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Going green in finance: bridging data gaps for enhanced financial risk and opportunities assessment[1]

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[1] This contribution was prepared for the workshop. The views expressed are those of the authors and do not necessarily reflect the views of the Central Bank of the Republic of Türkiye, the BIS, the IFC or the other central banks and institutions represented at the event.

Going Green in Finance:

Bridging Data Gaps for Enhanced Financial Risk and Opportunities Assessment

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ABSTRACT: Addressing climate change is of paramount importance on a global scale, requiring immediate efforts in both adaptation and mitigation. To develop adequate policy measures to tackle climate change issues, policymakers need robust, comprehensive, and comparable data. Despite increasing awareness, a major obstacle is lack of relevant data, especially concerning climate finance data. The paper aims to lay the groundwork for an assessment of such data gaps and discuss ways to bridge them. It underscores the International Monetary Fund's (IMF's) endeavor to improve climate finance statistics to facilitate the collection of internationally comparable data. The paper highlights the IMF's different initiatives in this respect, namely the G20 Data Gaps Initiative 3 (DGI-3), including the recommendations aimed at addressing data gaps on climate finance and other climate related issues through the development of methodological guidance and reporting templates. Particular emphaiss is given to the current updates of the *2008 System of National Accounts (SNA)* and the *Balance of Payments and International Investment Position Manual, sixth* Edition (*BPM6*), and the upcoming update of the *Monetary and Financial Statistics Manual and Compilation Guide* (*MFSMCG*) which will consider climate finance and the growing need for statistical information. The paper also discusses experimental indicators developed on 'Climate finance' by the IMF, through its Climate Change Indicators Dashboard, leveraging on data (including private) already available, which emphasize the need for central banks, supervisors, and financial institutions to act to manage climate-related risks and mobilize funds for green investments.

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Contents

Introduction

Climate change is macro-critical, necessitating urgent action on adaptation, mitigation, and transition to a low carbon economy on a global scale. Addressing climate change brings along significant challenges. For instance, to cope with heightened climate-related physical risks, substantial investments are necessary for adaptation and resilience building. To combat climate change by means of achieving net zero, significant changes to tax regimes (i.e., carbon tax) and regulatory frameworks are needed, which create transition risks for the overall economy and financial institutions. To develop adequate policy measures to tackle climate change issues, policymakers need robust, comprehensive, and comparable data (NGFS, 2022; IMF, 2023a). Despite increasing awareness, a major obstacle is lack of relevant data, especially concerning forward-looking risk assessments and climate finance.

This paper aims to lay the groundwork for an assessment of climate finance related data gaps and discuss possible approaches to bridge them. The paper unfolds by addressing the macro-critical nature of climate change, its implications for the global economy, and the imminent need for additional climate finance to fund the necessary investments. It emphasizes the need for urgent and coordinated action, underlining the indispensable role of data in shaping effective policies. The paper details the challenges posed by the current lack of relevant data on climate finance and the IMF's ongoing efforts to address them, including by developing experimental indicators to close the most pressing data gaps. It also looks at the work to introduce climate finance measures into the *2025 System of National Accounts (SNA)* and the *Balance of Payments and International Investment Position Manual, seventh* Edition (*BPM7*); and into the upcoming update of the *Monetary and Financial Statistics Manual and Compilation Guide* (*MFSMCG*), emphasizing the importance of collecting internationally-comparable detailed climate (or sustainable) finance statistics using international statistical standards.

Substantial investments aimed at mitigating the impact of climate change are needed to reduce global greenhouse gas (GHG) emissions to net zero by 2050 (IMF, 2023a). IMF estimates that the private sector would need to play a vital role to respond to climate finance needs, particularly in the case of Emerging Market and Developing Economies (EMDEs) where private climate mitigation investment needs can range between 80 and 90 percent of the total investment needs (IMF, 2023b).[1] Strengthening the climate information architecture—data, disclosures, and alignment approaches (including taxonomies)—is an important part of the policy mix to attract private climate finance, which many EMDEs still lack (IMF, World Bank and OECD, 2023).

The paper is structured as follows: Section 2 delves into the experimental indicators related to climate finance that are featured on the IMF's [Climate Change Indicators Dashboard] (CID). This section further explores the G20 Data Gaps Initiative 3, which aims to establish statistical reporting and promote alignment approaches among countries on climate finance. Section 3 discusses the updates of the international statistical standards to incorporate climate finance. Section 4 concludes by highlighting potential areas for future work.

[1] EMDEs will need about $2 trillion annually by 2030 to reach that ambitious goal, according to the International Energy Agency, with the majority of that funding flowing into the energy industry. This is a fivefold increase from the current $400 billion of climate investments planned over the next seven years. See IMF (2023b) for a detailed discussion of investment needs. Moreover, it is also important to note that other financial flows, such as foreign direct investment (FDI) and public spending, are very critical for a successful transition.

Bridging Data Gaps

The IMF has stepped up its engagement with member countries in addressing climate change-related challenges through its surveillance, lending, and capacity development activities in recent years (IMF, 2021). The Fund's Article IV consultations now cover macro-critical issues triggered by climate change and the need to contain it. Financial Sector Assessment Programs include a climate component with increased attention to the risks posed by climate change for financial stability (Adrian et al., 2022). The Fund also provides support to countries vulnerable to climate change and natural disasters by expanding its capacity development programs. The Resilience and Sustainability Trust (RST) provides longer-term, affordable financing to low-income and vulnerable middle-income countries to help them address various challenges, including climate change and pandemic preparedness.

The IMF launched the Climate Change Indicators Dashboard (CID) in 2021 to disseminate macro-relevant climate change indicators. This initiative is aimed at addressing the growing need for environment and climate change related data in macroeconomic and financial stability analysis to support policies for climate change mitigation and adaptation. The CID presents two experimental indicators on climate finance:
i) Environment, Social and Governance (ESG) debt indicators, and ii) the carbon footprint of bank loans indicator. Pending internationally agreed statistical standards to ensure comparable data collection, the climate finance experimental indicators on the CID have relied on leveraging private commercial data sources and conducting one-off surveys. These efforts aim to address the most pressing data needs in this field.

The IMF in cooperation with the Inter-Agency Group and the Financial Stability Board coordinates the G20 Data Gaps Initiative 3 (DGI-3) to enhance the global statistical infrastructure in filling data gaps to support policy formulation. DGI-3 includes 14 recommendations addressing various statistical areas. Seven of the 14 recommendations are related to macro-relevant climate change statistics. Two of these seven recommendations, Recommendation 4 on Green Debt and Equity Financing and the Recommendation 5 on Forward-looking Physical and Transition Risk Indicators, are of particular importance for this paper given their focus on climate finance and transition risk implications for the financial sector.[2]

2.1. Climate Finance: An Overview of the IMF's CID Experimental Indicators

The financial sector is playing a crucial role in combating climate change by steering financial resources towards a path that favors low greenhouse gas emissions and fosters climate-resilient development. Green financial instruments, such as green bonds, are regarded as a means to shift investments towards "green" sectors. Green bonds are fixed-income instruments where the proceeds are allocated to support specific climate-related or environment friendly projects. There is existing body of literature on green bonds that presents an optimistic picture, highlighting their growing investor interest and market demand (Maltais and Nykvis, 2020; Bhutta et al., 2022; IMF 2023c). These studies underscore the capacity of green bonds to mobilize significant financial resources for environmentally friendly initiatives, while also offering competitive

[2] The paper discusses the concepts of climate risk data and climate finance data. For clarification, it is important to note that climate risk data broadly pertains to the potential impacts of climate change on financial stability, whereas climate finance data focuses on the funding allocated to mitigate or adapt to climate change.

returns.[3] This dual benefit positions green bonds as a promising mechanism for achieving environmental and climate objectives.

Despite their growth over the last decade, green bonds issuances still represent a modest fraction of the total bond market, accounting for less than 5 percent of total issuances in 2023. Enhancing market depth and liquidity can be important for increasing the demand and supply of such instruments, thereby facilitating climate mitigation investments. The lack of transparency and standardized reporting on climate risks can often lead to these risks being inadequately priced into climate-focused securities (Krogstrup and Oman, 2019), having potential implications for liquidity and turnover rates. Initiatives and standards set by the International Capital Market Association (ICMA), the Climate Bonds Initiative (CBI), and the development of green taxonomies in regions like the EU[4] and ASEAN are playing a significant role in enhancing the sustainable securities market.[5]

To address the data gaps related to green bonds, the IMF has introduced indicators designed to capture the trends in Environmental, Social, and Governance (ESG) debt instruments, with a focus on green bonds, considering factors such as country-sector and currency aspects. The definition of ESG debt instruments is fundamental, as it is the foundation for any statistics derived from aggregated data on issuances. Several international and non-profit organizations are actively involved in developing guidelines and principles on Green Finance and, more generally, on ESG aspects of financial markets. Specifically for the case of green bonds, the ICMA and the CBI, among others, have made significant contributions to formalizing a set of voluntary guidelines and certification processes that issuers should follow when labeling securities as "*green*". The ICMA has published the Green Bonds Principles (ICMA, 2018), wherein it defines green bonds as "[…] any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible Green Projects […] and which are aligned with the four core components of the GBP." In turn, the Green Bond Principles (GBP) are a set of voluntary guidelines that revolve around four core principles:

1. *Use of Proceeds* is the cornerstone of the definition of green bonds, which must be appropriately described in the legal documentation accompanying the security. All designated green projects must provide environmental benefits.[6]

2. *Process for Project Evaluation and Selection* comprises a set of processes by which the issuer communicates to investors what the environmental objectives are, the process by which these projects are evaluated, and the eligibility criteria.

3. *Management of Proceeds* principle requires the net proceeds of green bonds issuances to be credited to a sub-account and tracked.

[3] Some studies find a relatively limited impact, especially with regards to the "greenium"—the premium often associated with green bonds due to their environmental benefits. This suggests that while the market for green bonds is growing, the financial incentives, specifically the added value of investing in environmentally beneficial projects, may not be as pronounced as anticipated. This nuanced perspective invites further examination into how green bonds are priced and the factors influencing their appeal to investors, shedding light on the complex dynamics between market demand and the tangible environmental impact of these investment vehicles.

[4] To read more about the sustainable finance initiatives, standards and legislations in the EU, see here.

[5] See IMF, World Bank and OECD (2023) for a detailed discussion on the benefits of taxonomies.

[6] Some categories of green projects are explicitly listed, including renewable energy, energy efficiency, pollution prevention and control, environmentally sustainable management of living natural resources and land use, terrestrial and aquatic biodiversity conservation, clean transportation, climate change adaptation, eco-efficient and/or circular economy adapted products, production technologies and processes, and green buildings.

4. *Reporting* principle necessitates issuers to voluntarily disclose information on the progress of financed Green Projects.

The CBI builds on the GBPs of ICMA to further lay out a certification process to validate the claims that investors make upon issuance of green bonds, described in the Climate Bonds Standard (CBI, 2019). In addition to satisfying consistency with the GBPs, the CBI requires that green bond issuers fully align with other green bond taxonomies, including their own Climate Bonds Taxonomy (CBI, 2021) and those proposed in the EU, ASEAN, India, and Japan. While the requirements to define a fixed-income security or other debt instrument as green bonds are aligned with those of ICMA, the certification process broadly consists of three distinct phases: pre-issuance certification, post-issuance certification. and ongoing certification.[7]

The Green Bonds indicator released on the IMF's CID, sourced from Refinitiv, a private commercial data provider, has been categorized under four broad segments, each corresponding to a different type of ESG debt instruments: green bonds, social bonds, sustainability bonds, and sustainability-linked bonds. This classification helps users and stakeholders to gain a better understanding of how each ESG instrument contributes to climate finance, allowing a structured approach to analyze their impact and effectiveness within the broader context of sustainable investments. For evaluating green, social and sustainability bonds, the key criteria are proceeds allocated to ESG related projects, issuer labelling, availability of dedicated ESG framework, and a second party opinion. For sustainability-linked bonds, the use of proceeds is not restricted to specific projects; instead, the main criteria are sustainable performance targets that the bond aims to achieve by certain target observation date and penalties for failing to meet these targets, issuer labelling, and documentation (framework, second party opinion).[8]

These data on ESG debt issuances on CID span the period from 1985 to 2023. The dataset encompasses issuances on annual basis for about 70 countries covering both Advanced Economies (AEs) and Emerging Markets and Developing Economies (EMDEs) as defined in the IMF's World Economic Outlook (WEO). The indicators on the CID can be divided into three broad categories:[9]

1. *Total ESG debt Issuances*: defined as the sum of all bonds' issuances, by instrument, taking place in a given calendar year. The instruments included in the climate finance statistics include green bonds, social bonds, sustainability bonds, and sustainability-linked bonds. These indicators are presented both as global aggregates and broken down by country-year. A further breakdown is available by type of issuer, sector, and currency of issuance.

