



STEP-BY-STEP GUIDE TO DEVELOPING A SUSTAINABLE FINANCE TAXONOMY

2024

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About this initiative

In the recognition that the realization of the Sustainable Development Goals (SDGs) and the objectives of the Paris Agreement require increasing both domestic and international capital flows towards investments that contribute to socially inclusive, sustainable and low-carbon economic development, UNDP's Sustainable Finance Hub, and its regional and country teams provide support to the development and use of complementary policies, tools and methodologies that can help governments and investors achieve these ends. This includes support to [SDG Impact Standards](#) (management standards businesses and investors can use to embed sustainability and the SDGs at the core of their internal management and decision-making practices), and sustainable finance taxonomies at regional and national levels. The latter represent valuable tools to channel resources to where they are needed most by providing definitions that are based on science (with regard to sustainability objectives) to identify assets, activities or projects aligned with countries' own sustainable development objectives while strengthening confidence in the market and the integrity of claims, and avoiding greenwashing. All of this within the context of overall support to countries adapt and innovate in the financing of their sustainable development pathways.

About the Sustainable Finance Hub (SFH)

UNDP established the global Sustainable Finance Hub (SFH) in April 2019, aggregating and advancing UNDP's work and expertise on financing the SDGs and working collaboratively through UNDP's regional hubs and country teams. The SFH offers a comprehensive package of methods and tools to enable governments, the private sector and international financial institutions to accelerate financing for the SDGs.

About the Sustainable Finance Team, Bangkok Regional Hub

The SDG Finance Team comprises of experts focused on both public and private sector dimensions of the sustainable finance agenda, including a strong focus on ensuring impact and innovation tailored to the regional and different country contexts. The team's portfolio encompasses support to the [Integrated National Financing Frameworks \(INFFs\)](#) and SDG and climate financing strategies; economic intelligence on SDG and climate responsive investment opportunities; support to Impact Measurement Management (IMM) and private sector alignment with the SDGs and impact venture accelerators; a significant and dedicated focus on climate finance, as well as risk finance and insurance; innovative finance and SDG-and climate-aligned budgeting, taxation and debt financing.

The [Climate Finance Network \(CFN\)](#) and the Governance of Climate Change Finance (GCCF) Team, located in the SDG Finance Team comprises of experts specializing in Governance, Public Financial Management, Development Finance and Political Economy, Climate Change, Gender & Social Inclusion, Private Sector Climate Finance and Development Effectiveness.

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Abbreviations

AIFM	Alternative Investment Fund Manager
AIFs	Alternative Investment Funds
ASEAN	Association of Southeast Asian Nations
BIS	Bank of International Settlement
BNM	Bank Negara Malaysia
BREEAM	Building Research Establishment Environmental Assessment Method
CAPEX	Capital Expenditure
CBI	Climate Bonds Initiatives
CSO	Civil Society Organizations
CSRD	Corporate Sustainability Reporting Directive
DG CLIMA	Directorate-General for Climate Action
DG ENV	Directorate-General for Environment
DG FISMA	Directorate-General for Financial Stability, Financial Services and Capital Markets Union
DNSh	Do not significant harm
EACB	European Association of Co-operative Banks
EBA	European Banking Authority
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECB	European Central Bank
EDGE	Excellence in Design for Greater Efficiencies
EEA	European Environment Agency
EFFAS	European Federation of Financial Analysts Societies
EIB	European Investment Bank
EIOPA	European Insurance and Occupational Pensions Authority
ELECTRE	Elimination and Choice Translating Reality
EnBW	Energie Baden-Württemberg AG
ESMA	European Securities Market Authority
E&S	Environmental and Social
EU	European Union
EUSEF	European Social Entrepreneurship Funds
EUVECA	European Venture Capital Fund
FAO	Food and Agricultural Organization
FMPs	Financial market participants
GHG	Greenhouse gases
GBF	Kunming-Montreal Global Biodiversity Framework
GRI	Global Reporting Initiative
IBIPs	Insurance Undertakings
ICMA	International Capital Market Association
ICT	Information, Communication and Technology
IFC	International Finance Cooperation
ILO	International Labor Organization
IORP	Institution for Occupational Retirement Provision
IPCC	Intergovernmental Panel on Climate Change
ISIC	International Standard Industrial Classification

KBLI	Klasifikasi Baku Lapangan Usaha Indonesia
KfW	Kreditanstalt für Wiederaufbau
kWh	Kilowatt hours
LEED	Leadership in Energy and Environmental Design
MSCI	Morgan Stanley Capital International
MSME	Micro, Small and Medium Enterprises
MiFID II	Markets in Financial Instruments Directive
M&E	Monitoring and evaluation
NACE	Nomenclature statistique des activités économiques dans la Communauté européenne
NAICS	North American Industry Classification System
NDCs	Nationally Determined Contributions
NFRD	Non-Financial Reporting Directive
NGFS	Network for Greening the Financial System
NGO	Non-Government Organizations
NIC	National Industrial Classification
OECD	Organization for Economic Cooperation and Development
OPEX	Operational Expenditure
PA	Paris Agreement
PEPP	Pan-European personal pension product
PRI	Principles for Responsible Investment
PSF	Platform on Sustainable Finance
RICS	Royal Institution of Chartered Surveyors
R&D	Research and Development
SCOR	Société Commerciale de Réassurance
SFDR	Sustainable Finance Disclosure Regulation
SFWG	G20 Sustainable Finance Working Group
SMEs	Small and mid-size enterprises
TCFD	Task Force on Climate-Related Financial Disclosures
TEG	Technical Expert Group
TNFD	Taskforce on Nature-related Financial Disclosures
TSC	Technical Screening Criteria
SDGs	Sustainable Development Goals
UCITS	Undertakings for the collective investment in tradeable securities
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
USD	United States Dollar
WWF	World Wildlife Fund

About this Guide

In recent years, there have been growing efforts across the world to integrate sustainability considerations into the global financial architecture systematically. It has not always been easy as mobilizing and channeling investments in sustainable activities require a clear definition of what can be considered as “sustainable”. Only with this shared understanding can one expect to establish a level playing field for all market participants, build confidence, and avoid greenwashing in the context of sustainability commitments and pathways. Taxonomies are starting to play the role of policy tools that help to determine whether, and to what extent, economic activities contribute to achieving global, regional and national sustainable development agenda.

Sustainable finance taxonomies provide clear definitions and help identify eligible assets, activities or projects that are compatible with relevant sustainability criteria. They help countries in structurally steering the economy towards an orderly transition to high-level goals, such as the achievement of a net zero emission economy or the Sustainable Development Goals (SDGs).

While there is no globally accepted sustainable finance taxonomy framework, there are various important benchmark taxonomies which, in practice, countries increasingly seek to ensure interoperability and/or alignment with those of the European Union, ASEAN in Southeast Asia, and Common Framework of Sustainable Finance Taxonomies for The Latin America and the Caribbean and/or those of important trade and investment partners.

What are the objectives of the Guide?

While there is no one size fits all approach, the purpose of this step-by-step guide is to provide a process-oriented detailed knowledge base with information about key steps in the development and implementation of a finance taxonomy, including objectives, design, and adoption. All major steps in the development process of a finance taxonomy, including alignment criteria, quantified metrics, and other technical details are described in detail (see Figure 1). In addition, this document provides insights, experiences and lessons learned from finance taxonomy developments across the globe and highlights ways to tailor the process to the national context and country needs, without being prescriptive.

Importantly, the document provides guidance on how to make the taxonomy context specific while ensuring its international comparability and interoperability so as to facilitate international capital flows to low-carbon projects and not create hurdles for reporting, trade and avoid market fragmentation, amongst others.

Who is this Guide for?

This Guide is aimed at financial regulators and government authorities who are looking to put in place or update their finance taxonomies. It also is intended for financial institutions, SMEs, and large companies in the private sector, industry associations, stock exchanges, and other stakeholders who are engaged in taxonomy development process as part of the technical working groups or, importantly, who will be using the taxonomies to inform decision-making, reporting and deployment of financial instruments and need clear classification systems for sustainable finance.

It will be useful for both the countries that are designing their first taxonomy and those that are in the process of updating, strengthening and expanding the scope of their existing taxonomies.

Why this guide?

As more and more jurisdictions are adopting their finance taxonomies the pool of knowledge and experience is constantly being expanded and updated. This guide is an attempt to accumulate and synthesize all the evolving knowledge in the space of finance taxonomies and provide the countries with up-to-date guidelines to help them navigate such a complex and multi-stakeholder process. This guide reflects upon lessons learned, and recommendations identified in other publications, incl. OECD (2020), World Bank (2020), CBI (2021), BIS (2021) (see Annex 1), and follow key principles defined by the G20 Sustainable Finance Working Group and endorsed by G20 Leaders¹. The referenced tools and guidelines provide valuable insights into the objectives of taxonomies and the development process.

Considering the complexity of developing and implementing taxonomies, however, due to the cross-sectoral characteristics and varying multi-stakeholder interests, more in-depth information about underlying criteria and resource considerations are provided for a smooth planning, development, and implementation process. Thus, relevant questions around process matters, but also the allocation of human and time resources and roles and responsibilities for decision-making in the development process of a finance taxonomy are addressed in this guide.

It also tries to help expand the discussion beyond 'green' and 'climate' activities, by pointing to how countries have incorporated social dimensions (poverty, human capital, gender) in their taxonomy frameworks. This will help better address the needs of most of the LMIC to tackle environmental and social challenges more coherently while not compromising economic growth.

How is the step-by-step guide structured?

The structure of the guide is aligned with the development process of a finance taxonomy. It consists of five subsequent sections covering the steps in the preparation and development process of the finance taxonomy.

Figure 1.
Stages of
taxonomy
development

STEP 1. Governance & Institutional set	STEP 2. Strategic Goals & Objectives	STEP 3. Sectors & Eligible Activities	STEP 4. Screening Criteria
The step describes the Governance structure, for relevant parts of the finance taxonomy development, including taxonomy owners, coordinator roles and participants at the operational level.	The step discusses the finance taxonomy Goals and Objectives to determine the overall scope and outcome of the finance taxonomy.	The steps outline the selection of sectors and activities that can be considered sustainable, which represents the technical core of the finance taxonomy development process by translating the scope and requirements in an actionable classification system.	
STEP 5. Consultations, Testing, Refinement, Adoption and Review			
The step briefly describes the pre-release process, which include consultations, testing and refinement, and drafting of related supporting documents and unpacks how to conduct periodic revisions to ensure that the taxonomy is fit for purpose.			

Important Considerations and Lessons Learned

It should be noted that **taxonomies are part of a broader policy toolkit** to drive the sustainability agenda encompassing regulatory measures, sustainability disclosures and reporting, use of subsidies and fiscal incentives and related policies (including carbon pricing), climate risk management, and dedicated financing mechanisms such as green development banks as well as green differentiated capital requirements (GDCRs) etc.² It should be noted that countries have adopted different mix of policies, and not all have formulated and formally put in place taxonomies (e.g., Japan).

Moreover, where taxonomies are being developed, they should be viewed as **living/evolving frameworks**. As the guide shows, countries have followed different pathways to elaborate taxonomies. E.g., some countries/regions started with climate and then included other environmental, social and transition dimensions over time (e.g., the approach of EU, South Africa and many other countries). Mexico is a pioneer in having integrated gender and social infrastructure along with climate change from the get-go).

Several countries have started focusing on priority sectors for mitigation, gradually expanding the scope in terms of sectors, and treatment of objectives over time. Thailand's Taxonomy Phase 1 only included activities contributing to the climate change mitigation objectives, and that too, it focused on two sectors: energy and transportation. Thailand Taxonomy Phase 2 will focus on the Manufacturing, Agriculture, Real Estate, Construction and Waste Management sectors. Over time, it is expected that future versions of the Thailand Taxonomy will include activities contributing to other environmental objectives (climate change adaptation, sustainable use and protection of marine and water resources, protection and restoration of biodiversity and ecosystems, pollution prevention and control, and resource resilience and transition to a circular economy).

Further, the **successful** adoption of the taxonomy hinges on a few critical aspects:

- The development of a **robust governance mechanism** for the development of the taxonomy and alignment with the country's sustainability and climate goals as well as regulatory embedding, following the testing and refinement stage.
- **Regulations** are needed to support the adoption and successful implementation. Without regulatory support, voluntary uptake could be very slow.
- Ensuring **interoperability** through measures such as the adoption of similar industry classifications and technical screening criteria as other benchmark taxonomies, can be important in cross-border flows.

2 E.g., World Bank and Institute of Finance and Sustainability. 2022; see insights from IFC 2022

- **Bringing transparency in the development and the rollout of the taxonomy** and adopting a consultative and coordinated approach with relevant ministries/departments and the participation of stakeholders can help to foster coherence and promote buy-in among users. Transparency in the development process of taxonomy also builds confidence among users of the taxonomy and international institutions. Moreover, the participation of stakeholders can help avoid confusion and ambiguity during implementation.
- It is critical to provide a rationale for the priorities focused on and to ensure **alignment of the taxonomy with the country's sustainable development goals**, related frameworks and sustainable finance strategies to help ensure smooth adoption, as the defined taxonomy would promote those sectors or economic activities that will help the country achieve its international commitments and national development plans sustainably, while ensuring that there is coherence across government's sustainable finance policy toolkit.

All these issues are focused on in this Guide as well as the ways to address them in decision making when developing national taxonomies.

Note: The guide makes every attempt to be accurate. However, given the often fast moving pace of developments, it is possible that some information has become out of date.

CHAPTER

1

FINANCE TAXONOMIES IN THE DEVELOPMENT CONTEXT

- Setting the scene
- Finance taxonomies
- Benefits of a finance taxonomy
- Challenges in designing taxonomies
- Users of a finance taxonomy
- Taxonomy use cases
- Policy goals underpinning finance taxonomy development

Setting the scene

The compounding impacts of climate change on economic growth and development necessitate significant financial commitments to facilitate timely and sufficient mitigation and adaptation measures. To achieve their Sustainable Development Goals (SDGs), Nationally Determined Contributions (NDCs), and commitments to the Global Biodiversity Framework (GBF), countries need to promote sustainable economic activities to accelerate low-carbon and climate-resilient development and investors too need to integrate climate change and broader sustainability concerns into their investment decisions and portfolio allocations.

Well-designed taxonomies

can help policymakers to develop and grow sustainable finance markets to support the achievement of environmental and other sustainable development goals. However, the complexity of and differences among taxonomies can create challenges for investors, particularly international investors. Commonalities across different taxonomies could provide a basis for creating comparable frameworks that facilitate international investment while also reflecting differing national circumstances and approaches.

OECD 2020

However, definitions and approaches to enable sustainable capital flows continue to be different across geographies and are often ambiguous. The lack of clarity on what constitutes sustainable finance makes it difficult to track capital flows into “sustainable” activities and assess whether enough capital is flowing into them. It creates uncertainty for investors and for identifying sustainable businesses among the players in the financial sector, consequently hindering capital flows to these businesses. The lack of a proper definition and classification also makes it challenging for regulators and policymakers to frame the right policy and regulatory measures for sustainable sectors.

While there is no singular globally accepted sustainable finance taxonomy framework, there are a number of key principles and characteristics that should ideally inform the development of finance taxonomies. The G20 encourages jurisdictions that intend to develop their own alignment approaches to refer to a set of voluntary principles:³

Principle 1	Ensure material positive contributions to sustainability goals and focus on outcomes;
Principle 2	Avoid negative contribution to other sustainability goals (e.g., through do no significant harm to any sustainability goal requirements);
Principle 3	Be dynamic in adjustments reflecting changes in policies, technologies, and state of the transition;
Principle 4	Reflect good governance and transparency;
Principle 5	Be science-based for environmental goals and science- or evidence-based for other sustainability issues; and
Principle 6	Address transition considerations.

3 See [G20 Sustainable Finance Roadmap](#)

The G20 roadmap actions include a focus on improving coordination at the regional and international level to facilitate the comparability, interoperability, and as appropriate, the consistency of different alignment approaches and taxonomies. The [Common Framework for Sustainable Finance Taxonomies for Latin America and the Caribbean](#) also underscores the need for comparability and interoperability with other taxonomies globally:

Interoperability is a key principle to ensure the taxonomy is developed under a methodological approach that can “communicate or align with other taxonomies”. Interoperability implies that taxonomies must be based on similar guiding principles, have design elements such as objectives, classification systems for sectors and activities that are comparable and are similar in approaches and methodologies used for defining eligibility.

United Nations Environment Programme, et. al. 2023

As underscored earlier, it’s important to recognize that taxonomies are not static frameworks. With the growing effort to ensure adequate scope and depth of the sustainable finance definitions, such frameworks are subject to periodic review and updates, and should be viewed as evolving.

Finance taxonomies

A taxonomy in the context of sustainable finance, is a classification system identifying activities, assets, and/or project categories that deliver on key climate, green, social, or sustainable objectives with reference to identified thresholds and/or targets.

ICMA 2020

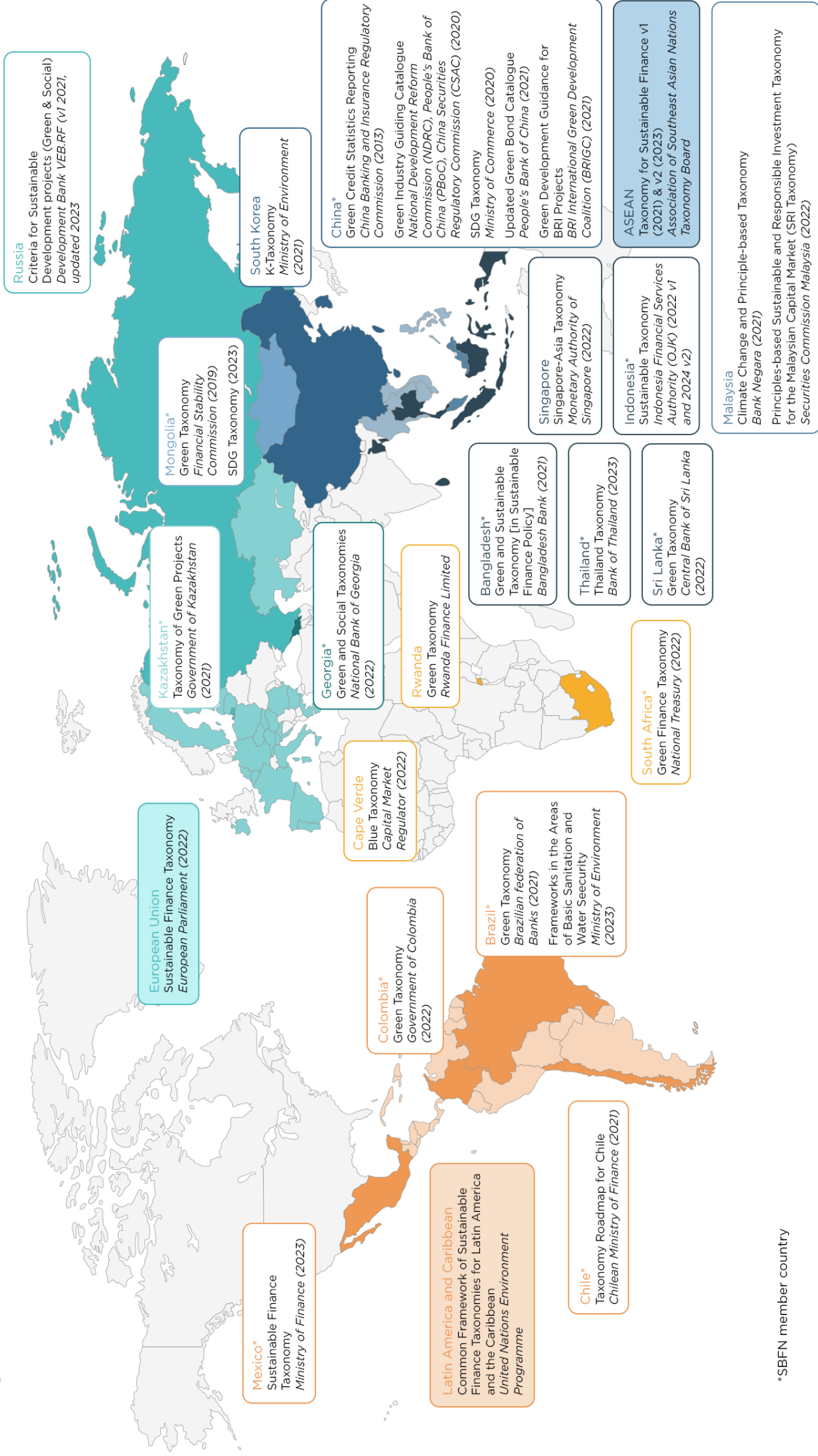
The key objective of establishing a finance taxonomy is to navigate and steer the economy in a structured and orderly way towards a more sustainable future, such as an inclusive, resilient and low-carbon economy. In recent years, countries have been actively introducing sustainable finance taxonomies to provide clear definitions and granular classification of sustainable economic activities (See Figure 2).

Yet, taxonomies are not the only tool that policymakers can deploy. In some instances, classification of the activities draws on the set of rules and recommendations defined in sectoral guidelines, frameworks and standards. Japan outlines its green and transition finance definitions in its Green Bond Guidelines, Basic Guidelines on Climate Transition Finance, etc.

Since the global emergence of finance taxonomies, the scope and thematic focus has evolved depending on the priorities of a particular country or region and growing scope. The key focus areas covered in the taxonomies include sustainability, green, climate, transition and social (see Figure 3), and increasingly also biodiversity, and other dimensions⁴.

4 See for example, EU journey, Philippines roadmap

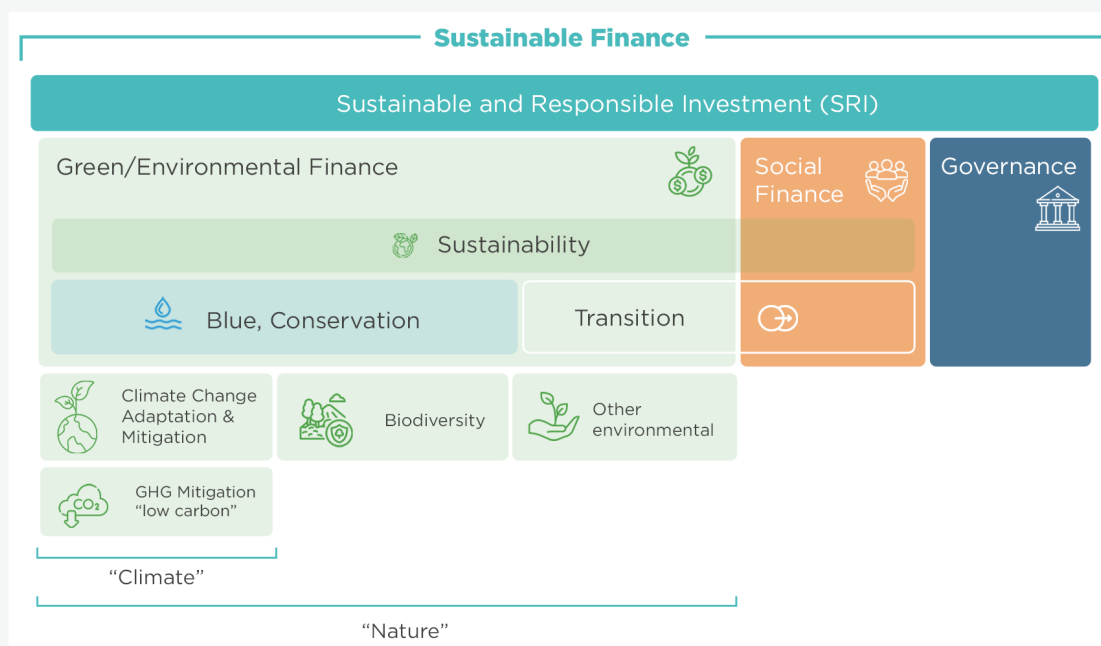
Figure 2. Roll out of sustainable finance taxonomies



Note: Figure depicts taxonomies adopted by different countries/ jurisdictions. In addition, there are a number of countries that are working on taxonomy development. For example, Nepal, India and Uzbekistan

Source: Frankfurt School

Figure 3.
Thematic focus
of finance
taxonomies



Source: World Bank and Institute of Finance and Sustainability (2022)

A green finance taxonomy

is an official classification or catalogue that defines a minimum set of assets, projects, and sectors that are eligible to be defined as “green” or environmentally friendly. A nationally agreed green finance taxonomy can support emerging national policy and voluntary private sector initiatives toward green finance by reducing costs and uncertainty in classifying a core set of green activities. Similarly, the **social taxonomy** aims to provide a classification system to determine whether an economic activity is considered socially sustainable.

While some taxonomies have adopted a binary approach (green, not green) others, e.g. ASEAN, have also adopted a ‘traffic light’ approach or shades of green (e.g. dark green to brown or Green, Amber and Red).⁵ Those starting now could learn lessons and potentially choose a more comprehensive framing or sequenced approach depending on their priorities, needs, data availability etc.

In parallel, countries normally seek to ensure interoperability and/or alignment with specific taxonomies and frameworks, e.g., [EU](#), ASEAN Taxonomy in SE Asia or the [Common Framework for Sustainable Finance Taxonomies for Latin America and the Caribbean](#) (See Chapter 4 in this guide).

A number of countries are also looking at broader alignment with sustainable development goals (e.g., SDGs in China, Mongolia and Mexico).

5 The [ASEAN Taxonomy version 2](#) uses a colour-coded system for identifying the degree to which an activity is sustainable through its contribution to an Environmental Objective (EO). Classification levels are Green, Amber and Red. OECD [Developing Sustainable Finance Definitions and Taxonomies A Brief For Policy Makers](#) underscores the identification of economic activities/financial products that are already compliant with environmental objectives (“green” or “dark green”); additionally or alternatively, identification of activities that are on a transition pathway to become green (“transition” or “light green”). There may also be a role for “brown taxonomies”, i.e. taxonomies identifying activities which are judged not compatible with environmental objectives.

Benefits of a Finance Taxonomy

A formalized finance taxonomy has multiple benefits, including:

- **Driving both the demand for and supply of sustainable finance.** A finance taxonomy can help financial intermediaries choose companies or projects based on taxonomy objectives and design financial instruments to raise capital for directed investments. For example, companies which are in the business of Green can tag themselves and be verified (to avoid risks of greenwashing and ensure credibility) as Green, which would allow institutional and retail investors to identify them more easily. In other words, it facilitates the classification of financial instruments as green/social/sustainable (for example bonds, credit/leasing portfolios, securities derived from securitization processes, investment funds, differentiated investment lines, investment portfolios and stock indices) and promotes the development of sustainability-aligned capital markets.
- **Promoting consistency and tracking sustainable finance flows.** A formal definition of sustainable finance and categorization of economic activities that are socially and environmentally sustainable can help track the amount of capital flowing into sustainable development sectors and in parallel assess whether the current flow is meeting the demand for sustainable investments. Mapping of capital flows will help stakeholders, including the government, regulators, and public and private financial institutions identify and tap the right sources of capital and deploy appropriate financial policies and measures to bridge the financing gap.
- **Designing effective policy and regulatory measures and institutional mechanisms:** With a widely accepted finance taxonomy in place, regulators, and policymakers, both at the central and state/sub-national levels, would be able to design policies and regulations and create necessary frameworks. A finance taxonomy can help align policy and regulatory measures with a common goal of increasing capital flows to identified sectors such as “green” sectors, using public resources to unlock private investment at scale and helping set up sectoral and geographical targets and monitoring projects. In Bangladesh, the central bank set a minimum target of five per cent for direct green finance, based on the taxonomy for all banks and FIs.⁶ Countries can benefit from periodically reviewing regulatory measures and incentives to identify what is working and what is not.
- **Assessing financial risks and opportunities from climate change:** A finance taxonomy helps financiers/investors identify businesses/projects contributing to the country’s goals and helps them explore investment opportunities. A common taxonomy will also assist the financial sector in identifying, assessing, and controlling financial risks, developing climate change risk management systems, increase capital allocation to identified sectors.
- **Better reporting and disclosures:** A formal finance taxonomy can mitigate the risks of green/SDG washing and bring better reporting and disclosure to investors and financiers (European Commission, 2017). Entities usually need to disclose how, and to what extent, their activities are associated with activities that are considered as environmentally sustainable.

6 Bangladesh put in place a Sustainable Finance Policy in December 2020 and a Green Bond Financing Policy (including a Green Bond Taxonomy and Green Bond Framework) in 2022. The Taxonomy is currently being reviewed and updated.

Challenges in Designing Taxonomies

While a finance taxonomy is noted to be a crucial component of countries' broader development and climate goals, it's important to note the various challenges that policy makers face:

- **Competing interests:** Countries often have different interests and, within countries themselves, policymakers often have to balance different interests and priorities including on the timeline for transition, where it is important to build consensus on science-informed pathways, adopt sunset clauses and ensure financing for countries, firms to transition sustainably.
- **Localization, Harmonization and Interoperability:** Developing a taxonomy that harmonizes with international (taxonomy) practices may be a challenge. As economic development progress widely varies between countries it may be difficult or counterintuitive to emulate the taxonomies of developed countries. However, at a minimum, it is important to promote comparability and interoperability across the taxonomies.⁷
- **Data and implementation bottlenecks:** There are likely to be data, institutional, process and capacity-based bottlenecks which may hinder the implementation, monitoring and updating of taxonomies and call for support to address these challenges. There has to be an upfront focus on addressing these challenges as part of the iterative rollout process (e.g., starting with a few priority sectors, testing, learning and scaling out) and a focus on identifying sources of data/innovations for verification. Countries can benefit from using existing taxonomies as a base for developing contextualized taxonomies rather than starting from scratch.

Users of a Finance Taxonomy

The finance taxonomy is essentially formulated for financial institutions (banks, non-banking financial institutions, development banks, mortgage corporations, credit guarantee funds, and foundations), regulators and policymakers (financial regulators and ministries). However, it can also be used by various stakeholders such as investors including public and private asset managers, equity investors, wealth managers and investment firms, verification and standard-setting companies, thematic bond issuers and project developers to align their decision-making, organizational processes and products and services with sustainability outcomes.

Box 1.

Users of Malaysia's Climate Change and Principle-based Taxonomy

Malaysia's Climate Change and Principle-based Taxonomy (CCPT) lists its targeted users as licensed financial institutions including banks, investment banks, international and domestic Islamic banks, insurers, reinsurers, takaful and retakaful⁸ operators (market participants) and prescribed development financial institutions. Additionally, the taxonomy mentions that the classification system has been developed such that it may be used to guide investment and asset selection decisions by wider financial sector stakeholders such as capital market players and intermediaries. The taxonomy can also be used by rating agencies and the public sector to guide policy formulation, prioritisation, and funds allocation.

Source: Malaysia [Climate Change and Principle-based Taxonomy](#)

7 See United Nations Environment Programme, 2023. [Common Framework of Sustainable Finance Taxonomies for Latin America and the Caribbean](#). China and the EU collaborated and produced the [Common Ground Taxonomy - Climate Change Mitigation](#) for the International Platform on Sustainable Finance (IPSF). It provides a methodology to identify and provide transparency on the commonalities and differences between some features of the EU and Chinese taxonomy.

8 (Re-)takaful – Islamic (re-)insurance

In the EU Taxonomy the taxonomy regulation, Article 2⁹ lists finance taxonomy mandatory and voluntary users (See Table 1).¹⁰ The ASEAN taxonomy version 3 lists all the potential users and their possible use cases (See Annex 2).

Table 1. Financial market participants based on the EU Taxonomy Regulation

Article 2 Regulation Users	Voluntary Users
Insurance Undertakings (IBIPs)*	Insurance Underwriting
Institution for Occupational Retirement Provision (IORP)	Project Finance*
European long-term investment funds (ELTIFs)	Corporate Finance*
Pension Product manufacturer	Indices
Alternative Investment Fund Manager (AIFM)*	Venture Capital*
Pan-European personal pension product (PEPP) provider	Private Equity*
Venture Capital Fund manager*	Mortgages
Social Entrepreneurship Fund manager*	Commercial Building Loans
Undertaking for collective investment in transferable securities (UCITS)* **	Home equity loans and mortgages
Credit institution providing portfolio management	Car loans

Note: *Potentially for investment manager users. **Securitisations, indices, venture capital or private equity conducted by investment banks do not fall under the scope of the regulation. They would not have to report on how they relate to the Taxonomy. However, the funds that replicate the indices, aggregate, or package the green securitisations or private equity investments which are sold as AIFs, UCITS, EUVECA funds or EU SEF would have to disclose the extent to which they use the taxonomy.

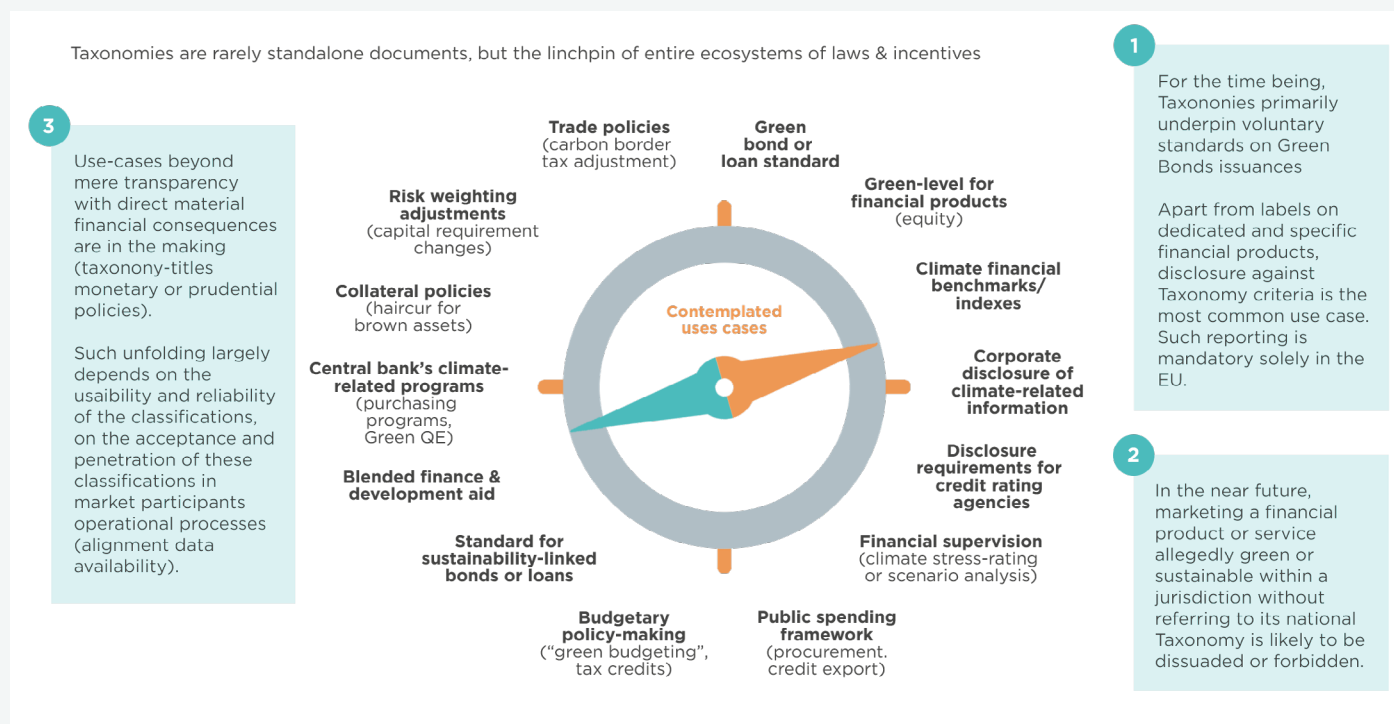
Financial institutions, including commercial banks, institutional investors, and private equity funds, can choose companies or projects based on the sustainable finance taxonomy and design financial instruments (loans, bonds, funds, indices, etc.) to market among investors. The companies that are in the business of sustainability can tag themselves as sustainable, which will allow these users to attract investments.⁹ Besides, sustainable finance taxonomy can also help investors to conduct negative (excluding all the non-sustainable sectors) and positive (including only the sustainable sectors/sub-sectors) screening, tilt the portfolio to sectors (possibly to sustainable sectors), and develop a sustainable-themed investment strategy. A sustainable finance classification framework helps financiers/investors to identify businesses/projects that contribute to the transition to a sustainable economy and helps them explore investment opportunities emanating from this transition.

