UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT
UNCTAD

WORLD INVESTMENT REPORT 2022

INTERNATIONAL TAX REFORMS AND SUSTAINABLE INVESTMENT

CHAPTER IV

CAPITAL MARKETS AND SUSTAINABLE FINANCE

UNITED NATIONS

INTRODUCTION

During the pandemic, and partly as a result of pandemic recovery plans, sustainable finance saw strong growth across equities, fixed income products and alternative assets, and in both public and private markets *(WIR20, WIR21)*. This is related to several factors. The accelerating and cascading impacts of climate change are rapidly revealing the physical and transition risks of non-sustainable investments. More recently, the war in Ukraine has also provoked reflection on the energy transition and its consequences for investors. Inflationary pressures and supply chain resilience, for example in energy, are adding further impetus to sustainability concerns. At the same time, the regulatory response to environmental and other sustainability-related issues, including climate change commitments, has accelerated and will support moves towards more sustainable financial markets in both developed and developing countries.

In 2021, the sustainable finance market continued to grow, in terms of both the number and the value of sustainable products. UNCTAD estimates the total value of sustainable financial products at $5.2 trillion, up by 63 per cent from 2020. They were made up of sustainable funds, whose assets grew by 53 per cent to $2.7 trillion, and sustainable bonds (including green, social and mixed-sustainability bonds), whose assets grew by 72 per cent to $2.5 trillion. However, UNCTAD analysis shows that not all of this investment is truly sustainable and that alignment with the SDGs remains limited.

The growing importance of sustainable finance is not just a question of market growth and expanding interest in related investment opportunities. It has also been supported by the increasing number of actions being taken by investors and asset owners to support more sustainable investments and to mitigate sustainability-related risks. This chapter shows that institutional investors, such as pension and sovereign wealth funds, are becoming more active in their assessment of sustainability risks and the responsiveness of their investment strategies to these risks. However, many investors still do not disclose or report on sustainability-related risks and are not moving quickly enough to reorient portfolios, especially with regard to climate-related action.

Stock exchanges and other market operators continue to integrate environmental, social and governance (ESG) factors into public market infrastructure. The number of exchanges with written guidance on ESG disclosure for issuers, for example, continues to grow rapidly, from just 13 in 2015 to 63 at the end of 2021. Likewise, the number of exchanges providing training on ESG topics to issuers and investors continues to increase, with more than half of exchanges offering annual training in this area. Mandatory ESG reporting has also been on the rise in recent years, supported by both exchanges and securities market regulators. The number of exchanges covered by mandatory rules on ESG disclosure, currently 30, has more than doubled in the past five years.

Overcoming fragmentation through the harmonization and comparability of frameworks and standards for corporate sustainability accounting and reporting is important to the achievement of SDG 12.6, sustainability reporting, and the further development of sustainable finance. Member States, working through UNCTAD's Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR), are playing an active role in this area. Since ISAR's publication of guidance in this area (UNCTAD, 2019), UNCTAD has been implementing capacity-building projects to assist member States in addressing regulatory, institutional and training needs.

The International Organization of Securities Commissions (IOSCO) continues to develop its work in this area to provide guidance to securities regulators, and development of international standards for ESG disclosure is accelerating. Between 2021 and 2022, the International Financial Reporting Standards (IFRS) Foundation formally launched its International Sustainability Standards Board (ISSB) (which is now recognized by the G7 and the G20) and signed a new agreement with the Global Reporting Initiative (GRI): combined, these developments aim to create a new global baseline for corporate sustainability reporting that is now recognized by the G7 and the G20. The consolidation of standards will further accelerate the integration of ESG into market infrastructure.

At the national level, the regulatory response to both sustainability-related risks and the growth of the sustainable finance market has been gathering pace. This chapter presents findings from a new UNCTAD project on national sustainable finance regulations. The findings are based on data from 35 economies, accounting for about 93 per cent of the world's gross domestic product (GDP), and show the accelerating efforts of major economies to introduce regulatory frameworks as well as standards and other policies in support of sustainable finance. The proliferation of regulations and standards by national governments (and regional groupings) relates both to country commitments, for example on climate change, and to the need to regulate financial markets in this space and mitigate problems such as greenwashing.

While it is a truism that investors face uncertainty and risk in many guises, one risk is foreseen and even financially quantifiable: climate change. As the world tries to move on from the pandemic while dealing with inflation, supply chain disruptions and the impact of war, investors, governments and international organizations should remain focused on the physical and transition risks of climate change. Towards this end, UNCTAD is mandated to support international efforts to finance climate change adaptation and other sustainability issues, as well as monitor the sustainable finance market and efforts to enhance its impact and contribution to sustainable development.[1] Through its programmes on sustainable finance, in particular its Global Sustainable Finance Observatory, UNCTAD will continue to provide analysis, advocacy and networking arrangements for governments, investors, regulators and other stakeholders to improve the sustainability of capital markets.

A. SUSTAINABILITY-THEMED CAPITAL MARKET PRODUCTS

UNCTAD estimates that the value of sustainability-themed financial products amounted to $5.2 trillion in 2021, up 63 per cent from 2020. These capital market investments consist mainly of sustainable funds (over $2.7 trillion) and sustainable bonds (including green, social and mixed-sustainability bonds) ($2.5 trillion). Most of these products are domiciled in developed countries and targeted at assets in developed markets. Most are self-labelled. Although these products tend to outperform their peers in the overall capital market in terms of sustainability, preliminary analysis reveals that the low-performing ones may not fulfil their sustainability credentials.

1. Sustainable funds

a. Market trends

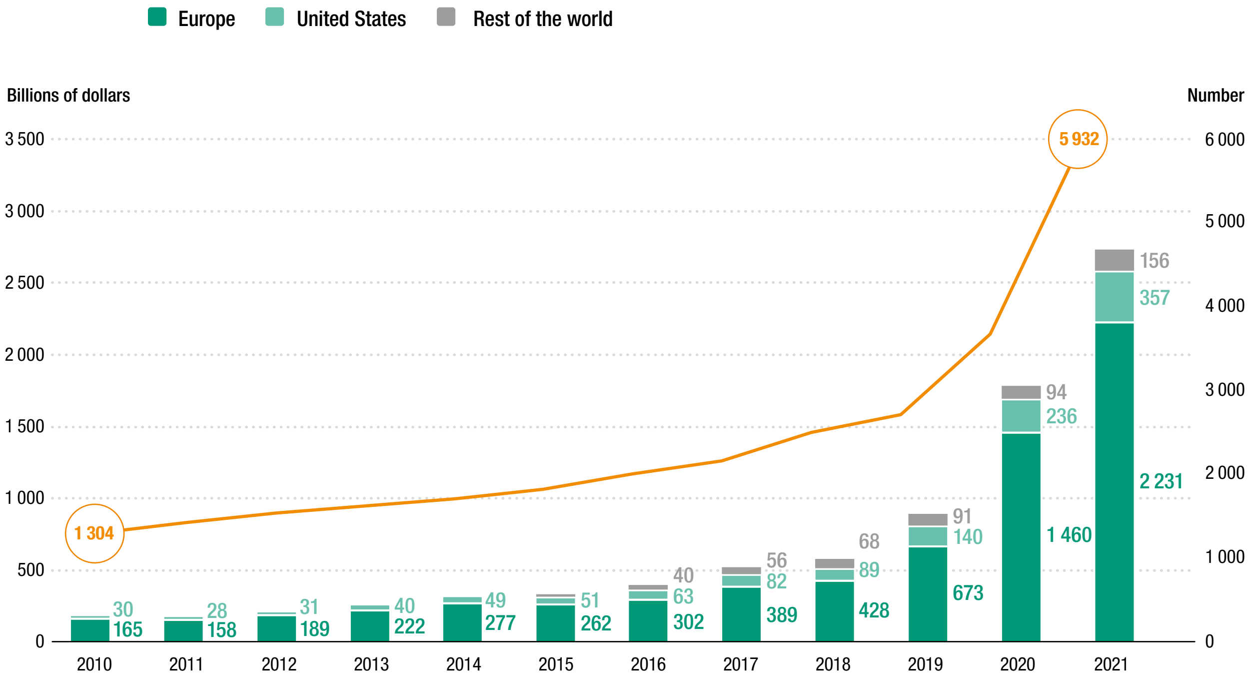
The global market for sustainable funds experienced another year of exceptional growth in 2021, mainly driven by developed markets. According to Morningstar data, the number of sustainable funds reached 5,932 by the end of 2021, up 61 per cent from 2020. The total assets under management (AUM) of these funds reached a record $2.7 trillion, an increase of 53 per cent from the previous year (figure IV.1).

Investment inflows to sustainable funds also accelerated. Net investment in 2021 reached $557 billion, up 58 per cent from 2020 and more than 200 per cent from 2019 (figure IV.2). This trend reflects robust demand for mixed-sustainability products. Institutional investors are increasingly integrating sustainability in their portfolios to mitigate long-term climate and other environmental and social risks while tapping into opportunities offered by the energy transition. European funds attracted net investment inflows of $472 billion, or 85 per cent of the world's total.

Much of the growth of sustainable funds remained concentrated in developed markets. Europe dominates the market with an 81 per cent share of all such assets (figure IV.3). In 2021, assets in sustainable funds in Europe were boosted by record inflows (up 63 per cent), strong product development and rising equity prices. Sustainable funds accounted for 18 per cent of the assets of the European fund market, reflecting the relative maturity of the market and the catalytic impact of sustainable finance regulation in Europe.

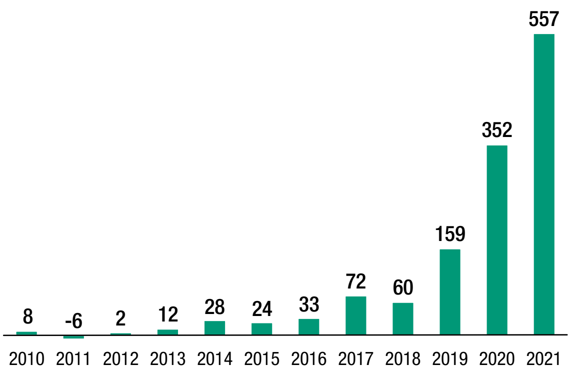
The United States is the second largest market; however, in terms of assets, sustainable funds represent roughly 1 per cent of the total United States fund market. Changes to regulations implemented by the Labor Department to make it easier for retirement plans to invest in sustainable funds[2] and new regulations adopted by the Securities Exchange Commission on disclosure of climate risk may speed up development of the sustainable fund market in the United States.

Figure IV.1. **Sustainable funds and assets under management, 2010–2021**
(Billions of dollars and number)



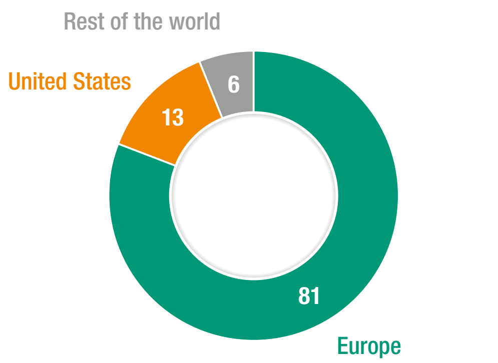
Source: UNCTAD, based on Morningstar data.
Note: The numbers for 2020 were updated based on the latest data.

Figure IV.2. **Net flows to sustainable funds, 2010–2021** (Billions of dollars)



Source: UNCTAD, based on Morningstar data.

Figure IV.3. **The global sustainable fund market, by region, 2021** (Per cent)



Source: UNCTAD, based on Morningstar data.

Sustainable funds in other developed markets also expanded rapidly in 2021, albeit from a relatively low level. The total assets of sustainable funds in Australia and New Zealand (combined), Canada and Japan reached $30.6 billion, $27.3 and $35.2 billion respectively.

In Asia (excluding Japan), sustainable fund assets grew to $63 billion, up 70 per cent from 2020. In total, 118 sustainable funds were launched in the region in 2021, more than double the number launched in 2020 (55). This growth was mainly driven by China (49 funds) and the Republic of Korea (36). China remains the dominant player in the region and the third largest sustainable fund market worldwide, with AUM of nearly $50 billion. Asset managers in major emerging economies in other regions, such as Brazil and South Africa, also launched sustainable funds in recent years, but their market size remains small.

The growth momentum of sustainable funds is expected to continue. Demand remains strong and governments in both developed and emerging economies have stepped up their efforts to support the growth of sustainable investment. A large number of countries are putting in place necessary frameworks, industry standards and regulations (see section D), which will bring more transparency and credibility to the market and help build a viable ecosystem for its further growth.

However, a number of challenges need to be addressed in order to fully tap into the potential of the sustainable fund market. Despite the surge in recent years, sustainable funds account for only about 4 per cent of the global fund market in terms of assets. Most of these funds are self-labelled, and the lack of consistent standards and high-quality data to assess their sustainability credentials and impact has given rise to greenwashing concerns and credibility issues. While regulation efforts at national level can help address these issues, international cooperation is needed to enhance interoperability and harmonization of regulations and standards across countries to facilitate international investment.

Another structural issue that needs to be addressed is the absence of most developing economies in the sustainable fund market. Despite positive developments in recent years in a few leading emerging markets such as Brazil, China, India, South Africa and some economies in the Association of Southeast Asian Nations, sustainable funds remain largely a developed-market phenomenon. Most developing economies, in particular the least developed ones, face tremendous barriers to developing their own sustainable fund market or benefiting from the international sustainable fund market, owing to their limited market size and the perception of relatively high risks in their capital markets.

The relative scarceness of company-level sustainability data in developing economies does not work to their advantage either. In this regard, UNCTAD and the ISAR facilitated the creation of regional partnerships in Latin America and in Africa to promote a communication channel among peers in the region and to support the development of national strategies and policies. The partnerships aim to (i) establish and/or strengthen the national infrastructure to prepare high-quality sustainability reports by companies; (ii) implement the new global sustainability reporting standards; (iii) measure the contribution of the private sector to the implementation of the SDGs; and (iv) promote sustainable enterprise development.

To support the growth of the sustainable fund market, developing economies need to address these issues. Small developing economies may also consider developing a regional market for sustainable investment, one in which high-quality companies, including small and medium-size enterprises (SMEs) and social enterprises that meet necessary sustainability and reporting standards, can be listed and traded, and sustainable financial instruments can be developed to meet the needs and requirements of international investors.

b. Sustainability performance

The rapid rise of sustainable funds shows the huge potential of this emerging financial instrument in financing sustainable development. However, the risk of ESG- or sustainability-washing constitutes a severe challenge to the future growth of the sustainable fund market. So far, sustainable funds have been self-labelled. Although several economies, such as the European Union (EU) and Hong Kong (China), have introduced regulations on sustainability disclosure by issuers at the product level, there are no industry standards for qualifying sustainable funds at the national or international level. Meanwhile, the lack of high-quality sustainability data and the inconsistent company sustainability ratings available in the market make it challenging to evaluate the sustainability performance of these funds. All these issues have led to legitimate concerns about the credibility of the sustainable fund market and its potential damage to investor confidence, which could hold back further growth of the market.

