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INCLUSIVE GREEN FINANCE (IGF) WORKING GROUP

FINANCIAL INCLUSION DATA (FID) WORKING GROUP

MEASURING INCLUSIVE GREEN FINANCE

CONSIDERATIONS FOR SUPPLY SIDE DATA, FUNDING SOURCES, RISK MANAGEMENT AND REPORTING

SPECIAL REPORT

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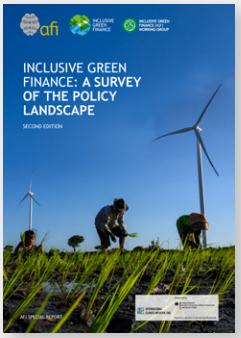
Eco-friendly building in the modern city. (Fahroni/iStock)

INTRODUCTION

Policymakers in the Alliance for Financial Inclusion (AFI) network have made tremendous efforts to improve access to financial services for disadvantaged individuals, as well as micro, small and medium-sized enterprises (MSMEs).

In the face of climate change, these efforts are more important than ever, given the abundant evidence regarding its disproportionate impact on poor and vulnerable populations.[1] Inclusive Green Finance (IGF) is an evolving policy area that aims to mitigate the impacts of climate change and environmental degradation, and build resilience through financial inclusion.[2]



The Alliance for Financial Inclusion's Inclusive Green Finance Policy Landscape Survey reveals new and emerging policy practices that are guiding the transition to more inclusive and resilient low-carbon economies.

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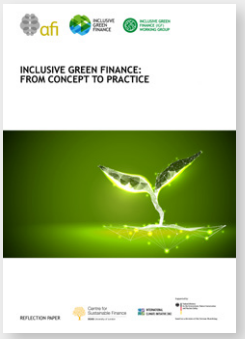
Collecting and analyzing financial data at the intersection of financial inclusion and green finance is a topic of increasing interest among AFI members. The interest reflects widespread concern about the impact of climate change on their economies as well as the potential opportunities for green finance to support a just transition to a sustainable economy.

MSMEs are the backbone of many developing countries and play a crucial role in providing employment, goods and services, and contributing to gross domestic product. Financial inclusion was found to be an integral tool in enabling MSMEs to sustainably adapt to climate change.[3] Specifically, access to savings, credit, and insurance services are key to the survival of MSMEs when faced with climate change impacts, particularly in the agricultural sector.[4]

Having relevant and accurate information from financial institutions (FIs) on the integration of climate risk management and provision of green financial services in MSME segments is crucial for policymakers and respective financial regulators to understand how their domestic financial sectors are integrating IGF approaches.



AFI resources on understanding Inclusive Green Finance

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Having relevant and accurate information from financial institutions (FIs) on the integration of climate risk management and provision of green financial services in MSME segments is crucial for policymakers and respective financial regulators to understand how their domestic financial sectors are integrating IGF approaches.

The lack of data is one of the main obstacles in defining and monitoring IGF policies. Challenges in collecting IGF data include data availability, data reliability, methodological challenges, comparability of data and open issues on compatible green finance definitions and green taxonomies.

Furthermore, the lack of sex disaggregated data also needs to be addressed to understand the structural issues facing access to finance for women and women-owned or women-led MSMEs.

1 A. Karim, and Noy. 2014. "Poverty and Natural Disasters: A Regression Meta-Analysis." Review of Economics and Institutions. Available at: https:// www.rei.unipg.it/rei/article/view/222

2 The Alliance for Financial Inclusion's Inclusive Green Finance Policy Landscape Survey reveals new and emerging policy practices that are guiding the transition to more inclusive and resilient low-carbon economies. Available at: https://www.afi-global.org/publications/inclusive-green-finance-a-survey-of-the-policy-landscape-second-edition/

3 Alliance for Financial Inclusion. 2020. "Inclusive Green Finance: From Concept to Practice." Available at: https://www.afi-global.org/publications/inclusive-green-finance-from-concept-to-practice/