9 Article 2 2019/2088

10 Undertakings subject to the Non-Financial Reporting Directive (2013/34/EU).

Taxonomy use cases

Figure 4. The various use cases of taxonomies



Source: Natixis 2023

As illustrated in Figure 4, taxonomies are not standalone documents, and can have radical implications for economies based on their use and application. While a more detailed description of the application of taxonomies is described in Chapter 3, we outline a few examples below:

- **Developing new products:** China's 2021 green bond catalogue guides the issuance of green financial bonds, green corporate bonds, green debt financing instruments and green asset-backed securities. China also has a SDG Finance taxonomy (China) which can be used on a voluntary basis (see Box 2).¹¹ In Mongolia, financial institutions creating sustainable finance products (e.g. green bonds, green loans) need to align with the taxonomy. In late October 2023, the European Council adopted a regulation on European green bond standard based on the finance taxonomy¹² which is meant to guide corporate green bond issuers. The Monetary Authority of Singapore is also looking to support the Taxonomy in debt financing such as green bond/loans, amongst other things.
- **Disclosure:** Taxonomies serve as the foundation for sustainable activities, with sustainability reporting standards building on this through aligned disclosure requirements. E.g., the EU Taxonomy provides a classification system for sustainable economic activities that is applied to the Corporate Sustainability Reporting Directive (CSRD) and the Sustainable Finance Disclosure Regulation (SFDR). The CSRD is relevant for the SFDR, as it provides part of the information to be disclosed for the SFDR report. Companies affected by the SFDR, in turn,

¹¹ See CBI 2022. In April 2021, the China's PBOC, together with the NDRC and CSRC, jointly released the Green Bond Endorsed Projects Catalogue (2021 Edition) representing another major development in unifying its domestic green definitions. Widely considered the leading green taxonomy for China, the 2021 Edition Catalogue also adopts the do no significant harm (DNSH) principle, aligning with international standards.

¹² See EC 2023. European Green Bonds: Council adopts new regulation to promote sustainable finance

Box 2.

Bonds issued in line with the SDG Finance Taxonomy (China)

Source: Xu Qing & Christophe Nedopil Wang 2020. New Development Bank [Annual Report 2021](#)

The SDG Finance Taxonomy (China) was co-created by Chinese national and international experts from various areas as a public good to accelerate capital flows that advance the SDGs. In the first phase, the goal is for voluntary adoption of the Taxonomy in China and its international adaptation. The New Development Bank (NDB) was the first issuer to use the UNDP SDG Impact Standards for Bond Issuers as well as the SDG Finance Taxonomy (China) in the Debt Capital Market. It issued a three year SDG bond worth CNY 5 billion (USD 700 million) on China's interbank market in March 2021. Further, the National Association of Financial Market Institutional Investors (NAFMII) also took reference of the SDG Finance Taxonomy (China) and launched its first social bond and sustainability bond pilot in China. Three bonds totalling US\$262 million have been issued under this pilot.

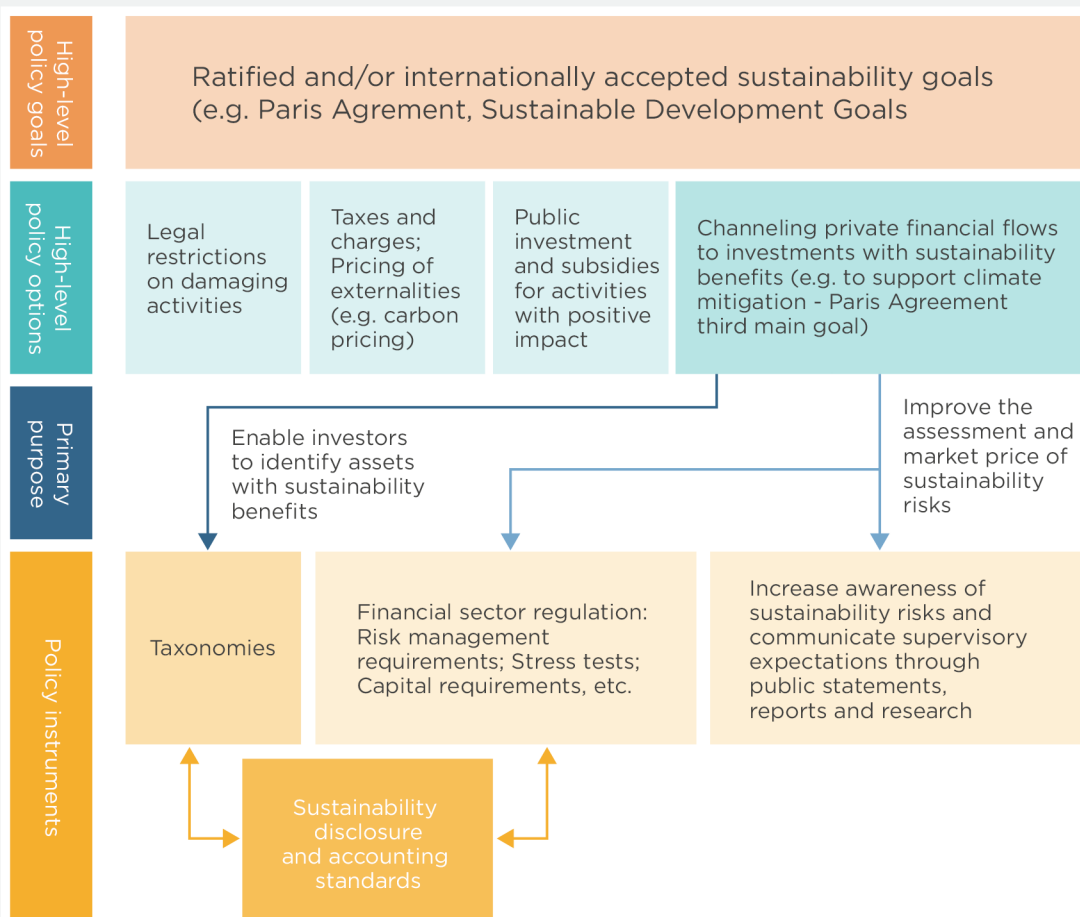
need the EU Taxonomy metrics from the CSRD report of their investment objects to fulfill their reporting obligations. The success of a Taxonomy is enabled by high quality disclosure, which is ideally aligned with global reporting standards and frameworks, such as the ISSB, SASB and GRI.

- **Supervision and regulation:** In Mongolia, the central bank tracks the green loan market based on the taxonomy. Malaysia's taxonomy is designed for financial institutions to classify the assets in their lending and investment portfolios, measure the climate-related risks and exposure, and report to Bank Negara Malaysia (BNM) for internal risk management and supervisory purposes.

Policy goals underpinning finance taxonomy development

Figure 5.

Taxonomies as a policy instrument to achieve high-level sustainability goals



Source: Ehlers, Gao and Packer 2021b

The goal and the thematic areas of the taxonomy should be in line with national development priorities. This is because finance taxonomies do not exist in isolation and are determined and influenced by existing systems. The Bank of International Settlement (BIS) (2021) highlights, that it is essential to align the taxonomy with high-level policy objectives as well as measurable interim targets. High-level policy goals determine the line of sight of policy development. Without such alignment, any labelled asset will face ongoing market or regulatory scrutiny.¹³

Typically, strategic goals refer to national development plans aligned with NDCs and the national SDGs.

A finance taxonomy can be framed as a blueprint for a (sustainable) economy referencing to how the future economy is intended to look. The adoption of an economic classification today can drive economic progress that supports an aligned economy tomorrow. This intertemporal function can make finance taxonomies an auspicious tool to drive significant change by enabling market earnings per share (EPS) to date.

Sustainable finance and taxonomy roadmaps

The objectives of strategies and roadmaps vary based on whether they are related to global/regional fora, such as the [G20 Sustainable Finance Roadmap](#)¹⁴ or country level such as those of Indonesia, Morocco, Mongolia, Philippines, Sri Lanka and Thailand.¹⁵ While the former broadly explains the need for a systematic and coordinated strategy for integrating sustainability into financial systems, the latter may adopt a country-specific view, such as putting forward a sustainable financial vision for the country.

Sustainable finance strategies and roadmaps help achieve multiple targets within the financial system, including:

- Assessing the current sustainable finance landscape to identify gaps, bottlenecks and areas that require attention and further action and ensuring policy coherence;
- Identifying opportunities to increase financial flows to priority sectors;
- Providing streamlined guidance and action plans to achieve sustainable finance objectives;
- Enhancing comparability and interoperability of approaches to ensure alignment of investments to sustainability goals;
- Improving sustainability disclosure and reporting;
- Strengthening the involvement of international financial institutions in advancing the sustainability and climate agenda.

The strategy or roadmap should ideally be developed at the initial stage to ensure policy coherence and predictability while situating the role and timing of the finance taxonomy itself. In Mongolia, the SDG Finance Taxonomy is designed to channel finance towards sustainable development as formulated in the Integrated National Financing Strategy (see Box 3) and is expected to be operationalized in 2025. The Philippines' Sustainable finance roadmap (2021) outlined the key policy frameworks to be established and subsequently, the Central Bank of the Philippines (BSP), on 22 February 2024, approved the use of a new sustainable finance taxonomy for banks. See Box 4.¹⁶

13 [A taxonomy of sustainable finance taxonomies](#)

15 See IFC-facilitated SBFN guidance [SBFN Toolkit Developing Sustainable Finance Roadmaps](#)

16 See [Guidelines on the Philippine Sustainable Finance Taxonomy](#) (23rd February 2024). This initiative was carried out under the auspices of the Financial Sector Forum (FSF) in line with the directives outlined in the Philippine Sustainable Finance Roadmap, which was issued by the Inter-agency Technical Working Group for Sustainable Finance (also known as the Green Force) in October 2021.

Box 3.
The Integrated National Financing Framework acts as a policy framework for the SDG finance taxonomy

Mongolia became one of the first countries (following China) in the world to formulate an SDG finance taxonomy in 2023. This builds on its National Green Taxonomy (2019). It is developed in pursuance of the National Integrated Financing Strategy adopted in 2022 as part of the Integrated National Financing Framework (INFF) and is designed to drive investment to achieve the sustainable development goals.

To date more than 85 countries have used and are using the INFF approach to strengthen financing for sustainable development at the country level. A total of 13 national and subnational governments now have an operational financing strategy, and over 50 countries are implementing reforms to financing policies, instruments and institutions shaped through their INFFs, which are embedding sustainable development into fiscal policies, financial markets and private sector operations. They are also catalysing SDG-aligned investment and deploying new and innovative SDG-aligned financial instruments.

Analysis of such reforms implemented by 17 countries has found that US\$16 billion in new finance has been leveraged for investment in sustainable development and alignment and scope for alignment of more than \$32 billion—initial emerging outcomes that speak to the scale of transformation that is possible if countries bring their INFFs to maturity.

There is a growing focus on embedding the SDGs into the architecture of the financial sector. Many countries are prioritizing sustainable finance taxonomies, sustainability reporting and disclosure frameworks, and sustainability impact management and measurement as key areas of reform. Taxonomies are being established in many contexts to provide a common framework for classifying sustainable finance and facilitating cross-border private capital flow to finance climate, green and social development priorities.

Twenty-three countries have prioritized green or sustainable finance taxonomies within their INFF, with work ongoing in countries including Armenia, Cambodia, Kyrgyzstan, Maldives, the Philippines, the Republic of Moldova, Rwanda, the United Republic of Tanzania and Uzbekistan.

Source: UNDP, [Integrated National Financing Frameworks](#)

Box 4.
Outline of the Philippine Sustainable Finance Roadmap (2021)

1. Sustainable Finance Overview
1.1 Definition of Sustainable Finance
1.1.1 Global
1.1.2 Local
1.2 Drivers of Sustainable Finance
1.3 Scaling Finance for the Sustainable Development Goals
1.3.1 Architecture
1.3.2 Current landscape

...

Box 4.

Outline of the
Philippine Sustainable
Finance Roadmap
(2021) (continued)

2. Philippines Sustainable Finance Roadmap

2.1 Development Objectives

2.2 Details of the Different Pillars

2.2.1 Rationale

2.2.2 Discussion of the Pillars

3. Strategic Plans to Develop Sustainable Finance in the Philippines

3.1 Creating a Conducive Environment

3.1.1 Policy gap

3.1.2 Integrating sustainability considerations into macroeconomic policies and regulations

3.1.3 Strengthening coordinating efforts within the financial ecosystem

3.1.4 Embedding sustainability into the risk management of the banking, insurance, and asset management sectors

3.1.5 Encouraging sustainability and climate-related disclosures

3.1.6 Conducting capacity building

3.1.7 Joining international initiatives on sustainable finance

3.2 Mainstreaming Sustainable Finance

3.2.1 Financing gap

3.2.2 Promoting Sustainable Financial Products

3.2.2.1 Multilateral Blended Finance

3.2.2.2 The Agri-Agra Reform Credit Act of 2009

3.2.2.3 Market Access

3.2.2.4 Incentives

3.2.2.5 Bond Issuance by the Government

3.2.2.6 Sustainability Index

3.2.2.7 Resilience Financing

3.2.2.8 Green Investment Vehicle

3.2.3 Improving the Sustainable Finance definition and creation of a principles-based taxonomy

3.2.4 Tracking Sustainable Finance flows

3.3 Developing a Sustainable Pipeline

3.3.1 Investment gap

3.3.2 Driving sustainable investments

3.3.3 Financing low carbon energy

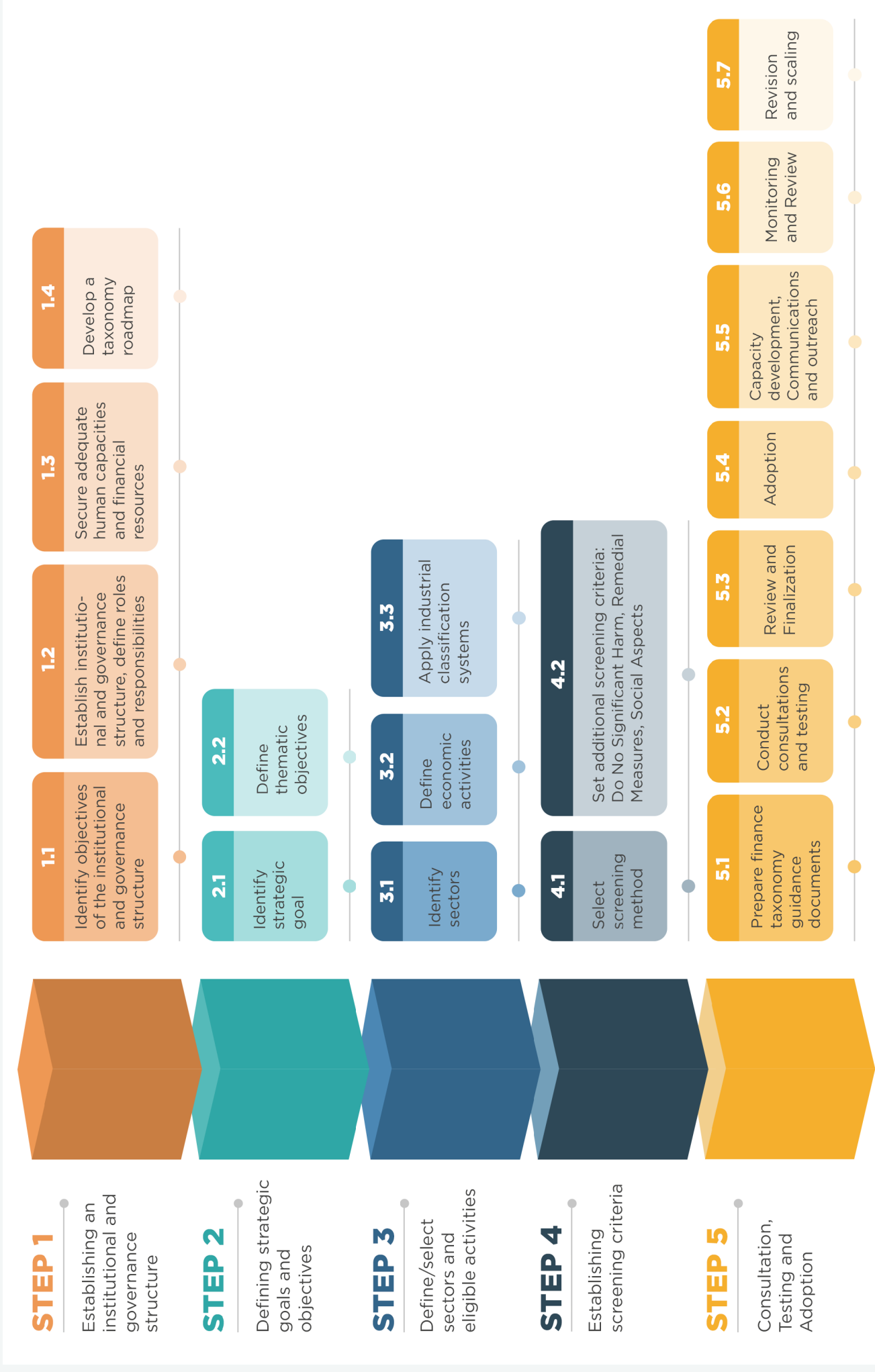
3.3.4 Financing other SDGs

3.3.5 Establishing a sustainable pipeline database, both for public and private sector projects

3.3.6 Progress monitoring and regular updating

Source: Philippine Sustainable Finance Roadmap (2021)

Figure 6. Taxonomy development process¹⁷



17 Illustrative only, feedback loops and iterative revisions especially in the latter part or the taxonomy development are not illustrated here

CHAPTER

DESIGNING TAXONOMIES

2



STEP 1. ESTABLISHING AN INSTITUTIONAL AND GOVERNANCE STRUCTURE



Key learning outcomes

Understanding the constitution of the institutional and governance structure for the taxonomy development process, including:

- Objectives of the institutional and governance body
- Selection of members of the institutional and governance body
- Roles and responsibilities within the governance structure
- Ensuring an ambitious consensus within the governance structure and managing diverging interests and views on the timeframe, particularly for transition pathways
- Planning for sufficient financial and human capacities for the taxonomy development process
- Grievance mechanism to ensure accountability
- Developing a taxonomy roadmap

Stakeholders for initiating the process

The very early [initial] idea and “kick-off” – to start a finance taxonomy development, can originate from appointing persons or groups within an institution, or from the institution itself responsible for overseeing the whole process. To name a few: government members, ministries, financial regulators, or financial sector associations. Irrespective of who or which institution initiates the process, the next steps will require a team to balance the related interests of the stakeholders [institution].

Objectives of the institutional and governance structure

The key objectives of the institutional and governance structure for planning and developing the finance taxonomy are to ensure:

- Accountability, transparency, credibility, and predictability throughout the process
- Ownership, considering that a finance taxonomy needs to continue to evolve over time
- Commitments and buy-in of different stakeholders, such as ministerial delegates and authorities, policymakers and regulators, the private sector, research institutions and civil society.

Establish institutional and governance structure, define roles and responsibilities

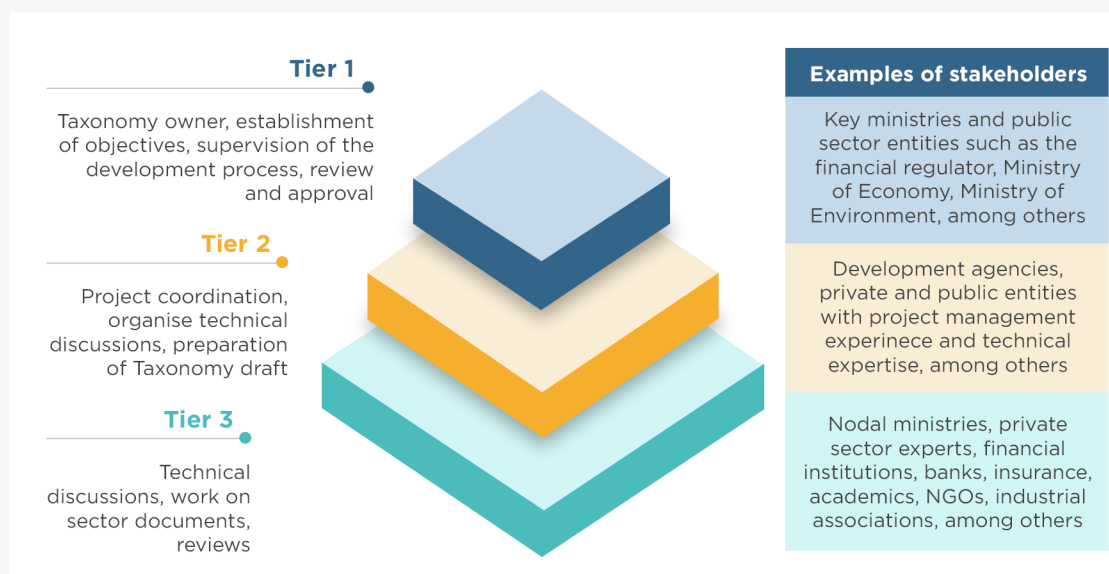
A clear designation of roles, mandates and responsibilities supports the successful development of a finance taxonomy. Typically, institutional and organizational structures for taxonomy development follow a three-tiered hierarchical approach (see Figure 7 and Table 4), which can be simplified, based on the context:

Tier 1 constitutes the strategic level finance taxonomy owner and is a fundamental building block of the system. It is usually structured as a committee or a council. Members are responsible for agreeing on the strategic goal, oversight, and respective policies for taxonomy development. Strategic level members should include high-level representatives of different ministries, authorities or regulators. This committee can be established specifically for taxonomy development or attached to existing high-level cross-sectorial structures such as national climate change committees, presidential committees, or economic councils.

Tier 2 consists of managing working groups and provides additional context and granularity. Members are responsible for the coordination of technical consultation processes, identification of chairs and lead advisors, and stakeholder consultations. Overall, the objectives and functions of the coordination level vary and may include coordination of strategic goal expectations between taxonomy owners (Tier 1) and users (including but not limited to the scope of Tier 3). Managing working groups also provides inputs and feedback on design decisions and leverages broad knowledge from coordination-level ecosystems. If appropriate committees already exist, the finance taxonomy development can potentially partly or fully be integrated into them.

Tier 3 is the technical/operational level, which focuses on specialized topics, and consists of a broader set of stakeholders, including target users and national and international sector experts. This level can also include the above-mentioned third-party coordinators with global knowledge and expertise to support the taxonomy preparation process. The Tier 3 members are involved in the actual report research and preparation process, including scoping assessments, stakeholder consultations, framework development and report writing. Technical consultants may be engaged in specific tasks such as baseline assessments, research and scoping studies which inform the framework development and drafting of the taxonomy document.

Figure 7.
Governance structure for taxonomy development



Source: adapted from UNEP 2023

Table 2. Institutional and governance structure of a finance taxonomy development

Level	Roles and responsibilities	Example of the ASEAN Taxonomy	Example of Colombia
Ownership – strategic level (Tier 1)	Owner of the taxonomy	The ASEAN Taxonomy Board (ATB) oversees all activities and is responsible for approval. The ATB is set up under the auspices of the ASEAN Finance Ministers and Central Bank Governors' Meeting (AFMGM) and is jointly driven by the ASEAN Capital Markets Forum (ACMF), the ASEAN Insurance Regulators' Meeting (AIRM), the ASEAN Senior Level Committee on Financial Integration (SLC) and ASEAN Working Committee on Capital Market Development (WC-CMD). The Sustainable Finance Institute Asia (SFIA), a neutral independent platform, hosts and provides administrative support to the ATB.	The Institutional Taxonomy Supervisory Committee was built on the joint leadership of Colombia's financial regulator - Superintendencia Financiera de Colombia (SFC); Ministry of Finance and Public Credit Members: Ministry of Environment and Sustainable Development; the National Planning Department, and the National Administrative Department of Statistics.
	Establishment of the strategic goal		
	Overall supervision		
	Adoption and approval		
	Reporting to high-level representatives (e.g., ministerial level, president, cabinet)		
Coordination – policy level (Tier 2) ¹⁸	Project coordination	Within the ATB, four sectoral bodies and major working committees were set up under either the AFMM (Capital Markets Forum; Working Committee on Capital Market Development; Insurance Regulators Meeting) or the ACGM (Senior Level Committee on Financial Integration). These sectoral bodies drove the development of the Taxonomy.	The taxonomy development was carried out by two groups- project coordinators, including multilateral organizations and international consultants, who were responsible for coordinating the technical evaluation, technical consultation process and preparation of the first draft; and project consultants who mainly facilitated the consultation process and technical discussions.
	Organizing technical level discussions		
	Preparation of drafts		
	Reporting to the strategic level		
	Preparation of drafts		
Technical – operational level (Tier 3)	Technical work	Three working groups were established. Each group had a separate taxonomy-related role and regularly reported to the ATB on its activities. Each working group had a chair and vice-chair selected from ATB's membership.	The technical work was carried out by lead advisors and technical experts. Lead Advisors served as sector team chairs, reviewed the initial list of activities and eligibility criteria, conducted stakeholder consultations, and worked with the project coordinators to select technical experts for their respective sector teams. Technical experts, including academia/research, think tanks, public entities, and representatives of industry, participated as members of sector teams.
	Consideration of sector documents		
	Reviews and comments		
	To be integrated ad hoc /requested/		
	Invited specifically		
	Reporting by request from Tier 1 or Tier 2		

Oftentimes, jurisdictions choose to have a more simplified, two-tier structure. In this case the coordination functions are assumed by the Steering Committee (Tier 1) and all the technical work is done by the inter-ministerial working group (Tier 2). See Box 5 (example of Papua New Guinea) and Annex 3 (the case of [Mongolia](#) and [Colombia](#)).

Also, it is to be noted that international third-party coordinators have worked across Tiers 1, 2 and 3, providing coordination, technical and management support to countries in developing their sustainable finance taxonomies. For example, UNDP has been supporting governments/secretariats (Tier 1) in India, Thailand, and Mongolia, among others, to coordinate the process, identify key stakeholders for engagement across Tiers 2 and 3 and provide guidance on the management and technical considerations of the taxonomy development process. The engagement of third-party coordinators, often multilateral agencies or international organizations with extensive experience in providing coordination and technical support to countries in developing their finance taxonomies, brings in an international perspective and helps ensure harmonization across geographies (see Annex 4).

Key considerations for selection of governance stakeholders

- The local context plays a crucial role in identifying suitable stakeholders and ensure representation at different levels.
- Including targeted users of the taxonomy and stakeholder groups in the governance structure can enhance alignment and facilitate a smooth process.
- The determination of feasible stakeholders for Tiers 1 and 2 (coordination and technical levels) primarily relies on official mandates which reflect existing expertise, capacities and traditional responsibilities.

The engagement of various stakeholders in defining the sustainable finance taxonomy can lead to a more well-rounded and effective strategy that incorporates various aspects and potential impacts on different stakeholders. The presence of the Central Bank and the Ministry of Finance in the steering committee is critical for the design and implementation of the taxonomy. The induction of an international institution in the steering committee, coordination and technical working group (Tiers 1-3) will help align the taxonomy with international practices and help strengthen the capacity of relevant stakeholders on implementation, use, scaling and periodic revision of the taxonomy. The involvement of local financial education institutions can ensure that strategies are tailored to the specific context and needs of the local community. Table 3 provides an illustrative list of potential stakeholders for the different institutional and governance tiers.

18 Project coordination and organization of discussions are understood as a dichotomy between administrative and policy level work. Oftentimes, at the country level, Tier 2 and Tier 3 together form technical working groups, along with the Tier 1 steering committee for strategic oversight. See Annex 3 - the case of [Mongolia](#).

Table 3. Potential stakeholder groups in the governance structure

Name	Strategic (Tier 1) ¹⁹	Coordination (Tier 2)	Technical/ Operational (Tier 3)
Ministry of Finance	X	X	x
Ministry of Environment	X	X	x
Other Ministries with knowledge about potentially taxonomy goal related public and private investments ²⁰	x	X	x
Regulators/Institutions in charge of oversight and regulation for the banking and insurance sectors and securities markets	X	X	X
National public finance institutions	(x)	X	(x)
(Local) credit institutions / financial institutions in general, particularly those supporting sustainable investments		X	X
Data provider / Bureau of statistics		X	(x)
International finance networks		X	(x)
Investment firms		(x)	x
Insurance undertakings		(x)	x
Stock exchanges		(x)	(x)
Academia		X	(x)
Multilateral institutions such as UNDP, World Bank		X	x
Non-governmental organizations		(x)	x
Real economy actors			x

Note: Authors compilation building on World Bank (2021). The list is illustrative/non-exhaustive. Typically, some stakeholder groups might be represented by more than one member. E.g., financial institutions represented by different banks /organizations. (x) are stakeholders that are less likely to be included in this group.

¹⁹ While the inclusion and participation of government organizations is crucial in Tier 1 for strategic oversight, their involvement in Tiers 2&3 can be subject to their capacity and bandwidth for engagement.

²⁰ Government departments or entities in charge of setting the national climate change and sustainable development agenda and economic planning

Box 5.

Governance
of Papua New
Guinea's Taxonomy
Development
Process

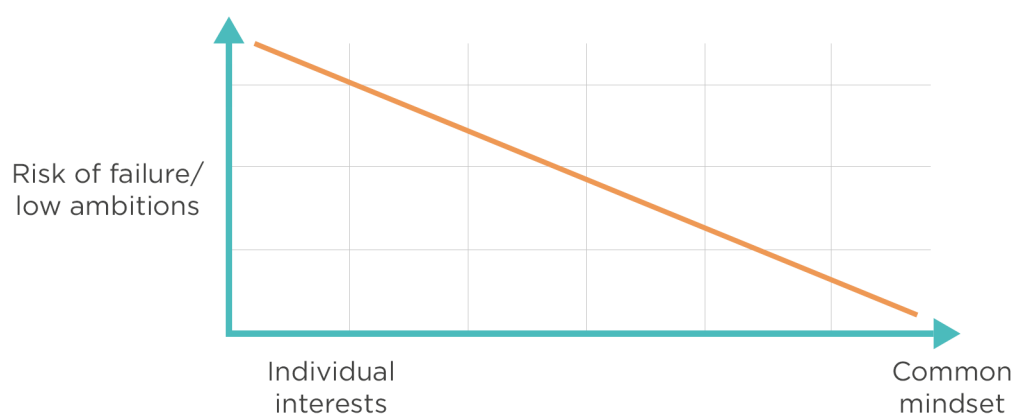
Source: Inclusive Green
Finance Policy of Papua
New Guinea 2023

Papua New Guinea's taxonomy development was guided by the country's broader climate and environmental goals, more specifically six objectives: climate change mitigation, climate change adaptation and resilience, sustainable use and protection of water and marine resources, pollution prevention and control, conservation and resource efficiency, and protection and recovery of biodiversity and ecosystems. The process was led by a Steering Committee (Tier 1) and supported by a Technical Working Group (Tiers 2 and 3). The Technical Working Group comprised policymakers, technical specialists, industry professionals, and other subject matter experts representing different sectors, including the national government, financial industry, NGOs, and corporations. The steering committee comprised the Central Bank, the Ministry of Finance, other ministries, international institutions, and local financial education institutes. The Steering Committee and Technical Working Group reviewed all the documents. The Steering Committee was the final approver of the document.

Managing diverging interests and building a common understanding

Figure 8.

Trade-off between
common ambition
and individual
interests



Note: Authors' illustration.
Non-exhaustive, only
illustrative.

A shared understanding of the strategic goal, and the alignment of institutional interests with the taxonomy's ambitions are essential prerequisites for its success. For the technical working group, it is important to gather inputs from a diverse range of stakeholders and should ideally be open for all interested individuals and stakeholders to ensure applicability and take up. However, while considering interests of different stakeholders, the taxonomy should not sacrifice the ambition of achieving national climate and social goals, by including harmful industries, allowing for technology lock in, etc.

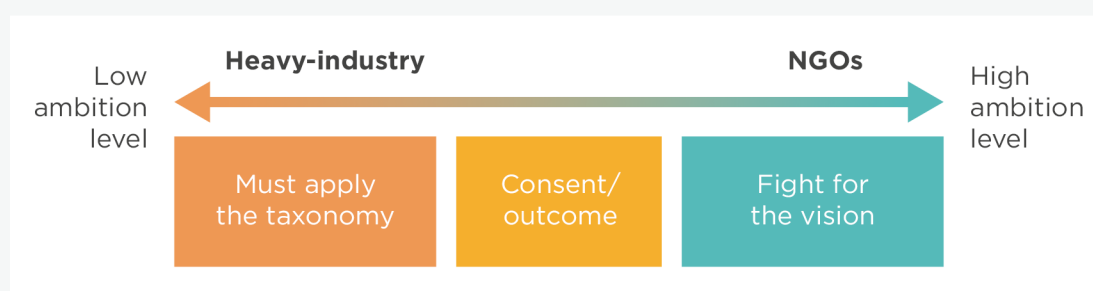
Opposing interests can arise from different stakeholder groups having varied goals. For example, representatives from coordination and technical level (Tier 2 and 3) are connected to specific home institutions with different interests and ambitions. On one hand, Civil Society Organizations (CSO) typically set the bar very high based on the goal of advocating for quick and orderly transformation of the economic base towards a more equitable future to "Leave no one behind". On the other, finance and industry actors who must apply the taxonomy after adoption, face potentially high costs and degradation of the running (but unsustainable) business models. There are two direct risks posed by a tight finance taxonomy regime with high ambition levels:

- Significant transaction costs for setting up institutional monitoring and reporting schemes (e.g., consider data and human resource gaps);
- Potential tax discrimination, drawback of future capital flows, and other disadvantages resulting from an adopted finance taxonomy regime (Box 6).

Thus, taxonomy adopters tend to be more conservative as they must apply the finance taxonomy and factor in potentially limiting assumptions (e.g., challenges of data and human resource availability). As illustrated in Figure 9, it is likely that the outcome and consent (e.g., agreement on the ambition level) will end up in the middle.

Figure 9.
Different interests,
different ambitions

Note: Only illustrative,
non-exhaustive. Authors'
compilation



The following measures can support a common mindset and lower the risk of failure:

- Integrating strong transparency measures, such as rules about decision making;
- Referring to the international and national strategic development agendas (Paris Agreement, NDCs, NAPs, Climate Acts, etc.), standards and the criteria established in respective sectors (green building codes, waste management regulations, etc.);
- Communicating on regular basis, such as publishing progress reports;
- Mapping of stakeholder priorities and potential to lobby for specific interests.

Box 6.
Engaging Diverse
Stakeholders in
Mexico's Sustainable
Taxonomy

The Ministry of Finance and Public Credit led the development of the Sustainable Taxonomy of Mexico (launched in March 2023), with a commitment to inclusivity. Recognizing the importance of diverse perspectives, the Ministry strategically involved development banks, government regulators, private sector (including banks), international development agencies, and representatives from different sectoral associations. The selection of the stakeholders was deliberate, with the aim of leveraging a broad range of expertise and insights. To ensure continued collaboration and transparency, the Ministry established robust communication channels with both the federal government and financial stakeholders. This maintained high levels of engagement throughout the taxonomy development journey, creating a collaborative framework that facilitated the integration of diverse viewpoints in shaping Mexico's Sustainable Taxonomy.

Source: Sustainable
taxonomy of Mexico 2023

Ensuring financial resources and human capacities for the development process

The governance of the finance taxonomy needs to include systematic governance project oversight and consider how to best address the following:

- **Resource Constraints:** Budget and human resource limitations while planning, allocating, and disbursing resources, especially in low-income countries with scarce resources
- **Milestones and Tracking:** Development of realistic milestone, timeline and tracking process to document progress and status of taxonomy development
- **Strategic coordination:** Well-planned coordination to maintain and update the development process based on financial and human resources required
- **Mainstreaming:** Positioning and housing the taxonomy within institutions and the existing political landscape to co-determine the availability of human and financial resources
- **Managing capacities/availability:** Budgeting of bottlenecks in availability of governance members, especially for Tier 2 as the coordination team mainly constitutes senior sector experts with high workloads
- **Monetary incentives:** Integration of compensation schemes (e.g., monetary compensating for a reduction of regular workload) to ensure full commitment and ensure/facilitate human resources
- **Garnering international support:** Opportunities for garnering support from international partners to facilitate taxonomy development and overcome financial constraints in the development process
- **Trainings and capacity building:** Delivery of trainings to help participants understand their roles within the governance structure and of periodical trainings as a “refresher” for existing governance members, and orientation of new members.
- **Flexible governance structure:** Incorporate flexibility to allow for adjustments in governance structure
- **Communication channels:** Effective communication of modifications in development plans to help target users stay informed about the process and timeline.

Developing a taxonomy roadmap

While a sustainable finance strategy or roadmap outlines the broader objectives for sustainability alignment of the financial system, the taxonomy roadmap outlines the steps and timeline for the development of the taxonomy itself. I.e., once the governance structures are formed, the expert group can start engaging in high-level consultations and research to frame the main direction and scope of taxonomy, which is then outlined in the **taxonomy roadmap**. It is essentially a conceptual document that helps to better understand the potential application of the national taxonomy and analyzes its benefits and drawbacks. It is not an obligatory element but can be a useful scoping exercise that can help better frame the taxonomy.

It usually builds on the overview of existing taxonomies as well as different pathways to consider in creating a national taxonomy. The roadmap also highlights each of the key elements involved in the elaboration of a taxonomy. It comes with a set of recommendations that inform the taxonomy development. Consultations with the stakeholders is important at this stage to inform the roadmap development. In both Canada and Chile the roadmap was elaborated based on the set of consultations, surveys and capacity development sessions with the stakeholders.

Box 7.Taxonomy
Roadmap for Chile**Source:** Chile Taxonomy
Roadmap (2021)

The Taxonomy Roadmap for Chile serves as a guide for the Chilean Government on steps needed to elaborate the country's sustainable/green taxonomy. It explains the conceptual aspects involved in the development of the taxonomy, global evolution of finance taxonomies and their potential applicability for Chile. It outlines the methodology, objectives, and application of other international taxonomies such as the European Union (EU), CBI, China and other similar initiatives currently undertaken in Colombia and Canada, which may serve as references for the potential development of the Chilean Taxonomy. During development of the roadmap, the taxonomy development team met with various ministries and public entities to review the national policies and plans and organize a workshop for government institutions and the financial sector as part of capacity building.