To shed more light on the sustainability profile of these funds, UNCTAD, with the support of its data partner Conser, has been monitoring more than 800 sustainability-themed equity mutual funds since 2020. This research builds on ESG data based on the average of leading ratings available in the market and in this sense reflects the "consensus" of the market (UNCTAD, 2021). This section provides the preliminary results of the monitoring assessment.

(i) Overall sustainability

Sustainable funds are highly heterogeneous in their approaches to integrating sustainability. For analytical purposes, the sustainable integration strategies of these funds are grouped into three categories: (i) sustainability engagement, a strategy of mainly engaging with portfolio companies, for example through voting or other specific actions, to push for positive changes in terms of sustainability integration; (ii) general incorporation, a strategy that incorporates ESG or other material sustainability factors into investment selection processes to mitigate risks or enhance returns, including by using positive or negative screening or by applying responsible investment principles; and (iii) sustainability thematic strategy, which focuses on one concrete sustainability theme (for example low carbon or gender equality) for asset allocation. A sustainable fund can use one or a combination of these strategies.

Overall, the sustainable funds covered by the monitoring exhibit a better sustainability profile than their conventional peers. As a group, these funds have a mean sustainability score of 7.2 (out of 10) in the assessment,[3] significantly higher than the 4.0 average sustainability rating of the MSCI global equity index (the MSCI ACWI).[4] This shows that, on average, sustainable equity funds tend to outperform the mainstream equity markets on sustainability ratings, regardless of their choices of sustainability integration strategies.

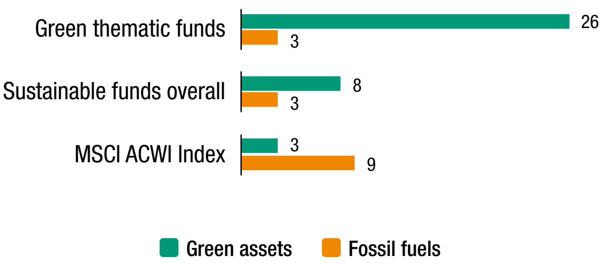
However, the sustainability ratings of the funds, as a whole and by strategy, are distributed over a wide range, and the low-performing funds in each group may not fulfil their self-claimed sustainability credentials (table IV.1). Most notably, the quartile of funds with the lowest scores, in each strategy category and overall, have an average sustainability rating below 6, owing to significant exposure to ESG or climate-related risks or sensitive sectors (such as fossil fuels, tobacco and alcohol, and weapons). This raises legitimate concerns about their sustainability claims. Their sustainability integration practices and performance therefore require careful examination, and external auditing may be warranted.

Table IV.1. Distribution of sustainability score by fund strategy, 2021
(Average sustainability rating)

	Percentile			
Strategy	0–25	25–50	50–75	75–100
Overall	4.6	6.6	8.1	9.5
Sustainability engagement	4.6	6.5	8.1	9.5
Sustainability incorporation	4.7	6.7	8.3	9.5
Thematic funds	5.3	7.9	9.2	10

Source: UNCTAD, based on Conser data.
Note: The distribution of fund sustainability ratings by strategy is broken into four quartiles; e.g. percentile 0–25 represents the bottom quartile of funds that have the lowest sustainability ratings.

Figure IV.4. **Exposure of sustainable funds to climate-positive and -negative assets, 2021** (Per cent)



Source: UNCTAD, based on Conser data.

(ii) Climate impact

With respect to the funds' impact on climate sustainability, the analysis shows that both thematic funds with a green investment focus and the sustainable fund universe in general tend to perform better than the overall fund market. On average, low-carbon thematic funds have a net exposure of 23 per cent of their portfolio to climate-positive assets (low-carbon assets minus fossil fuels), compared with a net exposure of -6 per cent for the MSCI ACWI index. It should be noted that, although some sustainable funds are fossil-fuel-free by prospectus, most are not. About 25 per cent of self-declared green funds have an exposure of more than 5 per cent to fossil fuels, and some cases nearly 20 per cent, which calls into question the "greenness" of these funds (figure IV.4).

Morningstar data also show that sustainable funds are improving their low-carbon performance. At the end of 2021, 63 per cent of United States sustainable funds had a Morningstar low-carbon risk rating, up from less than 50 per cent in 2019. The share is significantly higher than the 48 per cent of the United States fund universe that has a low-carbon risk rating (Morningstar, 2021).

This trend reflects a steady rise of climate funds in the sustainable fund market, driven by opportunities offered by renewable energy, electric vehicles, energy efficiency and storage, and other cleantech industries. Meanwhile, more fund managers have committed to greening their portfolios. According to the Net Zero Asset Managers initiative, 236 asset managers, with $57.5 trillion in AUM, have signed up to the initiative with a commitment to support the goal of net zero greenhouse gas (GHG) emissions by 2050 or sooner. However, these commitments need to be substantiated by an accurate evaluation of, and reporting on, the greenness of asset managers' portfolios, in particular in light of the unsatisfying ratings of some low-performing products in the market. A solid evaluation and disclosure of their carbon footprint and related risks is not only necessary but, thanks to the growing availability of carbon emissions data, also feasible. For example, an increasing number of banks and asset owners have started to assess their exposure to climate risk through systematic stress tests (UNCTAD, forthcoming); however, there is limited disclosure at the product level, and fund issuers need to do more in this respect.

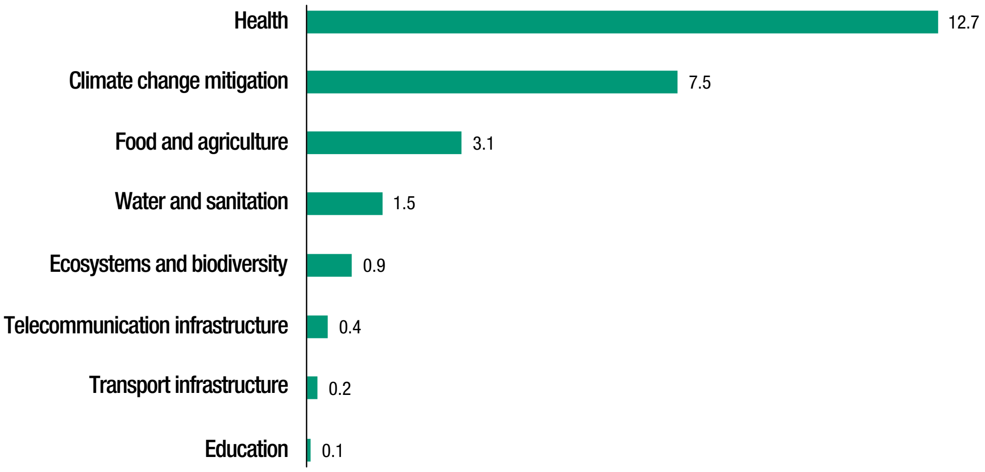
(iii) SDG alignment

As sustainable investment products, sustainable funds can play an important role in filling the Sustainable Development Goals (SDGs) financing gap, in both developed and developing economies. Leading fund providers, such as BlackRock, Amundi and Robecco, have launched funds dedicated to the SDGs, and some funds have used the SDGs as a framework to evaluate the impact of their portfolio. However, the lack of a taxonomy to define what counts as SDG investment as well as the poor quality of existing SDG ratings for individual companies make it challenging to measure or assess the SDG alignment of investment funds and determine how much of their portfolio is invested in assets that contribute to delivery of the SDGs.

UNCTAD has identified several key SDG sectors (encompassing all 17 SDGs), which are critical for achieving the SDGs and represent the largest investment needs and opportunities in terms of SDG financing (*WIR14*). Accordingly, UNCTAD has been monitoring private sector investment in these sectors (*WIR21*).

Examining the holdings of the more than 800 sustainable equity funds in the sample, the analysis identified assets of these funds across eight of the key SDG sectors: transport infrastructure, telecommunication infrastructure, water and sanitation, food and agriculture, climate change mitigation (renewable energy and cleantech), health, education and ecosystem diversity (figure IV.5). This investment totalled $156 billion, or 26 per cent of their total AUM at the end of 2021. Four sectors – health, renewable energy, food and agriculture, and water and sanitation – account for almost 95 per cent of the assets committed to these SDG sectors. The health sector, which covers health infrastructure, medical services, pharmaceuticals and medical devices, is the most common and single largest SDG sector for fund investments, followed by climate change mitigation. Compared with 2020, the funds' investment in the health sector declined by 1.7 per cent, while their investment in climate change mitigation rose by 1.5 per cent, pointing to increased interest in green assets.

Figure IV.5. **Allocated assets by sustainable funds across eight SDG sectors, 2021**
(Per cent)



Source: UNCTAD.

2. Sustainable bond markets

The sustainable debt market is primarily composed of use-of-proceeds bonds. They include any type of debt instrument from which the net proceeds are used exclusively to finance, in part or in full, eligible green or social projects. There are three main subcategories:

(i) Green bonds: Instruments that raise funds for projects that have environmental benefits including renewable energy, green buildings and sustainable agriculture

(ii) Social bonds: Instruments that raise funds for projects that address or mitigate a specific social issue and/or seek to achieve positive social outcomes, such as improving food security and access to education, health care and financing, especially but not exclusively for target populations

(iii) Mixed-sustainability bonds: Instruments that raise funds for projects that have both environmental and social benefits

In addition to use-of-proceeds bonds, sustainability-linked bonds (SLBs) are a new and rapidly growing product class within the sustainable bond market that can be useful for corporations funding their sustainability transitions (box IV.1).

Global issuance of sustainable bonds surpassed $1 trillion in 2021, and industry estimates project that it will exceed $1.5 trillion in 2022 (figure IV.6). The green bond market exceeded $517.4 billion in 2021, with a five-year growth rate of 70 per cent. Social and mixed-sustainability bonds repeated the strong growth trend observed in 2020 and totalled $395 billion in 2021. The EU and the corporate sector are set to be key players in 2022 and continue to push social and mixed-sustainability bond issuance to new heights as the market is driven by projects that support the SDGs and the 2030 Agenda.

Sustainable bond issuance has been increasing, especially in emerging markets, where it almost tripled in 2021 (figure IV.7), with China accounting for 60 per cent of the emerging-markets total and estimated to surpass $100 billion in 2022 (figure IV.8).

Box IV.1. Sustainability-linked bonds

Unlike established green and social bonds, sustainability-linked bonds (SLBs) come with no constraints on how the proceeds can be used. Instead, they are based on predefined sustainability or ESG objectives set by the issuer, which links this guarantee directly to the coupon paid to investors. For example, Italian utility group Enel issued a sustainability-linked $1.5 billion five-year bond in September 2019, which had a 2.65 per cent annual coupon if the company reached a target of 55 per cent renewable energy installed capacity by 2021. If that target was not achieved, a step-up mechanism would be applied, increasing the rate by 25 basis points until the bond matures in September 2024. A third-party expert report confirmed that by December 31, 2021, Enel's renewable installed capacity has reached 57 per cent. This flexibility in customizing objectives is particularly relevant for enterprises transforming their business to more sustainable modalities. Thus, SLBs are a forward-looking, performance-based instrument and the issuer's objectives should be measured through predefined key performance indicators (KPIs) and assessed against predefined sustainability performance targets.

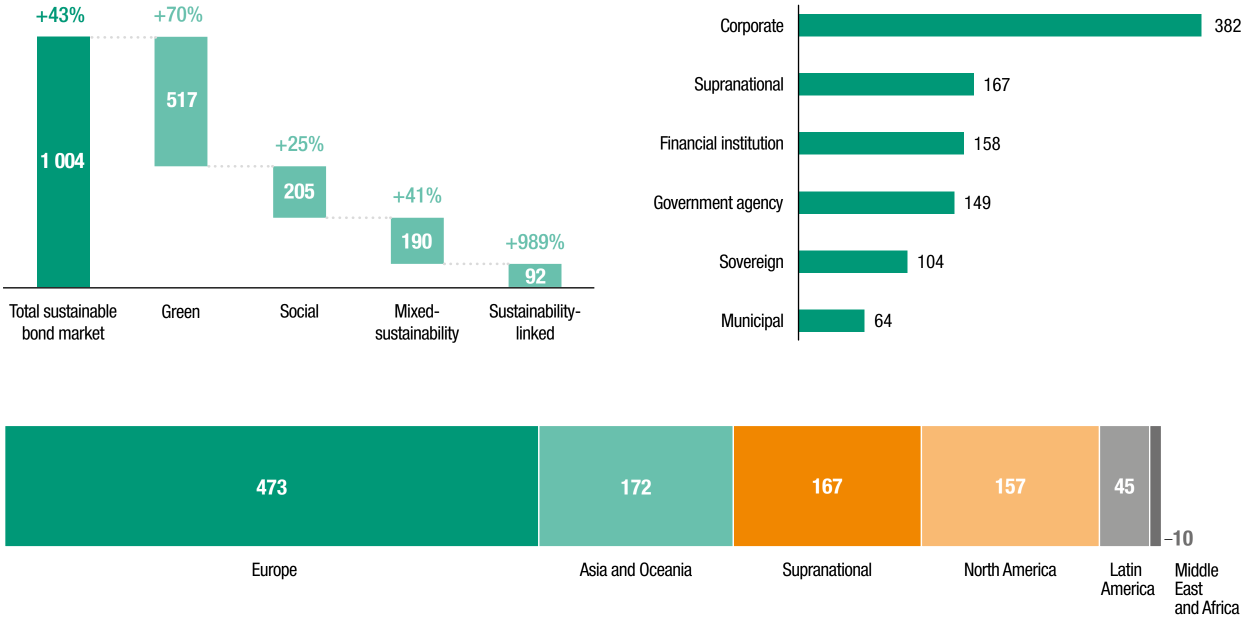
While the market for SLBs is still small, these instruments were a highlight of 2021, growing by more than tenfold to reach $92 billion. To date, 70 per cent of all KPIs have centred on reduction of scope 1 and 2[a] GHG emissions. This is mainly due to the availability of data on scope 1 and 2 emissions performance. However, some diversification is becoming evident. It appears that KPIs linked to scope 3 emissions reduction are gaining market acceptance, with only 22 issuers reporting in 2021 compared with only one in 2020. It is also important to note the growing importance of KPIs linked to gender diversity, which goes in line with the trend observed in social bonds where gender will be a key theme in 2022.

Source: UNCTAD, based on information from Environmental Finance.

[a] Scope 1 emissions are direct emissions from the reporting entity. Scope 2 are emissions derived from the production of electricity consumed by the reporting entity. Scope 3 are emissions derived from the production of goods and services consumed by the reporting entity. For more details on the GHG Reporting Protocol, see https://ghgprotocol.org.

