

IMPROVING COMPATIBILITY OF APPROACHES TO IDENTIFY, VERIFY AND ALIGN INVESTMENTS TO SUSTAINABILITY GOALS

**INPUT PAPER FOR THE G20 SUSTAINABLE FINANCE
WORKING GROUP (SFWG)**

prepared by

**United Nations - Department of Economic and Social Affairs (UN- DESA) and
International Platform on Sustainable Finance (IPSF)**

September 2021

UNDESA/IPSF G20 draft input paper***Improving compatibility of approaches to identify, verify and align investments to sustainability goals*****Table of Contents**

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This document is prepared as an input paper to the G20 Sustainable Finance Working Group by UN DESA and the IPSF Secretariat with the valuable contribution of IPSF members and observers, as well as inputs from the Climate Bonds Initiative, SDGLabs.ai, and World Bank. Acknowledgment of contributions does not imply endorsement of contributions or views by the IPSF or UN DESA.

Introduction

The Covid-19 crisis has exposed the fragility of our societies to sustainability risks but provides an opportunity to ‘build back better’. The dramatic consequences of the pandemic should be turned into an opportunity to put the world on a more inclusive and sustainable path, in line with international commitments. This paper highlights actions to address climate goals given the urgent need for near-term action, and shows how these actions can be translated across the UN Sustainable Development Goals (SDGs).

Achieving the Paris Agreement and SDGs requires changes and innovations in the global financial system, as called for in the Addis Ababa Action Agenda.¹ Financial markets have the capacity to mobilise the trillions needed to help make a global transformation towards sustainability goals a reality. This includes investing in and financing economic activities that contribute to sustainable development and channelling funds towards countries and regions that need support to achieve a sustainable transition and development objectives. Many countries and regions, including G20 and non-G20 members, have recognized the role of private capital in supporting sustainability goals and have taken or are planning to take steps to scale up the financial flows in support to sustainability.

Ensuring the credibility of sustainable investment products and strategies is critical to build trust and support investor demand. The rapid rise of the green bond market shows that there is interest from market participants for investments with environmental benefits. More individual investors are also expressing interest in sustainable investing practices (from 71 per cent in 2015 to 85 per cent in 2019, in one survey),² but there is a lack of clear, comparable and verifiable information about what is green and sustainable. Taxonomies, roadmaps, standards, ratings, verification schemes and other approaches are key to ensure that sustainable investment products and strategies do not mislead investors and achieve real impact.

There has been a multiplication of approaches to align investments with sustainability goals over the past few years. While these approaches provide useful tools, they are currently being developed in silos, which risks generating market fragmentation, inconsistencies, and challenges to accessing information. Eventually, this could entail additional costs for market participants and companies, and a higher risk of greenwashing and SDG-washing practices, thus hindering efforts to align financial flows with sustainability goals. Markets can also become more fragmented if different standards are applied in different regions. Sustainable investment approaches also need to consider the specific constraints of small and medium sized actors and of those of countries with less advanced capital markets.

More than 20 countries and regions around the world have introduced or are planning to introduce approaches and tools to identify, verify and align financial flows to support sustainability goals. These are typically established by a top-down or government-led approach, such as the Chinese and the EU taxonomies, which provide clear boundaries on what can be called green/sustainable. In other

¹ Addis Ababa Action Agenda provides a framework for financing sustainable development (see https://www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA_Outcome.pdf)

² Morgan Stanley, “Sustainable Signals: Individual Investor Interest Driven by Impact, Conviction and Choice” (2019).

jurisdictions, there is widespread use of voluntary and market-led solutions. These solutions include, for example: (i) adopting/using the ICMA’s Green Bond Principles and other private-led principles (e.g., GISS Sustainable Investing Definition); and (ii) using forward-looking portfolio alignment tools (e.g., implied temperature scores), Climate Bonds Taxonomy, and SDG/ESG ratings and scores from rating agencies and financial data providers to develop sustainable investment products. In this context, transition finance (financing transition activities contributing to a decarbonized society) has increasingly called attention for instance from governments and markets in the EU and Asia.

This paper reviews existing approaches to sustainable finance and explores ways to improve their consistency, interoperability and transparency, while acknowledging local specificities. Promoting common principles at the global level can help improve consistency in sustainable investment approaches. However, interoperability does not mean that all systems and tools need to operate in the same way, but rather that there is clarity on how each tool can interact with others, and sufficient comparability and interoperability between approaches such that they are usable across multiple jurisdictions and accepted as credible. The *International Platform on Sustainable Finance* is working on finding common ground between green taxonomies globally. By working towards interoperability of the core definitions of green/sustainable activities, other tools and approaches, whether developed privately or publicly, can be more easily aligned.

This paper starts with an overview and analysis of the existing public and market-based frameworks and approaches to identify, verify, and align investments with sustainability goals (**Chapter 1**). It then describes the main challenges to implement consistent, comparable and interoperable global frameworks (**Chapter 2**). Finally, it provides high-level principles for countries/markets that intend to develop their own approaches/taxonomies and a set of recommendations to improve coordination on enhancing the comparability, interoperability and consistency of different alignment approaches, and to facilitate their convergence (**Chapter 3**).

I. Stocktaking of approaches to identify, verify and align investments with sustainability goals

To start the stocktaking, it is important to understand how the approaches to sustainable investment relate to each other, and what issues they try to address (please see Annex 1 for a detailed schematic view).

- **A first set of approaches aims at defining the broad characteristics of sustainable investment.** Without a common understanding of what sustainable investment means in practice, different actors have divergent interpretations and investment products/strategies with vastly divergent levels of sustainability are bundled together under the heading of “sustainable investment”. This creates confusion and misleads investors. Broad principles have been developed to help creating more clarity about sustainable investment.
- **A second set of approaches aims at specifying pathways and the underlying assets that can be considered as compatible with sustainable investment.** These approaches help identify investment opportunities aligned with sustainable investment. They include:
 - **Activity-based taxonomies:** Taxonomies usually define sustainable economic activities and can help investors, businesses and policy makers use a common language and therefore

understand what activities are compatible with sustainability goals. They have been created by both regulators and private entities with various levels of granularity.

- ***Sustainability rating/scores and portfolio-level measures:*** Data providers and organizations have developed methodologies to assess the sustainability of companies and projects, including their alignment with climate goals. These scores and ratings can be used by investors to identify investment opportunities that meet sustainable investment characteristics and align their portfolio with sustainability goals.
- ***Credible pathways and roadmaps to sustainability goals:*** Identifying transition pathways tailored to different sectors, with credible roadmaps to follow up on progress, is another way to contribute to determine whether sectors, portfolios or companies are aligned with sustainability goals while recognizing that they may be at different starting points.
- **A third set of approaches aims at providing assurance and transparency about the sustainability of an investment product/portfolio and inform market participants.**
 - ***Labels, standards and benchmarks*** are tools to communicate to investors that an investment product/strategy meet certain sustainability criteria. Some of them are regulated and can be linked to a taxonomy or roadmap, while others are self-proclaimed or developed by market participants. They may also rely (or not) on third-party verifiers/certifiers.
 - ***(Self)-disclosure:*** Asset managers and advisors can also self-disclose their adherence to a definitional framework for sustainable investment. For example, in the EU, institutional investors and large companies are obliged to disclose the proportion of their investments and activities aligned with the EU Taxonomy. Some market-based approaches, including ICMA's Principles and Handbook, are also rooted in disclosure and transparency.

These different approaches are not mutually exclusive and are often articulated by public and private actors. The following sections will take stock of existing approaches/tools from the public and private sectors to identify, verify and align investments with sustainability goals and explain their different objectives, as well as their technical underpinnings.

A. Definitional frameworks for sustainable investment (high-level principles)

“Sustainable investments” encompass a wide range of investments with varying degrees of sustainability impact being sought. Some financial products and strategies are presented as sustainable investments without making a meaningful contribution to climate goals and sustainable development, including to the achievement of the SDGs (i.e., so-called green- and SDG-washing). For example, some “sustainable” funds include fossil-fuel or tobacco companies, based on their relatively good environmental, social and governance (ESG) performance compared to industry peers, while their impact on sustainable development, including on climate and health, has not been properly taken into account.

Investor surveys have shown that confusion about what sustainable investment is can prevent its adoption and reduce confidence in its integrity. For example, 72 per cent of 5,300 high net-worth investors surveyed found sustainable investing terms confusing.³ In another survey of institutional

³ UBS, “Global insights: What’s on investors’ minds: Return on values” (2018, Volume 2).

investors, about 50 per cent of participants indicated that the lack of agreement around terms and definitions continues to stifle responsible investment efforts.⁴

While each investor might have its own definition of sustainable investment, there have been attempts from the private sector to create greater consensus on what sustainable investment means. The table in Annex 2 presents selected definitions put forward by private-led organizations. For example, the green market has largely been underpinned by the Green Bond Principles (GBP), first launch in 2014 under the International Capital Market Association (ICMA). Different market-based associations have also defined the contour of sustainable investment. For example, the *Global Investor for Sustainable Development (GISD) Alliance* has put forward common principles for sustainable investment in its definition of sustainable development investing. It is important to understand how these approaches differ as the differences will be reflected in the investment products and strategies considered as aligned with sustainability goals. There are four main features that differentiate these definitions.

i. The Objective: Risk Management vs. Positive Contribution

A definition typically clarifies the objective of sustainable investment. There are two different approaches that co-exist in the investment community with often different outcomes.

The first approach refers to managing ESG risks (see for example the GSIA definition in Annex 2). This is important for all investors. In fact, managing ESG risks is becoming part of traditional investing as this is meant to maximize financial returns relative to all material risks (both economic risks and non-economic, or ESG, risks). A recent survey of institutional investor found that 80 per cent of asset owners integrate ESG factors into their investment process (up from 70 per cent in 2017).⁵ Banks are also increasingly integrating ESG considerations in their lending decisions.

The second approach refers to deploying capital in ways that make a positive contribution to sustainable development. Only investment likely to create positive sustainable development outcomes should then be considered as sustainable investment. This means investments that actively target companies and projects aligned with sustainability goals.⁶ This also means excluding companies with negative impact on sustainability goals, even when this negative impact might not affect the financial performance of these companies. Adopting this approach could bring clarity to market participants as it is aligned with the expectation that sustainable investment positively contributes to sustainability goals.

ii. Narrow vs. Comprehensive Impact Assessment

A second difference in the approaches to defining sustainable investment is whether investors look solely at the operational activities of a company they finance or also consider the impact of the products and services it produces. Figure 1 describes the two different ways through which a company affect sustainability. For example, a car manufacturer affects climate change through the GHG

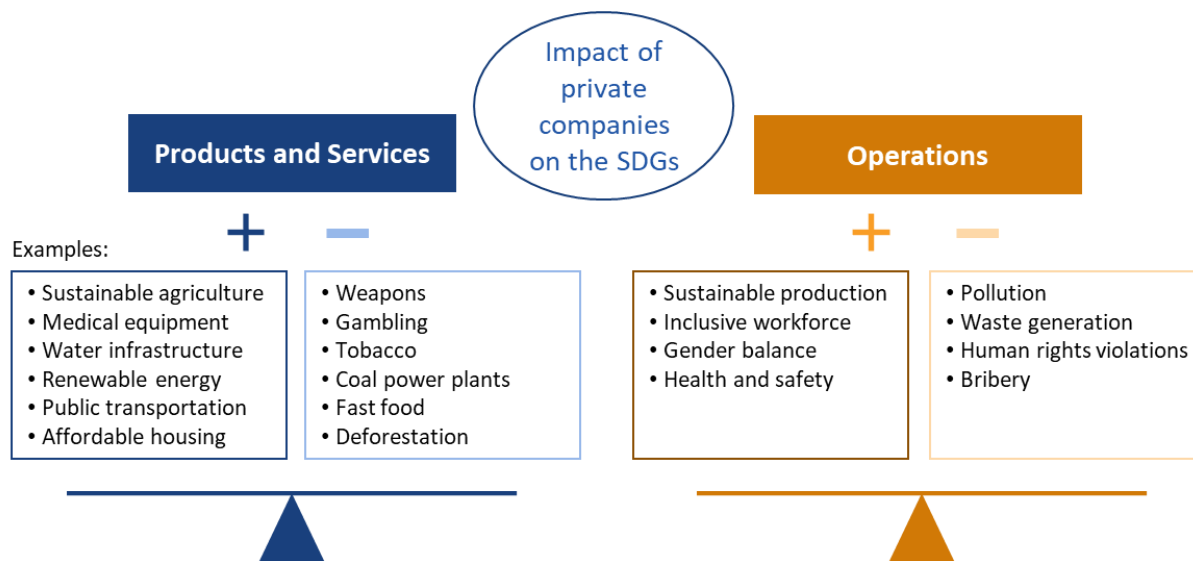
⁴ AON, “Global perspectives on responsible investing” (2018).

⁵ Morgan Stanley, “Sustainable Signals: Asset Owners See Sustainability as Core to Future of Investing” (May 2020).

⁶ IFF would categorize these investments as inclusive and impactful investments in contrast to exclusion investments. See: IIF Sustainable Finance Working Group Report, “The Case for Simplifying Sustainable Investment Terminology” (October 2019).

emissions from its factories (i.e., its operations – Scope 1 and 2 GHG emissions), but also through the emissions of the vehicles it puts on the market (i.e. its products – Scope 3 GHG emissions). To assess whether investing in a company in this sector could qualify as sustainable investment, a comprehensive impact assessment requires to account for Scope 1, 2 and 3 emissions, while a more narrow impact assessment could be limited to Scope 1 and 2. The same reasoning can apply to other sustainability issues. For example, a comprehensive impact assessment of the sustainability of a pharmaceutical company cannot be realized just by looking at its operations (e.g., labour practices) but needs to look at the impact and access to the medicines it puts on the market.

Figure 1: Framework to assess the impact of private companies on the SDGs



Source: *Financing for Sustainable Development Report 2020*.

Defining sustainable investment solely from an ESG perspective may not provide a comprehensive picture as most ESG data covers a company's operations rather than its products and services. ESG metrics that measure how a company produces (i.e., its operations) is necessary but not sufficient to conduct a comprehensive assessment of the impact of companies on climate goals, and sustainable development more broadly. A more comprehensive approach would also consider the sustainability impact of the economic activities of investee companies (see the GISD SDI definition in Annex 2). In this context, taxonomies of economic activities have a role to play in defining activities that are aligned with sustainability goals (see the taxonomy section).

iii. Positive vs. Net Positive

Another key difference in approaches to sustainable investment is the way a positive contribution is assessed. Is it enough for sustainable investment to contribute to an environmental or social goal? Does it require a net positive impact to that goal across a company? Or does it also require consideration of the impact of the investment on other social and environmental issues?

The Green Bond Principles focus only on the impact of the specific project financed (i.e., the use-of-proceeds impact), but do not guarantee the greenness of the firm issuing the bond. This means in practice that a highly-polluting or high carbon-emitting company can issue green bonds. This is not an issue per se if the issuer uses the money raised to make its business greener. Yet, it creates confusion and can be misleading if the company does not improve its performance over time.

Another approach is to consider the overall net impact of an investment on sustainability goals. The GISD SDI definition embraces this approach and stipulates: *“The positive contribution of an investment should not be outweighed by negative impacts from the same investment over the life of this investment.”* This notion of ‘outweighing’ is challenging to measure and implement but important. For example, it helps clarifying that an energy company with most its business in renewables can be considered as a sustainable investment even if it has a negligible coal-fired power plant activity. This notion is critical as, in reality, no company or project is 100 per cent aligned with sustainable development. Similarly, an investment could have a small positive impact on one sustainability goal but negatively impacts others, which would result in a net negative.

iv. **Current Alignment vs. Transition Pathway**

Definitions of sustainable investment also differ on the range of investments they cover. The objective may be to include only activities or companies already aligned with sustainability goals (sometimes referred to as green or dark green in climate-related discussions). The objective may also be to cover investment in companies on a pathway of alignment with sustainability goals (also referred to light green or transition in climate-related discussions). For example, companies may need financing to transform and align their activities with sustainable development. One could consider that investors are realizing a sustainable investment when they are financing companies that have a credible plan to align with sustainable development even if these companies do not yet reach all sustainability goals (see the CBI Principles for Transition and the ICMA Climate Transition Finance Handbook in Annex 2). However, there is a risk that companies never realize their alignment ambition or are too slow compared with the trajectory to achieve transition. Options to address this issue are at least to implement robust and proper disclosure frameworks and to create a specific terminology for these investments, e.g., transition investment (to differentiate transition activities from the core definition of sustainable investment).