2. *Cumulative Issuances*: defined as the cumulative sum of the value of all issuances from 1985 through 2023, in the entire sample of ESG bond issuances.

[7] The CBI Taxonomy is presented in Annex I, and it generally is not fully aligned with the pre-approved categories of eligible Green Projects described above from the GBPs. The purpose of this taxonomy is to lay out a consistent set of criteria that issuers can use to quickly ascertain whether their proposed projects are indeed suitable for certification by the CBI. The taxonomy clarifies the definition of each category, determines whether it is aligned with the goals of the Paris Agreement, and, if applicable, lays out quantitative criteria which can be applied to verify that the project satisfies the requirements.

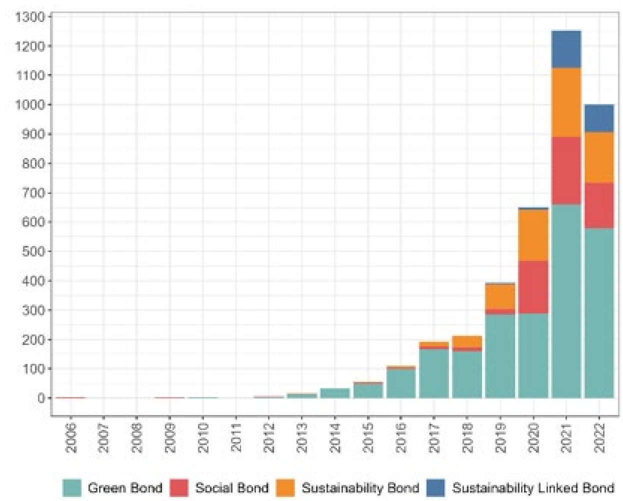
[8] Additional details are provided in Annex II.

[9] CID also provides information on variables such as the sectors, the use of proceeds, and the currency of issuance, which are relevant and important for analysis and are used for aggregation.

3. *Sovereign bonds Issuances:* defined as the sum of all government debt issuances in any year and country which are meant to fund public green projects. Importantly, this category only comprises central governments and central authorities and excludes local governments.[10]

The results in Figure 1 show that green bond and other ESG debt issuances continue to fall short of the financing needs, with 2022 witnessing slowdown in issuances amidst shifts in the global debt markets, which by some metrics continues for 2023 as well.[11] Despite an overall decrease in green bond issuances from 2021 to 2022, both banks and other financial corporations (OFCs) have sustained consistent levels of issuance (Figure 2). The euro and the U.S. dollar remain the predominant currencies of issuances, with the Chinese yuan following closely behind. Data also indicate that proceeds from green bonds are predominantly allocated to sectors such as clean transport, energy efficiency, and climate change adaptation.[12] These comprehensive data on breakdown of green bonds are accessible by country, issuer type, principal currency, and utilization of proceeds. This type of information provides policymakers with invaluable insights into the climate finance landscape, enabling them to identify any remaining gaps and make informed decisions.[13]

Figure 1. ESG Debt Issuance by Type of Instrument (In Billion USD)



Sources: Refinitiv; IMF Staff Calculations.

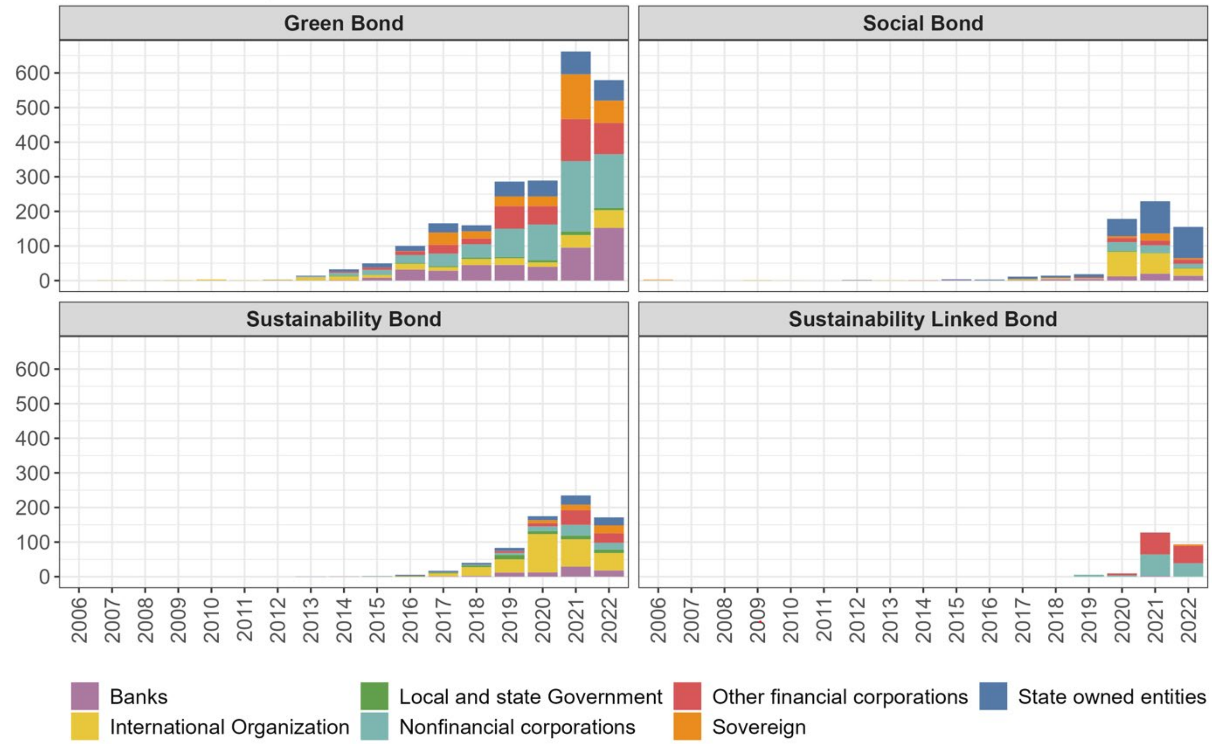
[10] It is important to note that governments may use other budget allocations to fund environmentally friendly projects, so the level of green bond issuance should not be taken as a sole proxy measure for "fiscal greenness."

[11] Estimates of global investments required to achieve the Paris Agreement's temperature and adaptation goals range between US$3 to $6 trillion per year until 2050 (IMF, 2022).

[12] See Annex III for the charts on issuances by currency and by use of proceeds.

[13] See IMF (2023c) for a detailed discussion.

Figure 2. ESG Debt Issuance by Type of Issuer
(In Billion USD)



Sources: Refinitiv; IMF Staff Calculations.

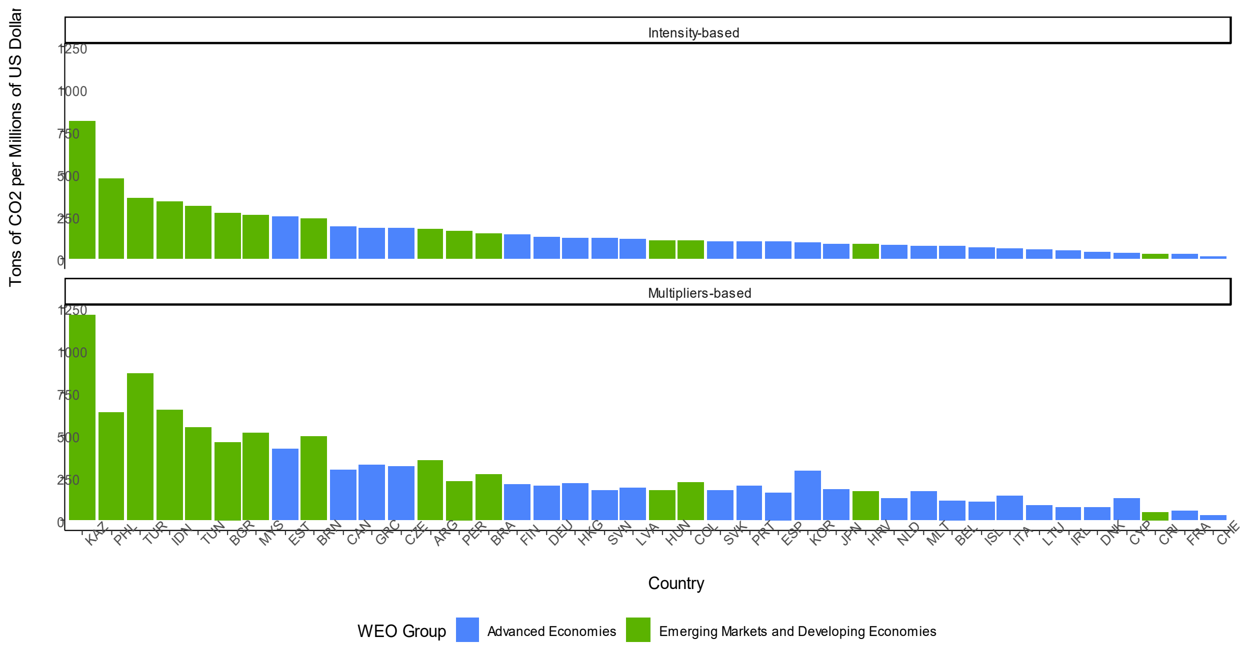
As the need for funding to help facilitate a transition to a greener economy far exceeds the available supply, and securities financing may not be an option in various jurisdictions across the world, bank credit and capital market financing need to complement each other in terms of helping close the climate finance gap. The banking sector plays a vital role in providing finance to the real economy, and bank loans are key financial instruments used globally to facilitate this funding.

This paper also discusses the Carbon Footprint of Bank Loans (CFBL), another experimental indicator available on the CID. The CFBL aims to quantify the exposure of a country's banking sector to climate transition risks. It thus serves as a tool for policymakers and relevant stakeholders to measure the carbon intensity of bank loan portfolios—an experimental measure of the greenness of the domestic loan portfolio. The CFBL, based on aggregated sector level data, provides a data-lean way to appraise the exposure of the banking system to transition risk for a given country. The formulation makes it possible to calculate this indicator for a wide range of countries.[14] The methodology allows for cross-country comparisons, albeit with certain limitations.[15] Figure 3 suggests that banking systems of emerging markets tend to have higher carbon footprints compared to advanced economies, with wide regional heterogeneity, highlighting the potential transition risk exposures to these countries' loan portfolios.

[14] The CFBL is currently available for 41 countries including EMDEs.

[15] See IMF (2023c) for a detailed discussion.

Figure 3. Carbon Footprint of Bank Loans (CFBL)



Source: IMF (2023c)

Recognizing the importance of statistical methodologies in tackling critical issues such as data gaps in green finance is essential. However, the challenge lies in developing and implementing these methodologies in a consistent manner across regions and countries, particularly when there are no established statistical standards and alignment approaches. The challenge is further compounded by the persistent issue of greenwashing.[16] Another significant limitation is the difficulty in defining climate finance, particularly with emerging new financial instruments like sustainability-linked bonds that lack the restrictions on the use of proceeds. While this flexibility broadens the scope for sustainable financing, it concurrently complicates efforts to precisely track the allocation of funds dedicated to fight climate change. Additionally, the constantly changing nature of climate finance instruments adds more complexity, necessitating a nuanced approach to address these multifaceted challenges. Similarly, the experimental CBFL indicators rely on a one-off survey on loans-by-industry, posing challenges in capturing the ongoing and most recent dynamics.

2.2. G20 Data Gaps Initiative 3 (DGI 3)

All these limitations outlined above necessitate improving data availability on climate change statistics at country level coupled with building on or further developing the established statistical infrastructure. These efforts, when carefully coordinated with existing international statistical workstreams, provide the necessary synergies, and gain more support. Additionally, statistical standards and alignment approaches are crucial for facilitating the collection of internationally comparable data, a prerequisite for informed decision-making.

[16] The classification of instruments as 'green' may not necessarily align with their actual environmental impact, diverting funds intended for climate-related activities towards potentially 'brown' activities.

The IMF's commitment to this cause is exemplified through its leading role in the G20 Data Gaps Initiative (DGI).[17] In October 2022, the G20 FMCBGs endorsed the DGI-3 initiative and the related workplan drawing on collaborative efforts and collective expertise from the IMF, Financial Stability Board (FSB), and the Inter-Agency Group on Economic and Financial Statistics (IAG) to coordinate climate related work. DGI-3 addresses 14 recommendations, seven of which call for better climate data. The DGI-3 also draws on work undertaken by groups such as the Network for Greening the Financial System to develop a common understanding of climate-related financial instruments.