Figure IV.6. Global sustainable bond issuance by bond category, sector and region, 2021

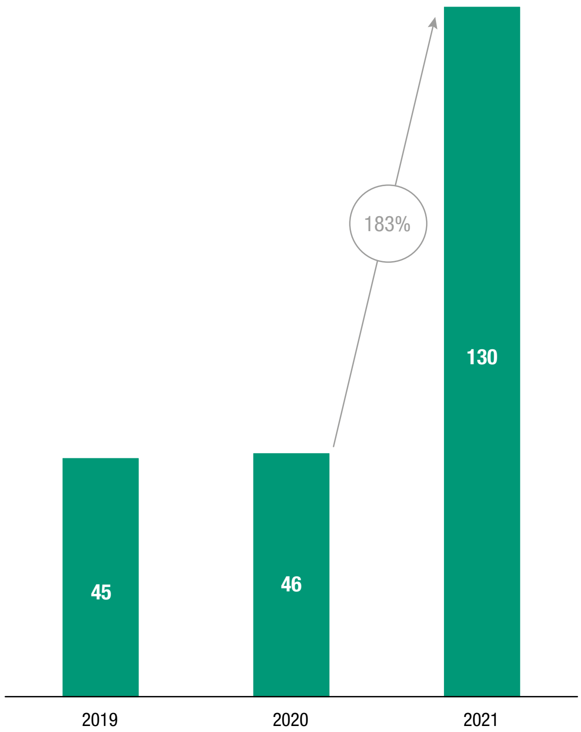
(Billions of dollars and per cent year-on-year growth)



Source: UNCTAD, based on information from the Climate Bonds Initiative and Environmental Finance.
Note: Total market value can vary slightly by data source and provisional value calculations.

Figure IV.7. Annual sustainable bond issuance in emerging-market economies, 2019–2021

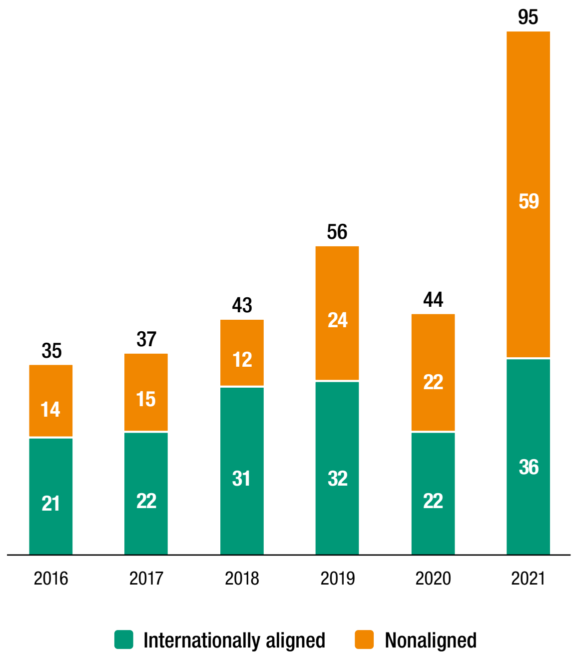
(Billions of dollars and per cent)



Source: UNCTAD, based on information from Environmental Finance.

Figure IV.8. China: green bond issuance, 2016–2021

(Billions of dollars)



Source: UNCTAD, based on information from Environmental Finance.
Note: Volume includes bonds aligned with international standards and bonds aligned with only local standards. Internationally aligned green bonds are limited to those where at least 95 per cent of proceeds are designated for green projects aligned with the Climate Bonds Taxonomy, produced by the Climate Bonds Initiative.

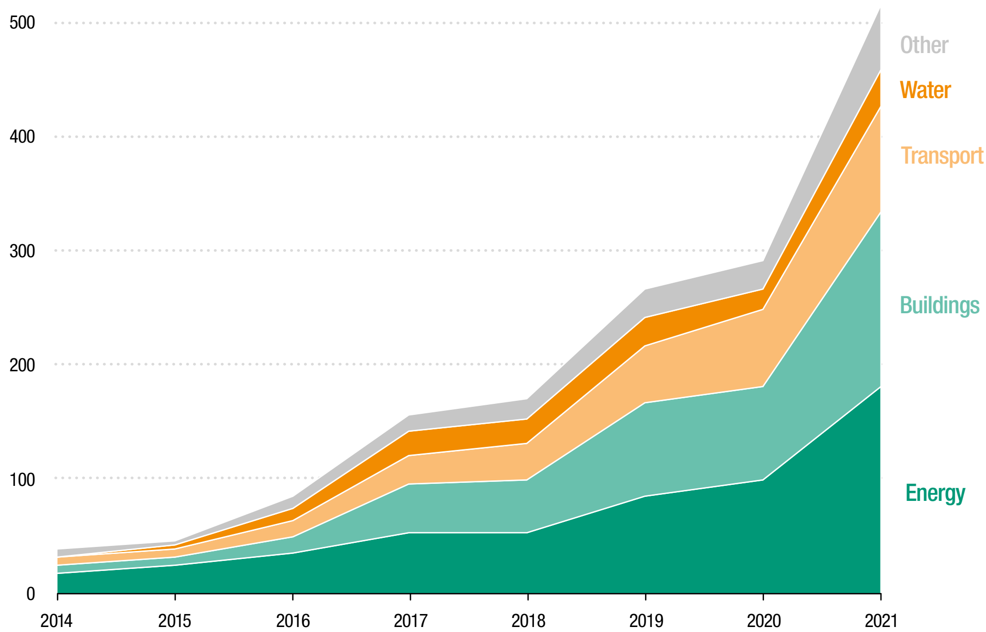
a. Green bonds

Green bonds are meant to promote investment in environmentally based SDGs such as climate action (SDG 13), affordable and clean energy (SDG 7), and sustainable cities and communities (SDG 11). The industries receiving the largest investment through green bonds all fund key elements of basic infrastructure: energy, buildings, transport and water (figure IV.9). Initially the energy industry received most of the funds invested through green bonds (50 per cent of the total market in 2014). In recent years, the buildings and transport sectors have caught up, making up 30 per cent and 18 per cent, respectively, in 2021. Although the renewable energy sector still has the largest share of green investment across categories, with 35 per cent of the market, the share invested in low-carbon buildings has grown by 33 per cent since 2014. This shows increasing effort to achieve the Paris Agreement goals since GHG emissions of cities are significant: up to 70 per cent of a large city's emissions relate to its buildings.

Europe remains a clear leader in the green bond market. After adopting the independently evaluated NextGenerationEU Green Bond framework, the European Commission proceeded with the issuance of the first NextGenerationEU green bond in October 2021. The 15-year bond was more than 11 times oversubscribed, and the proceeds went on to finance the share of climate-relevant expenditure in the Recovery and Resilience Facility (non-repayable financial support and loans to member States to support public investments and reforms). Also in 2021, the United Kingdom (£10 billion), Italy (€8.5 billion) and Spain (€5 billion) issued their first sovereign green bonds, which attracted record investor demand. These successful entries will pave the way for new sovereign green bonds from other countries in 2022.

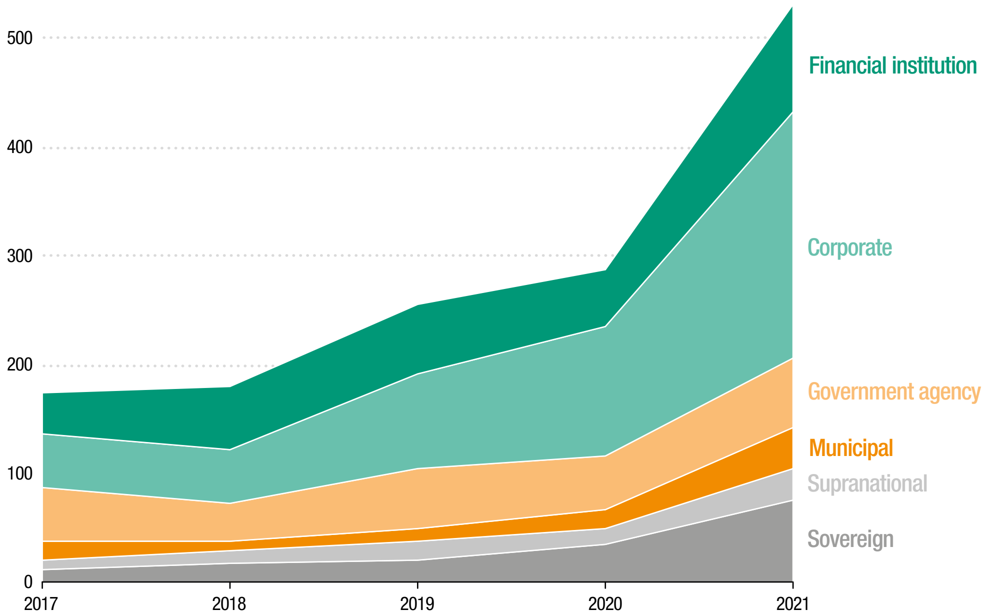
In 2021, issuance of green bonds by the corporate sector saw a yearly increase of 49 per cent (figure IV.10). The rapid growth in corporate green bonds will likely continue, given global campaigns such as Race to Zero (see section E).

Figure IV.9. **Green bond market size by industries financed, 2014–2021**
(Billions of dollars)



Source: UNCTAD, based on information from Climate Bonds Initiative.

Figure IV.10. **Annual green bond issuance by sector** (Billions of dollars)

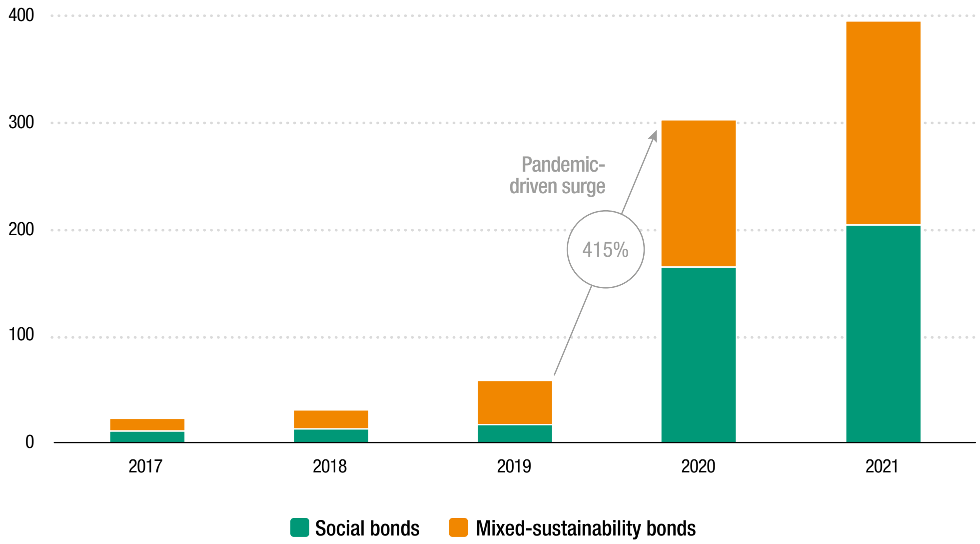


Source: UNCTAD, based on information from Environmental Finance.

b. Social and mixed-sustainability bonds

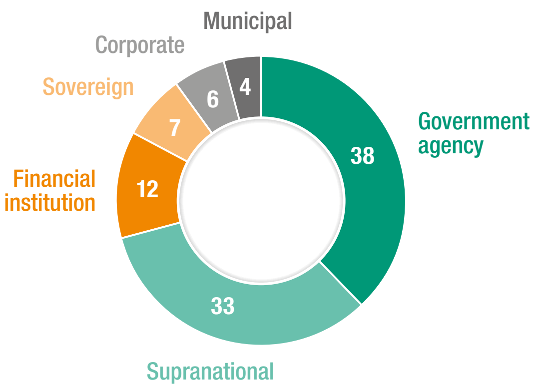
In 2021, the pandemic continued to push issuance of social and mixed-sustainability bonds to new heights, with year-on-year growth of 25 per cent and 41 per cent, respectively (figure IV.11). The total social bond issuance of about $205 billion represents an increase of more than 10 times over the level in 2019; the same holds for mixed-sustainability bonds, which totalled $190 billion, a 77 per cent increase over 2019.

Figure IV.11. **Social and mixed-sustainability bond issuance, 2017–2021** (Billions of dollars and per cent)



Source: UNCTAD, based on information from Environmental Finance.

Figure IV.12. **Social bond issuance by issuer type, 2021** (Per cent)



Source: UNCTAD, based on information from Environmental Finance.

Social bonds will likely continue to have a prominent share of the sustainable bond market even as the immediate effects of the pandemic subside. Government and supranational agencies will lead the way to new types of social issuance (figure IV.12).

However, the impacts of the global pandemic and the growing focus on the SDGs and the 2030 Agenda have been driving investor demand to socially minded investments. In this scenario, it is probable that financial institutions will take the opportunity to launch innovative financing schemes and drive private sector social bond issuance. It is expected that in 2022 the areas to receive more focus will be SMEs, affordable housing and credits with a gender focus, particularly to empower women entrepreneurs (UN Women, IFC, ICMA, 2021).

B. INSTITUTIONAL INVESTORS

Institutional investors can exert significant influence over their investees and the sustainable investment market through both the size of their holdings and the active nature of their ownership. UNCTAD research shows that institutional investors that have a long-term investment horizon, such as pension and sovereign wealth funds, are taking action on risks associated with sustainability, especially climate change. Nevertheless, more than half of the world's 100 largest public pension and sovereign wealth funds do not disclose or report on sustainability issues, and institutional investors as a group have a long way to go in mainstreaming sustainability.

Pension and sovereign wealth funds, as asset owners and investors at the very upstream end of the investment chain, are in a strong position to drive sustainability integration in capital markets, especially in view of the size of their total assets and the often large stakes they hold in publicly listed companies. In 2021, the AUM of the global pension industry grew to $56.6 trillion, up from $52 trillion the year before (Thinking Ahead Institute, 2022). Public pension funds (PPFs) account for $22.3 trillion, or roughly 39 per cent, of global pension assets.[5] The AUM of sovereign wealth funds (SWFs) in 2021 grew to $10.9 trillion, up from $9.2 trillion the year before.[6] UNCTAD has been monitoring sustainable investment-related practices of the world's largest public pension funds and SWFs. This section examines the latest developments in sustainability integration by these institutional investors in their operations.

In recent years, the real risks to investments of a rapidly heating planet, as well as the transition risks stemming from regulatory and other responses related to CO2 emissions, have been recognized and acted on by an increasing number of investors (*WIR21*). Indeed, for a small number of front-runner funds, the need to address sustainability concerns or ESG integration, including climate action, is so obvious that it is no longer seen as even a priority focus area for boards.[7] There is now a clear recognition that institutional investors with a longer-term investment horizon, such as pension and sovereign wealth funds, which own a growing share of equity markets, need to pivot rapidly to a more sustainable investment portfolio that can help contribute to sustainable financing through, for example, investment in renewable energy or clean technologies.