B. Taxonomies

i. **History of taxonomy development**

Definitions, principles and/or classification systems have been used for decades to determine the eligibility of assets for inclusion in ESG and other sustainable investment products. These were mainly private sector-led or ‘bottom-up’ approaches initially. Under these approaches, eligibility criteria were either developed in-house by a fund manager or were based on methodologies, ratings and scoring tools developed by specialist service providers. While many of these were fit for purpose, the number of different approaches and their sometimes-opaque criteria has led to concerns around greenwashing.

Public actors later on developed more top-down approaches to determining activities compatible with green and sustainable investment, initially to support the growth of the green bond market. This began with the establishment of national/regional green bond guidance (e.g., Japan, ASEAN, Mexico and others), which was generally voluntary and in line with the Green Bond Principles. These guidelines proved useful in promoting transparency and disclosure, even though they generally do not have specific eligibility criteria with regards to what is eligible as green, and tended to include broad categories of eligible sectors. This approach allows some flexibility for the market and external review has been utilized to secure the credibility of the green bonds. Nevertheless, concerns around

greenwashing have persisted without proper external reviews, clear methodologies to assess the sustainability of investments and disclosure obligations.

Further, to address these concerns, public authorities have increasingly moved to a more detailed and mandatory set of eligibility in the form of a taxonomy. China was the first to put forward a more detailed and mandatory paradigm for assessing and approving the issuance of green bonds (note that the official name is the Green Bond Endorsed Project Catalogue, which is referred to hereinafter as the China Taxonomy). The paper notes three types of approaches (public, private and hybrid) and that each of them has its respective comparative strengths and shortcomings. The next section looks at taxonomy development in more detail.

ii. Top-down: government-led approaches

A taxonomy is a system for the identification and classification of information. In this report, a ‘green’ or ‘sustainable’ taxonomy is a classification system that identifies activities, assets or revenue segments that deliver on key environmental objectives based on the eligible conditions set out by the taxonomy. As such, a taxonomy provides clarity and guidance to financial market participants on what activities/assets are eligible for sustainable investment.

The fundamental features of a taxonomy are of more importance than whether they are led by the public or private sector. These common features include (see also Annex 3):

- **Granular and clear:** taxonomies provide detailed information on what is eligible as ‘green’ or ‘sustainable’, for instance, at an economic activity level. Taxonomies typically include the boundary (definition) and provide categorization of specific sustainable investment activities within the boundary. This reduces the need for interpretation and provides a common language for investors and companies.
- **Publicly available:** they are available publicly and are not based on proprietary methodologies. They can therefore become commonly accepted and used across a wide range of actors/products as well as within a region or a nation. The approach to development them may involve a mix of public, private and non-government actors.
- **Science-based:** as far as possible taxonomies are based on science rather than on national priorities or opinions.

This section provides an overview of the key features of the stocktaking process undertaken (please see Annex 3 for the detail comparison) which includes both finalised and available taxonomies as well as those in development and in discussion.

a) Core elements of taxonomies

Objectives

Taxonomies usually have so far covered a range of environmental objectives that address some or all of the following areas: climate change mitigation, climate change adaptation, waste, water, biodiversity, marine, pollution control and land use. Given the difficulty and complexity of covering a wide range of environmental objectives, many countries have begun with climate change mitigation and adaptation as starting point – e.g. in the EU, South Africa and India. In China, the Green Bond Endorsed Project Catalogue (hereinafter referred to as the China Taxonomy) covered a wide range of

environmental objectives from the start. The table in Annex 3 includes details of the environmental objectives in different taxonomies.

There is limited progress to date on the development of social taxonomies although a few have incorporated social elements. One example is the Mongolia Taxonomy which includes ‘livelihood development’ as a core objective. Another example is the EU Taxonomy which includes ‘minimum social safeguards’ with reference to international principles and conventions.⁷ In the South Africa Green Finance Taxonomy, ‘Social Resilience’ is listed as one of the eight headline sectors covered although it is noted as an area to be developed in the future.

Coverage/granularity

Although their coverage varies, most taxonomies are based, whole or in part, on an existing sector classification systems. These systems tend to have a number of broad sectors and then more detail at activity/sub-sector levels (up to 4 levels of detail). The broad sector-level categories usually include energy, industry/manufacturing, agriculture, transport, water, waste, buildings and ICT.

Existing taxonomies use different industry classification systems that for some taxonomies are derived from the UN International Standard Industrial Classification (ISIC). ISIC is used in Singapore while VSIC in Vietnam, SIC in South Africa and NACE in the EU that are all derived from ISIC. The China Taxonomy uses its own classification system which is largely based on the Industrial Classification for National Economic Activities (ICNEA 2017) of China. Some areas included within taxonomies do not fit easily within industrial classification system – for example, South Africa includes ‘Social Resilience’ as a headline sector (noted above) even though such activities do not have corresponding SIC codes.

Use and application

The use, application and mandatory characteristics vary across jurisdictions and depends, to a large extent, on who is developing the taxonomy and for what purpose:

- In China, the taxonomy is not enshrined in legislation but is mandatory in that it is enforced by regulatory bodies. It applies only to green bonds.
- In the EU, the Taxonomy Regulation is enshrined in law and mandatory for certain market participants. It has much broader usage than green bonds as it applies to: Member States when setting out requirements for financial market participants or issuers; financial market participants offering products in the EU which have to disclose taxonomy alignment and; undertakings (financial and non-financial) which are subject to the obligation to publish a non-financial statement have to disclose the percentage of turnover, Capex and Opex aligned with the taxonomy.
- In Japan, the guidelines are not legally-binding at this stage.
- In other countries, there has been a mix of approaches and the mandatory characteristics are not yet clear. In a number of cases, the development has been carried out by non-governmental bodies and experts, but the final result may be used in regulatory processes. In New Zealand, for instance,

⁷ The UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work and the International Bill of Human Rights.

the Ministry for Primary Industries is one member of the leadership group which otherwise comprises private sector members. Another example is South Africa (see Box 4).

Approach to defining eligibility

Two main methodologies have emerged for defining eligibility: the ‘white list’ approach and the ‘technical screening criteria’ approach. Although there is some overlap between the approaches – for example, some activities outlined in a white list are also accompanied by technical screening criteria. A third approach is a ‘principles-based’ approach. This is covered in brief below.

The first approach is a ‘white list’ of eligible economic activities and projects under various sectors and subsectors. This is the approach taken in the Chinese, Mongolian and Russian Taxonomies. It is not ‘technology neutral’ and is instead explicit about which technologies are already green and therefore deemed eligible. Activities/assets/projects can only be eligible if the activity has been included in the list. The starting point is that an activity should be green and therefore the taxonomy does not cover the whole economy but rather those segments of the economy that are deemed to have green components. The detailed description of the activity then provides some further eligibility criteria for inclusion.

The second approach is a ‘technical screening criteria’ (TSC) approach for which specific screening criteria must then be met if an activity is to be included. Such an approach is used in the South African, EU Taxonomies and will likely be used for the Chile and Colombia taxonomies. Technical screening criteria determine whether an activity is considered to be making a ‘substantial contribution’ (language used, for example, in both EU and South African Taxonomies) and whether or not it does no significant harm to other environmental objectives. Within the sectors it covers, the TSC approach is intended to be technology neutral in that any activities can be deemed green if they meet the TSC. For example, in electricity generation, in theory any type of generation is eligible if it meets the 100g CO₂ threshold defined. In practice, thresholds specified in the criteria serve to effectively exclude some activities such as unabated natural gas, while the legal framework already excludes coal and solid fossil fuels outright. Further, some activities that do not qualify as green do qualify as transitional activities that enable the shift to a green economy, subject to specific criteria. This approach covers a broader section of the economy, as TSC are set across already green and non-green industries, but where the latter make a substantial contribution to EU environmental objectives through their enabling potential or transitional attributes.

An example of the difference between the approaches is in manufacturing. In the China Taxonomy, a ‘white list’ approach, manufacturing is included only as it refers to clean industries – e.g., manufacturing of wind generators, manufacturing of solar panels etc. In the EU Taxonomy, a TSC approach, however, manufacturing is a headline sector and includes a broader range of products such as manufacturing of cement and steel along with TSC to define how these activities can be eligible as transitional activities based on emissions threshold that will ratchet down over time. The China taxonomy does not cover steel and cement manufacturing at this stage.

As noted above, the third approach is a ‘principles-based approach’ to taxonomies exemplified by Malaysia and Japan. While this approach is helpful in bringing core principles to the attention of market participants, the end result more closely resembles the Green Bond Principles. For example, the Climate Change and Principle-based Taxonomy published by Bank Negara Malaysia provides a set

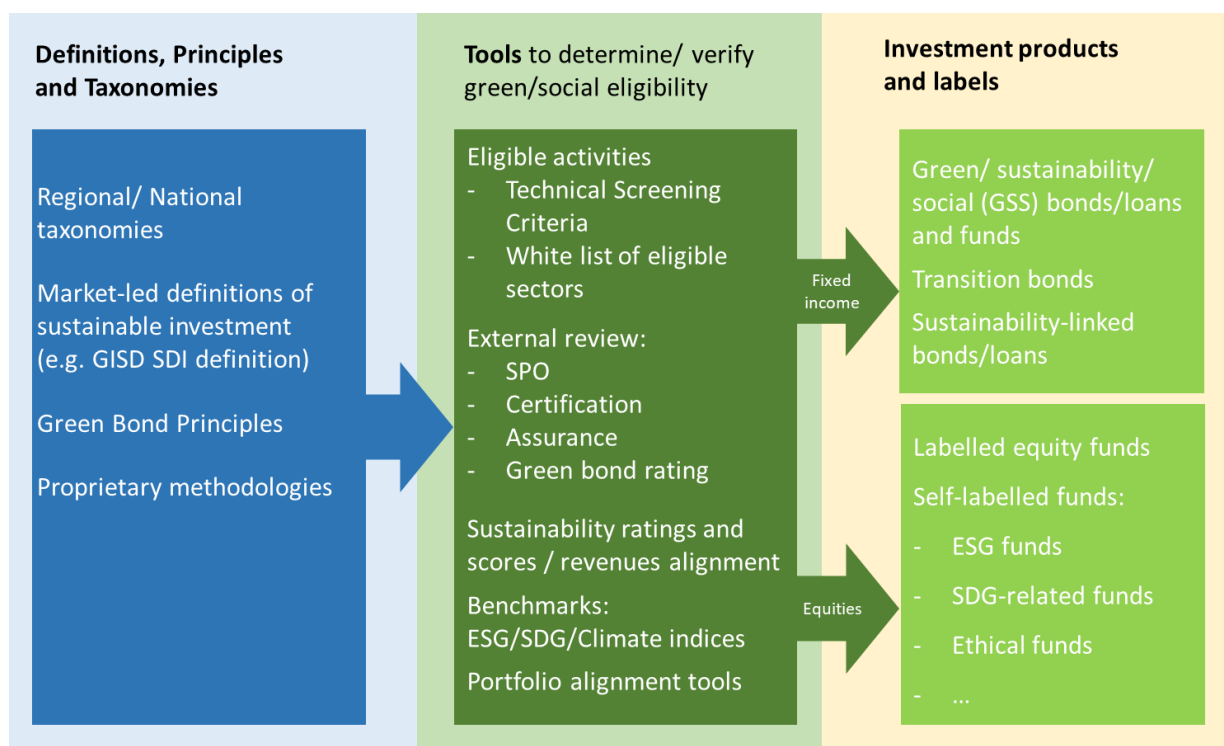
of principles to assess and categorize economic activities based on the extent to which they meet climate objectives and promote the transition to a low-carbon economy. It then includes a non-exhaustive list of examples of the types of investments that meet the overarching principle. Under Guiding Principle 4 “Remedial Measures to Transition”, it puts forward a list of criteria to assess the strengths and suitability of remedial efforts. In Japan’s Basic Guidelines on Climate Transition Finance, the principles-based guidelines will be bolstered by case studies and transition pathways for certain sectors as a next step in the development process.

b) Interoperability considerations

A taxonomy is not an outcome in and of itself. It is a tool to help directing flows of capital to green and sustainable projects that are aligned, for instance, with the goals of the Paris Agreement or the SDGs. There have been a range of other tools developed over the past two decades to achieve the similar objectives, but they have largely been based on proprietary methodologies. A taxonomy based on publicly available methodology increases its transparency and broad applicability, which makes it a valuable tool.

But enabling the flow of capital into green and sustainable projects around the world requires more than transparency - it requires better interoperability. If the taxonomy/classification system underpinning the market are aligned, investors can direct capital across borders more easily, for instance by reducing the costs of verifications/due diligence. Further, given that taxonomies can support other tools such as benchmarks and labels, the interoperability of taxonomies is conducive to creating better consistency across the range of tools in the market (see figure 2).

Figure 2: Interdependence of sustainable investment approaches



In a robust market that prevents greenwashing, definitions, tools and labels all play unique roles but could be made inter-related and together make up a credible and resilient sustainable investment

market. The underlying definitions including under a taxonomy/ classification framework would provide the use of a common definition of ‘what is green’ or ‘what is sustainable’ that is based on global goals and targets (Paris Agreement, SDGs, Net Zero by 2050) and the latest science of how to meet those goals. This would serve as a solid underpinning of robust standards to be applied to ‘green’ or ‘sustainable’ investments. Tools such as external reviews or benchmarks would build on these definitions by filtering and assessing alignment with the aforementioned classification framework.

Global efforts towards common principles and metrics for understanding what is green and sustainable are therefore critical to ensuring comparability and interoperability of standards, labels and benchmarks internationally and to reduce confusion and greenwashing in the market. The alternative is the risk of fragmentation – i.e. that there are multiple sets of taxonomies and definitions working in different directions creating confusion in the market and ultimately restricting the flow of capital into green and sustainable projects and activities.

Identifying common principles and features among taxonomies can be instrumental to achieve interoperability. As noted above, there are different approaches to developing a taxonomy, just as there are different approaches to its applicability and there are different types of stakeholders from both the private and public sector involved in each process. And yet, despite these different approaches, interoperability as an ultimate goal is achievable. This is because, what is of pivotal importance is the substance of the taxonomy. To ensure that this substance is aligned and interoperable, the report put forward a series of principles in its last section. The principles do not govern the approach or governance structures but the substance of the taxonomies – to ensure they are science-based, dynamic etc.

Assessing the interoperability and compatibility broadly across all markets is not possible at this stage since the development of national taxonomies remains at a nascent stage globally. Many countries have demonstrated ambition or have begun the process to develop their own taxonomies. Annex 3 presents a stock take of available information across many jurisdictions but most of these taxonomies have yet to be finalized. Nonetheless, a comparison of existing taxonomies as well as available drafts and information regarding other taxonomies, has revealed the following key points:

- **Overarching environmental objectives are largely consistent.** While differing in language used and their stage of development, the broad objectives to avoid green washing and promote green industries and economic activities aligned with the Paris Agreement is consistent across taxonomies, meaning that there is potential for significant overlap of eligibility across taxonomies. For example, objectives covering climate change mitigation and adaptation are included in most taxonomies including in South Africa, Mongolia, and Bangladesh.
- **In most cases, the China and EU taxonomies are being used as a starting point for the development of other national taxonomies.** Taxonomy developments in other countries thus far are already leveraging the existing taxonomies available and have largely followed either of the two methodological approaches, in principle. For example, the South Africa Taxonomy largely follows the EU approach while accounting for local differences and laws while the Russia Taxonomy and the Mongolia Green Taxonomy are similar in approach to the China Taxonomy with differences in the level of detail and coverage. This is encouraging as it will facilitate comparability and

interoperability of green taxonomies globally. It will also allow countries to reduce the time and resources required to draft a taxonomy.