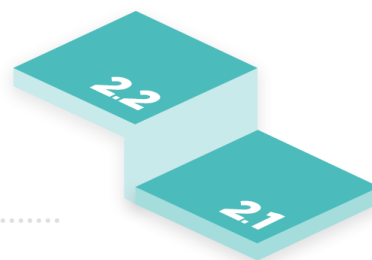
The sustainable finance taxonomy roadmap can also incorporate a resource plan, which outlines the financial, technical, and human resources required for the successful development and implementation of the taxonomy. Specifically, this can include:

- **Funding:** A plan that guides the allocation of financial resources to support the implementation, revision, and continued operationalization of the taxonomy
- **Capacity building:** Resources required to build the capacity of government, the financial sector and other taxonomy users to develop and implement sustainable finance taxonomy. Capacity building programme entails sharing the taxonomy document along with the implementation process across various stakeholders, developing and promoting courses and workshops to implement taxonomy, developing communication strategies, development of explainers and FAQs in simplified language to enhance understanding, and wider capacity building initiatives for key groups and sectors including civil society, academia and the private sector
- **Research and development:** Allocation of resources for implementation and revision of the taxonomy document to incorporate latest available information and data, literature, policy and regulation updates, technology advancement, government commitments and global momentum in the sustainable and climate finance space
- **Human resources:** Establishment of a skilled and knowledgeable team to ensure the implementation of the finance taxonomy including finance experts, communication and knowledge management specialists, data analysts and sectoral experts.

STEP 2. DEFINING STRATEGIC GOALS AND OBJECTIVES

STEP 2.2 Identify strategic goal

STEP 2.1 Define thematic objectives



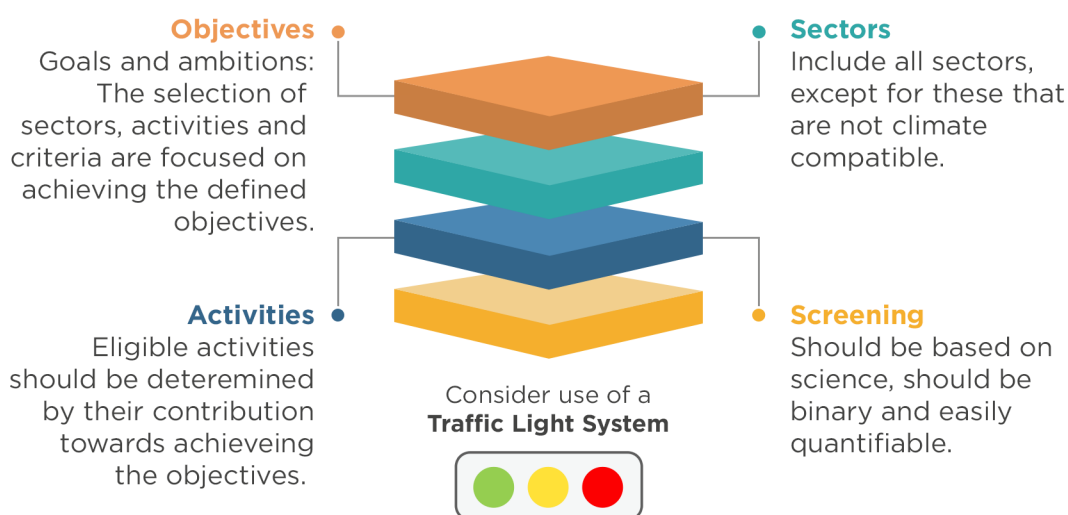
Key learning outcomes

- Identifying finance taxonomy strategic goals and objectives
- Practicing a phased approach to incorporating objectives in the taxonomy design

Once the governance structure is established, it is important to formulate a strategic goal of the taxonomy, i.e. why a jurisdiction needs to develop a finance taxonomy in the first place. Next, it needs to identify what development objectives the taxonomy is helping to achieve, along with identification of sectors and activities. Further, it's important to determine how the screening will be done, including criteria and thresholds (see Figure 10). The order of this step is based on a process-oriented approach but can differ and or take place in parallel depending on e.g., local circumstances.

Figure 10.

Key elements of a taxonomy



Source: Draws on CBI. 2022 cited in Thailand Taxonomy Board 2023

Strategic goals of putting in place a finance taxonomy

The strategic goal of a taxonomy forms the foundation of taxonomy development and provides a vision of what the entire taxonomy supports and aims to achieve. A finance taxonomy helps to steer the flows of capital towards the achievement of the identified strategic goals. It can bring together public and private actors of the financial sector with real economy actors to encourage and “supervise” financial actors to provide capital for sustainable economic activities. Thus, a finance taxonomy aims to harmonize the definition of economic activities and assets among all the ecosystem players. Strategic goals may also be more specifically defined and encompass the following:

- Establishing standardized definitions for sustainable investments that prioritize environmental and sustainability objectives
- Facilitating the growth of domestic sustainable financial markets
- Enhancing the nation's appeal to responsible investors, including those engaged in impact-investing strategies on both domestic and international fronts
- Facilitating the monitoring and reporting of public expenditures or private investments addressing specific environmental or sustainability concerns. This involves utilizing technically sound categories aligned with international best practices
- Signalling to investors and the broader financial markets the progress made toward achieving key sustainability objectives
- Identifying areas where investment falls short in addressing sustainability concerns.

Objectives of the finance taxonomy

Typically, the taxonomies are broken down to a number of multiple distinctive or complementary objectives (see Table 4). The finance taxonomy's thematic objectives describe the areas of its core contribution (e.g., to climate change mitigation and/or adaptation, green and/or sustainable/ social priorities), linked to national or regional policies and commitments. The objectives of the finance taxonomy are shaped by its national and sectoral development plans and strategies. For example, a **green finance taxonomy** aims to ensure low-carbon and resilient development through activities such as renewable energy or energy efficiency measures. A **social taxonomy** focuses specifically on social outcomes, such as human capital development, gender equality, labour rights, or poverty reduction. While the **sustainability taxonomy** is a combination of social, environmental and economic objectives.

Table 4. Finance taxonomy objectives in different jurisdictions

Taxonomy	Mitigation	Adaptation	Water use	Circular economy	Pollution	Bio-diversity	Education	Health	Affordable housing	Food security	Gender equality
EU	x	x	x	x	x	x					
SDG taxonomy (China)							x	x	x	x	
ASEAN	x	x	x	x	x	x					
Singapore	x	x				x					
Thailand	x										
Bangladesh	x	x	x	x	x	x		x	x		
Mongolia SDG taxonomy	x	x	x	x	x	x	x	x		x	
Mexico	x	x	x	x	x	x	x	x	x	x	x
Georgia	x	x	x	x	x	x	x	x	x	x	

Note: Only illustrative, non-exhaustive. Source: Author's compilation

Selection of finance taxonomy objectives

The objectives of the finance taxonomy can be identified based on the following:

- National development priorities as outlined in strategic documents, such as medium-term development strategies, etc.;

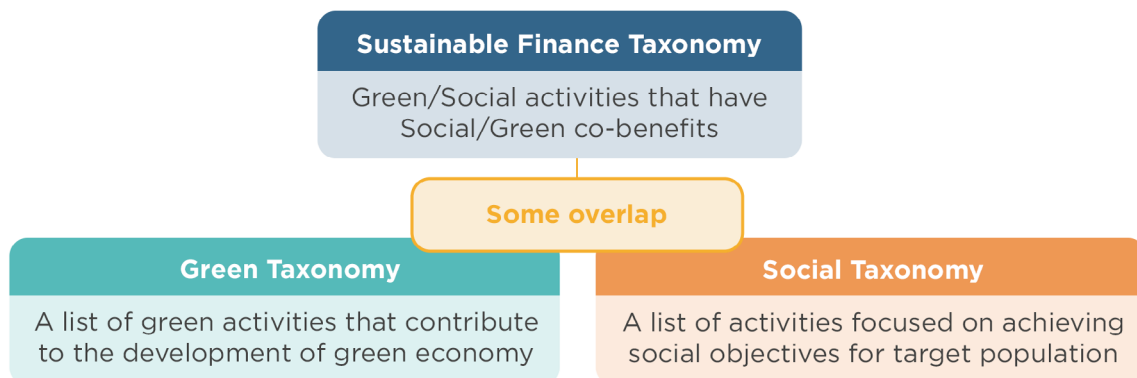
- International commitments, such as Nationally Determined Contributions (NDCs) and Sustainable Development Goals (SDGs) frameworks;
- The strategic focus of target users or key stakeholder of the finance taxonomy development (see Step 1: Governance structure);
- Alignment with broad goals of other international taxonomies which can support the harmonization of finance taxonomies and complement the identification of finance taxonomies;
- International and domestic priorities across scale: International commitments drive climate mitigation, while the local nature of climate adaptation and environmental pollution require for alignment of objectives with local priorities.

Box 8. Identification of taxonomy objectives in selected countries

Georgia

In its taxonomy, Georgia recognizes that inclusion, social mobility, and geographical and income-related inequalities remain to be major challenges faced by the country with 21.3% of the population living below the national poverty line. At the same time, coping with challenges caused by climate change and environmental issues is another essential priority that the country needs to address. Georgia finance taxonomy's environmental objectives, therefore, include climate change adaptation and mitigation, biodiversity conservation, natural resource conservation, pollution prevention and control, sustainable use and protection of water and marine resources, transition to a circular economy, waste prevention and recycling and others. While poverty reduction, food security, education, healthcare, and financial inclusion fall under social objectives.²¹

Figure 11. Structure of Georgia's sustainable finance taxonomy



Source: [Sustainable Finance Taxonomy for Georgia 2022](#)

Mexico

Mexico has launched its Sustainable Taxonomy with the aim of addressing three major sustainability challenges i) climate change, ii) gender equality and iii) access to basic services in municipalities. It is one of the first countries to formally include a social angle, with an upfront objective related to gender equality divided into three pillars decent work, wellbeing and social inclusion. By including this objective, all sectors and economic activities are required to be evaluated through the lens of gender equality. In this way, taxonomy facilitates that economic activities contribute to the reduction of gender gaps and elimination of discrimination against women, while at the same time encouraging the adoption of best practices in favor of gender equality by the users of the Taxonomy.

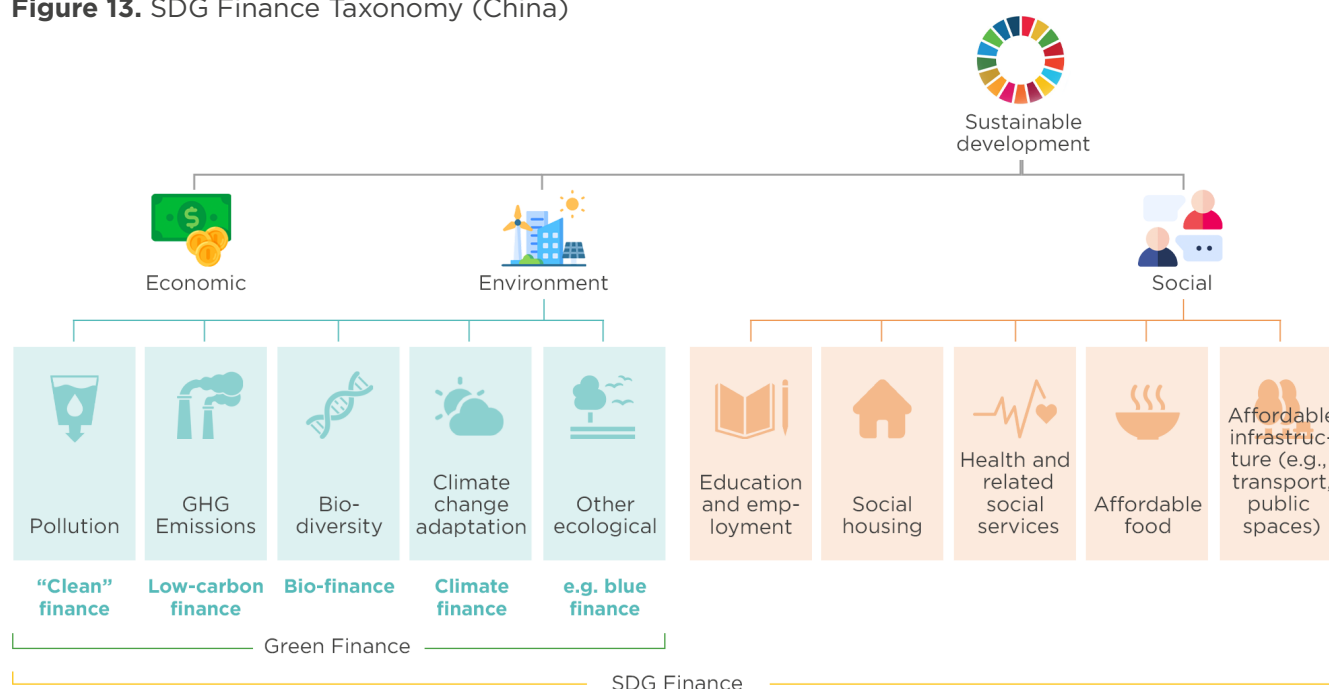
Figure 12. Mexico's Sustainable Taxonomy: Objectives and Economic Activities

Mexican taxonomy environmental objectives	Social objectives*
Climate change mitigation	Contribution to gender equality
Climate change adaptation	Access to basic services
Water & marine resource management	Health
Ecosystems conservation & biodiversity	Education
Circular economy	Financial inclusion
Pollution control & prevention	

* Health, education and financial inclusion are partially included within the gender equality category (gender index) and access to basic services includes water management activities, resilient homes, public transportation, land use and pollution prevention and control

China

The voluntary SDG Finance Taxonomy (China) aims at facilitating socioeconomic empowerment of the most vulnerable groups. It is, in essence, a social taxonomy, which builds on the China's Green Bond Catalogue and complements its environmental priorities. The Taxonomy covers six social thematic areas: 1) Basic Infrastructure; 2) Affordable Housing; 3) Health; 4) Education, Technology and Culture; 5) Food Security; and 6) Financial Services.

Figure 13. SDG Finance Taxonomy (China)

Source: [Debut of the SDG Finance Taxonomy](#) 2020 Edition

The ASEAN taxonomy has four environmental objectives: Climate Change Mitigation, Climate Change Adaptation, Protection of Healthy Ecosystems and Biodiversity, and Resource Resilience and the Transition to a Circular Economy.

21 Georgia's SF Taxonomy does not cover regulations regarding implementation, risk management or additional requirements such as "Do No Significant Harm" and "Minimum Social Safeguards" criteria. These issues are viewed as being part of NBSG's Sustainable Finance Framework and are addressed separately in Georgia's ESG Risk Management Guidelines. See National Bank of Georgia. 2023.

Figure 14.
Environmental
Objectives and
Essential Criteria
of the ASEAN
Taxonomy

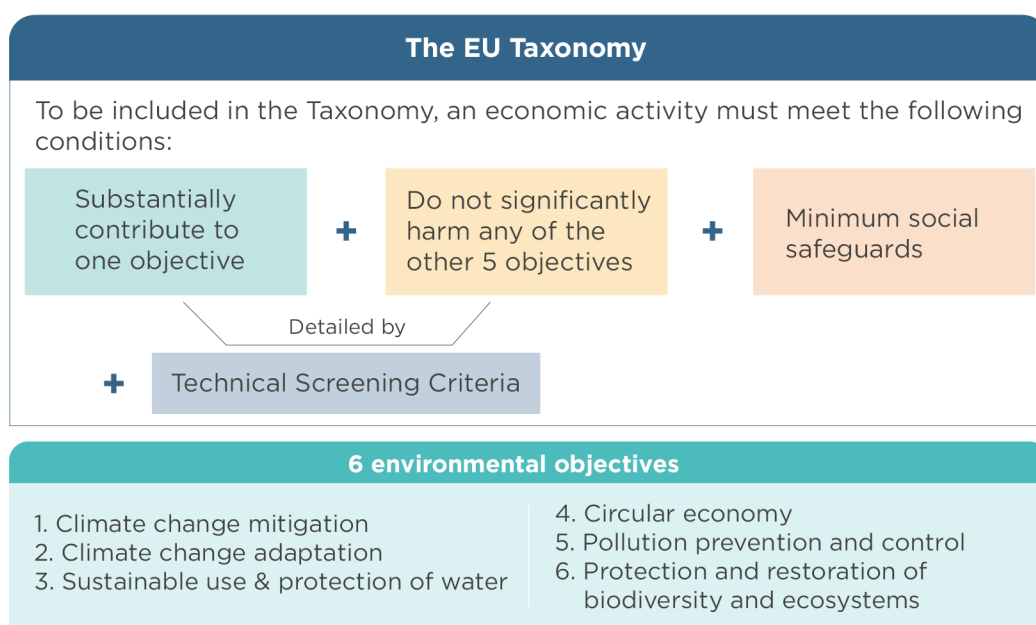
Source: [ASEAN Taxonomy for Sustainable Finance ver. 2](#)

Environmental objectives			
1	Climate change mitigation	3	Climate change adaptation
2	Protection of healthy ecosystems & biodiversity	4	Promote resource resilience and transition to circular economy
Essential criteria			
1	Do No Significant Harm	2	Social Aspects
3	Remedial measures to transition		

Phased approach to incorporating objectives

Finance taxonomy objectives can be defined comprehensively from the start, even as they are addressed sequentially or in phases. It will depend a lot on local circumstances, including technical capacities, resource limitations or binding timelines. Under the EU taxonomy, economic activities are expected to contribute substantially to one of the six environmental objectives, while doing ‘no significant harm’ (DNSH) to any of the six environmental objectives, and meeting ‘minimum safeguards’ so as not have a negative social impact and comply with the technical screening criteria.²² However, the EU started with identifying activities contributing to the first objective (climate change mitigation) and second objective (climate change adaptation) in the first instance and subsequently defined activities contributing to the other four environmental objectives.

Figure 15.
EU Taxonomy
Framework



Source: IPSF Taxonomy Working Group Co-chaired by the EU and China. 2022

²² [The ASEAN Taxonomy adopts ver 2](#) a similar approach: it requires any Activity to fulfil three Essential Criteria (EC) for classification: Do No Significant Harm (DNSH), Remedial Measures to Transition (RMT), and Social Aspects (SA). DNSH ensures that an Activity that contributes to one environmental objective does not cause significant harm to another objective. RMT ensures that any significant harm is either removed or rendered insignificant. SA focuses on social aspects that could be harmed by an Activity, such as human rights, labour rights, and impact on people living close to the investments.

Recent milestones in the EU's delegated act on environmental objectives

Simultaneously with the publication of the technical screening criteria for environmental objectives 3-6 in June 2023, new economic activities were added to the EU's climate delegated act, which came into effect in 2021. The recently published delegated act provides a separate annex for each environmental objective, defining the economic activities falling under each objective and the corresponding technical screening criteria. In addition to the two climate objectives, "climate change mitigation" (environmental objective 1) and "climate change adaptation" (environmental objective 2), capital flows will now also be directed towards ecologically sustainable economic activities that significantly contribute to at least one of the following four environmental objectives:

- Sustainable use and protection of water and marine resources (environmental objective 3)
- Transition to a circular economy (environmental objective 4)
- Pollution prevention and control (environmental objective 5)
- Protection and restoration of biodiversity and ecosystems (environmental objective 6)

In addition to including new sectors such as services, disaster risk management, and accommodation activities, the delegated act adds new economic activities to sectors already addressed in the climate delegated act. This particularly affects the manufacturing sector. Further to the CO₂-intensive activities defined in the climate delegated act, the production of plastic packaging materials and the manufacturing of electrical and electronic devices have been included as activities that can make a significant contribution to the transition to a circular economy. The amendment to the act adopted in June 2023 also included the manufacturing of automotive and mobility components, addressing the long-standing demand to include automotive industry suppliers in the taxonomy. Additionally, the amendment includes specific adjustments to the technical screening criteria for existing activities.

Source: [EU Implementing and delegated acts - Taxonomy Regulation](#) and other sources

A key advantage of such a phased development approach is the integration of lessons learned from one objective into the other. However, there are also large qualitative differences in the identification of activities under various objectives. For instance, identifying activities that contribute to the climate change mitigation objective comes with fewer challenges, than those that contribute to the objective of climate change adaptation. For climate change adaptation activities, it is tendentially more complex to define selection criteria than for climate change mitigation measures which usually rely on established GHG emissions reduction thresholds. Thus, the differences in technical work involved in defining activities, depending on taxonomy objectives, should be considered and integrated in the planning process.

STEP 3. DEFINE/SELECT SECTORS AND ELIGIBLE ACTIVITIES



Key learning outcomes

- Selecting sectors and economic activities to be covered in the sustainable finance taxonomy
- Awareness about methods for sector and activity identification
- Phased approach for sector and activity selection
- Consideration of industrial classification codes for sector and activity identification to increase comparability across jurisdictions.

Selection of sectors

Once the objectives are identified, sectors and activities most relevant and making the most **substantial contribution** to achieving these objectives are selected.

Approaches to select sectors typically involve an analysis based on 1) the **extent of contribution** to specific development objectives (emission reduction, poverty and inequality reduction), 2) **economic relevance** of the sector (output or FDI per sector), or 3) **contribution to employment** (# of people employed in the sector). Similarly, the World Bank guidance (2021) notes, that for developing finance taxonomies (esp. for developing countries), relevant sectors and associated activities or investments should ideally be determined based on their expected contribution to achieving the selected development objectives drawn from national or sectoral development plans, for example SDGs or sectoral emission reduction targets defined in the NDCs.

The identification of suitable sectors to meet mitigation objectives can be done by calculating emission- or economic output-weighted approaches - considering economic relevance, GHG emission intensity or other relevant indicators. To prioritize and rank the sectors there are three commonly used analytical methods: decision matrix, weighted average and the **ELECTRE²³ method**. The latter, for example, supports decision-making by using a weighted sum technique (see Box 9). As a reference, the Common Framework of Sustainable Finance Taxonomies for Latin America and the Caribbean (UNEP, 2023) provides a detailed calculation example of how to identify suitable sectors covered in the finance taxonomy.

23 **ÉLECTRE** is a family of multi-criteria decision analysis (MCDA) methods that originated in Europe in the mid-1960s. The acronym ÉLECTRE stands for: Élimination Et Choix Traduisant la REALité ("Elimination and Choice Translating Reality"). <https://en.wikipedia.org/wiki/%C3%89LECTRE>

Box 9.**The ELECTRE method**

The ELECTRE method allows the evaluation of each parameter and the alternatives and ranks them in a preferred order (Birgün and Cihan 2010). Like the weighted decision matrix, this methodology assigns weights for two parameters. The weights for emissions and GDP were 0.7, and 0.3, respectively which is consistent with the values assigned in the previous method. The initial data points for each parameter per sector are normalized to translate them into unitless values between 0 and 1. This is to ensure a valid comparison of the two parameters which have different units of measurement (GHG emissions in MtCO₂ eq and GDP contributions in USD). Subsequently, the weights are applied, and the concordance and discordance matrices are developed. Finally, matrices are evaluated using a credibility matrix to obtain a binary result of TRUE or FALSE. The more values with TRUE, the higher the count, thus the higher the rank.

Source: UNEP 2023

Selection of sectors and activities contributing to adaptation objective is based on the level of vulnerability and preparedness to climate risks of sectors. Countries might choose to either include all sectors and activities and assess them from the point whether they contribute substantially to climate adaptation objective (e.g. EU taxonomy). Or they can select a few sectors and activities that are the most vulnerable to climate change and assess only these shortlisted sectors in terms of their contribution to adaptation (CBI taxonomy) (UNEP, 2023). National vulnerability assessments or National Adaptation Programmes of Action (NAPAs) might serve as possible sources of information to select high priority sectors for adaptation.

To summarize :

- Eligible sectors and activities constitute the universe of economic sectors aligned with the finance taxonomy;
- Conversely, non-eligible economic sectors and activities are those which have limited contribution to both the taxonomy objective and the economy.

Generally, sectors covered in finance taxonomies are energy/power/electricity, manufacturing, real estate/construction, transportation, waste/water, agriculture/forestry, health, education. Additionally, sectors which are prone to support or enable activities (see section on enabling activities) or objectives of the finance taxonomy include, but are not limited to: Information, Communication and Technology (ICT), as well as Research and Development (R&D).

Selection of economic activities

Usually, a similar approach is used while selecting economic activities as in case of selecting the sectors. It is based on identifying those activities that substantially contribute to the identified objectives as well as economically relevant to the country. The parameters that can be considered in selection include GHG emission, contribution to the GDP or employment, exposure to climate change risks, etc. Thailand has applied such a multi-parameter approach in its taxonomy (see Box 10). It is noteworthy that in addition to a number of traditional parameters, Thailand also included a technical viability for decarbonization parameter.

In some cases, selection can be guided by taxonomies of other jurisdictions that have high economic relevance. For example, Singapore based its selection of activities on the importance to the Singapore and regional economy, the impact of each activity on GHG emissions (and emission reduction) as well as the inclusion in the ASEAN Taxonomy.

Box 10. Identification of sectors and activities in Thailand's taxonomy phase 1

In order to define sectors covered by the taxonomy Thailand has used the multi-parameter approach including such parameters as sectors' GHG emission profile, their contribution to the country's Gross Domestic Product (GDP), the share of Foreign Direct Investment (FDI), and the technical viability for decarbonisation.

Based on the data and information collected, the expert group derive a list of sectors to be initially covered by the Thailand Taxonomy: energy, water supply (sewerage, waste and remediation), transport, agriculture, and industrial production (see matrix below). Once the sectors were identified, the following two sectors were prioritized for Phase 1: energy and transportation. These two sectors are highlighted as being at the focus of Thailand's government efforts to decrease emissions because, on the one hand, they account for a significant share of the country's GHG emissions (68 per cent) and high energy intensity and, on the other hand, availability of technological solutions to decarbonize the sectors.

Sector prioritisation matrix

Sector	IPCC 2006	ISIC 4	Share of GHG emissions, % of country total (2018)	Share of FDI, % of total (2021)	Share of GDP, % of total (2021)	Emissions share to GDP share ratio	Comment
Energy	1A2, 1A1, 1A4	D	47.59%	1.14%	2.45%	19.45	Biggest ratio, biggest mitigation potential, a lot of available technologies
Water supply, sewerage, waste & remediation activities	5A, 5B, 5C, 5D	E	4.62%	N/A	0.43%	10.70	High ratio, but relatively small part of the GDP and small gross emissions
Transportation	1A3	H49, H50, H51, H52	20.76%	0.93%	4.55%	4.56	Average ratio, but large potential for decarbonisation due to a vast array of available technologies
Agriculture, hunting, fishing, forestry	3A, 3B, 3G, 3F, 3I	A	15.08%	0.07%	8.54%	1.76	Huge contributor to GHG emissions, small ratio, the most complicated sector for emission reduction due to multiple factors
Manufacturing (industrials)	2A, 2B	C, F	9.11%	40.35%	29.81%	0.30	Average emission but low ratio. Large FDI inflow of capital means increasing future emissions

Once the sectors were identified, the expert group selected activities following a similar rational: it identified activities which can be decarbonised with significant emission reduction benefits (e.g., steelmaking, battery production, power generation etc.), while excluding the ones whose effect of GHG emission is negligible (e.g., management, accounting etc.).

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Thailand Taxonomy: example of sub-sectors and activities for energy

ISIC Sector (TSIC)	ANDBI Sector	Activity in the Section 4
D351 - Electric power generation, transmission, and distribution	D35104 Solar power gen generation	Solar energy
	D35105 Wind power generation	Wind energy
	D35106 Hydro power generation (incl. pump storage)	Hydropower
	D ANDBI 35107 Geothermal power generation	Geothermal power
	D35108 Bio power generation	Bioenergy
	D35101 Gas power generation	Natural gas
	D35109 Marine power generation	Ocean energy
	N/A	Electricity generation from renewable non-fossil gaseous and liquid fuels
	D35111 Energy storage (not incl. pump storage)	Storage of electricity and thermal energy
	D35110 Transmission and distribution (incl. ICT and smart technology)	Transmission and distribution of energy
	N/A	Cogeneration of heating/cooling and power using renewable sources of energy
D352 - Manufacture of gas; distribution of gaseous fuels through mains	D35110 Transmission and distribution (incl. ICT and smart technology)	Transmission and distribution networks for renewable and low-carbon gases
	D 35203 Gas distribution	
D353 - Steam and air conditioning supply	D35302 Provision of steam / air conditioning (renewable production)	Production of heating and cooling using waste heat
		Installation and operation of electric heat pumps
		Heating and cooling distribution

Source: Thailand Finance Taxonomy, Phase 1, 2023 (p18, 21)

Elaborating green and focusing on transition definitions

A majority of the taxonomies started out as green taxonomies, with a focus on serving as a reference tool for economic activities responding to key environmental objectives. In most cases, mitigation was prioritized. There has also been a growing focus on not only exploring green activities but also transition to green. Transition finance taxonomies are developed in order to enable a country's transition to low carbon, resilient and sustainable development trajectories, which include sectors and/or activities such as coal phase out (ASEAN taxonomy) and liquefied natural gas energy (South Korea) to ease the impact of transition on economic growth. The environmental set of priorities is treated in great detail in this guide.

Social definitions and taxonomies

While early taxonomies, such as the EU Taxonomy, saw social as being elaborated somewhat later in the process, more recently, there has been a growing focus on broader Sustainable Development Goals, and more specifically on social sectors and related activities and the need to redirect capital to social priorities.

Given their relative novelty, social and transition definitions and priorities are treated separately in Chapter 3.

Phased approach to incorporation of sectors in taxonomies

A lot of taxonomies adopt a phased approach to the treatment of sectors, including Thailand and ASEAN (see Box 10). Thailand's Taxonomy Phase 1 only included activities contributing to the climate change mitigation objectives, and that too, it focused on two sectors: energy and transportation. Thailand Taxonomy Phase 2 is expected to focus on the Manufacturing sector, Agriculture sector, Real estate and Construction sector, and Waste Management sector. Over time, it is expected that future versions of the Thailand Taxonomy will include activities contributing to other environmental objectives (climate change adaptation, sustainable use and protection of marine and water resources, protection and restoration of biodiversity and ecosystems, pollution prevention and control, and resource resilience and transition to a circular economy).

Box 11. Development of the ASEAN Taxonomy for Sustainable Finance

The ASEAN Taxonomy is the overarching guide and acts as a common building block to enable an orderly and just transition and foster sustainable finance adoption by Asian Member States (AMS). It is designed to cater to the different ASEAN economies, financial systems, and transition paths. It is being elaborated and updated progressively. **Version 1**, published in November 2021, provided the overall framework of the ASEAN Taxonomy. The ASEAN Taxonomy Version 2 and subsequent versions centre around the classification of activities.

Version 2 of the Taxonomy, first published on 27 March 2023, provided the complete assessment process for the principles-based Foundation Framework (FF), as well as technical screening criteria (TSC) methodology for the Plus Standard. In addition, the TSC for the energy sector (Electricity, Gas, Steam and Air Conditioning Supply activities) was set out as the first of the Taxonomy's six economic sectors. It was updated on 9 June 2023 with additional criteria for the Plus Standard amongst other things.

Version 3 published on 27 March 2024, was updated to include Activities within the following ISIC codes: • ISIC 410 Construction; • ISIC 681 Real estate; • ISIC 492 Land transportation; • ISIC 501 Water transportation; and • ISIC 51 Air transportation. Amongst other updates, future revisions of the ASEAN Taxonomy are expected to include additional focus sectors and enabling sectors, as and when developed in the Annex 1 to the ASEAN Taxonomy for Sustainable Finance Technical Screening Criteria (TSC) for the Plus Standard.

The different versions include refinements based on stakeholder consultation and feedback. E.g., the bulk of the feedback received with regard to Version 2 pertained to suggestions to improve clarity in definitions and usability.

Exclusions

Not all the sectors can be covered in the taxonomy. Three broad categories of sectors and activities can be distinguished:

1. **Economic activities which account for a large share of gross output and employment** but contribute negligible amount in terms of development outcomes such as GHG emissions, gender equality or human development. Tracking such activities would require large administrative costs, while not contributing to the overall objective;

- 2. Carbon-intensive economic activities, for which thresholds have not been developed** and which cannot be fully substituted at the moment due to lack of green technologies (such as mining and aviation);
- 3. Carbon-intensive economic activities that can be phased out** since technological alternatives exist (burning of coal and petroleum).

In case of the carbon-intensive sectors, as understanding of them evolves these sectors are removed from the taxonomies or treated differently. E.g., China had initially included clean coal, defined as supercritical coal or a modern coal fired power generation process that is more efficient than traditional coal-fired generation, in its green taxonomy. In 2021, China officially removed clean coal and fossil-powered generation, including liquefied natural gas (LNG), from the definition of ‘eligible green project’.

Under its traffic light approach, ASEAN Taxonomy for Sustainable Finance version 2 adopted a selective treatment of coal phase out. According to the ASEAN Taxonomy board, it aimed to “promote inclusivity without compromising credibility and interoperability,” with activities related to the coal phase-out categorized into three tiers, ranging from green to amber, which are ranked according to how quickly coal-fired plants are planned for retirement.²⁴ See the section on shifts to transition later in this chapter.

For the purpose of exclusion, sectors which are not specifically covered must be carefully assessed during the selection process so as to not undermine the overall goal of the finance taxonomy. Certain hard-to-abate sectors such as agriculture, heavy-industry (such as steel, cement, shipping and aviation) have been observed as exemptions in some finance taxonomies. For example, in the EU Taxonomy, hard-to-abate sectors including cement, steel, aluminium, and hydrogen are included, but others such as mining and quarrying are spared out of the sector coverage.

The explicit exclusion of specific activities or sectors for not being finance taxonomy compatible (e.g., coal mining) can be also actively listed as such, in the taxonomy design. For instance, the Sustainable Finance Policy published by the Bangladesh Bank provides an explicit exclusion list of economic activities considered ineligible for (sustainable) financing specifically, some of which are use of thermal coal, upstream fossil fuel extraction and production (including gas, coal and oil), activities which do significant harm to natural reserves, scenic spots, drinking water source reserves, activities that endanger livelihoods and gender equality and projects that threaten public health.

Common types of economic activities

There are several classifications of economic activities. For example, in the EU taxonomy, classification of economic activities is based on their direct (e.g., construction of renewable energy equipment) contribution to an objective or the overall goal (e.g., net zero economy) of the finance taxonomy. In this sense, there are different types of economic activities. Types of economic activities based on their contribution to the taxonomy’s goal and objectives (Table 5).

Another classification framework is based on the colour-coded system for identifying the degree to which an activity is sustainable through its contribution to an objective. It is mostly relevant to the green and environmental taxonomies. Activities are classified as Green (environmentally sustainable), Amber (transition) or Ineligible based on their contribution to at least one of the taxonomy’s environmental objectives. It is used in many cases, e.g., the ASEAN, Singapore-Asia, Malaysia, etc.

24 [ASEAN Taxonomy Version 2: An overview of the coal phase-out framework; ASEAN Taxonomy for Sustainable Finance Version 2](#)

Table 5. Type of economic activities based on their contribution

Type of economic activity			Examples
1.	Fully aligned activities	Activities that are already aligned with the strategic goal (e.g., net zero emissions)	Zero emissions transport (e.g., cycling)
			Near to zero carbon electricity generation (e.g., solar and wind)
			Afforestation (e.g., planting new trees)
			Primary healthcare facilities
2.	Enabling activities	Activities that do not make a direct substantial contribution, but enable aligned and transition activities or mitigate negative impact	Manufacture of wind turbines
			Installing efficient boilers in buildings
			Social audits
			Consumer good inspection services
3.	Transition activities	Activities that contribute to a transition to the strategic goal but are not currently operating at that level	Building renovation (e.g., energy efficiency); Electricity generation below a specific threshold (e.g., <100g CO ₂ /kWh)

Source: Adapted from the EU Taxonomy regulation

Table 6. Type of economic activities based on color-coded classification

Description		Example (Activity on renovation of existing building)
Green classification	The Activity is making a substantial contribution to one or more objectives.	The building renovations that enable to reach the prevailing Green Mark Certification
Amber classification	The Amber category in the Taxonomy, corresponds to “transition” activities, and includes activities that are not presently meeting green criteria, but are either: Moving towards a Green transition pathway within a defined time frame; or Facilitating significant emissions reductions in the short term with a prescribed sunset date	Min 30% reduction in emissions or energy consumption if not meeting Certification standard above
Red classification	Activities are not aligned with any of the taxonomy objectives; or	Buildings are dedicated to extraction, storage, manufacturing, transport of fossil fuels
	Activities that are causing significant harm to any of the objectives and no remedial measures are applied.	

Source: Authors compilation

Industrial classification systems

Consistency

in classifying economic sectors and activities is essential to ensure standardization and avoid ambiguity in financial and investment related decision making, especially for taxonomy eligible activities.