There are many ESG-related issues of material concern to investors, but, in the past year, net zero has come to dominate attention. The latest instalment of the sixth assessment report of the Intergovernmental Panel on Climate Change (IPCC) makes clear that global CO2 emissions have to peak before 2025 if the world is to remain on track to achieve net zero along a 1.5-degree Celsius warming pathway by 2050 (IPCC, 2022). The report notes that, while investors may understand and report on climate risks (through, for example, the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD), they in fact have a long way to go on taking action on fossil fuels:[8] the report states that "despite [regulatory and voluntary] initiatives, climate-related financial risks remain greatly underestimated by financial institutions and markets, limiting the capital reallocation needed for the low-carbon transition" (IPCC, 2022).

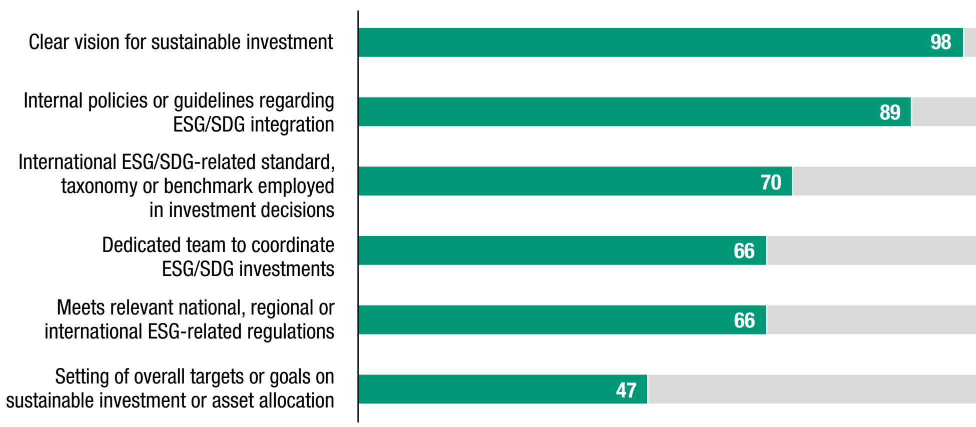
UNCTAD has analysed the sustainability integration practices of the world's top 100 PPFs and SWFs. They included the top 70 PPFs, accounting for $13.1 trillion of AUM – or almost 60 per cent of total AUM of PPFs – and the top 30 SWFs, accounting for $9 trillion of AUM –

or 83 per cent of total AUM of SWFs (UNCTAD, forthcoming). Of the top 100 funds, 47 published meaningful reporting on sustainability and ESG integration in their investment decisions (38 PPFs and 9 SWFs). Although this number is slightly up from 2020, when 40 per cent of funds reported (UNCTAD, 2020), the results appear to reflect the point made by the IPCC – that many investors are underestimating climate-related risks and they need to do more to address the climate challenge.

Of the 100 funds in the sample, 53 still do not report on ESG integration. They include 21 SWFs, accounting for 70 per cent of the SWFs in the sample, and 32 PPFs, accounting for 43 per cent of the PPFs. As discussed in the 2020 UNCTAD report, SWFs remain relatively less transparent and have further to go in terms of sustainability performance disclosure. Geographically, the non-reporting funds are based mainly in Asia and North America. Funds in China, Japan, Saudi Arabia and the United Arab Emirates are typically non-reporting, and a large share of funds in the United States also do not report on ESG. The non-reporting funds rarely include any information regarding ESG and sustainability on their websites and only occasionally in their annual reports, if at all. The size of the fund does not have a significant influence on non-reporting: all non-reporting funds had an average of $229 billion in AUM, as compared with reporting funds which had average AUM of $227 billion. Geographical location and governance seem to have the largest influence on whether a fund publishes an ESG report, and both are likely influenced by the strength of regulations within the national framework. This highlights the importance of national or regional regulatory frameworks and the need for technical assistance in some cases.

Nevertheless, among the 47 per cent of front-runner funds that do publish information on sustainability integration, there is serious acknowledgement of the material risks posed by ESG issues, and funds have changed their investment strategies and policies accordingly. The great majority of reporting funds have made efforts to elaborate a clear vision for their sustainable investments and have introduced internal policies and guidelines to support the integration of an ESG or SDG perspective in their investment strategy, often anticipating transition risks.[9] While an ESG perspective is often integrated into existing investment teams, two thirds of funds have put in place a dedicated team to coordinate ESG-related investments. Despite many funds now targeting net zero by 2050 in their asset allocation, less than half of reporting funds set an overall target or goal for sustainable investment or asset allocation in their portfolios (figure IV.13).

Figure IV.13. **Relevant sustainability-related policies of funds, 2022**
(Per cent of reporting funds)

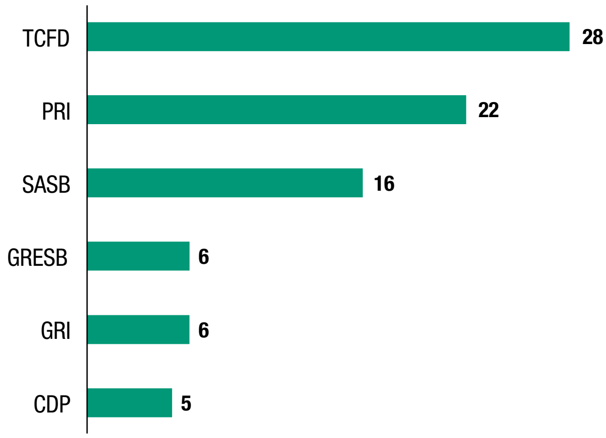


Source: UNCTAD, based on fund annual reports or sustainability reports, n = 47.

Most reporting funds are using at least one international standard or benchmark in their investment decision-making and reporting. In particular, they are increasingly using a couple of international sustainability disclosure standards. The most common reporting framework is that of the TCFD; many funds also use the Principles of Responsible Investment (PRI) Scorecard and Transparency Report to evaluate and improve their sustainability performance (figure IV.14). More than two out of three funds now need to meet relevant national, regional or international regulations, such as the EU's Sustainable Finance Disclosure Regulation, in the case of European funds, and more disclosure and reporting is expected to accompany compliance with these regulatory changes.

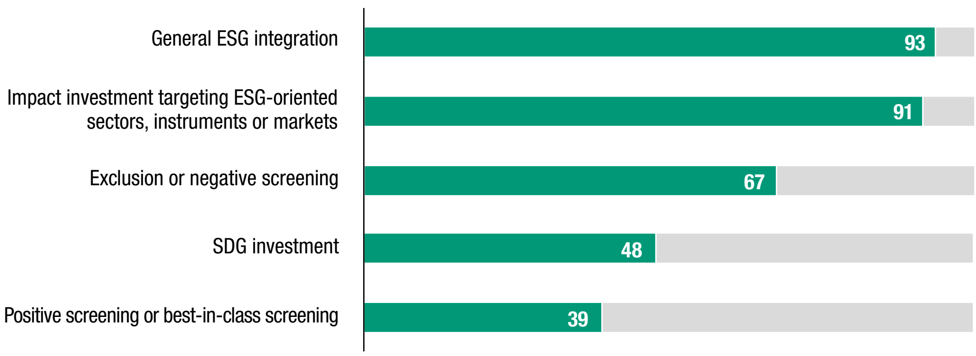
With regard to how funds implement sustainability concerns in their investment strategies, both PPFs and SWFs employ a combination of strategies that are not mutually exclusive. The majority integrate a sustainability perspective across their investment activities, including equities, fixed income, alternative assets, and public and private markets, which may also employ a negative screening of certain assets (in particular, tobacco, weapons and thermal coal). Nearly three out of four reporting funds now have an impact investment strategy. This strategy either targets thematic sectors, such as renewables, or uses a specific ESG-related instrument, such as green bonds, and sometimes targets emerging-market-based climate-solutions companies (Cheema-Fox, Serafeim and Wang, 2022). The SDGs are themselves becoming a benchmark for sustainability performance, and almost half of funds explicitly consider one or more SDGs in their investment decision-making process or have made attempts to align their holdings with the SDGs. However, this sometimes equates to mapping holdings against the 17 goals and is more of a reporting exercise than an investment strategy. Over a third of reporting funds use a positive or best-in-class screening strategy (figure IV.15).

Figure IV.14. **Relevant sustainability-related reporting standards used by funds, 2022** (Number of reporting funds)



Source: UNCTAD, based on fund annual reports or sustainability reports, n = 47.
Note: The funds use a total of 66 standards, initiatives and partnerships. CDP = Carbon Disclosure Project, GRESB = Global Real Estate Sustainability Benchmark, GRI = Global Reporting Initiative, PRI = Principles for Responsible Investing, SASB = Sustainability Accounting Standards Board, TCFD = Task Force on Climate-Related Financial Disclosures.

Figure IV.15. **Sustainability investment strategy of funds, 2022** (Per cent of reporting funds)



Source: UNCTAD, based on fund annual reports or sustainability reports, n = 47.

The results of UNCTAD's study on the sustainability practices and investment strategies of the largest PPFs and SWFs provide a mixed picture. While there is good practice to be applauded, there is also room for improvement, especially on disclosure and reporting where there is a great variance among even reporting funds in terms of what and how to report. Meanwhile, the use of key performance indicators is still rare, making sustainability disclosure highly subjective in some cases. In this respect, the regulatory environment is critical, and some regions are more advanced than others. What is needed is greater harmonization of standards and regulations to promote more widespread action on sustainability integration and performance.

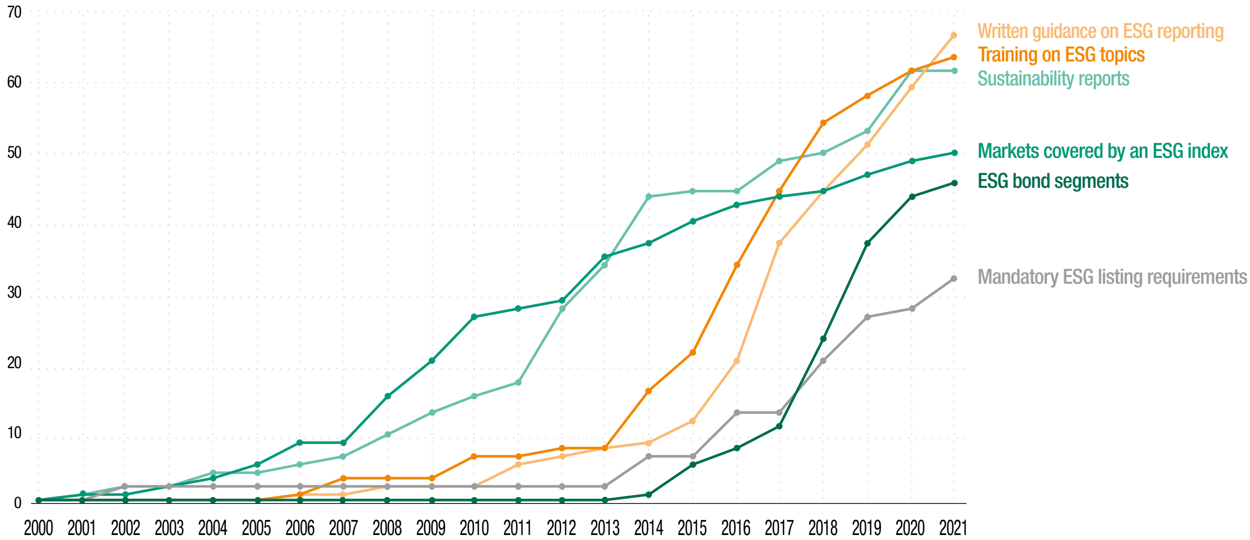
C. STOCK EXCHANGES AND MARKET INFRASTRUCTURE

The number of stock exchanges with written guidance on ESG disclosure for issuers (SDG 12.6) continues to grow rapidly, from 13 in 2015 to 63 at the end of 2021. Likewise, the number of exchanges providing training on ESG topics to issuers and investors continues to increase, with more than half offering at least one training course or workshop per year. Mandatory ESG reporting has also been on the rise in recent years, supported by both exchanges and security market regulators. The num ber of exchanges covered by mandatory rules on ESG disclosure more than doubled in the past five years, to 30.

1. Stock exchanges and derivatives exchanges

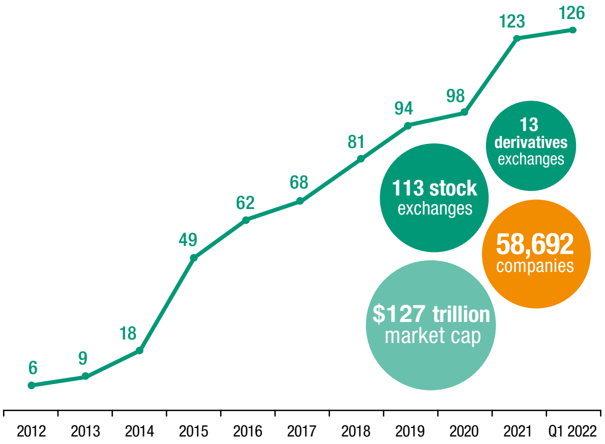
The sustainability activities of stock exchanges – those related to ESG factors – have increased exponentially since the beginning of the century (figure IV.16). Collectively these trend lines show a sharp uptick in sustainability activities among the world's exchanges. The number of exchanges with ESG bond segments continues to grow rapidly, from 5 exchanges in 2015 to at least 44 at the end of 2021 (Key instruments and developments supporting these trends are discussed in more detail in section C.) Likewise, the number of stock exchanges providing training on ESG topics to issuers and/or investors continues to rise rapidly, from fewer than 10 in 2013 to more than 60 by the end of 2021.

Figure IV.16 | **Stock exchange sustainability trends, 2000–2021** (Number of exchanges)



Source: UNCTAD, SSE database.
Note: ESG = environmental, social and governance.