Efforts of the DGI-3 recommendations on climate change are focused on seven keys areas pertaining to developing greenhouse gas emissions by industry, energy accounts, carbon footprints, climate finance indicators, physical and transition risk indicators, climate impacting subsidies and climate-related expenditures. A vital aspect of this work involves developing internationally accepted concepts and statistical methods that ensure comparable and consistent measures across countries and over time.

One of the recommendations of DGI-3, Recommendation 5 'Forward-looking Physical and Transition Risk Indicators,[18] focuses on the need to monitor risks related to increasingly frequent and severe climate hazards (such as floods, drought, and fires) and the transition effect of climate policy on economic development and financial sector stability. Physical risk indicators plan to combine information on hazards, exposures, and vulnerability to help policymakers better understand the risk climate hazards pose to populations, the economy, including its buildings and structures, and financial markets. Similarly, transition risk indicators underscore the economic and financial challenges that arise from the global move towards a low-carbon future. Together, both these risks require careful management and foresight to safeguard financial stability and ensure a smooth transition to a sustainable economic model, and bridging data gaps is paramount in addressing these challenges.

Similarly, another recommendation of the DGI-3, Recommendation 4 '*Climate Finance,'*[19] focuses specifically on Green Debt and Equity Securities Financing. The objective of this recommendation is to address data gaps by developing (i) reporting templates to collect experimental data on issuances and holdings of green and sustainable debt securities and green listed shares consistent to the extent possible with the *Handbook on Securities Statistics* (HSS), and (ii) methodological guidance to ensure greater interoperability and comparability of data reported across economies in the future.

The DGI 3 Recommendation 4 data templates discussed and agreed at its Workshop on October 5–6, 2023 include a set of tables.[20] The collection covers statistics on issuances and holdings on a from-whom-to-whom basis for green bonds, sustainability bonds, sustainability-linked bonds, and green listed

[17] An initiative launched in 2009 by the G20 Finance Ministers and Central Bank Governors (FMCBG) to close the policy-relevant data gaps identified following the global financial crisis to enhance the availability and quality of economic and financial data worldwide.

[18] For additional details, please see link.

[19] This recommendation is led jointly by the BIS and ECB (leads), with collaboration from the IMF, OECD, and FSB (user perspective). The work is also coordinated by the BIS-ECB-IMF Working Group on Securities Databases (WGSD).

[20] Available here: https://www.bis.org/ifc/events/231005_summary.pdf.

shares. The templates on the different types of green debt securities provide "of which" breakdowns corresponding to the established DGI-2 Recommendation 7 breakdowns.[21]

The data collection will rely on the existing DGI-2 Recommendation 7 current infrastructure for reporting, including frequency and timeliness, consistent with the HSS and using the Global Data Structure Definition (DSD) for Sector Accounts (NA_SEC) (See Annex IV for an illustrative reporting template). The reporting targets include a basic intermediate target for core data on green bonds by end-2025 and a final target for other data by end-2027.

The DGI 3 Recommendation 4 Task Team members and the coordinators of the sustainable finance workstreams for the *2025 SNA* and *BPM7* (see Section 3) through close collaboration have ensured that the approaches on both sides are aligned. The *2025 SNA* and *BPM7* principles and definitions have been informed by the work of the Recommendation 4 Task Team and the Recommendation 4 reporting templates will apply these same definitions.

Introducing climate finance in the international statistical standards

Progress in collecting internationally-comparable detailed climate finance statistics would remain limited unless the international statistical standards include measures of climate (or sustainable) finance, which is not the case currently. The work to update the standards and produce the new manuals—*Balance of Payments and International Investment Position Manual,* seventh edition (*BPM7*) and *2025 System of National Accounts* (*2025 SNA*)—has recognized the importance to provide expanded information on the interplay between the economy and the environment taking into account the evolving landscape of sustainable finance and the increasing demand for statistical information in this domain. Both the *2025 SNA* and *BPM7* will include, for the first time, lines for ESG and green financial instruments. The compilation of these ESG and green measures will be based on internationally agreed guidance to support the collection of statistics related to sustainable finance to quantify funding activities which actively contribute to green and climate outcomes.

3.1. *2025 System of National Accounts* and *Balance of Payments Manual 7*

From a user/policy perspective, the *SNA* update recommends that countries report the stocks and flows (holdings and issuances) of ESG and green financial instruments (debt securities, loans, and equity and investment fund shares) as ‘of which’ categories in the financial account and balance sheets. Although reporting mechanisms, classifications and regulations around sustainable finance are in their infancy in most countries, the update of the SNA acknowledges the importance of being forward-looking by introducing ESG and green breakdowns of all relevant financial instruments. Including these breakdowns in the financial account and balance sheets of the national accounts is important for tracking investment in the transition to a low carbon economy and informing decisions on monetary and fiscal incentives relating to it (OECD, 2020). The agreed

[21] Under the DGI-2 Recommendation 7, the G20 economies provide on a quarterly frequency debt securities issuance data to the BIS consistent with the Handbook on Securities Statistics (HSS) covering sector, currency, type of interest rate, original maturity and, if feasible, market of issuance.

structure for ESG and green financial instruments and associated definitions[22] in the current juncture, as presented in the SNA update *Issues Note: Sustainable Finance in the 2025 SNA and BPM7*[23] are provided in Table 1 below with corresponding definitions in Table 2.

Table 1: ESG and green financial instruments in the *2025 SNA*

AF.1	Monetary gold and SDRs
AF.2	Currency and deposits
AF.3	Debt securities
	Of which: ESG debt securities
	Of which: Social debt securities
	Of which: Green debt securities
	Of which: Sustainability debt securities
	Of which: Sustainability-linked debt securities
	Of which: Other ESG debt securities
AF.4	Loans
	Of which: ESG loans
	Of which: Green loans
AF.5	Equity and investment fund shares
AF.51	Equity
	Of which: ESG equity
	Of which: Green equity
AF.52	*Investment fund shares*
	Of which: ESG investment fund shares
	Of which: Green investment fund shares
AF.6	Insurance, pension and standardized guarantee schemes
AF.7	Financial derivatives and employee stock options
AF.8	Other accounts payable/receivable

Source: SNA update Issues Note (2024), Table 3.

[22] Definitions of ESG and "Green" instruments are evolving. The guidance note WS.12 Environmental Classifications notes that the *2025 SNA* adopts, in the interim, current definitions, which may change in the future and could therefore be re-examined closer to the publication date of the updated SNA, which will be accessible here.

[23] Final version (30 May 2024) incorporating the decisions of the joint meeting of the Advisory Expert Group on National Accounts (AEG) and IMF Committee on Balance of Payments Statistics (BOPCOM) of February 20, 2024.

Table 2: Definitions for ESG and green financial instruments

AF.3 Debt securities
➢ *Of which: ESG debt securities are debt securities where the use of proceeds is restricted to financing or refinancing activities or projects or where the issuer agrees to achieve performance objectives that improve the condition of the environment or society or governance practices. These include green debt securities, social debt securities, sustainability debt securities, sustainability-linked debt securities, and other ESG debt securities.*
➢ *Of which: Social debt securities are debt securities where the use of proceeds is restricted to financing or refinancing activities or projects that improve the condition of society.*
➢ *Of which: Green debt securities are debt securities where the use of proceeds is restricted to financing or refinancing activities or projects that improve the condition of the environment.*
➢ *Of which: Sustainability debt securities are debt securities where the use of proceeds is restricted to financing or refinancing activities or projects that improve the condition of the environment and society.*
➢ *Of which: Sustainability-linked debt securities are debt securities in which certain characteristics, such as the associated cash payments, are linked to achieving performance objectives that improve the condition of the environment or society*[24].
➢ *Of which: Other ESG debt securities* are any ESG debt securities other than those identified as social debt securities, green debt securities, sustainability debt securities or sustainability-linked debt securities.
AF.4 Loans
➢ *Of which: ESG Loans* are funds lent by creditors to debtors in which 50% or more of the debtor's activities improve the condition of the environment or society or governance practices.
➢ *Of which: Green Loans* are funds lent by creditors to debtors in which 50% or more of the debtor's activities improve the condition of the environment.
AF.5 Equity and investment fund shares
AF.51 Equity
➢ *Of which: ESG Equity are equity investments* by investors to institutional units in which 50% or more of the institutional unit's revenue comes from activities improve the condition of the environment or society or governance practices.
➢ *Of which: Green equity* are equity investments by investors to institutional units in which 50% or more of the institutional unit's revenue comes from activities improve the condition of the environment.
AF.52 Investment fund shares
➢ Of which: ESG investment funds are funds investing in financial instruments, companies, projects or other funds that intend to achieve performance objectives that improve the condition of the environment or society or governance practices.
➢ Of which: Green investment funds are funds investing in financial instruments, companies, projects or other funds that intend to achieve performance objectives that improve the condition of the environment.

Source: SNA update Issues Note (2024), Table 6.

[24] This definition of sustainability-linked debt securities is essentially the same as that used by the DGI-3 Rec 4 Task Team: "sustainability-linked debt securities: debt securities whose characteristics (e.g. coupon payments) can vary depending on whether the issuer achieves predefined environmental or other sustainability objectives".

The proposal for the *BPM7* is to introduce an updatable appendix on measures and balance of payments/IIP indicators relevant for climate change-related financial risks. The IMF's Committee on Balance of Payments Statistics (BOPCOM) has agreed to add supplementary 'of which' categories for ESG and green financial instruments in the balance of payments and international investment position (IIP) (SNA update Issues Note, 2024, Table 4). These are shown in Table 3.

Table 3: ESG and green financial instruments in the upcoming *BPM7* (IIP and BOP)

1	**Direct Investment**
1.1	Equity and investment fund shares
	Of which: ESG equity/investment fund shares
	Of which: Green equity/investment fund shares
1.2	Debt Instruments
	Of which: 1.2.0.1 Debt Securities
	Of which: ESG debt securities
	Of which: Social debt securities
	Of which: Green debt securities
	Of which: Sustainability debt securities
	Of which: Sustainability-linked debt securities
	Of which: Other ESG debt securities
2	**Portfolio Investment**
2.1	Equity and investment fund shares
	Of which: ESG equity/investment fund shares
	Of which: Green equity/investment fund shares
2.2	Debt Securities
	Of which: ESG debt securities
	Of which: Social debt securities
	Of which: Green debt securities
	Of which: Sustainability debt securities
	Of which: Sustainability-linked debt securities
	Of which: Other ESG debt securities
3	**Financial Derivatives**
4	**Other Investment**
4.1	Other equity
4.2	Currency and deposits
4.3	Loans
	Of which: ESG loans
	Of which: Green loans
4.4	Insurance, pension and standardized guarantee schemes
4.5	Trade credit and advances
4.6	Other accounts receivable/payable
4.7	SDRs
5	Reserve assets

In conjunction with the revised *2008 SNA* and *BPM6*, the forthcoming update of the *Monetary and Financial Statistics Manual and Compilation Guide* (*MFSMCG*) will introduce guidance on sustainable finance, including concepts and definitions for climate-related financial instruments. The updated manual will incorporate additional breakdowns to assist countries in better measuring climate finance and assess the impact of climate change on the financial sector.

3.2. Climate Finance Data Project for the Financial Sector

As much as climate issues are being integrated in the Fund's climate assessments and macro financial surveillance, a critical persistent obstacle has been limited and inconsistent data on climate finance.[25] To evaluate data availability as well as assess the possibility of collecting relevant granular climate-related financial details, the IMF will be launching a pilot project targeting approximately 50 economies.[26]

The project, underway, aims to collect climate-related components within the standardized report forms (SRFs) as part of the current Monetary and Financial Statistics (MFS) compilation structure (additional lines under main SRF templates—see Appendix V—and additional annex tables). The collection of the relevant data from these pilot countries will be undertaken while minimizing overlap with other initiatives. Initial focus is on improving data availability on green and brown assets of the banks, and sectoral/geographic distribution of exposures of banks and nonbank financial institutions. Cross-references at the aggregate level will be introduced, wherever possible, to achieve harmonization with the DGI-3 Recommendation 4 reporting templates and the international statistical standards.[27]

Participating economies in the pilot project will be requested to submit quarterly data, on a voluntary basis, with historical series covering a five-year period, whenever feasible. While the exercise will be used to test the underlying definitions of the *2025 SNA* and *BPM7*, countries may also report data based on their own definitions, should the latter not align with the proposed guidance. Metadata will therefore accompany the data reported in the pilot.

Results of this pilot exercise, including the metadata, will provide additional guidance for countries aiming to implement the new breakdowns in the *2025 SNA* and *BPM7*and benefit the discussion surrounding the forthcoming update of the *MFSMCG*. This comprehensive approach will also provide valuable insights into the sustainable finance intermediated by the financial sector and also the impact of climate change on the financial sector. If the pilot phase proves to be useful, it will transition into a regular exercise, with an expanded scope to include more countries. Based on the results, this initiative can either be integrated into the MFS data collection or established as a standalone database.

