

Source: International Capital Market Association, Natixis Corporate & Investment Banking

element of the SFDR – 'level two' obligations which require companies to report on 18 mandatory adverse impacts – will be published in January 2023. Articles 5 to 7 of the taxonomy require that by mid-2022, when marketing a product as 'environmentally sustainable' or 'promoting environmental characteristics', all financial market participants must disclose environmental objectives of the investment and the extent it qualifies as sustainable.

China's taxonomy

Another leading taxonomy that has been developed separately to the EU is the Chinese taxonomy, developed by the People's Bank of China. The Green Bond Endorsed Projects Catalogue, now with a 2021 edition, was established to build a green finance system and regulate the domestic green bond market. The framework aims to give 'full play to the role of green finance in promoting structural adjustment and transformation, accelerating the ecological civilization construction' and 'facilitating the sustainable development of the economy.'

Green bonds denote marketable securities that use raised funds to support green industries, green projects or green economic activities that meet specified conditions (see Chapter 3). The catalogue contains a list of green bond-qualified projects and industries understood as green in China to help the economy transition, establishing a unified definition for green bonds and their issuance. Issuers must report the capital usage of the bond and have it approved. In the 2021 edition of the catalogue, the use of coal and oil was removed from the list of eligible projects – a potentially huge step in the phase out of fossil fuel energy sources.

Unlike the EU taxonomy, the Chinese taxonomy is mandatory for all green bond issuers, including all financial institutions, corporations and state-owned enterprises, third-party appraisal agencies and regulatory agencies. It has three core objectives: responding to climate change, environmental improvement and more efficient resource utilisation.

The EU and Chinese taxonomy frameworks show there are divergences in obligations, objectives and users with various taxonomies. This adds to the complexities for the financial sector in understanding what is green, how standards should be implemented and jurisdictional expectations. This in turn could lead to market fragmentation.

Challenges of taxonomy frameworks

Taxonomies are tools that provide ways of assessing green revenues, green products and criteria for corporates and the financial sector to transition. A taxonomy is not a standard and this often causes confusion among users. 'Standards are a way of telling you how to disclose this information,' Laetitia Hamon, head of sustainable finance at the Luxembourg Stock Exchanges stated. They have different purposes and 'levels of granularities' to taxonomies. Taxonomies are 'activity-based' and

> Unlike the EU taxonomy, the Chinese taxonomy is mandatory for all green bond issuers, including all financial institutions, corporations and state-owned enterprises, third-party appraisal agencies and regulatory agencies.

do not provide direction on what determines a sustainable company, focusing more on guiding what makes a sustainable economic activity. This is demonstrated in the EU and Chinese taxonomies.

This indicates there is a lack of structures to assess individual companies' incorporation of taxonomy frameworks and ESG activities. The EU taxonomy has taken steps to rectify this, incorporating entity-based frameworks such as the NFRD (soon to be CSRD) for corporates and SFDR for financial institutions. These frameworks focus on 'reporting obligations or disclosures relating to the overall sustainability performance in the environmental, social and governance part of entire companies.'

Given the wide range of reporting standards and disclosure bodies on the market (see Chapter 2), the introduction of reporting and disclosure standards to taxonomy frameworks creates more complexity for financial institutions trying to comply with ever-changing regulation, and raises questions of double reporting. As Jeffrey Hales, chair of the Sustainability Accounting Standards Board argued: 'If a company or reporting entity is trying to meet the requirements or the standards proposed by two different entities, when they see something that looks like it is supposed to be overlapping or aligned, do they ultimately produce… the same thing twice?' Stronger alignment is required to avoid varying requirements and criteria in frameworks that contradict each other, resulting in heterogeneous reporting. To achieve this, there must be closer interaction between those working on the different frameworks and regulations.

This ties into one of the biggest challenges for achieving convergence of sustainable standards and taxonomy frameworks: the need for greater international alignment on ESG policies, definitions and objectives. This is particularly evident with energy. As one respondent from the corporate sector remarked, 'If you look at the taxonomies… the Chinese taxonomy has nuclear energy out. In Europe, it seems to be in,' which will be a 'nightmare for reporting and especially in terms of comparable data for investors.' Jurisdictions understand issues differently within their own territories, sectors and industries and have varying national political objectives which leads to divergence. As Hamon noted there is a lack of market convergence in sustainability transition, reporting and objectives as 'countries want to position themselves in a sustainable finance area, especially as sustainable finance centres develop in their specific regions.'

What is prioritised and legally defined as being green varies across jurisdictions. One of the greatest uncertainties for investors surrounding taxonomies is, as Florian Klinkhammer, financial market lead at

> "The EU's regulatory-driven approach has made Europe a clear leader at this stage. While the US has often become a leader in new fields through a market-based approach, many US investors believe a more structured regulatory approach will be crucial for sustainability.

the Value Balance Alliance, noted: 'unclear legal terms, for example, from unclear definitions within the regulatory framework.' Hamon strengthened this, observing that 'The same definitions, same terminologies and the same process would be very useful for investors'.

In a global market where investments, financial products and the impact of capital markets span jurisdictions, there is clearly a need for greater convergence between taxonomy frameworks and a common language defining the green criteria and principles established. The EU and China are taking significant steps to achieve this.

Towards a common taxonomy

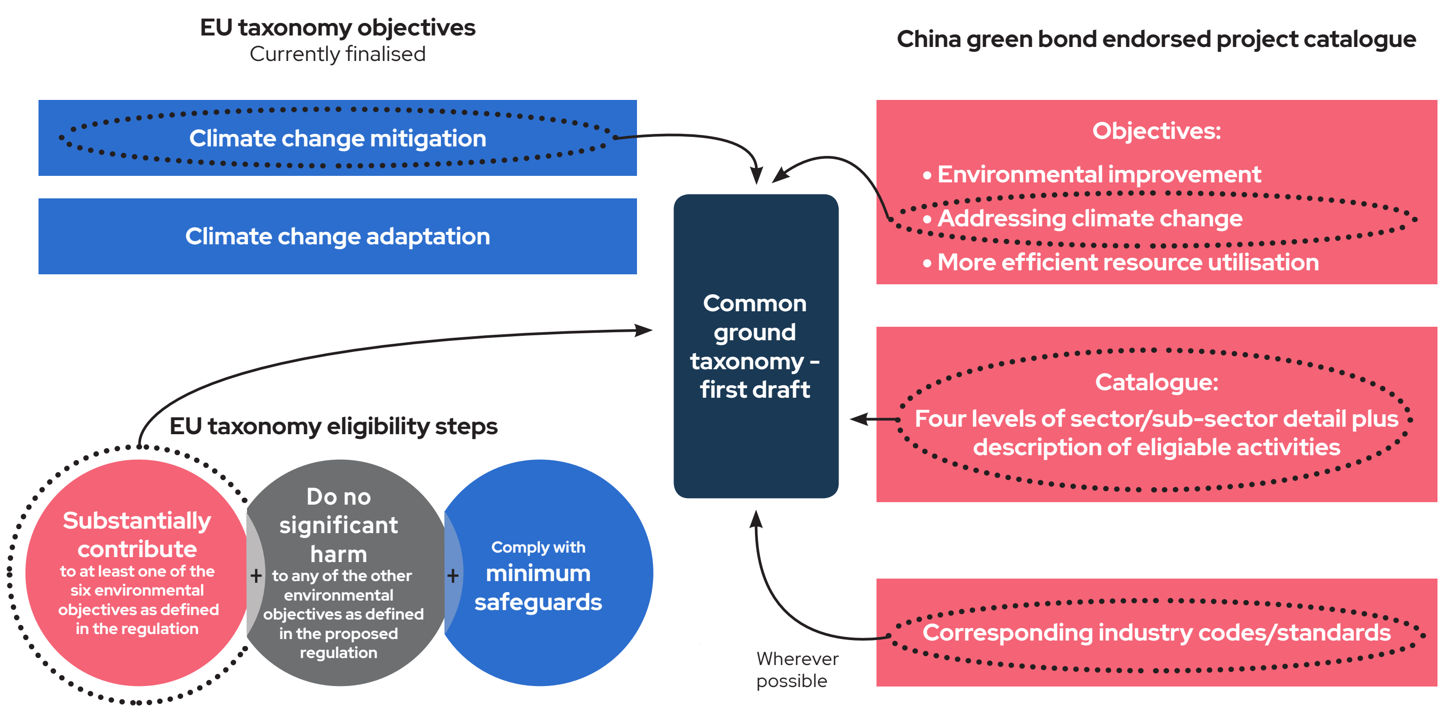
Respondents from the European Commission emphasised the importance of interoperability between frameworks, recognising that jurisdictions have 'different starting points' and that 'it might take time to reach the same ambition, detail and ability to increase transparency and so increase investment flows across borders.' Dan Novak, senior trade analyst at the Bank of Canada, argued that there must be 'allowance for some flexibility for local jurisdictions based on their needs, whether those be the needs of the economy, or whether they be the needs of political acceptability.' Nevertheless, standards must be framed in a way that is transparent, 'understood and can be meaningfully compared.'

There is a movement to bring greater clarity between taxonomies, seen with the Common Ground Taxonomy, developed between China and the EU, and led by the International Platform on Sustainable Finance. The European Commission and IPSF explained the role of the CGT as being: 'to provide more clarity and transparency about the commonalities and differences between approaches and eventually lower the trans-boundary cost of green investments and scale up the mobilization of green capital internationally. It also provides a solid methodology on the basis of which other taxonomies can be compared in the future.'

The CGT defines sections of commonality between the EU and China's taxonomies in terms of objectives, eligibility criteria, activities and thresholds (Figure 3). The CGT instruction report explains that taxonomies should be 'developed based on common sustainability objectives and principles and using a common language making them more comparable and interoperable.' Interoperable taxonomies will 'reduce transaction costs by avoiding unnecessary duplication of verifications,' increase market confidence, and 'help to facilitate cross-border green capital flows.'

The CGT is not 'A legal documentation by the EU and China which entails requirement/obligation for either jurisdiction to change their taxonomy' or 'exclusive definition of environmentally sustainable economic activities.' As the European Commission respondents noted, 'This is not a new taxonomy, not a standard and not covering all features, it's a signal… that work can be extended to other jurisdictions and

3. EU taxonomy objectives



Source: IPSF, Instruction Report on Common Ground Taxonomy – Climate Change Mitigation, November 2021

reinforces current methodology.'

