

Enhancing market transparency in green and transition finance

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Background and Motivation

- Central banks and financial supervisors are showing a growing interest in issues of market transparency in green and transition finance.
- Agreement that to scale up green finance, financiers and investors require transparency about the environmental impact of the assets they fund and purchase.
- Ambition to achieve greater integrity of green labels, to foster market development and funding in line with environmental objectives (eg GHG emission reductions) and contribute to the effective design of public policies.
- Better alignment between sustainable investment practices and climate transition plans, so financial markets help facilitate the reduction of carbon emissions intensity across industries.
- A new subgroup was formed in the spring of 2021, open to all interested NGFS members, tasked with preparing a report.
- More than 35 central banks, supervisors and IFIs contributed to the report over the course of the fiscal year.

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Joint foreword by Ravi Menon and Sabine Mauderer



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The growing threat of climate change and rising geopolitical risks highlight the need to speed up the global transition to meet the goals of the Paris Agreement. The UN's Intergovernmental Panel on Climate Change (IPCC) has warned that global greenhouse gas emissions need to peak before 2025 and drop sharply thereafter for a chance to limit global warming to 1.5°C. We consider it paramount to align global investments – including investments in green and transition projects and innovation in renewables – with the overarching target of net zero emissions.

Financial markets play a key role in enabling the transition towards carbon neutrality. To mobilise the necessary funding for low-carbon projects and innovations, investors need clear and internationally comparable criteria to assess the environmental benefits and costs of their investments in different jurisdictions. Credible external reviews play an important role in mitigating the risk of greenwashing, or attempts to declare activities as environmentally friendly when they are not.

Mandatory global disclosure standards with industry-specific metrics are therefore vital to ensure that financial flows are aligned with green and transition objectives. In this regard, we consider the work of the International Sustainability Standards Board an important step forward.

Against the backdrop of a multitude of heterogeneous standards and practices, this report by the NGFS provides a comprehensive account of current practices and key challenges with respect to taxonomies, green external reviews, climate transition metrics and frameworks. Drawing from the experience of our members and observers and providing case studies for reference, we aim to contribute to global efforts for greater harmonisation and help to unleash the transformative power of financial markets to advance the climate agenda. We are grateful to the lead authors of this report and the NGFS Secretariat. We urge all stakeholders to reap the full benefits of our Network as a knowledge hub and platform for exchanging views and experiences, to help green the financial system.

Outline of the Report

- **I. Taxonomies:** Classification systems that define criteria to identify assets, projects and activities with environmental benefits or costs.
- **II. Green external review and assessment:** Green external review plays an increasingly important role in ensuring the proper application of green principles, standards and taxonomies, and thus promoting market transparency.
- **III. Climate transition metrics, frameworks, and market products:** Important tools to assess and guide orderly transition through the use of market-based approaches.
- Boxes in the annexes of the report take a deep dive into specific country examples.
- Executive summary and concluding observations that extract common and general observations relevant to policymakers.

CHAPTER 1

Taxonomies: Chapter sections

- **1.1 Introduction**

Definition: Classification systems that define criteria to identify assets, projects and activities with environmental benefits or costs

Can differ by objective, granularity, target, and other characteristics

- **1.2 Use of taxonomies by central banks and supervisors**

Survey among NGFS members, conducted for the report:

- *Covering 25 central banks and 24 supervisor respondents.*

- **1.3 Transition Taxonomies**

- **1.4 Green taxonomies: emerging and developing market perspectives**

Executive Summary

- **I. Taxonomies**

- The challenges posed by a fragmented global landscape with many different taxonomies highlight the need to enhance comparability and interoperability across jurisdictions.
- According to an NGFS survey, most central banks and financial supervisors are either using or considering the use of taxonomies, whether they be national, regional or private sector-based taxonomies.
- An increasing number of jurisdictions are exploring transition taxonomies, which define and identify activities (or, more often, criteria for those activities) consistent with a “transition” towards green objectives.
- The developers of taxonomies in emerging and developing markets face the challenge of drawing on the design principles of existing taxonomies, such as the EU Taxonomy, whilst aligning with local regulations that reflect their own development paths and growth models, which are often at earlier stages of transition.