- **There is potential for low-hanging fruit but some areas are complex.** Many areas are likely to be functionally equivalent (high degree of consistency between activities that will be defined as eligible or ineligible) despite the different approaches taken. For example, whether a type of electricity generation is eligible because it is on a white list or because it meets the 100g TSC threshold makes no material difference if the eligibility outcome is the same in both taxonomies.

While there will likely be many areas of ‘low hanging fruit’ (renewable energy, electrified transport etc.), there is also be a great deal of complexity that will make comparison difficult in some areas. In particular, sectors like buildings which rely heavily on local regulations and directives are difficult to compare except at the extremes (i.e., very poor performing buildings or net zero buildings are relatively easy to classify).

- **Other eligibility features will be difficult to assess and harmonize.** Any eligibility features which rely on local legislation will be difficult to harmonize globally unless there is a mechanism in place for assessing functional comparability. This is likely to be the case for additional eligibility features such as the Do No Significant Harm (DSNH).
- **Importance of comparability and interoperability in attracting international capital is clear.** While the proliferation of national taxonomies may be seen as a concern given the potential for fragmentation, it is becoming clear that work on ensuring greater comparability and interoperability in taxonomies would facilitate cross-border investment in sustainable development. An example of this is the draft Russia Taxonomy which does not include gas-related investment, despite the importance of gas to the Russian economy. This is, at least in part, due to the need to ensure comparability and interoperability and a common language of green definitions to facilitate international capital flows.

Box 1: Role of the IPSF in enhancing interoperability of taxonomies

The International Platform on Sustainable Finance (IPSF) was launched in October 2019 with the aim of opening a channel of dialogue and exchange between international policy makers in the field of sustainable finance. Today, the IPSF counts 17 member jurisdictions and 11 observers representing 55% of global GHG emission, thereby gathering a critical mass of knowledge and expertise to make progress towards more integrated approaches for the development of sustainable finance frameworks worldwide.

Acknowledging the potential of taxonomies, in June 2020, the IPSF initiated a working group on taxonomies that is working toward a “**Common Ground Taxonomy**” highlighting the commonalities between existing taxonomies. The Common Ground Taxonomy aims to provide transparency to investors and companies by constituting a common reference point for the definition of investments that are considered as environmentally sustainable across jurisdictions. The final aim is to create a common language across all taxonomies, which would contribute to enhancing the comparability and interoperability of sustainable finance definitions internationally and scaling up cross-border green

investments. It would not have any legal status and would not require either jurisdiction to make changes to their taxonomy. It is expected to be published in November 2021.

The work of the IPSF on taxonomies would be extended to other taxonomies as they are developed by member jurisdictions. Through its dedicated work on taxonomies, the IPSF provides a forum where any interested jurisdictions can learn about the existing taxonomy approaches and the process to develop a taxonomy, including the challenges and be inspired by more advanced approaches. With a Common Ground Taxonomy and further work on alignment of sustainable finance tools the IPSF aims at providing a concrete and impactful contribution to increasing the level of global consistency, comparability, interoperability, and transparency of sustainable finance approaches and tools that align investments with sustainability goals.

iii. Bottom-up: private-led approaches

The credibility of the green bond market, from its early beginnings, has largely been underpinned by two sets of principles/standards:

- **The Green Bond Principles (GBP)**, were first launched in 2014 under the International Capital Market Association (ICMA). They have been developed through various iterations by a committee of issuers, investors and financial institutions with ICMA as the secretariat. They intend to guide the market and provide voluntary process guidelines that recommend transparency and disclosure.¹ The GBP provides high level categories for eligible Green Projects but were, however, never intended, to provide an exhaustive and detailed list of green definitions.
- **The Climate Bonds Taxonomy** was first released in 2013 as part of the more detailed Climate Bonds Standard and Certification Scheme (launched in 2010). The Climate Bonds Taxonomy is publicly available and applicable globally and provides an overarching classification of green assets and activities. It is based on the more detailed sector-specific criteria (also public) which are developed by independent sector experts under the **Climate Bonds Standard**.

The GBP and Climate Bonds Taxonomy are not mutually exclusive and serve, rather, to enhance one another. The GBP do not provide detailed definitions of green and instead, serve to guide the market and promote transparency. The Climate Bonds Standard and Climate Bonds Taxonomy provides the additional rigour and detail on what is eligible to be considered green. The Climate Bonds Standard is fully aligned with the GBP.

Both the GBP and Climate Bonds Taxonomy are global. However, the private sector has also been involved in different ways in the development of national taxonomies around the world. This includes:

- **Purely private sector led approach-** In Australia, while there is no taxonomy in development or in place as of yet, the Australian Sustainable Finance Initiative (ASFI) is a collaboration of banks, investors, pension funds and academia. One of the core recommendations of the Australian Sustainable Finance Roadmap that was published in 2020 was to explore the implementation of a sustainable finance taxonomy for Australia. If taken up, it will very likely be developed by the private sector.
- **Hybrid approach** – In New Zealand, as already noted, the government the Ministry for Primary Industries is one member of the leadership group which otherwise comprises private sector members. Similarly, in South Africa the research, stakeholder consultation and drafting work was

carried out by the National Business Initiative and Carbon Trust while oversight was provided by National Treasury.

In addition to these approaches, a range of **proprietary taxonomies** have been developed to underpin Green/SDG ratings, indices and other tools.

C. Tools for determining eligibility

Once the core definitions, classifications and/or taxonomies are established, tools can then be developed to operationalise them and provide labelled products.

i. **SDG/ESG scoring and ratings**

Sustainability ratings and scores also play an important role in the different approaches to identify, verify and align investment with sustainability goals. ESG ratings are used to provide quantitative ratings of environmental, social and governance performance of financial assets, companies, and/or projects. They have primarily been used in the equities space to underpin selection for ESG funds and ESG indices but can also be used to assess the sustainability performance of bond issuers

ESG/SDG ratings integrate sustainability considerations into investment processes, and could serve to support investors in making informed decisions and value judgments about asset allocation. If fit for purpose, they could help investors who seek to evaluate the financial materiality of environmental, social and governance risks over the medium to long term. In addition, they could also support the risk management of companies by highlighting the impact of climate change and other sustainability risks on corporate performance over time.

Data providers have created over 100 sustainability-related data products to inform market participants. Despite the large number of data products, a few large players lead the market, especially since M&A deals have led to a consolidation among sustainability rating providers. Annex 3 presents a stocktake of selected ESG and SDG rating data products to provide examples of methodologies used to make sustainability assessments.

The multiplicity of ESG/SDG ratings and scores presents a challenge for market participants as different vendors have divergent sustainability scores/ratings for the same company. The correlation among 6 major providers of ESG rating is low (54 percent on average) at the level of aggregated ESG scores (i.e., the scores combining several indicators into a single rating).⁸ This means that one company can be ranked high by one provider and low by another. Also, for some ESG rating providers, it has been found that high E scores positively correlate with high carbon emissions, which is counterintuitive (other environmental metrics may have greater weights in the methodologies that determine the E score).⁹ The lack of consensus among ESG ratings/scores provides a noisy signal to investors and means that portfolios using different ESG rating providers are likely to have different constituents. This raises concerns about the relevance and reliability of these data. The variation in part reflects ESG scorers' different metrics and component weights (e.g., the percentages allocated to 'E' versus 'S' metrics), but also the score focus (what they intend to measure).

⁸ Berg, Florian and Kölbl, Julian and Rigobon, Roberto, "Aggregate Confusion: The Divergence of ESG Ratings" (May 17, 2020).

⁹ Boffo, R., C. Marshall and R. Patalano (2020), "ESG Investing: Environmental Pillar Scoring and Reporting", OECD Paris.

Most ESG/SDG ratings and scores initially started by assessing ESG risks that companies face in their day-to-day operation. To make their assessments, vendors either use information found in company sustainability reporting or directly collected from companies (e.g., CDP and RobecoSAM Corporate Sustainability Assessment (CSA)). Large companies may have the resources to verify the work of rating vendors and fill out sustainability questionnaires, but this can be more challenging for smaller companies. This can result in ESG rating bias in favour of large companies. Vendors can also complement company self-reported data with alternative sources, such as news, social media and geospatial information. They can analyse and interpret this information, for example, through Artificial Intelligence (AI) technologies.

Several data providers have also gone on to provide impact ratings based on companies' economic output. For example, ISS's "SDG Solutions Assessment" analyzes the extent to which companies' revenue streams contribute or obstruct 15 sustainability objectives, which are mapped to the SDGs.^{10&11} However, there is an issue with using revenue as a proxy to measure impact. For example, the GISD SDI definition noted that it is not sufficient for a company to be active in the health sector more broadly to qualify as contributing to SDG 3 on good health and well-being. The positive contribution should be verified through fundamental analysis at the company/project level. The World Benchmarking Alliance, for example, attempts to provide this fundamental analysis and reveal where each company stands compared to its peers in terms of SDG contribution. Another issue with revenue-based impact ratings is that they depend on granular information about firms' revenue streams from different products and services, which firms usually do not disclose in sufficient depth. The EU Taxonomy provides a step in that direction as it requires companies to report on the proportion of revenues (and opex and capex) that are aligned with its taxonomy.

There are also several tools dedicated to measuring the alignment of companies with climate goals. For example, the Transition Pathway Initiative (TPI) assesses companies' preparedness for the transition to a low carbon economy by looking at the quality of companies' governance/management of their greenhouse gas emissions and at the carbon performance of these companies compared to international targets and national pledges.¹² Data providers have also created solutions to evaluate company-level alignment with the Paris Agreement by looking at the adequacy of emissions reduction over time. The emergence of net-zero pledges also requires robust methodologies to track companies' performance against these pledges. For example, the Climate Action 100+ has developed a Net-Zero Company Benchmark to assesses the performance of companies they target, which specifies, inter alia, the sectors for which scope 3 GHG emissions should be covered in net-zero targets.¹³ The inclusion of Scope 3 GHG emissions in several methodologies has led to various data providers substantially enhancing their Scope 3 estimation methodologies.

¹⁰ More information on the methodology of ISS-ESG's "SDG Solutions Assessment" is available from their website: <https://www.issgovernance.com/esg/impact-un-sdg/sustainability-solutions-assessment/>.

¹¹ Other ESG data providers follow similar revenue-based methodologies to measure SDG impact of individual firms (for an overview see: "SDG Impact Measurement" by the DVFA Sustainable Investing Commission, available from <https://www.responsible-investor.com/reports/sdg-impact-measurement-a-brief-overview-of-providers-methodologies-data-and-output>).

¹² <https://www.transitionpathwayinitiative.org/>

¹³ <https://www.climateaction100.org/wp-content/uploads/2021/03/Climate-Action-100-Benchmark-Indicators-FINAL-3.12.pdf>

Greater transparency, comparability and reliability of data and methodologies is necessary to transform analysis of corporate ESG/SDG performance into an objective practice. Transparency is necessary to build confidence in the scores/ratings and clarify precisely what they intend to measure. For example, does the score/rating measure the ESG risks a company faces or its contribution to sustainability goals? The aggregation of many indicators into a single score/rating also makes the interpretation by investors challenging. This may explain why many large investors tend to focus on raw data and develop proprietary models to assess sustainability risk and performance. In order to contribute to users' investment decision-making, reliability of ESG ratings and data is a key. This requires ESG ratings and data providers to have robust and transparent governance processes that ensure the independence and objectivity of their assessments.

ii. Benchmarks and other portfolio alignment tools

a) Sustainability benchmarks and indices

The sustainability benchmark landscape has changed dramatically over the last 3 decades as the momentum behind ESG and sustainable investing has grown and, with it, interest in passive investing and Exchange-traded funds (ETFs). Numerous ESG and sustainability-linked benchmarks have been developed to support the growth and diversification of the market over the last three decades beginning in the equities space and diversifying into fixed income later on. Early pioneers in the equity space include MSCI KLD 400 Social Index (started in 1990), the Dow Jones Sustainability Index (1999) and the FTSE4Good Indexes (2001). Global ESG fixed income indexes were then developed by Barclays and MSCI in 2013.

The objectives behind each index and the related methodologies vary considerably. The objectives range from an exclusion/ negative screening focus (common exclusion are alcohol, gambling, weapons etc.) to more active impact/inclusion strategies, with most having a mix of these objectives. Methodologies are usually based on proprietary SDG/ESG scoring methodologies which measure a broad range of sustainability factors with constituents being selected based on either an absolute score or a best-in-class in their sector. Further constraints are often put on indices to exclude certain types of companies. Today, there are over 1,000 ESG and other sustainability-related indexes.¹⁴

The growth of the green bond market led to an explosion of green bond indices based on a range of methodologies, the majority of which use the Climate Bonds Green Bond data which is pre-screened against the Climate Bonds Taxonomy. Green/sustainability bond indexes have been launched by Solactive MSCI, FTSE and others. Selection criteria tend to focus on the 'greenness' of the bond rather than the issuing entity although some providers have additional issuer screens.

Some regulators have intervened to make benchmark methodologies more transparent and put forward standards for the methodology of low-carbon benchmarks. The EU Climate Benchmarks regulation is an example of these regulatory interventions. The first Paris-aligned benchmarks started to appear in 2020 as a response to this regulation. These include the Robeco / Solactive Paris Aligned Benchmark as well as the S&P Paris-Aligned & Climate Transition (PACT). This is an emerging space, and although methodologies do vary, they are based on the EU Climate benchmarks regulation and

¹⁴ <https://www.ishares.com/us/literature/whitepaper/an-evolution-in-esg-indexing.pdf>

therefore have similar criteria. For example, the Robeco/Solactive index is a bond index that selects bonds based on the year-on-year decarbonisation of the issuer which should be at least 7% per annum and specifically exclude fossil fuels but includes all other industries¹⁵. The S&P PACT methodologies have been designed to meet the requirements of the EU benchmark regulation including the 7% year-on-year decarbonisation to be in line with the Paris Agreement by the terms of this benchmark regulation.

b) Portfolio Alignment Tools¹⁶

Data providers and other public/private-led initiatives have developed tools to assess the alignment of investment portfolios with sustainability goals. Most of these tools have emerged in the climate space where portfolio alignment tools are key instruments for investors and financial institutions to assess the needed steps to align an investment portfolio with the Paris goals in the intermediate term, given the portfolio's unique composition.

For investors, forward-looking portfolio alignment tools describe if companies in their portfolios are on track with their transition path, which can be key to their future financial performance. The transition needed to achieve the Paris goals leads to enormous commercial opportunities for companies that position themselves optimally and implement necessary structural changes early on. At the same time, companies that do not adjust quickly enough risk a significant impact on their profitability. Financial institutions are adopting increasingly sophisticated tools to measure whether companies in their portfolios are on track to achieve the Paris goals. Such portfolio alignment tools aim at accounting for two key challenges. First, these tools may need to evaluate companies not only based on present-day emissions, but also the company's planned transition efforts, which can be influenced by investors' engagement strategies. Second, these tools may need to take into account that all sectors won't need to reduce emissions on the same trajectory to achieve the Paris goals.

Portfolio alignment tools available today show various degrees of sophistication:

1. **Binary target measurements:** These tools reflect the percent of investments in a portfolio that declared Paris aligned targets.
2. **Benchmark divergence models:** Based on forward-looking climate scenarios, such as those developed by the International Energy Agency, these tools measure on an individual company level its trajectory with constructed normative benchmarks.
3. **Implied temperature rise (ITR) models:** These tools extend benchmark divergence models, by aggregating the company level divergence from benchmarks and translating it into the form of a temperature score.