The impact the CGT will have on future taxonomies remains to be seen. The UK's Greening Finance: A Roadmap to Sustainable Investing, which outlines its taxonomy plans, does indicate alignment with the EU and Chinese taxonomies, referencing the need for interoperability and consistency in taxonomy approaches. Jurisdictions developing their own taxonomies are not bound to follow the CGT, nevertheless it is a significant step in developing a common language between taxonomies, enabling comparability, transparency and coherent approaches to identifying and aligning investments with sustainability goals.

A question remains on the impact these frameworks will have on jurisdictions with no taxonomy regulation. One jurisdiction which shows a clear divergence in approaches to ESG transition pathways and standards is the US, choosing a market-led approach which follows client demand.

A market-led approach

The US lags behind the EU and other jurisdictions in terms of ESG regulation, having no established taxonomy framework. The US Securities and Exchange Commission has established a Climate and ESG Task Force in the enforcement division, yet many asset managers surveyed by OMFIF said they have been led by Europe in disclosure of funds and defining green investment, products and assets.

This has also meant that large US asset managers have based their ESG and sustainability leadership primarily in the UK and Europe. Without regulation, the development of expertise and ESG tools slows, and as Kristina Church, head of responsible strategy at BNY Mellon Investment Management remarked, 'there is still a need in the US to work with clients to highlight the benefits of ESG integration.'

Investors and asset managers clearly need guidance, frameworks and definitions to implement ESG. Lack of regulatory development has also led to a slower expansion of ESG products within the asset management community, and Church noted that, while she expects strong future growth, it currently comes 'from a smaller base'. This may also result from a lack of client demand for ESG, which may be a further reason why regulation has not been developed. There is nervousness in the US market which prioritises financial returns for clients and a lack of appreciation that ESG can be integrated while maintaining return on investment.

Nevertheless, ESG is clearly gaining in prominence in the US. ESG assets have reached over $51tn, or 33%, of the total US assets under management. Asset management in the US is experiencing a huge change in approaches to investment and many asset managers do report a significant growth in client demand for data on firms' ESG approaches. The US as an individual jurisdiction leads in green bond issuance, which is expected to reach an annual $5tn by 2025. This is still behind Europe with Germany

> "There is nervousness in the US market which prioritises financial returns for clients and a lack of appreciation that ESG can be integrated while maintaining return on investment.

and France in the top four issuers, but shows huge market growth and enormous opportunity in ESG investment (Figure 4).

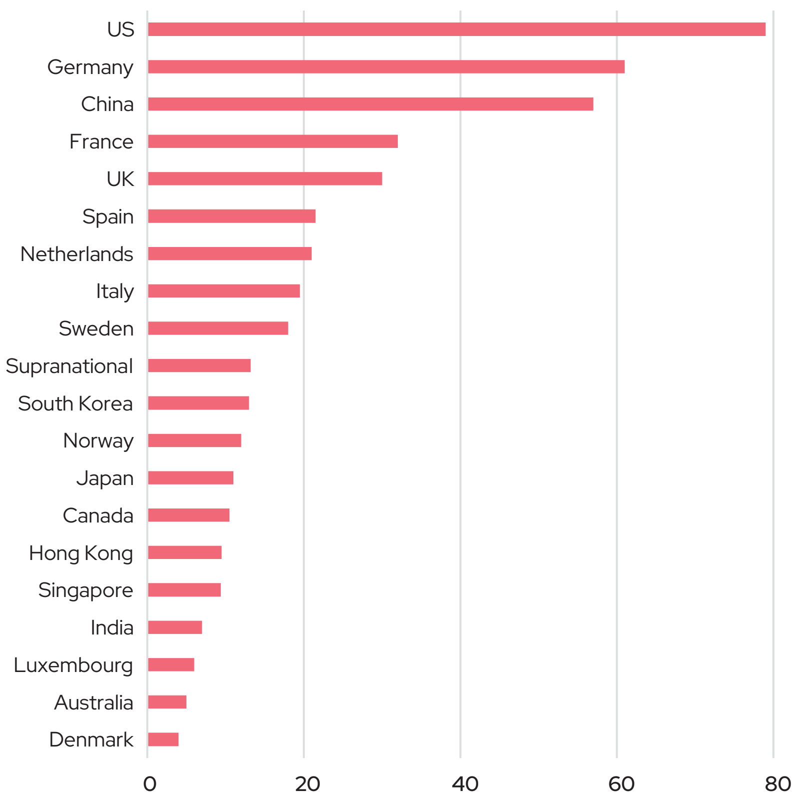
The market-led approach is clearly an effective method of driving ESG integration if the client demand for products and investments is there. The US aims to maintain efficiency and spur innovation through a through this approach. Yet, Europe is still ahead in driving ESG transition.

Investors are now dealing with divergence in regulatory and market led approaches, as well as divergence within the various regulations which have arisen. This is becoming increasingly difficult for the financial market to navigate.

33%

ESG assets have reached over $51tn, or 33%, of the total US assets under management.

4. US, Germany and China leading jurisdictions in green bond issuance, 2021
Top 20 jurisdictions for green bond issuance ($bn, approx.)



Source: Climate Bonds Initiative; OMFIF Analysis

Practical implications

Even without a clear regulatory structure, ESG is becoming integrated into US asset managers' strategies, albeit in a smaller and slower way than in Europe. This is through the screening of investments to ensure alignment with sustainability objectives, impact investment and the formal integration of ESG investments across portfolios. The role of the financial market in driving ESG transition will be examined in Chapter 4, but this shows clear action being taken by financial actors in the US. Client requests from Europe all now contain some ESG requirements, which means the US financial market is already having to deal with and understand ESG regulations. It is clear US funds are looking for more clarity on ESG criteria and have in many instances turned to Europe for guidance.

Regulation may have moved faster in Europe, but that doesn't mean the US can't and won't catch up. While European asset managers have hired climate experts, and this is currently where the bulk of expertise resides, there is a realisation that fund management and financial experience may be more valuable. The ESG elements can then be learnt. This is one way the US can leapfrog the EU and move quickly to integrate ESG into financial market strategies and investment.

The extraordinary pace of ESG regulatory development in the EU has also made it harder for the financial industry to differentiate and innovate and has in some instances led to fragmentation. Varying objectives, principles and criteria emerge, and this has led to the EU financial sector grappling with a multitude of frameworks. As Church noted, asset managers in the EU are 'working flat out to comply with an ever-evolving regulatory environment.' Additionally, the EU has been criticised for using 'backward-looking' measures for ESG information, which causes issues for sustainability transition and requires a forward-looking

5. Costs and benefits of various ESG frameworks

	Potential benefits to investors	Potential systemic benefits	Costs, concerns
State-led regulatory framework (EU, China)	Clarity, ease of doing business in ESG space Facilitates the incorporation of climate-related risks into portfolio Lower risk over the long run	Foundational step in implementing broader net-zero transition agenda beyond finance Top-down guidance (i.e., taxonomy, mandated disclosures) more easily measurable and comparable Science-based Takes long-run perspective Facilitates collective action	Slow moving, bureaucratic hurdles Could flatten political and societal differences on definitions (i.e., whether to classify nuclear energy as green) Could risk difficulties in implementation
Market-led framework (US)	Less costly/burdensome in the short-term Can opt in or out based on own investment strategy / objectives First-movers' advantage could offer competition for leadership position in ESG	Praxis-based approach more easily implemented (or already implemented) More flexible Moves more quickly than state-led efforts	Risks prioritising returns and profit over science-based climate imperatives Focused on short-term rather than long-term risks and benefits More risky and costly over the long term Ad hoc measures can lead to market fragmentation, mislabelling (greenwashing) and confusion Entity-level ESG measures are only marginally effective

Source: xxxxxxxxxxxxx

examination of physical and transition risk. Another way for the US to leapfrog the EU is integrating ESG metrics and data which are 'forward looking' and enable projections and accountable targets to be set (Figure 5).

Despite the challenges, taxonomies and regulation clearly do play an important role. The European Commission respondents to this report noted the EU doesn't want to necessarily export its taxonomy globally, yet as an instrument which classifies activities and prevents greenwashing it has become widely used and has formed a framework for other taxonomies. As Fiona Wild, vice president of sustainability and climate change at BHP, a mining company in Australia, noted: 'We've been looking at the EU taxonomy to try and help us articulate the process we will use to define what green revenue is for us'. The EU taxonomy is arguably, therefore, becoming a global standard in understanding green products, revenue and investment.

Given the complexity and discrepancies of available taxonomies already causing divergence in ESG regulation, the establishment of a US framework would most likely cause further divergence and market fragmentation. It is also evident that although there is a clear need for more guidance and regulatory frameworks in the US, the US market has little desire for its own taxonomy, or a top-down regulatory approach seen in Europe and there is little indication this will be implemented. Nevertheless, in a global world, it is impossible for the US financial market to ignore ESG-related requests from European and Asian clients. There is a clear need in the US and globally for a common language defining green products and investments and some convergence in reporting and disclosure of ESG activities. This is complicated by varying political needs and knowledge of sustainability – reflected in the US market-led approach which prioritises investment return – and the divergence in taxonomy frameworks which have been developed. Nevertheless, ESG investment and products are mainstream now, and the US is looking to Europe for guidance and is establishing mandatory requirements for disclosure. This indicates the regulatory approach is taking the upper hand and is needed to fully integrate ESG into financial markets. The EU-China Common Ground Taxonomy framework offers an encouraging tool for providing a common baseline while accommodating jurisdictional variation. The EU has provided a path.

The EU's regulatory-driven approach has made Europe a clear leader at this stage. While the US has often become a frontrunner in new fields through a market-based approach, a more structured regulatory approach may be crucial for the financial sector to effectively integrate sustainability into their strategies and investments. Whether a combined market/regulatory approach in the US comes into effect, and can then overtake the European position, remains to be seen.

The next chapter will explore further the issue of the various disclosure, targets and reporting frameworks across jurisdictions, and the increasing need for climate-related information to understand climate related risk. •

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CHAPTER 2

DISCLOSURE, TARGETS AND REPORTING

More and more jurisdictions are introducing mandatory requirements for reporting and disclosure, but stakeholders are divided over whether this is the best approach.