[25] The absence of reliable data was explicitly mentioned in all 32 FSAPs conducted in 2021–23. About 20 percent of the 2023 staff reports acknowledged either the lack of climate data or the need to improve climate data.

[26] This will be a joint project between IMF's Statistics Department and Monetary and Capital Markets (MCM) Department.

[27] For example, aggregate green bond issuances by banks reported within the pilot collection would be cross-referenced and aligned with the reporting under DGI-3 Recommendation 4 templates – Table 1.2a. Given the absence of globally accepted criteria for brown assets, an option-based method is intended to gather data on national practices.

These data, with an expanded coverage beyond G20 countries, are expected to complement other ongoing work, such as the Financial Stability Board's SCAV Climate Vulnerabilities and Data (CVD) workstream[28] and the DGI-3 climate related work. This pilot project also aims to support data needs for the monitoring of RST countries' climate-related policy conditionalities. By contributing to the design and application of a robust climate information architecture, the pilot data collection, if proved successful and adopted as a regular collection, will provide invaluable service to national authorities, supervisors, and financial institutions in support for policy work on climate finance.

Concluding Remarks

Reliable and comparable climate finance data are crucial for assessing global efforts towards climate change mitigation and adaptation. Such data enable policymakers, researchers, international organizations, and stakeholders to track the flow of funds, and the alignment of financial flows on a low-carbon and resilient trajectory, evaluate the effectiveness of investments in climate change mitigation and adaptation, and ensure accountability in the use of resources (notably to mitigate greenwashing risks). Climate data are a key pillar of the climate information architecture (IMF, World Bank and OECD, 2023). Consistency in data reporting and analysis is essential in setting standardized benchmarks and facilitating international cooperation by highlighting areas in need for more support or intervention.

This paper has delineated the ongoing collaborative efforts of the IMF with other relevant stakeholders including member countries in addressing these challenges stemming from inadequate availability of relevant climate finance data and statistical guidelines in this field. These efforts encompass not only the development and dissemination of experimental indicators aimed at alleviating pressing data gaps but also the revision of the international statistical standards for the national accounts, external statistics and monetary and financial statistics. Updating these standards will foster a more equitable environment for climate finance statistics, thus facilitating informed decision-making and effective policy formulation in combating climate change. Ultimately, robust climate related data are vital for informing strategies that can effectively address the complex challenges of climate change on a global scale.

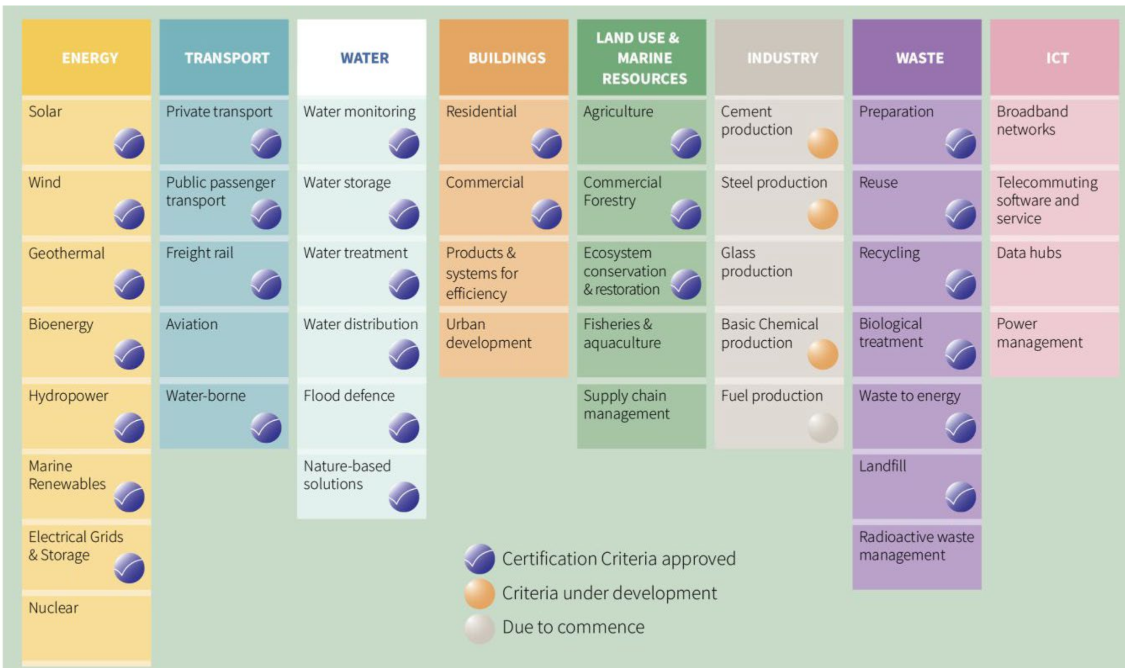
28 The CVD's work aims at developing a monitoring framework to analyze the evolution of climate vulnerabilities and transmission or amplification channels in the global financial system, based on available metrics, which can be updated regularly and evolve over time as improved data and tools become available.

Annex I. Climate Bonds Initiative Taxonomy

The certification process broadly consists of three distinct phases:

1. *Pre-Issuance Certification: CBI certifies, through an Approved Verifier, that all GBPs are satisfied.*
2. *Post-Issuance Certification: CBI certifies that the green bond has been issued.*
3. *Ongoing Certification*: on an ongoing basis CBI certifies the disclosure and reporting requirements are fulfilled.

Figure: Climate Bonds Initiative Taxonomy



Source: Climate Bonds Initiative (CBI, 2021)

Annex II. Additional Details about ESG Debt

Here are some key definitions and concepts related to the ESG debt instruments published on CID based on data from Refinitiv.

- **CBI Aligned Green Bond—**Aligned to the Climate Bond Initiative (CBI) Climate Taxonomy and screened for eligible sector and use of proceeds.

- **CBI Certified Green Bond—**Certified by Climate Bond Initiative (CBI) to conform to the Climate Bond Standards and has a verifier appointed. More on CBI's certification: Certification under the Climate Bonds Standard | Climate Bonds Initiative .

- **Self-Labelled Green Bond—**Labelled by issuers to be a green bond and follows a green bond framework. Has use of proceeds dedicated to projects with environmental benefits. May eventually be changed to CBI certified or aligned, as assessment takes time.

- **Social Bond—**Labelled by issuers to be a social bond and follows a social bond framework. Have use of proceeds that are dedicated to projects with positive social outcomes.

- **Sustainability Bond—**Labelled by issuers to be a sustainability bond and follows a sustainability bond framework. Have a mix of green and social use of proceeds.

- **Sustainability-Linked Bond—**Labelled by the issuer to be sustainability linked bond (SLB), follows sustainability linked bond framework. Is non-use of proceeds bond unlike other ESG classification types. Proceeds can be spent on general purposes. Have specific KPIs and related targets that are connected to environment, social initiatives etc. If target is not met on the specified target observation date, there will be compensation paid to the bondholders which is usually in a form of coupon step-up or premium redemption. SLBs derive their ESG theme from the sustainable targets.

The IMF staff remapped the type of issuer variable from the underlying Refinitiv data to a custom classification scheme that is considered more aligned with statistical methodologies. This mapping is portrayed in the table below. Mapping was produced by joining two variables available from Refinitiv, that is, Type of Issuer (portrayed below in the table under the Refinitiv column) and the TRBC sector variable.

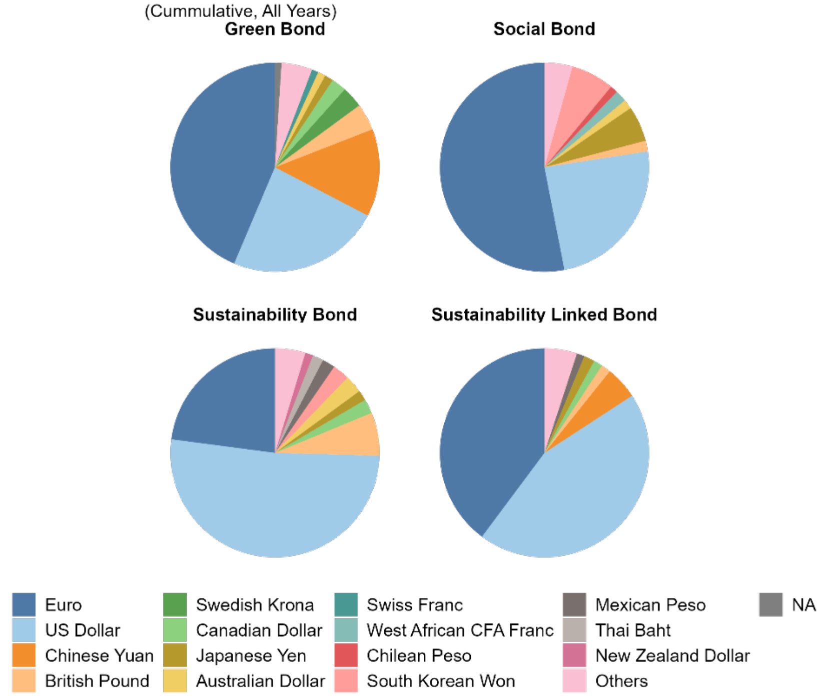
Table 4: Mapping of Type of Issuer Between Refinitiv and the CID

<table>
<tr><th>Refinitiv</th><th>CID</th></tr>
<tr><td>Agency</td><td>State-Owned entities, including:
▪ Public Banks
▪ Public OFC
▪ Non-Financial Public Corporations</td></tr>
<tr><td rowspan="3">Corporate</td><td>Banks</td></tr>
<tr><td>Other Financial Corporations</td></tr>
<tr><td>Non-Financial Corporations</td></tr>
<tr><td>Government / Central Banks</td><td>Sovereign</td></tr>
<tr><td>Non-US municipalities</td><td rowspan="2">State and Local Government</td></tr>
<tr><td rowspan="2">Other Government / Supranational</td></tr>
<tr><td>International Organizations</td></tr>
</table>

Source: Refinitiv, Thomson Reuters Business Classification, IMF Staff.

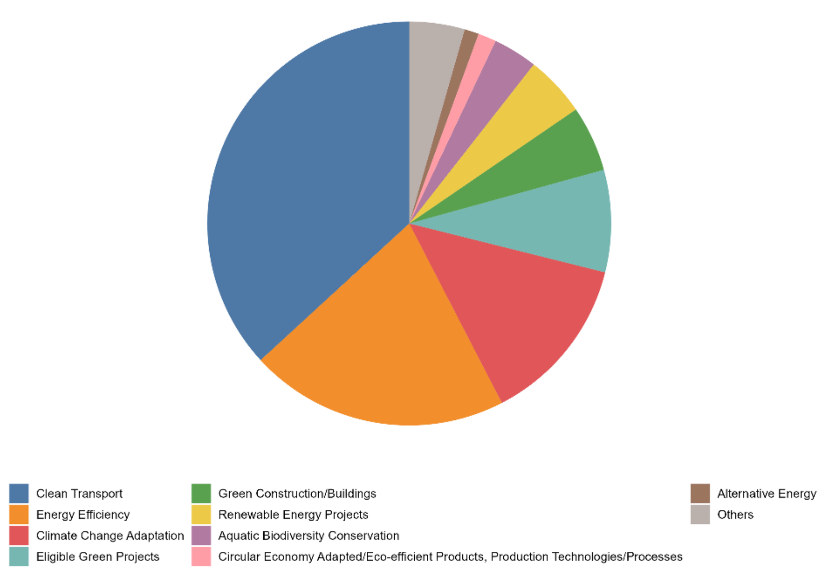
Annex III. Issuances by Type of Currency

Cummulative Global Sustainable Instrument Issuance by Type of Currency
(Cummulative, All Years)



Note: Others = currencies with a share of less than 1%.
Sources: Refinitiv; IMF Staff Calculations.

Cummulative Green Bond Issuance by Use of Proceeds
(Cummulative, All Years)



Note: Others = proceeds with a share of less than 1%.
Sources: Refinitiv; IMF Staff Calculations.

Annex IV. Illustrative Reporting Template

The template below comes from the explanatory note on the recommendation 4 templates that can be accessed here.