4 F. Crick, E. Shaikh, S. Frankhauser, and M. Diop. 2018. "How do African SMEs respond to climate risks? Evidence from Kenya and Senegal." World Development, Volume 108, Pages 157-168. Available at: https://www.sciencedirect.com/science/article/pii/S0305750X18300974?via%3Dihub

On the international climate policy stage, the positive impact women can have on their environment and achievement of Sustainable Development Goals (SDGs) has generated widespread demand for more inclusive climate action and gender-sensitive financing channels.[5]

Women in developing countries possess extraordinary potential to contribute to climate change mitigation and have unique needs for climate change adaptation. The overlay of a gender lens on IGF policies and practices is thus a critical facet of a sustainable transition.[6]

Globally, there has been a call to action to address these issues, though there is no unified approach. There are, instead, several initiatives that seek to improve the identification and measurement of progress regarding financial inclusion and financing climate change mitigation and adaptation as separate issues.

The purpose of this special report is to examine the intersection of trends between green finance measurement approaches and supply-side financial inclusion indicators.

There is greater consideration for how these factors pertain to MSME segments, given their importance in economic development.

The report also identifies the priorities of AFI members concerning inclusive green finance regulatory reporting that may be relevant to other policymakers and financial regulatory authorities responsible for financial inclusion and climate change development agendas. The concepts covered in this report may also convey potential indicators for the greening of a National Financial Inclusion Strategy (NFIS).

5 Asian Development Bank. 2014. "Gender and Climate Finance Policy Brief." Available at: https://www.adb.org/sites/default/files/publication/42881/climate-finance-work-women.pdf

6 The policy intersection between gender, financial inclusion and climate change is an emerging global opportunity being explored by AFI. The report, "Towards an Inclusive Green Future: An Analysis of the Intersection Between Inclusive Green Finance and Gender Inclusive Finance," examines the intersection between inclusive green finance and gender inclusive finance, with a special emphasis on how to integrate gender considerations into AFI's 4P Framework. Available at: https://www.afi-global.org/publications/towards-an-inclusive-green-future-an-analysis-of-the-intersection-between-inclusive-green-finance-and-gender-inclusive-finance/

POLICY QUESTIONS ARE BEING ASKED THAT NEED TO BE ADDRESSED WITH SUPPORTING DATA

"ARE EMERGING CLIMATE RISKS BEING ADEQUATELY IDENTIFIED AND MANAGED BY LENDERS AND INSURERS IN INCLUSIVE SEGMENTS?"

"IS THERE SUFFICIENT AVAILABILITY OF CAPITAL FOR IGF INITIATIVES AND WHICH FINANCING CHANNELS ARE BEING UTILIZED?"

"ARE TARGET POPULATIONS AND SEGMENTS TAKING UP INCLUSIVE GREEN FINANCIAL SERVICES?"

Through the Inclusive Green Finance Working Group (IGFWG) and the Financial Inclusion Data Working Group (FIDWG), AFI members are responding to the need for IGF data by developing policy frameworks and ways to measure financial inclusion and inclusive green finance that include aspects such as target setting, funding availability, disclosure requirements, measurement and analysis methodologies (quantitative and qualitative), and dissemination approaches.

Source: IGFWG & FIDWG Subgroup meeting on 5 July 2022.

THIS REPORT IS ORGANIZED INTO THE FOLLOWING THREE THEMES THAT WERE FOUND TO BE RECURRING PRIORITIES FOR IGF DATA AMONGST AFI MEMBERS:

	I. ASSESSING THE INTEGRATION OF CLIMATE RISK MANAGEMENT IN MSME SEGMENTS 	II. MEASURING FUNDING FOR IGF 	III. MEASURING THE PROVISION OF INCLUSIVE GREEN FINANCIAL PRODUCTS 
DATA THEMES	Financial regulators and policymakers need to ensure that financial institutions are adequately managing the climate risks of their portfolio of customers.	Financial regulators and policymakers need to monitor the availability of capital for funding inclusive and green segments.	Financial regulators and policymakers need to track the provision and delivery of inclusive green financial products (supply side).
TYPES OF DATA	Supervisors, financial institutions, third party data providers, survey data, environmental data, stress test results	Funding allocations, disbursements/ utilizations, fund performance indicators	Supply-side financial and transactional data such as volumes and number of financial instruments deployed
DATA SOURCES	Supervisors, Financial Institutions, Third-party Data providers (credit Bureaus, environmental ministries, rating agencies, ESG data firms, etc.)	DFIs, IGOs, climate and sustainable finance/ investment commissions, finance ministries, investment funds	Financial institutions, payment processors, insurance providers, credit guarantee providers