THE Carbon Disclosure Project, which runs the global environmental disclosure system, has found that portfolio emissions of global financial institutions are on average over 700 times larger than direct emissions, suggesting that financial institutions are significantly underestimating climate risks associated with financing. Until the financial sector tracks and reports accurately and fully on the environmental impact of its lending and investment portfolios, it is impossible to set targets to transition to sustainable investments.

Progress in standards and reporting frameworks

One of the first reporting frameworks to adopt ESG criteria was the Global Reporting Initiative, which launched its Sustainability Reporting Standards in 2015 following the adoption of the United Nations' sustainable development goals. The Global Sustainability Standards Board is responsible for setting the standards for sustainability reporting, with 15 members from across jurisdictions and stakeholder expertise. These standards are designed to be economy-wide, with sector specific as well as universal standards, aiming to bring a 'common language' to the communication of ESG impacts.

The Sustainable Finance Disclosure Regulation is a mandatory disclosure tool developed by the European Commission and attached to the EU taxonomy. It is designed for financial market participants and asset managers. Participants are required to deliver standardised disclosures on ESG factors and their integration at entity and product-level. The SFDR aims to create comparability in financial products and funds and ensure transparency for end-investors.

Reception of the SFDR has been largely positive, with many stakeholders recognising it as an imperfect but welcome first step. Dina Lorentz, senior business development manager and specialist sustainable finance at Dentons Europe, acknowledged that the SFDR appears complex, 'but it clearly connects, and very practically connects, to the taxonomy,' setting out obligations and steps for the financial sector to follow.

To be successful, the SFDR must be aligned with the EU taxonomy criteria. Gabor Gyura, head of sustainable finance at the Magyar Nemzeti Bank argued that alignment with taxonomy metrics will significantly reduce greenwashing risks. This is a complex task when considering the divergent views of what is considered green, and which energy sources should be included as green in the EU taxonomy. While the SFDR does not completely eliminate the risk of greenwashing, it is a huge step forward.

The EU is also developing the Corporate Sustainability Reporting Directive within its green taxonomy, which will be published in October 2022. It is designed for corporations, with requirements for both listed and non-listed companies. Participants will be required to report on how sustainability issues affect their business and the impact of their activities on people and the environment.

Disclosure frameworks is an area where the US is working to catch up with the EU in the ESG regulatory landscape. In a landmark decision, the US Securities and Exchange Commission has set a mandate that listed companies on US exchanges disclose their current levels of carbon emissions and their risk exposure. A key issue US asset managers highlight in their ESG activities is a lack of data, something which disclosure and reporting of activities, explored in the next chapter, will help solve. In terms of reporting ESG activities, many US asset managers surveyed by OMFIF use the Task Force on Climate-related Financial Disclosures and the SEC's disclosure rule is like to include the TCFD. At the international level, this is one of the most influential standards of the last few years, its inclusion by the SEC would be a huge step towards market convergence.

Set up by the Financial Stability Board, the TCFD is designed so that financial markets can price climate-

2.1. Available standards and frameworks
Current standards and boards

Abbreviation	Name	Aims
Carbon Disclosure Project	CDP	CDP runs the global environmental disclosure system. Each year CDP supports thousands of companies, cities, states and regions to measure and manage their risks and opportunities on climate change, water security and deforestation at the request of their investors, purchasers and stakeholders.
CDSB	Climate Disclosure Standards Board	CDSB is an international consortium of businesses and environmental non-government organisations. It has adopted the TCFD as a disclosure framework to enable companies to provide investors with decision-useful environmental information via the corporate report, enhancing the efficient allocation of capital.
CSRD	Corporate Sustainability Reporting Directive	The CSDR aims to revise and strengthen the rules introduced by the NFRD and to bring sustainability reporting on a par with financial reporting. Companies will have to report on how sustainability issues affect their business and the impact of their activities on people and the environment.
GRI Standards	Global Reporting Initiative Standards	The GRI Standards provide global best practice for reporting publicly on a range of economic, environmental and social impacts. Sustainability reporting based on the standards provides information about an organisation's contributions to sustainable development. It is a modular system of interconnected standards: the GRI Universal Standards, the GRI Sector Standards and the GRI Topic Standards.
IASB	International Accounting Standards Board	An independent group of experts with an appropriate mix of practical experience in setting accounting standards, preparing, auditing or using financial reports and accounting education.
ISSB	International Sustainability Standards Board	Established November 2021, the ISSB's aim is to deliver a comprehensive global baseline of sustainability-related disclosure standards that provide investors and other capital market participants with information about companies' sustainability-related risks and opportunities to help them make informed decisions.
IFRS	International Financial Reporting Standards	FRS were established to develop a single set of high-quality, understandable, enforceable and globally accepted accounting and sustainability disclosure standards. The IASB sets IFRS accounting standards and the ISSB sets IFRS sustainability disclosure standards.
NFRD	Non-Financial Reporting Directive	The NFRD aims to enable the investment community, consumers and other stakeholders to evaluate the non-financial performance of large companies, and to encourage those companies to develop a more responsible approach to business. Under the NFRD, large, listed companies, banks and insurance companies with more than 500 employees are required to publish reports on the policies they implement in relation to: the environment, social responsibility, human rights, anti-corruption and bribery and diversity.
SASB	Sustainability Accounting Standards Board (Value Reporting Foundation)	SASB standards guide the disclosure of financially material sustainability information by companies to their investors. Available for 77 industries, the standards identify ESG issues most relevant to financial performance in each industry. SASB standards are maintained by the Value Reporting Foundation.
SFDR	Sustainable Finance Disclosure Regulation	The SFDR sets sustainability disclosure obligations for manufacturers of financial products and financial advisers towards end-investors. It covers the integration of sustainability risks by financial market participants and financial advisers in all investment processes and for financial products that pursue the objective of sustainable investment. It also has disclosure obligations for adverse impacts on sustainability matters at entity- and financial product-levels.
TCFD	Task Force on Climate-related Financial Disclosures	The Financial Stability Board established the TCFD to develop recommendations for more effective climate-related disclosures that could promote more informed investment, credit and insurance underwriting decisions. This enables stakeholders to understand better the concentrations of carbon-related assets in the financial sector and the financial system's exposures to climate-related risks.
TNFD	Taskforce on Nature-related Financial Disclosures	The TNFD is an alliance aiming to deliver a risk management and disclosure framework for organisations to report and act on evolving nature-related risks. It aims to support a shift in global financial flows away from nature-negative outcomes and towards nature-positive outcomes.

related risks and opportunities correctly. A key focus of the TCFD is developing data and projection tools, and closing the climate risk information data gap. It aims to support stakeholders in understanding the concentrations of carbon-related assets in the financial sector and the financial system's exposures to climate-related risks The TCFD has been adopted as a mandatory disclosure tool in various jurisdictions, including the UK, Brazil and Japan, by both the financial and corporate sector.

Finally, using the structure and foundation of the TCFD, the Taskforce on Nature-related Financial Disclosures was developed as a framework for organisations to report and act on nature-related risks. It uses similarities in framework design and stakeholder engagement to avoid repetition and maximise the prospects of accelerated market adoption.

To address the proliferation of various disclosure and reporting frameworks (Figure 2.1) and ensure their interoperability and standardisation, the International Sustainability Standards Board was established by the International Financial Reporting Standards. Announced at COP26 in November 2021, the ISSB is a first step in developing a global, baseline, corporate reporting standard on climate change and sustainability. It aims to provide investors and other capital market participants with information about companies' sustainability-related risks and opportunities to help them make informed decisions. The inclusion of the US in the ISSB shows, once again a movement towards regulatory practice and standards in market-led jurisdictions. With the US involvement, the ISSB has a stronger likelihood of bringing market convergence and setting a global baseline and language for reporting metrics.

Steps towards mandatory disclosure

Although much progress has been made in developing internationally standardised disclosure and reporting metrics, challenges persist. Disclosing climate-related risk and investments and understanding how to measure impact with multiple data sources to benchmark the costs, is extremely complex. This is especially the case when assessing exposure to risk. Lending to an energy producer is relatively straightforward to quantify in terms of climate risk exposure, but this becomes more challenging to measure as you progress through the value chain (see Figure 2.2).

The legal and compliance costs, combined with the data collection and processing costs, create financial burdens. These challenges are potentially exacerbated by the movement towards disclosure becoming mandatory.

Mandatory disclosures could impose burdens on smaller financial institutions and businesses which may not have the capacity and the resources to report on their ESG compliance. Furthermore, different jurisdictions will have varying starting points and capabilities, making establishing a global mandate for disclosure challenging. For instance,

2.2. Greenhouse gas emissions by scope

Scope 1: Direct GHG emissions from operations that are owned or controlled by the reporting company.

Scope 2: Indirect GHG emissions from the generation of purchased or acquired electricity, steam, heating or cooling consumed by the reporting company.

Scope 3: All indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

Source: The Greenhouse Gas Protocol Corporate Accounting and Reporting

financial institutions operating in emerging markets may find it difficult to comply with certain global standards or requirements due to lack of data, insufficient supervisory capacity or even government support in requiring such disclosures. For some countries, requiring ESG disclosures may not be as pressing an issue.

'The challenge [with making disclosures mandatory] is that mandates are governed by local jurisdictions,' emphasised Jeffrey Hales of the SASB. As those are likely to differ, he said, this can 'institutionalise differences across jurisdictions and so it can create some real challenges to global solutions.' As Church noted, more disclosure isn't always better. Getting consistent, material data is what is important. Nevertheless, setting a mandate for standardised disclosure across jurisdictions would help facilitate comparable and clear information for both investors and investees in the ESG space (see Figure 2.3).

Many of the disclosure frameworks in the market are already mandatory in some form. For financial institutions, the SFDR requires mandatory reporting of investments and portfolio allocation. The TCFD is already adopted as mandatory in various jurisdictions and the SFDR is mandatory across Europe. Satoshi Ikeda, chief sustainable finance officer at the Financial Services Agency (Japan), believes that the TCFD will inevitably become mandatory, noting that 'even Japan made a certain element of the TCFD recommendation mandatory already.'