Countries need to map sectors and activities covered by a taxonomy against industrial classification codes. Use of common industrial classification systems contributes to harmonization with various taxonomies globally. The International Standard Industrial Classification (ISIC) of economic activities offers great coverage and a strong institutional framework. The ISIC was initially adopted by the United Nations (UN) in 1949. It recommends that all member governments make use of the ISIC classification either by adopting this system of classification as a national standard or rearranging their statistical data in accordance with this system for purposes of international comparability (Table 7). There are existing mappings between large classification systems,

including Nomenclature statistique des activités économiques dans la communauté européenne (NACE), and ISIC to support activity classification in local contexts (BIS, 2021). Notably, in June 2021, the UN Statistical Division summarized in its latest “List of National Classification” that 474 classifications from 125 countries exist primarily representing classifications of activities and more.²⁵

Table 7. Industrial classifications

UN level	ISIC	International Standard Industrial Classification economic activities					
EU level	NACE (derived from ISIC)	Nomenclature statistique des activités économiques dans la Communauté européenne					
National level	National versions of ISIC or NACE	NAICS	SIC*	KBLI	NIC	NACE/NIC	NACE
	Country	USA, CAN, MEX	South Africa	Indonesia	India	ASEAN / Singapore	EU

*SIC was introduced and used in USA and has been mostly replaced by NAICS in 1997.

Box 12. ISIC use in Singapore’s taxonomy

In Singapore’s taxonomy, activities are defined on the basis of the ISIC codes (level 3 for activity). For instance, the activity “Energy from solar PV and CSP (including electricity, heat, cool)” refers to the International Standard Industrial Classification (ISIC) activity “Electricity, gas, steam and air conditioning supply” with the ISIC code 3510.

Sector	Energy
Activity	Energy from solar PV and CSP (including electricity, heat, cool)
ISIC code	3510 Electric power generation, transmission and distribution
ISIC description	This class includes the generation of bulk electric power, transmission from generating facilities to distribution centers and distribution to end users. This class includes:
	operation of generation facilities that produce electric energy, including thermal, nuclear, hydroelectric, gas turbine, diesel and renewable
	operation of transmission systems that convey the electricity from the generation facility to the distribution system
	sale of electricity to the user
	activities of electric power brokers or agents that arrange the sale of electricity via power distribution systems operated by other operations of electricity and transmission capacity exchanges for electric power
Objective	Climate change mitigation

Source: Singapore finance taxonomy

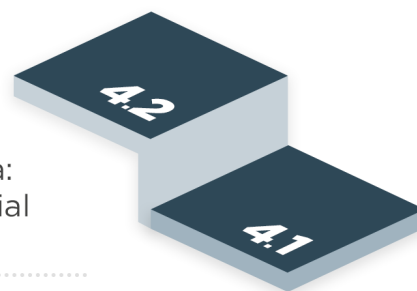
25 [List of National Classification](#) includes activities products, occupations, and expenditures, but also include health and education classifications for some countries

STEP 4. ESTABLISHING SCREENING CRITERIA

STEP 4.2 Select screening method

STEP 4.1

Set additional screening criteria:
Do No Significant Harm, remedial
measures, social aspects



Key learning outcomes

- Defining technical screening criteria, whitelist-based approach and principle-based approach
- Understanding quantitative and qualitative thresholds within screening approaches for economic activities
- Minimum environmental and social safeguards requisite for designing the sustainable finance taxonomy.

Once a list of economic activities that have the potential for substantial contribution to each environmental or social objective have been identified, for each activity, a series of eligibility parameters are developed. This is done to provide clear guidance on how each economic activity should perform in order to be considered as taxonomy-aligned.

Screening Methods

Multiple screening methods have been used across jurisdictions to ensure the alignment of economic activities with their respective objectives and the country's development paradigm and goals. The three mostly widely applied criteria are **technical screening criteria (TSC)**, **whitelist-based approach** and **principle-based approach**. While TSC uses both quantitative and qualitative criteria, the latter two primarily consist of qualitative screening parameters. While some taxonomies have used one of these approaches, e.g., the EU taxonomy uses TSC, China uses a whitelist-based approach. Others such as Singapore and ASEAN, use a combination.²⁶

Technical Screening Criteria (TSC) based approach

TSC for an eligible economic activity defines rules for alignment with the finance taxonomy and ensures taxonomy users align with the finance taxonomy. It sets out specific characteristics that can be used to determine whether an economic activity provides a substantial contribution to at least one of the objectives. E.g., the ASEAN taxonomy (version 2 page 11) defines TSC as “quantitative or qualitative criteria against which the classification of the activity is assessed” and distinguishes three methods by which TSC are defined: quantitative, qualitative and nature of the activity.

²⁶ For the varied approach to eligibility, see [International Platform on Sustainable Finance Common Ground Taxonomy – Climate Change Mitigation](#) Annex: Stocktake of sustainable finance taxonomies. This is a somewhat updated table of the [UNDESA/IPSF G20 SFWG Input Paper](#) (2021) Annex 3 Stocktake of sustainable finance taxonomies.

Table 8. ASEAN Taxonomy: types of TSC and examples of activities included

	Type of TSC	Explanation	Examples of activities included
1.	TSC applied to Activities classified 'by their nature'	TSC which relate to specific Activities which are normally considered to be Green by default (assuming any other TSC which may be applicable to that Activity are also fulfilled).	Electricity generation using solar photovoltaic technology
			Electricity generation using CSP technology
			Electricity generation from wind power
			Electricity generation from ocean energy technologies
			Storage of electricity, including pumped storage
2.	Qualitative TSC	Process- or practice-based TSC which require for an Activity to demonstrate that it is following certain principles, standards, or rules.	All Activities may be subject to some qualitative TSC
3.	Quantitative TSC	Threshold-based TSC where Activities are required to meet certain defined numerical targets (e.g., gCO ₂ e/kWh).	All forms of power generation which emit GHG
			Electrical Transmission and Distribution (T&D) networks which incorporate GHG emitting generation.

Source: [ASEAN Taxonomy ver 2](#). Table 1 page 160

Quantitative technical screening criteria

For quantitative TSC, the development of prescriptive criteria is applied using quantitative thresholds (e.g., below 100g CO₂/kWh electricity generation, gender equality index). These can be typically backed up by guidelines such as the IPCC emission factor database²⁷. The definition of 'substantial' contribution must be quantifiable and be in line with a binary approach (e.g., below or above certain thresholds), or a graded approach (e.g., allowing for mitigation trajectories and "intermediate" solutions that are taxonomy eligible).

The eligibility of an activity or investment in the energy sector, for instance, in the context of a national climate mitigation target (expressed as a volume of emissions reduction by a given year) may be defined by whether it meets an:

- Accepted threshold in carbon intensity (for example, GHG emissions per unit of production),
- In relative terms as a share of reduction in emissions (against a pre-defined baseline), or
- In terms of compliance with energy standards (for example Leadership in Energy and Environmental Design (LEED), Building Research Establishment Environmental Assessment Method (BREEAM), or from the IFC Excellence in Design for Greater Efficiencies (EDGE)).²⁸

If available, it is recommendable to take science-based evidence for thresholds development into account. Thus, the TSC should follow latest scientific findings, in line with the G20 SFWG Principle 5: Be science-based for environmental goals and science- or evidence-based for other sustainability issues. For instance, the ASEAN, Indonesia, and Singapore-Asia Taxonomies includes clear quantifiable metrics (substantial contribution), for mitigation objectives.

In case of social objectives, the good practice is to ensure alignment with international standards and practices, such as Universal Declaration of Human Rights, the OECD Guidelines for Multinational Enterprises, etc. Mexico has introduced a scoring system to measure a degree of alignment with gender equality standards, forming a Gender Equality Index, building on the international and national standards (see Box 13).

27 [Emission factor database](#) by the Intergovernmental Panel on Climate Change

28 World Bank 2020

Box 13. Screening criteria in Mexico's taxonomy

One of the most important aspects of Mexico's Sustainable Taxonomy is the incorporation of a priority social objectives such as gender equality. By including this crosscutting objective, all sectors and economic activities can be evaluated through the prism of adherence to the gender equality principles. In this way, the taxonomy helps identify those economic activities that contribute to the reduction of gender gaps and the elimination of discrimination against women, while at the same time encourages the adoption of best practices in favour of gender equality by users of the taxonomy. The taxonomy measures alignment with gender equality principles through establishing a gender equality index (GEI), which is inspired by the guidelines, mechanisms, strategies and policies²⁹ that contribute to closing gender gaps in the work environment of companies or investment projects.

	Decent Work	1.1.	Equal pay
		1.2.	Equality in access and career development
		1.3.	Care and co-responsibility
	Wellbeing	2.1.	Promotion of equal access to goods and services
		2.2.	Health with a gender perspective
		2.3.	Economic and social empowerment
	Social inclusion	3.1.	Enabling peace context (eliminate violence against women)
		3.2.	Inclusion in the value chain
		3.3.	Social participation of women

This index is built around the three pillars: 1) Decent Work, 2) Well-being and 3) Social Inclusion. Each pillar is composed of a number of dimensions that help to address various aspects of gender equality. They allow to assess, for instance, companies' performance in terms of access to labor market, coverage with healthcare and other services, social participation and other dimensions.

The GEI is constructed using the scoring system that is generated based on the survey that consists of 43 questions. This allows the qualitative criteria of these three pillars to be translated into a quantitative metric, which together with a threshold help determine a level of substantial contribution to the gender equality objective.

Source: Sustainable taxonomy of Mexico 2023

Qualitative technical screening criteria

Qualitative (principle) measures allow for more flexibility and qualitative techniques (see table below). Measured baselines or accepted metrics have typically not yet been developed, and TSCs are more based on political will and how activities are contributing to objectives of the financing taxonomy. Measuring of increased climate resilience, or a change in consumer behaviour, is backed by underlying narratives defined in the strategic goal or the objectives.

²⁹ The guide to good business practices aimed at gender diversity (ILO, 2017), the principles of women's empowerment (UN WOMEN, 2021), the gender equity index (Bloomberg, 2019), the Social Bonus with a Gender Approach (FIRA, 2020), the General Law for Equality between Women and Men (2006), the Constitutional Reform on Human Rights (2011), the Mexican Standard on Labor Equality and Non-Discrimination, and the Official Mexican Standard, Psychosocial risk factors at work-Identification, analysis and prevention; the Model Protocol to Prevent, Address and Eradicate Workplace Violence in the Work Centers of the Ministry of Labor and Social Welfare.

Qualitative criteria can be practice or process-based:

- **Practice-based criteria** require the adoption of a set of practices which define how the activity must be performed. These are essentially a set of practices or qualitative requirements for economic activities, such as compliance with a set of qualitative criteria, code of conduct and certification. Practice-based criteria are generally based on widely accepted market best practices.
- **Process-based criteria** consist of a series of steps that are to be followed to reduce economic activities' pressure on and improve the current state of the environment and development trajectories. These can be a set of actions or points of focus that need to be addressed.

Table 9. Examples of qualitative technical screening criteria

Type of qualitative TCS	Activity and TSC
Practice-based criteria	353[040] Production of heating / cooling using electric heat pump Activity is the operation of electric heat pumps complying with both of the following criteria: 1. Refrigerant threshold: Global Warming Potential does not exceed 675; 2. Demonstrate a high standard of energy efficiency according to an internationally recognised certifications scheme. TSC: Activity has implemented physical and non-physical solutions ('adaptation solutions') that substantially reduce the most important physical climate risks that are material to that Activity, which can be demonstrated by a climate risk and vulnerability assessment (CRVA)
Process-based criteria	351[012] Electricity generation from renewable non-fossil gaseous and liquid fuels, including co-firing with fossil fuels. TSC: The Activity meets either of the following criteria: • at construction, measurement equipment for monitoring of physical emissions, such as methane leakage is installed, or a leak detection and repair programme is introduced • at operation, physical measurement of methane emissions is reported and leak is eliminated.

Source: Adapted based on the ASEAN taxonomy version 2 (pages 156, 113)

Principle-based approach

Principle-based taxonomies define a pre-set of principles for users. It contains core guiding principles to assess which economic activities are taxonomy-aligned. Principle criteria allow for more flexibility on how outcomes are achieved or implemented in the finance taxonomy. For example, Malaysia lays out the key principles that make an economic activity relevant for mitigation or adaptation, and list categories that activities can fall into based on their alignment with said principles. However, it does not lay out what those activities may be based on specific criteria the way rule-based finance taxonomies intend to do.

Table 10. Principle-based approach to screen alignment in Malaysia's taxonomy

Economic Activity components	Principles	Assessment criteria
Purpose	Positively contribute to a reduction in material physical climate risk	Is the purpose of economic activity to reduce physical risk to an organisation, community or society?
		Can the objectives and benefits of the activity be clearly articulated?
		How far reaching are the expected benefits to the organisation, community or society?
Impact	Should be sustainable and does not cause harm to the broader environment and community	Is the activity performed in a sustainable manner?
		Has the organisation or the FI obtained an independent and reliable expert opinion for due diligence purposes? (e.g. feasibility studies, vulnerability assessments, impact analysis)
		Any unintended impacts? (e.g. displacement of flood water at the expense of another community area, poorly managed construction of adaptation infrastructure resulting in waste production, water contamination, destruction of natural animal habitats or local communities)
Outcome	Outcome to be clearly defined, sustainable and fit-for-purpose	What is the desired outcome of the activity? (e.g. construction of slope protection to prevent landslides)
		Can the desired outcome increase resilience against the effects of climate change in the long run? (e.g. sustained crop production in drought-prone areas with the installation of water harvesting systems)

Source: Adapted from Malaysia's 2021 [Climate Change and Principle-based Taxonomy](#) (page 15)

Whitelist-based approach

The whitelist-based approach provides detailed lists of projects and activities considered eligible under each sector or sub-sector. The screening is done at the very initial stage to determine if the activity is listed or not. E.g., China uses the whitelist-based approach to categorize activities as green/not green to identify activities linked to industry-specific green standards and criteria set by regulatory authorities. The clear categorization provided by this approach allows for simplification of the process. It may require external reviews and careful decision-making to ensure rigour.

Table 11 below, summarizes the main strengths and weaknesses of applying each of these approaches.

Combining approaches

Overlaps in the approaches are possible, for instance, a TSC taxonomy with threshold values could potentially include a project list for some activities or could contain other guiding principles. For example, Singapore's taxonomy uses a combination of TSC quantifiable thresholds and principle-based criteria, while the Sri Lankan green finance taxonomy applies all three approaches depending on the sector and activity.

Setting additional screening criteria

In many instances, countries set additional requirements for the activities to be considered sustainable following the example of the EU taxonomies. To qualify as taxonomy-aligned, in many instances, an activity must **do no significant harm (DNSH)** to the other environmental objectives, and comply with **minimum safeguards (MS)**.

Table 11. Pros and cons of the different approaches and examples of country taxonomies

	Technical screening criteria	Principle-based	Whitelist-based
Pros	Technology-neutral approach Specificity - Evaluating the activities, assets, industries, and sectors. Adaptability to technological progress – technical criteria can be updated Objective assessment of activities or assets	Adaptable to changes in technology, industry practices, and environmental standards Accommodates a wide range of sectors and activities Allows consideration of all environmental, social, and governance (ESG) aspects	Clarity and specificity - reduced ambiguity in identifying assets or activities as green or sustainable Standardization across industries and sectors - easier for users to understand and comply with the taxonomy Reduced greenwashing – activities or industries to meet well-defined standards or criteria Easy for regulator/supervisor to monitor
Cons	Complex and requires expertise to apply or use Resource intensive to identify (for users) and ensure compliances (for regulator or supervisor) Takes a long-time to develop TSC needs to be updated regularly Cross border interoperability challenging as TSC will vary among countries /regions	Uncertainty and subjectivity in the interpretation and application of principles Potential for greenwashing Challenges in monitoring, reporting, and ensuring compliance Lack of clarity on whether the activity or asset qualifies as green, for investors	Rigid and lack of flexibility - need to regularly update changes based on scientific development (e.g. exclusion of new technologies), environmental standards, and priorities Potential oversight of activities or sectors that do not align perfectly with the set criteria Compliance challenges for users if their activities do not neatly fit into predefined categories
Countries adopting approach	EU, South Africa and Korea	Malaysia and Japan	China, Mongolia and Russia

Source: Authors compilation

Figure 16.
EU compliance
criteria for
economic activities

Note: Drawn from final report of the EU's TEG on Sustainable Finance (March 2020)



At the same time, the ASEAN Taxonomy requires any activity to fulfil three Essential Criteria (EC) for classification: Do No Significant Harm (DNSH), Remedial Measures to Transition (RMT), and Social Aspects (SA). The DNSH ensures that an activity that contributes to one environmental objective does not cause significant harm to another objective. RMT ensures that any significant harm is either removed or rendered insignificant. SA focuses on social aspects that could be harmed by an activity, such as human rights, labour rights, and impact on people living close to the investments. See Box 14 and Annex 5 for further details.

Box 14. Essential Criteria in the ASEAN Taxonomy

Any Activity which is to be classified under the ASEAN Taxonomy must also fulfil the minimum requirements of three Essential Criteria (EC), as follows: EC1: Do No Significant Harm (DNSH); EC2: Remedial Measures to Transition (RMT); EC3: Social Aspects (SA)

EC1: Do No Significant Harm: An Activity interacts directly or indirectly with the surrounding environment. While the Activity may contribute towards an EO, it may cause unintended significant harm to the broader environment. DNSH refers to the principle that an Activity which contributes to one EO, shall also not significantly cause any harm. Assessment of DNSH to other EOs forms part of the classification assessment of an Activity and is undertaken after ascertaining the contribution of an Activity against EO-specific objectives. Note that an Activity may also be rejected for Green or Amber classification if it causes direct or indirect harm which impacts the positive contribution to the main EO under consideration. For Activities to be assessed under the PS, criteria for significant harm are described in Annex 5.

EC2: Remedial Measures to Transition: Remedial Measures to Transition (RMT) are measures which ensure that any actual or potential significant harm is removed or rendered not significant. If it has been assessed that an Activity may cause significant harm to an EO, RMT must be put in place. Implementation of RMT needs to be planned which will effectively remove all significant harm within 5 years from the assessment date. Comprehensive and realistic plans for RMT must be presented as part of the assessment. If significant harm is occurring or will occur, and RMT is not planned to be completed within the specified timeframe (i.e., within 5 years), the Activity is automatically classified as Red. In both the FF and the PS, if an assessment shows that an Activity is causing or may cause significant harm, the classification will be downgraded to Amber (FF) or Amber Tier 3 (PS) pending effective remediation, as described in Section 3.6.3

EC3: Social Aspects: Social Aspects (SA) relates to social conditions which could potentially be harmed by an Activity. An Activity may contribute to EOs, but during its lifecycle, may result in negative impacts towards its employees or the surrounding communities. Therefore, it is important that taxonomy-alignment also involves the adherence of the Activity to the ASEAN Taxonomy social aspects. Within the ASEAN Taxonomy, there are three key Social Aspects (Table 7). Assessment of Social Aspects is undertaken at the Company level, as opposed to at an Activity level, as social policies are usually crafted at the Company level

Source: ASEAN taxonomy ver 3, p. 31

Do no significant harm requirement

A Do No Significant Harm (DNSH) assessment ensures that while the economic activities make a substantial contribution to one objective, they do not cause significant harm to all other objectives of the Taxonomy. Even if an activity is classified as climate-aligned during previous steps, it can still be considered ineligible in practice based on its impact on other objectives. For instance, in the case of wind power, despite the crucial contribution of wind energy to mitigating climate change, the construction of a wind farm might hurt nature conservation at a local level. Some of the environmental implications that need to be considered under the DNSH criteria, might include composite waste generated from on- and offshore wind turbine blades at the end of their lifetime or the possible disturbance, displacement or collision of birds and bats by the

construction and operation of wind farms. Under a social taxonomy the screening can be made in terms of whether the construction of a new school is negatively affecting biodiversity or GHG emission, if, for instance, it is powered by burning coal.

Therefore, the DNSH comes with specific criteria and approaches for identifying and assessing the harm caused by activities. It also evaluates if measures are taken to address these impacts. In the case of wind power, the activity can be assessed on whether a company has a recycling plan at end of life cycle of the wind turbine, or whether a dismantling/decommissioning processes at time of decommissioning is done in line with the industry standards to comply with the objective on promoting circular economy. Taxonomies with the comprehensive approach to the DNSH framework lists all the thresholds that activities need to comply with, which encompasses environmental impact assessments, mitigation and compensation measures, and the necessity to preserve biodiversity-sensitive areas. See Annex 5 for treatment in the ASEAN and Singapore taxonomy.

Minimum Social Safeguards requirements

In addition to the screening against DNSH criteria, supplementary minimum social and environmental safeguards (right circle in Figure 16) can be used to determine eligibility of an activity. Social safeguards can be drawn from international best practices for managing corporate conduct in the areas of human rights, labour rights, and corruption, such as the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises or national legislation and regulations.

Different jurisdictions assess performance criteria against different topics. The Colombian Green Taxonomy addresses

- i. Assessment and management of environmental and social risks and impacts,
- ii. Labour and working conditions,
- iii. Community health and safety,
- iv. Land acquisition and involuntary resettlement,
- v. Indigenous peoples, and
- vi. Cultural heritage.

While the EU Taxonomy covers

- i. Human rights, including workers' rights,
- ii. Bribery/corruption,
- iii. Taxation, and
- iv. Fair competition.

Importantly, assessment is usually performed at a company level as opposed to an activity-level assessment applied in previous screening stages. This is because social strategies are usually crafted and apply to the entire company.

Box 15. ASEAN Taxonomy. Guiding question for social safeguards

A few sample questions from the ASEAN taxonomy to assess compliance with the taxonomy social safeguards criteria in the absence of minimum standards established through national regulations or legislations:

1. Promotion and protection of **human rights**

- a. Does the Company have policies or guidelines that uphold an individual's right to enjoy just, decent and favourable working conditions?
- b. Does the Company have a clear and transparent policy that sets out measures to create a positive environment in overcoming discrimination?

2. Prevention of forced labour and protection of **children's rights**

- a. Does the Company employ occupational health and safety practices?
- b. Does the Company have a clear and transparent policy that sets out measures taken to prevent and eliminate all forms of exploitation, trafficking, violence and abuse in its entire supply chain?

3. Impact on **people living close to investments**

- a. Does the Company conduct risk and vulnerability assessments to ensure targeted response measures that would contribute to the progressive implementation, effective monitoring and evaluation, as well as optimum impact of social protection?
- b. Does the Company engage and strengthen the capacity of the community for the better responsiveness, coordination and effectiveness of risk reduction and management policies?

Source: ASEAN Taxonomy version 2

Remedial measures to transition requirements

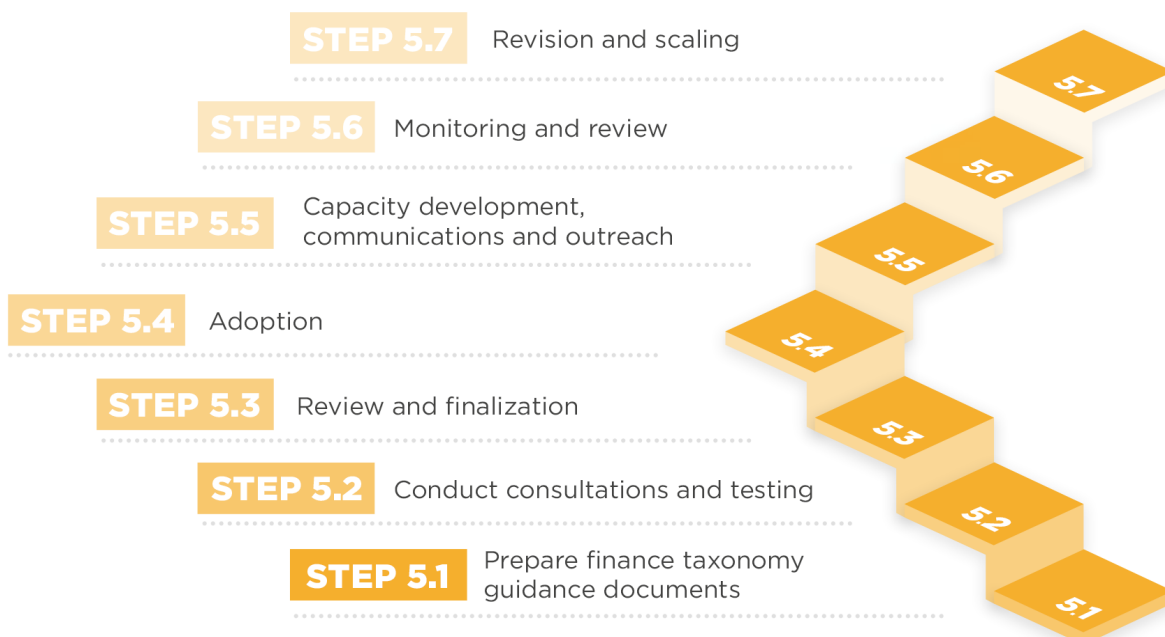
This criterion is used by the jurisdictions, which incorporate green transition in their taxonomy, including ASEAN and Malaysia. The remedial measures to transition principle entails that if an activity can cause significant harm to the objective, the company must demonstrate that a realistic and comprehensive plan is in place to mitigate the harm. Depending on whether the remediation plan is implemented or not within the indicated timeframe, the activity is upgraded or downgraded accordingly.

Table 12. Malaysian Taxonomy: criteria to assess the strengths and suitability of remedial efforts

Context	Business is assessed as causing significant harm to the climate and/or the environment
Assessment objectives	The remedial efforts should directly contribute towards the outcomes in which unacceptable risks to the climate and/or environment can be eliminated or significantly reduced.
	The commitment/willingness of the business is demonstrated through the development/practice/commitment of sustainable practices to ensure that the business is conducted in a sustainable manner where all parties involved understand the potential risks and take appropriate mitigating actions to reduce any adverse climate and/or environmental impacts.
Assessment criteria	Sector/industry What is the intensity of the business' GHG emissions in comparison with the industry average or other acceptable benchmark? Is there a decarbonisation pathway established within the industry that the business operates in? What are the environmental-related risks commonly associated with the sector/industry? Have these risks been taken into consideration in business strategy and policies? Is there any pollution management or mitigation plan? How effective is the policy implementation?
	Purpose and possible impact of loan/financing/investment What are the proceeds used for? Will the use of proceeds help reduce GHG emissions? Will the use of proceeds help increase climate resilience? Will the use of proceeds help fund sustainable practices? Will the use of proceeds help remediate, or at least not increase, the harm caused by the business to the environment?
	Business profile Is the business strategy (proactiveness and willingness) aligned with climate change and environmental objectives? Is the business operation(s) and asset(s) located in areas vulnerable to physical risk? How extensive is the business supply chain and to what extent are the business' vendor(s) adopting sustainable practices? Does the business have adequate financial capacity to fund the remedial efforts, including supporting remediation efforts by its vendor(s)?
Determining remediation efforts for credit decision and monitoring	Remedial efforts and transition period What is the business' current GHG emissions profile, and does it have a plan to close gaps against acceptable benchmarks? Has a plan with specific milestones been drawn up to outline appropriate measures to achieve GHG emissions reduction and reduce environment related risks? Is the remediation plan appropriate and does the plan commensurate with the size, complexity and financial capacity of the business? Is there a plan and time-bound commitment to pursue external certification and/or validation (voluntary certifications)?
Tracking and monitoring of remedial outcomes	Progress of remedial efforts should be tracked by FIs against the agreed milestone and timelines i.e. short, medium and long term.

Source: Climate Change and Principle-based Taxonomy, Malaysia

STEP 5. CONSULTATION, TESTING AND ADOPTION



Key learning outcomes

- Providing essential information via guidance documents and awareness rising for target users are necessary to ensure applicability of the finance taxonomy
- Introducing a testing phase to improve the applicability of the finance taxonomy
- Ensuring a dynamic review process of all the steps for the finance taxonomy development, with inclusive stakeholder consultations.

Once the first draft of screening criteria and set of activities is prepared, the finance taxonomy must be endowed with a guidance document, testing/ feedback phase, required revisions, monitoring and review process and finally the adoption and scaling, outlined in Table 13.

Table 13. Guidance, Testing, Adoption and Revision

Guidance and Frequently asked questions	Formulating a guidance document for finance taxonomy users is a crucial step for implementing the taxonomy. A list of FAQs to be built to assist the process moving forward and ensure ease of integration of new stakeholders across different steps.
Consultation and Testing Phase	Stakeholder consultations provide essential feedback before pre-finalizing the finance taxonomy. For instance, the EU TEG has conducted various stakeholder consultations, incl. calls for written feedback testing / piloting phase.
Review and Finalization	Feedback can be used to improve and adjust the taxonomy before being rolled out. Workshops can be conducted to further improve the design of the finance taxonomy.
Adoption	Adoption of the taxonomy
Capacity development, Communications and outreach	Capacity development to help build understanding of all the market participants on the application of taxonomies and improve uptake. Introduce a communications and outreach plan to generate awareness about the taxonomy and ensure its widespread adoption. This can include using various media for outreach, workshops, conferences, print and virtual dissemination methods
Monitoring and Review	An M&E framework is used to track progress and incorporate requisite changes in the taxonomy to ensure effectiveness.
Revision and Scaling	Review, update and expand the scope of the taxonomy to address the emerging needs

Finance taxonomy guidance documents

A key output of the finance taxonomy development process is typically a “taxonomy guidance” document, that helps targeted users to apply the taxonomy. As the introduction of a finance taxonomy comes with significant technical requirements not all taxonomy users are in the position to evaluate their operations (economic activities) on eligibility, incl. reporting of the e.g., finance taxonomy-eligible share of activities without a clear guidance. Thus, there is a need to provide clear and precise instructions around how eligibility criteria and thresholds can be applied and what is needed for a smooth implementation. The better the guidance, the higher the uptake. Examples of guidance for countries:

- China 2020: [Technical Report on SDG Finance Taxonomy \(China\)](#)
- Malaysia 2021: [The Central Bank of Malaysia, Bank Negara Malaysia \(BNM\)](#), issued the final version of the Climate Change and Principle-based Taxonomy guidance document
- EU 2021: [Sustainable Finance Taxonomy – Frequently Asked Questions](#)
- EU 2022: [Taxonomy Report: Technical Annex. PART C Taxonomy user and use case analysis](#)
- Thailand 2023: Usability Guide Thailand Taxonomy (See Box 16)

Box 16. Applying the Thailand Taxonomy from a user’s perspective.

Thailand usability guide provides explanation of key concepts and processes, such as steps to determine eligibility, traffic-light system application of thresholds, and other, in a user-friendly way.

5 steps to use Thailand Taxonomy

Example: A power plant that generates electricity using different sources

	List your activities Break the entity/project into activities	Solar generation	Cool generation	Bioenergy generation	Consulting services
1	Check the coverage Define activities from the break-down, use the Section 4 of the Thailand Taxonomy	Covered under section 4.1.1	Covered in Red List (section 4.3)	Covered under section 4.1.5	Not covered
2	Color your activities Categorize the activities, see if they are in line with green / amber criteria defined in the Taxonomy		 Fossil fuel-based activities		
3	‘Do no harm’ to others? Define whether activities meet green or amber criteria also meet DNSH and MSS requirements	Meet both DNSH and MSS requirements		Does not meet DNSH/MSS requirements (Adopt a plan to remediate in 3 years)	
4	Conclude the evaluation Prepare a final conclusion and Supplementary reports	 Eligible as Green	 Eligible as Red	 Eligible as Amber Harm should be remediated within the timeframe in the plan. If not, the status will be revoked	 Out of scope Thailand Taxonomy
5	Example of adapting in the financial tool	can apply for Green loan or bond according to the criteria set by financial regulators	cannot apply for sustainable finance instrument	can apply for transition loan or bond according to the criteria set by financial regulators	

Source: Usability Guide Thailand Taxonomy (2023)

The Guidance can be complemented with the FAQ note, compiled during consultations, links to user feedback, presentations from capacity development trainings, case studies that demonstrate how the taxonomy is applied to specific projects, activities or instruments etc.

Box 17. Thailand Taxonomy – reference and related documents

 ธนาคารแห่งประเทศไทย BANK OF THAILAND	
	25 December 2022 Public Hearing - Thailand Taxonomy Phase 1 The Draft was launched by Thailand Taxonomy Board for public consultation between 26 December 2022 and 26 January 2023. Feedback Summary (TH)
	30 June 2023 Thailand Taxonomy Phase 1 is focused on two sectors: energy and transportation - June 2023 Download Document
	5 July 2023 Thailand Taxonomy Seminar: A Reference Tool for Sustainable Economy at Siam Kempinski Hotel Bangkok. Watch the recording and download related document (TH)
	In Progress Thailand Taxonomy Phase 2 will be focused on Manufacturing, Agriculture, Real estate and Construction, and Waste Management sectors.
Related Documents • Usability Guideline for Thailand Taxonomy • Excel Tool: Activities thresholds and criteria • Business Guide, Case Studies, and FAQs	

Source: Bank of Thailand, [Thailand Taxonomy: A Reference Tool for Sustainable Economy](#)

Consultation and Testing phase of the taxonomy

Consultation and testing a finance taxonomy to garner feedback is required to ensure applicability. It should comprise of offline and online consultation, collecting feedback from potential users through surveys and interviews, and should be followed by adjusting the draft to address major challenges identified.

Integrating the testing phases early in the process is an essential lesson learned from established finance taxonomies, such as the EU finance taxonomy. It is likely, that the finance taxonomy will create confusion and raise concerns by potential users (firms, financial institutions) as it significantly impacts internal and external reporting practices. Planning and preparing a “sandbox” environment for testing purposes early in the process can help minimize confusion and inefficiencies.

Box 18.Colombian taxonomy:
Piloting and
Feedback Process

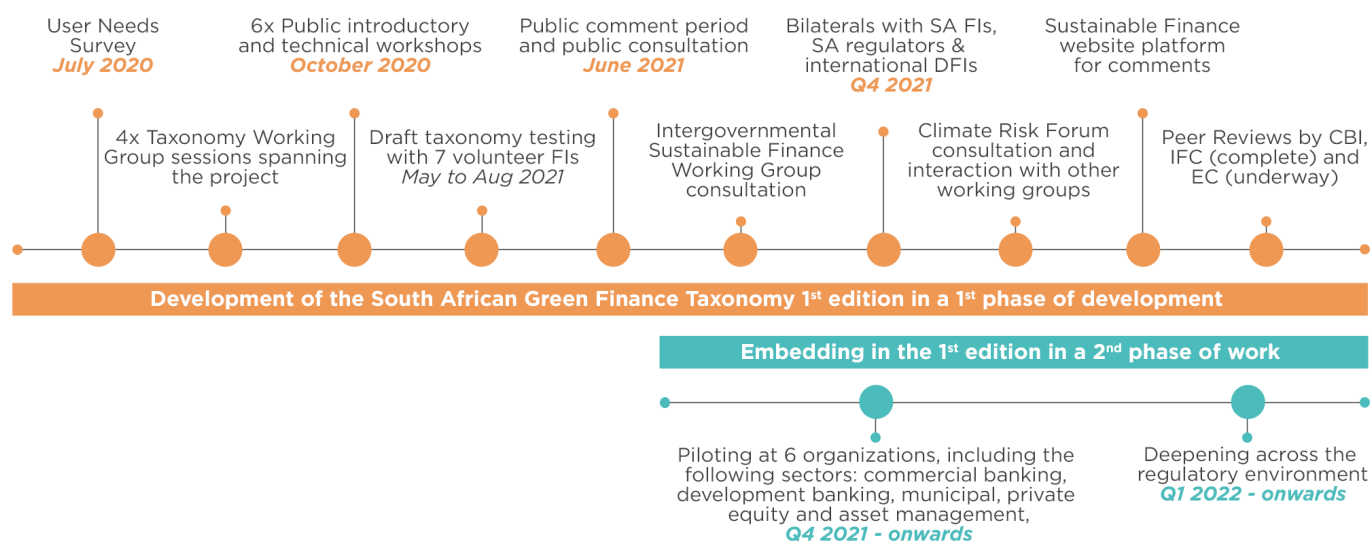
The piloting phase of the taxonomy for green credit lines in commercial and Tier-2 banks revealed that most micro, small, and medium enterprises (SMEs) faced challenges in applying the taxonomy. SMEs play a significant role in Colombia and in the Latin American and Caribbean (LAC) region. The difficulties primarily stemmed from limited resources and capacities, as well as a lack of necessary information and data to demonstrate compliance with the taxonomy. In light of these challenges, it is crucial for taxonomies to consider their practical applicability to various market users, as outlined in Guiding Principle 6 of this Framework. Recognition is needed that not all users possess the same resources and capabilities to comply with the implementation of a taxonomy. The gaps identified during the pilot phase indicated that it is essential for the user classification process to take into account factors such as size, type of debtor, and category. Users can be categorized as small, medium, and large, and the requirements of the taxonomy might need to be applied differently based on the scale of the project/activity to be financed.