Definition of Taxonomy

- Taxonomies are classification systems that define criteria to identify assets, projects and activities with environmental or social benefits or costs.
- “Green” taxonomies contribute solely to financing for environmental benefits, as opposed to more general societal benefits that fall under the labels of “social” or “sustainable” finance.
- Taxonomies provide a strong signal to investors and other stakeholders, and assist their decision making by identifying the types of information needed to classify assets and projects
- Good taxonomies should diminish the risk of greenwashing, and create a common language that investors can to redirect funds to jurisdictions’ environmental goals

The Principal Characteristics of Green Finance Taxonomies (1)

- **Environmental Objectives** (eg reduction GHG emissions vs. protection of natural resources and ecosystems vs. sustainable use and protection of water resources)
 - Can be single or can be multiple
 - EU Taxonomy has six objectives plus DNSH (*“Do no significant harm”*)
 - DNSH intended to ensure integrity of system and mitigate greenwashing
 - DNSH can incur higher costs of implementation and supervision
- **Granularity** (eg can allow for multiple shades of green)
 - Can also distinguish between severity of polluting investments (*“red taxonomies”*)
 - Can define highly granular spectrum from contributing significantly to environmental objectives on one end, to being highly polluting on the other
 - Higher granularity can be associated with higher costs

The Principal Characteristics of Green Finance Taxonomies (2)

- **Target** (eg activity vs. entity vs. asset)
 - Many widely used taxonomies define green from the perspective of the activity/project, rather than the entire entity undertaking the activity
 - Some taxonomies target entity level by relating to firm level disclosure requirements
 - Target can be asset on the balance sheet, either actual green physical asset, or financial investment such as green loan or bond, related to the physical asset being financed
 - *Key point: Signalling benefits of business activities at project level do not necessarily imply a similar signal at the entity-level*
 - Size of project can be small relative to size of entity
 - Some taxonomies (EU taxonomy) combine activity-level focus with a secondary, entity-level aggregation of share of taxonomy-aligned activities over total assets, or even fuller picture of profile of entity's assets

1.2. Uses of taxonomies by central banks and supervisors

- Portfolio management by central banks
- Supervision of financial institutions
- Important considerations for central banks and supervisors in developing or selecting taxonomies

Portfolio management by central banks (1)

- Central bank portfolios consist of both monetary and non-monetary policy portfolios
 - Policy portfolios designed to meet strict objectives and are the largest
 - Three main operational functions that can be adjusted to factor in climate-related risks
 - Credit operations, Collateral, and Asset purchases
- Operationalising the above adjustments requires application of climate-related criteria to facilitate identification as “green”, “sustainable” etc. Taxonomies are one such tool.
- At instrument level, central banks can use taxonomies as an input in their collateral eligibility framework.
 - ECB uses EU taxonomy objectives for criteria in determining eligibility of sustainable instruments
 - PBC even gives green bonds preferential status as collateral for its MT lending facility
 - Thus taxonomies determine which choice of investments are deemed sustainable

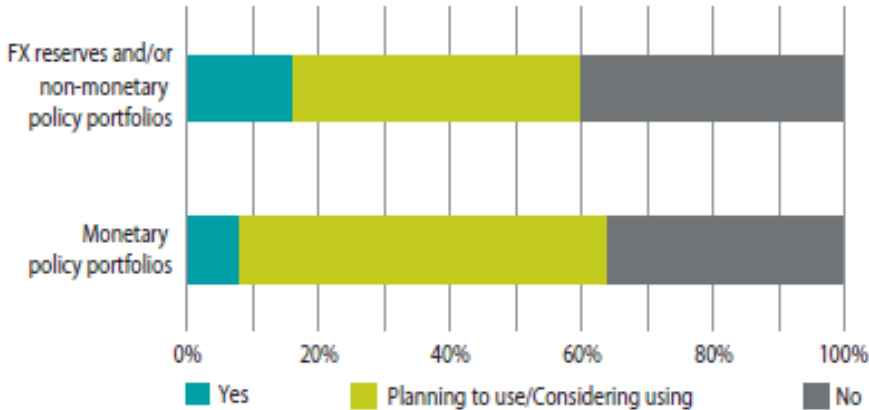
Portfolio management by central banks (2)