Many respondents argued that making disclosure requirements mandatory is imperative to ensure that companies report, and to enhance comparability and transparency across sectors. 'There is a big acceleration when things become mandatory, noted Sherry Madera, chair of the Future of Sustainable Data Alliance. Gyura highlighted the importance of mandatory disclosure in driving transition: 'If we gave more leeway to firms… I think we would not get anywhere.' Mandatory disclosure levels the playing field and can provide transparency and comparability.

The proliferation of disclosure requirements, indicators and metrics means some kind of standardisation is necessary, with indicators which are transferable, comparable and can be used across jurisdictions. The TCFD, used across multiple

" In addition to supporting investment preferences, labels help to reduce the risk of greenwashing.

2.3. G20 countries that have implemented mandatory climate-related financial disclosures

G20 countries	TDFC	Other framework	Relevant authority
Australia	Yes		Australian Prudential Regulation Authority
Brazil	Yes		Banco Central do Brasil
Canada	Yes		Canadian Securities Administrators
France	Yes	Yes	European Union and Banque de France
Germany	Yes	Yes	European Union and German Federal Assembly
Italy	Yes	Yes	European Union
Japan	Yes		Financial Services Agency
New Zealand	Yes		Ministry of Climate Change
Russia	Yes		Bank of Russia
South Korea	Yes		Financial Supervisory Service
UK	Yes		Bank of England
China	Under consideration	Yes	People's Bank of China and Ministry of Environment and Ecology
South Africa	Under consideration		National Treasury
India	No	Yes	Securities and Exchange Board of India
US	No	Yes	Securities and Exchange Commission

Source: OMFIF Sustainable finance tracker

jurisdictions, and seemingly being integrated into the SEC's rules, seems an obvious framework to accomplish this. Disclosure and reporting requirements are where the US is now taking steps to integrate ESG regulatory practice, and catch up with the EU's regulatory-driven approach. This reveals the importance and necessity of reporting in understanding climate risk, setting targets and driving ESG investments and products. Data is a key tool for this and remains a huge challenge for the global financial market.

Data and forward-looking projections

Huge strides have been made in filling ESG data gaps, as corporations are increasingly reporting against the TCFD requirements on their ESG activities and generating climate-related information. Asset managers, central banks, multinational companies and multilateral development banks are using this data to carry out scenario analysis and stress testing to understand their risk exposure to climate change. As Novak observed: 'more and more data has been collected at a granular, small business, even individual level,' and some financial institutions are developing models for risk as technology improves.

Nevertheless, data – or the lack of it – remains the biggest challenge to reporting across the globe. Investors need robust data to comply with increasing regulatory requirements, which they receive via their investee companies. Correspondingly, companies need the right data to make adequate disclosure of their climate risk exposures. For these reports to be useful to investors across different jurisdictions, the data must be comparable and interoperable.

A key challenge is that countries and jurisdictions do not possess the same capacity for data access, collection, aggregation and verification. In order to make meaningful data open source, this needs to be addressed 'at the international level,' stated King. Data disparity can also be seen between small and large corporations, especially when considering the cost of generating data, which for a small- to medium-sized institution with lower revenue proves a potential hindrance to data capture and analysis. Filling this gap will undoubtedly enable better standardisation of disclosure frameworks.

At the firm level, capturing data on companies' emissions remains a challenge. 'The information that you get from structured accounting is directional at best. So it's not accurate… It's based on a lot of things like industry averages. There's a lot of uncertainty in that,' noted Fiona Wild of BHP. 'When people start using certain data for ranking companies, or for comparing one company with another, there's a huge amount of error that gets introduced. So really, what you want to able to do is look at a company's scope three emissions over time.' A lack of standardisation at the firm level will impact the quality of comparability of information being reported for investors and regulators.

To be able to fully model and capture the risks associated with climate change, and adequately disclose the impact of investments and portfolios, forward-looking projections and data must be integrated in the financial sector's metrics and frameworks. There is therefore increasing demand for projections and forward-looking data which capture physical and transition risk.

"Mandatory disclosures could impose burdens on smaller financial institutions and businesses which may not have the capacity and the resources to report on their ESG compliance.

The latest TCFD proposal includes guidance on forward-looking disclosures, signifying that this is something the financial sector needs to consider. Forward-looking projections enable investors to look beyond current sustainability performance and consider more dynamic metrics, such as the potential for transition. They allow investors to assess the ability of a company to adapt to the physical and transition risks of climate change, and how risks are being integrated into various disclosure tools. 'As long as you are super transparent about what you are using as your benchmark for your scenarios and where you are getting the data from, and it's continued to be used as a credible and continuous source during the life of the product,' stated Madera, 'there shouldn't be issues with credibility of the data.'

Nevertheless, there was a general sense among respondents that implementing forward-looking indicators, combined with mandatory disclosures, is very ambitious. To adequately make projections or use forward-looking data, historical data must also be used. 'Any forward-looking data is ultimately a forecast,' noted Hales, 'and there are no forecasts that are based exclusively on guesses about the future, all are informed based on activities in the past.' Ben Webster, CEO of OWL Analytics based in the US, also voiced concern that companies are not yet prepared for disclosures: 'When you actually look at the data, there are probably only 5,000-6,000 companies directly reporting to GDP worldwide. The rest is pretty much models.' This lack of standardisation at the data gathering level has impeded progress on reporting and disclosure initiatives. Converged regulation, and criteria on disclosure frameworks is then required to assist in companies becoming ready to report their activities, and in turn drive forward-looking data. This again supports the EU regulatory driven model in driving ESG transition in financial markets.

Given the challenges posed by climate change, there may not be any alternative. Hamon summarised that financial institutions need to ensure the 'business that [they're] doing today will align to selected [climate] scenarios to ensure targets will be achieved' in order to ensure that the 'business will still be there in 20-30 years.' Therefore, the development and implementation of forward-looking data is a challenging but necessary step in disclosure enhancement, targets, plans and strategies, and, ultimately, the financial sector's transition to net zero.

The role of labels and ratings

The increasing pressure from both retail and institutional investors for ESG-linked products has given rise to the use of labels to identify such products. Labels or ratings are used to certify and/or promote sustainable and responsible investment, as well as simplify the choices for investors by identifying funds or products that have ESG factors incorporated into their investment processes. In Europe, asset managers now use these labels to attract certain categories of investors who are either environmentally or socially inclined. Regulatory requirements have also led to the need to label products and to include these products in investment portfolios.

To assist investors in decision-making, various labels or certifications – like the German Sustainability FNG Label, the LuxFlag Environment Label (EU funds), France's SRI Label, the Austrian Ecolabel – are now awarded to funds to show that they meet specific sustainability targets and requirements. Additionally, the EU Ecolabel criteria for Retail Financial Products is developing its own certification. These funds are measured against agreed methodologies or benchmarks. In addition to supporting investment preferences, labels help to reduce the risk of greenwashing. When funds and other financial products are subjected to review and third-party verification, it ensures that necessary processes have been followed for ESG integration in the product development, and that fund credentials meet requisite ESG metrics and standards.

The SEC has also began putting pressure on the financial sector to clarify the ESG standards they use for classifying funds, arguing asset managers need to be better informed. The SEC ESG sub-committee recommended clear description of each product's strategy and investment priorities in its disclosure, showing efforts are being taken to bring labels and definitions to ESG products.

Ratings have also been used to promote integration of ESG into funds. The European Fund and Asset Management Association describes its rating as 'an amalgamation of all the holdings in the fund and its objective is to provide investors with an overall assessment on the fund's environmental, social and governance holdings.' These ratings are determined based on quantitative tools provided by ratings and analysis agencies such as Vigéo Eiris, EthiFinance, INrate, ISS-Oekom, MSCI and Sustainalytics. The ratings measure the ESG performance of companies, governments and public institutions, primarily for institutional investors and financial data providers. Ratings that have been developed include the Morningstar Sustainability Rating and the MSCI ESG Fund Quality Score.

The important difference between labels and ratings is that funds voluntarily submit themselves or request to be labelled, while ratings are independently awarded by agencies. Furthermore, labels are provided based on qualitative and quantitative bases, while ratings only focus on a quantitative measurement.

Some stakeholders believe that a more holistic framework is needed that enables investors to assess a company's overall ESG standing rather than assessments being based on specific labelled funds or products. These standards and criteria will come from the public sector and the regulator, and are explored in the next chapter. Significant progress has been made on the creation of a harmonised and interoperable framework could lay the groundwork for expanding disclosures to include further ESG metrics and practices.

"Until the financial sector tracks and reports accurately and fully on the environmental impact of its lending and investment portfolios, it is impossible to set targets to transition to sustainable investments.

CHAPTER 3

WIDENING THE ROLE OF THE PUBLIC SECTOR

Regulators and central banks have an important role to play in encouraging the development and use of standards and regulation, but they also need to collaborate with the private sector.

AS illustrated in Chapters 1 and 2, the public sector has taken a more active role in both the integration of standards and policy initiatives and in promoting transparency across the financial sector. Despite the progress made by the private sector, the public sector will be crucial in facilitating the sustainable transition: 'If you're an investor… even a pension fund, or a social security, you should be concerned about meeting your risk return policy and finding the best projects – and not necessarily solving the problems of the world,' one respondent noted.

As a result, globally, the public sector's scope is also expanding beyond the introduction and enforcement of taxonomy guidance, disclosure and reporting frameworks. Policy-makers set the bounds for conduct and practice, regulators ensure systemic stability and mitigate risk across markets, and public investors ensure capital is channelled toward sustainable projects and activities where private finance falls short. This chapter will provide an overview of the wider role of the public sector entities within ESG finance.

The role of regulators

Though the scope of regulation varies globally across jurisdictions, regulators set the language and tone for conduct and practice. Undoubtedly one of the biggest dilemmas regulators face is how to drive standardised reporting across a global financial sector and economy. Lack of international coordination means regulators are unable to effectively do their job. Jeffrey Hales of the SASB noted, 'How companies respond is going to be partly based on what they're hearing from auditors and regulators.' This lack of international coordination at regulatory level leads to a 'chaotic environment' and can delay the implementation of ESG-aligned practices.

The aim of the regulator is to build trust in the market for ESG and sustainable investment products, ensuring greater transparency and helping to combat potential 'greenwashing' by requiring firms to back up the ESG claims they make. For example, in corporate green bond issuance, many jurisdictions are developing their own frameworks and guidance to help alleviate some of the inconsistencies and discrepancies in the market. Progress in the green bond space is also paving the way for social and other sustainability labelled bonds, which are discussed more in depth in the next chapter.

