Enhancing market transparency in green and transition finance

SUERF BAFFI Bocconi e-lecture
11 July 2022

Background and Motivation

- To scale up green finance, financial market participants require transparency about the environmental impact of the assets they fund and purchase.
- Need to achieve greater integrity of green labels, to foster market development and funding in line with environmental objectives (eg GHG emission reductions).
- Better alignment between sustainable investment practices and climate transition plans, so financial markets help facilitate the reduction of carbon emissions intensity across industries.
- In the spring of 2021, a new subgroup was formed, 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.

Network for Greening the Financial System

Technical document

Enhancing market transparency in green and transition finance

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NGFS

Central Banks and Supervisors Network for Greening the Financial System

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**
- **II. Green external review and assessment**
- **III. Climate transition metrics, frameworks, and market products**

- 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

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

The Principal Characteristics of Green Finance Taxonomies ("Taxonomy of Taxonomies")

- **Environmental Objectives** (eg reduction GHG emissions vs. protection of natural resources and ecosystems vs. sustainable use and protection of water resources)

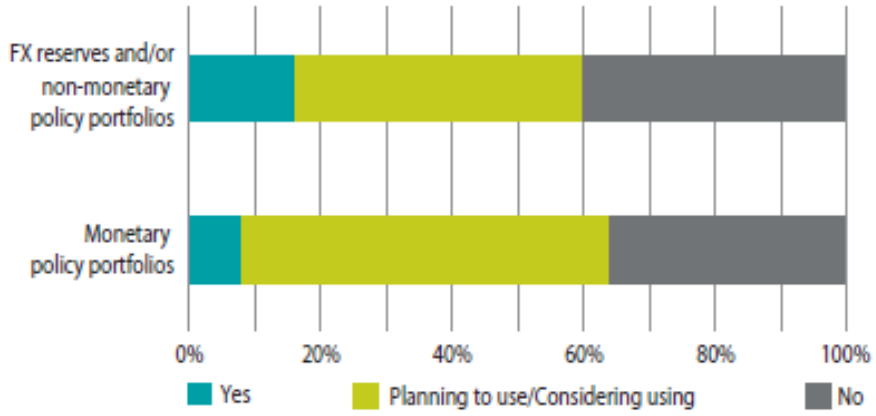
- **Granularity** (eg can allow for multiple shades of green or red)

- **Target** (eg activity vs. entity vs. asset)
  - *Key point: Signalling benefits of business activities at project level do not necessarily imply a similar signal at the entity-level*

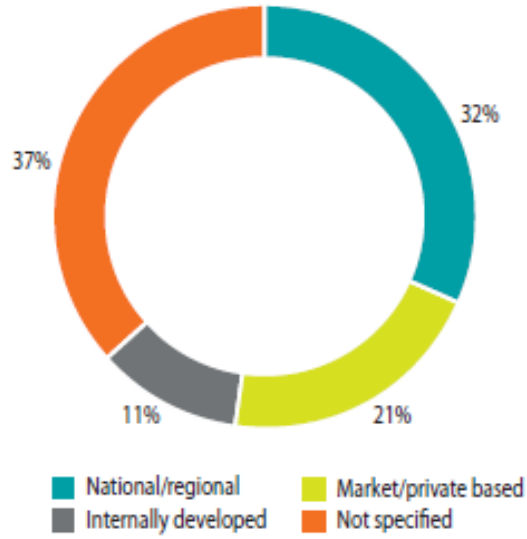
Uses of taxonomies by central banks

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

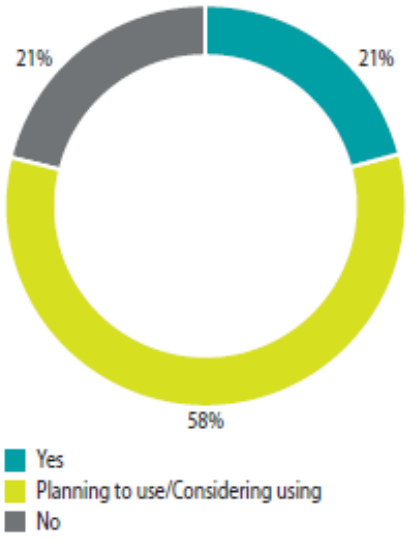


N = 25
Source: NGFS survey.