Table 1.1a: Green Bonds Issues by Sector, Currency, Maturity, Interest Rate and Market of Issuance. Stocks at Nominal Value

Orange cells: Core data to be transmitted by end-2025
White cells: Advanced ambitions data to be transmitted by end-2027

Issuer / Currency, Maturity, Interest rate, Market of issuance	Residents (S1)													All resident issuers (S1)
	Non-financial corporations (S11)	Financial corporations (S12)							General government (S13)		*Memo item:* public sector	Households and NPISH (S14+ S15)		
			Central bank (S121)	Other deposit-taking corporations (S122)	Money market funds* (S123)	Other financial corporations (S124 to S127)	*Of which:* Securitisation corporations (S125A)	Insurance corporations and pension funds (S128,S129)		*Of which:* Central government (S1311)				
Total														
By domestic currency														
By foreign currency														
Short term at original maturity														
Long term at original maturity														
More than 1 year and up to and including 2 years														
More than 2 years and up to and including 5 years														
More than 5 years and up to and including 10 years														
More than ten years														
Of which: Long term at original maturity, with a remaining maturity up to and including 1 year														
Fixed interest rate														
Variable interest rate														
Inflation-linked														
Interest rate-linked														
Asset price-linked														
Domestic market														
International market														

*) Money market funds do not issue debt securities. 2008 SNA codes are used for sectors and subsectors.

Annex V. Illustrative Reporting Table

Table 5: Illustrative table to incorporate climate related data under SRFs – Other Depository Corporations - 2SR - Assets* (to be finalized)

Securities Other Nonfinancial Corporations NC*
Of which ESG debt securities
Of which: Social debt securities
Of which Green securities
Of which: Sustainability debt securities
Of which: Sustainability-linked debt securities
Of which: Other ESG debt securities
Of which Brown securities
Securities Other Nonfinancial Corporations FC*
Of which ESG debt securities
Of which: Social debt securities
Of which Green securities
Of which: Sustainability debt securities
Of which: Sustainability-linked debt securities
Of which: Other ESG debt securities
Of which Brown securities

*Nonfinancial corporations' sector is chosen for illustration purposes only. Similar data will be collected under the 1SR – Central Banks and 4SR – Other Financial Corporations report forms as well.

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Going Green in Finance: Bridging Data Gaps for Enhanced Financial Risk and Opportunities Assessment

CBRT-IFC WORKSHOP, İZMIR, TÜRKIYE

MAY 6-7, 2024

Artak Harutyunyan
Chief, Financial Institutions Division, Statistics Department

Outline of the Presentation

IMF and Climate Change

Role of IMF in Bridging Data Gaps on Green Finance

- Experimental Indicators on Climate Change Indicators Dashboard (CID)
- Data Gaps Initiative
- Updates to Statistical Methodology

The Way Forward

IMF and Climate Change

- Climate change is an **existential threat** to long-term growth and prosperity.
- The IMF is systematically covering climate-related issues through surveillance, lending, analytical, and capacity development work.

Source: F&D – December 2019

Risks

- Financial stability
- Economic stability

Transition Opportunities

- Job creation
- Growth
- Other externalities: improved biodiversity and air quality

Role of Climate Finance

Climate Finance

Achieving Paris Agreement objective and fighting the outcomes of climate change requires climate finance:

- Reduce reliance on carbon intensive means of production and thus emissions of greenhouse gases (GHG).
- Adaptation and resilience building

Finance gap

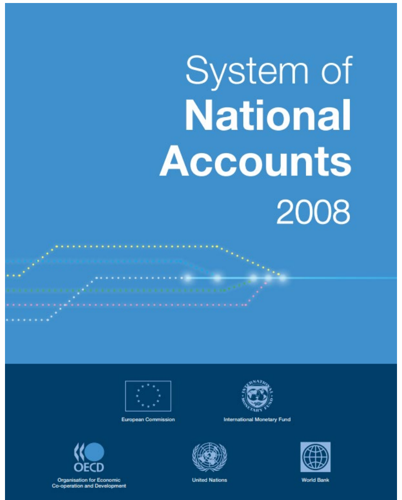
Estimates of global investments required to achieve the Paris Agreement's goals:

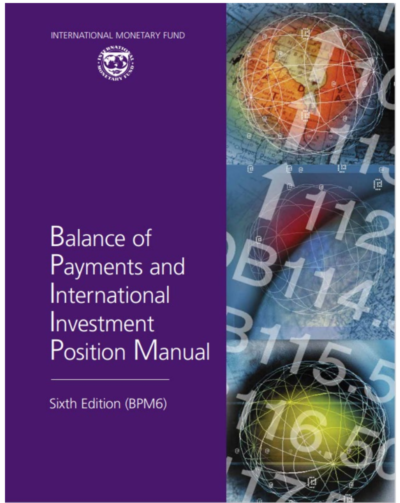
- US$3 to $6 trillion per year until 2050.
- Global climate finance currently adds to about US$630 billion annually. (IMF-2022)

Bridging Data Gaps: IMF’s Statistics Department

- Climate Change Indicators Dashboard (CID)
- Data Gaps Initiative 3 (DGI-3)
- Introducing Climate Finance in Statistical Methodology
- Capacity Development

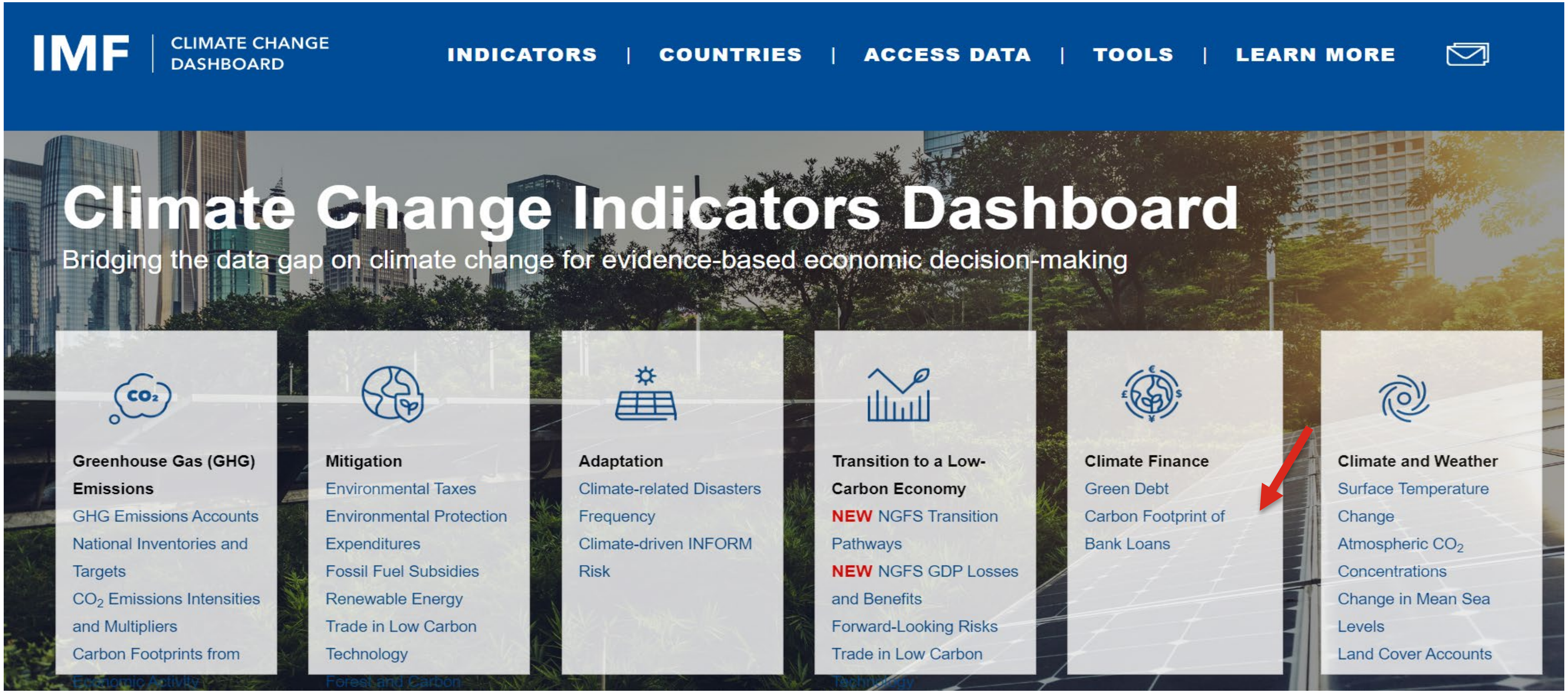
IMF | CLIMATE CHANGE DASHBOARD





IMF's Climate Change Indicators Dashboard (CID)

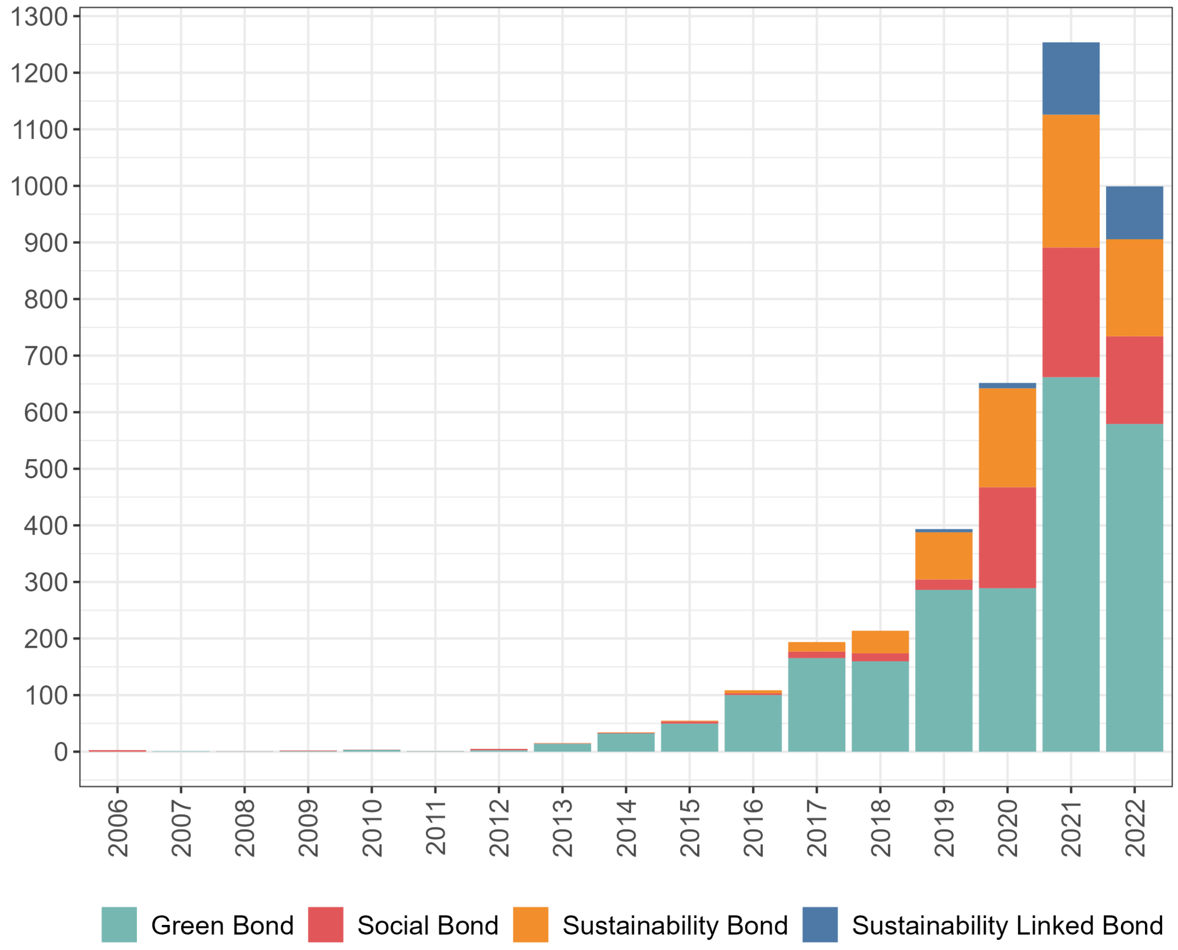
- ✓ The CID addresses the growing need for climate-related data used in macroeconomic and financial stability analysis by identifying and developing a range of distinctive indicators, including experimental ones.