One example of active involvement in sustainable finance by a regulatory institution is the UK's Financial Conduct Authority, which in January 2022 mandated that regulated firms align climate-related disclosure requirements with the

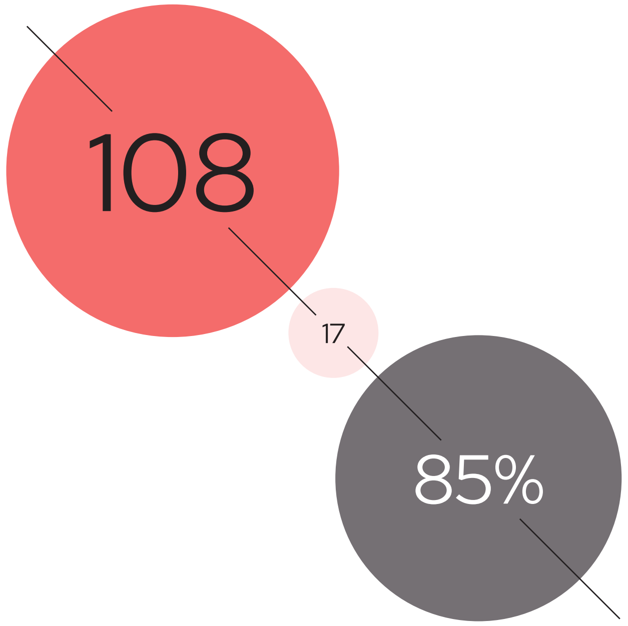
TCFD's recommendations. The FCA monitors and enforces compliance, and all listed companies must make a statement in their annual financial reports regarding the disclosure of climate-related financial information. These requirements are at entity- (investments on behalf of clients and customers) and product-level (climate-related metrics of products and portfolios). The FCA will review accounts and reports that are produced by issuers of transferable securities admitted to trading on a UK regulated market and required to comply with any accounting requirements imposed by FCA rules. The organisation worked with the International Organization of Securities Commissions' Sustainable Finance Taskforce and will adopt the standards of the ISSB, which will form the 'backbone' of the whole-of-economy Sustainability Disclosure Requirements it is now implementing.

The role of central banks

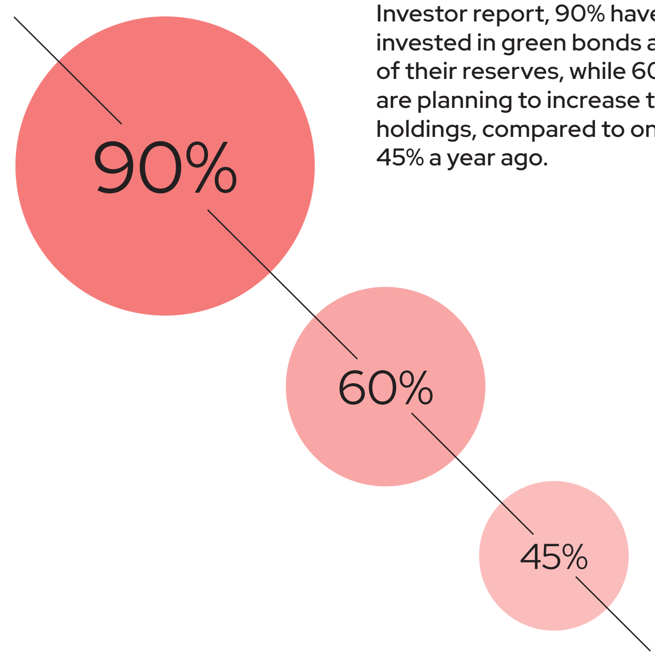
Due to jurisdictional variation, the role of central banks in ESG varies to some extent by institution. Some are more actively developing frameworks and establishing ESG standards, while others are following developments in the market. The role of the central bank varies by jurisdiction. The People's Bank of China established China's green taxonomy framework and the Monetary Authority of Singapore is in the process of establishing its own green taxonomy framework. In other jurisdictions, central banks have a more limited mandate and therefore have fewer tools at their disposal. As Gyura argued, where the central bank is not the regulator, the 'financial regulator itself is the most logical player to be involved in this standard-setting process.'

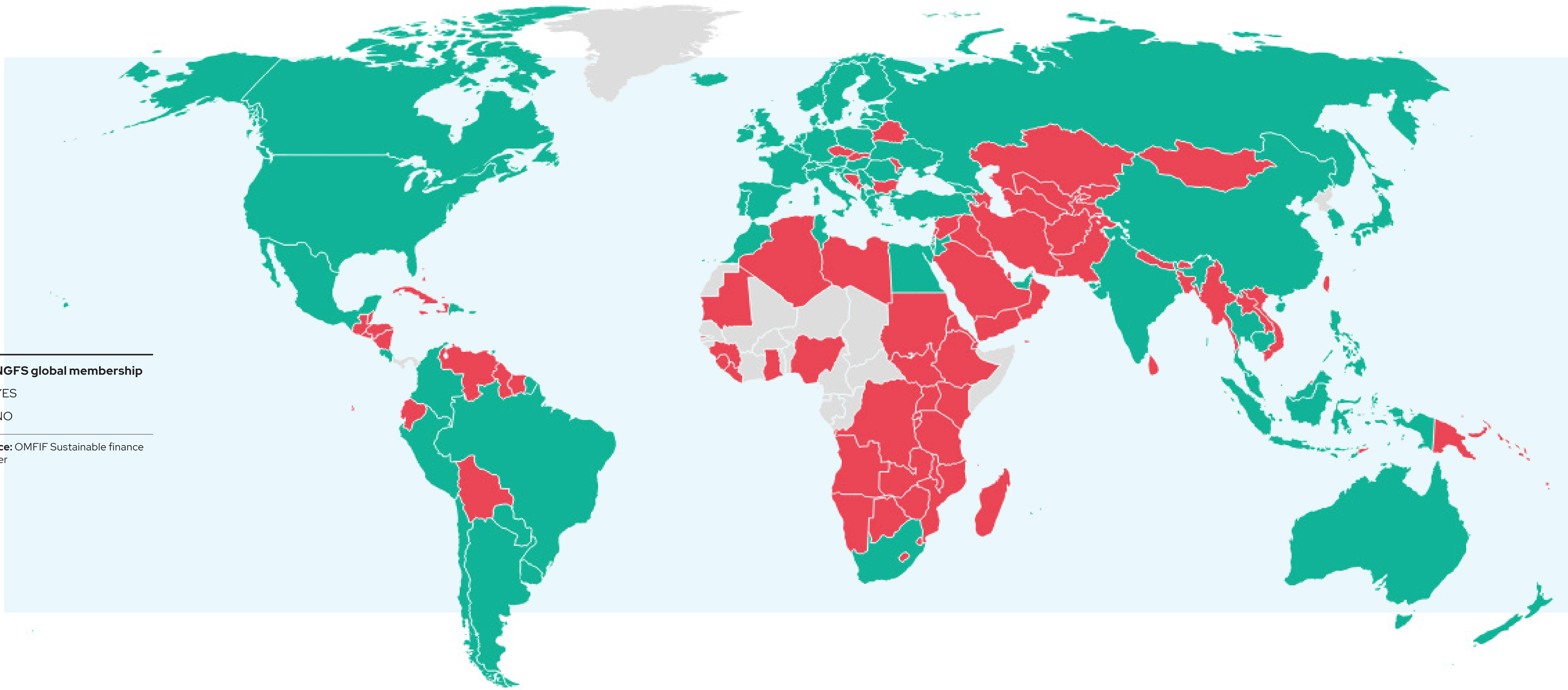
Correspondingly, international coordination efforts to facilitate the adoption of ESG standards are ramping up throughout the financial sector. NGFS membership now consists of 108 central bank members and 17 observers as of February 2022, collectively representing 85% of global greenhouse gas emissions (Figure 3.1). The growth of the NGFS, established to mobilise finance to support transition and climate risk management, indicates the importance central banks are placing on the risk posed by climate change, and their role in mitigation. The NGFS is not a standard setter,

> **NGFS membership now consists of 108 central bank members and 17 observers as of February 2022, representing 85% of global greenhouse gas emissions.**



> **Of the central banks surveyed in OMFIF's 2021 Global Public Investor report, 90% have invested in green bonds as part of their reserves, while 60% are planning to increase their holdings, compared to only 45% a year ago.**





3.1. NGFS global membership

YES

NO

Source: OMFIF Sustainable finance tracker

> **One of the biggest dilemmas regulators face is how to drive standardised reporting across a global financial sector and economy.**

but it is extremely helpful for convergence in how climate and environmental risk to the financial sector is understood, and the mitigation tools which are implemented.

Central banks have a macroprudential role, managing the risks associated with climate change and the mobilisation of green capital and products to ensure price stability and liquidity. 'The financing of… transition is of utmost importance from a macroprudential economic perspective,' argued Sheryl King, adviser to the governor of the Bank of Canada, which also indicates the importance of scaling up green and transition finance.

While it is widely accepted that climate change poses a risk to financial stability and should be part of central banks' mandate to some extent, ESG considerations are still seen as secondary or even tertiary objectives, behind price stability and capital preservation. King observed that in circumstances where 'companies need access to capital, making decisions based on whether they're sufficiently green or not… is not a sound policy choice for a central bank.'

In many jurisdictions, because of their desire to maintain market neutrality, central banks prefer soft instruments, such as improved transparency, stress testing and disclosure requirements. More interventionist measures, such as divestment or direct capital regulation, have remained circumscribed to governments and financial regulators in jurisdictions pursuing a market-led approach to ESG.

Scenario analysis tools

One area where central banks and the NGFS have been integral is the development of stress testing and scenario analysis tools for examining and embedding climate risk mitigation into the financial sector and wider economy. This enables financial institutions to assess the impact investments can have in the future, and to integrate the results into ESG disclosures.

In December 2021, the NGFS published guidance for scenario analysis based on the recommendations of the TCFD on climate governance, strategy, risk management and metrics and targets, with 11 recommended disclosures. It provides a basis for which central banks and other financial regulators may mitigate climate-related risks in their financial systems and direct capital towards activities that promote a just transition. This guidance and the NGFS as an organisation are significant tools for convergence in how climate risk is viewed internationally.