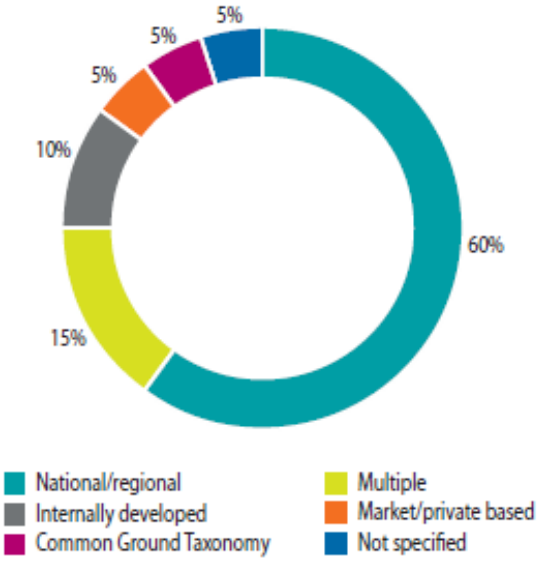
Uses of taxonomies by supervisors

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.

Transition taxonomies (1)

- To achieve Paris goals of limiting temperature increases, essential to provide finance for transition efforts to move industries that are high emitters towards decarbonisation

- 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

- At the same time, general intent to avoid locking in assets incompatible with net zero

Transition taxonomies (2)

- Initiatives to develop transition taxonomies
  - EU Taxonomy does recognise some transitional activities, and there is a proposed extension to include an intermediate “amber” space between beneficial (green) and harmful (red) space.
  - The Singaporean taxonomy (GFIT) also encompasses transition activities, including a proposed traffic light system.
- Focus on entity-level transition
  - Important to gauge aggregate impact of any classified activity on the sustainability of corporation’s full range of economic activities
  - Data challenges in disclosure of non-financial data

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 1st tier; 6 focus sectors and 3 enabling sectors for 2nd tier*	2nd 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.

Green taxonomies: emerging and developing market perspectives

- Balancing global developments with EM developmental needs
  - Huge demand for external financing means jurisdictions must be sensitive to investors' needs to compare investments across borders
  - EU taxonomy, while detailed and rigorous, does not necessarily reflect EMEs own development paths
  - 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 on local context
- Interoperability of Taxonomies
  - International Platform on Sustainability Finance (IPSF) spearheading global efforts to find common principles and metrics for green and sustainability activities
  - Within IPSF, China and EU have developed Common Ground Taxonomy, a comprehensive activity-by-activity mapping and comparison of the EU and China taxonomies
  - Bangledeshi taxonomy is another well-known EME case referring to external taxonomies

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
- Regulators must focus on taxonomies being realistic
  - 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 using similar activity metrics