- At issuer level, central bank could in principle determine issuer's eligibility using a taxonomy-linked metrics (eg % of revenue taxonomy compliant, etc)
 - Avoids risk of activities level labels being extended incorrectly.
 - Applying issuer level taxonomy is much more difficult for sovereigns, however. Disclosure regime often don't apply to sovereigns. New methodologies need to be developed.
- Central banks also can use taxonomies in non-monetary policy portfolios, which can incorporate other objective, including investment in green assets per se.
 - Number of central banks screen investment universe and counterparties by sustainability criteria, which can include taxonomy-related criteria

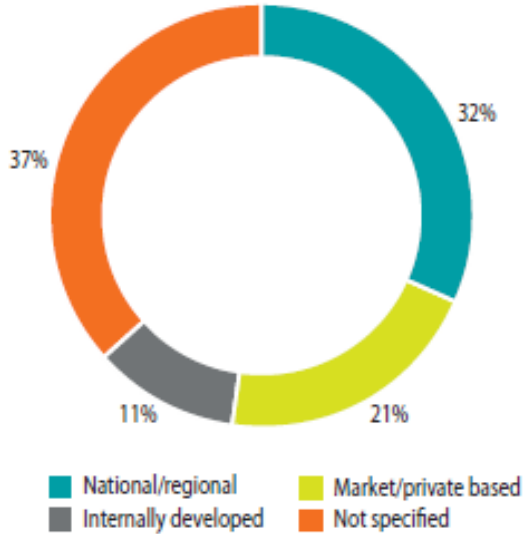
Uses of taxonomies by central banks

Graph 1.1 Use of taxonomy by portfolio and choice of taxonomy type by central banks

Use of taxonomy by portfolio



Choice of taxonomy by central banks



N = 25
 Source: NGFS survey.

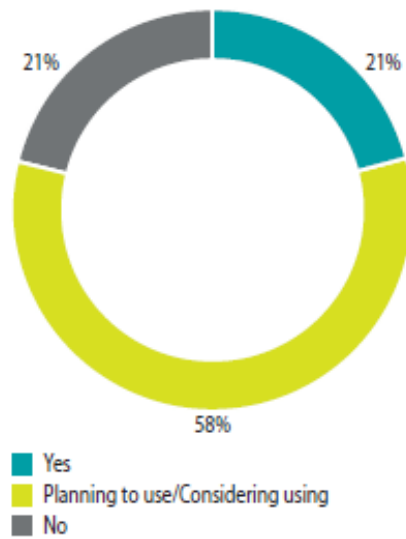
Supervision of financial institutions

- One step in assessing financial institutions' resilience to climate-related risks is requiring assessment of impact by economic sectors, classified by international sector classifications or even taxonomies.
 - Taxonomies can thus allow for granular assessment of exposures, which can offer insights into climate-related risk faced by financial institution as lenders
 - Help to identify activities that are most exposed to transition risk, stranded assets
- Taxonomies can be used to measure green lending by financial institutions, eg overall alignment of credit institutions' balance sheets with the EU Taxonomy.
- Taxonomies can be used in exploration of possible risk differentials of assets that are similar but differ in carbon intensity. If found, could potentially be used in assessment of capital adequacy (See initial reports from PRA and ECB)
- And depending on policy remit, taxonomies could be used to encourage FIs to contribute to transition to the low carbon economy