1 ASSESSING THE INTEGRATION OF CLIMATE RISK MANAGEMENT IN MSME SEGMENTS

Female MSME working on the pottery square, Bhaktapur, Nepal. (hadynyah/iStock)

Climate-related risks facing business enterprises (broadly categorized as physical risk and transition risk) can translate into financial risks for financial institutions. These can affect areas such as credit risk, market risk, liquidity risk, operational risks and reputational risks.[7] Developing tools and processes to identify, assess and manage climate-related risk drivers, and monitor the associated financial and environmental impacts is a challenge facing financial institutions globally.

To boost a more sustainable financial sector, lenders and insurers need to assess their exposure to climate-related risks in their portfolios. Integrating a climate approach into a risk management framework will enable banks and insurers to reflect on climate risks. This will affect their business decisions (for example, by explicitly incorporating physical and transition scenarios and modelling the resulting business impacts on counterparties with regards to pricing, lending and investment decisions). In order to produce estimates of climate risks in their portfolios, banks and insurers will need to develop climate risk assessment capabilities and integrate climate risks with their internal risk reporting frameworks.

> “Financial institutions will ultimately be the ones providing financial services aligned with IGF policy objectives. Central banks and financial regulators will need to prepare for, coordinate and support this process. Financial regulators will need to develop an appropriate regulatory and supervisory framework while banks and other financial service providers will need to integrate environmental and climate change risks in their business strategies and risk management systems.[8]”

7 For a detailed background on how the impact of climate-related risk drivers on banks can be observed through traditional risk categories see BIS report: “Climate-related risk drivers and their transmission channels.” Available at: https://www.bis.org/bcbs/publ/d517.htm

8 Alliance for Financial Inclusion. 2021. "Promoting Inclusive Green Finance Initiative and Policies." Available at: https://www.afi-global.org/publications/promoting-inclusive-green-finance-initiative-and-policies/

FIGURE 1: CLIMATE FINANCE DATA TERMINOLOGY

ENVIRONMENTAL INDICATORS

Environmental indicators represent the state or trend of certain environmental conditions over a given area and a specified period of time, i.e. “what climate change looks like.”

Examples: long-term measurements of rainfall, temperature, and ocean acidification.

CLIMATE-RELATED METRICS

Quantities indicative of the level of historical, current, and forward-looking climate-related risks and opportunities for a given organization, i.e. climate-related information that forms the input data on which to base determinations of historical, current, and forward-looking financial impacts.

Examples: greenhouse gas emissions, carbon price, the proportion of exposed assets.

CLIMATE-RELATED RISK DRIVERS

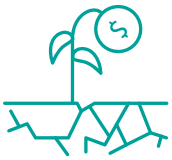
These represent climate-related changes that could give rise to financial risks, such as:

- **PHYSICAL RISKS,** which arise from the changes in weather and climate that impact the economy (can be distinguished between acute physical hazards and chronic physical hazards)

  Examples: Droughts, floods, extreme precipitation and wildfires.

- **TRANSITION RISKS,** which arise from the transition from an economy that is reliant on fossil fuels to a low-carbon economy.

  Examples: Changed land-use policies or water conservation practices impacting the agricultural sector, costs facing energy industry in developing low-carbon technologies, reduction in the value of investments in carbon-heavy industries.



CLIMATE-RELATED FINANCIAL IMPACTS

Historical or current quantity or forward-looking quantitative outlooks regarding the financial impact of climate-related risks and opportunities on an organization’s financial performance or position.

Examples: Forecasts, projections, or disaster loss estimates.