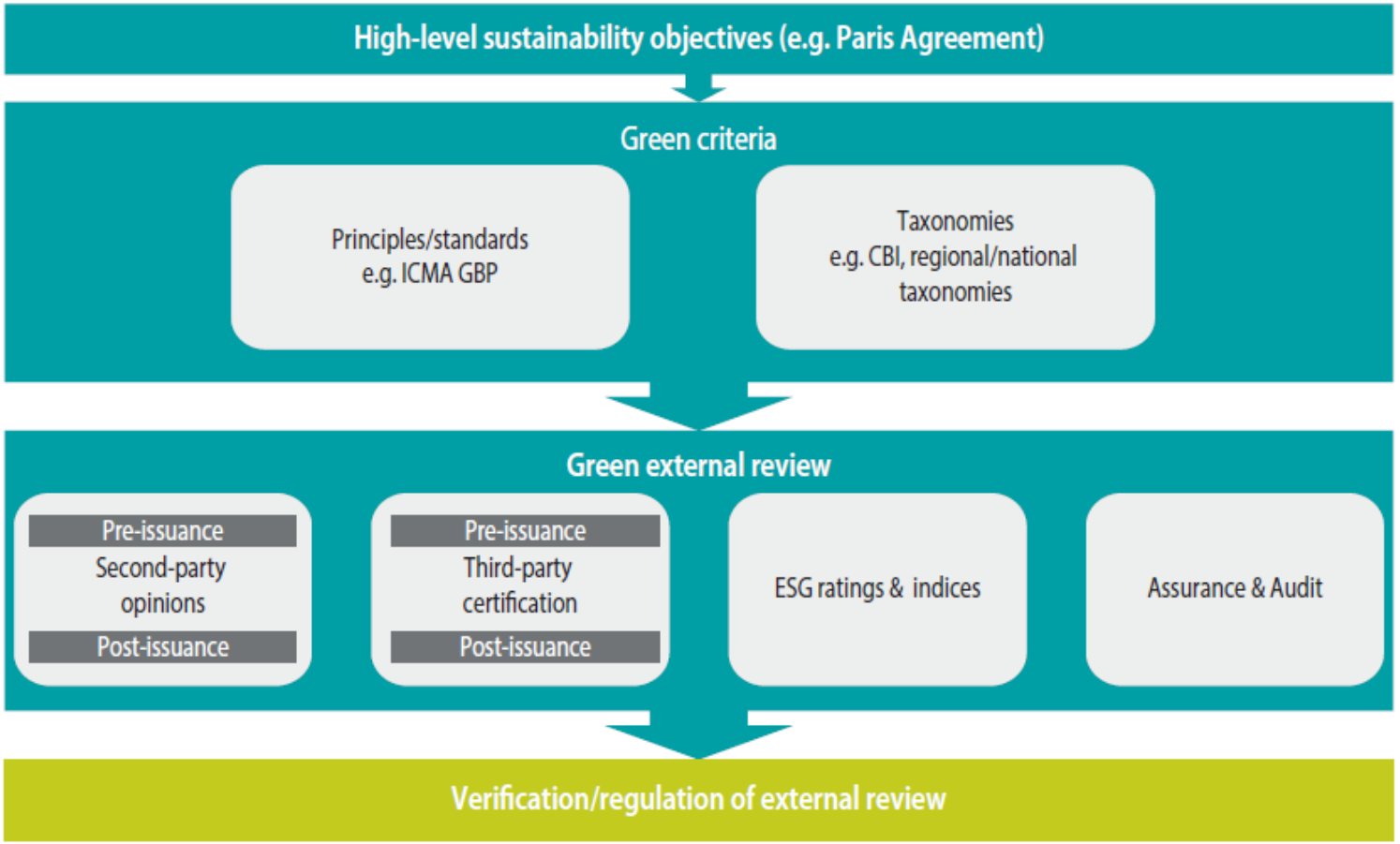
CHAPTER 2

Executive Summary

- **II. Green External Review and Assessment**
  - Private sector solutions currently dominate the green external review market, and offer a range of different approaches, such as second-party opinions, third-party certifications, ESG ratings, assurance, and audit.
  - Clear and meaningful reporting underpins any effective external review or assessment of green bonds.
  - New green finance instruments, and most particularly sustainability-linked debt (such as sustainability-linked bonds, or SLBs), have built-in quantitative targets against performance indicators.
  - Lastly, greater availability of data is needed to broaden the scope for verifying outcomes related to environmental objectives.

From green criteria to green external review

Graph 2.1 **From green criteria to green external review: various approaches possible**



Source: Authors' depiction.

We address four questions in this chapter

Institutional design of green external review

Which institutions are the best suited to conduct an external review of the greenness of an asset, an instrument or an issuing entity?

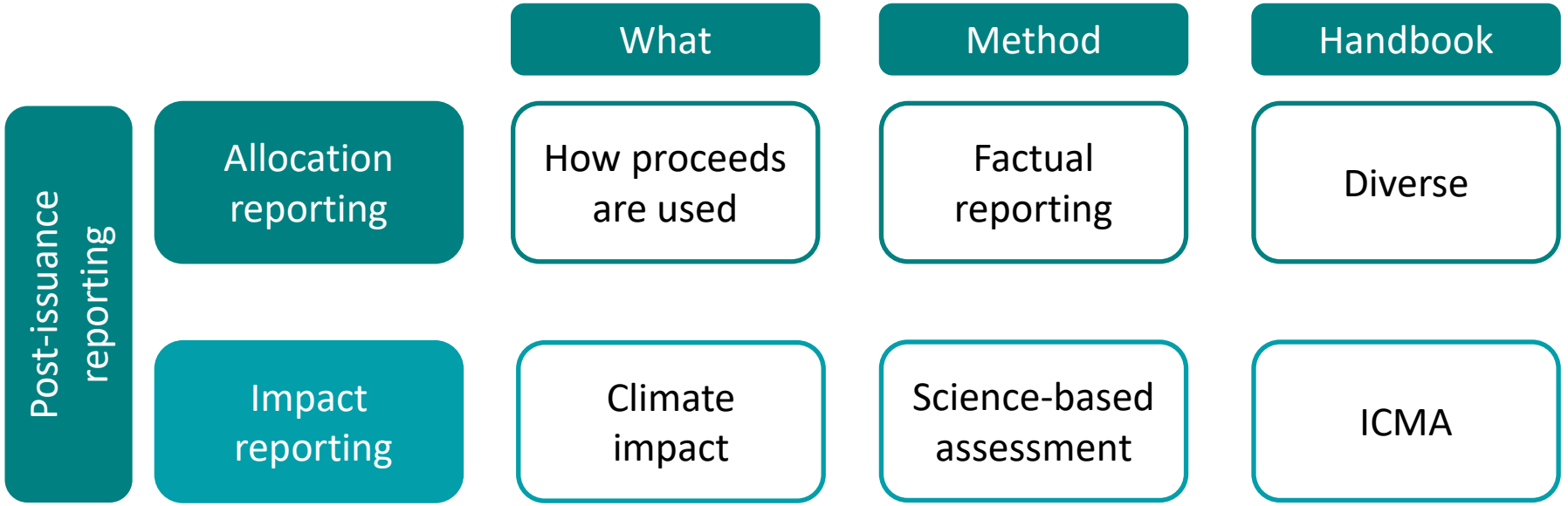
	What	How	Who
SPO	Issuer framework	ICMA GBP/GLP	Sustainalytics CECERO
Certification	Issue framework, proceeds	CBI, taxonomies	CBI
Assurance	Compliance	Accounting principles	Audit firms
ESG ratings	Sustainability credentials	ESG scorecard	MSCI Vigeo Riris