Box 2: Example of using portfolio alignment tools as a policy instrument

Switzerland regularly offers free portfolio alignment tests for financial market participants to analyse their progress to align with the Paris goals, using the open-source alignment methodology named PACTA (Paris Agreement Capital Transition Assessment), developed by non-profit, independent think tank 2 Degrees Investing Initiative. All Swiss banks, asset managers, pension funds and insurance

¹⁵ <https://www.robeco.com/au/key-strengths/sustainable-investing/glossary/paris-aligned-benchmarks.html>

¹⁶ Also see [2021-TCFD-Portfolio Alignment Technical Supplement.pdf \(bbhub.io\)](#)

companies can test their portfolios anonymously on a voluntary basis. In 2020, 179 financial institutions voluntarily participated, resulting in a representative picture of the entire Swiss financial market with around 80 per cent of investments in global equity and corporate bonds, half of all properties held by institutional investors and three-quarters of Swiss residential buildings with mortgages being covered.

The results of these tests create transparency while supporting the efforts of the financial institutions involved guiding their investments onto a Paris goal compatible pathway. The 2020 test results show that the previous test in 2017 has demonstrably led to greater transparency for financial institutions regarding climate damaging and - friendly investments and has triggered tangible action. By their own account, half of all participants in the two rounds of testing implemented climate-related initiatives in the wake of their 2017 test results, and now on average score more environmentally friendly than their competitors.¹⁷

D. Product and instrument labels for sustainable investments

Labels have been created to market sustainable investment products and have been accompanied by the development of standards, which aim to reassure investors that labelled investment product actually do what they claim to do. Labels and standards help to create a coherent investment universe for green financial instruments and products allowing investors (including retail investors) to identify sustainable investments and make more informed decisions. They lower transaction costs for investors by reducing the need to check and compare information to ensure that financial instruments are truly green and sustainable. In addition, they provide issuers with a common understanding and clear rules regarding the underlying investments and therefore support a level playing field for higher environmental and social standards. They mitigate the risks that issuers with lower sustainability ambitions use sustainability as a marketing tool to attract and mislead investors. Altogether, standards and labels have a positive impact for both issuers and investors and are beneficial to channel financial flows toward sustainable activities.

Standards and/or labels for green and sustainable financial instruments and products are generally described as specifications and criteria regarding the process and/or the use of proceeds that need to be met to issue green and sustainable financial instruments or to mark financial products as green and sustainable (equity, bonds and funds). In particular, labels often define the process for project evaluation and selection, management and use of proceeds, and reporting in order to meet high sustainability standards. They usually aim to ensure that there is sufficient transparency with regard to the respective products to limit the risk of green/SDG-washing (i.e., preventing the use of marketing to promote the perception that instruments and products are green and sustainable when they are not in fact). With increased demand for sustainable investment, standards and labels can play a critical role in channelling investment to sustainability goals.

However, the proliferation of labels relating to sustainable investment over the past two decades has reduced their benefits and created confusion. This began in the equity space with the growth of

¹⁷ For more information, see <https://www.bafu.admin.ch/bafu/en/home/documentation/news-releases/anzeige-nsb-unter-medienmitteilungen.msg-id-81034.html>

funds labelled with ESG, SRI, ethical or other similar labels. These tended to be self-designated labels without much industry or regulator guidance to compare and assess approaches. Often, the need to maintain a competitive advantage has resulted in limited of transparency with regards to the approach pursued. The following sections review the standards and labels related to different asset classes to provide a better understanding of existing approaches in this area.

i. Bonds

a) Green label

Green bonds have catalyzed the development of sustainable investment products. In 2007, the first climate awareness bond was issued by the EIB which triggered an explosion in the green bond market. Early bonds were issued primarily by development banks and were generally self-labelled as green which was accepted by the market given the nature of the institutions. However, as the market started to grow and attract a more diverse range of issuers, standards and certification mechanisms were developed to ensure the credibility of the market. This broadly consists of a) underlying standards/principles and b) an external review process to confirm alignment with the underlying principles.

Underlying standards / principles	Types of review/verification	Resultant label
Climate Bonds Standard →	Verification against Climate Bonds Standard	Certified Climate Bond
Green Bond Principles →	<ul style="list-style-type: none"> • Second Party Opinion or • Assurance statement or • Green bond rating 	Green bond <i>with</i> <i>SPO/assurance/rating</i> <i>from named provider</i>
Internal private assessment methodologies →		
National green bond guidelines →		
National taxonomies →	No external review	Self-labelled as green (not best practice)
Self-labelled can use any/none of the above		

b) Other labels

Social bonds later emerged as another segment of the sustainable bond markets. As the green bond market has grown, the proceeds have diversified to a wider range of green projects and social projects. In 2020, social bond issuance grew to \$249 billion mainly to fund Covid-related relief packages by government agencies and development banks (in comparison with \$290 billion green bonds). Bonds with a mix of both social and green spending are usually called sustainability bonds and issuance in 2020 amounted to \$169 billion. To guide social spending, ICMA has put together the Social Bond Principles. Like the Green Bond Principles, the SBP are voluntary process guidelines that recommend transparency and disclosure and promote integrity in the development of the Social Bond market by clarifying the approach for issuance of a Social Bond. Currently, there is no social taxonomy that is used to define social investments. However, various initiatives are underway to improve definitions, eligibility and process of social bond in this space.¹⁸ The same external review mechanisms in place for

¹⁸ In July 2021, EU has published draft proposal for a social taxonomy. Japan published the draft proposal of the “Social Bond Guideline”.

green bonds are also used for social bonds with the notable exception of the Climate Bonds Standard which has not yet been extended to include social objectives and project.

Transition finance and the transition bond label has arisen in recent years to encompass a broader range of high-emitting sectors such as electricity generation, industry, aviation etc. in the green finance space. This is in recognition that a) large GHG emitters are still largely absent from the green bond market and b) achieving the goals of the Paris Agreement will require high-emitting entities to reimagine their business models, and plan and implement transition pathways. Transition finance has emerged to fill this gap. There are, however, some challenges to define and capture transition activities, and therefore, work on approaches to transition finance is still at an early stage.

Despite these challenges with regards to definitions, the concept of transition finance has been valuable in shifting the focus of green finance from activities towards the ‘greenness’ of entire entities. In other words, in directing capital toward whole entities and economies following credible strategies that are aligned with zero carbon and away from those that do not. So called ‘transition strategies’ are not only about where the entity is today but also how its strategy and operating metrics show where it will be in 2030 and in 2050. An evaluation or rating of an entity’s strategy as ‘credible’ or ‘Paris-aligned’ could complement “use-of-proceeds” green or transition bond issuance to better align incentives and provide a complete picture to investors. Although the evaluation of whole entity transitions is at a nascent stage and there is not yet a widely-accepted label/scheme which provides this evaluation, there are some in development. For example, in its updated sustainable finance strategy,¹⁹ the EU announced that it will deep dive into transition finance, including consideration of the options to extend the EU Taxonomy framework. Some jurisdictions such as Canada and Singapore are also taking steps to capture transition activities in their taxonomies under development. Some market-led approaches to promote transition finance have also emerged. For example, the ICMA’s Climate Transition Finance Handbook is a market-led, principles-based approach to promote transition finance by requiring that transition strategies be aligned with the goals of the Paris Agreement. Building on this Handbook, Japan published Basic Guidelines on Climate Transition Finance and plans to develop transition roadmaps for hard-to-abate sectors. **Standards/labels for assessing whole entity transition strategies will face additional scrutiny and therefore must be credible to be widely accepted.** The transition label should be a tool for identifying entities that are making ambitious transitions. Given this, any schemes will need to be transparent, science-based and globally relevant (rather than based on corporate strategy or national economic objectives).

Sustainability-linked bonds (SLB) are the latest addition in the sustainable bond market. These bonds are performance-based in that the finance raised is for general corporate purposes but the interest rate or coupon varies based on the achievement of predetermined sustainability performance objectives. Such parameters are usually set at an entity level, and can be at or above the borrower’s own ESG targets. Instead of financing specific assets, they aim to incentivize the issuer/borrower to achieve wider Sustainability Performance Targets (SPTs) at the issuer level. To date over 85 per cent of SLBs are linked to environmental KPIs, with over 58 per cent linked to GHG emission reductions, 13 per

¹⁹ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021DC0390>

cent to waste reduction, and 8 per cent to renewable energy. 12 per cent have been for social initiatives, including gender diversity, health and training.²⁰

There are some concerns related to sustainability-linked instruments. In particular:

- **KPIs are entity-specific** meaning that the ambition associated with each deal may vary among entities and as such difficult to benchmark against peers/wider sustainability goals. Some commentators have also expressed doubts as to whether treasurers would agree to stretch sustainability targets if there is a possibility of the cost of capital going up.
- **Transparency could improve, particularly in the loan market where the level is currently relatively low compared to other market products.** While the SLL and SLB market has seen impressive growth, because the loans are for general corporate purposes and are not linked to financing any particular assets, the size of each loan does not directly relate to the target they are addressing. For example, a \$100m loan could have the same targets (and impact) as a \$1bn loan. The size of the market cannot be used, for example, in understanding how the climate finance gap is being filled.

These concerns are not insurmountable and with some clear guidance the market could be a valuable addition to the sustainable finance landscape, especially in enabling and assessing credible entity-level transitions, and some efforts have already been made.²¹ Targets set in SLBs and SLLs could, for example, be used to incentivise an entity to pursue an entity-level transition pathway in line with the Paris Agreement or to align with the SDGs.

c) Bonds: External review processes

It is best practice for an issuer to commission an external review from an external party to assure the credibility of a green bond. The main types of external review are: Second Party Opinions (SPO), Climate Bonds Certification, assurance and green bond ratings. Second Party Opinions (SPO) are the most widely used method for assuring the green credentials of a bond. An SPO can be provided against any existing standard, principle or criteria such as the GBP, national green bond guidelines or proprietary methodologies. The SPO provider gives an opinion as to the extent that the bond meets those principles or criteria. As an SPO is an opinion, there is no associated label, however the green bond is seen as in line with best practice given it has received external review. There are some indices and exchanges that will not accept green bonds from issuers without some degree of external review.

SPOs were initially commissioned by issuers to evaluate whether or not a bond met the four principles of the GBP. This, sometimes, proved to be problematic given that the GBP provides only high-level green project categories rather than specific eligibility criteria. SPOs continue to be used in

²⁰ S&P Global Ratings, “Environmental, Social, And Governance: How Sustainability-Linked Debt Has Become A New Asset Class” (April 2021).

²¹ For example, ICMA has developed the “Sustainability-Linked Bond Principles (SLBP)” and examples of KPIs with detail FAQ to provide guidelines that recommend structuring features, disclosure and reporting. Loan Market Association (LMA), Asia Pacific Loan Market Association, and Loan Syndications & Trading Association, jointly published the “Sustainability Linked Loan Principles” and “Guidance on Sustainability Linked Loan Principles” in 2020. Building on this Principle, Japan has developed the “Green Loan and Sustainability Linked Loan Guidelines 2020”.

the market but most go beyond assessing the GBP and use their own internal methodologies for assessing ‘greenness’ which are, in some cases, proprietary and not available publicly.

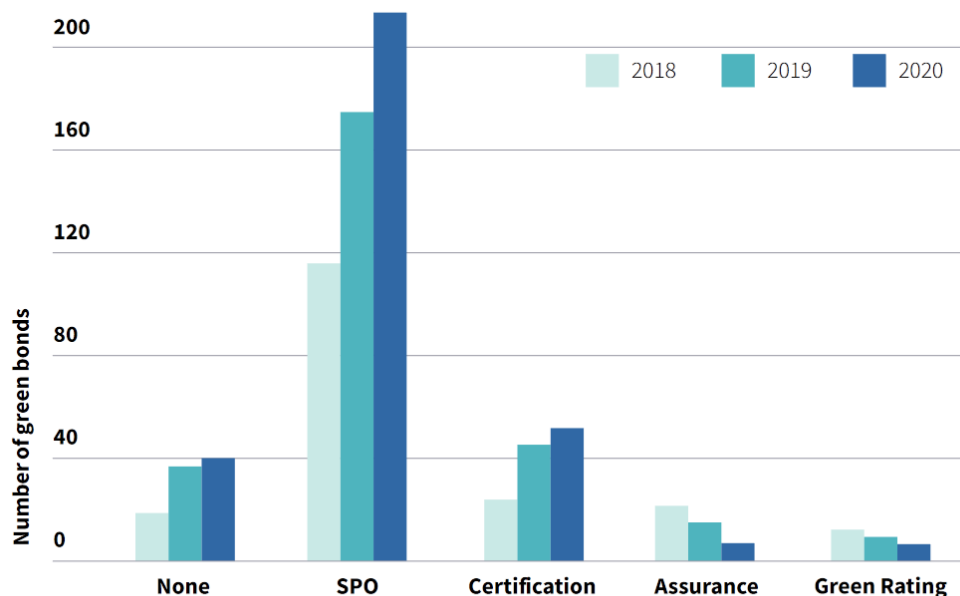
The Climate Bonds Standard and Certification Scheme, first launched in 2010, uses a third-party verification approach, which aims to reduce the potential for conflicts of interest by providing a publicly available standard and set of certification criteria, against which an approved external verifier can provide verification. The certification criteria are developed by academic, sector and industry experts. Certified climate bonds account for approximately 15 per cent of the green bond market.

Assurance on a green bond can be provided by an auditor against a pre-determined existing standard or set of principles. Usually this is provided against the Green Bond Principles. Assurance looks only at the compliance of the bond with the chosen standard and does not have any internal methodology to make a bespoke assessment of the bond (as an SPO does).

Green bond ratings are provided by ratings agencies or other private sector entities and provide a shaded rating on the ‘greenness’ of the bond. This scoring is based on the bond’s alignment with the GBP as well as other (usually proprietary) indicators.

In the future, where national taxonomies are developed, mandatory verification mechanisms may also be established. In the EU, the Green Bond Standard²² will create a robust tool for issuers to demonstrate that they are funding legitimate green projects aligned with the EU taxonomy in full transparency and subject to external review and supervision by the market authority. In China, the external review processes as described above are used to determine the credentials of the bond against the Green Bond Endorsed Project Catalogue with private sector institutions primarily playing the verifier role.

Figure 3: Prevalence of different types of external review in the green bond market



Source: Climate Bonds Initiative, 2021

²² https://ec.europa.eu/finance/docs/law/210704-proposal-green-bonds-standard_en.pdf

ii. Investment funds

A proliferation of labels relating to investment funds and strategies have emerged over the past two decades as there was no consensus on what it means in practice. In the equity space, there has been a growth of funds labelled with ESG, SRI, ethical or other similar labels. These tended to be self-designated labels without much transparency with regards to approach.

Different regulators have been trying to address this cacophony. For example, French legislation has defined “green investments” within the context of the GreenFin label. It defines three categories of issuers of financial securities: those with more than 50 per cent of their sales coming from an activity identified as “green” by the Climate Bonds Initiative (CBI) taxonomy; those with between 10 and 50 per cent of sales from a green activity; and those with between 0 and 10 per cent of their sales in green activities. For a private equity fund to receive this label, it must have 75 per cent of the Net Asset Value (NAV) of the fund in securities from issuers with at least 50 per cent of their sales compliant with the CBI taxonomy. France also has an ESG label (Label ISR, Investissement Socialement Responsable), which targets investment funds with good ESG practices and verification.²³ Asset Managers are responsible for providing data necessary to show compliance with the label. Similar efforts exist in the Nordic countries, such as the Nordic Swan Ecolabelled fund and investment product. The European Commission is also preparing an Ecolabel regulation that will define sustainability criteria for investment funds.