1.1 CLIMATE RISK MANAGEMENT

Financial regulators have an important role to play in helping promote, coordinate and accelerate the development of common principles to support FIs in developing the expertise and building the capacity to identify, assess, and manage climate-related financial risks.

New standards and codes of conduct for the financial services industry that serves MSME segments will need to be articulated by the respective regulatory authorities. Many jurisdictions choose to publish Environmental and Social Risk Management (ESRM) guidelines which provide guidance and direction for managing climate-related risk. These aim to promote enterprise accountability and transparency on the impacts of businesses on the environment and society and vice versa.[9] For instance, the Nepal Rastra Bank, in its recently updated Guidelines on ESRM, includes templates for the reporting of banking and FIs[10] covering, among others, indicators related to employee capacity building and transactions subject to E&S due diligence.

Integrating climate risk data into risk management processes is inherently challenging for banks and insurers, but even more so in inclusive segments. A recurrent theme across FIs is a lack of data on many key factors which participants need to understand to manage climate risks.[11] A more developed and nuanced approach to risk management that utilizes more granular climate risk data (for example, climate scenario modeling of client production metrics, reliance on energy sources, and data on the geolocation of assets) would allow banks and insurers to more accurately reflect climate risks in their business decisions.

The quantitative and qualitative information that needs to be collected for climate risk measurement is very broad and FIs apply different approaches to obtain data. Many FIs use a combination of client and third party-sourced data (for example, mortgage lenders may utilize specialized third-party firms to model flood risks at a property level). However, coverage of third-party data is often limited for smaller counterparties. While already used by larger international FIs, an increased reliance of domestic FIs on third-party sourced data is expected in the future. This fosters comparability, saves resources, reduces effort, and allows banks to rely on approaches grounded in climate science.[12]

Due to the informal nature and relatively high administrative cost barriers of micro and small businesses, microfinance lenders are particularly challenged to provide the level of detailed financial and risk information that can be obtained by corporate lenders. Alternative data and digital solutions are, therefore, increasingly playing a role to improve the visibility of MSME credit risks, but not yet with regards to climate risks.

Banks and insurers serving MSME segments need to prioritize progress on climate risk data and may need to put in place interim measures to better inform on risk management until these data challenges at the inclusive green level are resolved. However, in the interim, the information collected by regulators across the different lending segments should still be comparable at some level.

1.2 RISK REPORTING AND DISCLOSURE

Measuring climate risk management capabilities of financial institutions can be observed through prudential examinations, regulatory reporting, and public disclosure. Once FIs start to implement climate risk management systems, obtaining data on the level and quality of FI climate risk management capabilities will be a core function of a financial supervisor.

Augmenting the regulatory framework will be necessary to measure the ability of regulated entities to manage climate risks, which has been the main focus of discussion in recent years.[13] While the narrative has largely been focused on greening debt and equity frameworks for large corporate and infrastructure project carbon emitters, these prudential supervisory approaches are becoming increasingly relevant for financial institutions that lend to MSMEs given the economic and environmental significance of MSMEs as catalysts for inclusive and green growth.[14]

9 The concept of “double materiality” seeks to expand the conventional understanding of what accounting standards consider “material” to include not only climate-related impacts on a company but also the impacts of a company on the climate.

10 See Annex 11 of the Nepal Rastra Bank – Central Office Banks and Financial Institutions Regulation Department’s “Guideline On Environmental & Social Risk Management for Banks and Financial Institutions.” Available at: https://www.nrb.org.np/contents/uploads/2022/02/Final-ESRM-with-cover.pdf

11 One prominent example comes from the Bank of England, which ran its first exploratory scenario exercise on climate risk involving the largest UK banks and insurers in 2021. The analysis identified notable data gaps in the climate risk management processes of FIs. The report is available at: https://www.bankofengland.co.uk/stress-testing/2022/results-of-the-2021-climate-biennial-exploratory-scenario

12 European Union. 2021. "Development of tools and mechanisms for the integration of ESG factors into the EU banking prudential framework and into banks' business strategies and investment policies." European Commission, Directorate-General for Financial Stability, Financial Services. Available at: https://data.europa.eu/doi/10.2874/220248