Institutional design of green external review

- Concerns have also arisen regarding the reliability and comparability of green labels, in particular as regards ESG ratings, with **calls for the green external review market to be regulated**.
- The key institutional design objective here is to develop appropriate regulations to **admit competent private verifiers**, **ensure a level playing field** for independent and professional assessments, and promote **transparency for both green objectives and definitions, and external review methodologies**.
- Some countries, such as China, and the EU, have started to put in place, or have upgraded, regulatory frameworks to guide private external review activities.

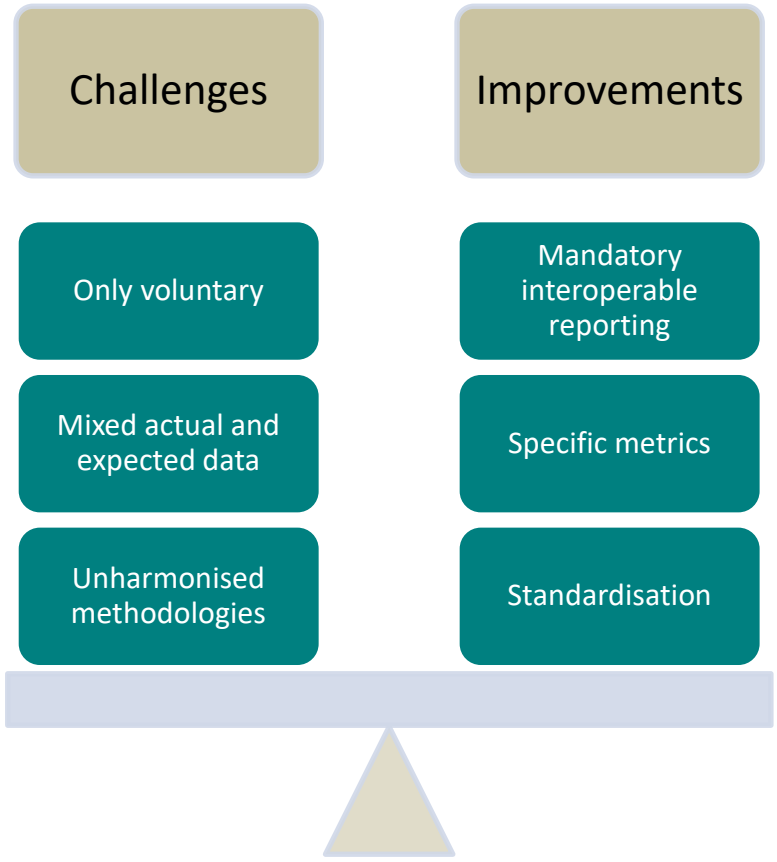
Role of reporting approaches

What reporting approaches and practices are needed to support an effective external review or assessment of green bonds?



Impact reporting: challenges and improvement

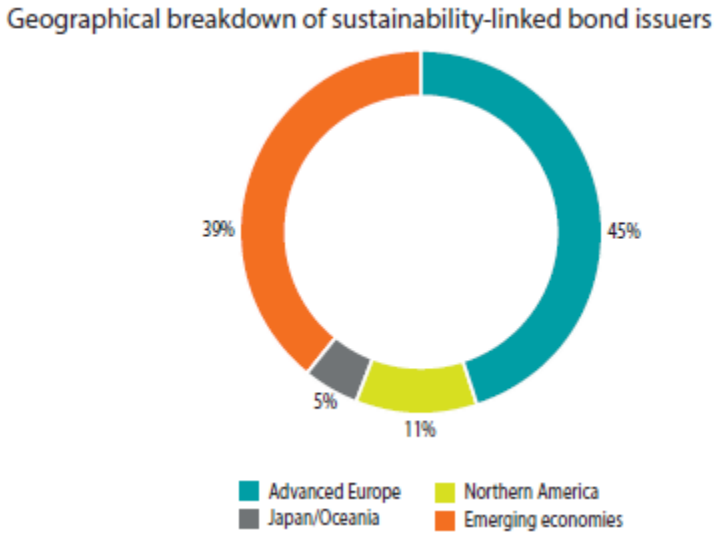
- Currently, there is **a general lack of consistency and comparability** across the reporting scopes, formats, measurement methodologies and metrics used by different issuers.
- **A call for standardisation of impact reporting and moving to a comprehensive sustainability reporting system**
  - A few ongoing initiatives: ISSB, Paris Europlace, etc.