The private sector has also developed guidance on what criteria needs to be met to be labelled as sustainable investment. For example, the GISD Alliance has developed operationalizing guidance, which accompanies its definition of sustainable development investing (SDI). This guidance clarifies how to construct an investment portfolio that is aligned with the GISD SDI definition (see Box 3). For ESG funds, the Luxembourg Finance Labelling Agency (LuxFLAG), a non-profit association, requires funds to screen 100 per cent of their invested portfolio according to one of the ESG strategies and standards recognized by LuxFLAG and to apply an exclusion policy in order to obtain their ESG label.²⁴

Transparency also requires that asset managers and other investment professionals disclose information about the sustainability-related features of investment products they market as sustainable. Such information is necessary to help investors understand and compare sustainable investment products presented to them. This information is also necessary to verify the claims made by those marketing these products. For this information to be meaningful, disclosure by investment managers has to be consistent and comparable among different products and across markets. If each sustainable investment product follows its own disclosure framework, the transparency aimed will not be achieved. Recognizing the need to help investors better understand and compare investment products with ESG-related features, the CFA institute recently published a draft for ESG disclosure standards for investment products.²⁵

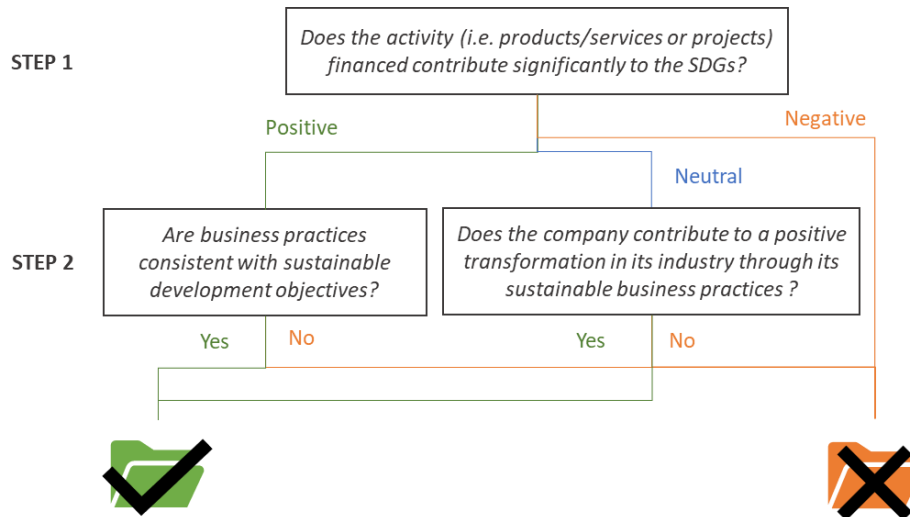
²³ OECD, “Developing Sustainable Finance Definition and Taxonomies” (October 2020).

²⁴ LuxFLAG, “ESG Label – Eligibility Criteria”.

²⁵ CFA Institute, “Exposure Draft CFA Institute ESG Disclosure Standards For Investment Products” (May 2021).

Box 3: GISD Alliance guidance to operationalize the SDI definition in an investment funds/portfolio

The GISD Alliance suggest using the following decision tree to decide whether an investment is compliant with its definition and makes a positive contribution to sustainable development.

SDI decision tree

Step 1: To qualify for a positive contribution to sustainable development investment, the activity financed (i.e., company products/services or a project) will have to contribute to the attainment of the SDGs, checked through fundamental analysis at the company/project level (e.g., it is not sufficient for a company to be active in the health sector more broadly to qualify as contributing to SDG 3). While doing this assessment, investors will need to also make an effort to ensure that contributions to sustainable development are not outweighed by negative impacts from the same investment over the life of this investment²⁶ and that robust investment practices are in place to measure and manage this positive contribution.

As an initial step:

- For companies, to assess whether products and services contribute to sustainable development, investors can draw from existing taxonomies of sustainable activities with the ultimate aim of covering all related SDGs.
- For projects, financed for instance through fixed-income products, the contribution can be assessed against sustainable-related standards, such as the ICMA Green Bond Principles and Social Bond Principles and the related ICMA high-level mapping to the SDGs.

Investment in areas neither covered by a taxonomy of sustainable activities nor in line with sustainability-related standards, nor included in an exclusion list,²⁷ will be considered “neutral.” Projects and companies with a majority of their revenue derived from activities with negative impact on the SDGs should be excluded (negative screening supports SDI but is not sufficient - see SDI decision tree).

²⁶ This remains a complex exercise for the time being, which should become easier over time once methodologies are further developed and the availability of data is improved. The contribution of the investment should be monitored over time to ensure that it continues to be positive.

²⁷ Exclusion list might differ widely by investors, but it is expected that convergence will emerge over time.

Step 2: To be eligible as SDI, companies will have to be transparent about their business practices and provide adequate sustainability disclosure and reporting (for example, this could include having a plan/ambition to be aligned with the Paris Agenda and 1.5 degrees). Companies not qualifying as positive contributor under step 1 could still be considered as SDI in limited cases where their strong sustainable business practices lead to positive transformation in their industry and their products and services do not have a known negative impact on the SDGs. Active engagement by investors can help achieve these strong sustainable business practices and create a positive transformation. Company reporting will need to be cross-checked with unreported information (e.g., media) to verify the absence of inconsistencies with sustainable development objectives.²⁸

II. Implementation hurdles for consistent sustainable investment approaches

A. Risks and challenges of fragmented approaches across jurisdictions and markets

The multiplication of public-led and private-led sustainable finance frameworks and tools (e.g., taxonomies, standards, labelling schemes), while positive, has also brought an increased complexity for market actors to deal with. While sustainable finance frameworks and tools are essential to operationalise sustainability targets and goals, and there is no perfect “one size fits all” single approach, too many “sizes” risk fitting nobody and creating a cacophony²⁹ difficult to deal with by investors and companies, but also for governments and the public.

Investors as well as corporates/issuers are the first impacted as they may see their operations and compliance costs increased by the need to align with different standards and “fit” into different frameworks. In general, using inputs from different sources is costly and inefficient, and managing different sets of standards may prove cumbersome. This is not only the case for multinationals or companies operating across borders. Almost no company is able to completely function in a single country or jurisdiction and operate in a vacuum given the increasingly integrated, global nature of financial markets and economic value chains. In this context, having to comply with different frameworks creates a higher “information cost” related to the different sets of applicable provisions. This is even more so the case for smaller companies for which these costs may be relatively greater, or which may not have the capacity and resources to support them.

Inconsistencies between sustainable finance frameworks may represent a deterrent for companies to engage in new green areas and more sustainable business models.³⁰ In the absence of coherent standards and metrics, it is difficult for companies to integrate sustainability goals into their business model, as well as to measure their sustainability performance. This can translate both into a hurdle in obtaining the necessary investments (because companies would have difficulties to demonstrate their

²⁸ For example, using the UN Global Compact principles.

²⁹ Inter-agency Task Force on Financing for Development, “Financing for Sustainable Development Report 2021” (March 2021).

³⁰ OECD and UNDP, “Framework for SDG Aligned Finance” (March 2021).

sustainability record)³¹ and a risk of green/SDG-washing due to the absence of harmonized definitions and metrics to assess sustainability performance.³²

Fragmentation also affects the capacity of investors to make informed decisions and assess sustainable finance risks and opportunities. In a very fragmented setting, it becomes more difficult for investors to assess how sustainability performance links to financial performance, which can in turn become a supplementary barrier to financing climate action and other SDGs. Moreover, if the methodologies to assess sustainability risks are not harmonized, it is difficult to compare scores, and integrate long-term material sustainability risks in core credit ratings. Ultimately, this may also affect the capacity to evaluate the performance of the financial sector itself: with lack of harmonized standards and metrics, it is more difficult to assess portfolio alignment and therefore the financial sector's contribution to Paris Agreement goals and SDGs in general.³³

The development by a country/jurisdiction of a new regulatory framework also comes with a cost (in terms of time and resources) and may prove to be a cumbersome process that some public actors may have difficulties to carry out. This cost may be reduced by taking existing frameworks as a model. This would in turn favour their market uptake since these frameworks are known by market participants. This would also limit the risk of regulatory loopholes as these frameworks were subject to in-depth scrutiny.

Increased global alignment does not mean a “one size fits all” approach. Specificities among countries, regions and jurisdictions must be duly considered and accounted for. International cooperation could allow progress in achieving better alignment across sustainable finance frameworks, for instance, the IPSF has been making efforts on developing “common ground” taxonomies that highlight commonalities between existing and emerging approaches. Market participants and regulators could build on these frameworks and complement them with additional building blocks (e.g., more detailed criteria) they deem necessary for the local context.

Approaches to identifying sustainable investment, such as taxonomies, can initially focus on one or multiple objectives of environmental and/or social nature but should ideally be extended over time to cover all sustainability issues as defined in the SDGs. While some jurisdictions may prefer to focus their sustainability classifications and sustainable labels/standards purely on a single objective such as greenhouse gas mitigation, other jurisdictions will include multiple objectives.

B. Data needs and challenges

A second hurdle relates to the availability and quality of data for the implementation of sustainable investment approaches by investors. Investors require data to operationalize frameworks for sustainable investment and compare the relative sustainability performance of companies and projects they want to finance. Data availability is also crucial for implementation of a taxonomy of

³¹ Global Investors for Sustainable Development (GISD) Alliance, “Renewed, Recharged and Reinforced: Urgent actions to harmonize and scale sustainable finance” (July 2020).

³² OECD and UNDP, “Framework for SDG Aligned Finance” (March 2021).

³³ Global Investors for Sustainable Development (GISD) Alliance, “Renewed, Recharged and Reinforced: Urgent actions to harmonize and scale sustainable finance” (July 2020).

sustainable activities, and for verification and certification of sustainability claims made by investment products labelled as sustainable. Particular data challenges include:

- **Low quality and consistency of data published by corporates.** In 2019, 90 per cent of S&P 500 companies published a sustainability report, compared to only 20 per cent in 2011.³⁴ Yet, despite the increasing number of sustainability reports issued by companies, it remains challenging for investors and consumers to understand the environmental and social footprint of companies. Information published is often not comparable and sometimes outdated. Companies can often select the issues they choose to communicate and have clear financial incentives to communicate those issues that make them appear more sustainable, as sustainability reporting remains largely voluntary. This creates incomplete and even possibly misleading information. It also prevents investors from assessing how sustainability disclosure performance links with financial performance, both in terms of risks and opportunities.
- **Lack of data on company's products/services and geographical footprint.** ESG data has, so far, focused on a company's operation rather than its products and services. This includes, for example, data on carbon emissions, labour practices and waste management. However, it does not consider what a company sells. This means that tobacco companies can easily rank high in ESG ranking. Investors need another type of data to understand a company's business and implement a taxonomy. For example, they may need data on the distribution of a company's revenues employment and investment (i.e., capex) by sectors/industries and countries. This would allow investors estimating the proportion of a company's business linked to a taxonomy of sustainable activities across various jurisdictions. Similarly, it would help investors understand where multinational companies have business activities. Hence, it is crucial that companies to disclose their geographical footprint, particularly in terms of capex and employees.
- **Impact measurement remains challenging in the absence of sector/industry-specific metrics.** The presence of a company in a specific industry does not provide enough information to assess the sustainability of the products/services it provides. Key performance indicators (KPI) need to complement this information. These metrics often need to be tailored to the sector/industry specificities to be meaningful and companies active in the same sector/industry should use the same KPIs to allow for comparison. The GISD Alliance, for instance, is working on addressing this issue by exploring possible standardized metrics per industry/sector while consulting a wide range of stakeholders. Once the relevant KPIs have been identified, they may have potential to achieve a high-level intergovernmental interoperability given the track record of individual KPIs. Most prominently perhaps, the Paris Agreement achieved intergovernmental interoperability using CO₂e as key KPI for greenhouse gas emissions, whereby the translation of other greenhouse gases to CO₂ is undertaken using Global Warming Potential 100 years factors.
- **Absence of forward-looking information.** Most sustainability data is currently backward-looking as it describes a company's past performance. For investors, it is also necessary to have access to forward-looking information. Developing sustainability track records much like financial records can help investors extrapolate a corporation's proven ability to enhance its sustainability performance (e.g., reduce GHG emissions). Beyond such track records, it is useful for investors to

³⁴ Governance & Accountability Institute, Inc, "Flash Report S&P 500" (16 July 2020).

understand a company’s ambitions and targets to align with sustainability goals, for example its plan to align with the Paris Agreement. To be useful, such forward-looking information should include long term ambitions as well as near term milestones, be reported regularly and consistently in a verifiable manner, and be relevant to firm, industry, and national/international commitments, as required in transition finance (see ICMA Handbook in Annex 2 and Japan’s Basic Guidelines).

Policymakers can address data issues by further improving interoperability and comparability of existing reporting frameworks, ensuring global coherence between frameworks, and working towards minimum levels of disclosure by companies.³⁵ Addressing these issues is critical to increasing the coherence and consistency of the data that investors require, and further the growth of sustainable investment.

To mitigate regulatory burden, disclosure requirements should be proportional to company size and sophistication. Large multinational companies have deep social and environment footprints, as well as the resources to assess and disclose the impact of their operations, products, and services. Imposing the same standard on small and medium-sized enterprises (SMEs), and most companies in developing countries, would not be proportional to their footprint and means. Such companies could be subject to a “disclose-or-explain” standard, similar to the “comply-or-explain” standard used in regulation: they can choose to disclose their impact or justify why they did not.³⁶

Sustainability verification needs to remain financially independent of the assessed entity to represent unbiased information. This imperative of financial independence is particularly important when the subject matter is of particular interest to corporate marketing and public relations teams as in the case of sustainability. In this sense, asset managers may ask buy side rating agencies or consultant to support their research on sustainability verification without biasing the outcome. Companies, however, do not materially reduce the bias in sustainability self-assessments by paying for the services of an auditor or consultant as the latter have a financial incentive to provide a positive assessment of the company funding the exercise.³⁷

Sustainability assessment should follow precautionary principles. When assessing the sustainability of entities, financially independent third parties will have to make estimations in case subjects do not report relevant information at all or report it in a manner that is not deemed sufficiently trustworthy. To avoid being fooled by greenwashing or SDG washing, these estimations should be made with precaution. This means that the assessor should, when in doubt, err on the side of the planet and the environment, not on the side of the assessed subject.

³⁵ Inter-agency Task Force on Financing for Development, “Financing for Sustainable Development Report 2021: Chapter III.B” (March 2021).

³⁶ Inter-agency Task Force on Financing for Development, “Financing for Sustainable Development Report 2021: Chapter III.B” (March 2021).

³⁷ To date, only three sustainability rating agencies have signed the Deep Data Delivery Standards, whose principle 6 ensures that they are free from direct financial conflicts of interest in their work (<http://www.deepdata.ai/>).

C. Risks and challenges from a developing country and SMEs perspective

Investment targeting a positive contribution to sustainability goals should benefit developing countries. Since developing needs are higher in these countries, realizing a positive contribution with an investment should be easier. By increasing transparency around the impact of investment opportunities, sustainable investment approaches and tools can drive capital flows towards these countries. However, mobilizing sustainable investments in less advanced markets necessitates addressing several challenges, which are beyond the scope of this report.³⁸ Challenges related specifically to sustainable investment approaches include: (i) further developing local sustainable capital markets; (ii) making sustainable investment approaches applicable in and adapted to a developing country context.

i. **Capital market development**

Sustainable investment largely relies on capital market infrastructure. It is challenging, for example to issue a green bond in the absence of a deep and liquid sovereign debt market, which creates the basic infrastructure and yield curve necessary for issuing and pricing domestic securities. Similarly, if local companies are not listed on stock exchanges, sustainable investment funds may struggle to include companies from developing countries. Indeed, these funds are often created by selecting a subset of listed equities with better sustainability performance.