13 For more information, see the Network for Greening the Financial System (NGFS) technical document, “Guide for Supervisors Integrating climate-related and environmental risks into prudential supervision” 2020. Available at: https://www.ngfs.net/sites/default/files/medias/documents/ngfs_guide_for_supervisors.pdf

PROMOTING IGF INITIATIVES AND POLICIES (PART OF THE AFI 4P FRAMEWORK FOR IGF)

It will likely be necessary for financial regulators to help both the public and financial service providers make the connection between financial inclusion and mitigating and building resilience to climate change.

Promoting Inclusive Green Finance Initiatives and Policies

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Financial regulators have a choice: take the lead on IGF issues or leave it to financial institutions to incorporate best market practices on their own. If financial regulators decide to take the lead, two approaches are possible: mandatory or voluntary. In either case, they will need to deliberately engage with other stakeholders. The following are some examples of promotion initiatives (for a comprehensive analysis, refer to AFI knowledge product on "Promoting Inclusive Green Finance Initiatives and Policies").

MORAL SUASION

Use of moral suasion can help prepare the leadership of local financial institutions before policy is formalized and regulatory changes take effect. Central banks routinely use moral suasion, such as public statements, interviews or meeting minutes, to shape public expectations. Although typically used to manage expectations on inflation, moral suasion can also be a way for central banks to promote gender-sensitive IGF policies in the best interests of the country.

PUBLICATIONS AND INDUSTRY GUIDANCE

When regulations and financial supervisory techniques are updated to include IGF, prior industry consultation and published industry guidance are vital for smooth implementation. Regular communication with regulated institutions and the public should be conducted through carefully planned awareness-raising campaigns.

These campaigns will likely involve more than one government actor, and must be gender-sensitive and fully inclusive.

AWARENESS RAISING AND CAPACITY BUILDING

On the supply side, awareness raising and capacity building initiatives for financial institutions can take many forms and target different levels of the organization (i.e. executive outreach, branch training, investor triple bottom line returns). Public awareness raising and capacity building can happen at the micro level (e.g. community outreach, small business associations and cooperatives), the meso level (e.g. training academies and universities) or the macro level (e.g. parliamentary or ministerial). Informing and educating consumers about the societal need for green finance will be important, as this will stimulate the demand side, particularly women who are disproportionately excluded from the financial system.

DEFINING GREEN

Developing a green taxonomy addresses the need for clarity and transparency, both in what is meant by "green" and what qualifies as green in a jurisdiction. A green taxonomy is a classification system to identify activities or investments that meet key climate or green objectives for identified thresholds and national targets. Expanded "sustainable taxonomies" can include social equity and gender implications of economic activity. A green taxonomy also enables policymakers to define and measure financial flows toward their national sustainable development priorities.

Numerous global initiatives, such as the Sustainable Accounting Standards Board (SASB), the Global Reporting Initiative (GRI), the Task Force on Climate-related Financial Disclosures (TCFD), and the Carbon Disclosure Project (CDP), are working to develop business disclosure standards and define materiality to support aspects of climate risk disclosure.

On the business enterprise disclosure side, although climate disclosures are currently primarily used for corporate financing activities (i.e. equity and bond valuations or project finance), at the MSME level, a simplified version can be used for traditional bank lending. For example, the GRI Sustainability Reporting Standards[15] are principle-based, which allows businesses to apply them in a manner commensurate with local business accounting and reporting practices.[16]

As borrower and FI climate-related risk disclosure frameworks evolve, supervisors will be able to access increasingly higher quality and the more granular data they need for evidence-based policy decisions and to fulfill their financial stability mandates.