Source: Common Framework of Sustainable Finance Taxonomies LAC, 2023

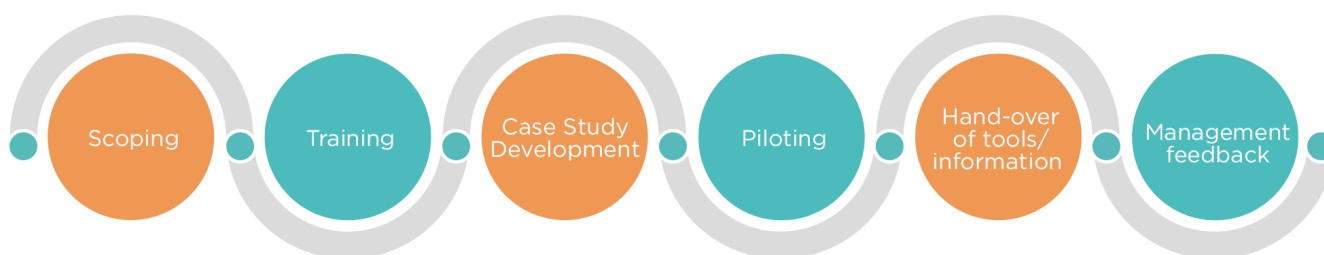
South Africa had a comprehensive consultative approach, including six pilots with volunteers:

Box 19. Consultative Approach to the development of South Africa's Green Taxonomy

A rigorous consultation process to develop and refine the Taxonomy has been followed over two phases of development



Pilots followed an iterative and collaborative approach:



Source: South Africa Sustainable Finance Initiative

	What?	Who?	Why?
1	Embedding the GFT into Public Sector Procurement Processes	Local municipalities; public sector entities; government departments	To drive change at a local scale and embed sustainability into City planning
2	Embedding the GFT into Asset Management Investment Decision-Making	Asset managers; private equity investors; fund managers; venture capitalists; securities exchanges; listed companies; financial instrument issuers	To stimulate an ecosystem of investable GFT aligned projects and attract finance
3	Embedding the GFT into Sustainable Finance Frameworks	Commercial banks; industry; market exchanges; debt investors; municipalities	To standardize green debt issuance
4	Opportunities for Emerging Market Development Banks	Development banks; international funders; emerging market governments	To align with international best practice

Among others, results from the testing phase can require adjustments in the applicability criteria, or the re-designing of economic activities. Thus, once specific issues are identified, corrections and adjustments must be incorporated in the design and definition phase. To do such revisions, the roles and responsibilities must be clearly mandated and set already in the governance structure (Chapter 2, step 1).

Stakeholders for the feedback phase

The review process to collect and incorporate expert inputs from relevant stakeholders, multiple stakeholder consultations can be conducted with various actors (World Bank, 2021):

- Environmental and other regulators with programs for environmental improvement
- Banks, asset/investment managers, and banking and insurance associations
- Key economic sectors most likely to be materially affected and/or benefited by the sustainable finance taxonomy
- Civil society and academia (particularly research centres)
- International organizations and international investors

Stakeholder consultation and feedback process

Wider stakeholder consultations remain a key part of the taxonomy process. The consultation process can vary based on the depth of feedback required, the audience that is invited to comment and the level of transparency in the process (UNDP 2022). Taxonomy processes have facilitated consultations in different ways in different jurisdictions, for example:

- **Singapore** promoted a publicity available survey for the public (e.g., everyone with access to the internet can potentially provide feedback) and providing key guiding questions³⁰
- **Bangladesh** officially reported to considered forty-five comments of consultation feedback, coming from banks and international agencies³¹
- **EU Taxonomy** provided a guiding document and a set of clearly formulated questions. At the end of the consultation, the recommendations were documented and made public (see Annex 6 for main takeaways based on the public consultations).

30 E.g., see [Green Finance Industry Taskforce \(GFIT\) Taxonomy Public Consultation](#)

31 Sustainable Finance Policy for Banks and Financial Institutions, 2020

Capacity development, communications and outreach

Capacity development of all relevant stakeholders in the financial system can help build understanding of all the market participants on the application of taxonomies and improve uptake.

The effectiveness of a green or sustainable taxonomy system hinges on its ability to make a real impact. This underscores the importance of transparently communicating and disseminating progress in greening financial practices. Such communication serves a dual purpose: rallying the financial sector towards climate action and engaging diverse stakeholders from government, private sector, civil society, and academia in knowledge-sharing endeavors that foster transparency and inclusivity regarding climate change and sustainability. To ensure these efforts resonate with various audiences, the following steps are advised for devising impactful communication and information-sharing strategies:

- Present the taxonomy in international, regional, and national forums to broaden its reach
- Facilitate courses and workshops within working groups to promote understanding
- Craft communication strategies tailored to different stakeholders, emphasizing the significance of the taxonomy
- Translate technical jargon into accessible language for wider comprehension
- Empower key groups and sectors—including civil society, academia, the private sector, and youth—by involving them in disseminating the taxonomy’s message.

Monitoring and Evaluation

Monitoring and evaluation (M&E) is an essential process as continuous monitoring, development, and revisions of the taxonomy is key to ensuring the successful implementation of the finance taxonomy. M&E frameworks systematically assess the taxonomy’s progress and effectiveness in line with its objectives, identify bottlenecks and unintended consequences of the implementation (positive or negative) of the taxonomy, and update the taxonomy accordingly. For this purpose, taxonomy M&E systems should be flexible to allow for improvement, while keeping in line with the taxonomy’s goals and objectives. At a broad level, M&E systems are designed to track the following:

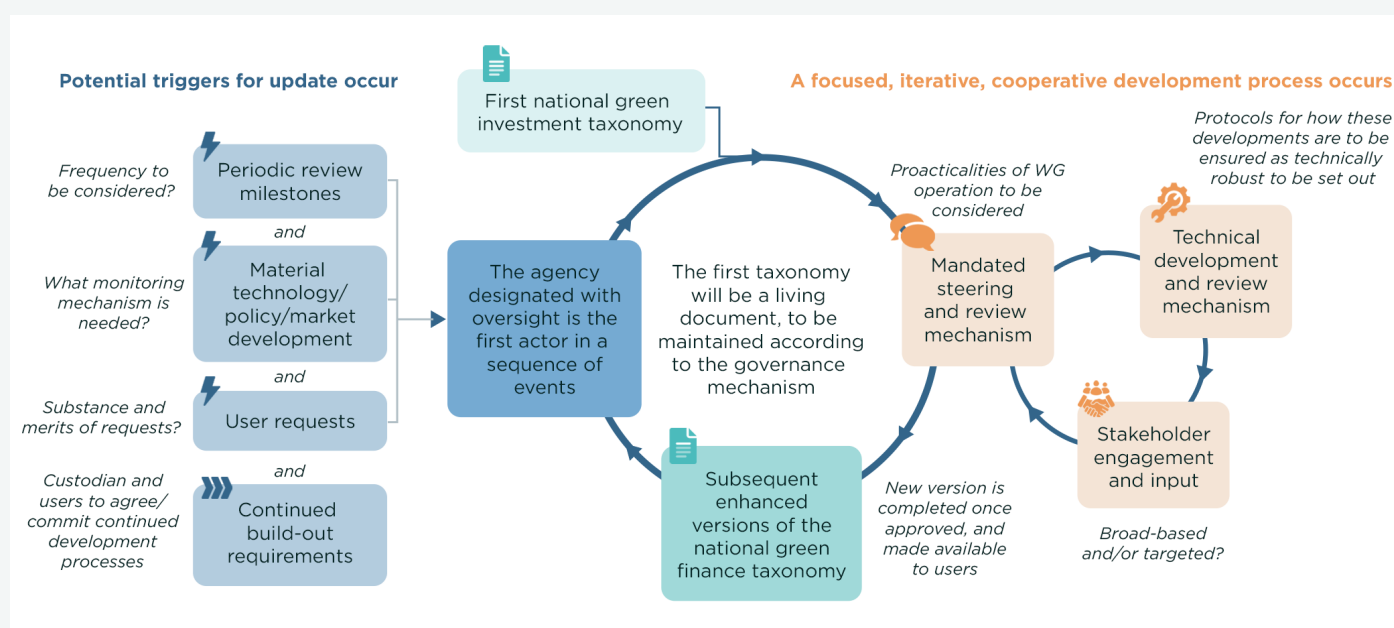
- **Relevance:** Whether it is achieving its objectives and desired impact
- **Effectiveness:** Monitor the progress of taxonomy and assess the implementation plan, and suggest measures to improve its effectiveness
- **Efficiency:** If the resources are being used in the best possible way to implement the taxonomy and identify alternative means to maximize its impact in a timely manner
- **Impact:** If the taxonomy is generating evidence-based change in line with the taxonomy’s broader goals and objectives
- **Sustainability:** if the taxonomy will be sustainable and operational over a period of time.

The M&E framework follows the causal logic of the Theory of Change and associated result-based frameworks. This includes mapping of activities, outputs, and outcomes and how they feed into the taxonomy’s goals, objectives, and strategy.

Revision and scaling

The taxonomy document must not be a static document and should have the necessary features that can accommodate market innovation, technological progress, climate science development, and the changing sustainability and climate goals of the country. Updating the taxonomy can entail the addition or deletion of certain industries, sectors, and economic activities, revision of technical screening criteria, and addition of new objectives. Hence, it is important to ensure that the taxonomy document is responsive and revised periodically to avoid being outdated and irrelevant. Users of the taxonomy must be aware that the taxonomy is a live document and subject to being updated. Any updates on the taxonomy must be developed within the principles of the taxonomy that offer confidence among users.

Figure 17. South Africa: Iterative process for development and update of finance taxonomy



Source: [National Business Initiative](#) 2020

To make the revision process smooth, effective, and transparent, it is important to develop guiding principles for the taxonomy outline processes and rules to manage, update, and improve the taxonomy over time. It will follow the same governance mechanism as a step-by-step guide to develop the taxonomy. The principles will serve as a guide for the stakeholders in consistently evolving the taxonomy.

Another key step is to identify a custodian who will maintain, monitor, and update the taxonomy. The custodian will also be engaged in developing practice guidance and standards to implement the updated taxonomy. The custodian will be responsible for the oversight of the review processes. The updated taxonomy will be updated by the working group and subsequent consultation with the stakeholders. The technical committee will subsequently perform a validation process approving suggested updates to form the updated draft for public comment. Once comments are assessed and incorporated, the updated taxonomy will become the renewed user version going forward.

CHAPTER



TREATMENT OF SOCIAL AND TRANSITION DEFINITIONS



Key learning outcomes

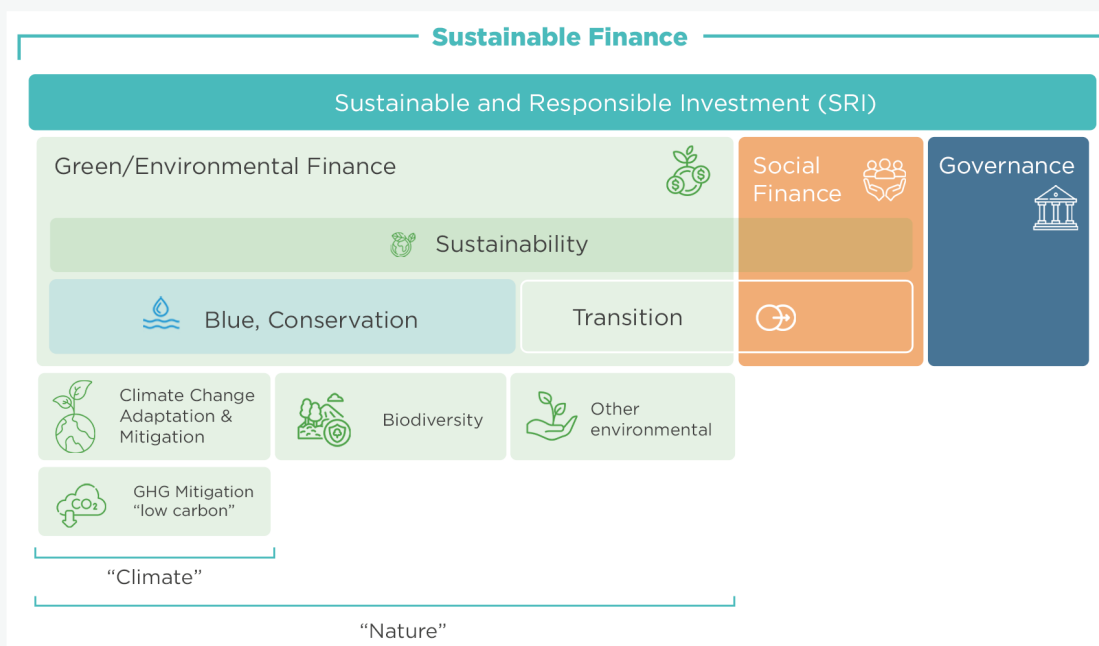
- Promote a better understanding of why a social taxonomy or inclusion of social sector objectives;
- Promote a better understanding of the interlinkages between environmental and social dimensions and how countries can formulate their taxonomies to focus on transition pathways in a manner that is informed by science and social justice.

While sustainable development and finance encompass both green and social dimensions, a majority of the taxonomies started out as green taxonomies, with a focus on serving as a reference tool for economic activities responding to key environmental objectives. In most cases, mitigation was prioritized given the urgent need for the world to move net zero pathways.

While early taxonomies, such as the EU Taxonomy, saw the treatment of social objectives as being elaborated somewhat later in the process, more recently, there has been a growing focus on broader Sustainable Development Goals (SDGs), and more specifically on social objectives, sectors and related activities and the need to redirect capital to social priorities. Moreover, there has also been a growing focus on not only exploring green activities but also just transitions to green at an accelerated pace and in credible ways. Given their relative novelty, social and transition definitions and priorities are treated in detail in this chapter.

Figure 18.

Growing scope of sustainable finance taxonomies



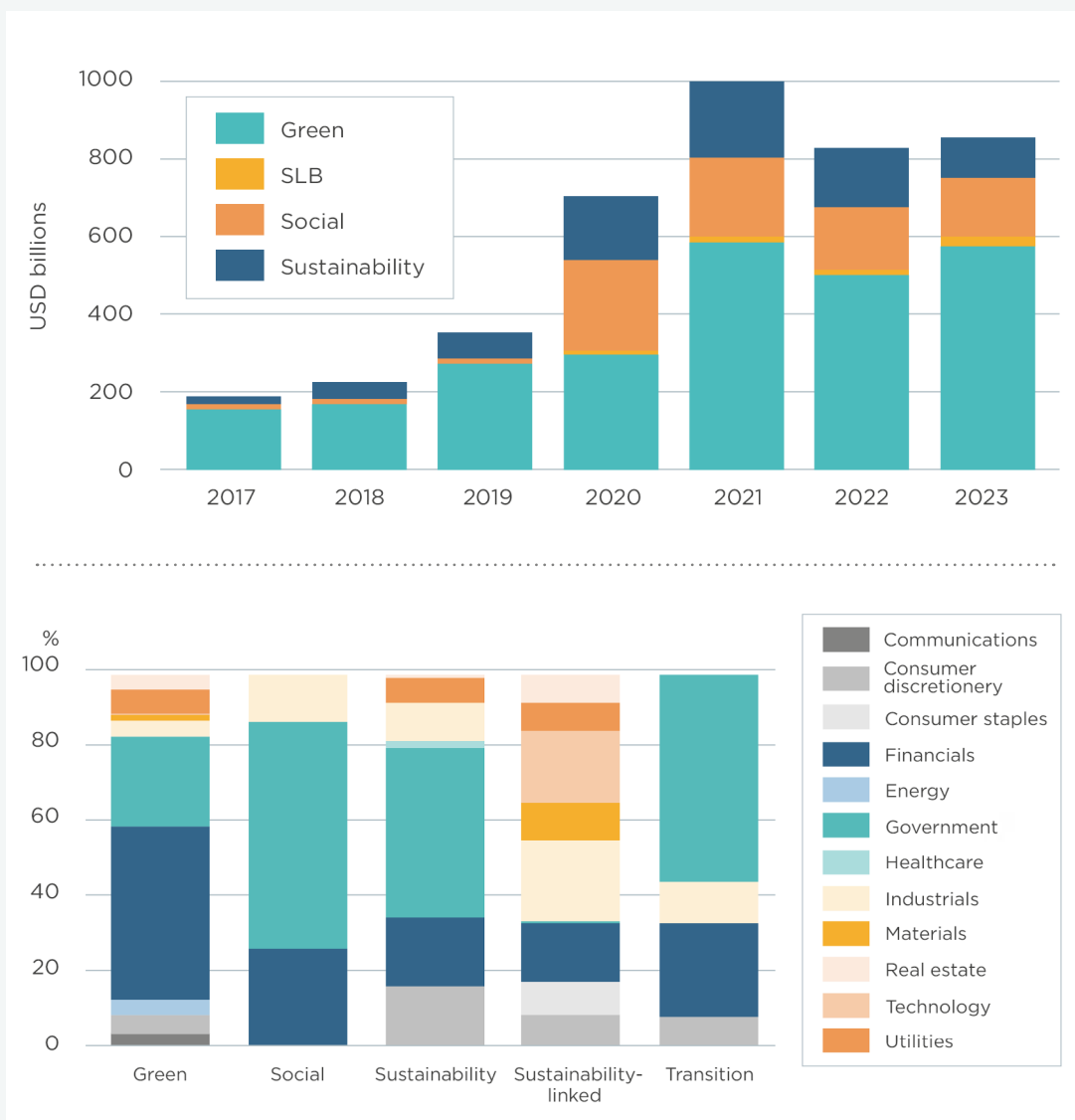
Source: World Bank 2022

Social dimensions in the finance taxonomies

In the wake of the COVID-19 pandemic and growing focus on the need to address health emergencies, the landscape has already begun to change with a growing priority assigned to social impact. As a result, social bonds and loans have become increasingly attractive during the COVID-19 period to finance health and recovery programs. But even in the aftermath of the pandemic their popularity remained high, expanding beyond health sector alone (to finance social housing, education, and jobs for target groups) (See Figures 19 and 20).

Figure 19.

Trends in Green, Social, Sustainability and Sustainability-linked and aligned bonds (GSS+)

**Notes:**

1. ASEAN + 3 is defined to include member states of the Association of Southeast Asian Nations (ASEAN) plus the People's Republic of China, Hong Kong, China, Japan and the Republic of Korea.

2. Data include both local currency and foreign currency issues.

Source: AsianBondsOnline computations based on Bloomberg LP data.

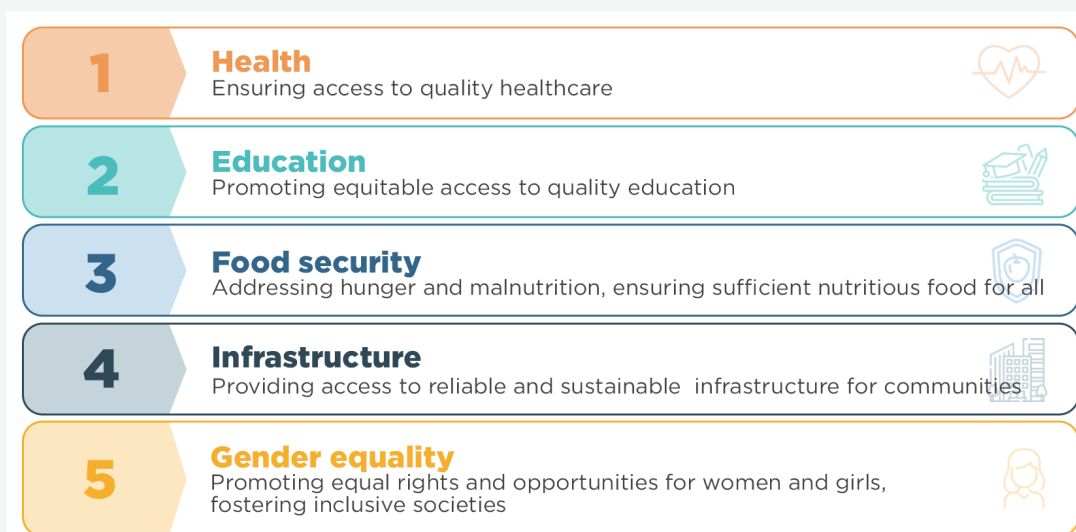
Social investments have always been one of the main priorities of governments across the world. Yet, there is a growing recognition that public investments are not merely enough to meet the sustainable development goals, this is a perfect opportunity to channel private investments to socially valuable activities. At the corporate level, the social pressure is growing to align business operations and management culture with ESG principles, not only addressing any human-rights issues like child labour or gender pay gaps but also investing in social impact. It is therefore increasing demand to define what constitutes a social investment, in a similar way to green investments.

Approaches to the classification of the activities as socially aligned are still being shaped across the jurisdiction which is why there is no common methodology that can be presented in this guide. Here, the guide tries to summarize some of the main approaches to treating social dimensions in taxonomies.

Objectives, categories and sectors

While there is some variation in how different taxonomies name objectives and categories, they can be summarized below:

Figure 21.
Social categories
based on
international and
national definitions



Source: compiled by
Authors

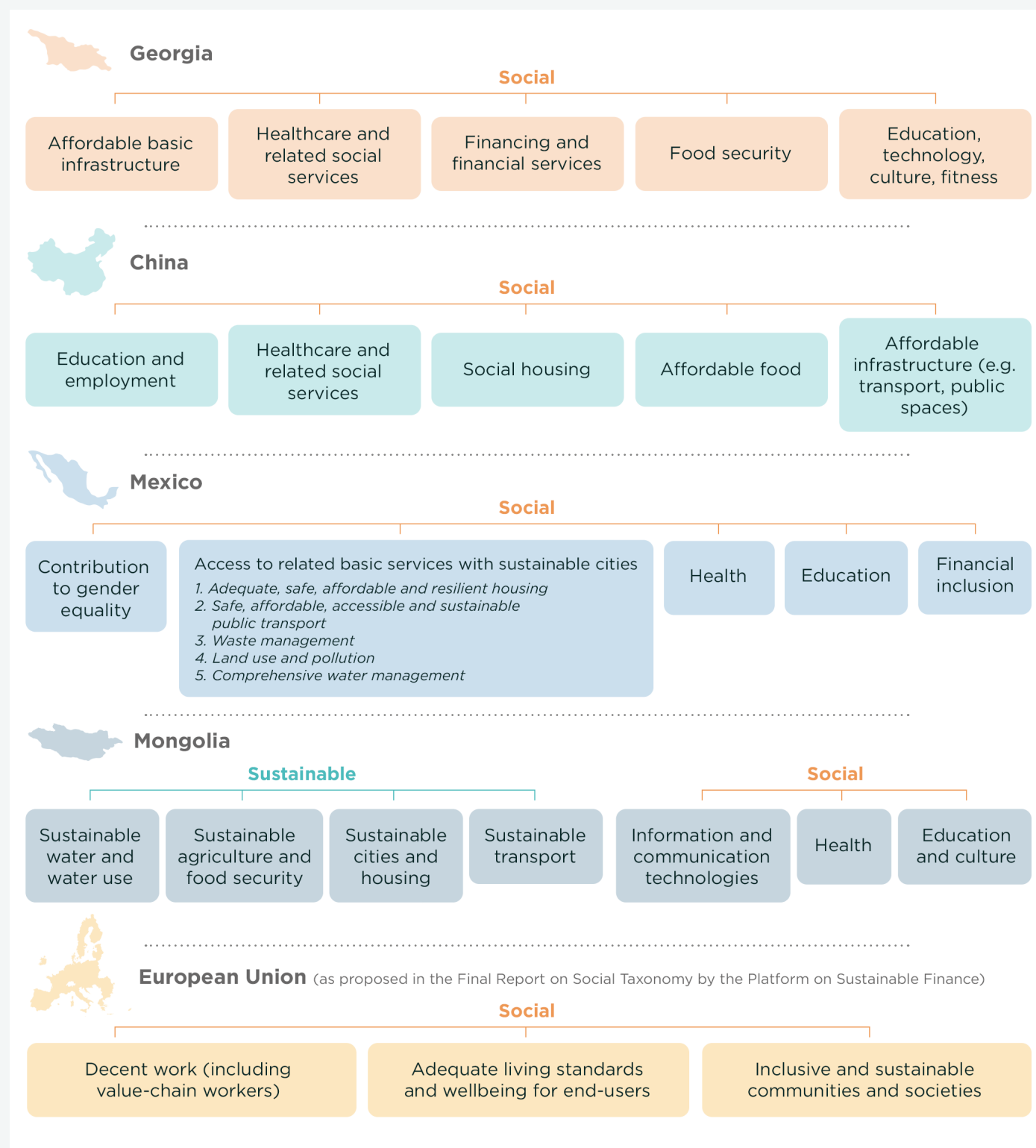
The International Market Association (ICMA), a not-for-profit association, has formulated six social categories under its social bond principles (see Box 20). Most countries have been formulating social categories in line with this classification with some diversions (see Figure 22).

Box 20.
ICMA social project
categories (include
but are not limited to
these)

Affordable basic infrastructure	(e.g. clean drinking water, sewers, sanitation, transport, energy)
Access to essential services	(e.g. health, education and vocational training, healthcare, financing and financial services)
Affordable housing	affordable housing is broadly defined as that which is adequate in quality and location and does not cost so much that it prohibits its occupants meeting other basic living costs or threatens their enjoyment of basic human rights. Housing affordability, however, is multi-dimensional and involves more than the often-used simplified conception of the ratio of house purchase price to household income.
Employment generation and programmes	designed to prevent and/or alleviate unemployment stemming from socioeconomic crises, climate transition projects and/or other considerations for a “just transition” (such provision and/or promotion could include SME financing and microfinance)
Food security and sustainable food systems	(e.g. physical, social, and economic access to safe, nutritious, and sufficient food that meets dietary needs and requirements; resilient agricultural practices; reduction of food loss and waste; and improved productivity of small-scale producers)
Socioeconomic advancement and empowerment	e.g. equitable access to and control over assets, services, resources, and opportunities; equitable participation and integration into the market and society, including reduction of income inequality)

Source: [ICMA 2023 Social Bond Principles](#)³², UN-Habitat, 2011

32 Examples of target populations include, but are not limited to, those that are: (i) Living below the poverty line; (ii) Excluded and/or marginalised populations and/or communities; (iii) Vulnerable groups, including as a result of natural disasters; (iv) Unemployed; (v) People with disabilities; (vi) Migrants and/or displaced persons; (vii) Undereducated; and (viii) Underserved, owing to a lack of quality access to essential goods and services.

Figure 22. Social categories in selected countries' taxonomies

Source: Finance Taxonomies of Georgia, Mexico, China and Mongolia.

In addition to pure social categories, the Mongolian SDG taxonomy recognizes that some of the activities present overlapping environmental and social benefits and are therefore considered as sustainable activities. Also, Mongolia is the only country, so far, that considers information and communication technologies as a social category. Georgia and Mexico have introduced financial services as a separate category.

Mexico has adopted a phased approach to unrolling its finance taxonomy. In the first version the country has declared five high-level social objectives, while eligibility criteria, for time being, are introduced only for the activities contributing to two objectives (gender equality and sustainable cities).

Types of substantial contribution

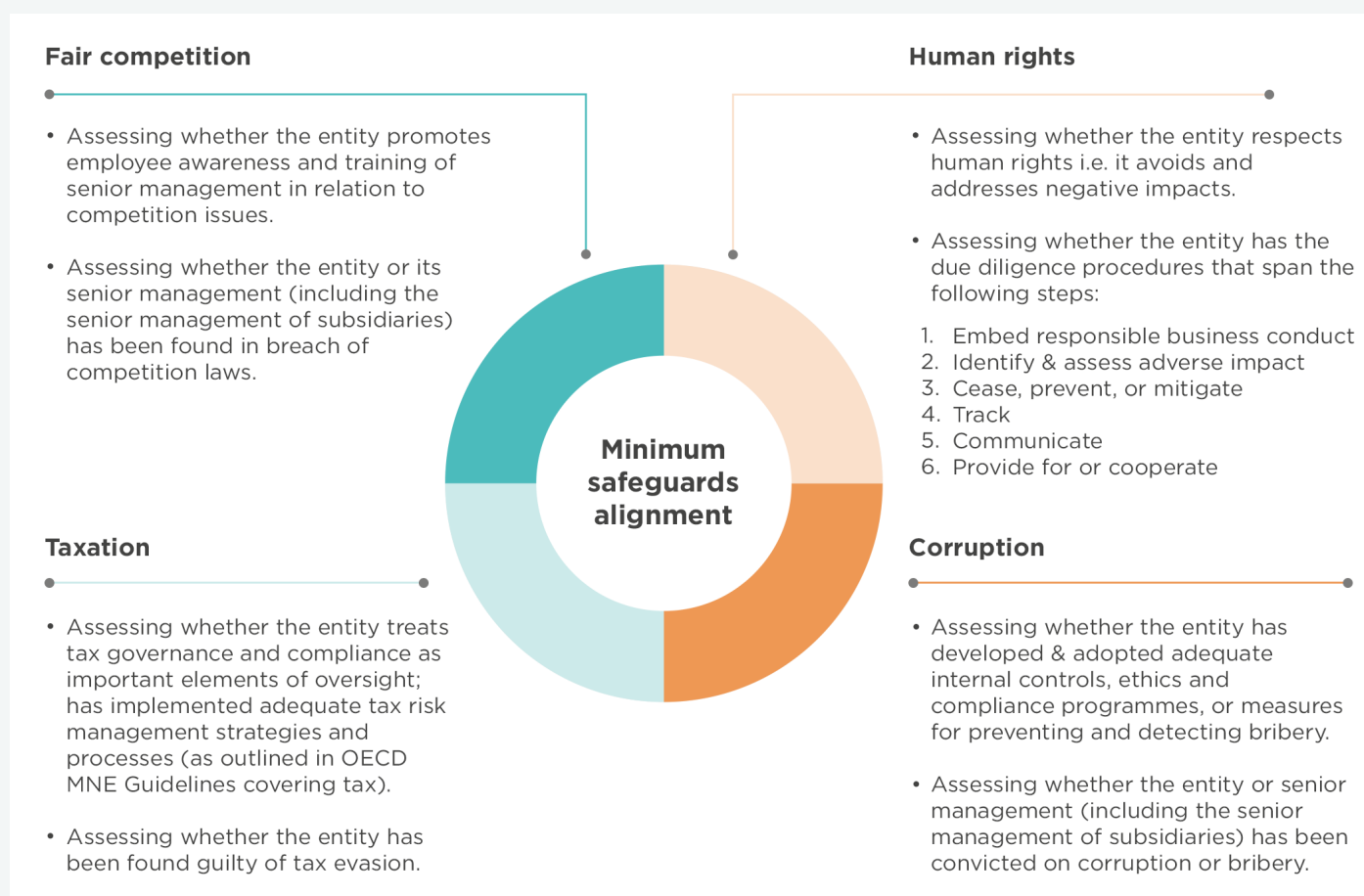
It is well recognized that social taxonomies are harder to tackle than green taxonomies for one obvious reason that most of the existing economic activities are, in essence, socially beneficial as they contribute to job creation, income generation, tax collection, etc. Social taxonomies, therefore, need to identify more specific incremental benefit that they bring to the society.

The social dimension in the finance taxonomies is addressed in two different ways. One, is by identifying the **economic sectors and activities which substantially contribute to social objectives**, i.e. sectors that are essential to improving the quality of people's lives (e.g., construction of primary healthcare facilities, loans to female-headed MSMEs). These are the sectors and activities that are traditionally classified as "social", including education, health, job creation, water and sanitation, affordable housing, etc.

Another way of treating "social" in the taxonomy is to analyze how any single **economic entity, not necessarily operating in the social sector, is contributing to social objectives**, such as decent employment, gender equality, human rights, etc. within its own corporate boundaries. Such contributions are usually limited to the company's own business operations, or business operations, but can also be applied across its value chain. Some of the aspects that the company might want to address related, for example, to decent employment are as follows: (i) occupational health and safety (OHS); (ii) training workers for a just transition; (iii) paying wages agreed in collective agreements; and (iv) ensuring a decent life for the worker and his/her family. In case of gender equality, it might be (i) equal pay; (ii) equal access to professional development, (iii) social participation of women, (iv) work-life balance of women, etc.

The second approach is similar to the **Minimum Safeguards** screening criterion, which states that companies have to meet certain ESG-aligned standards to avoid or mitigate any undue harm to people and society. Such standards and requirements usually cover social dimensions, such as adherence to human and labour rights, as well as governance dimensions - bribery, taxation and fair competition (See figure 23). Also see the discussion earlier in this document on [DNSH](#) and [minimum safeguards](#).

Some countries limit their taxonomies by incorporating just one approach. For example, Georgia and Mongolia only account for contributions that a company makes to the social sector/activity (construction of affordable housing). In other countries, like Mexico, the taxonomy assesses how a company that does not necessarily operate in the social sector comply with gender equality standards. The more advanced approach would be to apply these two approaches jointly.

Figure 23. Minimum Safeguards requirements in the EU finance TaxonomySource: [Briink](#)**Box 21.** The International Institute for Sustainable Development (IISD)'s practical steps to identify relevant social performance activities and improvements

The IISD has put forward a social taxonomy of business activities that promote social good and social governance improvements. It encompasses two sets of broad guiding principles (GPs): GP1 on promoting overall social well-being (enhancing positive social impacts) and GP2 on enhancing respect for human rights and enhanced company conduct (through company-level governance improvements on social issues).³³

Step 1	Meet the minimum social safeguards and Do No Significant Harm (DNSH) to GP1 and GP2; this has been designed to ensure taxonomy users meet minimum social requirements of avoiding adverse impacts on human rights and presence of basic governance systems, in order to be eligible to apply the taxonomy.
Step 2	Identify the relevant qualifying activity(s) that will have substantial contribution to GP1 (mandatory) and GP2 (optional but is strongly encouraged).
Step 3	Assess the social baseline performance on the chosen qualifying activity(s) to understand the magnitude of effort needed to achieve the social outcomes.
Step 4	Identify the relevant stakeholder group(s) (e.g., communities, consumers, workers) and anticipate the potential adverse and positive impact of the chosen activity(s) on these stakeholders.
Step 5	Undertake the chosen activity(s) by updating products or services or other business activities and instituting new governance systems or updating existing ones.
Step 6	Internally assess the chosen activity(s) social performance using some of the broad corporate governance level or human rights indicators.
Step 7	Report or disclose on the social impact of the chosen activity(s) by using these indicators to relevant stakeholders.

Source: [IISD 2022](#)

Eligibility screening

In the first case, when the taxonomy aims to identify activities that make substantial social contributions, it is important to further understand how the screening is done. In case of China, Mongolia and Georgia the whitelist approach was used, when the catalogues of the eligible activities were created, based on the common understanding of how certain projects and activities contribute to achieving high-level social objectives (See [Table 14](#)).

Table 14. Georgia's social finance taxonomy, health sector, white-list based approach

Category	Sub-category	Social Impact	Example/Explanation
Medical and health care services	Primary health care	Improves access for target groups to basic medical care and health knowledge	Provision of medical facilities, equipment, medical personnel and vocational training to provide primary health care, including primary dental care, services to target populations. Primary health care is defined in accordance with the Law of Georgia on Health Care
	Public health	Improve access for target group to basic medical care and provide public health services for all	Provision of medical facilities, equipment, medical personnel and vocational training to strengthen public health. For example, emergency centers, blood banks, health research and development guidelines, R&D, activities and projects to promote a healthy lifestyle, etc.
	Women's and children's health services	Improves access to maternal and child health care, popularises health knowledge, and ensures the safety of women and children and the improvement of their nutrition	Provision of medical facilities, equipment, medical personnel and vocational training to provide health services to pregnant women and infants; education and awareness raising about family planning, sexual and reproductive health of young people and the health of pregnant women; etc.
	Occupational health services	Improves safety and health of employees and workers	Provision of medical services, protective and medical equipment, medicines, and vocational training for the safety and health of employees; Development of new technologies, processes, equipment and materials to protect the health of workers, research of new occupational diseases, occupational health training; etc.

At the same time, in other countries, screening is based on whether the company meets a nationally/internationally accepted threshold, i.e. technical screening criteria approach. In the case of Mexico, the screening is done using the Gender Equality Index, which is based on the survey questionnaire and the score ranges between 0 and 174 points. Only those companies that get 72 points and above pass the screening (See Chapter 2, Step 4. Establishing Screening Criteria).

Do No Significant Harm, Minimum Safeguards, exclusion list and other structural elements

In addition to framing the substantial contribution of social taxonomies, there are still many uncertainties on how to design certain structural elements, such as DNSH, MS, TSC, etc. The existing social taxonomies do not elaborate on how to treat DNSH, minimum safeguards or any other elements with regard to social activities. Similar to the green taxonomy, it is important to maintain a balance between making it user-friendly, but at the same time have clear eligibility criteria to avoid “social-washing”.

The EU's Platform on Sustainable Finance has proposed ways these different elements can be handled. In the case of **MS**, the social taxonomy can introduce minimum environmental safeguards, in the same way as green taxonomies have incorporated minimum social and governance safeguards. This means that any social project, such as a construction of a social housing, for example, will be undertaken considering environmental considerations. These minimum environmental safeguards can build on the environmental part of the OECD guidelines for multinational enterprises (MNEs)³⁴. This does not mean that environmental safeguards will replace social and governance safeguards, but rather complement them.

For the **DNSH** principle, the EU taxonomy working group suggests that “do no significant harm”-criteria are equally valid across social and environmental objectives.