Capital markets remain undeveloped or underdeveloped in several developing countries, including most Least Developed Countries (LDCs) and Small Island Developing States (SIDS). While market capitalization of listed companies roughly doubled in developing countries between 2009–2019 to reach almost \$25 trillion,³⁹ growth has been concentrated in a handful of countries. Excluding China, only about 11 per cent of global equity and debt issuances were by companies located in developing countries in 2019.⁴⁰

The international community should provide support to countries with underdeveloped capital markets to put in place market infrastructure and develop action plans tailored to their local circumstances. These actions should consider from the outset how to integrate sustainable investment approaches in capital market development plans, and broader sustainable finance approaches to make sure all relevant institutions involved in it take part in the evolution of the market.

ii. **Applicability of developed country approaches and tools**

Developed country approaches to sustainable investment may have unintended consequences if not enough attention is paid to developing countries constraints. Taxonomies, labels and other tools ostensibly apply to investors domiciled and regulated in developed country jurisdictions, but many of these investors have global investment mandates that cover developing countries. The design of the sustainable finance approaches and tools should be carefully considered to ensure that they incentivize investment in developing countries.

³⁸ See Financing for Sustainable Development Report 2020 and 2021.

³⁹ IOSCO, Development of Emerging Capital Markets: Opportunities, Challenges and Solutions, (Madrid, IOSCO, 2020)

⁴⁰ World Bank, Capital Markets Development: A Primer for Policymakers, (2020).

Data challenges presented in the previous section are likely to be more acute in less advanced markets, particularly in LDCs. The lack of verifiable data could mean that investors are unable to account for the sustainability of these investments with the same degree of certainty than investments made in developed countries. For example, investors could struggle to determine the level of taxonomy alignment for investments located in developing countries, which could de facto be considered as non-aligned. A way to address this issue is to allow for investors to use estimates for assessing the Taxonomy-alignment of their exposures to undertakings established in a third country.⁴¹

A certain degree of flexibility could be introduced to address this challenge. For example, policymakers in developed countries could allow references to local taxonomies designed with similar principles and objectives. They could also encourage private data vendors to develop methodologies to estimate the sustainability or taxonomy-alignment of companies that are domiciled outside developed markets. Another way to introduce flexibility could be to focus on the rate of improvement as a universal measure instead of static thresholds. For example, a credible science-based target for emission reduction is considered 7 per cent per annum. While the carbon intensity of some vulnerable developing country companies may initially be higher, they could still show the same rate of improvement if they are to be considered sustainable.

Finally, allowances could be made for the unique situation of SMEs. Certain reporting requirements for SMEs, in both developed and developing countries, should be proportionate. Yet, international investors are unlikely to be able to invest directly in SMEs in developing countries. Local financial institutions that lend to smaller enterprises could play an intermediary role between these SMEs and international investors. To demonstrate a positive impact, local financial institutions could themselves collect basic sustainability information about their SME clients.

iii. Support to adapting approaches and tools to developing country local contexts

While all countries may need to adapt approaches and tool to their local context and priorities, some developing countries may need capacity support for this. Applying the same approaches and tools can be challenging for some low and lower-middle income countries. Companies in these countries do not always have the same means of tracking and reporting on their sustainable development impact. Developing priorities might also differ. However, starting from an existing base can be beneficial and avoid reinventing the wheel (see Box 4).

To facilitate the interoperability across markets, policymakers in developing countries could maintain the same language and standards as developed country taxonomies and tools while adapting the level of granularity. Adopting common language, standards, and metrics increases the coherence between developed and developing country taxonomies and tools, reduces the burden for global investors, and facilitates global capital flows. However, developing countries could adapt the level of activity granularity in the taxonomy compared to developed country taxonomies, for instance with regard to key performance indicators. Yet, the adaptation of the level of granularity should not hamper the achievement of international agreed sustainability targets.

Regional approaches to taxonomies and labels offer prospects in terms of adapting sustainable investment approaches to local circumstances while maintaining a certain level of harmonization

⁴¹ https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-4987_en.pdf

and convergence. Regional capacity-building support – for instance, by regional MDBs and UN Regional Economic Commissions – could facilitate an agreement at a regional level. Additional guidance could also be provided by these institutions for the development of green taxonomies (see for example, the World Bank Group publication on this topic).⁴²

Box 4: Case Study - South Africa’s Experience in Domesticating the EU Sustainable Finance Taxonomy in an Emerging Market Context

South Africa's National Treasury launched a multi-stakeholder process in June 2020 to develop a national Green Finance Taxonomy. A draft taxonomy was published for public comment on 7 June 2021. The following are the key lessons learned:

a) Stakeholder consultation has been essential to guide key decisions in the taxonomy process and raise awareness among potential users.

- A Technical Working Group was established to provide strategic guidance. Broader stakeholder consultations were undertaken virtually between July 2020 and June 2021.
- The result has been strong local awareness of the initiative, shared ownership by key constituencies, and an opportunity for financial institutions and investors - including pension funds - to provide input and prepare for implementation.

b) The EU Taxonomy provided a robust starting point.

- Stakeholders agreed the best approach would be to adapt a recognized international framework.
- The EU Taxonomy was selected due to its global relevance, comprehensive technical foundation, and influence on the expectations of international investors.
- Key elements, such as the use of Environmental Objectives, Do No Significant Harm (DNSH) principle, and adherence to social safeguards were adopted due to their alignment with local trends to embed ESG risk management in South Africa’s finance sector. For example, South Africa’s pension funds are required by regulation to consider all material factors, including ESG, in their investment decision making. The taxonomy supports both their risk management and positive impact objectives.

c) It was critically important to adapt the EU framework to South Africa’s local priorities.

- All stakeholders consistently and strongly emphasized the importance of adapting the EU framework to local standards, priorities, and realities. For instance, South Africa seeks to achieve a Just Transition to a low carbon economy and requires investment solutions to achieve this – such as for phasing out coal and greening the mining sector while creating jobs in new green sectors.
- South Africa has also amended criteria for certain sectors in alignment with local environmental standards while maintaining harmonization with international best practice.
- Social aspects are particularly important for South Africa as a developing country and therefore social safeguards were included in line with the EU approach.

d) Capacity and resources are critical to enable taxonomy development and implementation.

- The initial phase of work was carried out with support from IFC, part of the World Bank Group.
- National Business Initiative (NBI) and Carbon Trust were selected to undertake research, stakeholder engagement, and taxonomy development.
- Future taxonomy expansion is planned in relation to the Just Transition and social topics.

⁴² World Bank, “Developing a National Green Taxonomy: a World Bank Guide” (June 2020).

- An intergovernmental governance structure is planned to guide future evolution and updates of the Taxonomy.

For more information, visit <https://sustainablefinanceinitiative.org.za/taxonomy/>

III. Moving towards globally consistent and comparable approaches to sustainable investment: High level principles and recommendations

High-level principles for developing alignment approaches and recommendations for international coordination can enhance comparability, interoperability and consistency of different alignment approaches. Since different jurisdictions are in the process of developing their own definitions, taxonomies/ classifications, labels, and other tools, adherence to these principles can increase comparability and interoperability between approaches, and thus create a more level playing field for international capital market participants.

Converging existing and new approaches can in theory be accomplished in different ways. For instance, these recommendations could be process-focused and answer how international policymakers could work to establish this interoperability. However, it is this report's opinion that the most effective way of achieving comparability and interoperability is by defining upfront a set of principles that all new approaches could incorporate, and existing approaches could adopt if their current approach falls short. This provides an effective technical blueprint for global convergence.

With this in mind and, building on the stock take analysis in the previous chapter, this paper proposes the following principles and recommendations aimed at moving towards more comparable and interoperable approaches to identify, verify and align investments with sustainability goals. This section is divided into two parts. The first part sets some high-level principles for countries/markets that intend to promote private-led approaches and/or develop their own definitions, taxonomies or other alignment approaches. The second part sets recommendations for international coordination among existing alignment approaches, including taxonomies, ESG rating methodologies and verifications.

Principles for countries/jurisdictions and markets for the development of coherent approaches to identify and align investments with sustainability goals

Principle 1: Make a positive contribution to support SDGs. Approaches to align investments with sustainable goals, including definitions and taxonomies, should aim to create a positive contribution to at least one of the 17 sustainable development goals, including environmental, climate, biodiversity and social objectives.

Principle 2: Do no significant harm. Approaches to align investments with sustainable goals, including definitions and taxonomies, should ensure that activities identified by these approaches do no significant harm to any of the 17 SDGs, even if the selected activity makes positive contribution to some other SDGs. To the extent that an alignment approach involves a process for implementation, it should also introduce safeguards to ensure that a positive contribution to one objective is not going to be outweighed by negative impacts on other environmental and social objectives.

Principle 3: Be Science-based. Approaches to align investments with sustainable goals, including definitions and taxonomies, should be objective in nature, supported by clearly defined and disclosed metrics and thresholds that align with the best available science and are internationally interoperable.

Principle 4: Be dynamic. Approaches to align investments with sustainable goals, including definitions and taxonomies, will need to be regularly reviewed and updated to reflect the market change and development of green and sustainable technologies, as well as the change of both domestic and international policy agendas and priorities.

Principle 5: Be transparent and verified. Approaches to align investments with sustainable goals, including definitions and taxonomies, should rely on: (i) transparent and robust methodologies (including from private data providers) to identify sustainable investment opportunities; (ii) proper disclosure by investment managers and financial advisors marketing sustainable investment products and strategies; and (iii) independent verification mechanisms.

Principle 6: Contain a fuller coverage of SDGs. As some approaches to align investments with sustainable goals, including definitions and taxonomies, are developed with an initial focus on climate, there is a need to expand over time their coverage to include other aspects of SDGs, such as environment, biodiversity and social aspects of sustainability.

Principle 7: Create a comprehensive assessment - Approaches to align investments with sustainable goals, including definitions and taxonomies, should consider the entire impact of an investee entity's activities, both from its operational activities and from the value chain and usage of its products and services.

Recommendations to enhance interoperability across approaches and tools for identifying, verifying and aligning investments with sustainability goals

For jurisdictions that choose to implement taxonomies:

Recommendation 1: Develop sustainable finance taxonomies using the same language (e.g., international standard industrial classification, ISIC), to enhance comparability and interoperability. If taxonomies are developed using different activity classification methods, comparison between these taxonomies would be difficult and translation of these taxonomies would be costly. It is recommended that countries/regulators/market bodies intending to develop new taxonomies consider the use of internationally recognized classification (i.e., ISIC), which can help enhance comparability and interoperability across taxonomies and reduce translation costs.

Recommendation 2: Share and compare national and regional taxonomies to identify common ground. The G20 SFWG could support the effort of the International Platform on Sustainable Finance (IPSF) that initiated a working group on taxonomies with the objective of developing a common ground taxonomy by highlighting the commonalities between existing taxonomies.

Recommendation 3: Voluntary adoption of common taxonomies or existing taxonomies to facilitate cross-border sustainable financial flows. For jurisdictions that choose to implement a taxonomy, adoption of common taxonomies would help mutually identify common criteria and support cross-border green capital flows. Jurisdictions or markets that do not have the resources or need to develop their own taxonomies can also choose to adopt an existing taxonomy.

Recommendation 4: Collaborate regionally on developing unified taxonomies, in which the MDBs can play an instrumental role. Regions with a large number of relatively small economies or markets (e.g., Africa, Central Asia, and Latin America) can consider developing unified regional taxonomies, as opposed to a large number of national taxonomies, to avoid market segmentation and illiquid sustainable finance markets. MDBs in these regions can play a role in coordinating or assisting with the development of these taxonomies, and adopt the recommended principles and consistent classification methods in the development process. Given that emerging and developing economies face significant challenges in low-carbon transformation of their economies, supporting transition finance can become a key feature of these regional taxonomies.

For all jurisdictions:

Recommendation 5: Enhance comparability, consistency and transparency of ESG rating methodologies and data products, including by improving the governance of the assessment process. The G20 SFWG can acknowledge existing work⁴³ on this field and encourage market participants and other stakeholders to facilitate discussions on developing robust and transparent governance structure of ESG ratings and data providers and improve consistency and transparency of selection of indicators, scoring methods and forms of presentation, to enhance quality of ESG data and their usefulness.

Recommendation 6: Support collaboration among relevant stakeholders to ensure consistency, transparency and interoperability of methodologies for verification and labeling of sustainable investment products. Relevant stakeholders include verifiers, certifiers, second-opinion providers and third-party reviewers. This should aim to enhance transparency, comparability and consistency on minimum contents, key indicators, and forms of report presentation and labelling.

Recommendation 7: Consider ways to standardize disclosure by investment managers and financial advisors. Financial market participants marketing investment products and/or strategies as sustainable should disclose how they intend to achieve their sustainability goals. Disclosure by investment managers has to be consistent and comparable among different products and across markets to be meaningful. If each sustainable investment product follows its own disclosure framework, the transparency aimed will not be achieved. The G20 SFWG could build on some existing initiatives.⁴⁴

Recommendation 8: Leverage existing private-led platforms. The G20 SFWG can leverage investor platforms, such as the Global Investors for Sustainable Development (GISD) Alliance, the Paris Aligned Investment Initiative, the Net Zero Asset Owner Alliance, and the Net Zero Asset Managers Initiative, and build on consensus emerging from these platforms (e.g., the GISD SDI definition) to promote consistent approaches in the market around sustainable investments.

Recommendation 9: Provide capacity building support. The G20 SFWG could call on increasing assistance to developing countries with underdeveloped capital markets to: (i) strengthen local

⁴³ For example, IOSCO has published Consultation Report on ESG Ratings and Data Products Providers in July 2021. <https://www.iosco.org/news/pdf/IOSCONEWS613.pdf>

⁴⁴ For example, IOSCO has published Consultation Report on Recommendations for Sustainability-Related Practices, Policies, Procedures and Disclosure in Asset Management In June 2021. <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD679.pdf>

markets; (ii) integrate sustainable investment approaches in capital market development plans; and (iii) raise awareness on the actions countries can take to benefit from the sustainability shift in developed capital markets.