However, climate risk disclosure frameworks at present typically apply to large and listed corporations, and there will be challenges at the MSME level where data gaps may remain for some time. Supervisors will, thus, likely have to make substantial and concerted efforts to promote development of additional climate-related risk data sources for MSME segments to gain a comprehensive view of risk exposure of the balance sheets of the financial institutions they supervise.[17]

14 Organisation for Economic Co-operation and Development. 2018. "SMEs: Key Drivers of Green and Inclusive Growth." Green Growth Knowledge Platform. Available at: https://www.oecd.org/greengrowth/GGSD_2018_SME%20Issue%20Paper_WEB.pdf

15 The Global Reporting Initiative's Sustainability Reporting Standards are available at: https://www.globalreporting.org/standards/

16 Alliance for Financial Inclusion. 2021. "Promoting Inclusive Green Finance Initiative and Policies."

17 Ibid.

FIGURE 2: IGF MEASUREMENT FRAMEWORK FOR THEME 1

The following table presents the four critical areas of a risk management process and examples of indicators and underlying data points. Indicators proposed under each theme emerged from this research and are based on prior AFI members indicators, international guidance and author's interpretations. Over time, the collected data can detail the progress of the regulated entities' integration of climate risk management approaches in MSME segments.

THEME 1: IGF CLIMATE RISK MANAGEMENT

SUB THEMES	INDICATOR	NO.	EXAMPLES OF UNDERLYING DATA POINTS
1.1 GOVERNANCE & STRATEGY	FIs have a strategy for climate risk management with responsibility at the board of director level (or highest governing body)	1	The FI has a strategy for climate risk management that covers MSME segments (yes/no)
	FIs have set targets for implementing a climate risk approach	2	Percentage of the MSME portfolio granted that takes into account-climate-related risks
1.2 POLICIES AND PROCEDURES	FIs integrate into the risk management process tools and procedures to identify, measure, monitor, and manage/mitigate financial risks from climate change	3	The FI has adopted a climate risk management policy for MSME lending (yes/no)
		4	No. of disbursed MSME credits that applied a climate risk component in the credit risk management process (proportion of the total disbursed MSME credits)

FIGURE 2: *continued*

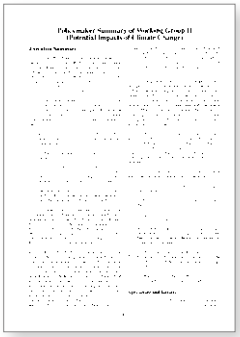
SUB THEMES	INDICATOR	NO.	EXAMPLES OF UNDERLYING DATA POINTS
1.3 TRACKING, REPORTING, AND DISCLOSURE	FIs report on their overall approaches to climate risk management in line with international good practices (e.g. TCFD)	5	The FI has published their approach to Climate Risk Management in their Annual Report or other. (yes/no)
		6	To what extent does the approach cover the TCFD thematic areas (governance, strategy, risk management, and target/metrics)?
		7	If the FI has not published their approach to Climate Risk Management, have they established a timeline by which they will begin to align their reporting with such practices? (yes/no)
	FIs identify, measure, and report on exposure to sectors which are vulnerable to climate risks	8	The FIs stress testing of the MSME portfolio include climate-related physcial risk factors (such as 1.5°C climate scenarios) (yes/no)
		9	The FIs stress testing of its MSME portfolio includes climate-related transition risk factors (such as electrification scenarios) (yes/no)
		10	The FI discloses climate risk exposures in the MSME portfolio (i.e. Basel Pillar III disclosures). (yes/no)
		11	No. of MSME IGF loans recovered vs non-IGF*
		12	No. of non-performing MSME loans in IGF segments vs. non-IGF*
	FIs adopt and report on targets to reduce portfolio greenhouse gas (GHG) emissions on a regular basis	13	The FI has performance targets for GHG emission reductions of the MSME portfolio of clients. (yes/no)
	FIs adopt and report on targets to reduce exposure to climate change risks at the portfolio level on a regular basis	14	The FI has performance targets to reduce climate change risk exposure in the MSME portfolio (yes/no)
1.4 INSITUTIONAL CAPACITIES	FIs address in-house human capacities and technical know-how for dealing with climate-related financial risks and opportunities	15	The FI has defined the specific roles and responsibilities of senior management with regards to managing climate-related financial risks and opportunities (yes/no)
		16	No. of climate risk trainings performed with the board of directors.
		17	No. of climate risk trainings performed with senior management
		18	The FI has defined the specific roles and responsibilities of operational staff with regards to identifying, assessing and managing climate-related financial risks (yes/no)
		19	No. of climate risk trainings performed with the operational staff of the MSME departments.