Figure IV.17. SSE initiative members, 2012–Q1 2022 (Number of exchanges)



Source: UNCTAD, SSE database.

a. Sustainable Stock Exchanges initiative

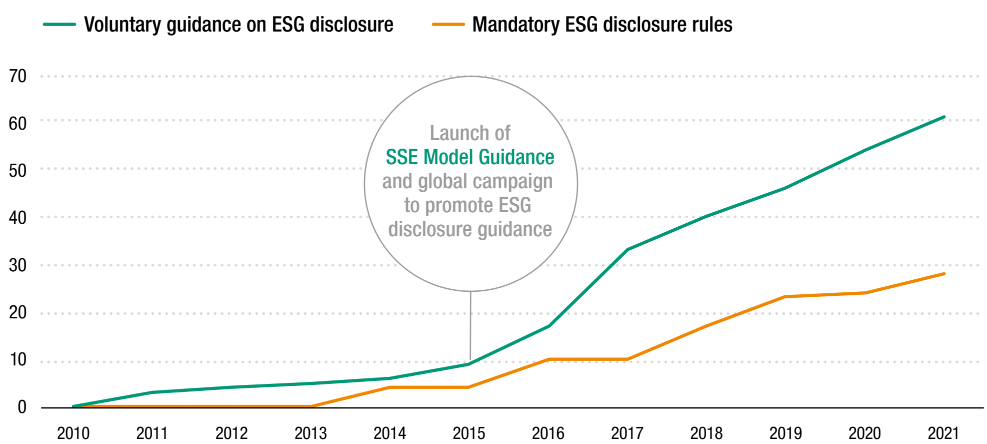
Since its launch in 2009, the United Nations Sustainable Stock Exchanges (SSE) initiative has grown to include most of the exchanges in the world: as of Q1 2022, the initiative had 113 stock exchange members, collectively listing more than 58,000 companies with a combined market capitalization of more than $127 trillion (figure IV. 17). The growth of this United Nations partnership programme illustrates the demand for ESG guidance and peer learning in the exchange industry. The SSE has emerged as the premier platform for collaboration and learning for stock exchanges, together with capital market regulators, investors, issuers and financial service providers, to meet global sustainability goals.

In 2021, derivatives market operators joined the SSE for the first time, as members of the SSE derivatives network, which was launched with 12 founding members from across the world.[10] The establishment of this network recognizes the next step in the market's evolution towards aligning market signals with sustainable development imperatives across all markets.

b. ESG disclosure: stock exchange guidance, listing requirements and standards

Stock exchanges continue to play an important role in helping markets navigate emerging ESG disclosure and management demands. By the end of 2021 the number of exchanges providing formal guidance to issuers on reporting ESG information had reached 63 (figure IV.18). Only 13 did so in 2015, when the UN SSE launched its global campaign and model guidance to encourage exchanges to provide guidance on sustainability reporting.

Figure IV.18. Global trends in ESG disclosure rules and guidance (Number of exchanges)



Source: UNCTAD, SSE database.

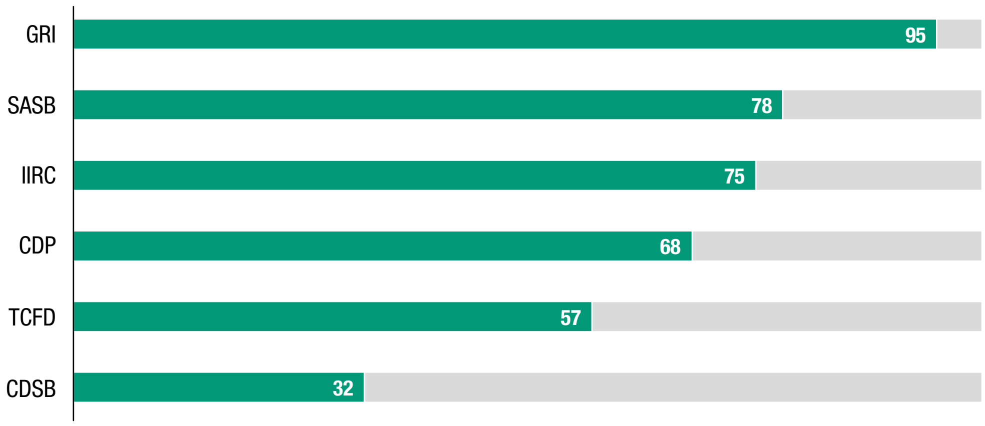
There has also been a steady increase in mandatory ESG disclosure rules, with a five-year growth rate of 60 per cent. This trend suggests that SDG 12.6 on sustainability reporting should be achieved by 2030.

UNCTAD and UN Environment, as co-custodians of SDG indicator 12.6.1, "number of companies publishing sustainability reports", have developed a measurement methodology for the indicator and are overseeing data collection and the reporting process to the global SDGs database used to assess progress up to 2030. This promotes harmonization of SDG reporting by companies and facilitates countries reporting on the contribution of the private sector to the implementation of the SDGs.

The spectrum of approaches to reporting ESG data incorporates a few key reporting instruments (figure IV.19). An overwhelming majority of guidance documents reference the instruments of the GRI, followed by those of the Sustainability Accounting Standards Board (SASB) and the International Integrated Reporting Council (IIRC), which are each referenced in about three quarters of guidance documents. Climate-specific reporting instruments such as the recommendations of the Financial Stability Board's TCFD and the Carbon Disclosure Project (CDP) are referenced by over half of the guidance, and about a third reference the work of the Carbon Disclosure Standards Board (CDSB). Developments in the global ESG reporting landscape may see reviews of guidance as necessary (see section 2.b).

Exchanges are also starting to provide focused guidance on climate disclosure since the growing demand for decision-useful, climate-related financial information in annual reports and financial filings has led to an increased need for issuers to update their knowledge on climate-related risks and reporting frameworks. Following the UN SSE initiative launch of the Action Plan to Make Markets Climate Resilient and a Model Guidance on Climate Disclosure in 2021, the Johannesburg Stock Exchange launched for comment its Sustainability and Climate Change Disclosure Guidance, specifically tailored to the South African context. It is expected that more exchanges will start providing guidance on climate disclosure as global financial markets take steps towards better integrating climate risks and opportunities into pricing mechanisms (see section E).

Figure IV.19. **ESG reporting instruments referenced in stock exchange guidance, as of Q1 2022** (Per cent of guidance documents referencing the instrument)



Source: UNCTAD, SSE database.
Note: CDP = Carbon Disclosure Project, CDSB = Climate Disclosure Standards Board, GRI = Global Reporting Initiative, IIRC = International Integrated Reporting Council, SASB = Sustainability Accounting Standards Board, TCFD = Task Force on Climate-Related Financial Disclosures.

c. Derivatives exchanges

While the incorporation of ESG into products traded on the derivatives market is considered nascent compared with the growth seen in equity and bond markets, the pace of change continues to intensify in this sphere of the financial sector, spurred by factors such as demand in the physical market, regulatory changes and commitments by market players (including exchanges) to play a role in the transition to more sustainable economies and capital markets. It seems inevitable that this market will also experience exponential advancement on ESG issues in the coming years, with industry experts noting that a marketplace previously considered niche has "a key role to play in the advancement of ESG objectives in the financial markets and the global transition to a green economy".[11]

Already exchanges have seen significant growth in the ESG index-based derivatives segment, with futures and options tracking equity indices that incorporate ESG weightings and ratings.[12] More conventional "ESG-linked" derivatives (which involve such environment-linked underlying commodities as carbon credits, sustainability prescriptions in contract requirements of the underlying asset and hedging products that focus on the use of proceeds for ESG purposes) have also become increasingly commonplace. More recently derivatives markets are seeing mounting interest in sustainability-linked derivatives (SLDs), which link ESG components to traditional derivatives. The first SLD was traded in August 2019. Similar to sustainability-linked bonds, sustainability-linked derivatives (SLDs) provide flexibility by not prescribing the use of proceeds. Although SLDs are still mostly bespoke products, it remains a challenge to ensure that the intended ESG objectives are achieved; hence, to enable measurement and monitoring, KPIs must be agreed and incorporated into the contractual documents. To support the safe and efficient progression of the SLD market, to attract new market participants and to grow liquidity, in 2021 the International Swaps and Derivatives Association (ISDA) published guidelines and regulatory considerations.

In addition to exchanges, industry a ssociations and regulators in the derivatives market are keenly following developments and conducting their own research to keep track of progress while ensuring that they are positioned to respond as needed or to take the lead on new initiatives. The newly established derivatives network of the SSE aims to provide a platform for exchanges and other market participants to gain learning by sharing information and experiences in this regard. During 2022, the SSE will also engage and collaborate with key industry players such as the Futures Industry Association to examine developments in the market and provide insights into the role of derivatives and exchanges in supporting the SDGs.

2. Advancing gender equality

Gender equality is a human right and a critical component of the SDGs. It is also a driver of economic growth and enterprise development: progress towards gender equality is a core contributor to more economically prosperous and socially cohesive societies. Exchanges play a central role in the economies in which they operate, and as such they have the direct and indirect ability to influence listed companies' actions on gender equality.

The number of exchanges supporting greater gender equality in businesses has soared over the past decade. For example, seven years ago, seven exchanges started to raise awareness about the Women's Empowerment Principles and the importance of gender parity to businesses, by jointly ringing the bell for gender equality. Organized by UN SSE, UN Women, UN Global Compact, WFE and Women in ETFs, this event developed into an annual activity and by 2022, more than 100 exchanges around the world participated and organized events.

Apart from awareness-raising, further exchange action on gender equality falls into three broad categories, as detailed in the joint UN SSE–IFC gender equality action plan for exchanges (figure IV.20), included in the report *How Exchanges Can Promote Gender Equality* (UN SSE and IFC, 2022). Two of these categories are market-focused, and one is focused on what exchanges can do internally. Exchanges can lead by example when they increase internal efforts for gender equality, but it is their market-focused actions that have the potential to initiate large-scale changes. These actions include mobilizing finance and improving women's access to financial markets by providing products and services as well as strengthening market performance on gender equality by improving transparency.

Figure IV.20. Gender equality action plan for exchanges

Source: SSE, IFC (2022).

D. POLICIES, REGULATIONS AND STANDARDS

With the rise of sustainability-themed financial products, governments around the world are stepping up their efforts to develop regulatory frameworks for sustainable finance. Thirty-five leading developed and developing economies and country groupings had 316 sustainable finance-dedicated policy measures and regulations in force by the end of 2021. Sustainability disclosure and sector-specific measures account for the majority of these measures; policy and regulation developments concentrate in emerging policy areas such as taxonomies, product standards and carbon pricing. Although sustainable finance policies and regulations need to take a nation's specific development context into consideration, international collaboration is also needed to ensure necessary coherence with international standards. At the international level, more work is being done within IOSCO to standardize the approach of securities regulators on sustainable finance, including efforts to strengthen product and corporate ESG disclosure. The second half of 2021 and first half of 2022 also saw a historic consolidation in ESG corporate reporting standards with the merger of several instruments into the new ISSB of the IFRS Foundation and the agreement between the latter and the GRI, which now sets a clear global baseline for corporate sustainability reporting.

1. National sustainable finance policies and regulations

a. An overview

The rise of sustainability-dedicated financial products that can also help finance sustainable development has been accompanied by a proliferation of principles and standards. These have been primarily driven by the private sector and international initiatives, as exemplified by a large number of voluntary standards on products, disclosure and sustainability integration. More recently, governments in both developed and developing economies are stepping up their efforts to support the growth of sustainable finance by putting in place the necessary policies and regulatory frameworks.

UNCTAD has been monitoring the latest developments in sustainable finance measures and regulations in 35 economies and country groupings. These include the G20 member states and Switzerland, as well as 13 developing economies (Bangladesh, Chile, Colombia, Egypt, Hong Kong (China), Kenya, Malaysia, Nigeria, the Philippines, Singapore, Thailand, the United Arab Emirates and Viet Nam) and ASEAN, which together account for about 93 per cent of the world's GDP. According to the UNCTAD sustainable finance regulation database, by the end of 2021 these economies had 316 sustainable finance-dedicated policy measures and regulations in force (figure IV.21). Over 40 per cent of these measures were introduced in the last five years, and 41 new measures were adopted in 2021 alone. At least 45 more measures are under development. These trends illustrate the accelerating pace of growth in sustainable finance policymaking.

This large pool of policy measures and regulations covers seven key policy areas (table IV.2). Almost half of policies are dedicated to sustainability disclosure. Sector-specific regulations with respect to asset management, sustainable banking and sustainable insurance are the

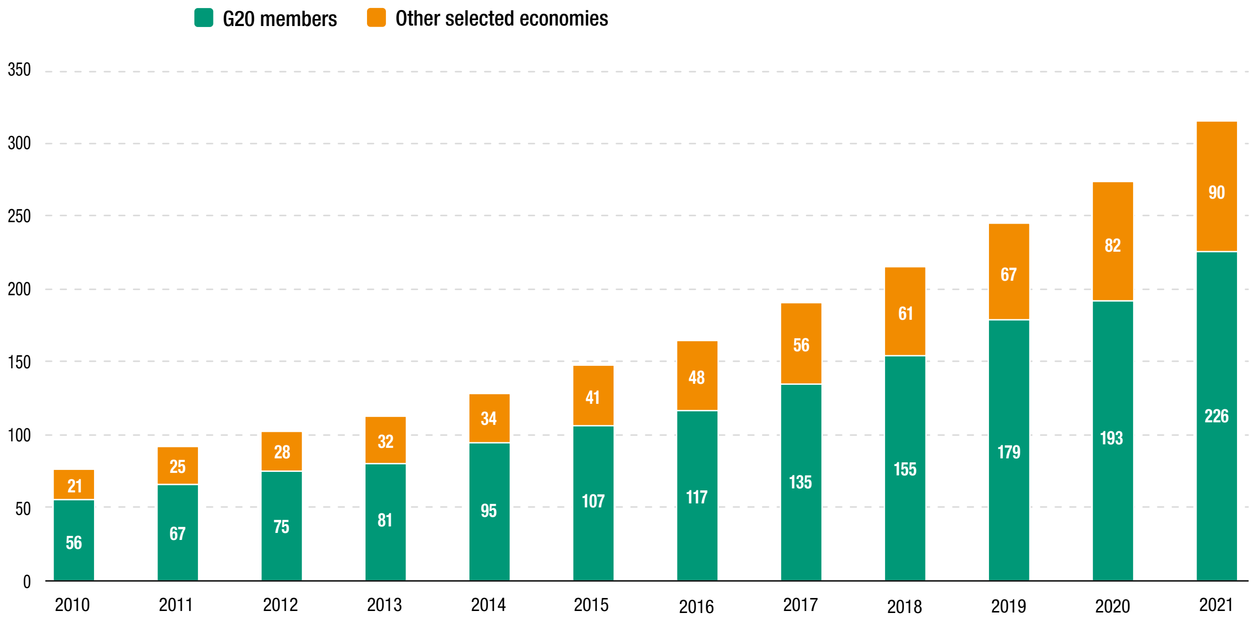
Table IV.2. Key sustainable finance policy areas covered by major developed and developing economies, 2022

	Economy	National strategy	National framework and guidelines	Taxonomy	Product standards	Sustainability disclosure	Sector-specific regulations	Carbon pricing
G20	Argentina		In use		In use	In use	In use	In use
	Australia			In development		In use	In use	In use
	Brazil	In use		In development		In use	In use	In development
	Canada	In use		In development	In development	In use	In use	In use
	China	In use	In use	In use	In use	In use	In use	In use
	European Union	In use	In use	In use	In use	In use	In use	In use
	France	In use	In use	EU measures apply	EU measures apply	In use	In use	EU measures apply
	Germany	In use	In use	EU measures apply	EU measures apply	In use	In use	EU measures apply
	India		In use	In development		In use	In use	
	Indonesia		In use	In development	In use	In use	In use	In development
	Italy	EU measures apply	In use	EU measures apply	EU measures apply	In use	In use	EU measures apply
	Japan		In use	In use	In use	In use	In use	In use
	Mexico		In use			In use	In use	In use
	Republic of Korea		In use	In development		In use	In use	In use
	Russian Federation		In use	In development	In use	In use		In development
	Saudi Arabia					In use		
	South Africa	In use	In development	In development		In use	In use	In use
	Turkey					In use	In use	In development
	United Kingdom	In use	In use	In development		In use	In use	In use
	United States					In use	In use	In use
Other developed economies	Switzerland		In use			In use	In use	In use
Other developing economies and groupings	Bangladesh		In use	In use		In use	In use	
	Chile	In use		In development	In use	In use		In use
	Colombia			In development		In use	In use	In use
	Egypt					In use		
	Hong Kong (China)	In use	In use			In use	In use	
	Kenya				In use	In use	In use	
	Malaysia		In use	In use	In use	In use	In use	In development
	Nigeria		In use			In use	In use	
	Philippines		In use	In development		In use		
	Thailand			In development		In use	In use	In development
	United Arab Emirates		In use			In use		
	Viet Nam			In development		In use		In development
	Singapore	In use	In use	In development		In use	In use	In use
	ASEAN			In use	In use			

In use · In development · No measures · No measures at the national level but EU measures apply

Source: UNCTAD sustainable finance regulation database.