ESG Debt Issuances Continue to Fall short of Meeting Financing Needs

Global Sustainable Instrument Issuance by Instrument

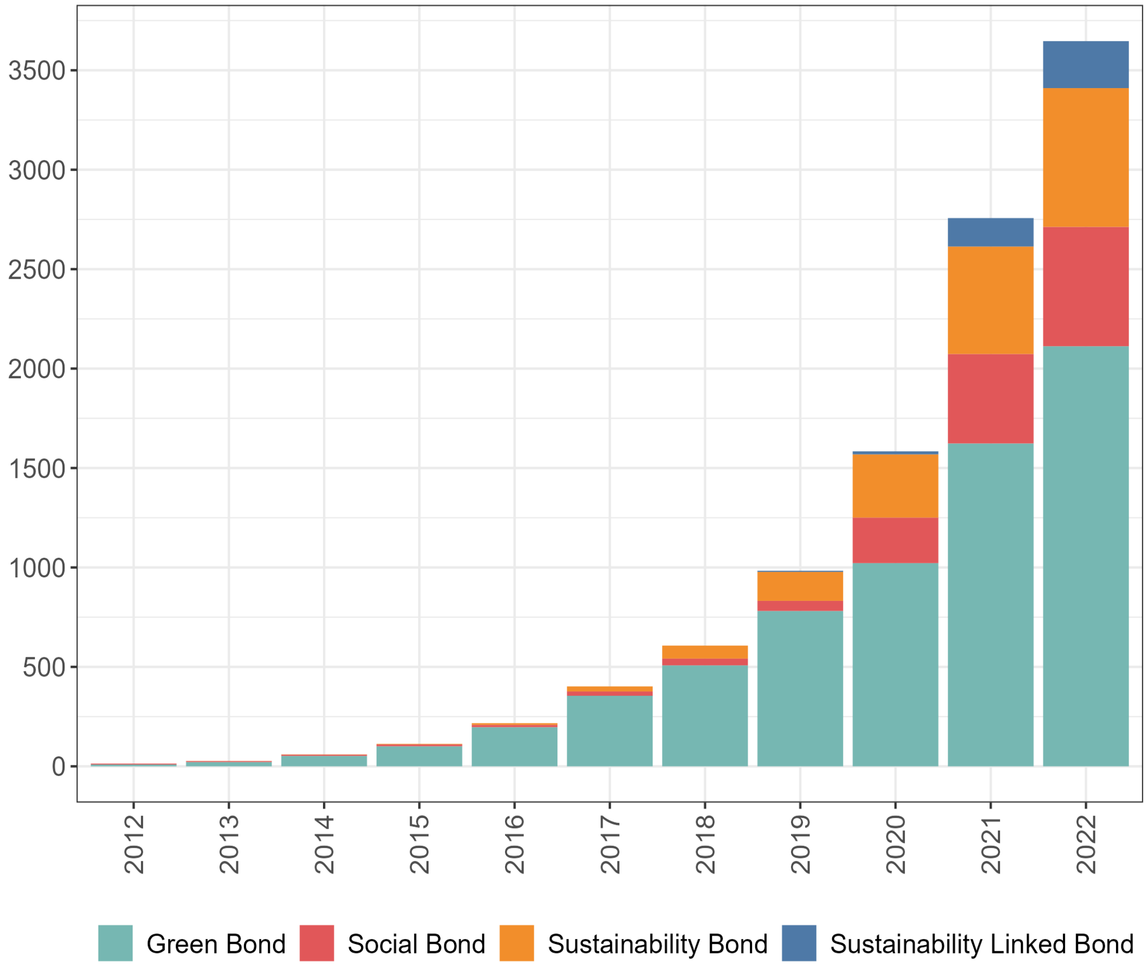
(Billions of U.S. dollars)



Sources: Refinitiv; IMF Staff Calculations.

Global Sustainable Instrument Amount Outstanding by Instrument

(Billions of U.S. dollars)

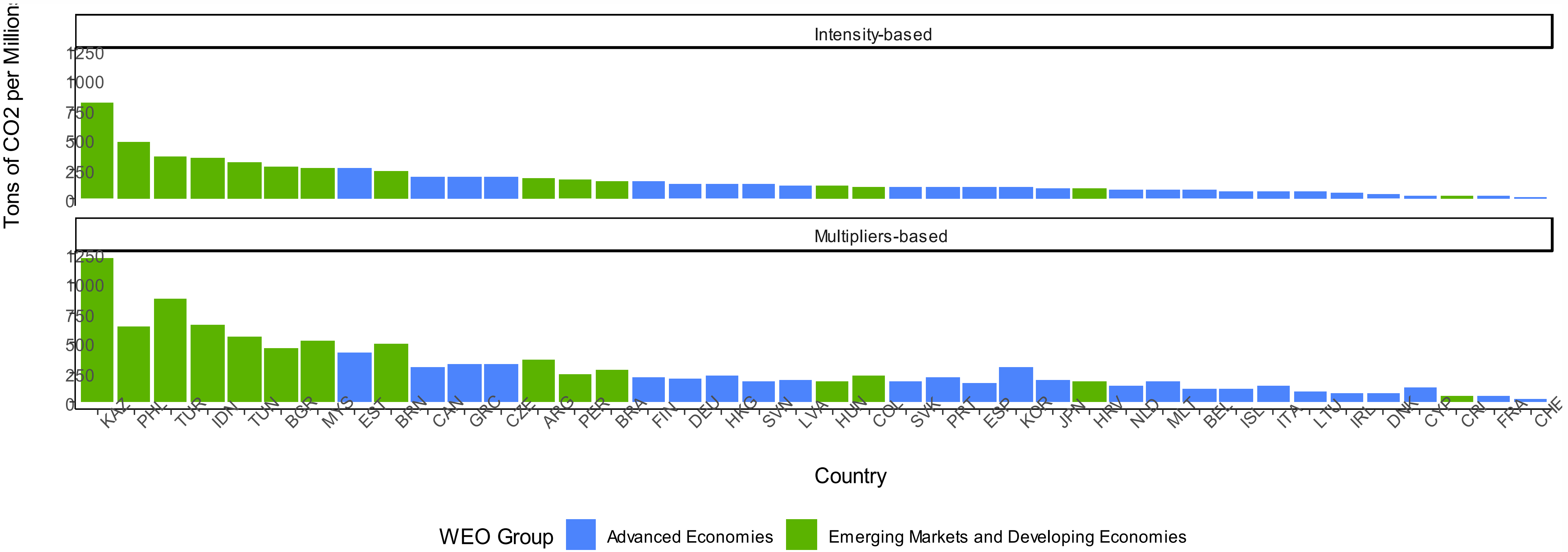


Sources: Refinitiv; IMF Staff Calculations.

Carbon Footprint of Bank Loans Indicator (CBFL)

- The CFBL indicator, a country-level indicator, constructed as the average of carbon dioxide (CO_2) **emission factors** from fuels used in each sector, weighted by the **sectoral share of outstanding loans** from deposit takers.

- EMDEs have higher metrics for both intensity-based and multipliers-based measures.



G20 – Data Gaps Initiative 3 - Recommendations

- The new DGI-3 endorsed by the G20 FMCBG will play an important role in addressing climate-related data gap.
- G20 Leaders asked the IMF to coordinate with the FSB, the IAG, and statistical authorities across the G20 to “begin work on filling these data gaps"
- DGI-3 Global Conference held in Washington D.C. in June 2023
- First Progress Report of DGI-3 was published in October 2023

- **Climate Change**
  - Greenhouse Gas Emissions Accounts, Energy Accounts and Carbon Footprint of FDI
  - Climate Finance
  - Forward Looking Physical and Transition Risk Indicators
  - Climate Subsidies and Mitigation and Adaptation Expenditures
- **Household distribution**
  - Distributions of Household Income, Consumption and Wealth
- **Fintech and Financial Inclusion**
  - FinTech Credit
  - Digital Money
  - Financial Inclusion
- **Access to Private and Administrative Data**
  - Data Sharing Agreements
  - Access to Private and Administrative Data

DGI 3 – Recommendations on Climate

Recommendation 1: **Greenhouse gas emission accounts and carbon footprints**	*To monitor progress towards emission targets and the transition towards a low carbon economy.*
Recommendation 2: **Energy Accounts**	*Data to monitor transformation of the energy sector which is key to addressing climate change.*
Recommendation 3: **Carbon Footprint of Foreign Direct Investment (FDI)**	*To monitor cross-border emissions through trade, investment, and global value chains (GVCs).*
Recommendation 4: **Climate Finance**	*Data to track the source of funds available for green projects and activities that can mitigate climate change and help countries adapt to its implications.*
Recommendation 5: **Forward Looking Physical and Transition Risk Indicators**	*Quantify and monitor forward looking risk to help prioritize and develop support for climate action.*
Recommendation 6: **Climate-Impacting Government Subsidies**	*Provide comparable estimates for insight into government subsidy regimes to tackle climate change.*
Recommendation 7: **Climate Change Mitigation and Adaptation Expenditures**	*Track level of expenditures to mitigate and adapt to the effects of climate change to ensure achievement of national commitments.*

DGI 3 – Recommendations 4 on “Climate Finance”

- **Policy Driver:** Incentivizing investments in green projects and activities that can contribute to climate change adaptation and mitigation.

- **Statistical Outputs**: Issuances and holdings of green debt securities and green listed shares.

- Objective is to address data gaps by:
  1. Developing reporting templates for experimental data on issuances and holdings of green debt securities and listed shares securities consistent with the Handbook on Securities Statistics (HSS)
  2. Providing methodological guidance to enhance data interoperability and comparability

- BIS and ECB are leading this in collaboration with international organizations and G20 countries

- An in-person Workshop was held in Cape Town during October 5-6, 2023
  - Data templates were discussed and agreed upon
  - The collection covers statistics on issuances and holdings on a from-whom-to-whom basis for green bonds, sustainability bonds, sustainability-linked bonds, and green listed shares.

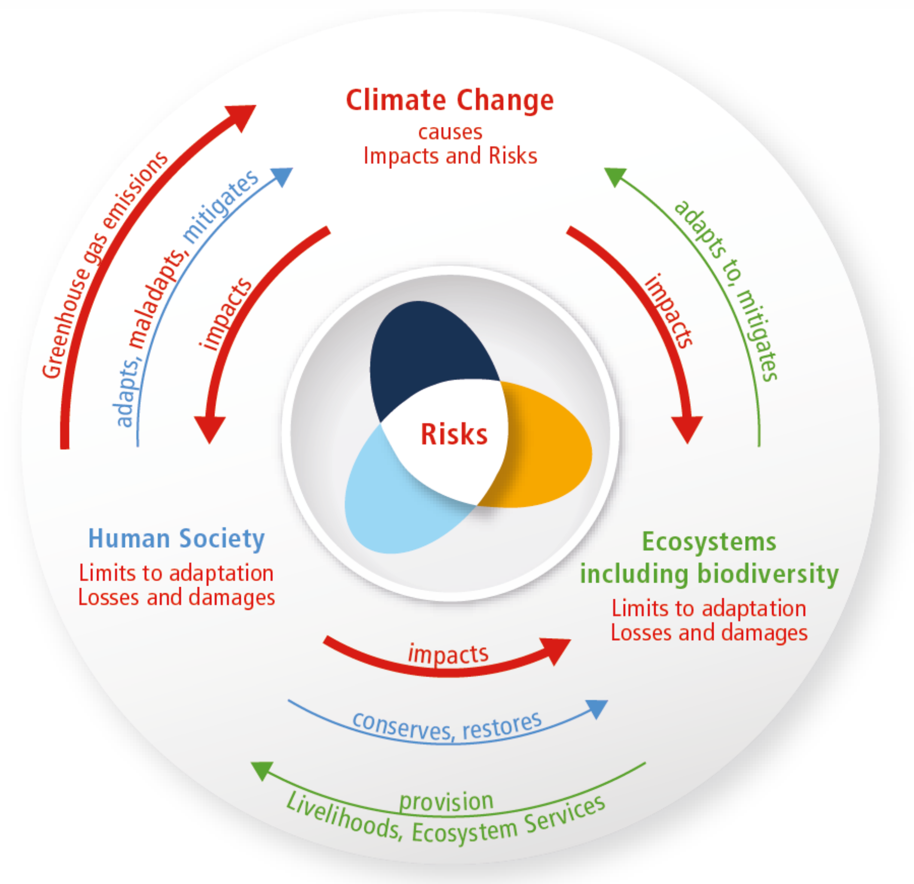
DGI 3 – Recommendations 5 on “Forward Looking Physical ad Transition Risk Indicators”

- **Policy Driver:** Quantify and monitor forward looking risk, physical as well as transition risks, to help prioritize and develop support for climate action.

- **Statistical Outputs:** Forward looking physical and transition risk indicators (risk to populations, economic growth, financial markets, firms etc.)

- **Methodological guidance** is being developed and a **concept note** has been presented and shared with G20 countries in a workshop in Q42023

- IMF is leading this work with other international organizations: BIS, FSB, ECB, OECD and World Bank.