Instruments with built-in targets: the case of Sustainability-Linked Bonds (SLBs)

Can new financial instruments help to move green external review from instrument-based verification to entity-based verification?

- The built-in mechanism allows **issuers** to achieve some defined and usually verifiable green or sustainability objectives while **securing funds for a general purpose.**
- **The SLB market has expanded rapidly since 2019**, with Europe featuring strongly and both corporate and sovereign issuers tapping the market.
- **A further development of industry-specific assessment indicators and targets** will be needed to make this market attractive.



SLB market: looking forward

- Investors largely interested in assets that support **GHG emissions reductions**.
- It is paramount to ensure **credible forward-looking indicators and targets** used by issuers.
- **Simple KPIs should be preferred over composite or more sophisticated indicators** such as temperature metrics or ESG ratings which are currently highly dependent on the assumptions used by data.
- A higher degree of **standardisation** might be achieved notably by providing more guidance on **the choice of industry-specific indicators**.
- Relying on indicators promoted by **global reporting standards setters** (such as the one being developed by the ISSB) will allow comparison with other non-SLB issuers that abide by these standards.

Technology and future data collection

Will technology enhance data collection for green external review?

- Greater availability of data is needed to broaden the scope for verifying outcomes related to environmental objectives.
- Technological advancement holds promise in this regard.
  - To enhance market transparency by improving the management of disclosures on sustainability impacts and outcomes
  - To allow real-time data collection and storage: example of BIS Project Genesis leveraging Internet of Things and Blockchain technologies
- Some jurisdictions, for instance in the EU with the proposed EU Corporate Sustainability Reporting Directive, have already started to make progress in this regard.

CHAPTER 3

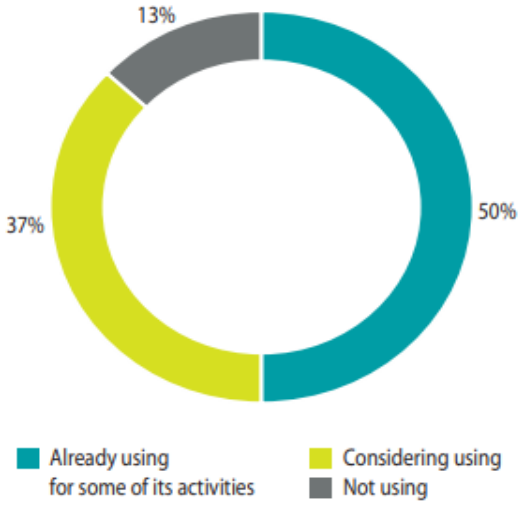
Executive Summary

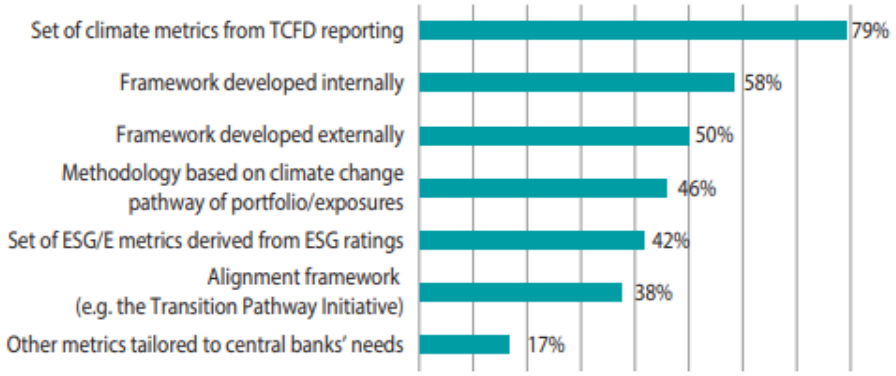
- **III. Climate transition metrics, frameworks and market products**
  - **Climate transition metrics and frameworks are important tools for central banks and financial authorities** that may be looking to assess and guide an orderly climate transition through the use of market-based approaches.
  - **A range of transition frameworks are emerging** to help assess factors such as issuers' awareness of climate transition risks, ambition and readiness to decarbonise, governance and strategy, and medium and long-term science-based net zero targets.
  - **Progress is being made to develop market products** to help scale up investments in support of climate transition opportunities and green technologies.
  - Yet **challenges need to be addressed with respect to consistency, comparability, and credibility of metrics, frameworks and investment products**. Funds and ETFs labelled as climate solutions, low-carbon, climate-conscious, and clean energy differ widely in terms of how they measure emissions and carbon intensity.