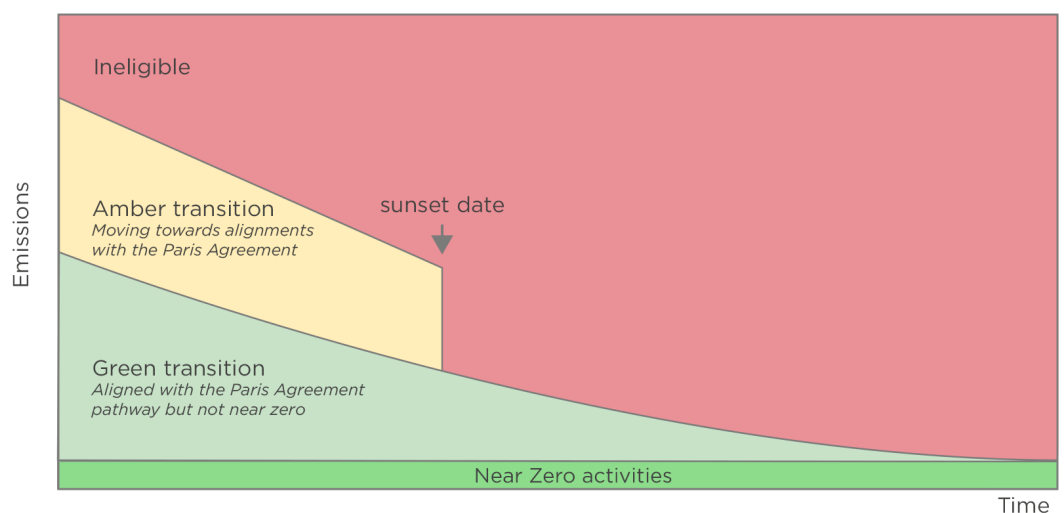
Finally, the exclusion list for socially harmful activities needs to be created, similarly to the green taxonomies, to identify activities that are harmful under any circumstances.

Adaptive taxonomy design to incorporate transition-oriented shifts

As finance taxonomy development increases, it is increasingly common to see an expansion of the scope [or discussions and reflections] of the finance taxonomy to look at transition activities and pathways. A key characteristic of a transition finance taxonomy is the inclusion of a time component with evolving performance thresholds of the TSC over time. As new information and changes in technology occur, TSC can become “tighter”. Thus, the TSC of transition activities is expected to enhance their performance [above the sector average] and ensure that no lock-in to carbon-intensive assets or processes takes place. TSC are therefore subject to regular revisions and adjustments as monitoring and evaluation are needed to update TSC in line with market developments and based on available scientific evidence (EC 2022). The Singapore-Asia taxonomy recognizes taxonomy considerations and introduces a ‘sunset date’ to ensure that transition timebound and thresholds facilitate movement towards green (see Figure 24).

Figure 24.
Illustration of sunset date for amber thresholds in the Singapore-Asia Taxonomy

Source: [Singapore-Asia Taxonomy for Sustainable Finance](#)



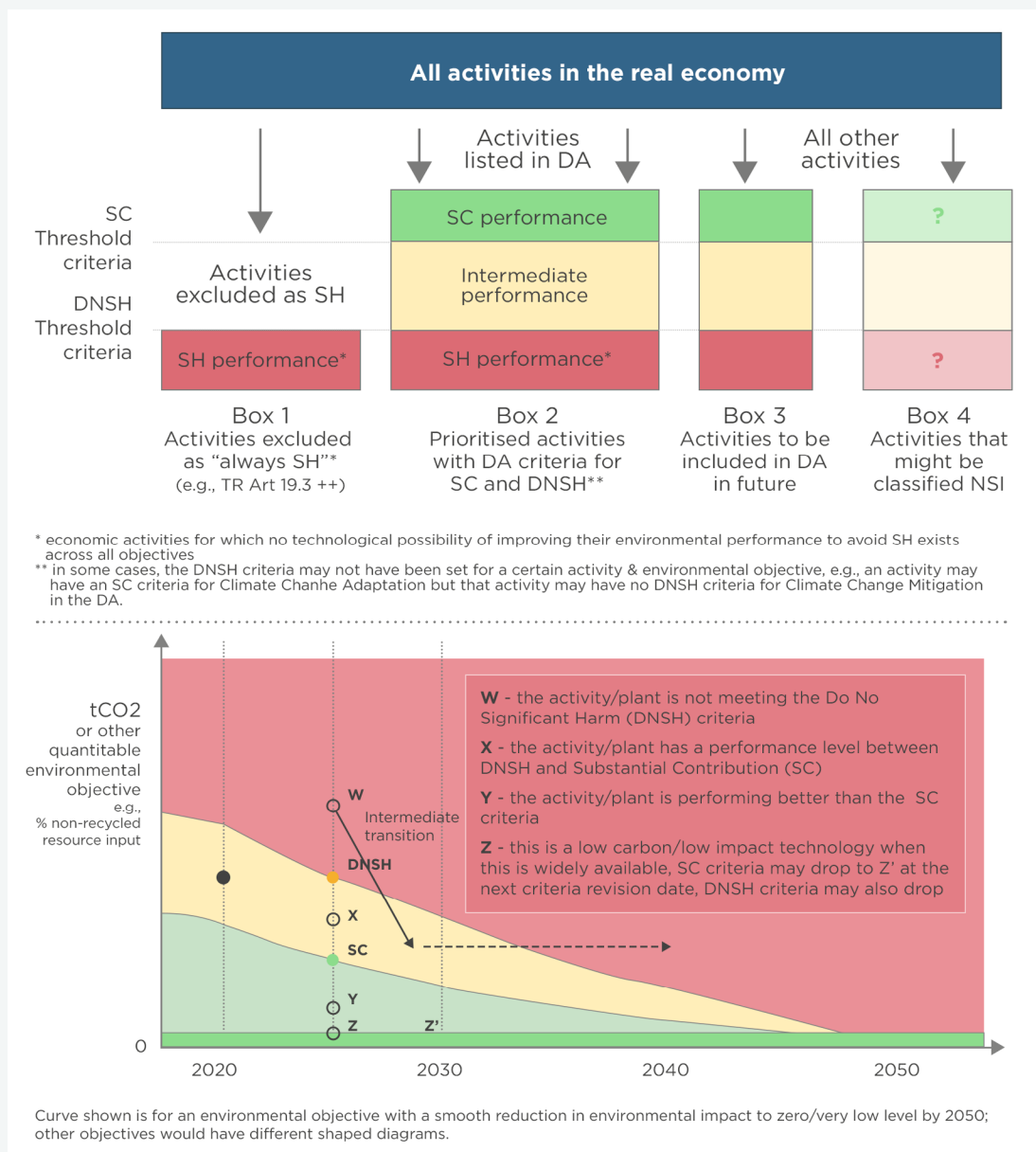
As shown in Figure 25 (relationship between type of economic activities and technical screening criteria), time sensitive thresholds are identifying transition activities. “Traffic light” systems allow for a more gradual improvement and track record to finance taxonomy alignment. For instance, combined with time-sensitive threshold-trajectories (proposed in the ASEAN finance

34 OECD Guidelines for Multinational Enterprises, 2011

taxonomy and drafts of the extended taxonomy proposal of the EU Taxonomy) graded designs provide more flexibility (e.g., especially for carbon-intense industries and less developed region), and acknowledge that an orderly transition cannot be achieved in “one step”. The Japanese sector plans also reflect on the improvement of environmental performance levels over time. The performance is pursued – at least in line with regional and global goals and targets.³⁵

It must be noted that not all sectors or activities have the same falling curves (see Figure 25, right chart) as some have low-carbon technologies already available at scale, but in other sectors respective scaling up is not possible. For this reason, the extended EU finance taxonomy proposal suggests, “to include certain groups of economic activities, where low-carbon alternatives are available, may need to reach net zero earlier than 2050 – for example, in the global electricity generation sector, by 2040.”

Figure 25.
Extended taxonomy
proposal of the EU
finance taxonomy



Note: Graph on the right follows a smooth transition, but it should be considered that “falling steps” with updated cycles of 3-5 years are more realistic. Drawn from Transition Finance report of the Platform on Sustainable Finance (page 28).

“Green activities”, “Substantial Contribution (SC) performance”, and similar activities contribute substantially to the taxonomy objectives. However, as levels of environmental performance may get tighter, these need to continue improving environmental performance levels over time to significantly contribute to transition and environmental objectives. For instance, the performance of Y can potentially fall into the intermediate or even SH performance. “Intermediate Performance” activities have performance levels between the TSC for SC and DNSH, and need to continue improving their environmental performance levels over time, in line with regional and global goals and targets, to avoid falling back into doing significant harm to environmental objective in a few years’ time.

Transition, activity-specific transition plan or entity-level transition strategy benefits from being more forward looking, good-quality idiosyncratic sector trajectories and a clear understanding of revision cycles of different criteria (EC, 2022).³⁶ In this sense, a traffic-light systems [graded criteria] for alignment of the economic activity with the taxonomy provides good entry point to deal with transition activities. Graded concepts can support entities [firms] with a pathway towards better performance. UNDP (2022) shows that finance taxonomies in developing economies lean towards more graded approaches to account for on-ground economic realities and multiple development goals.

Box 22.

Treatment of coal phase out in finance taxonomies

As understanding of green and social finance evolves some sectors are removed from the taxonomies or treated differently. E.g., China had initially included clean coal, defined as supercritical coal or a modern coal fired power generation process that is more efficient than traditional coal-fired generation, in its green taxonomy. In 2021, China officially removed clean coal and fossil-powered generation, including liquefied natural gas (LNG), from the definition of ‘eligible green project’. Under its traffic light approach, ASEAN Taxonomy for Sustainable Finance version 2 adopts a selective treatment of coal phase-out. According to the ASEAN Taxonomy board, it aimed to “promote inclusivity without compromising credibility and interoperability,” with activities related to the coal phase-out categorized into three tiers, ranging from green to amber, which are ranked according to how quickly coal-fired plants are planned for retirement (See Figure 26).³⁷

35 [Platform on Sustainable Finance on a social taxonomy and on an extended taxonomy to support economic transition](#)

36 [Final Report on Taxonomy extension options supporting a sustainable transition](#)

37 Bursa Sustain 7 Nov 2023 [ASEAN Taxonomy Version 2: An overview of the coal phase-out framework](#); [ASEAN Taxonomy for Sustainable Finance Version 2](#)

Figure 26. ASEAN Technical Criteria for Coal Phase-Out

The Coal Phase Out (CPO) TSC a global first for a regional taxonomy

ASEAN TAXONOMY BOARD

The TSC for CPO, is one of the unique features of the ASEAN Taxonomy, that demonstrates the facilitation of transition:

Green	Amber Tier 2	Amber Tier 3
Aligned with a 1.5 degrees outcome and is consistent with the IEA Net Zero Emissions Pathway for the power sector to achieve net zero emissions by 2050. Specific conditions under (1) include: a. Coal phase out by 2040, and; Coal plants built after 31 December 2022 will not qualify, and; c. Operation duration of the coal plant from commercial operation date (COD) is capped at 35 years, and; d. Qualifying coal plants must demonstrate the adoption of best-in-class technology, provided that these technologies are affordable, accessible, reliable and can be implemented within a reasonable timeframe, and; e. Qualifying coal plants have been independently verified or acknowledged by internationally- recognised bodies or programmes as having demonstrated substantial absolute positive emissions savings over their expected lifetime compared to a case without a transition mechanism. Coal plants under the ADB ETM or JETP meet this criteria.	Aligned with a 1.5 degrees outcome for coal phase-out that is derived from regional- or country- specific pathways that are consistent with science- based pathways. Specific conditions under (1) include: a. Coal phase out by 2050, and; b. Coal plants built after 31 December 2022 will not qualify, and; c. Operation duration of the coal plant from commercial operation date (COD) is capped at 35 years.	Operation duration of the coal plant from commercial operation date (COD) is capped at 35 years, and; Coal plants that are built after 31 December 2022 will not qualify, except for a. Coal plants that are built from 1 January 2023 up till 31 December 2027, and; b. Adopt best-in-class technology, provided that these technologies are affordable, accessible, reliable and can be implemented within a reasonable timeframe.

Technical Screening Criteria for Coal Power Phase-out

Technical Screening Criteria under EO1: Climate Change Mitigation

Tier 1 (green)

Aligned with a 1.50C outcome and consistent with IEA Net Zero Emissions Pathway. Specific conditions include:

- Coal phase out by 2040
- Coal plants built after 31 December 2022 will not qualify
- Operation duration of coal plant is capped at 35 years
- Qualifying coal plants have been independently verified as having demonstrated substantial absolute positive emissions savings over their expected lifetime

Tier 2 (amber)

Aligned with a 1.50C outcome for coal phase-out that is derived from regional-or country-specific pathways that are consistent with science-based pathways. Specific conditions include:

- Coal phase out by 2050
- Coal plants built after 31 December 2022 will not qualify
- Operation duration of the coal plant is capped at 35 years

Tier 3 (amber)

- Operation duration of the coal plant is capped at 35 years
- Coal plants built after 31 December 2022 will not qualify except for
- Coal plants built from 1 January 2023 up till 31 December 2027, and
- Adopt best-in-class technology. provided that these technologies are affordable, accessible, reliable and can be implemented within a reasonable timeframe

Source: [ASEAN Taxonomy for Sustainable Finance Version 2](#), [ASEAN Taxonomy Version 2: An overview of the coal phase-out framework](#)



4

CHAPTER

ALIGNMENT AND INTEROPERABILITY PRINCIPLES

- Ensuring country contextualization and alignment across jurisdictions
- Harmonizing approaches in taxonomy development by adopting international standards
- Finding common ground between individual and common taxonomy concepts for comparability and interoperability

Key learning outcomes

- Harmonizing approaches in taxonomy development by adopting international standards
- Ensuring contextualization and integrating country characteristics, priorities and needs and finding common ground between individual and common taxonomy concepts.

Finance taxonomy alignment across jurisdictions

International guidance, best practices and lessons learned from existing initiatives should be taken into consideration in the finance taxonomy development. For instance, in 2021, G20 leaders endorsed the G-20 Voluntary Principles for Developing Alignment Approaches, a set of 6 guiding principles which provides a common foundation for ensuring taxonomies' comparability, interoperability and consistency. A practical approach suggesting options and tools for applying these principles with a focus on climate change mitigation has been published by the IMT, the World Bank and OECD.

A needs assessment reflecting on the national circumstances and ambitions can further support taxonomy development. This has been reiterated by the SFWG synthesis report 2021 to enhance the availability of quality and comparable sustainability data.³⁸

Interoperability, such as the consistent classification of economic activities across taxonomies, reduces transition costs for issuers and investors. Within the development process, undertaking systematic reviews of existing finance taxonomy is a key step to identify synergies and trade-offs with existing regulations and approaches.

Balancing individual and common concepts for comparability and interoperability across finance taxonomies**Interoperability**

is a key principle to ensure the taxonomy is developed under a methodological approach that can “communicate or align with other taxonomies”. Interoperability implies that taxonomies must be based on similar guiding principles, have design elements such as objectives, classification systems for sectors and activities that are comparable and are similar in approaches and methodologies used for defining eligibility.

United Nations Environment Programme, et. al. 2023

Comparability and interoperability between jurisdictions of finance taxonomies is necessary to reduce the compliance burden for multi-country companies and regional diversified investment portfolio. Convergence of taxonomies aims to ensure transparency of cross-border capital flows and the actions of companies with global footprints. Lack of comparability and harmonization of finance taxonomies can foster inequalities, prevent cross-border investments, and increase barriers to international flows of capital.

However, finance taxonomies tend to vary, based on the kinds of activities they include, their assessment parameters and the type of performance threshold chosen. These divergences and differences reflect local realities and may need consideration for taxonomy adoption and implementation. While these reduce market friction at the country level, they can cause market friction at the cross-country level. Thus, inconsistencies in definitions and standards can obscure investor operations for cross-border activities, make it challenging to operate across different

38 [Applying the G-20 Principles for Sustainable Finance Alignment with a Focus on Climate Change Mitigation](#)

jurisdictions, and also make it harder to root out green-washing. To address these challenges, during the taxonomy development process, countries can consider the following:

- Existing finance taxonomies from “peer countries” (e.g., similar stage of development, same region, and/or similar strategic goal) can serve as a starting point for countries without finance taxonomy experience and contribute valuably to the harmonization of global taxonomy development. This also saves financial resources
- Beyond adopting and adapting existing finance taxonomies, countries may establish new fields and areas of interest (e.g., defining sectors that have not received attention in established taxonomies such as shipping and aviation)
- One route of harmonization can be to adopt (low hanging fruits and basic principles e.g., DNSH), then adapt and modify eligibility and alignment criteria to account for local laws and national circumstances, and finally establish new and individual measures where no standards exist.
- Promote the adoption of the same guiding principles, and have design elements such as objectives, classification systems for sectors and activities that are comparable and are similar in approaches and methodologies used for defining eligibility. Undertake studies or otherwise point to the similarities and differences with key benchmark taxonomies³⁹
- To ensure comparability after the taxonomies are developed, jurisdictions with strong economic links and capital flows might want to produce a document that explains investors’ differences and commonalities in their taxonomies, map coverage of sectors and activities and by doing so, reduce the cost of transboundary sustainable investments. The EU-China Common Ground Taxonomy lays out the ways in which the two taxonomies can be compared (See Figure 27).

Various countries have adopted a number of those measures (See boxes 23-27).

Box 23.

EU Taxonomy:
Pioneer and
inspiration for other
finance taxonomies

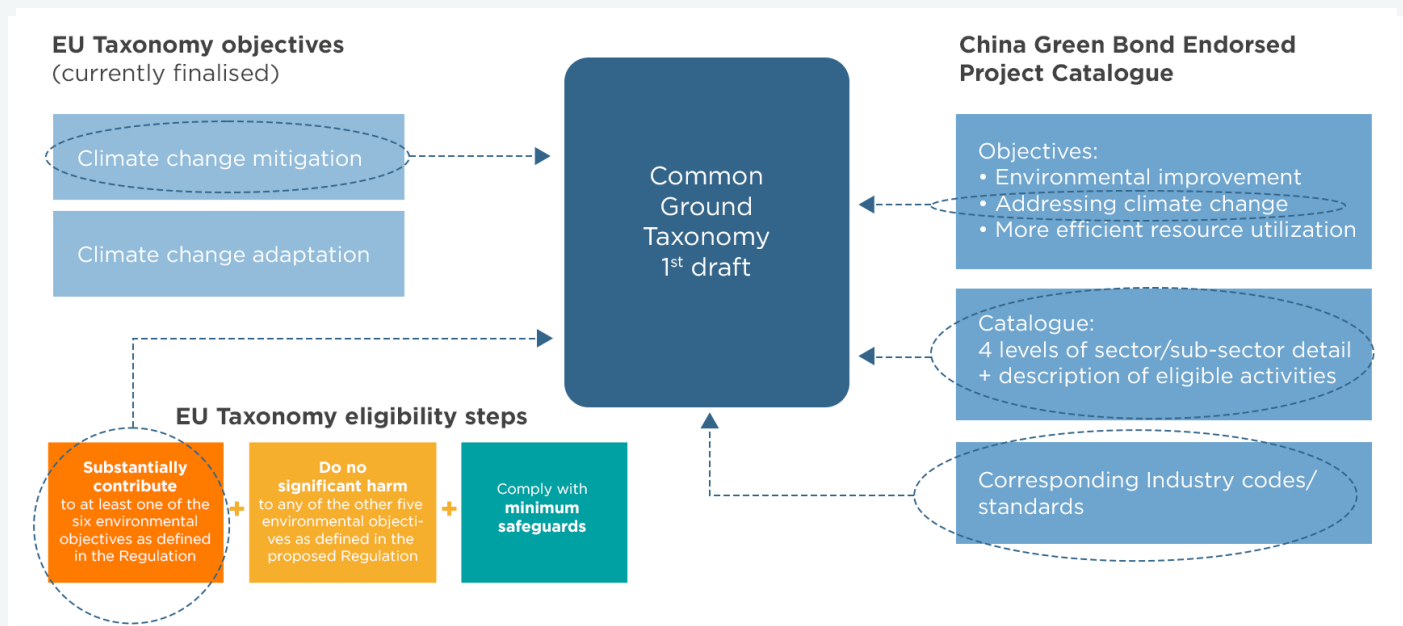
The EU Taxonomy and its detailed and ambitious objectives to achieving climate neutrality and improving the resilience of its energy systems by integrating economic, political, and financial regulatory frameworks already serves as a role model for other taxonomy developments. For instance:

Bangladesh, and **Singapore**, are aligned with the environmental objectives of EU Taxonomy.

The China Green Bond Endorsed Project Catalogue adopts the “no significant harm” principle inspired by the EU Taxonomy, thus making carbon reduction constraints more stringent and the regulation in alignment with other national and international taxonomy costumed standards.

The Indonesia Green Taxonomy Edition 1.0 focused on similar environmental objectives and was designed dynamic/living document.⁴⁰ While the compliance criteria for the green category in the Indonesia Green Taxonomy is almost identical with the EU taxonomy compliance criteria, the eligibility criteria are graded and not binary. For instance, if coal mining activity meet the requirement criteria listed in the Indonesian Green Taxonomy, it was to categorized “green” or “amber” and is an activity eligible for the taxonomy, whereas coal mining under no circumstance can be labelled as green through the EU Taxonomy.

However, countries as well as the EU are also evolving new approaches to address the gap between green and brown to assist countries with ensuring finance for the transition; e.g., multi-tier traffic light approaches such as that of ASEAN and Singapore-Asia.⁴¹

Figure 27. EU-China Common Ground Taxonomy

Prior to analysis, an analysis was carried out to identify the highest impact sectors, based on emission levels, to focus on for the initial iteration of the CGT.

ISIC		Level 1 EU Taxonomy		Level 1 China		Priority
A	Agriculture forestry and fishing	1	Forestry	4	Ecology and environment-related sector	High priority
C	Manufacturing	3	Manufacturing	1	Energy saving and environmental protection industry	Prioritise some sub-sectors
				3	Clean energy industry	
D	Electricity, gas, steam and air conditioning supply	4	Energy	3	Clean energy industry	High priority
				5	Sustainable upgrade of infrastructure	
E	Water supply, sewerage, waste management and remediation activities	5	Water supply, sewerage, waste management and remediation	1	Energy saving and environmental protection industry	Waste (high priority)
				2	Clean production industry	Waste (low priority)
F	Construction	7	Construction and real estate activities	1	Energy saving and environmental protection industry	High priority
				5	Sustainable upgrade of infrastructure	
H	Transportation and storage	6	Transport	5	Sustainable upgrade of infrastructure	High priority
J	Information and communication	8	Information and communication	6	Green services	Not included
M	Professional scientific and technical activities	9	Professional scientific and technical activities	6	Green services	Not included
		2	Environmental protection and restoration activities			Not included

Source: Natixis, 2021

- 39 E.g., Common ground taxonomy (CGT) between EU and China or CBI Ambire Global's study Comparison Study Between The Colombian And EU Taxonomies.
- 40 In February 2024, Indonesia's Financial Services Authority (OJK) published the Taxonomy for Indonesian Sustainable Finance (TKBI), which is a revised version of the Indonesian Green Taxonomy Edition 1.0. The new taxonomy is compliant with the ASEAN taxonomy
- 41 Further, see [The Transition Traffic Light System: The EU Platform on Sustainable Finance's Tool for Transparency](#), wherein rather than solely supporting green activities, the [EU Taxonomy Extension Report](#) aims to expand financing mechanisms for industries in transition, thus supporting a sustainable economic transition for activities to move away from significantly harmful levels of performance.

Box 24. Principles for Developing and Implementing the ASEAN Taxonomy

Principle 1	The ASEAN Taxonomy will be the overarching guide for all ASEAN Member States, providing a common language and complementing their respective sustainability initiatives
Principle 2	The ASEAN Taxonomy will take into consideration widely used taxonomies and other relevant taxonomies, as appropriate, and shall be contextualised to facilitate an orderly transition towards a sustainable ASEAN.
Principle 3	The ASEAN Taxonomy shall be inclusive and beneficial to all ASEAN Member States.
Principle 4	The ASEAN Taxonomy shall provide a credible framework, including definitions, and where appropriate, be science-based.
Principle 5	The ASEAN Taxonomy will be aligned with the sustainability initiatives taken by the capital market, banking and insurance sectors, or at least not be in conflict.

International Interoperability			ASEAN TAXONOMY BOARD	
Features	ASEAN Taxonomy		EU Taxonomy	
Environmental objectives (EO)	1	Climate change mitigation	1	Climate change mitigation
	2	Climate change adaptation	2	Climate change adaptation
	3	Protection of healthy ecosystems & biodiversity	3	Sustainable use and protection of water and marine resources
	4	Promote resource resilience and transition to circular economy	4	Transition to a circular economy
			5	Pollution prevention and control
			6	Protection and restoration of biodiversity and ecosystems
Classification system	ISIC		NACE	
Do No Significant Harm (DNSH)	Yes		Yes	
Remedial measures to transition (RMT)	Yes - to facilitate transition		No	
Minimum safeguards	Yes - social aspects			
Activity classification	Yes, using Foundation Framework		Straight to TSC	
Technical screening criteria	Up to three thresholds		Single threshold	

Source: ASEAN Taxonomy Board [Overview of ASEAN Taxonomy Version 1](#)

Box 25. Key reference taxonomies for the Thailand Taxonomy, phase 1

The EU Taxonomy is widely considered to be a global benchmark for taxonomies worldwide, given the large number of investors in the EU as well as its leadership in sustainable finance. As a result, investors regard compatibility with the EU Taxonomy as an important reference point to attract capital from the international market.

The Asia-Pacific region occupies the second place in the world in terms of volume of the green bond market, is the home region for Thailand and the majority of its key trade partners (13 of 15 top trade partners of Thailand are situated in the region). The Chinese Green Bond Endorsed Project Catalogue and the ASEAN Taxonomy are dominant in the region and additionally they

...

serve as the reference point for investors. Finally, the Climate Bonds Taxonomy is incorporated into most existing taxonomies worldwide as it provides high quality, science-based and politically neutral technical screening criteria.

The current taxonomy is broadly compatible with all above-mentioned taxonomies although there are some differences at the granular level. Along the lines of the ASEAN Taxonomy, it is a thresholds-based and traffic lights-based taxonomy. CBI points out that: “While the green thresholds are aligned with international standards for 1.5 degree, the thresholds for the amber category within the taxonomy were calculated based on the decarbonization trajectories adopted by the Thai government, subject to a sunset clause that helps ensure an ambitious 1.5 degree-aligned transition. This gives local businesses more maneuvering power in moving towards the goal of decarbonizing the country’s economy by 2050 without compromising the goal itself.” It also includes do no significant harm (DNSH) and social safeguards.

Source: [Thailand Taxonomy Phase 1](#) and CBI 2023. [Launch of the Thailand Green Taxonomy will accelerate the country’s decarbonization drive](#)

Box 26. Colombia Taxonomy: promoting comparability and interoperability with Global Standards, while responding to Local Needs

Colombia’s taxonomy aims to find an equilibrium between standardization and specificity. While aligning with global environmental sustainability benchmarks like the European Union Taxonomy, the International Capital Market Association’s Green Bond Principles, and the Climate Bonds Initiative Taxonomy, it also integrates country-specific considerations. Notably, the taxonomy focuses on sectors such as agriculture, forestry, and land use, acknowledging their significance as these activities contribute to almost 60 per cent of Colombia’s greenhouse gas emissions. Colombia’s taxonomy was designed based on the common guiding principles, has certain design elements such as objectives, classification systems for sectors and activities that are comparable and are similar in approaches and methodologies used for defining eligibility as many other taxonomies (EU, ASEAN, South Africa).

Source: [Colombia Sovereign Green Bond Case study, World Bank, 2022](#)

Box 27. Mexico’s approach to aligning domestic commitments with international standards

In the development of its Sustainable Finance Taxonomy, Mexico categorically aligned both national environmental commitments and global climate standards, adhering to international best practices. Mexico considers those activities that substantially contribute to climate change (gCO₂e). Besides, Mexico involves minimum requirements, DNSH and Minimum Safeguards criteria for activities to be considered as sustainable. All these principles are in line with international standards. The taxonomy included insights from domestic initiatives and leveraged green initiatives of local institutions. This strategic amalgamation of global benchmarks and local expertise ensured the relevance of the taxonomy while keeping it at par with international standards.

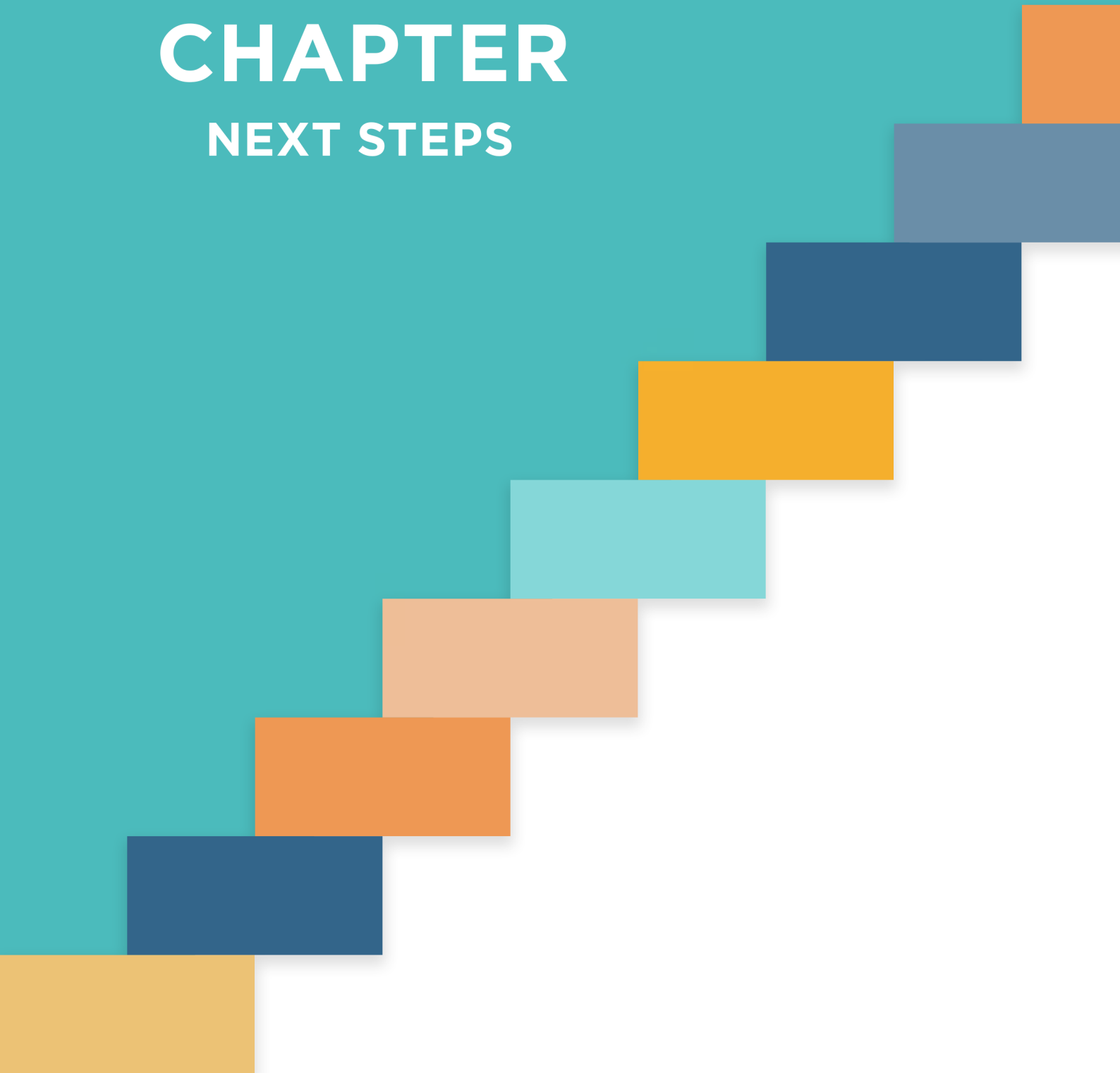
Source: Sustainable taxonomy of Mexico 2023

In sum, a complete adoption of an existing finance taxonomies is not recommended as countries do have individual needs and national priorities. Different types of economy and different stages of development makes it impossible to fully adopt existing frameworks. However, adopting key principles and structural elements, while adapting eligibility criteria to account for local contexts can support global alignment.



CHAPTER

NEXT STEPS

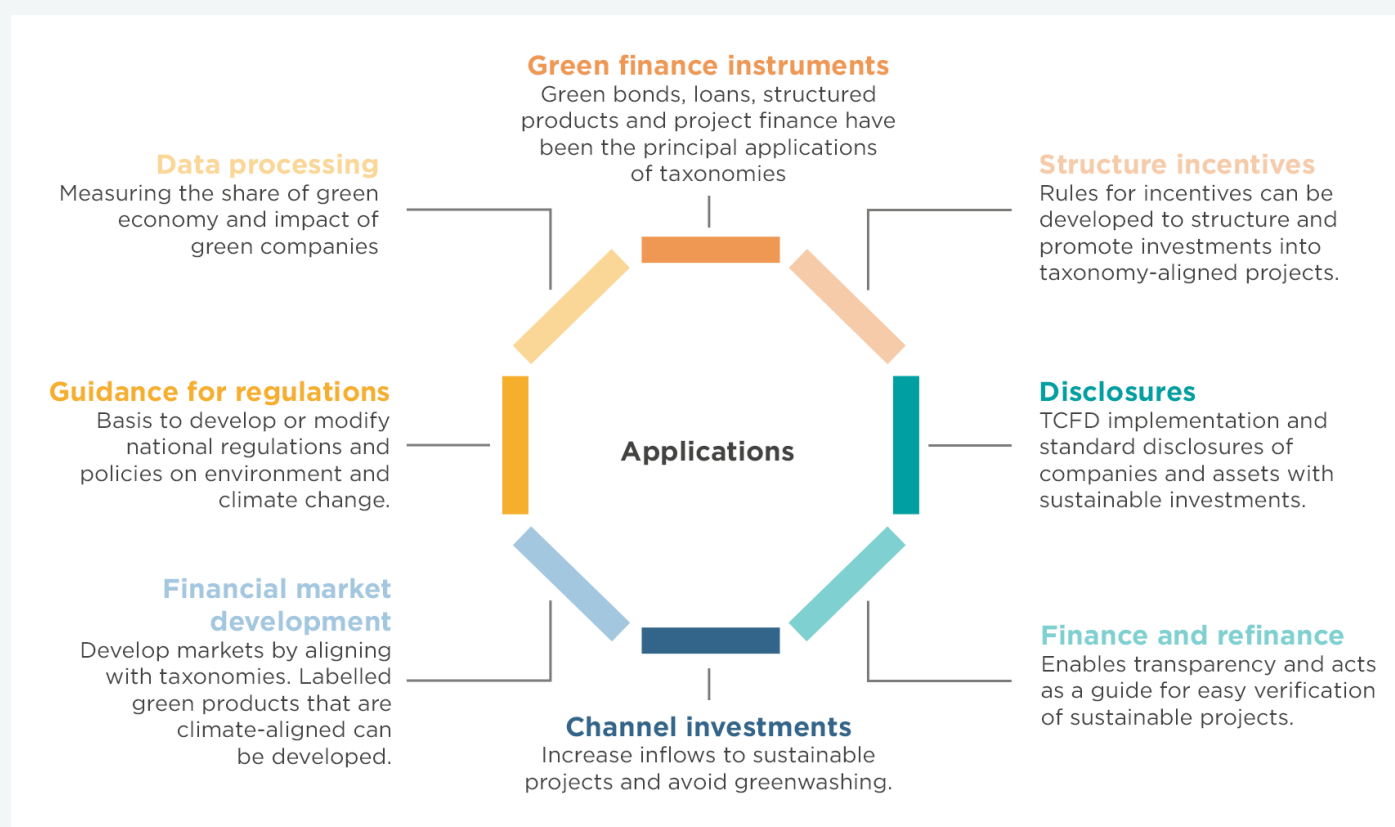


Taxonomy application and interplay with sustainable finance policies and instruments

As underscored in this guide, taxonomy development is not a standalone endeavour and should form a part of the broader toolkit to drive sustainable finance solutions, investments, and demand for them. The finance taxonomy might be partially or fully integrated in rule setting procedures for public or private actors to develop standards or labels. E.g., for the development of green financial products or green bonds to achieve countries' NDCs, Sustainable Development Goals (SDGs) or to inform standards for sustainable development (e.g., sustainable building codes). In addition, existing regulatory guidance (e.g., related to financial sector disclosure or Environmental and Social (E&S) safeguards as part of official project permissions to prevent significant harm) must be assessed to ensure consistent development with existing measures.

Alongside, an enabling environment is an essential prerequisite for taxonomies to be effective. A detailed understanding of existing disclosure practices and concerns about data exposure for additional reporting is needed to define the playing field of future taxonomy applicability and usability from a users' perspective. To understand those rules and guidance, it is important to be aware of necessary policy and strategy related changes to design, shift, and finally drive capital to fund sustainable economic development. For instance, the Figure 28 shows the application of the taxonomies and interplay with other finance frameworks and instruments.