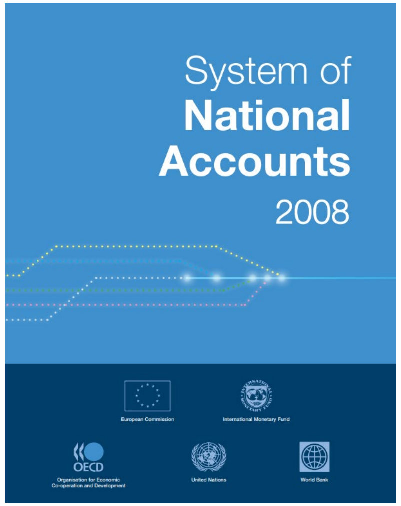
Source: IPCC

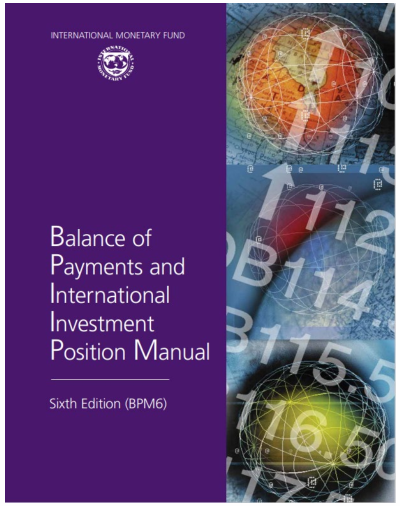
Introducing Climate Finance in Statistical Methodology

- Update to the international statistical standards

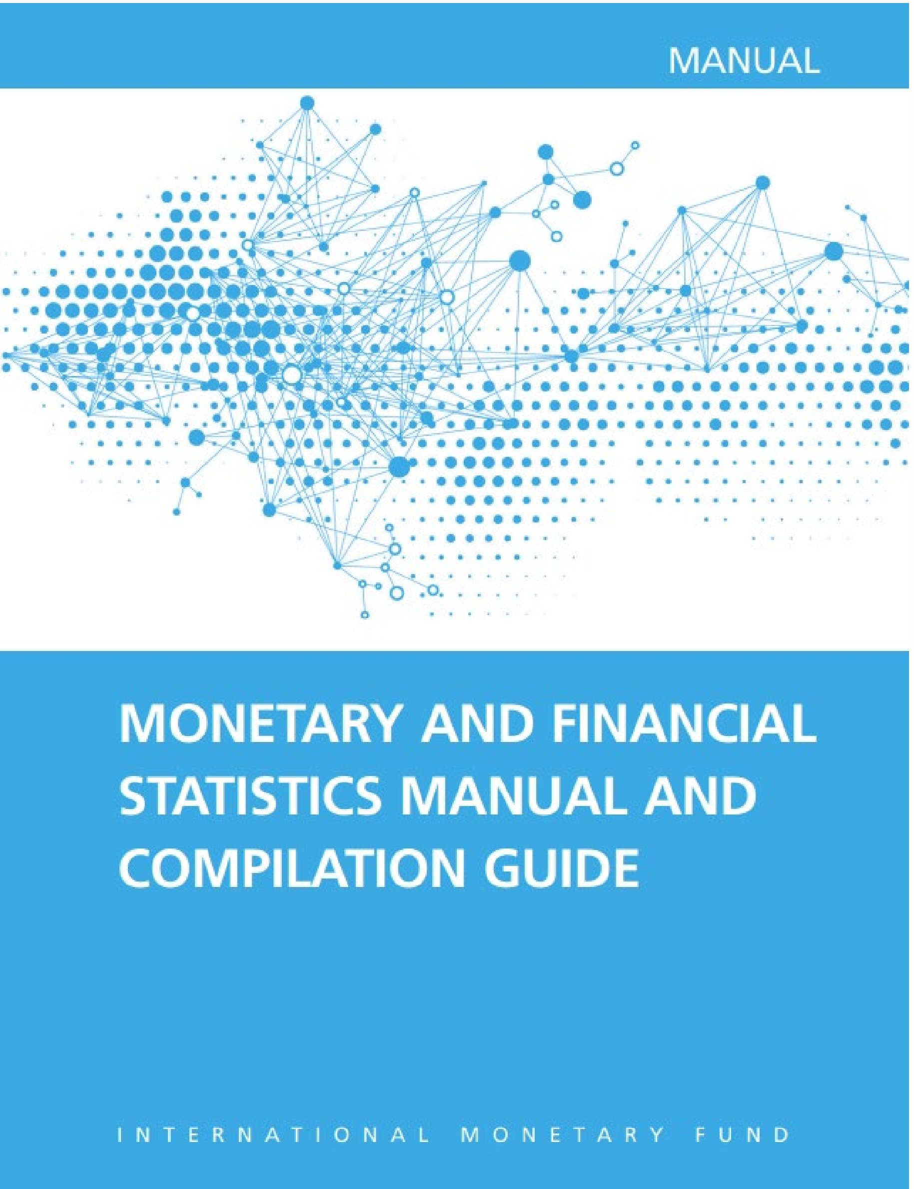
  - The *SNA 2025* will include:
    - Additional environmental classes for bonds, loans, equity, and investment fund shares.
    - Definitions for ESG/Green Financial Instruments recognizing that these will be updated as they evolve over time.

  - Balance of Payments and International Investment Position Manual, *BPM7*– Annex (updatable) on Sustainable Finance
    - Some items from the BOP/IIP framework and possible additional breakdowns:
      - Direct investment in specific sectors; Direct Investment by counterparty country.
      - Supplementary “of which” category for transactions and positions in “green-labelled” bonds as well as for interest in the returns earned on them.
      - Supplementary data on international cooperation grants to low-income countries to finance climate change mitigation and adaptation.





Climate Finance Data Project for the Financial Sector



Main Objective:

Leverage IMF's monetary statistics database to bridge climate-related data gaps for the financial sector

Conduct a pilot exercise

Evaluate data availability and assess the feasibility of collecting relevant granular climate-related details within the framework of the existing MFS database

Set of pilot countries will report data

→

Use of the metadata

Support the work on developing a harmonized compilation methodology

→

Dissemination of data and indicators

Separate set of supplementary tables to the MFS database or integrated

Complement other ongoing work (DGI 3.0, FSB Climate Vulnerabilities and Data WS)

Climate Finance Data Project for the Financial Sector

Objectives of the Project

- Project aims to integrate climate-related data into **standardized report forms** (SRFs) within the existing monetary statistics framework.
- Pilot results will also help **inform methodological guidance** for the SNA and BPM6 update.
- The project will aid the upcoming ***MFSMCG* update**.
- Based on pilot results, this can be integrated into the monetary statistics collection or as a standalone database, with **broader country coverage**.

Pilot Phase

- **Pilot** will be launched for **50 countries**
- Countries will be requested to **submit quarterly data**, on a **voluntary basis**, with historical series covering a five-year period, whenever feasible.
- Cross-references will be introduced at aggregate level, where feasible, to **align with Rec#4** reporting format.
- **Metadata** to be submitted, including definitions and variations.

Suggested Data Categories

Climate-related (low carbon / carbon intensive) assets/liabilities

- Data categories: Low carbon (green) / carbon intensive (brown) loans, debt securities, equity, financial derivatives.
- Potential Indicators: Share of low-carbon assets/liabilities in the balance sheet / loan portfolio / securities portfolio

Exposures by sectors

- Data categories: Loans and debt securities broken down by sector
- Potential Indicators: Carbon footprint of bank loans, carbon footprint of investments, share of exposures to high/low carbon intensity sectors

Geolocational distribution of exposures

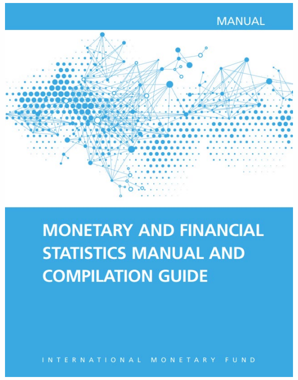
- Data categories: Geolocational distribution of loans
- Potential Indicators: Exposures of financial institutions to climate hazards (tropical cyclones, droughts, etc.)

Structure:

- Additional breakdowns under MFS reporting

LOANS
In National Currency
Loans Other Nonfinancial Corporations NC
- of which green
- of which carbon intensive
Loans Nonresidents NC
- of which green
- of which carbon intensive
In Foreign Currency
Loans Other Nonfinancial Corporations FC
- of which green
- of which carbon intensive
Loans Nonresidents FC
- of which green
- of which carbon intensive

- Supplementary tables



Coordination with Other Ongoing Initiatives

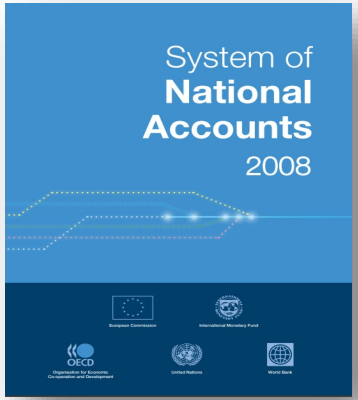
Strong links with ongoing statistical initiatives…

- Data collection beyond G-20 countries.
- Support the work on DGI
  - ➢ Rec 4 on Green Finance
  - ➢ Rec 5 on Forward Looking Physical and Transition Risk Indicators

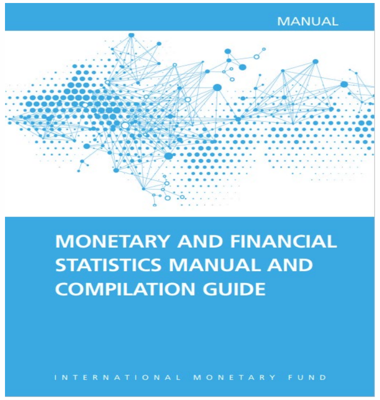
- New and updated indicators for the CID.
  - ➢ Climate finance indicators
  - ➢ Risk indicators

FSB FINANCIAL STABILITY BOARD

- Support CVD's work on the assessment of evolution of climate vulnerabilities.

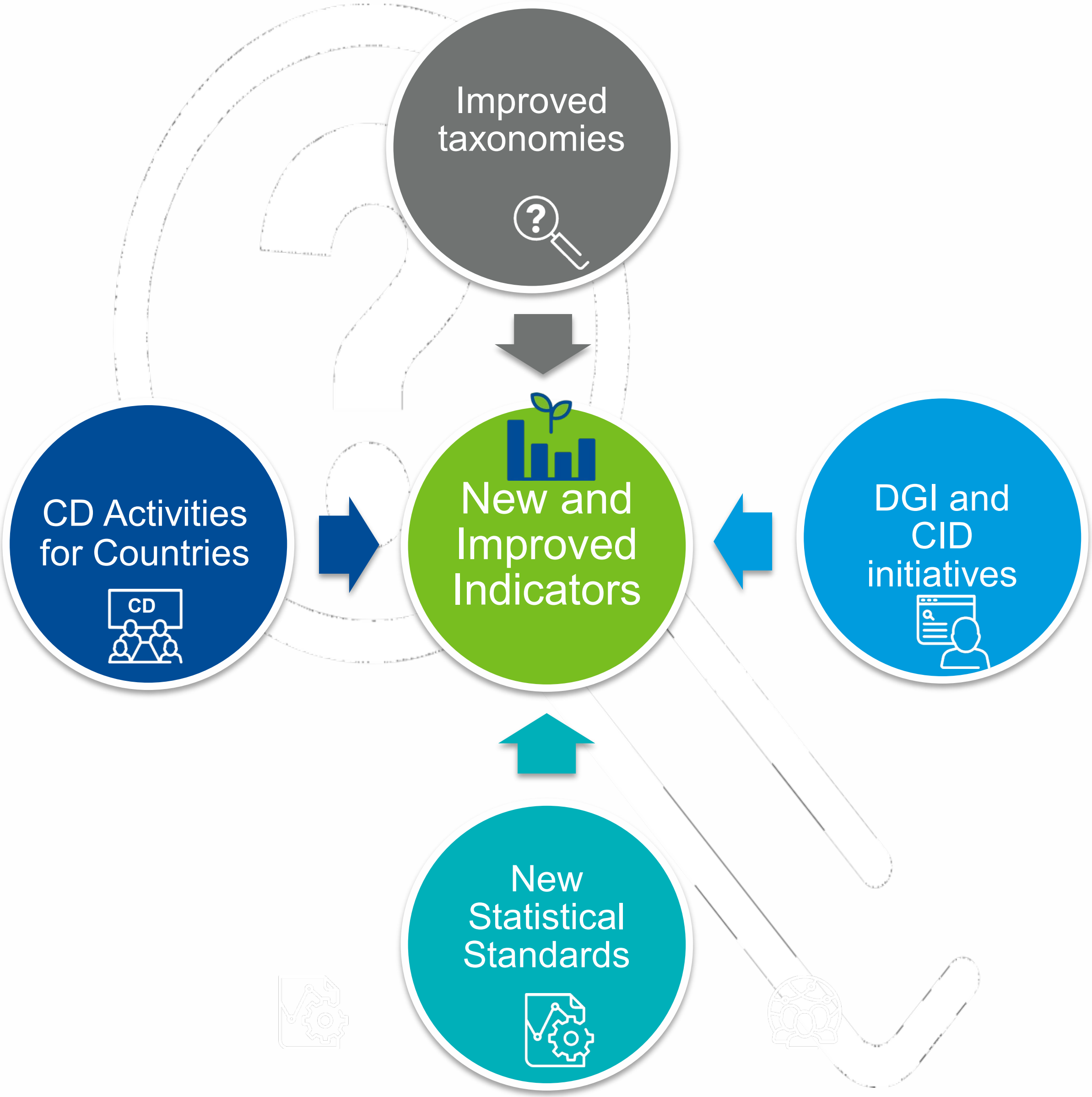


- Test the definitions (environmental classes) and provide feedback for SNA 2025 update.