NGFS Survey – climate metrics and frameworks

- The NGFS survey of central banks in 2021 explored the extent to which they are using climate-related metrics and climate transition frameworks with respect to activities, such as for market surveillance, financial stability, and own portfolio

Graph 3.2 **Central banks' use of framework/metrics to assess climate transition risks**





N = 24
Source: NGFS survey.

Growing availability of climate-related metrics and frameworks

- Central banks and market participants are increasingly using a range of climate-related metrics and frameworks.
- There are a number of similarities across core information (eg emissions, net zero targets) but also many differences that challenge comparability.

Metrics

- Environmental Pillar metrics from major ESG raters.
- Climate transition metrics from TCFD reporting guidance.
- Key metrics used in *climate transition frameworks*.

Frameworks

- Climate Action 100+
- Transition Pathway Initiative
- Science-Based Targets Initiative
- GFANZ (evolving)
- Private sector (eg MSCI net zero tracker)

Metrics in climate transition frameworks

Target Setting

- Most capture net-zero targets
- Interim (eg 2030) targets

Emissions

- Ranges from absolute to net emissions
- Some also balance absolute with carbon intensity

Other metrics

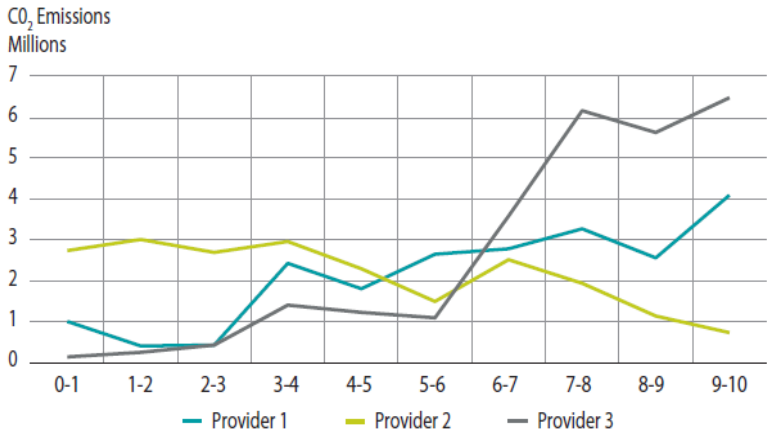
- Acknowledge climate risks
- Advocacy about climate policy action
- Climate planning
- Executive pay linked to transition targets
- Capex and climate targets
- Rewards act of disclosures
- Third party verification

The Environmental Pillar of ESG

- The E of ESG is used to gain insight with climate alignment, yet it is not often fit for purpose.
- E scores from ratings providers often do not often align with lower carbon emissions or intensity.

Graph 3.3 **ESG ratings providers' E pillar ratings compared to measurements of GHG emissions**

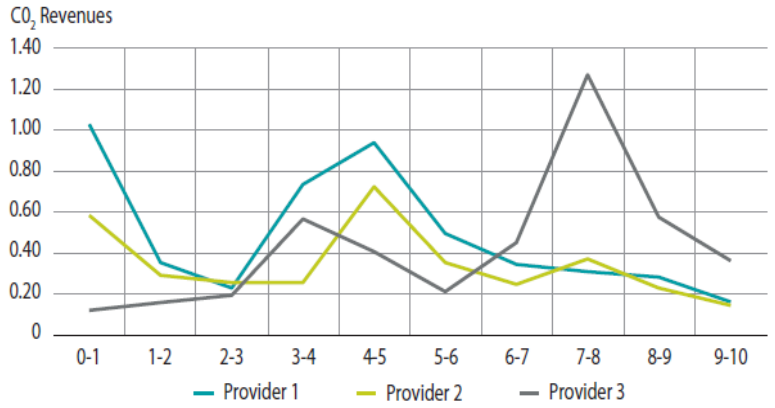
CO_2 emissions by E pillar score



Note: Average tonnes of estimated CO_2 and CO_2 equivalent emissions (Scope 1 and Scope 2, as reported by Refinitiv's methodology for estimating emissions) by E pillar deciles for different providers.

Sources: Bloomberg, MSCI, Refinitiv, OECD calculations.