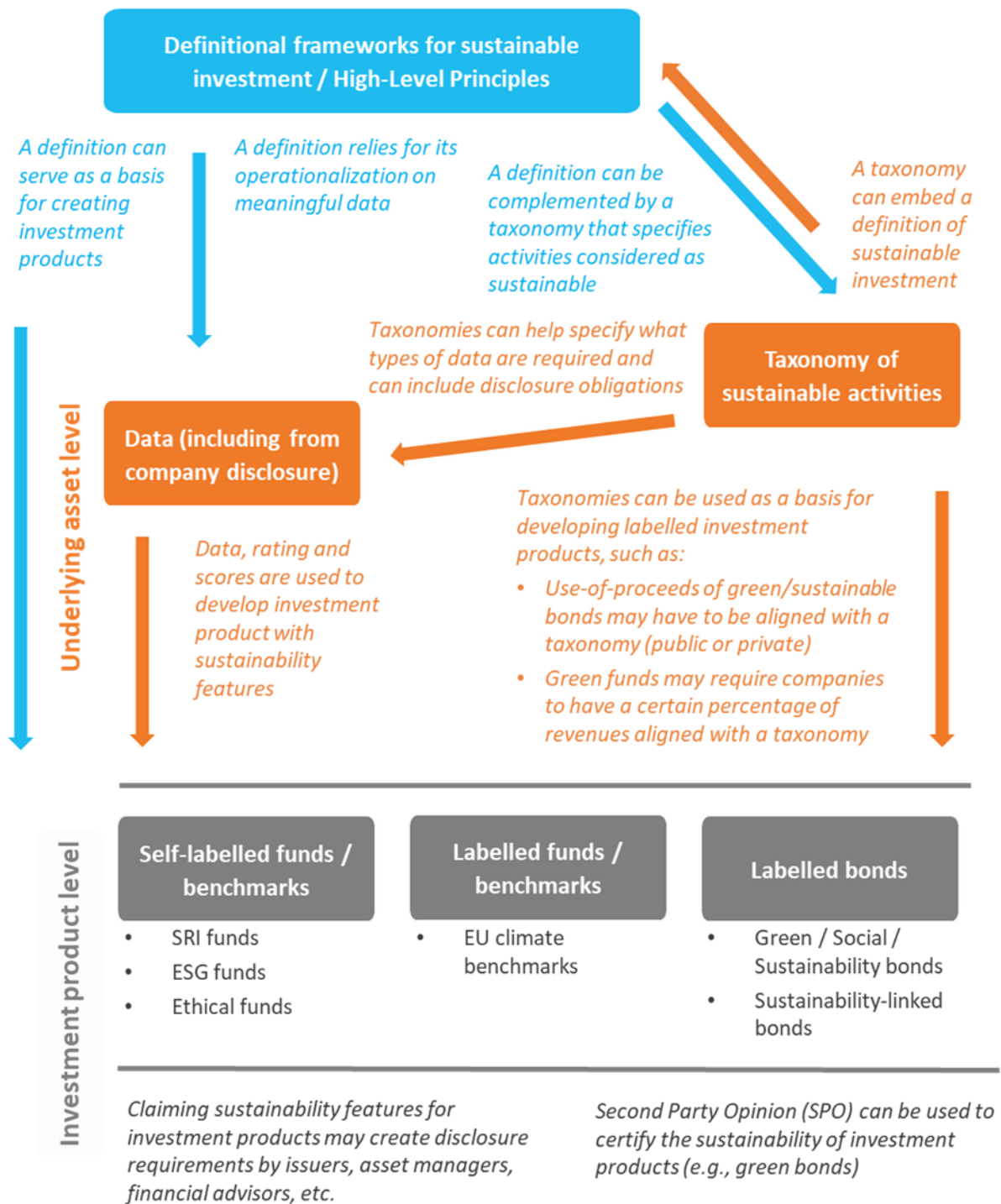
Recommendation 10: Support collaboration among scientists, investors and civil servants to identify suitable KPIs for a common language on impact measurement. The G20 SFWG could call on investors, civil servants and scientists to identify a suitable set of often sector specific KPIs in order to establish a common technical language on impact measurement. Scientists should ensure that the KPIs are technically accurate, investors should ensure that the KPIs are practically usable in all relevant investment processes and civil servants should ensure that the KPIs are usable from a policy making perspective.

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Annex 1: The relationship between sustainable investment approaches



Annex 2: Stocktake of selected definitions related to sustainable investment

Global Investors for Sustainable Development (GISD) Alliance	
Definition	Sustainable Development Investing (SDI) refers to deploying capital in ways that make a positive contribution to sustainable development, using the Sustainable Development Goals (SDGs) as a basis for measurement. The contribution can be made through products, services, and/or operations or through projects financed across asset classes and in multiple sectors or themes. The positive contribution of an investment should not be outweighed by negative impacts from the same investment over the life of this investment. Investors can strengthen their positive contribution through active ownership, such as engagement for more sustainability in companies, sectors and projects they invest in, as well through greater investment in developing countries.
Origin	Private sector - GISD is an alliance launched by the UN Secretary General made of 30 CEOs, recognized leaders of major financial institutions and corporations spanning all the world's regions.
Link	https://www.gisdalliance.org/our-work/create-impact/sustainable-development-investing-sdi
Global Sustainable Investment Alliance (GSIA)	
Definition	Sustainable investing is an investment approach that considers environmental, social and governance (ESG) factors in portfolio selection and management.
Origin	Private sector – GSIA is a collaboration of sustainable investment associations
Link	http://www.gsi-alliance.org/wp-content/uploads/2019/03/GSIR_Review2018.3.28.pdf
Institute of International Finance (IFF)	
Definition	IFF suggest distinguishing the following categories of investment: <ul style="list-style-type: none"> - Exclusion investments: those actively avoiding investing in unsustainable corporates or countries based on screens or other ways to identify particular issues or outcomes of concern. - Inclusion investments: those actively investing in sustainable corporates and countries based on consideration of underlying data about issues or outcomes. - Impactful investments: those seeking to have a direct, positive measurable impact on society and/or the environment while targeting market, or better, financial returns.
Origin	Private sector – The Institute of International Finance is the global association of the financial industry, with more than 450 members from more than 70 countries.
Link	https://www.iif.com/Publications/ID/3633/The-Case-for-Simplifying-Sustainable-Investment-Terminology
Principles for Responsible Investment (PRI)	
Definition	Responsible investment is a strategy and practice to incorporate environmental, social and governance (ESG) factors in investment decisions and active ownership
Origin	Private sector – The PRI is an association that promotes responsible investment, which was launched in 2006. As of 2020, there were about 3,000 signatories to the 6 PRI principles.

Link	https://www.unpri.org/download?ac=10948
ICMA Green Bond Principles	
Definition	Green Bonds are any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible Green Projects and which are aligned with the four core components of the GBP (i.e., Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds, and Reporting).
Origin	ICMA is a not-for-profit membership association committed to serving the needs of its wide range of member firms active in the international debt capital markets.
Link	https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Green-Bond-Principles-June-2021-140621.pdf
ICMA Climate Transition Finance Handbook	
Definition	The concept of climate transition focuses principally on the credibility of an issuer's climate change-related commitments shown in issuers' strategy and their practices. Four key elements to transition bonds are <ol style="list-style-type: none"> 1. Issuer's climate transition strategy and governance; 2. Business model environmental materiality; 3. Climate transition strategy to be 'science-based' including targets and pathways; 4. Implementation transparency.
Origin	ICMA is a not-for-profit membership association committed to serving the needs of its wide range of member firms active in the international debt capital markets.
Link	https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/climate-transition-finance-handbook/
CBI Principles for Transition	
Definition	Five principles for an ambitious transition: All goals and pathways need to: <ol style="list-style-type: none"> 1. Align with zero carbon by 2050 and nearly halving emissions by 2030; 2. Be led by scientific experts and not be entity- or country-specific; 3. Be sure that credible transition goals and pathways don't count offsets; 4. Include an assessment of current and expected technologies which can be used to determine a decarbonisation pathway; 5. Be backed by operating metrics rather than a commitment or pledge.
Origin	Climate Bonds Initiative (CBI) is an international organisation working solely to mobilise the largest capital market of all, the \$100 trillion bond market, for climate change solutions.
Link	https://www.climatebonds.net/principles-transition

Annex 3: Stocktake of sustainable finance taxonomies

Country/jurisdiction	State of play	Objectives	Coverage / granularity	Usability	Approach to eligibility
China	In use Green Bond Endorsed Projects Catalogue (2021 Edition) released by the PBC, the NDRC, and the China Securities Regulatory Commission (CSRC).	i) Environmental improvement, ii) Addressing climate change, and iii) More efficient resource utilization	6 Level-I industry categories: 1. Energy-saving and environmental protection industry, 2. Cleaner production industry, 3. clean energy industry, 4. eco-environment industry, 5. green upgrading of infrastructure, 6. Green services.	Mandatory for green bonds issuance	Whitelist Binary (green/not green) Activities linked to industry-specific green standards and criteria set by competent regulatory authorities.
EU	In regulation with additional delegated acts to follow	(i) CCM, (ii) CCA, (iii) sustainable use and protection of water and marine resources, (iv) transition to a circular economy, (v) pollution prevention and control, (vi) and protection and restoration of biodiversity and ecosystems	Taxonomy based on NACE codes (EU industry classification derived from UN ISIC code). 9 broad categories with additional NACE subcategories. Activities within select sectors 7 sectors: 1. Agriculture & forestry, 2. Environmental protection and restoration activities, 3. Manufacturing, 4. Energy, 5. Water and waste, 6. Transport, 7. Buildings, 8. ICT & 9. Professional services Taxonomy covers economic activities of roughly 40% of listed companies.	Mandatory for EU Member states, Large corporate and financial market participants Where: Taxonomy to be used as reference for green investment funds (e.g., retail funds and green bonds) Taxonomy to be used for disclosure (e.g., investors and large companies to disclose share of taxonomy-aligned investments/ activities).	Technical Screening Criteria “Do No Significant Harm” principle Minimum social safeguards Room for transition and enabling activities
Japan	In use Basic Guidelines on Climate Transition Finance released in May 2021 Under development METI has set up a Roadmap Taskforce to formulate sector-specific roadmaps.	Focus on transition pathways for high emitting companies/ sectors and ensure the credibility of transition finance label.	Roadmaps to Carbon Neutrality by 2050 are the attachments to the Basic Guidelines. Target sectors to be published in 2021 include steel, chemistry, electric power, gas, petroleum, cement and paper/pulp	Guidelines released are legally non-binding	Principles-based guidelines with forthcoming cases studies and Industry transition pathways for sectors
South Africa	Draft published Public consultation in June 2021.	Initial coverage: (i) CCM, (ii) CCA Future coverage: (iii) Sustainable use and protection of water and marine resources, (iv) Sustainable resource use and circularity, (v) Pollution prevention,	Based on SIC code Covers: 1. Agriculture forestry, fisheries and land use; 2. Industry; 3. Energy; 4. Water and waste; 5. Transportation; 6. ICT; 7. Construction; Enabling activities,	TBC, likely all financial instruments	Technical Screening Criteria “Do No Significant Harm” principle Room for transition and enabling activities

Country/jurisdiction	State of play	Objectives	Coverage / granularity	Usability	Approach to eligibility
		(vi) Ecosystem protection and restoration	system resilience and innovation; 8.Social resilience		
Russia	Draft published in Dec 2020 Part of Russia 'Green Finance Guidelines'	(i) Environmental improvement; (ii) Pollution reduction; (iii) Greenhouse emissions reduction; (iv) Energy efficiency enhancement; (v) CCA	Taxonomy covers 9 sector categories: 1. waste management and recycling, 2. energy, 3. construction, 4. industrial production, 5. transport, 6. water supply and wastewater disposal, 7. forestry, 8. conservation of natural landscapes and biodiversity, 9. ICT	Financial instruments but not government financial instruments	Whitelist Mandatory verification to obtain green certification for a financial instrument
Kazakhstan	Under development The New Environmental Code of Kazakhstan is expected to come in force in July 2021, which will include: definitions of green technologies, green finance, green projects, classification of green projects (taxonomy), green bonds and green loans.	TBC	TBC	Anticipated to cover green finance instruments such as green bonds, loans, technologies, and projects. Will include a Register of green technologies and projects – a digital data base that gathers information on green technologies and projects	The Rules for recognizing technologies as “green” technologies, will outline the procedure for recognizing technologies and projects as green, verification of green activities with accordance to the green taxonomy, functions of the Service Operator.
Korea	Draft published 'K-taxonomy' draft open for public consultation in Korean	(i) CCM, (ii) CCA, (iii) sustainable conservation of water, (iv) circular economy, (v) pollution prevention management, (vi) biodiversity conservation	53 activities in 9 major categories: 1. Energy, 2. Manufacturing, 3. Cities and buildings, 4. Transportation, 5. Resource circulation, 6. CO2 capture, 7. Water., 8. Biodiversity & Agriculture, 9. Research and education.	It is recommended to applied to green projects selected in accordance with the Korean Green Bond Guidelines. It is expected to be applied to green bonds first and then to other green financial activities e.g. green loans and green funds. It is noted that the taxonomy may also be used by any entity or financial institution to assess the sustainability of an individual assets or to disclose the proportion of sustainable assets of an entity.	Similar structure to EU Taxonomy , substantial contribution + DNSH + minimum safeguards. Also contains exclusions criteria

Country/jurisdiction	State of play	Objectives	Coverage / granularity	Usability	Approach to eligibility
Mongolia	Approved Mongolia Green Taxonomy	(i) CCM and CCA, (ii) pollution prevention, (iii) resource conservation, and (iv) livelihood improvement It includes livelihood improvement as one of its overall objectives, adding a social element to the taxonomy	Covers 58 activities from eight sectors 8 sector categories are: 1. renewable energy; energy efficiency; 2. pollution prevention and control; sustainable agriculture, land use, forestry, bio-diversity conservation and ecotourism; low-pollution energy; green buildings; sustainable water and waste use; and clean transport	The taxonomy is designed to be applied for a wider range of financial instruments, including loans, bonds, equity investment, insurance, etc. Beyond the eligibility of green financial products, it is also used for banks to report exposures and for the central bank to track the development of its green loan markets	White List It stipulates a list of activities considered as environmentally sustainable for investment purposes and does not provide technical criteria
India	Under development Phase 1 expected to be completed in 2021 (*note that India has green bond guidelines in place but these are separate to a detailed taxonomy)	Environmental and social objectives being defined. Phase 1: climate change and climate adaptation and resilience.	Sustainable Activities will be defined for up to four sectors. Sector selection criteria not yet defined.	All financial instruments (likely) Mandatory for the listing of green bonds on recognized stock exchanges	In synch with international taxonomies, such as the EU and CBI, but likely to go beyond as it aims to integrate social objectives along with environmental objectives Binary (green/not green)
Sri Lanka	Under development Central Bank of Sri Lanka with technical assistance from IFC Further information expected in Q4 2021	TBC	TBC	TBC	TBC Will likely utilise elements of China and EU taxonomies
Bangladesh	Existing: Bangladesh Bank (BB) published a Sustainable Finance Policy for Banks and Financial Institutions in December 2020 In development: Green Bond taxonomy (not yet published)	Existing: (i) CCM, (ii) CCA, (iii) sustainable protection of water and marine resources, (iv) transition to a circular economy, waste prevention and recycling, (v) pollution prevention and control, (vi) protection and restoration of biodiversity and healthy ecosystems	Existing: 1. Renewable energy, 2. Energy efficiency, 3. Alternative energy, 4. Waste, 5. Recycling, 6. Green Brick production, 7. Green buildings In development: Likely to align with EU taxonomy sector coverage	Existing It is used to encourage and supervise banks and FIs to grant sustainable loans and conduct sustainable investments. The list of green products/ projects/initiatives is also used as eligibility criteria for whether bank assets can be refinanced with BB under the Refinance Scheme for Green Finance. In development Mandatory nature of future taxonomy is yet to be confirmed.	Existing: 1. Must make substantial contribution to environmental objectives, + 2. DNSH + 3. minimum social and governance safeguards. Similar to EU at a high level except that the eligibility is defined using a Whitelist approach where a List of eligible Green Products/ Projects/ Initiatives is provided. List of eligible projects possibly in sync with local conditions and should create widespread awareness of sustainability and environmental issues for banks and FI. It also provides two exclusion lists of economic activities considered ineligible

Country/jurisdiction	State of play	Objectives	Coverage / granularity	Usability	Approach to eligibility
					for financing and sustainable finance respectively In development: Likely to use TSC approach
ASEAN	Under development The association of ASEAN central banks has set up an ASEAN Taxonomy Board to develop, maintain and promote a multi-tiered ASEAN Taxonomy for Sustainable Finance. Work is currently underway on a first iteration of the taxonomy, expected to be announced at the November 2021 UN Climate Change Conference in Glasgow.	Will likely include climate mitigation as well as transition objectives	TBC	The ASEAN Taxonomy will be the overarching guide for all ASEAN Member States complementing their respective national sustainability initiatives and serving as ASEAN's common language for sustainable finance.	TBC
Indonesia	Under development	TBC – likely to be comparable with EU in terms of environmental objectives	TBC – likely to be comparable with EU in terms of economic classifications		Technical screening criteria (TBC) 2 categories: “green” and “towards green”. Thresholds to reflect the country's objectives and capacities
Vietnam	Under development, expected end 2021.	TBC	Energy, Transport, Water, Buildings, Land use and Marine resources, Industry, Waste, ICT Using the Vietnam Standard Industrial Classification (VSIC)		Technical screening criteria (TBC) Likely mandatory Comparable metrics and thresholds to EU to determine whether an economic activity is aligned with Vietnam’s climate-transition pathway.
Philippines	Under development a Green inter-agency taskforce with the Philippines Securities and Exchange Commission and the central bank has started the process of developing a taxonomy.	TBC	TBC		
Malaysia	Published	5 Guiding Principles (GPs): (1) CCM, (2) CCA, (3) No significant harm to	Principles 1 & 2 are applicable at the activity level whereas 3 and 4	Applicable to Financial Institutions to assess whether	Principles-based Taxonomy provides the 5 principles with examples as to what