Figure 28. Application of finance taxonomies



Source: [CBI](#)

Reporting and disclosures

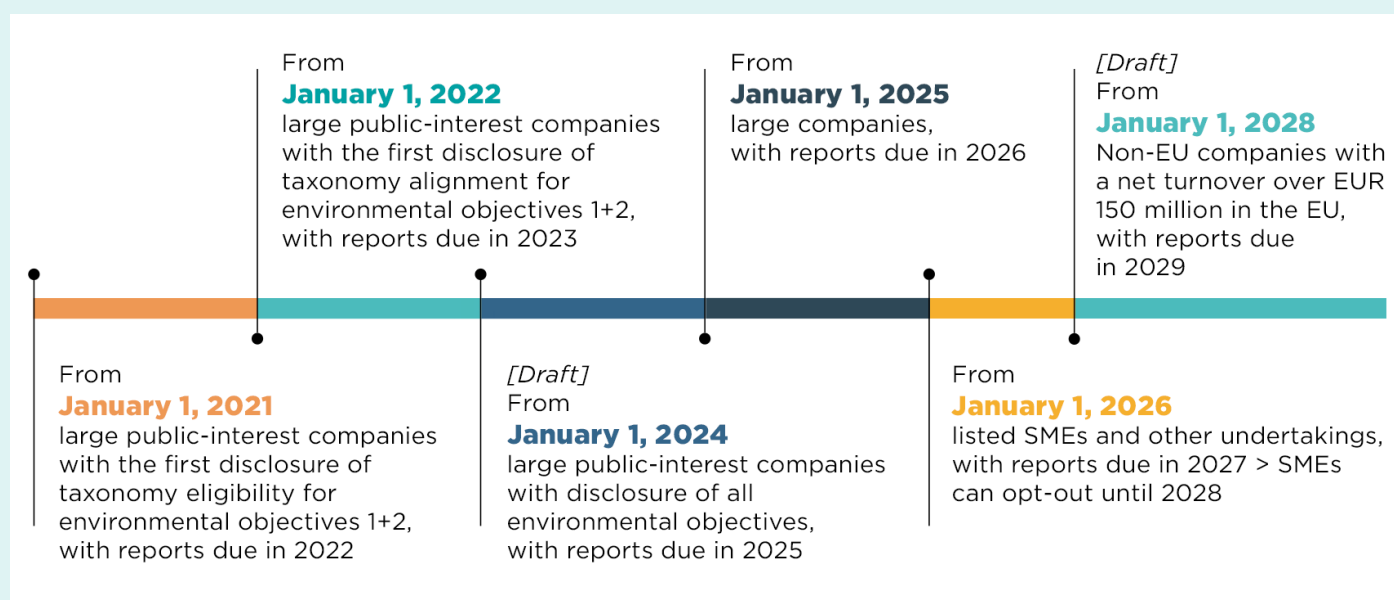
Regulators often use the taxonomy as a transparency tool, to help identify the extent to which activities of certain entities relate to sustainability goals. This is achieved by introducing

regulations on sustainability reporting and disclosure requirements. The reporting framework is closely linked to the finance taxonomy and is applied to two types of entities:

- **Corporates** required to report their sustainability performance against the taxonomy
- **Financial market participants** required to disclose how their products align with the taxonomy.

Once the taxonomy is adopted the regulator needs to start developing reporting requirements and guidelines, that take into consideration taxonomy complexity, existing reporting practices, data availability. A phased approach that starts with voluntary reporting practices is recommended. Mandatory requirements can, at the initial stages, cover large public companies and financial market players that have adequate capacity and data management architecture to meet reporting requirements. At a later stage, once capacities are developed more broadly and challenges addressed through piloting and potentially revising, the scope can be extended to listed medium-sized companies, foreign entities, etc.

Box 28. Phased approach to reporting outlined in the EU Disclosure regulation



Source: Envoria, What is the EU taxonomy and which companies are required to report⁴²

The regulation needs to also outline against which financial flows the reporting needs to be done. Entities might be required to disclose the proportion of their a) Turnover, b) CapEx and c) OpEx.

Financial Instruments

Green loans. Credit institutions can start to integrate the finance taxonomy as part of their credit decision-making processes on a voluntary basis in the initial stages. The taxonomy can be leveraged in designing the following market practices across banking activities as follows:

- Taxonomy criteria and thresholds can be used to identify and process labelled or unlabeled green, sustainable and sustainability-linked loans;
- Development of incentive schemes in line with the taxonomy criteria to incentivize good sustainability practices. E.g., in order to increase their Green Asset Ratio, banks can use alignment with the taxonomy technical screening criteria as a condition to provide better loan pricing to clients;
- Raise capital by distributing green loans to investors via securitization.

⁴² [What is the EU Taxonomy and which companies are required to report?](#)

Thematic bonds. The finance taxonomy can act as a cornerstone for establishing domestic standards for sustainable bond issuance. The Standards can emerge as a voluntary set of recommendations that later could be turned into mandatory requirements as the market evolves. In 2023, the EU adopted a regulation creating a European green bond standard. The regulation lays down voluntary requirements for issuers of bonds that wish to use the designation ‘European green bond’ or ‘EuGB’ for their environmentally sustainable bonds. There’s an initial five-year period after which the European Commission will evaluate the impact and feasibility of the standard. Some of the requirements that were outlined under the EU Green Bonds Regulation include:

- **Taxonomy-alignment:** All the funds labelled as EU Green Bonds should be allocated to projects that are aligned with the EU Taxonomy Regulation (subject to a 15 per cent flexibility pocket)
- **Transparency:** Full transparency is required on how the bond proceeds are allocated through detailed reporting requirements, including disclosure in the applicable prospectus and disclosure in the form of a pre-issuance European Green Bond factsheet and post-issuance allocation and impact reports
- **External review:** The bond issuers are required to arrange for pre-issuance and post-issuance review of the allocation report by a third party (external reviewer or verifier) to ensure compliance with the taxonomy. External review of the mandatory impact reports remains optional
- **Supervision by the European Securities Markets Authority (ESMA) of reviewers:** ESMA is appointed as a body that registers and supervises all external reviewers who provide verification services to issuers of European green bonds.

The regulators will need to allow a gradual transition from the widely used international thematic bond standards and principles, such as ICMA’s Green Bond Principles (GBPs) or Social Bond Principles (SBP), which are usually much more flexible than requirements outlined in the taxonomy-based bond standards. Thus, elements of the taxonomy can be applied gradually, starting with defining eligible categories and activities for the use of proceeds based on those identified under the taxonomy, for example, and expanding it to ensure alignment with the DNSH criteria and minimum safeguards.

Box 29. Differences between international thematic bond principles and EU green bond standards

Some of the main differences between the ICMA Bond principles and EU Green Bond Standards are illustrated below:

Eligible green projects	the ICMA GBP has a broad and more intuitive definition of eligible green projects whereas the EU GBS require alignment with technical screening, do no significant harm and social safeguards criteria as defined by the Taxonomy Regulation
Cash management	one of the four ICMA GBP principles is detailed disclosure of the internal management process of proceeds whereas the EU GBS focuses more on the outcomes of the use of proceeds in reporting requirements
Reporting	the EU GBS requires detailed post-issuance allocation and impact reports. These must follow the templates in the Regulation and include specific requirements on Taxonomy Regulation alignment, positive and adverse environmental impacts and details on impact methodology and must be prepared for specified periods. External reviews on allocation reports are mandatory and optional for impact reports but in each case must be prepared in accordance with templates in the Regulation.

Sovereign thematic bonds. Governments can start considering applying the finance taxonomies to the sovereign bond issuances by incorporating the taxonomy alignment requirements in project selection process. This can be highlighted in the bond framework to explain investors to what extent the alignment with taxonomy will take place. The Netherlands have revised their Sovereign Green Bond Framework, once the EU taxonomy was adopted, indicating that the eligible expenditures will be aligned with the criteria outlined in the “EU taxonomy” and CBI’s Climate Bond Standards to the extent possible.

Sovereign green facilities, funds and programmes

Taxonomy definitions can be applied to sovereign green funds and programmes, which can start with using taxonomy definitions to determine eligibility of the projects to receive dedicated funding. At a later stage the taxonomy can help understand the impact of such sovereign wealth funds and public programs on the investment and business behavior.

In the wake of the pandemic the EU launched an InvestEU programme, to provide businesses with long-term financing by leveraging private and public funds to support recovery from global crises. The programme helped to shift growth to green and digital sectors and boost the SME and start-up ecosystem in Europe. The funding that was made available through the EU Invest Fund, selected sustainable business projects based on the methodology which incorporates the technical screening criteria and DNSH principles outlined in the EU Finance taxonomy.⁴³

Budget tagging

Taxonomies can help further refine and deepen the budget tagging methodologies applied by the Governments to identify sustainable public expenditures/revenues. The existing budget tagging approach is in many instances principle-based and often does not come with the strong justification for why a certain expenditure is eligible or not. It also rarely applies such criteria as DNSH or social safeguards. By strengthening the eligibility criteria and introducing thresholds outlined in the finance taxonomy, MoF can ensure synchronized approach across public and private finance. This is especially relevant for the PPP, blended finance and development fund operations that are funded from both public and private sources. Especially for countries that haven’t developed a dedicated national budget tagging methodology, but also more broadly, a finance taxonomy can serve as a solid starting point. See Box 30.

Interoperability with other taxonomies

To enhance interoperability with other major taxonomies, the Government can consider mapping the national Taxonomy to the Common Ground Taxonomy developed by the International Platform for Sustainable Finance. This mapping exercise will aim to align the national Taxonomy with the EU Taxonomy and the People’s Bank of China’s Green Bond Endorsed Project Catalogue. Once completed, financial institutions and market participants can refer to a consistent set of definitions, facilitating taxonomy-aligned financing solutions and cross-border financing flows.

Financial and non-financial incentives

Taxonomies can be applied to inform public policies which incentivize low-carbon and sustainable development, by establishing a more comprehensive definition of what can be considered as a sustainable activity. Once the taxonomy is adopted, it is important to ensure that the existing incentive schemes are aligned with the criteria established in the finance taxonomy. For example, if the state-owned bank currently provides financial incentives, such as low-interest loans, to developers and investors in green building projects, and doing this lowers the cost of capital and improves cash flow, it is important to make sure that the definitions and criteria applied in the policy document is in line with the main principles, thresholds, DNSH and other criteria outlined in the finance taxonomy.

43 [InvestEU Programme](#)

Box 30. Time to shift budget tagging methodologies to be taxonomy-aligned?

Green/climate budget tagging methods vary widely across countries reflecting: (i) different definitions of what is green, (ii) various national green/climate agendas and commitments that may form the basis for country-specific 'green' definitions. However, Rio Markers drawing on the Handbook on Rio Markers for Climate, which provides an indicative table to guide the "Rio Marking" exercise by sector/sub-sector with qualifying activity examples, plays an important role. The ICMA group underscores a rationale for change. It points out that while pragmatic and relatively simple to implement by sovereigns, is subject to various challenges. Firstly, the attribution of Rio Markers scores is constructed on the potential relevance of a sector from a climate perspective, as opposed to the Green Bond Principles which are sector agnostic as it should be. Further, the Rio Markers are also not appropriate to systematically aggregate and determine positive climate impacts since the claims are based on the intention that underlies an activity, rather the actual or estimated environmental impact. They have also received criticism because of the risk of over-estimating climate spending and not following the conservativeness principle adopted by the MDBs- IDFC Common Principles. More importantly the Rio Markers have not been designed for use in financial products.

Some of the EU countries have started to align green finance taxonomies and budget tagging practices. Greece and Spain have commenced the green budgeting process by covering all objectives of the EU Taxonomy. Spain has designed, and plans to further develop, its methodology in line with the EU GRBF.

Ireland has expanded the coverage substantially, initially with a focus only on climate aspects with criteria broadly based on those contained within the EU Taxonomy and, in addition to the 6 categories, expenditure items are assessed for their contribution to a Just Transition where expenditure items support progress towards a low-carbon economy while also promoting social protection and the creation of decent work and quality jobs in accordance with nationally defined development priorities.

In the French system, the budget is assessed by means of six categories for sustainable finances, defined in the EU taxonomy and brown expenditures are also tagged.

Sources: ICMA 2021. Overview and Recommendations for Sustainable Finance Taxonomies and European Commission Directorate General Economic and Financial Affairs. 2023. [Green Budgeting In The EU: Key insights from the 2023 European Commission survey of green budgeting practices](#); EU 2023. [European Union Green Budgeting Reference Framework](#) and Ireland Department of Public Expenditure, National Development Plan Delivery and Reform (DPENDR) Staff Paper 2023. [Green Budgeting in REV 2024 Climate and Environmental Expenditure in the Revised Estimates for Public Services](#)

Alignment of national policies with the finance taxonomy needs to take place at several levels, depending on the type of policies:

- **Financial incentives:** These are incentives that provide financial assistance to both businesses and investors by improving risk-return profile of certain economic activities. Examples of financial incentives include tax credits, guarantees, grants, and low-interest loans.
 - From the return perspective, businesses may get an improved return through tax breaks, for example
 - From the risk perspective, a state can change the risk profile of a potential investment or loan by introducing instruments such as guarantees, first-loss capital, and insurance.
- **Non-financial incentives:** These incentives provide non-monetary benefits to businesses and investors. Examples of non-financial incentives include expedited permitting processes, elimination of non-tariff barriers, and priority access to government programs.

Once the proper reporting and disclosure processes are established and data collection process is streamlined, policymakers will be able to analyze the impact of policy incentives on the sustainable investment flow and make necessary adjustments to channel capital to sustainable practices.

Complementary “green” measures

Some of the complementary measures that need to be taken after the adoption of the taxonomies, especially in the countries where climate and social considerations are not yet well integrated in the business practices.

- upgrade existing Environmental Impact Assessments and other environmental permitting requirements to help set a baseline of acceptable environmental performance;
- promote the adoption of Environmental Social and Governance (ESG) strategies and reporting among businesses and financial institutions, as well as ESG and climate risk assessment;
- develop monitoring and verification capabilities, with regulations for their independence and accreditation;
- where there are market barriers, introduce policy measures to support sectoral development (feed-in tariffs, trade barriers, regulations on land use, repatriation of profits, etc.);
- require cost-benefit analysis and green impact reporting for any public, private, and public-private partnerships with an explicit double-bottom line mandate applying for concessional finance or subsidies.

Conclusion

Sustainable finance taxonomies, when appropriately designed, can help channel and accelerate sustainable finance flows and promote just transitions, and thereby are a useful component of the architecture of countries' financial systems. The taxonomy development process is a crucial step which determines the overall direction that the taxonomy will subsequently take, once implemented. This step-by-step guide has outlined the various steps needed to be followed to develop a taxonomy, which will help the Government or the institution responsible for developing the taxonomy.

The objective is to facilitate the timely adoption and implementation of the taxonomy by the targeted users by making the process efficient and effective. The governance mechanism in developing the taxonomy should be transparent to win the trust of the general public, and that of the domestic and international financial and development institutions that the country is on the right path to meet its sustainability and climate goals.

The guide has underscored the importance of a consultative and a multi-stakeholder approach to developing taxonomies, when policymakers and regulators, the private sector, academia and civil societies, technical experts, and international institutions take a holistic view and make the process representative and transparent while being informed by international best practices.

Taxonomies can be considered a success when the following conditions are met:

- Interoperability of the taxonomy: the extent to which the taxonomy is compatible with other taxonomies
- New financial products emerge: the extent to which new financial products are that are aligned with the taxonomy
- Uptake and application of the taxonomy by the regulatory body: the extent to which regulators reference the taxonomy when approving products or services
- Integration with other standards: the extent to which other frameworks/standards reference the taxonomy
- Clear linkage to disclosure requirements: the extent to which the taxonomy is embedded within regulatory disclosure requirements
- Data availability: the extent to which the disclosure requirements present an 'undue burden' on corporates.

Given the complexity of the financial system, capital flows for sustainable activities require the identification of areas in the financial system where changes are needed. While the taxonomy can be the first or intermediate step, countries need to take a set of measures to bridge the gap for sustainable finance to ensure a low-carbon, resilient and sustainable economic system. A comprehensive long-term strategy and sequenced sustainable finance strategy can act as a blueprint for the financial system. Ensuring that climate and sustainability-linked risks are well understood and managed at system and entity level is also key. Access to credible, accurate and actionable information on sustainability-related activities is also critical for the efficient operation of markets and effective allocation of capital. These and other measures are necessary to complement sustainable finance taxonomy and result in a more coherent and resilient sustainable finance architecture.

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ANNEX 1: TAXONOMY TOOLS AND GUIDELINES

Table 15. Taxonomy tools and guidelines (exemplary)

Guide	Year	Title	Objective	Recommendation / conclusion
UN PRI		Testing the Taxonomy: Insights from the UN PRI Taxonomy Practitioners Group'	Case study comparison	Key recommendations regarding implementation and development of the EU taxonomy
OECD	October 2020	Developing Sustainable Finance Definitions and Taxonomies	Case study comparison	Guidance on good practice for taxonomy design
World Bank Group	June 2020	Developing a national green taxonomy	Provides a conceptual framework and procedural guide to develop a finance taxonomy	Sustainable finance definitions and taxonomies
Climate Bonds Initiative	May 2021	Taxonomy Roadmap for Chile. One more step towards consolidating the local Green Finance Agenda	Taxonomy Roadmap for Chile. One more step towards consolidating the local Green Finance Agenda	Outlines different pathways for the government and regulators to consider in creating a national taxonomy, gives insights to the opportunities for a potential national taxonomy and analyzes its benefits and limitations
BCG and GFMA	June 2021	Global Guiding Principles for Developing Climate Finance Taxonomies – A Key Enabler for Transition Finance	Highlights overlaps between a changing climate as well as environmental taxonomies (e.g., biodiversity, pollution ...), and the impact of a changing climate policy on the society.	The report shows, that due to regional and sectoral nuances, transition pathways are different across jurisdictions and sectors. While a single global taxonomy is unlikely to be achieved, consistent sets of global principles can be supportive across all jurisdictions and sectors to ensure activities are aligned with Paris goals.
Bank for International Settlement	October 2021	Global Guiding Principles for Developing Climate Finance Taxonomies – A Key Enabler for Transition Finance	Proposes key principles for the design of effective taxonomies	Endeavor to specific objectives; Encourage the development of transition; M&E of certification and verification processes; and to mandatory impact reporting for green bonds.
Sustainable Finance Working Group ⁴⁴	October 2021	A taxonomy of sustainable finance taxonomies	The overall goal is to 1) scale up investments which align with sustainability goals, 2) enhance availability of quality / comparable sustainability data and 3) level up intl. FIs role for delivering on the goals set out. Principles are:	7 Principles etc.

44 [G20 Sustainable Finance Roadmap 2021](#) and [G20 Sustainable Finance Roadmap](#)

Sustainable Finance Working Group (October 2021) G20 Sustainable Finance Roadmap

In October 2021, the Sustainable Finance Working Group (SFWG) published a synthesis report, agreed upon by G20 Finance Ministers and Central Bank Governors. The overall goals for the implementation of the G20 sustainable finance roadmap is to 1) scale up investments which align with sustainability goals, 2) enhance availability of quality and comparable sustainability data and 3) level up international financial institutions' role for delivering on the goals set out. Principles are:

UN PRI Testing the Taxonomy: Insights from the UN PRI Taxonomy Practitioners Group

The report shares insights from first comprehensive set of case studies how to use the EU Taxonomy including 40 investment managers and asset owners that have applied and implemented the EU taxonomy on a voluntary basis. The report summarises also key recommendations regarding implementation and development of the EU taxonomy.

OECD (October 2020) Developing Sustainable Finance Definitions and Taxonomies

The report applies a pragmatic purpose in five countries (China Taxonomy; EU Taxonomy; France Definitions; Netherlands Definitions; Japan Definitions) aiming for a detailed comparison of selected definitions and taxonomies. The focus of the report is on legislative definitions, and as such it leaves aside all market and institution- based definitions of sustainable finance. The report contains an overview of sustainable finance definitions and taxonomies, including a discussion on key issues around design and implementation. In addition, the report presents detailed principles, metrics and thresholds used in the studied jurisdiction. Finally, a sector comparison helps to identify key sectors. The report aims to pave the way for future guidance on good practice for taxonomy design.

World Bank Group (June 2020) Developing a national green taxonomy

The World Bank guidance provides a conceptual framework and procedural guide for regulators engaged in the development process of a green taxonomy. The approach is based on previous country experiences in Colombia, Malaysia, Mongolia and South Africa. The guide reflects critical initiatives, such as the Green Bond Principles (GBP) by the International Capital Market Association (ICMA) and the Network of Central Banks and Supervisors for Greening the Financial System (NGFS). The target audience for the guideline are financial regulators and their environmental. The guideline highlights, that it will require considerable tailoring to each country's circumstances, including its national environmental policies and its capacity in the financial sector).

Climate Bonds Initiative (May 2021) Taxonomy Roadmap for Chile. One more step towards consolidating the local Green Finance Agenda

This report prepared for Chile outlines different pathways for the government and regulators to consider in creating a national taxonomy, gives insights to the opportunities for a potential national taxonomy and analyzes its benefits and limitations, highlights each of key elements for taxonomy development, and provides overall recommendations for developing a finance taxonomy. While the report is prepared for the government of Chile, the guiding principles are well structured and helpful for other jurisdictions.

BCG and GFMA (June 2021) Global Guiding Principles for Developing Climate Finance Taxonomies – A Key Enabler for Transition Finance

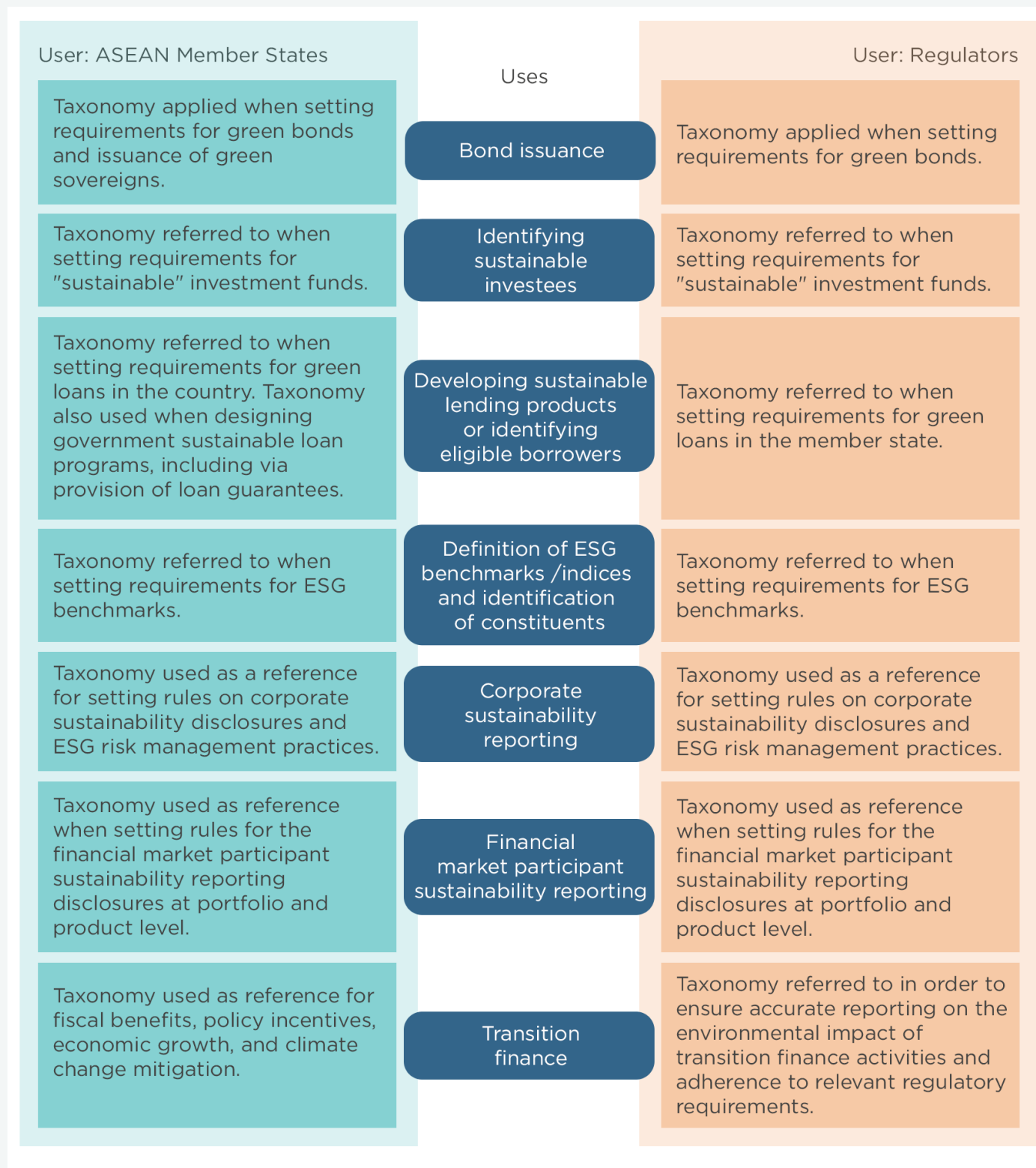
The report is limited to Climate Finance taxonomies and does not cover other taxonomies, such as green or ESG taxonomies. The report highlights the overlaps between a changing climate as well as environmental taxonomies (e.g., biodiversity, pollution ...), and the impact of a changing climate policy on society. Therefore, the report concludes, that climate finance taxonomies need to be “reassessed” based on future ESG taxonomies (e.g., social taxonomies). The report shows, that due to regional and sectoral nuances, transition pathways are different across jurisdictions and sectors. While a single global taxonomy is unlikely to be achieved, consistent sets of global principles can be supportive across all jurisdictions and sectors to ensure activities are aligned with Paris goals. The report set out five key guiding principles to be considered, including climate Finance taxonomies should be: 1. Be broadened beyond use of proceeds to capture entity-level activities and all eligible sources of capital; 2. Be objective in nature, supported by clearly defined metrics; and thresholds aligned to the Paris Agreement, and science-based targets; 3. Have a consistent set of principles and definitions, but provide flexibility for regional and temporal variation to align with differences in transition pathways; 4. Metrics should be defined and applied to sectors using science-based targets, balancing ease of use with transparency and robustness to both assess climate impact and support third-party verification; and 5. Be based on a governance process that is robust, inclusive, and transparent, and has the flexibility for continued evolution.

Bank for International Settlement (October 2021) A taxonomy of sustainable finance taxonomies

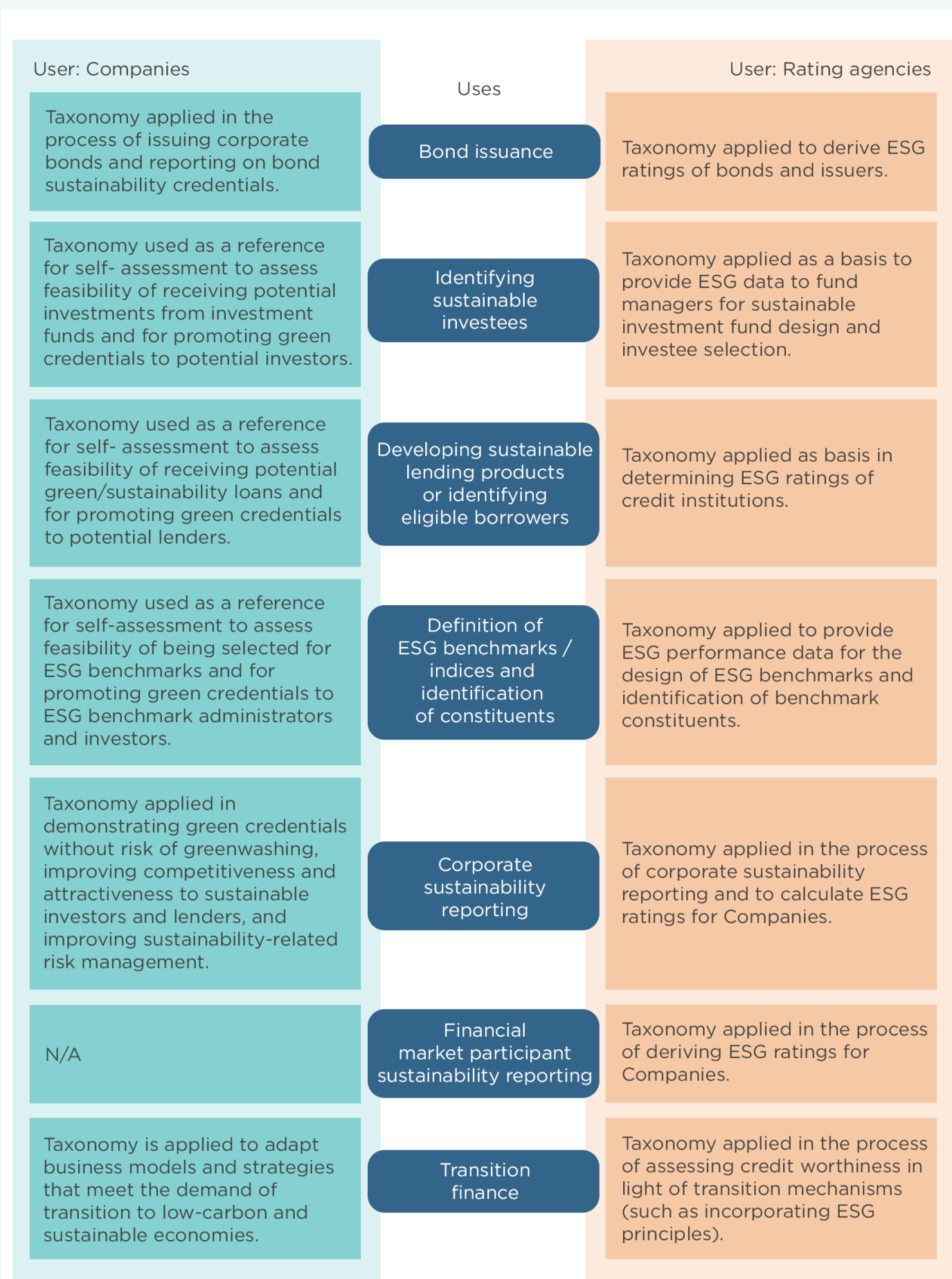
The report proposes key principles for the design of effective taxonomies. The principles are then employed to develop a simple framework for transition taxonomies. Main outcomes of the report: Endeavor that taxonomies correspond to specific objectives; Encourage the development of transition taxonomies as well as focus alignment with the Paris Agreement; Monitor and supervise the evolution of certification and verification processes; and finally Shift from voluntary to mandatory impact reporting for green bonds.

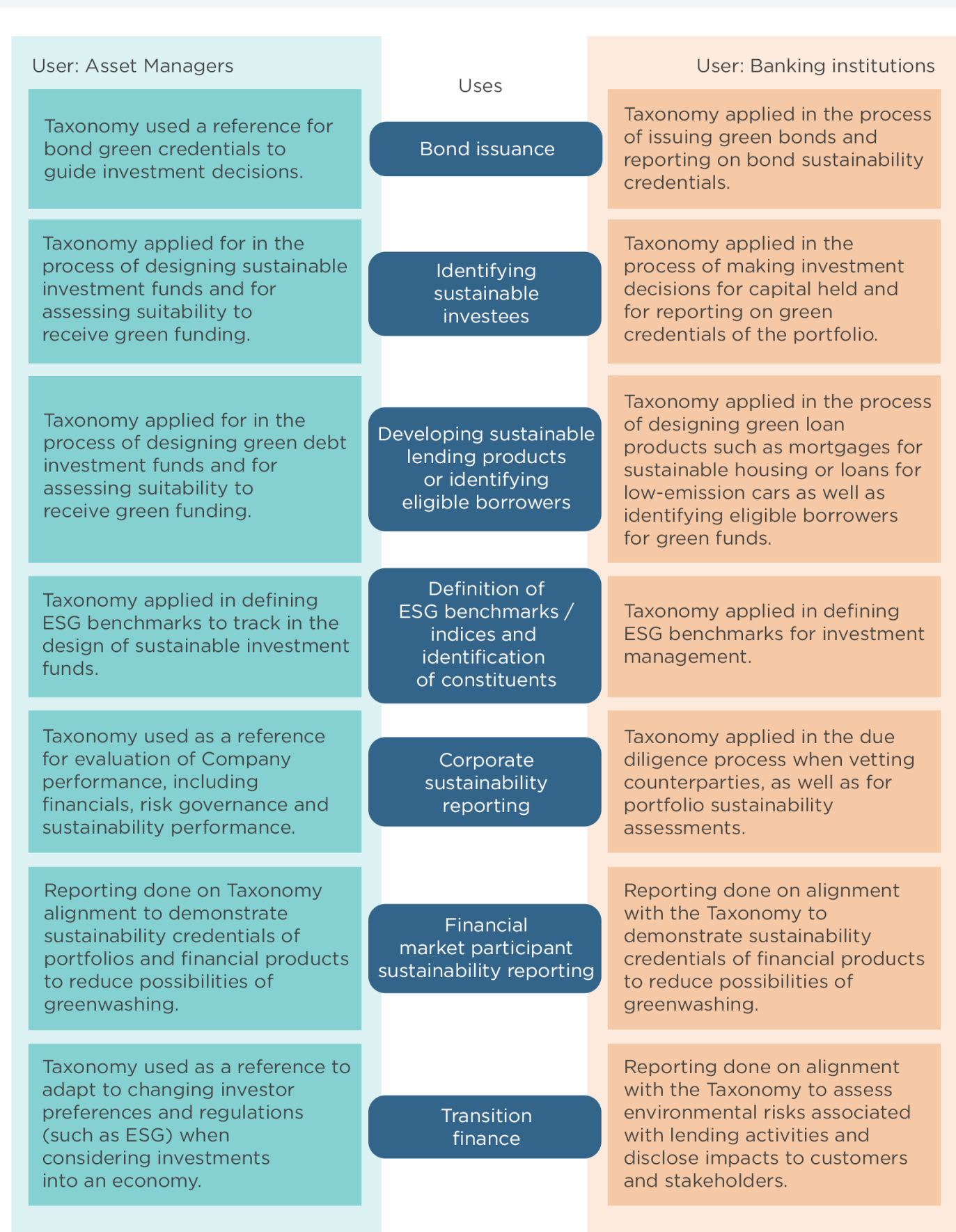
ANNEX 2: POTENTIAL USERS OF THE ASEAN TAXONOMY

Figure 29. Potential Users of The ASEAN Taxonomy



Source: [ASEAN Taxonomy for Sustainable Finance Version 3](#)





ANNEX 3: FINANCE TAXONOMY DEVELOPMENT CASE STUDIES

From green to sustainability: The case of Mongolia⁴⁵

Context

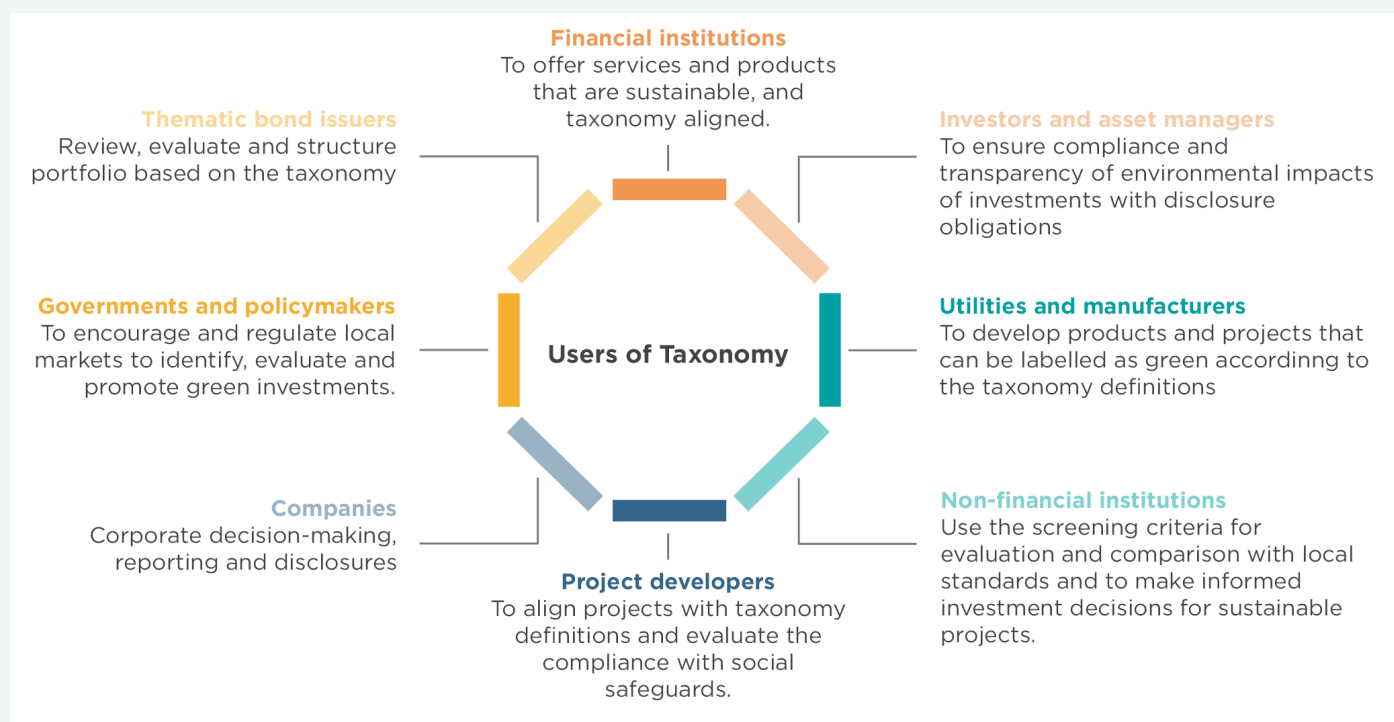
Mongolia's journey of developing and updating its finance taxonomy has been in response to the global trajectory of sustainable development and climate commitments. The Financial Stability Council on Mongolia approved the country's Green Taxonomy in 2019, with the aim to provide a nationally agreed-upon classification framework for financing green activities that contribute to mitigation, adaptation, pollution prevention, resource conservation, and livelihood improvement. This was in response to the recognition that while the National Sustainable Finance Roadmap 2030 released in 2018 promoted the integration of sustainability in the country's financial system, the market had no clarity on what constitutes green investment.