- Important input for the MFSMCG update to harmonize compilation methodology.

Way Forward



IMF | CLIMATE CHANGE DASHBOARD

Thank You!

Questions?

Proposed structure for ESG and green financial instruments for the 2025 SNA

Table 1: ESG and green financial instruments in the *2025 SNA*

AF.1	Monetary gold and SDRs
AF.2	Currency and deposits
AF.3	Debt securities
	Of which: ESG debt securities
	Of which: Social debt securities
	Of which: Green debt securities
	Of which: Sustainability debt securities
	Of which: Sustainability-linked debt securities
	Of which: Other ESG debt securities
AF.4	Loans
	Of which: ESG loans
	Of which: Green loans
AF.5	Equity and investment fund shares
AF.51	Equity
	Of which: ESG equity
	Of which: Green equity
AF.52	*Investment fund shares*
	Of which: ESG investment fund shares
	Of which: Green investment fund shares
AF.6	Insurance, pension and standardized guarantee schemes
AF.7	Financial derivatives and employee stock options
AF.8	Other accounts payable/receivable

Source: SNA update Issues Note (2024), Table 3.

Proposed table for ESG and green financial instruments for the BPM7 (IIP and BOP)

Table 3: ESG and green financial instruments in the upcoming *BPM7* (IIP and BOP)

1	**I. Direct Investment**
1.1	Equity and investment fund shares
	Of which: ESG equity/investment fund shares
	Of which: Green equity/investment fund shares
1.2	Debt Instruments
	Of which: 1.2.0.1 Debt Securities
	Of which: ESG debt securities
	Of which: Social debt securities
	Of which: Green debt securities
	Of which: Sustainability debt securities
	Of which: Sustainability-linked debt securities
	Of which: Other ESG debt securities
2	**II. Portfolio Investment**
2.1	Equity and investment fund shares
	Of which: ESG equity/investment fund shares
	Of which: Green equity/investment fund shares
2.2	Debt Securities
	Of which: ESG debt securities
	Of which: Social debt securities
	Of which: Green debt securities
	Of which: Sustainability debt securities
	Of which: Sustainability-linked debt securities
	Of which: Other ESG debt securities
3	**III. Financial Derivatives**
4	**IV. Other Investment**
4.1	Other equity
4.2	Currency and deposits
4.3	Loans
	Of which: ESG loans
	Of which: Green loans
4.4	V. Insurance, pension and standardized guarantee schemes
4.5	VI. Trade credit and advances
4.6	VII. Other accounts receivable/payable
4.7	VIII. SDRs
5	IX. Reserve assets

Illustrative reporting template: Recommendation 4

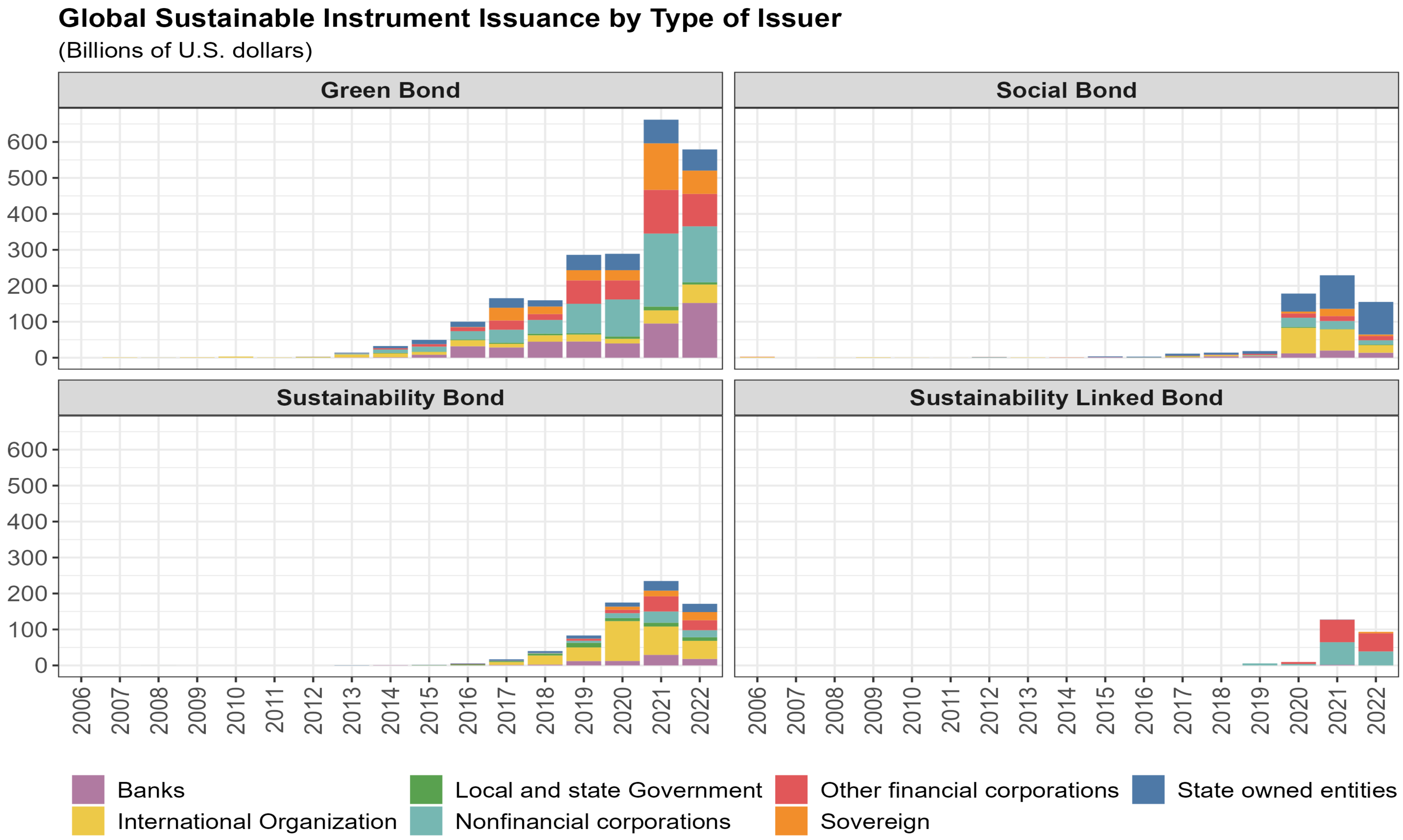
Table 1.1a: Green Bonds Issues by Sector, Currency, Maturity, Interest Rate and Market of Issuance. Stocks at Nominal Value

Orange cells: Core data to be transmitted by end-2025
White cells: Advanced ambitions data to be transmitted by end-2027

Issuer / Currency, Maturity, Interest rate, Market of issuance	Residents (S1)												All resident issuers (S1)
	Non-financial corporations (S11)	Financial corporations (S12)						General government (S13)		*Memo item:* public sector	Households and NPISH (S14+ S15)		
			Central bank (S121)	Other deposit-taking corporations (S122)	Money market funds* (S123)	Other financial corporations (S124 to S127)	*Of which:* Securitisation corporations (S125A)	Insurance corporations and pension funds (S128,S129)		*Of which:* Central government (S1311)			
Total													
By domestic currency													
By foreign currency													
Short term at original maturity													
Long term at original maturity													
More than 1 year and up to and including 2 years													
More than 2 years and up to and including 5 years													
More than 5 years and up to and including 10 years													
More than ten years													
Of which: Long term at original maturity, with a remaining maturity up to and including 1 year													
Fixed interest rate													
Variable interest rate													
Inflation-linked													
Interest rate-linked													
Asset price-linked													
Domestic market													
International market													

*) Money market funds do not issue debt securities. 2008 SNA codes are used for sectors and subsectors.

Issuances by Type of Issuer

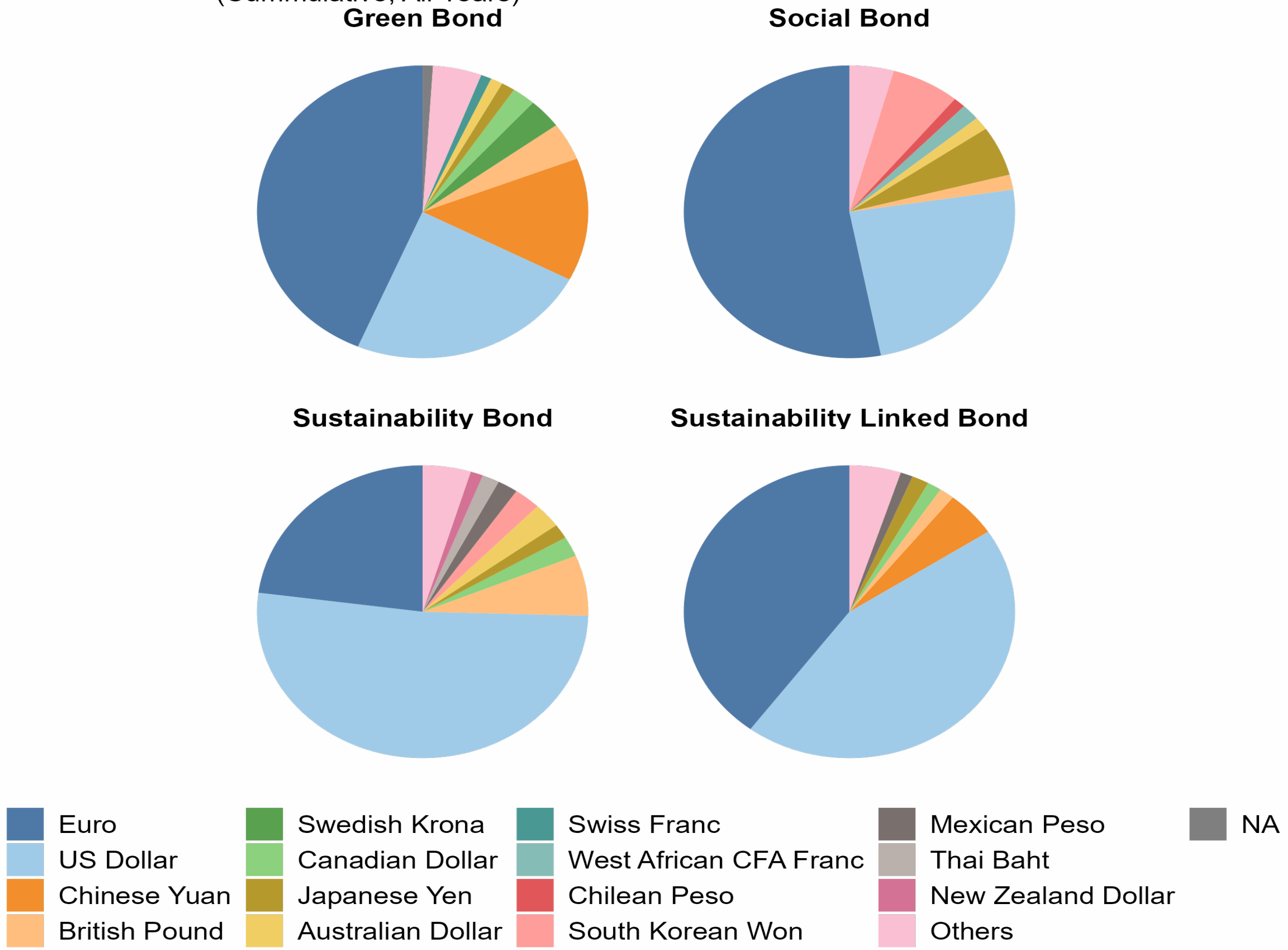


Sources: Refinitiv; IMF Staff Calculations.

The Euro and the Dollar emerge as the primary currencies for issuances, followed by Chinese Yuan

Cummulative Global Sustainable Instrument Issuance by Type of Currency

(Cummulative, All Years)



Note: Others = currencies with a share of less than 1%.

Sources: Refinitiv; IMF Staff Calculations.

IMF's Resilience and Sustainability Facility (RSF)

RSF

Financing and policy reforms to reduce significant macro-critical risks associated with **long-term structural challenges: climate change** and **pandemic preparedness** at the outset.

Boost policy space by building policy and financial buffers against such risks. Contributes to **longer-term *prospective* balance of payments stability**

The RSF is **not aimed at project financing.**

The RSF is **not aimed to address short- to medium-term BoP problems** (which is the focus of other Fund-supported programs).