Country/jurisdiction	State of play	Objectives	Coverage / granularity	Usability	Approach to eligibility
	Climate Change and Principle-based Taxonomy (CCPT) published in April 2021	the environment, (4) Remedial measures to transition, (5) Prohibited activities	should be applicable at the entity level.	financed activities are (i) Climate supporting (see GP1 to 3); (ii) Transitioning (GP4) or (iii) Watchlist. This facilitates standardized reporting of climate-related exposures.	types of investment qualify under each. This list is non-exhaustive.
Singapore	Under development	4 objectives proposed: (i) CCM; (ii) CCA; (iii) Protect biodiversity; (iv) Promote resource resilience	ISIC sectors and sub-sectors are covered. Proposed sectors: Agriculture, construction & real estate, transportation, energy, industrial. Additional enabling sectors may include waste, ICT and CCS.	Financial sector	A combination of principle-based criteria and quantifiable thresholds for activities via a ' traffic light system ' green (clear aligned), yellow (activities with pathways to becoming green) and red (activities that are inconsistent with the taxonomy). The conceptual framework of the traffic light system was set out in the consultation document published in January 2021, and the granular criteria is now being developed. Other eligibility features: a) Do no significant harm; b) no negative impact on communities' social and economic well-being, unless the trade-offs can be justified in the long run; c) no breach local laws and regulations.
Thailand	In discussion Workplan to develop a green taxonomy initiated			Financial sector	
Colombia	In draft	7 objectives: (i) CCM; (ii) CCA (iii) Sustainable use and protection of water and marine resources; (iv) Transition to a circular economy (v) Pollution prevention and control (vi) Protection of healthy ecosystems (vii) Social / SDG	8 Broad categories	Green Labelled financial instruments	Voluntary. No certification mechanism discussed TSC proposed Other eligibility features: Minimum safeguards and DNSH
Chile	In discussion Taxonomy Roadmap for Chile published in 2021	Likely climate mitigation, adaptation and other environmental objectives	Priority sectors to address are Energy, Transport, Buildings, and Industry (mining).		Likely leverage EU Taxonomy. Taxonomy type: Technical screening criteria likely
Mexico	In discussion	includes six elements: principles, criteria, methodologies, operational and governance mechanisms, reporting framework, and diffusion mechanisms			

Country/jurisdiction	State of play	Objectives	Coverage / granularity	Usability	Approach to eligibility
Dominican Republic	Under development				
UK	Under development Green Technical Advisory Group (GTAG) announced	GTAG will provide the UK government with non-binding advice on how to adapt the EU taxonomy for UK purposes.	TBC Likely based on EU approach	TBC	TBC- likely based on TSC approach as per the EU
New Zealand	In Draft Published in Dec 2020 seeking stakeholder feedback	Sustainable Agriculture (SAFI)	Agriculture only	To be used by the finance sector in considering agriculture lending and investment	Aims to seek equivalence, to bridge the gap between international and domestic standards
Australia	In discussion Private sector-led initiative				Voluntary (likely leveraging the EU Taxonomy).
Canada	Under development Industry-led (not connected to a regulatory framework / not a government policy document)	Transition focused taxonomy ⁴⁵ and specifically on GHG emissions reduction	Part I: Transition definition, principles and detailed corporate disclosures requirement. Part II: 8 sector-specific transition taxonomy: (i) Energy (ii) Utilities, (iii) Agriculture, (iv) Forestry, (v) Cement, (vi) Steel (vii) Aluminium, (viii) Mineral mining.	Likely applicable to transition-based financial instruments (bonds and loans)	Voluntary classification tool (Activity-and sub-activity based: aligned with EU, CBI and ICMA.
CBI Taxonomy	In use	(i) CCM and (ii) CCA	No reference to industrial classification code. The CBI taxonomy presents eight categories (energy, water, transport, buildings, land use and marine resources, industry, waste, and ICT), with forty-five subcategories of eligible assets and projects.	The use of the taxonomy is mandatory for certified climate bonds.	“Traffic lights” : green (automatically eligible); orange (subject to eligibility criteria); and red (not eligible). The CBI’s guidance on eligibility goes beyond its taxonomy. Issuers wishing to certify their bonds need to comply with the detailed Sector Criteria, the Climate Resilience Principles, and the Climate Transition Principles, (where relevant).
MDBs-IDFC Common Principles		(i) CCM and (ii) CCA		Mainly used for the monitoring and reporting of climate financing in a consistent manner among development banks.	Descriptive eligibility : The Common Principles introduce definitions for CCM and CCA-related financing. Inclusion in the non-exhaustive list of eligible activities is

⁴⁵ https://iiac.ca/wp-content/uploads/Taxonomy-Developments-and-Issuance-Potential-in-Canadian-Transition-Bond-Markets-in-2021_February-2021.pdf

Country/jurisdiction	State of play	Objectives	Coverage / granularity	Usability	Approach to eligibility
					<p>descriptive and not subject to greenness thresholds</p> <p>The Common Principles on CCM includes “transition”-related projects/ activities at a high level, with the backstop of principles such as avoiding carbon-lock in, importance of long-term structural shift towards green technologies, and replacing the old technologies before their lifetime (with a distinction of greenfield vs. brownfield investments in energy efficiency).</p>

Annex 4: Examples of ESG and SDG rating providers

Operations:

Score	Objective	Methodology
REFINTIV ESG		
<i>ESG Scores</i> (~ 9,000 firms)	Companies' ESG performance	Out of 500 different ESG indicators based on company disclosures 186 indicators are used to calculate 10 category scores. Indicators are evaluated by their materiality for every industry whereas the number of included indicators vary between 70 and 170 per industry. The category scores are calculated with a percentile rank scoring methodology with an industry benchmark for the environmental and social category scores and a country of incorporation for the governance category scores. The three pillar scores (E; S; G) and the final ESG score are relative sums of the category weights. The ESGC Score overlays the ESG score with the ESG Controversies Score.
ARABESQUE		
<i>ESG Scores</i> (~ 8,000 firms)	Companies' ESG performance	Arabesque provides an overall ESG Score, the three pillar scores and the underlying 22 category scores. The category scores include 250 indicators from non-financial disclosures and are corrected by news-based controversies including NGO campaign activities. The ESG Score is calculated as a weighted sum of the 22 category scores using materiality-based weights which are assessed on a sector- and industry-level each quarter. The individual pillar scores are calculated with mapped categories.
<i>Global Compact Scores</i> (~ 8,000 firms)	Companies' ESG performance based on UN Global Compact	The UN Global Compact Score provides an overall GC Score and individual scores on the four core principles of the GC: Human Rights, Labour Rights, Environment, Anti-corruption. These four scores are based on the initial 22 category scores, mapped accordingly to those four principles. The aggregated GC Score weights every GC principle initially with 25%, but a principle gets more weight allocated as the score starts dropping below the neutral center score.
<i>Temperature Score</i> (~ 22,000 firms)	Companies' contribution to the rise in global temperature through their GHG emissions	Proprietary metric that quantifies the extent to which corporations are contributing to the rise in global temperature through their greenhouse gas emissions according to International Energy Agency (IEA) scenarios. The emissions intensity ratio, GHG emissions per unit of gross value added, of each company is compared to the sector-benchmark. Additionally three additional indicators are provided: Target (emissions target approved by the Science Based Targets initiative), Trend (adequate year-on-year scope 1 and scope 2 emissions reductions), Scope 3 (Disclosure of scope 3 emissions).
FTSE ESG		

ESG Scores (> 7,200 firms)	Companies' ESG performance	FTSE defines 14 categories for the calculation of the pillar and the total ESG Score. Indicators are selected according to their materiality on a sector and country basis out of 300 indicators in total. On average 125 indicators are applied per company. Companies that are more exposed to particular categories are assessed with higher thresholds. The Pillar Scores are calculated as a weighted average of the category scores by its exposure level. The same logic applies for the overall ESG score with its underlying pillar scores. In addition to the absolute scores, peer relative Scores are also calculated by comparing a company's score to others within the same industry with a percentile rank scoring model. All category and pillar scores/exposure are provided.
ISS		
Impact Rating - Operations (> 6,500 firms)	Companies' impact on SDGs along its operations	For every SDG ISS provides data on how a companies' operations, controversies and products/services contribute or obstruct the achievement of this particular SDG. An aggregated score on a SDG level across the three pillars as well as an aggregated SDG score across all individual SDGs is provided. The assessment of a company's operational impact is based on standard and industry-specific indicators from the ESG Rating that are mapped based on their thematic relevance to the individual SDGs. The relative weighting of the indicators are adapted from the ESG Rating based on a materiality assessment of the industry.
SUSTAINALYTICS		
ESG Risk Scores (> 12,000 firms)	Encompassing ESG risk model with Unmanaged ESG Risks as a central rating	The model is based on company's ESG risk exposure that is estimated along corporate governance, a sub-industry-specific set of up to 10 out of 20 pre-defined material ESG issues (MEIs). The exposure can be increased by severe ESG controversies. By relying on outcome-focused and management indicators, Sustainalytics assess the (Un)Managed ESG Risk. Management indicators measure the degree to which a company meets relevant best practice standards, whereas outcome-focused indicators measure management performance in quantitative terms or via a company's involvement in controversies. Companies can engage with Sustainalytics and are contacted during the annual update feedback process and when significant ESG controversies occur.
MSCI		
ESG Scores (> 14,000 firms)	Companies' resilience to long-term, industry material ESG risks	Based on the understanding that ESG risks and opportunities can vary by industry and company the ESG Ratings identifies out of 35 Key Issues those that are most material to a sub-industry/sector. Corporate Governance Key Issues being always material. For each company and Key Issues MSCI provides data on the exposure and management. The final ESG Rating is the weighted average of individual Key Issue Scores, and benchmarked against the ESG Rating of industry peers. These industry-adjusted scores are translated in ratings between best (AAA) and worst (CCC).
VIGEO EIRIS		
ESG Assessments	Companies' consideration and management of material ESG factors	Vigeo Eiris set up 38 ESG criteria that are framed within 40 industry specific models to identify the relevant criteria for each industry. On average, 25 criteria are assessed relevant for a given sector, with an industry-specific materiality weight assigned to each criteria. Each company is assessed on a three-pillar managerial framework for each relevant ESG criteria: Quality of leadership (Visibility, Exhaustiveness, Ownership), Extent of implementation (Means, Coverage, Scope), Results (KPIs, Stakeholder Feedback, Controversy Management). The assessments is based on qualitative/quantitative data, and self-reported and third-party data.

Products and services:

Score	Objective	Methodology
ISS		
<i>SDG Solutions Assessment</i>	Contribution to SDG-related objectives based on companies' revenue from related products and services	Measures the positive and negative sustainability impacts of companies' product and service portfolios. The SDG solutions score measures companies' SDG contribution across 15 sustainability objectives, which are linked to individual or multiple SDGs. The SDG solutions score is composed of the 15 objective scores by considering the most distinct objective scores (i.e., the highest positive and/or the lowest negative score). The objective scores (and the solutions score) range from -10 to 10. A rating of 10 means that 100% of net sales are generated with products/services classified as having a significant contributing impact. The taxonomy of products and services is subject to an ongoing review process to include more or new products and services. Source data is from publicly available information as well as company feedback to ISS.
<i>Impact Rating - Product & Services (> 6,500 firms)</i>	SDG Contribution based on companies' revenue from SDG-related products and services	For every SDG ISS provides data on how a companies' operations, controversies and products/services contribute or obstruct the achievement of this particular SDG. An aggregated score on a SDG level across the three pillars as well as an aggregated SDG score across all individual SDGs is provided. The score on products/services assesses the impact of a company's product/services portfolio. The data is leveraged from ISS SDG Solutions Assessment Objective Scores.
ARABESQUE		
<i>Preference Filter (~ 22,000 firms)</i>	Companies' involvement in critical business segments	Companies are checked daily for revenues from and business involvement in 13 different business segments: Tobacco, Nuclear, Gambling, Defense, Stem Cells, GMO, Fossil Fuels, Adult Entertainment, Firearms, Alcohol, Pork, Recreational Drugs and Thermal Coal. The revenue is retrieved from financial statements and 10K-reports, whereas involvement is based on products and services reported by the company (e.g., website).
ASSET OWNER PLATFORM		
<i>SDI Scores (~ 7,900 firms)</i>	SDG contribution based on revenues from related products and services	The data provides information on companies' revenue share that contributes to the SDGs (for each SDG and aggregated) and a derived overall SDI rationale. In total, 151 product categories are labeled SDI. In scope are SDG 1 to 15, whereas the criteria for operations/conduct related SDGs (5, 8, 10) are still under development. The assessment of a company is based on publicly available information; an indication of confidence level underlying the assessment is provided as well. Additionality of a company's contribution to the SDGs, its geographical or social context is not explicitly part of the methodology yet. In total, 1,653 companies were identified as SDI; 1037 as majority plays (>50% SDI aligned revenue) and 616 as decisive plays (10-50% SDI aligned revenue). 19% of SDI companies have one (or more) warning flag(s) for involvement in critical activities (e.g. produces palm oil).

FTSE ESG

Green Revenues
(> 16,000 firms)

Environmental contribution based on revenues from related products and services

Products and services are analyzed based on their impact on climate change mitigation and adaptation, water, resource use, pollution, and agricultural efficiency. The taxonomy for green products and services covers 10 subsectors, 64 subsectors and 133 micro sectors. Based on company's overall revenues the share of green revenue is provided. Around 3,000 companies with green revenues have been identified.

MSCI

Sustainable Impact Solutions
(~ 10,300 firms)

Revenue exposure to social and environmental sustainable impact solutions

MSCI ESG Research refers to a detailed taxonomy of activities, products and/or services with positive impact on the society and the environment. The assessment is based on granular revenue data and measures the impact on six environmental impact categories (Alternative energy, Energy efficiency, Green buildings, Sustainable water, Pollution prevention, Sustainable agriculture) and seven social impact categories (Nutrition, Major disease treatment, Sanitation, Affordable real estate, SME finance, Education, Connectivity - Digital Divide).

SDG Alignment
(~ 8,600 firms)

Companies' net contribution, positive and negative, to each of the 17 SDGs

The underlying framework has been on an understanding that companies may contribute to the goals in a variety of ways, both positive and negative, through their operations and the products and services they provide. The framework is powered by data inputs from MSCI research products (Sustainable Impact Metrics, ESG Controversies, ESG Ratings and Business Involvement Screening Research). The data offers assessments (Strongly Aligned, Aligned, Neutral, Misaligned and Strongly Misaligned) and scores for the two dimensions, product/services and operations, and an aggregated evaluation for each company and for each of the 17 goals.

SUSTAINALYTICS

Controversial Product Involvement
(>20,000 firms)

Companies' product involvement in critical business segments

Sustainalytics provides data on how a company is involved in one or more critical product areas as well as the degree of involvement by the respective revenue share. In total, Sustainalytics identifies 24 critical products along 6 product areas: Defense & Military (e.g., Riot control), Business Practices (e.g., Animal testing), Energy (e.g., Thermal Coal), Health & Life (e.g., Tobacco), Value-based (e.g., Gambling), and Environment (e.g., Palm Oil).

VIGEO EIRIS

Sustainable Goods & Services
(> 4,500 firms)

Revenue of companies' products/services that are contributing to sustainable development themes

Vigeo Eiris defines nine sustainable development themes that are aligned with the SDGs. These themes are: Access to information, Capacity building, Energy & climate change, Food & nutrition, Health, Infrastructure, Responsible finance, Water & sanitation, Protection of ecosystems.