The landmark Green Taxonomy enabled the identification and comparison of green investment opportunities and boosted investor confidence in shifting capital into green projects. However, there remained a lack of social investments due to an absence of financial instruments and mechanisms linked to sustainable development, resulting in investments into social projects being a co-benefit or additional benefit. This led to the expansion of the Green Taxonomy into the SDG Finance Taxonomy, that now includes broader SDG-aligned, bankable economic activities as well.

Users of the SDG Finance Taxonomy

The official adoption, scaling and implementation of the SDG Finance Taxonomy is crucial for identifying sustainable economic activities, leveraging private sector resources for SDG financing, and facilitating the development of sustainable and innovative financial products. While the taxonomy is primarily shaped for financial institutions and policymakers, its use can extend beyond the banking sector to include non-banking financial institutions and capital markets. It is anticipated that the taxonomy will

Figure 30. Proposed users of the Mongolia SDG Finance Taxonomy



Source: Mongolia SDG Finance Taxonomy

⁴⁵ Mongolia's SDG Finance taxonomy underwent all the stages of taxonomy development process and is awaiting formal adoption in 2025.

serve as a guiding framework for financial institutions, aiding them in promoting sustainable lending and funding operations. Additionally, it will assist in reporting both existing and new financing flows, as well as engaging clients in exploring new market opportunities. Companies can utilize the taxonomy to initiate new sustainable projects and gain a better understanding of sustainable finance options. Furthermore, policymakers can leverage the taxonomy to address financing gaps in specific areas, guide policy actions and design incentive mechanisms.

Governance and institutional structure

The SDG Finance Taxonomy was developed using a collaborative phased approach with multiple iterations and inputs from various stakeholders including policymakers, private sector organizations, civil society representatives, international agencies, and technical experts over the period of a year (2021- 2022). The governance structure of the taxonomy development process included representatives from the three tiers of governance:

Tier 1 (strategic level): The process had strong buy-in and policy support from the Bank of Mongolia, Financial Regulatory Commission, Ministry of Finance, Deposit Insurance Corporation of Mongolia, Ministry of Economy and Development and other government agencies.

Tier 2 (managing working groups): The taxonomy framework and technical report was authored by UNDP, the Mongolian Sustainable Finance Association- founded by the Mongolian Bankers Association to create a green financing system and assist Mongolian finance and business sectors to adopt sustainable and green activities, and international experts. Therefore, the core managing working group involved representation from the country's policymakers and financial sector regulators, and a multilateral organization and international experts who brought in global perspectives.

Tier 3 (technical/operational level): UNDP and MSFA also led the technical process through the project team which synthesized inputs and contribution from over 50 institutions and 200+ individuals throughout the development and consultation process. This included, the financial sector, civil society, academia and international experts, such as other UN agencies, members of and Professional Councils under the Mongolian Sustainable Finance Association and the Business Council of Mongolia.

Sustainable Finance Taxonomy principles

The SDG Finance Taxonomy is based on a set of core guiding principles that span across the entire process and have been designed to guide the process and activities. These are:

- principle 1: contribute to national policies and targets;
- principle 2: align with international standards and good practices;
- principle 3: empower vulnerable groups and increase financial access for them;
- principle 4: be easy to use;
- principle 5: comply with ESG standards;
- principle 6: engage with stakeholders; and
- principle 7: review and update continuously.

Strategic goal and thematic area

The Sustainable Finance Taxonomy is aligned with Mongolia's key high-level development targets such as NDCs, the Vision 2050 long-term development policy, Action Plan of the Government of Mongolia for 2020- National Air Pollution Reduction Program (2016-2025), National programme "150 thousand households - housing" (2019-2023), National programme "150 thousand

households - housing” (2019-2023), National Program for Soil Protection and Land Degradation Reduction (2019-2023), National Waste Management Improvement Program (2014-2022), National Biodiversity Program (2016-2025), National programme to combat desertification (2010), among others.

The taxonomy maps its categories and sub-categories of activities with relevant policies and plans. This ensures the broader positioning of the taxonomy within the country’s economy and development priorities. While the strategic goal provides overall direction to the taxonomy, the thematic goals of the taxonomy ensure the prioritization of green and sustainable economic activities in line with the country’s development objectives and requirements.

Objective and scope of the SDG Finance Taxonomy

The overall objective of the SDG Finance Taxonomy is: “To provide a common, nationally agreed classification framework of activities that are eligible for sustainable financing and make substantial contribution to Mongolia’s sustainable development goals and targets. The vision of the SDG Finance Taxonomy is to help Mongolia transition to a sustainable, low carbon, climate-resilient and just economy” (Mongolia SDG Finance Taxonomy).

The Green taxonomy has therefore been expanded to include economic activities that provide both environmental and social benefits and significantly contribute to Mongolia’s sustainability agenda. These include socially oriented sectors such as education, health, information technology and affordable basic infrastructure. Some of these activities have overlapping environmental and social benefits and are therefore considered as sustainable activities. Gender equality is a cross-cutting issue across all sectors and multiple economic activities. The emerging terminology of transition finance has been included as well, and together they are considered as SDG activities that can be used to identify SDG-financing opportunities.

Figure 31. Mongolia SDG Taxonomy Activities

Green	Energy production
	Energy efficiency
	Sustainable cities and housing
	Pollution prevention and control
Sustainable	Sustainable water & waste use
	Sustainable agriculture and food security
	Sustainable land use, forestry, biodiversity protection
	Low emission transport
Social	Information and communication technologies
	Health
	Education & culture
	Affordable basic infrastructure

Source: Mongolia SDG Finance Taxonomy

Box 31. Mongolia taxonomy: Do not significant harm

While the taxonomy does not directly provide requirements related to “Do no significant harm”, these requirements are set and regulated by voluntary frameworks like the Mongolian Sustainable Finance Principles (building on the IFC Performance Standards) as well as associated regulations and directives by the Central Bank of Mongolia and Financial Regulatory Commission. The SDG finance taxonomy also clearly emphasizes the importance of integrating ESG risk management due diligence in taxonomy-aligned lending processes in its principles.

Alignment and harmonization

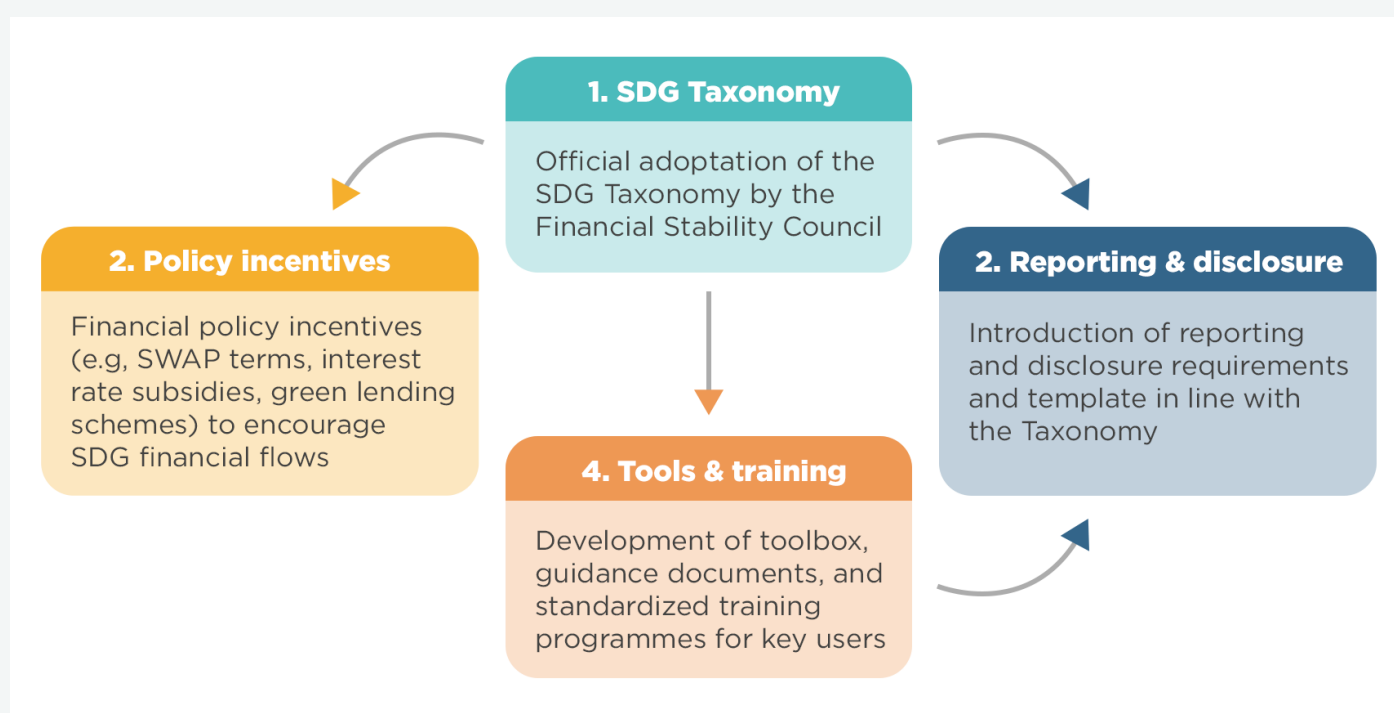
The SDG Finance Taxonomy alignment is established by assessing the percentage of the loan or investment that conforms to the criteria of the SDG Finance Taxonomy. Hence, users must meticulously examine each activity within the loan portfolio to ascertain the proportion that qualifies as environmentally friendly, socially beneficial, or sustainable. To facilitate this evaluation, the Taxonomy Key Performance Indicators (KPIs), thresholds, and exclusions serve as tools to filter out sustainable investment activities. Investors are required to scrutinize the data and metrics of a company or project, ensuring compliance with the criteria outlined in the Taxonomy. The following illustrates an example of the calculation for the loan portfolio.

To ensure harmonization and integration of global best practices and alignment with international standards, the taxonomy’s principle 2 clearly outlines that the SDG taxonomy should “reference international standards and best practices, also promote the overall convergence of international standards and increased cross-border investments.” In this context, the taxonomy document consists of a comprehensive overview of global taxonomy development and trends.

Implementation

The taxonomy document lists the requisite next steps for the successful adoption, implementation and scaling of the sustainable finance taxonomy:

Figure 32. Steps for the adoption of Mongolia’s Sustainable Finance Taxonomy



Source: Mongolia SDG Finance Taxonomy

The Colombian Green Taxonomy: A landmark taxonomy development initiative in Latin America

Context

Having acknowledged the importance of investing in sustainable and low-carbon technologies, services, and infrastructure to meet climate change and biodiversity objectives, Colombia has taken significant steps towards establishing an enabling environment for sustainable finance. The establishment of the Colombian Green Taxonomy is one such endeavour with others including the National Climate Finance Strategy, Green Protocol, and the Responsible Investment Task Force. These frameworks are designed to assist both public and private entities, both within the country and globally, in making ecologically responsible investments. By giving priority to green investments, Colombia aims to improve its competitiveness, promote climate-resilient development, attain low-carbon growth, and fulfil its commitments outlined in international agreements. With the release of the Green Taxonomy by the Ministry of Finance and Public Credit (MHCP) in April 2022, Colombia became the first Latin American country to have a national green taxonomy in place to guide green investments and economic activities.

Users of the Green Taxonomy

The Green Taxonomy's aim is to help multiple public and private sector actors identify and evaluate investments that can meet Colombia's environmental objectives and can be classified as green or environmentally sustainable in the country's context. These actors include the public and private sector and all leading players of the Colombian capital market- financial regulators, public and private entities, bond issuers, issuers of securities, investors, companies, local and foreign investors and financial consumers.

Governance and institutional structure

Colombia's green taxonomy development process consists of a robust and decentralized governance structure which ensures transparency and continuity of its initiatives through inputs from multiple relevant stakeholders.

Tier 1 (supervisory committee): The Supervisory Committee was built on the joint leadership of Colombia's financial regulator - the Colombian Superintendency of Finance (SFC), the Ministry of Finance, Ministry of Environment and Sustainable Development, the National Planning Department, and the National Administrative Department of Statistics. The Committee oversaw and guided the entire taxonomy development process. This collaborative effort by the government institutions was aimed at establishing a common language and classification system for green investments in Colombia concerning policies, regulations, international taxonomies, and the investment tracking system.

Tier 2 (coordinators): The Supervisory Committee formed a joint working group which identified the country's environmental objectives and priorities in alignment with Colombia's commitments, strategies, and policies in the field. The taxonomy development was carried out by two groups- project coordinators, including government institutions (SFC and MHCP), multilateral organizations (the World Bank Group), and international consultants (Climate Bonds), responsible for coordinating technical evaluation and the technical consultation process and preparation of the first draft; and project consultants who mainly facilitated the consultation process and technical discussions.

Tier 3 (technical experts): The technical work was carried out by lead advisors and technical experts. Lead Advisors served as sector team chairs, reviewed the initial list of activities and eligibility criteria, conducted stakeholder consultations, and worked with the project coordinators to select technical experts for their respective sector teams. Technical experts, including academia/research, think tanks, public entities, and representatives of industry, participated as members of

sector teams. The taxonomy development process engaged with technical and sectoral experts and involved multiple stakeholders through a public consultation phase. 257 technical experts and stakeholders representing 53 entities from the private and public sectors, academia and international organizations participated in the taxonomy process.

Green Taxonomy principles

The taxonomy's guiding principles are designed in line with established taxonomies and frameworks across the world, especially the EU taxonomy, to provide direction and ensure consistency. Some of the key guiding principles include:

- Generate substantial contributions to the country's climate change and environmental objectives
- Ensure that activities are well defined to ensure that eligible activities do not cause significant harm
- Science-based technical criteria to ensure a credible transition of the hard-to-abate sectors
- Periodic review of the taxonomy to incorporate updates based on changes in policies and technologies that indicate market best practices.

Strategic goal and thematic areas

The taxonomy has four core goals structured to address Colombia's climate and environmental risks:

- Support companies, investors, financial institutions, public, and private entities among others, to identify and evaluate the economic activities and activities that make a substantial contribution to the environmental objectives
- Strengthen the differentiation and classification of eligible financial instruments, to facilitate the redirection of capital towards green sectors
- Harmonize the criteria and definitions in green/sustainable finance through a common language to avoid greenwashing
- Support the development, monitoring, and follow-up of green markets that have sustainable objectives, as well as to identify the activities with potential or breaking points of the resources

The taxonomy selects eligible activities through two primary filters- relevance to the Colombian context, and contribution to environmental objectives. The taxonomy has identified 47 activities that are relevant for Colombia and can contribute towards achieving the country's environmental objectives and a green transition.

Objectives and scope of the Green Taxonomy

The main objective of the Colombian Green Taxonomy, and its selection of seven economy sectors is to ensure substantial contribution to climate change mitigation.

Alongside, the taxonomy established a process for addressing five cross-cutting environmental objectives through sustainable management and best practices in three land-use sectors- forestry, agriculture, and livestock, considering that these sectors contribute to 59 per cent of the country's total GHG emissions. Selected sectors and activities should also comply with DNSH criteria, environmental objectives, and minimum safeguards requirements. The taxonomy covers a total of ten sectors and 58 economic activities. These include 47 activities from seven economic sectors for mitigation and 11 additional activities from three land use sectors wherein broader environmental objectives are also covered.

Figure 33. Colombian Green Taxonomy objectives

	Climate change mitigation		Climate change adaptation
	Ecosystem and biodiversity conservation		Water management
	Soil management		Circular economy
	Pollution prevention and control		

Source: [Climate Bonds Initiative 2023](#)

Alignment and harmonization

Colombia encourages the use of the taxonomy for labelling green bonds, ESG portfolio labelling and voluntary labelling for pension funds through external circulars/rules. While market participants are not obliged to issue green bonds or label products, if they choose to do so, they can be aligned with the Green Taxonomy. The SFC has in place an external circular, as part of its official regulatory framework, which allows for entities under its supervision to use the taxonomy for identifying financing and investing opportunities for enabling Colombia's transition to a green economy, measuring alignment of portfolios with green assets and activities, formulating green solutions and products, and improving disclosure and transparency practices. The circular includes directions on the use of the taxonomy for investment portfolios, green bond issuers and voluntary pension funds.

The Colombian Green Taxonomy strives to draw a balance between the country's priorities and commitments and international standards and best practices. The taxonomy governance body utilized the EU Green taxonomy as a foundation for creating its own taxonomy and adjusted the technical criteria to align it with local environmental policies, strategies, and plans. The taxonomy is designed to ensure interoperability with other country and regional taxonomies and frameworks to ensure comparability and facilitate cross-border cooperation. Its guiding principles and design have similarities to other established taxonomies in terms of core elements such as objectives, classification systems, technical screening criteria, among others.

Implementation

The taxonomy, once developed, went through a rigorous piloting phase with the first implementation pilots conducted for green credit lines in commercial and Tier-2 banks. Feedback was garnered and gaps identified through multiple pilot exercises, and these were incorporated and addressed in the taxonomy document.

The Colombian Green Taxonomy's adoption and implementation guidelines are clearly outlined in the SFC's External Circulars 005 and 008 of 2022. Through these circulars, the taxonomy was adopted and minimum information requirements for issuance of bonds linked to green and sustainable performance were standardized. This helped establish the taxonomy as a nationally recognized classification system. The SFC has also introduced Resolution 0586 of 2023 which aims to incentivize issuance of thematic instruments and promote the application of the taxonomy.

ANNEX 4: UN/UNDP PARTNER PLATFORMS SUPPORTING TAXONOMY DEVELOPMENT

EU Funded Sustainable Finance Advisory Hub

The **Sustainable Finance Advisory Hub** is a joint initiative of the EU, the EU DFIs and the UN organizations, which will serve as a center of expertise and knowledge exchange to help low- and middle-income countries develop sustainable finance ecosystems, taking into account local contexts while promoting alignment with international good practice and, to the extent possible, building on EU frameworks and standards, to scale up the mobilisation of private capital towards sustainable (infrastructure) investments.

The Hub will assist countries with developing sustainable finance frameworks, designing green bonds and other sustainable finance instruments. As part of the sustainable finance framework development, the Hub will help countries in developing and updating their finance taxonomies, ESG standards & labels, sustainability-related disclosure and reporting.

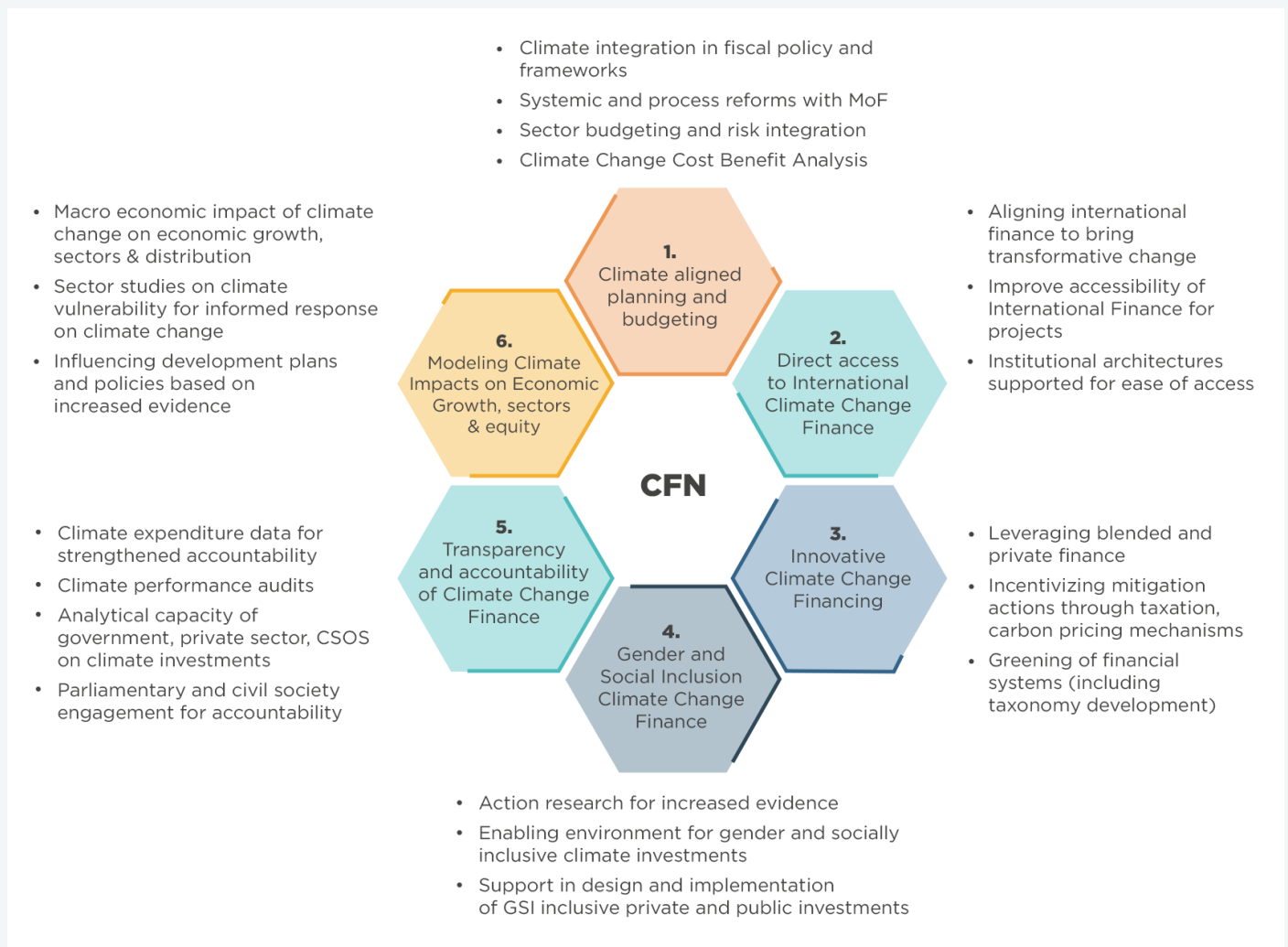
Figure 34. Pillars of EU's Sustainable Finance Advisory Hub

Sustainable Finance Advisory Hub					
Cross-cutting: centre of expertise, global coordination, and knowledge exchange					
Objectives		Sustainable Finance Frameworks		Green Bonds - TA for the Global Green Bond Initiative	 Other sustainability related financial instruments
	Assist partner countries in the development of credible and coherent sustainable finance frameworks, taking into account global developments to ensure global coherence, including with EU frameworks		Assist green bonds issuers (corporate, sovereign and sub-sovereign) in partner countries on their first green bond issuances		Assist issuers (corporate, sovereign and sub-sovereign) in partner countries on their first issuance of sustainability-related financial instruments <i>e.g., thematic loans, bonds or impact investment vehicles</i>

Source: UNDP

UNDP Hosted Climate Finance Network

The Climate Finance Network (CFN) is a peer-to-peer network and a knowledge management and technical support facility to support the identification and scaling up of climate finance innovations in the region. Housed in UNDP with support from the UK's Foreign Commonwealth and Development Office (FCDO), the CFN is supporting 18 countries in the Asia-Pacific region on several workstreams including integration of climate as part of budgetary planning processes, access to international climate finance, the development of innovative financing instruments, mainstreaming gender and social inclusion, modelling for economic impacts and enhancing transparency and accountability. The CFN mandate includes support for the development of tools and frameworks for the greening of financing systems, including technical assistance for taxonomy development.

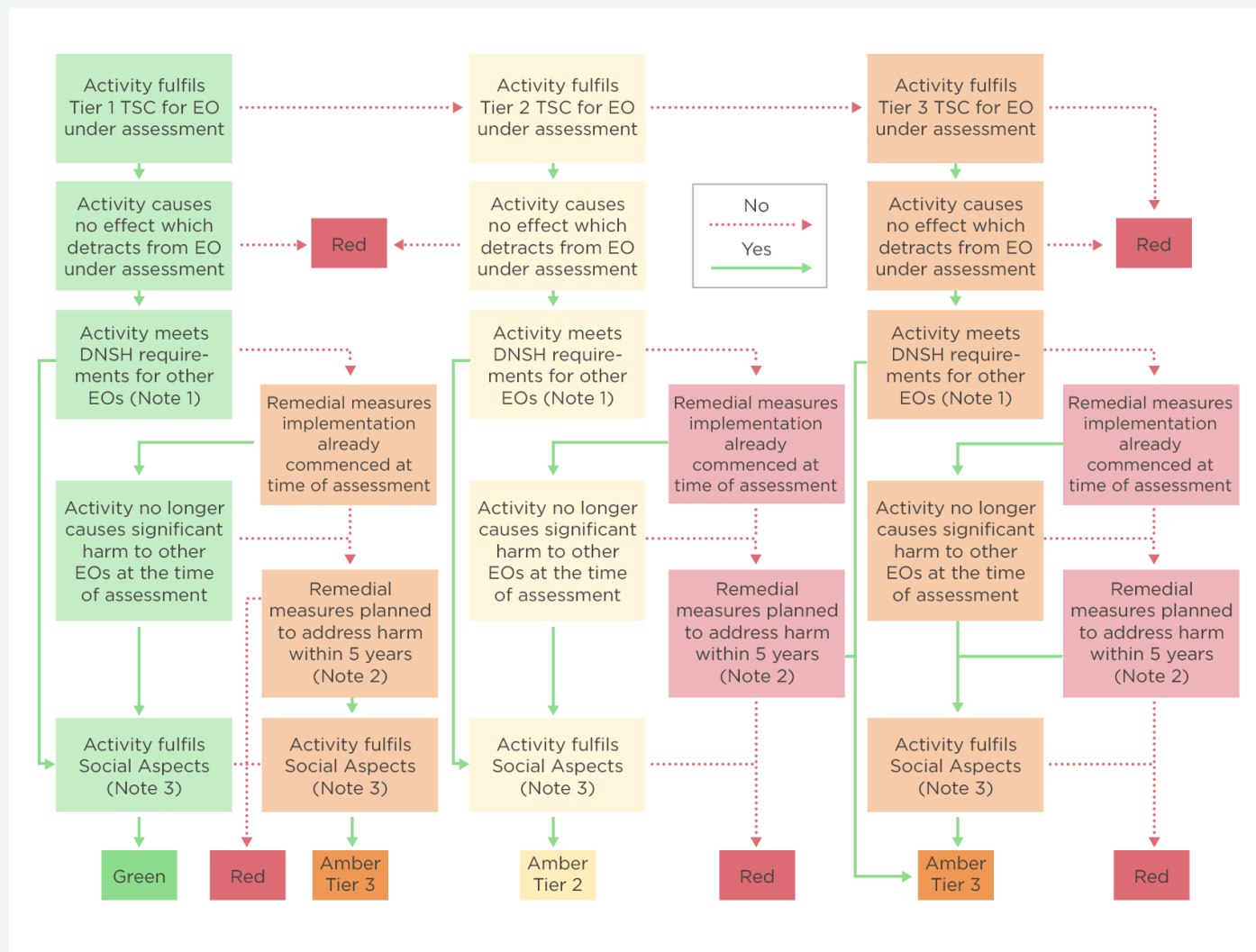
Figure 35. Workstreams of UNDP's Climate Finance Network

ANNEX 5. APPLICATION OF THE DNSH CRITERIA

ASEAN Taxonomy

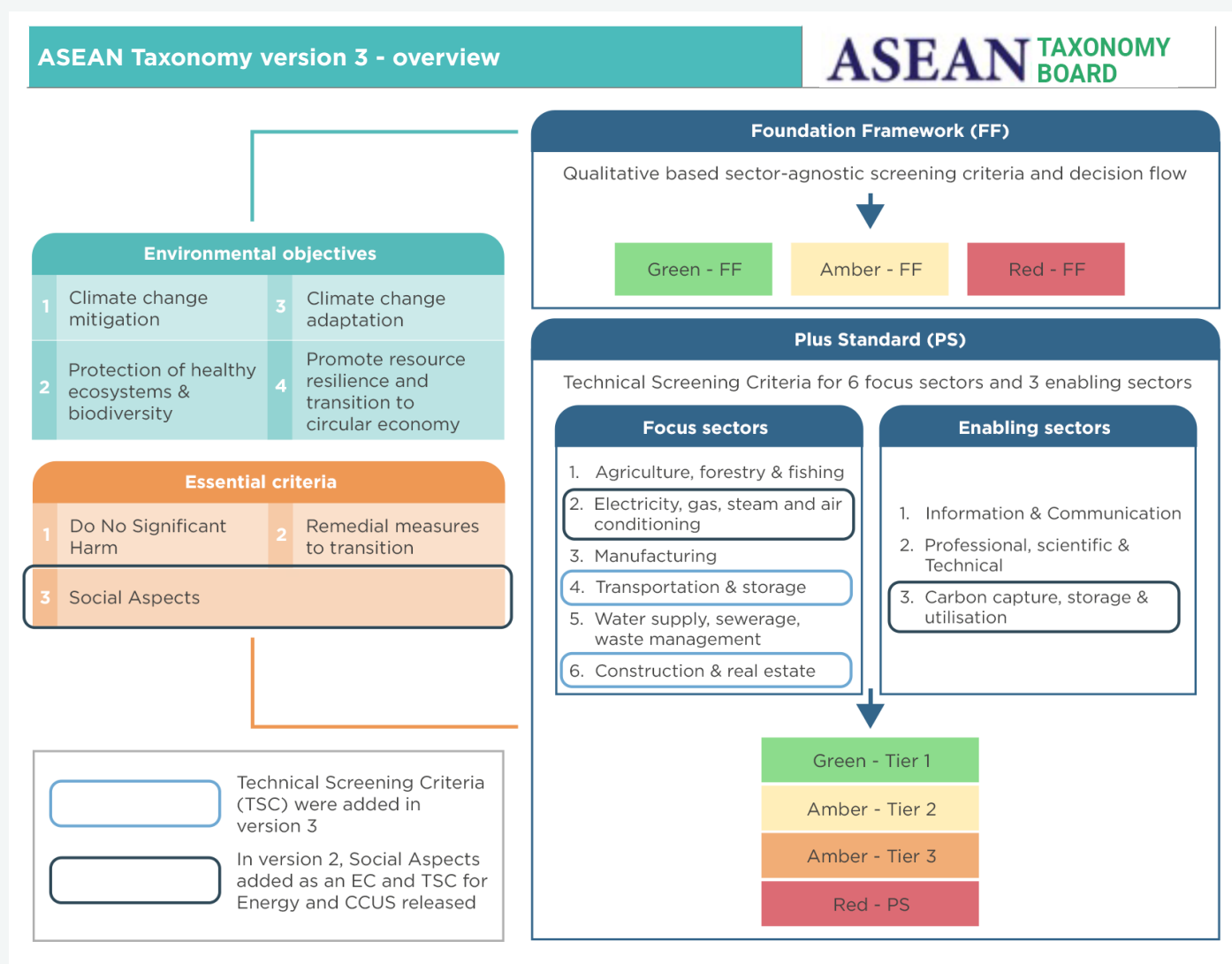
For the ASEAN taxonomy, if an activity is to be assessed by the Plus Standard (Figure 36), the Company is required to provide evidence of the fulfilment of the terms of the EO (or EOs), DNSH (if material), RMT (if applicable) and Social Aspects under the terms of the ASEAN Taxonomy (Figure 37).

Figure 36. ASEAN Taxonomy: Assessment using the Plus Standard



Notes:

1. DNSH requirements are the same for all Tiers
2. Activity must be re-assessed to ensure harm has been remediated within 5 years
3. Social Aspects are the same for all Tiers

Figure 37. ASEAN Taxonomy: environmental Objectives, Essential Criteria, TSC in Version 3

Singapore-Asia Taxonomy

The Do No Significant Harm (DNSH) assessment ensures that while the economic activities make substantial contribution to climate change mitigation, they do not cause significant harm to all other environmental objectives of the Taxonomy, which in the case of the Singapore Taxonomy are: Climate change adaptation; Protect healthy ecosystems and biodiversity; Promote resource resilience and circular economy; Pollution prevention and control.

Energy from solar PV and CSP (including electricity, heat, cool)⁴⁶

The main potential significant harm to other environmental objectives from the installation and operation of photovoltaic (PV) panels relate to:

- The PV installation siting: impacts on ecosystems and biodiversity if built in a designated conservation area or other areas with important ecosystem and biodiversity value
- The impacts from the production and end-of-life management of the PV systems and its component/materials: potentially significant environmental impacts are associated with the sourcing/production of materials and components of PV systems.

⁴⁶ [Singapore-Asia Taxonomy for Sustainable Finance](#), p. 141

Singapore-Asia Taxonomy

The main potential significant harm to other environmental objectives from Concentrated Solar Power (CSP) is associated with:

- the construction of the installation and the substantial land-take associated with the installation
- impact on birdlife from the high temperatures generated by the plant
- impact of the cooling system on water resources.

Figure 38. DNSH assessment for energy from solar PV and CSP (including electricity, heat, cooling)

Objectives	Criteria
Climate change adaptation	Refer to the screening criteria for DNSH to climate change adaptation: Table 1. Also, can refer to ISO Standard for Adaptation to climate change: ISO 14091:2021- Guidelines on vulnerability, impacts and risk assessment.
Protect healthy ecosystems and biodiversity	Ensure an Environmental Impact Assessment (EIA) has been completed in accordance with national and international standards (e.g IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks; Convention of Biological Diversity (CBD) Voluntary guidelines on biodiversity-inclusive impact assessment) - including ancillary services, e.g. transport infrastructure and operations). Ensure any required mitigation measures for protecting biodiversity/eco-systems have been implemented (i.e.: avoid possible collision of birds and visual impacts, generated by the change in landscape, due to the construction and operation of wind farms) For sites/operations located in or near to biodiversity-sensitive areas (including the Natura 2000 network of protected areas, UNESCO World Heritage sites and Key Biodiversity Areas (KBAs), as well as other protected areas), ensure that an appropriate assessment has been conducted in compliance with international standards (e.g. IFC Performance Standard 6) - based on the conservation objectives of the protected area. For such sites/operations, ensure that: a site-level biodiversity management plan exists and is implemented in alignment with the IFC Performance Standard 6; all necessary mitigation measures are in place to reduce the impacts on species and habitats; and a robust, appropriately designed and long-term biodiversity monitoring and evaluation programme exists and is implemented
Pollution prevention and control	Identify and manage risks related to water quality and/or water consumption at the appropriate level. Avoid possible negative impacts of the cooling system on water resources.
Promote resource resilience and circular economy	Ensure PV panels, CSP installations and associated components have been designed and manufactured for high durability, easy dismantling, refurbishment, and recycling, aligned to international standards and guidelines (ex: KAPSARC Guide to circular economy, French standard, XP X30-901, Circular economy - Circular economy project management system). Ensure that water use/conservation management plans, developed in consultation with relevant stakeholders, have been developed and implemented as per international standards and guidelines. (ex: UNEP International Water Quality Guidelines for Ecosystems (IWQGES); ISO 13.060: Water Quality). Ensure reparability of the solar photovoltaic (PV) installation or plant thanks to accessibility and exchangeability of the components.

ANNEX 6. EU TAXONOMY TESTING PHASE TAKE AWAYS

Based on feedback, and further findings from other feedback modalities, key challenges for specifically financial institutions identified in the EU taxonomy testing phase⁴⁷ are described below:

- **Unspecified uses of proceeds:** A large share of loans and banking transactions refer to “general purpose corporate loans”. It is therefore likely to be very challenging for banks in the application of the EU Taxonomy to banking products by establishing taxonomy aligned green financial products. Handling this issue requires a classification of transactions accurately according to business activities, and or a kind of segmenting alignment based on turnover or revenues. Both approaches are not trivial.
- **Data related challenges:** Financial transactions or portfolios requires access and availability of reliable data for the technical screening criteria to test eligibility. Especially, for SMEs, the EU taxonomy is far too technical for SMEs to adopt and requires significant simplification. There are different underlying causes, incl. the non-existence of required data or the complexity and difficulty to use for non-subject matter experts is hindering a smooth application.
- **Operational challenges:** Banks are typically considering corporate counterparts overall and do not distinct economic activity in which they are involved. There is simply lack of complete data set for each economic activity that allows us to make a full analysis (Unikredit). Another operational issue is the management of increased documentation requirements. For instance, loan documentation records use of proceeds and any information deemed essential to contract between the bank and the client and will therefore become an important part of the process in the application of the EU finance taxonomy.

47 [Testing the application of the EU Taxonomy to core banking products: High level recommendations](#)