The NGFS guidelines outline four broad steps for scenario analysis: identifying objectives and exposures, choosing scenarios, assessing impacts and communicating results. The NGFS also outlines three scenarios for measuring transition: an orderly transition, where 'immediate action is taken to reduce emissions consistent with the Paris agreement'; a disorderly transition, which recognises efforts and technology are insufficient to meet targets; and a hot house world which assumes that only current policies are implemented, and therefore physical risks increase significantly.

The NGFS has noted that financial institutions are establishing their own scenario analysis tools to gain better insight into transition and physical risk in their investments and portfolios. Credit rating agencies are also exploring scenario tools to improve their ratings methods. The results and information generated by scenario analysis are useful for financial standard setters in developing domestic and international standards and should help ensure an orderly transition. It also allows financial institutions to understand their own risks and drive sustainable investment.

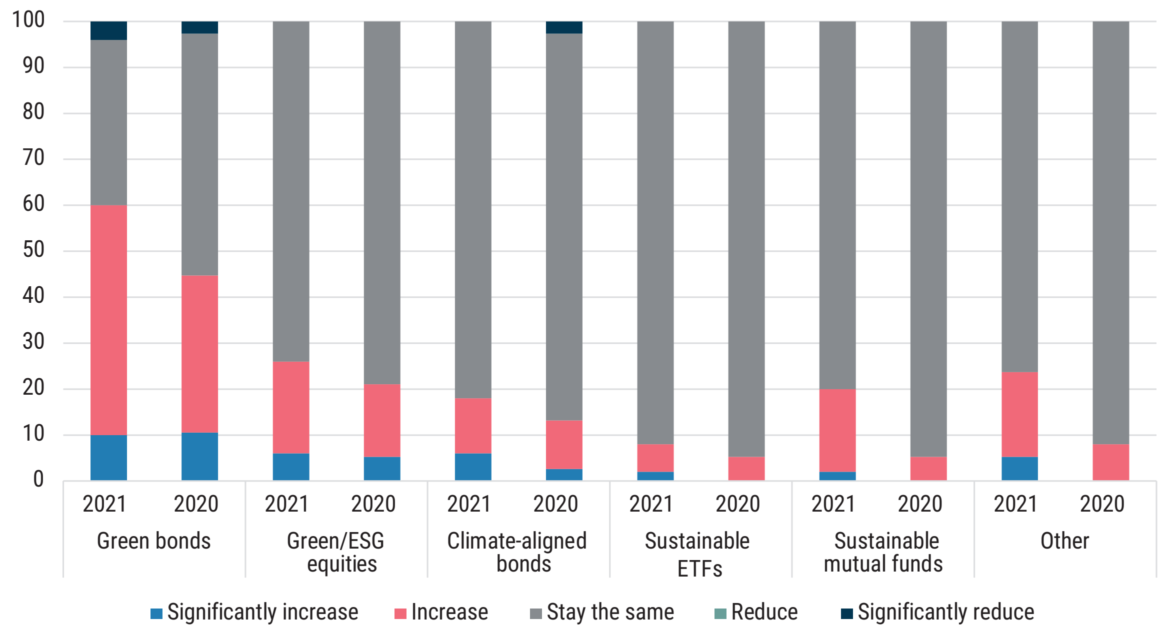
This is also an area where the US lags behind.

3.2. G20 countries that have implemented climate stress testing

G20 countries	Stress test implementation	Relevant authority
France	Completed	Autorité de Contrôle Prudentiel et de Résolution
Canada	In progress	Bank of Canada, Office of the Superindendent of Financial Institutions
China	In progress	People's Bank of China
Japan	In progress	Financial Services Agency
South Africa	In progress	South African Reserve Bank
UK	In progress	Bank of England
EU	In progress	European Central Bank and European Banking Authority
Australia	Expected	Australian Prudential Regulation Authority
Brazil	Expected	Banco Central do Brasil
South Korea	Expected	Financial Supervisory Service

Source: OMFIF Sustainable finance tracker

3.3. Pace of green bond investment accelerates
Are you planning to increase your allocation to 'green' asset investments over the next 12-24 months?, %, 2020 and 2021



Source: OMFIF GPI survey 2020 and 2021

The US Federal Reserve has not yet developed scenario analysis or stress-testing tools to integrate and understand climate risk. Nevertheless, the Fed is requesting information from banks on the actions they are taking to mitigate climate change-related risks on their balance sheets, which shows it is rising on the agenda. The New York Federal Reserve has also produced a report developing a stress-testing procedure which suggests movement towards developing climate risk assessment tools. The decision by the SEC to mandate disclosure will also significantly enhance the understanding of the risk climate poses to the financial sector, and may pave the way for climate stress testing tools to be developed Figure 3.2).

Public investors

Once seen as a niche strategy best left to activist investors in the private sector, ESG holdings, particularly green bonds (see Chapter 4), are moving into the mainstream. Of the central banks surveyed in OMFIF's 2021 Global Public Investor report, 90% have invested in green bonds as part of their reserves, while 60% are planning to increase their holdings, compared to only 45% a year ago (Figure 3.3).

Nevertheless, due to their institutional role, public investors are subject to more legal and regulatory restrictions than those operating in the private sector. Bureaucratic hurdles and slow changes in regulation have meant that public investors lag behind their institutional peers in incorporating ESG considerations into their portfolio management. The private sector will, therefore, continue to play an integral role in driving capital allocation, investments and financial products towards ESG (see Chapter 4).

Driving collaboration between the public and private sector

Close consultation between policy-makers, regulators and private sector stakeholders is the best way to ensure ambitious but achievable standards in the ESG space. As respondents from the European Commission stated, 'We have consultations, bilateral exchanges, and are quite transparent with looking for feedback from the industry,' showcasing the opportunities for the private sector to engage and share best practice with regulators and policy-makers. At the same time, policy-makers and regulators must work together internally and externally to ensure alignment of ESG criteria in products, investment and risk. Regulatory framework will ensure clarity for investors, market alignment and the production of climate-related data which is comparable and transparent. This is being acknowledged now in the market-driven US with the establishment of mandatory reporting and increased movement towards the EU regulatory approach.

Respondents agreed that there needs to be better collaboration between the public and private sector in terms of verifying and establishing what 'good' looks like in green products and investments. This will necessitate collaborative efforts in driving capital allocation to new technologies, and government and public organisations providing incentives for ESG-aligned private sector investment. A dialogue is being created, and the establishment of the ISSB will help bring convergence, but much work is still needed. •

> **Due to their institutional role, public investors are subject to more legal and regulatory restrictions than those operating in the private sector. Bureaucratic hurdles and slow changes in regulation have meant that public investors lag behind their institutional peers in incorporating ESG considerations into their portfolio management.**

CHAPTER 4

BRIDGING THE REAL ECONOMY AND THE FINANCIAL SECTOR

There is a disconnect between the needs of the financial sector and the real economy that needs to be bridged before net zero can be achieved.

WHILE financial markets can facilitate the strategic allocation of capital, the net-zero transition will be driven by the transformation of real economic activity on the ground. Many within the financial sector argue that regulation and disclosure should start from the real economy. Nevertheless, the financial sector is positioned to drive meaningful change through capital reallocation, divestment and transition of assets from 'dirty' industries. This chapter will explore the challenges for non-financial corporate actors and considerations in the drive to increase collaboration between finance and the real economy.

The role of finance in the transition to a sustainable economy

The transition to a net-zero economy by 2050 will require a mobilisation of capital unprecedented in size and scope. 'Capital markets have the opportunities to help accelerate this transition, in part because they know they can move faster than regulation, and they can be more adaptable than law,' argued Jeffrey Hales of the SASB. But it is less certain how best to facilitate such a massive (re)allocation of capital, given the urgent time imperative. 'In the financial community, there's a huge willingness to participate' in ESG initiatives, observed Sherry Madera of FoSDA, 'but there is a misunderstanding – a less clear roadmap – as to how it is that they can and should and must participate.'

Expanding the ESG toolkit of the financial sector

There has been a proliferation of ESG-labelled financial tools, strategies and instruments within the last few years. Where regulatory efforts have stalled, capital markets can promote best practices in ESG by finding common baselines.

Two interrelated ESG strategies are being driven by the financial sector: integration and scenario analysis. Integration, or the embedding of financial materiality climate data into risk analysis through disclosure metrics, facilitates appropriate pricing of ESG-related risk into markets, which has largely been missed by traditional analyses. As noted by the NGFS scenario guidelines (see Chapter 3), this has enabled financial institutions to establish their own scenario analysis tools, gaining better insight into

4.1

Key developments in ESG financial tools and products

ESG integration entails the incorporation of material ESG information and data into portfolio decisions. This strategy can be implemented regardless of whether the investment strategy has a sustainable mandate.

Labelled bonds are fixed-income instruments which promote sustainability and ESG performance. These can be issued by sovereigns, supranational and agency issuers in the public sector as well as companies in the private sector. Labelled bonds fall within two distinct categories.

Use-of-proceeds bonds fund projects with specific ESG benefits. A wide range of bonds fall under the UoP umbrella. Green bonds are linked specifically to climate-related or environmental projects and are the most developed and widely issued labelled financial instruments. Other notable labelled bonds include blue bonds, which finance water and ocean conservation, and transition bonds aimed at financing the greening of emissions-intensive industries and/or activities. Social bonds allocate spending to deliver positive social and/or societal outcomes, often in line with specific UN sustainable development goals, such as human rights, labour protections or diversity, equity and inclusion initiatives.

The second category of labelled bonds are **key performance indicator** bonds. These bonds do not finance particular green or social projects but rather the general activities of an issuer with explicit and measurable objectives, such as sustainability performance targets, at the organisation level. Therefore, while the proceeds are not earmarked for any specific purpose, coupon payments are linked to meeting pre-determined performance objectives. Sustainability-linked bonds are the most common KPI bonds.