CO_2 emissions intensity (CO_2/revenues) 2019

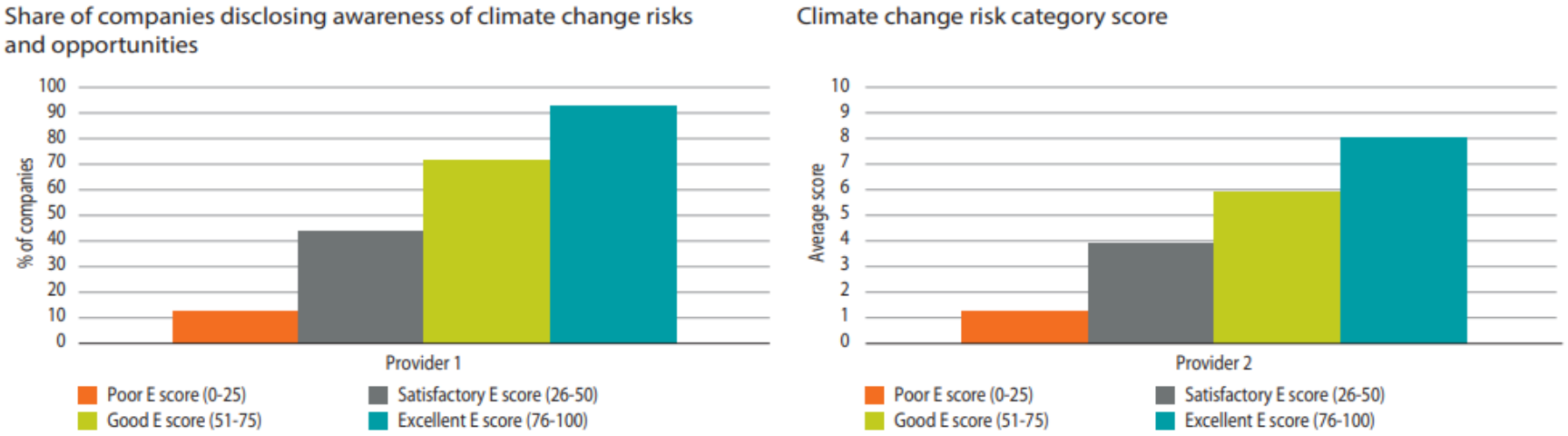


Note: Average tonnes of estimated CO_2 distributed by Revenues, by E pillar deciles for different providers.

E pillar scores and climate transition?

- Some ESG providers capture disclosure of *awareness* of climate change risks and opportunities, plans and policies, and governance.
- Yet net zero targets, and implementation against targets, and not well measured.

Graph 3.4 **Relationship between the environmental pillar score and climate transition issues**

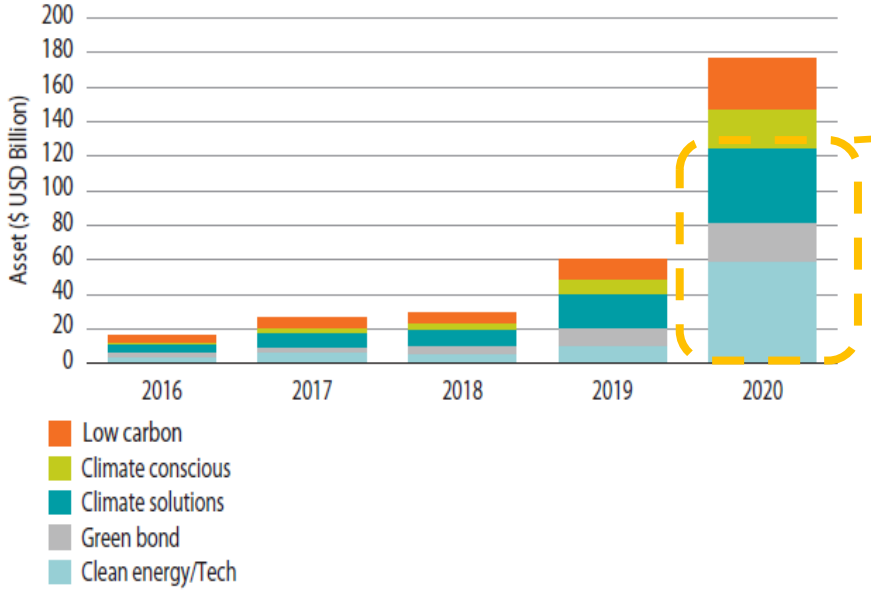


Note: Metrics on diclosure of policies are binary (1 = true (company discloses awareness); 2 = false (company does not disclose awareness)). Information provided for 2,870 companies. Classification is based on Refinitiv ESG scores' quartiles.
Sources: Bloomberg, MSCI, Refinitiv, OECD calculations.