Figure IV.21. **Sustainable finance policy measures and regulations in selected developed and developing economies, 2010–2021** (Number)



Source: UNCTAD.
Note: Other selected economies include Switzerland, as well as 13 developing economies (Bangladesh, Chile, Colombia, Egypt, Hong Kong (China), Kenya, Malaysia, Nigeria, the Philippines, Singapore, Thailand, the United Arab Emirates and Viet Nam), and ASEAN. Relevant measures of the EU are included in the number for the G20.

second biggest policy area, representing about 20 per cent of all measures. The majority of the 35 economies already have in place either a national sustainable finance strategy or framework, or guidelines on sustainable finance. Policy and regulatory gaps are more visible in three relatively new policy areas: taxonomies, product standards and carbon pricing. Most measures under development concentrate in these areas, and the situation may change in the coming years.

G20 members account for 226 of the 316 measures identified by the database. The EU (and its member states) and China take the lead, with policies developed in all seven areas. Significant progress has been made by non-G20 economies covered by the UNCTAD sustainable finance regulation database. These economies have been proactively pushing ahead with their sustainable finance agenda and have played an important role in shaping the global sustainable finance policy landscape.

b. Latest developments in key policy areas

(i) National strategies and frameworks

A well-developed national strategy, framework or action plan is imperative in setting national goals and galvanizing efforts to support the growth of sustainable finance. In response to the 2030 development agenda and the pandemic, many governments in developing and emerging economies have recognized the need to focus on economic resilience and have started including climate mitigation and adaptation measures and green investment targets in their national recovery plans (Zhan and Santos-Paulino, 2021). In this context, several countries launched national strategies, frameworks and action plans to support the development of sustainable finance in 2021.

After announcing its intention to achieve peak carbon by 2030 and carbon neutrality by 2060, China adopted a national action plan to achieve the goal in October 2021. As another milestone in achieving the European Green Deal, in July 2021 the EU published the renewed EU Sustainable Finance Strategy, which sets a clear policy agenda to finance the sustainable transition to 2024. Indonesia launched the Sustainable Finance Roadmap, Phase II (2021–2025) to accelerate the transition of the financial sector to sustainability through the establishment of a sustainable finance ecosystem. In Japan, the Ministry of Economy, Trade and Industry launched a Green Growth Strategy to enable industry alignment with 2050 carbon neutrality. The Japanese Government also established a task force on transition finance and published the Basic Guidelines on Climate Transition Finance for sustainable bonds and loans. Singapore adopted the Singapore Green Plan to advance its national agenda on sustainable development, including through the implementation of its Green Finance Action Plan. The National Treasury of South Africa published an updated version of "Financing a Sustainable Economy" to encourage long-term investments in sustainable economic assets, activities and projects. The United Kingdom launched Greening Finance: A Roadmap to Sustainable Investing, setting out the long-term ambition for a green financial system. Phase one of the road map will focus on "ensuring decision-useful information on sustainability is available to financial market decision-makers". By the end of 2021, most of the 35 economies in the database had in place a national sustainable finance strategy, framework or guidelines.

(ii) Taxonomies and product standards

As a fundamental building block of the sustainable finance ecosystem, taxonomies help clarify what economic activities are considered environmentally or socially sustainable for investment purposes. As such, they help bring more clarity, credibility and transparency to the sustainable investment market. Taxonomies have become a very active policy area in recent years.

In 2021, ASEAN, China, Japan and Malaysia launched or revised their sustainable finance taxonomies on sustainable finance. Together with Bangladesh and the EU, six of the 35 economies in the UNCTAD sustainable finance regulation database have developed a taxonomy. Meanwhile, 16 other economies (Australia, Bangladesh, Brazil, Canada, Chile, Colombia, India, Indonesia, the Philippines, the Republic of Korea, the Russian Federation, Singapore, South Africa, Thailand, the United Kingdom and Viet Nam) are in the process of developing one.

Most of the taxonomies in use, and under development, are dedicated to climate transition and environmental protection. However, a few countries have started to incorporate social development into their taxonomies. After the launch of its green taxonomy, the EU is working on a comprehensive taxonomy for social sustainability. The Bangladesh taxonomy pursues both climate and social development objectives, and covers cottage, micro and SME development and socially responsible investment. South Africa also included social resilience activities, such as education, skills development and knowledge management in its draft taxonomy, and it plans to further strengthen the social dimension in the future. Given the acute need to mobilize more investment for social development in less developed countries, inclusion of the social aspect in their sustainable finance taxonomies is necessary.

The expanding taxonomy universe varies significantly in objectives, scope, technical criteria, verification and disclosure requirements, and countries use different approaches to define sustainable activities (IPSF, 2021a). This inconsistency hinders interoperability of standards and can raise transaction costs and discourage sustainable investment flows across economies (Ehlers, Gao and Packer, 2021). A certain level of international coordination and cooperation is necessary.

As an instrument for identifying sustainability-compatible investment activities, taxonomies can serve as a useful framework for sustainable financial product labelling and for standards setting. Following the adoption of the EU Taxonomy, the EU Commission presented the European Green Bond Standard in 2021, with the aim of improving the effectiveness, transparency and credibility of the market and encouraging market participants to issue and invest in green bonds. Also in 2021, the Japan Bank for International Cooperation launched a Green Bond Framework to guide the issuance of green bonds.

With the proliferation of taxonomies, the number of labelling standards for sustainable investment products at the national level is expected to increase. However, most of the existing standards are dedicated to green bonds. More work needs to be done on the development of standards of other sustainable investment products, including social bonds, SDG bonds and sustainable funds.

(iii) Sustainability disclosure

Sustainability disclosure is a dynamically evolving field that accounts for almost half of all sustainable finance policy measures and regulations in the 35 economies analysed. Most of these measures target companies, with 75 per cent applying to large corporations, in particular listed companies, and 28 per cent to financial institutions.

Sustainability integration and related requirements are the main focus of disclosure (36 per cent), followed by corporate governance (32 per cent) and environmental and climate issues (26 per cent). Most climate disclosure measures were introduced in the last five years and their number is growing rapidly. Yet the use of KPIs remains rare, including in environmental and climate disclosure. To help improve the comparability and credibility of disclosures, the introduction of more KPIs, aligned with international standards such as the Paris Agreement or the SDGs, is necessary.

Another trend in corporate sustainability disclosure is the rise of mandatory measures, although voluntary measures remain more common (figure IV.18). Almost all economies in the database have at least one mandatory sustainable disclosure measure in place, and new mandatory measures are planned by many economies, including Brazil, Canada, Chile, China, the EU, Hong Kong (China), India, Japan, Singapore, Switzerland, the United Kingdom and the United States.

Disclosure measures at the product level are rare, and much work needs to be done in this area. The EU, China and Hong Kong (China) have introduced disclosure measures that apply to sustainable bonds or funds and other financial products. The United Kingdom and Singapore are working on similar measures. The absence of product-level sustainability disclosure regulations makes it difficult to address the lack of sustainability data for financial products and the associated greenwashing concerns.

Leading international corporate reporting standards, such as the TCFD, the SASB and the GRI, have started to make their way into national regulations. For example, the Financial Conduct Authority of the United Kingdom is planning to introduce product- or portfolio-specific disclosure guidelines connected to the TCFD. The EU's Corporate Sustainability Reporting Directive integrated all the key concepts of the TCFD recommendations. The Japanese Government has also launched initiatives to support TCFD-aligned disclosure by large companies (IPSF, 2021b). The formation of the ISSB could accelerate the consolidation of international disclosure standards (see the following section) and thus lead to improved harmonization of sustainability reporting at the national level.

Although SMEs represent a significant part of the economy, they are largely exempted from corporate sustainability disclosure regulations, especially when it comes to mandatory measures. This can help reduce the burden of disclosure for SMEs but also makes it harder for them to benefit from sustainable finance. One solution is to implement adapted frameworks and requirements that are more suitable for SMEs, such as UNCTAD's Core SDG Indicators for Entity Reporting.

(iv) Sector-specific policies

Climate, other environmental and social issues are increasingly recognized as systemic risks to the financial sector, precipitating increased policymaking and the introduction of regulations on sustainability incorporation for financial institutions. This has encouraged financial sector supervisors and central banks to include climate transition and environmental protection into their mandates (WWF, 2021). Among the 35 economies in the database, 27 have put in place sector-specific measures designed to promote the integration of climate, environmental or social considerations in the governance, strategy, risk management, investment decision-making and disclosure practices of asset managers, banks or insurance companies. About 75 per cent of these measures target asset management, focusing on climate change and environmental issues, with the rest being shared between sustainable banking and insurance roughly equally.

An important development in investment management regulation is that advanced economies are taking action to modernize fiduciary duty rules, focusing on specifying institutional investors' obligations and duties in relation to sustainability integration. In 2021, the EU Commission published six amendments to delegated acts on fiduciary duties and investment and insurance advice, which require financial firms (e.g. asset managers, advisers and insurers) to include sustainability factors in their procedures (PRI, 2021). In the United States, the Labor Department enacted changes to the fiduciary duties of retirement plans to make it easier for them to invest in sustainability-themed financial funds. The Pension Schemes Act 2021 of the United Kingdom strengthened the obligations of trustees of occupational pension schemes on governance and reporting with respect to climate and environmental issues.

Emerging economies are also putting in place sector-specific measures to leverage the potential of financial institutions to finance sustainable development. Bangladesh, China, Colombia, Nigeria and Turkey have developed guidelines for sustainable banking with the aim of directing more investment into key sustainable development areas, including SME development, job creation, social infrastructure and agriculture.

(v) Carbon pricing

Carbon-pricing measures, including carbon taxes and emission trading schemes, have been gaining further momentum in recent years as a policy tool to internalize negative externalities and reduce carbon emissions. Among the 35 economies covered by the database, carbon-pricing measures have been implemented by 18 economies and are under development in a 7 others. Most notably, all the new development activities are happening in emerging economies, which include Brazil, Indonesia, Malaysia, the Russian Federation, Thailand, Turkey and Viet Nam. Emission trading schemes have become more popular in recent years and account for a majority of carbon-pricing measures in use and under development.

The multiplication of net-zero commitments not only by governments but also by companies is driving growth in the carbon market. Meanwhile, climate-related disclosure policies, such as those aligned with the TCFD, are also pushing companies to internalize carbon prices (World Bank Group, 2021a).

One challenge associated with carbon-pricing measures, in particular for developing economies, is to determine an appropriate price or tax level for carbon and GHG emissions. Such a price or tax needs to be high enough to achieve meaningful emissions reductions aligned with a country's climate change commitments while not imposing an excessive fiscal burden on business. In order to avoid any unexpected macroeconomic impacts, in particular in developing economies, it is important to assess countries' readiness to deploy carbon-trading schemes or participate in international carbon markets (World Bank Group, 2021b).

2. International regulations and standard setting

a. Securities regulation and sustainability

Securities regulators are now actively considering their role in supporting the transition to more sustainable capital markets. IOSCO intends to professionalize all aspects of sustainable finance and work intensively in 2022 to deliver acro ss a range of focus areas.[13]

(i) Corporate reporting: pathway towards endorsement of ISSB standards

The work to consider whether the IOSCO Board will endorse the ISSB standards began in earnest with the publication of the ISSB exposure drafts on 31 March 2022 (see section 2.b). IOSCO will base its analysis of the drafts on a set of criteria published in June 2021 (IOSCO, 2021a). Overarching considerations include whether the proposed requirements can serve as an effective global baseline of investor-focused standards; whether they are fit for purpose in helping financial markets accurately assess sustainability risks and opportunities; and whether they can form the basis for the development of a robust audit and assurance framework.

(ii) Sustainability assurance

IOSCO's work stream on sustainability assurance began in February 2022 with an international round table of 140 participants, including such key stakeholders as the International Federation of Accountants, the International Auditing and Assurance Standards Board and the International Ethics Standards Board for Accountants. The round table showed strong support for IOSCO in coordinating and promoting global consistency for sustainability assurance standards, similar to what IOSCO has done with sustainability reporting and its support for the establishment of the ISSB. Building upon the round table, IOSCO will publish its vision for sustainability assurance, including the following aspects: (i) issuer readiness, (ii) investor needs and practices, (iii) auditors' current practices and future needs, and (iv) the state of play with regard to assurance standards and any future considerations required.

(iii) Promoting good industry practices and supervisory approaches

IOSCO issued two reports in November 2021, one covering asset managers and one covering ESG ratings and data providers (IOSCO, 2021b and 2021c). Both contained recommendations and good practices that are expected to be implemented by both regulators and industry. IOSCO will engage with market participants and regulators to promote these good practices. With regard to industry, IOSCO will collaborate with voluntary standard-setting bodies and industry associations and other relevant stakeholders to ensure that market participants begin implementing the IOSCO recommendations. This will also enable stakeholders to comply with national rules and regulations, which aim to be consistent with the IOSCO recommendations. With regard to supervisors, IOSCO will also act as a forum where members can exchange their experiences on implementation and supervision, with a view to ultimately achieving consistent implementation of the IOSCO recommendations.