ESG funds embed sustainability values and objectives into an investment portfolio. Their asset allocation can be constructed to gain exposure to high ESG ratings or a specific ESG theme, or to generate a positive environmental or social impact. This is often achieved through activist investment in ESG-labelled assets and products, but ESG funds can also use exclusion or divestment to eliminate certain types of exposures, such as fossil fuels.
Engaging in active ownership or stewardship practices entails leveraging ownership rights to influence activities of investee companies. This includes tactics such as shareholder engagement through dialogue and monitoring, as well as the more formal exercise of voting rights on shareholder resolutions to influence investee companies' practices. Active ownership is not necessarily circumscribed to ESG issues.

transition and physical risk in their investments and portfolios. In combination, these practices will enable a more robust integration of climate and environmental considerations into financial markets. More effective and consistent pricing of climate risk into financial decisions should fundamentally change the way that environmentally degradative practices are valued in the markets, dissuading investment in 'dirty' assets.

Beyond these strategies, a plethora of ESG products have also been created (see Figure 4.1). The furthest developments are taking place in the green bond space. Green bond issuance reached $500bn in 2021, nearly a 10-fold increase in just five years, with the US leading its development. The increased demand in green bonds is moving from philanthropic and impact-orientated investors to mainstream fixed-income instruments, paving the way for further developments in ESG bond issuance.

Challenges

The development of such products, strategies and tools are an indication of the financial sector's increasingly important role in the ESG space. Yet there are concerns of greenwashing – or mislabelling – particularly from the real economy. The Value Balance Alliance's Klinkhammer expressed scepticism of self-proclaimed ESG financial products being used as a 'marketing tool' to raise capital. Without proper regulation, clear and credible standards, and accountability they can 'open the door for greenwashing.' This was also echoed by a former senior executive of the UN Joint Staff Pension Fund: 'I think what we're seeing now are not necessarily the best projects or best practices, but the most astute actors in the market being the first to label their project as socially responsible.'

Though green finance remains the most developed segment within the ESG space – both because it is the most time-sensitive and because environmental impacts are more easily quantified than social or governance concerns – quantifying climate impact poses significant challenges to standardisation. Competing definitions of what constitutes a 'green' bond, for example, have led to various 'shades of green' in bond issuance, adding further murkiness to the ESG bond market. For social- and governance-orientated financial products, there is even less convergence. As witnessed with other ESG definitions, metrics and objectives, complexity has resulted in broad and often contradictory criteria.

Apprehension towards ESG financial innovations has arisen because of the complexity of the many different tools, products and strategies. Even within those labelled 'green', financial activities can vary significantly in objective and scope. For example, ESG integration is markedly different from impact investing, which ensures that capital is being allocated towards green projects or activities. Hence, a financial institution can be 'fully ESG integrated' regardless of whether their investment strategies have a sustainable mandate. If distinctions between various products are not clearly defined, they appear misleading and can damage the credibility of ESG initiatives.

A lack of clarity around the various kinds of financial products, the difficulty of calculating their respective impacts and unclear guidance from regulatory bodies can erode the confidence of both investors and investees. For Klinkhammer, the answer to this fragmentation is not more innovative financial products, but better regulation: 'We do not need green labels. We need clear standards and criteria in order to allow for a stringent assessment of the overall performance of a company. Transparency is very essential. It can enhance comparability and foster credibility –which is crucial to driving transformation.'

4.2. G20 countries that have introduced green bond guidance and/or legislation

G20 countries	Green bond framework	Relevant authority
Brazil	Yes	Banco Nacional de Desenvolvimento Econômico e Social
Canada	Yes	Government of Canada
China	Yes	People's Bank of China
France	Yes	Île-de-France Regional Council
Germany	Yes	Federal Ministry of Finance
India	Yes	Securities and Exchange Board of India
Indonesia	Yes	Ministry of Finance
Italy	Yes	Ministry of Economy and Finance
Japan	Yes	Ministry of the Environment
Mexico	Yes	Climate Finance Advisory Group
Saudi Arabia	Yes	Public Investment Fund
South Africa	Yes	Development Bank of Southern Africa
South Korea	Yes	Ministry of Economy and Finance
Turkey	Yes	Capital Markets Board of Turkey
UK	Yes	Bank of England
Canada	Under development	Bank of Canada

Source: OMFIF Sustainable finance tracker

Key challenges for the real economy

ESG financial products aim to enact change in the real economy. Sustainability initiatives should, therefore, ensure close collaboration between financial markets and the non-financial corporate sector. Nevertheless, the consensus among respondents was that there is a disconnect between the finance and the real economy on ESG issues. Two distinct aspects of this disconnect came up in our interviews: divergence in both substance and timing of ESG-aligned practices.

Greening economic activity across the supply chain

Aligning the divergent strategies, objectives and information between financial and non-financial institutions is difficult when institutions are approaching ESG issues with fundamentally different capabilities. Though financial institutions may face considerable costs in aligning their investment strategies with an ESG strategy, the transition for non-financial corporates often requires a complete reimagining of their activities and business models, especially for companies in 'dirty', emissions-intensive sectors like energy, mining or chemicals.

It necessitates 'understanding where emissions come from, how easy it is to abate them, what sorts of technologies might be available, and what that might mean from a practical perspective, in terms of cost or delivery,' said Fiona Wild of BHP. She felt that the 'rush' towards standardisation in sustainable finance underestimates these challenges for non-financial corporations by ignoring the complexities of the real economy. The case of green revenue reveals this disconnect. Wild reported being frequently told: 'if you were manufacturing wind turbines, then all of your revenue would be green.' For her, this view misses the mark. Wind turbines are made of steel, which is made from iron ore metallurgical coal, which BHP produces. Even the 'greenest' projects derive their materials from dirty, emission-intensive industries, though this is not necessarily captured in the current ESG taxonomies and frameworks.

A respondent from the corporate sector expressed similar frustration with developments in ESG standards: 'The current [EU] taxonomy focuses on the end product. The manufacturer of batteries is good for eventual lights, but this does not all exist without the kinds of things that are early in the value chain and is still very carbon dioxide-intense.' While carbon-intensive sectors have received more scrutiny, it is perhaps misguided to focus solely on the end product rather than acknowledging emissions along the entire supply chain. The taxonomy scrutinises dirty industries without regard to a holistic model of production, which is misleading and counterproductive. 'I will not claim that [our company] is not carbon dioxide-intense… But lots of solar panels

“While carbon-intensive sectors have received more scrutiny, it is perhaps misguided to focus solely on the end product rather than acknowledging emissions along the entire supply chain.

and wind turbines would not stand without our base chemicals.'

There may be benefits to divergence in this sense, as relevant metrics differ by industry. For example, the priority for some industries may be reducing emissions, while for others the primary objective may be combatting deforestation. To address these differences, Webster of OWL Analytics suggested market-led working groups designed to collaborate with global industry leaders to identify the most material factors for ESG in those industries, thereby creating bottom-up, industry-based international standards.

Nevertheless, too much sectoral variation according to this proposed model could create a patchwork system which risks promoting a double standard in how green activity is measured and could fall short of invoking transformative and sustainable change in the necessary timeframe.

Managing disclosures in the real economy

A further aspect of divergence pertains to the timing of mandated disclosures. While financial disclosures have become mandatory in some jurisdictions, ESG disclosures in the real economy are further behind. As financial institutions' disclosures are often reliant on data from their investee companies, investors often do not yet have access to the information they are asked (or required) to disclose.

Currently, the most developed regulation for corporate disclosures is the EU's framework. The EU is in the process of revising and strengthening its existing Non-Financial Reporting Directive rules, the adoption of which is currently mandatory for companies with more than 500 employees. With the new Central Securities Depositories Regulation, the EU is aiming to bring corporates' sustainability reporting on a par with financial reporting.

To some extent, the issue of timing is already taken into consideration in the CSRD, with the phasing-in provision mirroring the Sustainable Finance Disclosure Regulation's staggered implementation. The CSRD guidelines are due to be published in October 2022, giving large enterprises time to prepare for increased mandatory disclosures, reporting on how sustainability issues affect their business and the impact of their activities on people and the environment (in addition to turnover, capital expenditure and operational expenditures) starting in 2024. Small- and medium-sized enterprises have been given more time and are due to begin reporting in 2026.

Although the CSRD is not yet in place, the SFDR has already come into force for financial institutions within the European market, inevitably leading to gaps in the data. 'Whereas financial market players have to disclose this information about the entity that they invest in… that's a disconnect in terms of asking financial players to display information when the corporates haven't yet calculated these numbers,' stated Hamon. There is a 'lack of understanding from many market participants that much of the

> **$500bn**
> **Green bond issuance reached $500bn in 2021, nearly a 10-fold increase in just five years, with the US leading its development.**

information for the financial services sector comes from the corporate side' argued Dina Lorentz of Dentons Europe. Additionally, the relevant criteria has not yet developed for sustainable business activities across all industries. This is a clear blind spot in ESG regulations and standards.

From a public sector perspective, respondents felt these claims are exaggerated. The disconnect is not absolute between finance and the real economy and the financial sector is still able to disclose. 'Finance has some things they can report which they do not rely on from the real economy' stated Cristina Hostensia Samratean, administrator of financial law at the European Commission. Other respondents thought that, as the financial market is more influential, financial corporates should be held to higher standards of transparency and accountability than non-financial corporates. As financial institutions have a 'broader fiduciary responsibility to depositors, borrowers, investors, counterparts' said a former senior executive of the UNJSPF, the cross-sectional scope of the finance sector legitimates the introduction of mandatory disclosures before similar legislation comes into force for corporates.

Most of the respondents we spoke with saw the vast amount of requests for ESG disclosures as significant obstacles for companies. Wild stated that: 'We get asked for all sorts of information from a million different sources. And we have to [prioritise] which things we choose to engage with and which ones we don't, otherwise we would literally spend all our days filling in questionnaires and sending information.' To manage this, she said, 'you [try] to map all of these different standards that are out there.'

In responding to investors' and regulators' requests for ESG disclosures, companies have had to understand and implement the various requirements of the different disclosure frameworks across jurisdictions – like the TCFD, GRI or SASB – which are not necessarily interoperable. Where there are multiple applicable standards, companies struggle with implementation. Companies having to map their activities against various standards may lead to 'regulatory cherry-picking', with entities choosing a framework perceived to be onerous or which best suits their risk appetite. This could also lead to greenwashing, incompatible data and/or incomparable risk assessments.