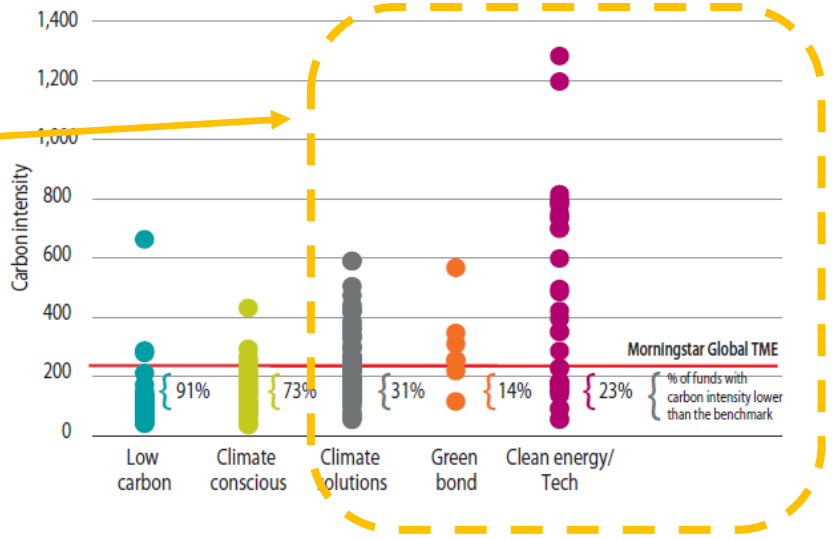
Growth of climate-aware funds

- Sharp growth of “climate aware” funds, which include a range of investment styles have risen x5 in several years.
- Yet, some investment styles – climate solutions, green bonds, and clean energy, have *much more carbon intensity* than typical funds.

Growth of “Climate Aware” Funds (assets by type)



***Carbon Intensity* by Type of Climate Aware Funds**



% = percentage of funds by AUM that are below the Morningstar Global Target Market Exposure

Key concerns with metrics, frameworks, and investment products

- Key commonalities across metrics should improve through TCFD guidance and ISSB global baseline reporting, yet ***significant differences*** **may remain**.
- Use of climate metrics in ESG ratings and climate frameworks varies widely, and this causes the ***lack consistency and comparability***.
- Growing evidence that the ***Environmental score of ESG is not well aligned with climate transition*****.**
- Climate transition frameworks are evolving, and growing use of net zero targets is welcome. Yet, **they also tend to weigh factors, such as *awareness* and the *act of disclosure*, more heavily than *actions* to reduce carbon emissions and intensity.**
- Environmental/climate funds and ETFs in name vary significantly in practice, in terms of carbon intensity, raising ***concerns about "climate" labelling and impact***.
- In light of the NGFS survey of growing use among central banks, it is important that they better understand this range of metrics, frameworks and products, in terms of their use, benefits, and shortcomings.

ANNEX: POLICY OBSERVATIONS

Policy observations 1

Enhance market transparency surrounding green and transition objectives

- **Policy-makers and authorities should carefully assess and understand the tools that are available to achieve long-term climate objectives**.
- While current green taxonomies, external review and assessment, and climate transition metrics and frameworks have been primarily applied to fixed income products, **the rise of ESG practices and products within green equity investment strategies merit further assessment and scrutiny**.
- **Taxonomies and climate transition frameworks are most effective when they have clear objectives, and science-based net zero targets**.

Policy observations 2

Facilitate comparability and interoperability of taxonomies, frameworks and principles

- To avoid the risks that various green taxonomies, standards and principles lead to divergent outcomes, **enhance comparability and interoperability of taxonomies and transition frameworks**, in order to enhance a common understanding and provide a consistent basis for green external review.
- **External review, assessment, and engagement are key to market integrity**.
- **Due diligence in the assessment of climate risks by institutional investors** forms a sound basis from which to assess the credibility of issuer transitions.
- In the case of transition finance**, the transformation of the entity's business model is the critical purpose of funding, and entity-level analysis is essential**.

Policy observations 3

Strengthen future efforts on disclosure and reporting

- **Global baseline disclosure standards with industry specific activity metrics** form the basis for transparent, comparable and credible climate transition plans and climate investment products.
- The **minimum requirements** for sustainability reporting include both **forward-looking measures** necessary for transition metrics and **measurable sustainability performance indicators** for investors in order to verify whether forward-looking targets have been achieved.
- The **comparability of practices for calculating and reporting on environmental impact should be enhanced**.

Acknowledgement

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