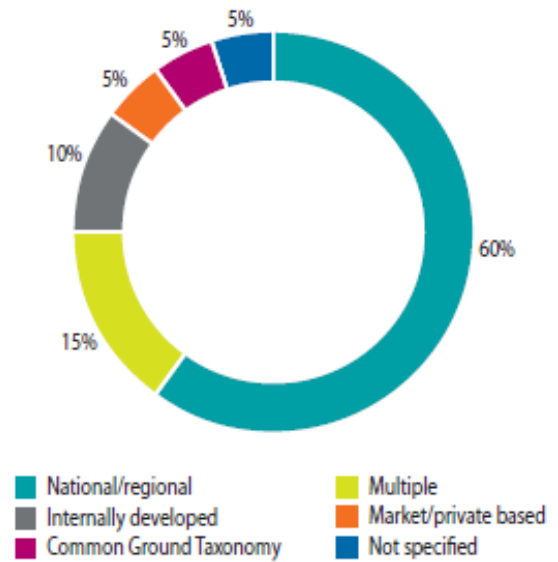
Uses of taxonomies by supervisors

Graph 1.2 Use and choice of taxonomies by supervisors

Usage of taxonomy by supervisors



Choice of taxonomy by supervisors



N = 24
Source: NGFS survey.

1.3. Transition taxonomies

- To achieve Paris goals of limiting increase in temperatures, essential to provide finance for transition efforts to move industries that are high emitters towards decarbonisation
- Transition label in taxonomies can refer to two types of activities
 - Currently transitioning towards a new zero status
 - Activities that enable (activities) in the economy to transition towards sustainability
- To formalise the category, some jurisdictions developing new frameworks that define transition finance, others extending scope of green taxonomies to include activities that promise transition away from polluting activities, even if activity itself is not green
- Economic activities facilitating transition to sustainable activities, without locking in assets incompatible with net zero, are essential to mitigate climate change
- Beyond energy, decarbonisation of key industry segments for which no alternative exist also important for an orderly transition

Initiatives to develop transition taxonomies

- EU Taxonomy does recognise transitional activities view as “contributing substantially to climate change mitigation”
 - Must outperform industry peers (“top of class”)
 - Must not lock in existing practices/hinder development alternatives
 - Further development of intermediate “amber” space between beneficial (green) and harmful (red) space.
- The Singaporean taxonomy (GFIT) also encompasses transition activities, viewed as critical for Singapore financial institutions operating in emerging Asia
 - “Traffic light” system proposed in which yellow category includes quantifiable and time-bound pathways towards green (if path exists) or significant decarbonisation
 - Red if significant alternatives exist or fail to meet DNSH criteria

Classification Methods

- Number of jurisdictions plan to incorporate more than one label
 - EU proposal to extend EU taxonomy such that classifies into substantial contribution (SC), intermediate performance (IP), significantly harmful (SH) and no significant impact (NSI); moving from SH to IP is an “intermediate transition”
 - Singapore GFIT and ASEAN taxonomies have traffic light systems where green is given to activities aligned with objectives of taxonomy, red for those that are inconsistent, and amber given to those with quantifiable and time-bound pathways towards green of significant decarbonisation
 - Malaysia taxonomy classifies as either Climate Supporting, Transitioning, or Watchlist (those companies displaying no commitment)

Focus on entity-level transition

- Important to gauge aggregate impact of any classified activity on sustainability of corporation's full range of economic activities
 - Transformation of entity's business model critical purpose of transition finance
 - Ultimately important for green instruments based on use of proceeds as well
- Data challenges posed by prerequisite disclosure of non-financial data
 - Consistent, comparable disclosures at entity level often not available.
 - EU taxonomy regulation aims to ensure entities disclose % activity/investments consistent with taxonomy
 - IOSCO recommends industry-specific quantitative metrics and activity-specific metrics