(iv) Carbon markets

IOSCO's carbon markets work aims to promote the understanding and sound functioning of carbon markets – of both the compliance and the voluntary kinds, while being mindful that cross-border trading of carbon credits may expand. The underlying objective is to better understand the set-up and potential vulnerabilities of these markets, with a view to identifying essential attributes that foster market integrity. IOSCO plans to publish a report by COP27, setting out recommendations on the good functioning of compliance markets and identifying key facets and risks for further consideration in voluntary markets.

(v) Capacity-building

IOSCO's capacity-building efforts will encompass a comprehensive programme to assist its members in assessing their readiness and achieving implementation of ISSB standards and asset management obligations. This is particularly important for emerging markets, as they need to develop appropriate resources to be able to conduct this analysis in their efforts to implement the ISSB standards.

b. Consolidation of global ESG disclosure standards

During the second half of 2021 and the first half of 2022, the world witnessed a major shift towards consolidation of ESG disclosure standards, frameworks and tools. In June 2021, the IIRC and the SASB merged to form the Value Reporting Foundation. At the COP26 climate summit in November 2021, IFRS Foundation trustees announced the establishment of the ISSB) as well as consolidation of the Value Reporting Foundation and the CDSB into the IFRS Foundation.

The ISSB's formation responds to strong demand from public authorities and market participants for a high-quality, consistent global baseline of sustainability disclosures that enable investors to evaluate sustainability-related risks and opportunities when making investment decisions and assessing enterprise value. The concept has been welcomed by the G7,[14] the G20,[15] IOSCO, Financial Stability Board and by companies and investors from around the world.

The IFRS Foundation expects the consolidations to be completed during 2022. Meanwhile, the relevant instruments remain in place (i.e. the CDSB Framework, the SASB Standards and the International Integrated Reporting Framework). The ISSB is developing sustainability standards; in March 2022 it published for public comment its first two proposed standards – a draft climate standard and a general requirements standard, complete with industry-based requirements.[16] Its goal is to issue final requirements by the end of 2022, depending on the feedback received. The ISSB's future agenda and priorities will be determined on the basis of further public consultations commencing in Q3 2022, but it has also announced a working group to enhance compatibility between the global baseline and jurisdictional initiatives.

In another significant move affecting the broader spectrum of ESG disclosure, in March 2022, the IFRS Foundation signed a memorandum of understanding with the GRI, which provides global best practices for multi-stakeholder sustainability reporting. Under the collaboration, the sustainability standard-setting boards of the IFRS Foundation (the ISSB) and GRI (the GSSB) will seek to coordinate their work programmes and standard-setting activities and join each other's consultative bodies related to sustainability reporting activities.[17] In the interests of all stakeholders, together they aim to reinforce a corporate reporting system based on two pillars: one for reporting information on economic value creation at the level of the reporting entity for benefit of investors, and one for reporting information on the impact of the reporting entity on the economy, environment and people. The two pillars will have a core set of common disclosures and be on equal footing.

The GRI is also working with the European Financial Reporting Advisory Group on the development of the European Sustainability Reporting Standards, following an agreed statement of cooperation in July 2021. The effort is complementary to that of the IFRS and ISSB.

The developments described here are an unprecedented shift to reduce the existing fragmentation and prevent further fragmentation of sustainability disclosure instruments. The efforts build directly upon and protect the heritage of the leading sustainability disclosure instruments, with widespread adoption and use likely to reduce market confusion and costs for data preparers while improving usability of the information for a range of data users. Implementation of this global baseline will require action by others, including public authorities, stock exchanges and market participants, to contribute towards developing the baseline and to require or encourage its widespread use.When the new standards come into effect, exchanges and regulators will need to review their ESG disclosure requirements and/or guidance to ensure that they adhere to the new standards.

3. Lessons learned

Overall, sustainable finance regulations have flourished in recent years, both resulting from and reinforcing the mainstreaming of sustainable finance. An increasing number of economies across the globe are developing regulatory frameworks for sustainable finance. Both the number and the scope of policy measures and regulations are expanding rapidly. New policy tools, such as taxonomies, sustainable financial product standards, climate disclosure and carbon pricing, are being developed in a push for a green transition.

Yet, sustainable finance policies and regulations cannot work in silos. Countries need to take a holistic approach, by integrating sustainable finance regulations into their overall sustainable development strategy and ensuring coherence between sustainable finance and fiscal, technology, industry and other policies. For this purpose, it may be necessary to review all the policies that could have implications for sustainable finance regulation and policy consolidations may be needed. A well-developed national sustainable finance strategy or framework could serve as a useful tool to provide overall guidance for policy review and could thus be a good starting point for the exercise.

Meanwhile, government policies and regulations need to be complemented by market-driven standards and guidelines on disclosure, governance and other issues ("soft regulations"). It is important to engage all stakeholders to create a viable ecosystem that embeds sustainability along the entire investment chain. Given the early stage of development of sustainable finance and the quickly evolving market, policies and regulations need to be adapted in response to changes in specific market situations and in the overall development environment within which the investment system functions.

While sustainable finance policies and regulations need to take into consideration a nation's specific development context, international collaboration is important to ensure necessary coherence with international standards. This can help facilitate and attract cross-border investments, since consistence with international standards may be required by international investors (as is the case for green bonds issued in developing markets).

E. CLIMATE ACTION

Capital market participants along the whole investment chain are making progress to decarbonize and to embed climate conscious decision-making into their activities. To promote transition to a net zero economy, stock exchanges are tracking the carbon emissions of listed companies. An indicator of the momentum and demand for capacity-building on climate-related disclosures is the number of exchanges now hosting training on TCFD-aligned disclosure. In the last quarter of 2021 and the first half of 2022, more than 20 stock exchanges hosted training sessions on climate-related disclosure for more than 6,000 companies around the world. Several initiatives have been created to assist public markets and investors in navigating regulations and reporting standards, including the SSE Model Guidance on Climate Disclosure. Despite the many institutional investors that do not publish information on climate action, UNCTAD's continuous monitoring reveals that an increasing number of institutional investors have been taking action on climate risk with regard to their investment strategies and their active ownership of assets.

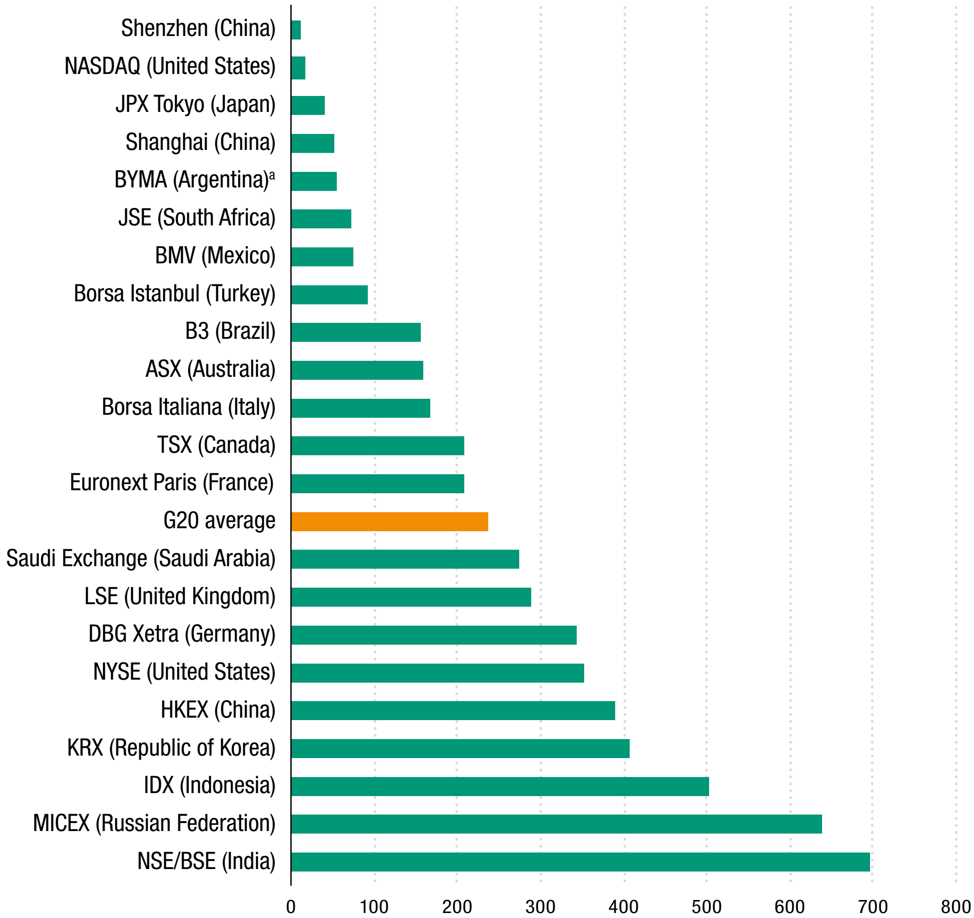
The global efforts to rapidly decarbonize the world's economies has important implications for business and the investment community. Increasingly, physical risks from climate change such as droughts, sea-level rise and flooding pose financial risks to listed companies and investors. For example, between 2017 and 2019 natural catastrophe losses intensified by climate change exceeded $600 billion (TCFD, 2021). Simultaneously, transition risks (such as technological and energy-mix changes, policy and legal implications, and changes in market trends) have financial impacts on an organization's financial performance and financial position. The total value of manageable assets at risk as a result of climate change by 2100 is estimated to exceed $40 trillion (The EIU, 2015). In addition to the risks posed by climate change, new opportunities are emerging that both investors and issuers can capitalize on. Many of the world's largest companies have identified and quantified financial impact from climate change, estimating a potential impact nearing $1 trillion ($970 billion). The same companies have also identified $2.1 trillion in climate-related opportunities (CDP, 2019). Capital markets have witnessed intensified actions on climate challenges and related investment opportunities along the investment chain.

1. Carbon emissions in public markets

In 2021, world leaders met in Glasgow, Scotland, for the 26th United Nations Climate Change Conference (COP26) to emphasize the urgent need to address the climate crisis. Moving towards a net zero emissions world is a key action point on the international agenda to ensure that the average global temperature rises no more than 1.5°C above pre-industrial levels. Tracking the carbon emissions of listed companies provides a useful benchmark for exchanges and other key stakeholders to assess progress in promoting transition to net zero emissions among listed companies (figure IV.22).

Research into the scope 1 GHG emissions of the top 100 issuers by market capitalization on G20 stock exchanges shows that the top companies listed on the Shenzhen exchange in China and on the Nasdaq exchange in the United States have the lowest scope 1 emissions among G20 exchanges. Together the top 100 companies on each of these exchanges combined represent only 0.6 per cent of emissions from the top 100 companies listed on the remaining G20 exchanges. By contrast, over half of the scope 1 emissions from the companies analysed in the G20 are emitted by companies listed on just five exchanges.

Figure IV.22. **G20 stock exchanges by scope 1 carbon emissions of top 100 issuers** (Million metric tonnes CO2 equivalent)



Source: UN SSE (2021).
[a] For the exchange in Argentina, which has fewer than 100 issuers, all the issuers were included in the analysis.

Significant differences can also be observed between individual exchanges; for example, the market with the highest-emitting top 100 issuers produces 50 times the level of scope 1 emissions as the market with the lowest-emitting issuers. Even within the same jurisdiction, exchanges' markets can vary significantly, highlighting the difference in industry and sector composition of the companies listed on those markets, which may be used by the exchanges to estimate their markets' risk of being affected by forthcoming regulations on carbon emissions.

2. The Net Zero movement

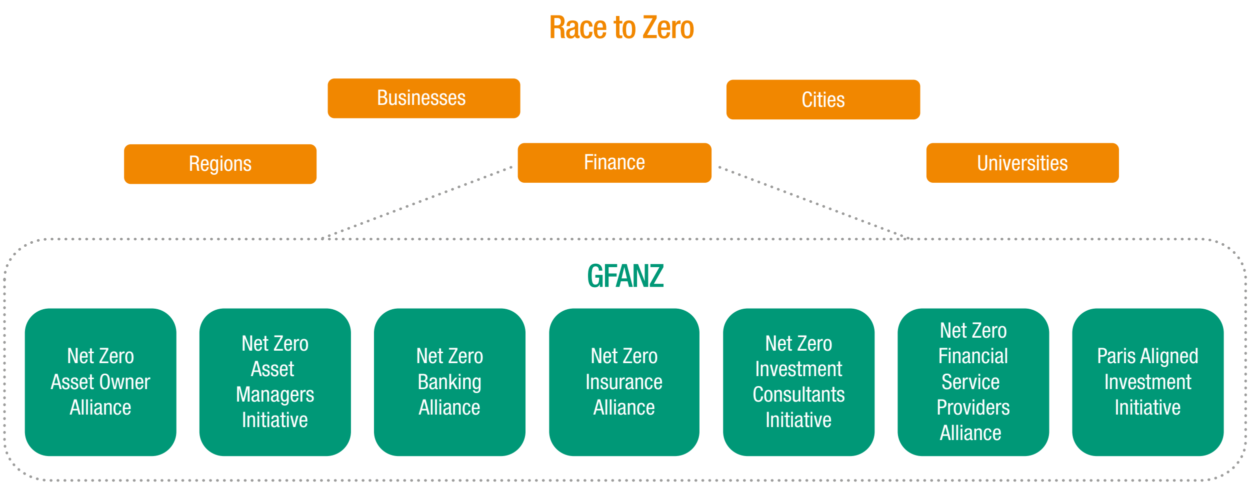
GHGs are the key driver behind global warming and climate change. Over the past decade, global GHG emissions have risen steadily, contrary to the goals set by the 2015 Paris Agreement, which defined the goal to limit global temperature rise to 1.5°C. In order to remain within the parameters set out in Paris, global emissions need to be halved by 2030 and have to be "net zero" by 2050 at the latest. In contrast to the absolute reduction of emissions, the concept of "net zero" allows the removal of unavoidable emissions through technical innovations or natural means (e.g. plants that remove carbon dioxide from the atmosphere).

To assist private and public sector organizations in reducing their overall emissions and moving towards net zero emissions, the United Nations Framework Convention on Climate Change created the global campaign "Race to Zero" (figure IV.23). With 1,049 cities, 67 regions, 5,235 businesses, 441 of the biggest investors, 1,039 higher education institutions and 120 countries, Race to Zero has become the largest alliance committed to achieving net zero carbon emissions by 2050. Collectively, actors involved in the initiative cover nearly 25 per cent of global CO2 emissions and over 50 per cent of global GDP.[18]

To coordinate efforts of the financial sector, United Nations Special Envoy on Climate Action and Finance Mark Carney created the Glasgow Financial Alliance for Net Zero (GFANZ). As part of the Race to Zero, GFANZ is a global coalition of leading financial institutions committed to accelerating the decarbonization of the economy (SSE, 2021b). Financial institutions join sector-specific alliances that establish science-based commitments and targets for each individual industry to fulfil. There are currently seven sector alliances active within GFANZ, catering to asset owners and asset managers, insurers, investors, banks and investment consultants. Each alliance is supported by a secretariat, which in some cases is led by the United Nations. Together, the actors involved publish guidance and targets to achieve within the next 12 months and the coming years. Exchanges are included in the Net Zero Financial Service Providers Alliance (NZFSPA).