Frustrated by the increased expectations of disclosure while there is still a lack of standardisation and implementation of current regulation, stakeholders recognise the importance of mandating disclosures among all market participants. However, more guidance and capacity building is needed for non-financial corporations, particularly for SMEs. 'The cost of data is extremely prohibitive' for many companies, King pointed out, echoing Webster's point that 'disclosure is a huge investment for companies to actually do, and a lot of smaller companies can't afford it.' Therefore, harmonisation is especially important for companies in terms of allocation and management of its time and resources in responding to disclosure requests and complying with various

4.3. Costs and benefits of investor ESG strategies

	Potential benefits to investors	Potential systemic benefits	Costs, concerns
Responsible active ownership	Potential for active collaboration, management and monitoring of investees' ESG practices	Can move faster than regulation in many cases, especially in laissez faire jurisdictions like the US	Market fragmentation Can be burdensome for investors Risks undermining disincentives for carbon intensive companies to transition
Divestment	Signals commitment to ESG Lower risk over the long run	Incentivises laggard companies to transition more quickly	Societal and economic cost of stranded assets Risks forcing companies into unregulated capital markets (i.e., private equity)

benchmarks and indices.

Some see barriers to disclosure and reporting for non-financial corporates as significant enough that they advocate for voluntary disclosures for the time being. Novak viewed the market as an effective enforcement mechanism, thereby supporting the US market-led approach: 'The markets are rewarding issuers that put out both strong transparent disclosure, as well as credible plans for their own transition.'

Finally, respondents emphasised the importance of accountancy firms in driving collaboration through preparation of the reporting material but also in conducting the front-to-back analysis of corporations and who manages the data being disclosed. Hales described the firms as coordinators between the corporations, regulators and financial sector in terms of what is required for disclosure and ensuring 'activities [are] in sync'. Madera strengthened this point: 'The whole concept of auditing forward-looking data has been a part of the accounting professions toolkit' for a long time. Auditors can help link the actions of corporations and the financial sector by standardising ESG metrics across their platforms.

The role of disclosure requirements, as well as other forms of regulation, should not be about separating the corporate from the financial services sector, but bringing them together, as they are reliant on one another. Due to the current multiplicity of disclosure standards for non-financial corporates across various jurisdictions, there is concern about the lack of standardisation and harmonisation for a variety of organisations, particularly those with cross-border operations and SMEs. This further illustrates the need to harmonise disclosure standards and requirements for the financial sector, but also for the corporate sector to be able to verify portfolio compliance with these standards.

Leveraging influence

There is divergence in opinion on whether divestment or responsible active ownership is the most effective way of transitioning 'dirty', emissions-intensive industries (Figure 4.3). Different sectors and industries will move at different speeds, but divestment will ultimately be a necessary punitive measure for laggard enterprises over the medium term. 'If they're not willing to transition, then there needs to be a divestment,' said one respondent. Hales echoed this sentiment: 'At the end of the day, it is the right of investors to decide where they would like their funds to be invested,' he stated. 'From a moral perspective, I see no problem with divestment and… I definitely have seen and heard anecdotes where companies have [then] changed their behaviours.'

However, most stakeholders seemed uncomfortable with the idea of divestment. For some, divestment prevents asset owners and managers from engaging with corporates to steward their practices and activities, preventing sustained dialogue. For Richard Lacaille, executive vice president and head of ESG at State Street , responsible active ownership is the preferred method. In his view, asset owners should 'speak loudly' to the companies in which they have a significant stake, use their position to engage directly with companies and coax them to pursue ESG alignment.

Moreover, divestment does not always lead to intended effects and could instead push ownership of riskier assets to shadier and less regulated private equity. 'Divestment doesn't necessarily achieve… the end goal,' stated King. 'If the entity that is trying to raise capital just simply goes to a place that is not regulated… you're potentially building sources of climate risk within private entities, plus you're not actually reducing emissions.' Lacaille voiced similar scepticism. With divestment, 'you run the risk of a two-tier system, where a company can go dark by going private,' he maintained. 'What will happen is listed companies will be doing things that are supposedly sustainable, and all of the unsustainable activities will be in private businesses.'

While responsible active ownership is perhaps more effective on an ad hoc basis, this form of market-led regulation followed by the US risks fragmentation if asset owners are free to encourage investee companies to pursue ESG objectives at their own discretion.

> **While financial disclosures have become mandatory in some jurisdictions, ESG disclosures in the real economy are further behind.**

CONCLUSION

A CALL TO ACTION

While huge strides have been made across the financial sector, much more needs to be done to ensure the global economy becomes more sustainable.

Moving beyond the 'E' in ESG

In ESG, the focus has primarily been on environmental and climate-related impacts and mitigation. There is a growing recognition of the interconnectedness of climate, nature-related loss and how transition is managed socially. This has led to the increased use of labels and ratings geared towards nature-related products. Investors are seeking more disclosures around social issues such as gender diversity, equity, inclusion, labour practices and human rights. Social taxonomies are being developed, and directives such as the CSRD are going beyond just climate considerations.

However, difficulties arise when moving beyond environmental concerns as social and governance issues are not science-based and are therefore more challenging to measure. Developing a harmonised disclosure regime that captures social and governance requirements may be fraught with political undertones, especially as societal norms differ from one jurisdiction to another. The S in ESG is an area where the US could become a frontrunner in regulatory practice, in particular when examining the integration of gender, diversity and inclusion practice which is already high on companies agendas.

> It is essential for the US to be involved in the development of and integration of standards if convergence and interoperability in ESG regulation is to be achieved.

When considering biodiversity and ecological developments, from a financial regulatory perspective, integrating nature-related frameworks has a clear effect on financial performance, and the TNFD is a big step in measuring the risk of nature loss and incorporating this into financial institutions strategy. This is less evident for social and governance issues. It is clear stronger benchmarks and concrete measurements for the impact of social, governance and nature-related risk on the economy are crucial.

More coordination is needed between standards, but there are difficulties that come with convergence. Not all countries have developed regulatory capacity or technical expertise at the same level and are beginning from different points due to varying priorities. Emerging economies may struggle to adapt international standards or frameworks that they do not find relevant for their jurisdictions, or where these standards do not align with their regulatory priorities.

Nevertheless, there is a consensus that there must be some convergence to enable transparency, comparability and accountability in how ESG investments, products and transition targets are understood and measured. Standardisation will bring clarity to issuers and investors and the further development of credible ESG investments and products globally. Significant strides have been made in establishing convergence, the ISSB being the most recent.

From market practice to best practice

Our findings revealed that much work must be done to strengthen the connection between finance and the real economy in the ESG space. Though ESG standards and regulations are increasing in complexity and scope, some of the more practical and most rudimentary questions have yet to be addressed. There has been huge growth and mainstreaming of green bond issuances, led by the US. This shows the influence the market can have and should leverage to drive economy-wide transition through capital market and asset reallocation. Nevertheless, when it comes to climate and environmental impacts, financial innovations alone will not produce the desired results. A purely market-led approach to drive ESG transition in the financial sector and wider economy will be insufficient. Clear criteria and definitions on ESG investment, products and risk disclosure is required. A lag in regulation has led asset managers to turn to the EU for standards and ESG criteria, indicating a strong need for supervision to drive ESG transition.

At the same time, regulators operating in the ESG space face a trade-off between robust, globally harmonised standards and effectively addressing the various challenges for different industries through a more granular approach. As the goal is ultimately to transform real economy activity, achieving sustainability is impossible without acknowledgment of supply chain linkages, sectoral interconnectivities and other complexities within the real economy.

The NGFS and central banks have played an integral role in developing climate risk mitigation and disclosure tools. Additionally, the mainstreaming of green products, loans and labels shows the active role the financial sector is playing in establishing sustainable investments, driving transition towards ESG and the impact it can have on real economies actions.

The acceleration of green taxonomies, reporting, disclosure standards and metrics for understanding the risk climate change poses to the financial sector demonstrates a real commitment by governments, regulators and financial institutions to transitioning economies. Huge strides are being made to overcome the divergence of taxonomies and standards, with the EU and China outlining the Common Ground Taxonomy. Nevertheless, significant divergence remains with the US following a market-led approach to driving ESG. The regulatory-driven approach has made Europe a leader in driving ESG transition in financial markets at this stage, but there are early signs of the establishment of US ESG regulation by the SEC now taking place. Whether the US stepping up its regulatory activity will cause further divergence and market fragmentation remains to be seen. However, the US involvement in the ISSB, and the suggested inclusion of the TCFD in the SEC mandatory disclosure ruling, are positive signs towards increased transparency and clarity in ESG criteria, data and risk understanding, and an overall convergence in standards.

A call to action:

This report has outlined the need for convergence on international sustainable finance standards. To achieve this there are some necessary steps that needs to be taken. A globally utilised disclosure and reporting framework which is mandatory will drive more data and ESG-related risk information. This will also enable forward-looking projections and actionable targets to be set. The ISSB is a promising effort to enable convergence of various reporting standards and regulatory frameworks globally and has been received positively. The board must set clear goals and move quickly to establish trust in an internationally recognised standard. The SEC has been involved in the technical working group, a positive step in driving regulation in the US, and ensuring global convergence of disclosure and reporting standards. It is essential for the US to be involved in the development of and integration of standards if convergence and interoperability in ESG regulation is to be achieved.

More guidance and capacity building are needed for non-financial corporations' disclosure and reporting. Policy-makers and regulators must work to align disclosure expectations of the real economy and financial sector. Financial institutions' disclosures are often reliant on data from their investee companies, and this will significantly help in closing the data gap.

However, this should not stop financial institutions from disclosing themselves, gathering ESG information and setting transition targets. The financial sector must integrate disclosure and reporting frameworks into their strategies and expect this from clients. Banks are still failing to adequately disclose whether climate and environmental change has a material impact on their risk profile, and how transition and physical risk impacts their strategy. Using tools such as scenario analysis and stress testing, financial institutions must further incorporate climate risk into their strategy. Policy-makers and regulators must act to support this through developing the tools and frameworks to build and assess risk mitigation efforts in the financial sector.

To this end regulators and policy-makers must work together to set a common language on green products, investments and expectations of disclosure and reporting to avoid market fragmentation. It is essential the market works with and responds to consultations from regulators establishing ESG related regulation to ensure these frameworks work. •

> Developing a harmonised disclosure regime that captures social and governance requirements may be fraught with political undertones, especially as societal norms differ from one jurisdiction to another.

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