Transition Taxonomies

Main characteristics of selected transition taxonomies

Table 1.2

Jurisdiction	Format	Base	Methodology	Sectors	Science-based targets	Requirements for entity
ASEAN	Taxonomy	Activity	Tiered framework, traffic lights	All sectors for 1 st tier; 6 focus sectors and 3 enabling sectors for 2 nd tier*	2 nd tier provides science-based metrics and thresholds	NA
EU (proposed extension)	Taxonomy	Activity	Five categories; Traffic lights	Most relevant sectors	Set science-based criteria for different categories of performance	Entity-level disclosure based on the taxonomy
Japan	Roadmap	Entity	Sector-specific pathway	Hard-to-abate sectors	Formulate science-based roadmaps	Entity-level roadmap
Malaysia	Taxonomy	Activity	Three broad categories	All sectors	NA	NA
Singapore	Taxonomy	Activity	Traffic lights	8 focus sectors	Thresholds use science-based targets	NA

Sources: National and regional taxonomies and roadmaps.

*Focus and enabling sectors may be expanded in future iterations of the taxonomy.

1.4. Green taxonomies: emerging and developing market perspectives

- Balancing global developments with EM developmental needs
 - Outsized needs (\$ 1 trillion a year for EMEs to transition to low-carbon by one estimate) will often need external assistance
 - Clear definitions of green assets, activities and project will play an important role in incentivizing investors to meet those financing need
 - EU taxonomy, while detailed and rigorous, and a leading reference point, is based on EU regulations, which for EMEs do not necessarily reflect their own development paths
 - But huge demand for external financing means jurisdictions must be sensitive to investors' need to compare investments across borders
 - Key is balance with alignment with realistic domestic environmental objectives while allowing for comparability and consistency of terms and metrics with EU taxonomy
 - World Bank offers guide how to develop taxonomies based on national priorities where structure of taxonomy may be similar to EU but content differs depending on local context

Interoperability of taxonomies

- Taxonomies that are consistent and interoperable both across jurisdictions and within large jurisdictions can scale up cross-border finance
- The PBC (together with the NDRC and CSRC) updated in 2021 the China Green Bond Endorsed Projects Catalogue, removed clean coal, included climate change mitigation as environmental objective along with pollution prevention, and introduced the DNSH principle.
- International Platform on Sustainability Finance (IPSF) launched in 2019 spearheading global efforts to find common principles and metrics for green and sustainability activities, to facilitate comparability and interoperability
 - Within IPSF, China and EU launched a working group to develop Common Ground Taxonomy, the first comprehensive activity-by-activity mapping and comparison of the EU and China taxonomies in 2021
- Technical screening criteria in China's Catalogue reflect China's own environmental regulations but de facto overlap is significant
- The Bangladeshi Taxonomy is a well-known EME example of referring to external taxonomies while utilising domestic standards

Challenges and important factors going forward

- Taxonomy is not a substitute for environmental strategies and policies.
 - Eligible activities need to be based on national strategies and policy frameworks, as well as consistent with regulations and achievement of action plan targets
 - In absence of clear framework and implementation plan in one sector, may wish to focus on sectors for which solutions are known and regulations clear
 - Good quality data and metrics need to be available to assess compliance, measure progress in targets, and support disclosure schemes
- Taxonomies can benefit from technical assistance provided by international agencies and multilateral development banks (MDBs)
 - MDB also have their own standards and classifications systems
- Regulator must focus on taxonomies being realistic and aligned with environmental objectives that reflect a country's development strategies
 - “NDC Transition taxonomies: Aligned with nationally determined contributions, even if not fully aligned with a science-based net zero 2050 sectoral decarbonisation pathway
 - Yet transparent enough to allow investors to study and compare taxonomies across jurisdictions, ideally use similar activity metrics

Some ideas for further research

National taxonomies

- Can taxonomies encourage greater disclosure?
- Can taxonomies encourage increased improved real sustainability performance?
- Could issuers be incentivised by differences in the strictness of taxonomies to relocate production?

Central banks and supervisors

- Does pricing suggest that otherwise similar assets of higher carbon intensity pose greater risk?
- Can central banks and supervisors influence market practice in their application of taxonomies?

Acknowledgement

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