The NZFSPA is a diverse group of 23 financial service provider organizations, including 6 exchanges. Members are committed to elevating the urgency of net zero alignment and integrating net zero efforts into their operations, services and products. The UN SSE acts as an accelerator for the growth of the alliance and offers secretariat services to exchanges within the alliance to guide, support and speed up their net zero efforts. Due to the diversity of members, the commitment and the action points developed by the NZFSPA must be interpreted within each individual subgroup, to ensure they align with each sector's operations and abilities.

Figure IV.23. Structure of the Race to Zero movement in the finance industry



Source: UNCTAD, adapted from GFANZ/NZFSPA presentation.

3. Climate action by public pension and sovereign wealth funds

Climate and environmental concerns are the dominating subjects of sustainability action taken by PPFs and SWFs, with a focus on the identification and mitigation of the impact of climate change on future returns. Climate action by funds focuses principally on five areas:

1. Risk identification and mitigation related to transitional and physical risks
2. The application of metrics and reporting or disclosure of climate-related risks
3. The use of targets and benchmarks to reorient portfolio holdings and investment strategies in response to climate-related risk
4. The institutional response to climate-related risks – and ESG integration more broadly – through resource mobilization and organizational change
5. Increasingly active ownership on climate risk, through engagement, voting and exclusion or divestment

Their climate action usually starts with the identification of both physical and transitional risks. For example, climate change is considered the primary portfolio risk for many funds, such as AP Fonden (Sweden), and several funds, such as HOOPP (Canada), have developed in-house climate models to identify at-risk investments. The focus on climate is partly related to the scale of the risks involved and their impact on future financial returns and partly related to reporting and other initiatives that facilitate disclosure on carbon emissions.

Most reporting funds now elaborate a specific strategy on climate or CO2 emissions (figure IV.24). This is often linked to a specific goal, which for the majority of funds means net zero carbon emissions in their portfolios by 2050, if not before. A majority of reporting funds use an international reporting framework for reporting on climate action and have signed up to an international climate response initiative, one of the most popular being Climate Action 100+, signalling their commitments on climate action to shareholders and beneficiaries and to policymakers. Over two thirds of reporting funds now publish specific information on climate risk, sometimes in a report separate from either their annual or sustainability report.

Information on the size of investments in climate-related assets is not comprehensive, but anecdotal evidence from fund reports suggests that they are making rapid changes to portfolios and that the actual or potential impact of regulatory changes will accelerate

Figure IV.24. **Climate-specific action by funds, 2022**
(Per cent of reporting funds)

Source: UNCTAD, based on fund annual reports or sustainability reports, n = 47.

investment decisions in this area. For example, funds such as ABP (Netherlands) have developed specific investment instruments for investing in the energy transition. Meanwhile, two Californian pension funds, CalPERS and CalSTRS (United States), are facing a proposed state law requiring them to divest all their fossil fuel assets – about $9 billion – by 2027.[19]

Despite calls for divestment from beneficiaries and the likely impact of regulatory changes, funds often choose to engage with investees rather than exclude them. The rationale for engagement, from the fund's perspective, is the understanding that the fund has a huge degree of influence and leverage through engagement and voting that it would not otherwise have if it divested. For this reason, funds privilege engagement in the expectation that investees will be encouraged to implement their own transition strategy to net zero. Most reporting funds exercise their voting rights, either directly or through a proxy, and actively engage with their investees. Nearly two thirds of funds provide guidance on ESG integration to asset managers or investees (figure IV.25).

UNCTAD's continuous monitoring reveals that an increasing number of institutional investors have been taking action on sustainability and climate risk, in line with their long-term outlook and fiduciary responsibilities. This goes beyond reporting to implementing meaningful actions with regard to fund investment strategies and their active ownership of assets. Yet, a majority of the world's largest funds, either by number or AUM, still do not publish information on ESG integration or climate action. The first step towards reallocating capital towards sustainable outcomes and mobilizing more finance to support climate change mitigation and adaptation is to recognize and quantify risk through disclosure and reporting. Such reporting needs to improve and become mandatory in financial markets and among institutional investors as it already is in several countries and regions, such as in the EU and in the Republic of Korea.

With the IPCC clear that further rises in emissions after 2025 puts a 1.5°C warming scenario out of reach, and facing the cascading risk impacts related to hydrocarbons and energy security arising from geopolitical crises, such as the war in Ukraine, investors should be taking more urgent action to decarbonize their portfolios through reorienting assets or engaging investees. UNCTAD, through its Global Sustainable Finance Observatory and its Sustainable Institutional Investment programme, is contributing towards accelerating the reorientation of investments and in channeling more finance to sustainable outcomes, including the energy transition.

Figure IV.25. **Active ownership by funds, 2022**
(Per cent of reporting funds)

Source: UNCTAD, based on fund annual reports or sustainability reports, n = 47.
Note: ESG = environmental, social and governance, SDG = Sustainable Development Goal.

4. Stock exchange strategies for climate action

Stock exchanges are playing an important role in helping their markets navigate the low-carbon transition. An indicator of the momentum and demand for capacity-building on climate-related disclosures is the number of exchanges now hosting training on TCFD-aligned disclosure. In the last quarter of 2021 and the first half of 2022, more than 20 stock exchanges have hosted training sessions on climate-related disclosure for more than 6,000 participants around the world, working with UN SSE, IFC and other partners. Key areas of concern that participants highlight in these sessions are how to identify the financial impact of climate-related risks and opportunities and how to integrate this information into mainstream financial reports.

The TCFD has identified climate-related risks and opportunities that are more likely to have a financial impact on a company's financial position or financial performance. Companies can use these risks and opportunities as a starting point by incorporating them into their risk management processes and identifying their strategic relevance to the organization. By conducting a materiality analysis or identifying how risks and opportunities may affect the organization's financial position and performance, companies can integrate this information into their mainstreaming reports. The risks and opportunities deemed to have a financial impact should be a part of their strategic planning and risk management processes in order to mitigate risks and capitalize on opportunities pertaining to climate.

To help exchanges lead a transition to more climate-resilient markets, the UN SSE, in collaboration with the UN Special Envoy on Climate Action and Finance, launched a voluntary practical Action Plan (SSE, 2021c) together with a set of tools for guiding markets on climate-related disclosures (SSE, 2021d). The Action Plan highlights two streams of activities which focus either on changing the internal operations, disclosure and governance within a stock exchange, or on influencing the external market's operations, disclosure and governance practices. The SSE provides exchanges with a template, the *SSE Model Guidance on Climate Disclosure*, that can be used to create bespoke guidance for each unique market, and a TCFD checklist to conduct a gap analysis of current reporting practices. Building on the tools and guidance developed specifically for stock exchanges, the SSE, together with the World Bank Group's International Finance Corporation and the CDP, developed a three-part training programme on aligning disclosure practices with the recommendations of the TCFD recommendations.

* * *

With the rapid proliferation of sustainability-themed financial products, the growth of the sustainable finance market has reached a tipping point. Its growth is expected to further accelerate in the coming years, with more institutional investors mainstreaming sustainability in their investment decisions and more governments, stock exchanges and industry associations making systematic efforts to create a viable policy and regulatory ecosystem for sustainable investment.

Much remains to be done to fully leverage the potential of the capital market for sustainable finance. The current focus is on strengthening the integrity of sustainability-themed products and corporate ESG disclosure. The biggest challenge that needs to be addressed is the sustainability-washing concern and the credibility of sustainable financial products associated with it. UNCTAD analysis shows that huge variance remains in the sustainability profiles in self-labelled sustainable funds and that the low-performing ones may not fulfil their sustainability credentials. Meanwhile, although an increasing number of asset owners and asset managers have announced their commitment to carbon neutrality, more than half of the world's 100 largest PPFs and SWFs are not disclosing or reporting on sustainability issues. This situation needs to change, and the most effective way to address the credibility issue is to further strengthen sustainability reporting, at both the entity and the product levels, covering both companies and financial institutions. Regulators and stock exchanges can drive the change by making more disclosure and external auditing requirements mandatory, especially for sustainability-oriented products traded in securities markets. Taxonomies and product standards can also bring more clarity and credibility to the market and have been multiplying in recent years. However, the lack of standards for sustainable funds and other emerging sustainable financial products at national and international levels needs to be addressed, and better alignment of existing standards for sustainable bonds across countries is necessary to enhance transparency.

To make sustainability a norm of investment, a holistic approach is necessary. National strategies and policies aimed at supporting sustainable finance and the growth of the market need to be embedded in the national development strategy, and fiscal, financial, industry, technology and other relevant policies may need to be reoriented to work together to facilitate sustainable investment. Meanwhile, in order to build a viable ecosystem for sustainable finance to flourish, the entire investment value chain needs to be involved, including asset owners and asset managers, exchanges, issuers and regulators.

A coherent market with better geographical balance will not be achieved without more international cooperation and support. Already, regional approaches have helped harmonize standards and policies across markets and, ultimately, harmonization at the international level would be beneficial, perhaps on existing standards and policies. For countries with less developed markets and infrastructure, particularly with regard to regulation and standard setting, technical assistance would be helpful to support market development and beneficial outcomes.

Through the work of its Global Sustainable Finance Observatory (box IV.2) and other sustainable investment-related programmes, such as the SSE, the Sustainable Institutional Investment and the International Standards of Accounting and Reporting programmes, UNCTAD is committed to working together with key stakeholders from both the public and the private sector to make the financial market ecosystem more sustainable and better contribute to sustainable outcomes, including the SDGs, as mandated by the UN General Assembly.[20]

Box IV.2. UNCTAD Global Sustainable Finance Observatory

The Global Sustainable Finance Observatory was launched by UNCTAD in the 2021 World Investment Forum with a vision to build a future global financial ecosystem in which sustainable development, as defined by the SDGs, is fully embedded into the business model and investment culture and to bring more credibility, transparency and consistency to the market.

The Observatory is committed to addressing the challenges of fragmentation in standards, proliferation in benchmarking, complexity in disclosure and sustainability-washing. It works in tandem with the standard-setting processes of the financial industry and regulatory bodies to promote the full and effective integration of sustainable development into all aspects of the global financial ecosystem.

In particular, the Observatory

- Promotes the integration of SDGs into the sustainability assessment ecosystem in a coherent and synergistic manner, including through the Guidance on *Core Indicators for Entity Reporting on Contribution towards Implementation of the SDGs* published by the ISAR.
- Manages a global database of sustainable investment funds and other products to improve the open-source availability of sustainability data for key stakeholders and the public.

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Box IV.2. UNCTAD Global Sustainable Finance Observatory (Concluded)

- Conducts sustainability assessments of "self-labelled" sustainable products on global capital markets, and awards best performers.
- Establishes a pool of sustainability ratings on capital markets to encourage better reporting methodologies in different industries.
- Maintains a global inventory of good regulatory and policy practices for sustainability integration and to facilitate peer learning.
- Provides a capacity-building platform for assisting developing countries on policies, regulatory measures, product development, industry standards, reporting and other related issues to ensure they benefit from sustainable finance.

The Observatory leverages UNCTAD's partnership with leading sustainable finance-related initiatives, such as the UN Global Compact, the PRI, the UNEP Finance Initiative, IOSCO and the World Federation of Exchanges, in the area of sustainable investment.

Source: UNCTAD.

NOTES

[1] United Nations General Assembly resolution on "Promoting investments for sustainable investment" (A/RES/74.199) and (A/RES/75/207).

[2] Tergesen, A., "ESG funds easier for 401(k)s to buy under Labor Department plan", *The Wall Street Journal*, 13 October 2021, https://wsj.com/articles/esg-funds-for-401-k-s-easier-to-buy-under-labor-department-plan-11634160291.

[3] The score is based on the relative rating, with 10 for the highest-rated funds and 1 for the lowest-rated ones.

[4] The MSCI ACWI covers about 3,000 holdings from 23 developed and 27 emerging markets and approximately 85 per cent of the free float-adjusted market capitalization in these markets. The index is the benchmark against which the relative sustainability performance of sustainable funds is evaluated in this section.

[5] According to data from the Global SWF data platform, 2022, https://globalswf.com.

[6] According to data from the Global SWF data platform, 2022, https://globalswf.com.

[7] Cybersecurity was seen as the biggest risk warranting focus from boards (a bigger risk focus than ESG). KPMG (2022).

[8] About 30 per cent of oil, 50 per cent of gas and 80 per cent of coal reserves will remain unburnable if warming is limited to 2°C (IPCC, 2022).

[9] For example, Temasek (Singapore) has introduced an internal carbon-pricing policy in response to its assessment that carbon pricing may need to surpass $100 per tonne of carbon dioxide equivalent (tCO2e) by 2030 to drive effective decarbonization and deliver on the Paris Agreement. The fund has set an initial internal carbon price of $42 per tCO2e to inform its investment decisions. The fund will further refine its carbon-pricing strategies as it gets further clarity on the economic and policy levers of change (https://temasekreview.com.sg/.

[10] The 12 founding members of the SSE Derivatives Network are the Australian Securities Exchange (ASX) (Australia), Borsa Istanbul (Turkey), Bursa Malaysia (Malaysia), CBOE Global Markets (United States), CME Group (United States), Deutsche Börse AG/Eurex (Germany), Matba Rofex (Argentina), MexDer (BMV Group) (Mexico), NZX Limited (New Zealand), Singapore Exchange (Singapore), The Intercontinental Exchange (ICE) (United States) and TMX Group/Montreal Exchange (Canada).

[11] *MayerBrown Perspectives*, "ESG derivatives: a sustainable trend", 21 October 2021.

[12] *BDO Insights*, "ESG Derivatives: a new way to promote sustainability", 22 October 2021.

[13] *Investment News* "IOSCO targets greenwashers", 15 March 2022.

[14] G7 Finance Ministers and Central Bank Governors Communiqué, 5 June 2021.

[15] G20 Third Finance Ministers and Central Bank Governors meeting, Communiqué, 9–10 July 2021.

[16] IFRS, "ISSB delivers proposals that create comprehensive global baseline of sustainability disclosures", 31 March 2022.

[17] GRI, "IFRS Foundation and GRI to align capital market and multi-stakeholder standards, 24 March 2022.

[18] UN Climate Change, "Race to Zero Campaign", https://unfccc.int/climate-action/race-to-zero-campaign.

[19] "Proposed bill would require CalPERS, CalSTRS to divest fossil fuels", *Chief Information Officer*, 15 March 2022, https://ai-cio.com.

[20] United Nations General Assembly resolution on "Promoting investments for sustainable development" (A/RES/74.199) and (A/RES/75/207).