* IGF loans are MSME credit instruments that qualify under the jurisdictions and definitions of qualifying sectors and activities (see Theme 3).

GENDER AND AGRICULTURE CONSIDERATIONS FOR IGF-RELATED CLIMATE RISKS

Climate change is a global problem, but the effects are most likely to adversely affect the global south,[18] and in those countries, the most at-risk populations are those that live near coastal areas, rural areas, and communities that rely on agriculture as a means of production. In most developing countries, women are a crucial labor force in the rural economy, and in many cases, women are the dominant gender involved in agricultural activities, thus rural women are at a heightened vulnerability to the risks of climate change.

Their adaptive capacity depends on geophysical, socioeconomic and political realities. The amount of resources and opportunities available to women, how women are empowered in economic and political processes, and the degree to which their community is exposed to natural hazards are among the critical factors in climate adaptation.[19]



Policymaker Summary of Working Group II (Potential Impacts of Climate Change

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The interlinked issues of climate change risk and gender differential impacts are most evident in the agriculture sector.

1/4

Globally, one-quarter of all economically active women are engaged in agriculture,[20] where they must contend with climate consequences such as crop failures, and less access to resources to cope (such as technology and finance).

The agriculture sector produces about a quarter of global greenhouse emissions worldwide, so climate change policy actions supporting gender equality in the agriculture sector will need to consider both mitigation and adaptation goals. The agency of rural female farmers is essential to enhance agricultural productivity and realize the SDGs. At the same time, climatic stresses on agriculture and food systems present formidable risk considerations for financing institutions.

In the context of climate change risks and vulnerabilities, gender issues considered important by policymakers may not yet be addressed by the existing reporting systems. Once national policy priorities are decided and the required depth of analysis is identified, then it is the task of statistical producers (i.e. third party data providers-statistics agencies, ESG data firms, and credit bureaus) to assess the existing data sources and propose modifications. This assessment should include the availability and quality of data, collection and analysis of sex disaggregated data, use of classifications and definitions that would allow for an accurate portrayal of climate change-induced risks, and the impact they have on women and other vulnerable groups in a particular area.

18 According to the International Panel on Climate Change (IPCC), two broad sets of regions appear most vulnerable to climate change: (i) some semi-arid, tropical and subtropical regions (such as Arabia, the Maghreb, west Africa, southern Africa, and eastern Brazil), and (ii) some humid tropical and equatorial regions (such as Southeast Asia and Central America). Reference “Policymaker Summary of Working Group II (Potential Impacts of Climate Change).” Available at: https://www.ipcc.ch/site/assets/uploads/2018/05/ipcc_90_92_assessments_far_wg_II_spm.pdf

19 Nyirongo, V. 2019. "UN Chronicle." Rural women’s economic empowerment and the road to 2030: agency for climate action. Available at: www.un.org/en/un-chronicle/rural-women%E2%80%99s-economic-empowerment-and-road-2030-agency-climate-action

20 UN Women. n.d. "SDG 13: Take urgent action to combat climate change and its impacts." Available at: https://www.unwomen.org/en/news/in-focus/women-and-the-sdgs/sdg-13-climate-action

MEASURING THE IMPACT OF EXTREME WEATHER EVENTS ON THE PHILIPPINE BANKING SECTOR

The Philippines is at the forefront of dealing with the negative effects of climate change. Over the past decade, extreme weather events, particularly super typhoons and intense monsoon rains, have hit the Philippines with increasing regularity. The scale and damage of these events reached an unprecedented magnitude in 2013 with the impacts of one of the most powerful tropical cyclones ever recorded - Typhoon Yolanda. These alarming events have prompted the Philippine government to take a closer look at the suitability of its disaster-resiliency and rehabilitation programs to mitigate the impact of such extreme weather events on the economy and the welfare of its people.

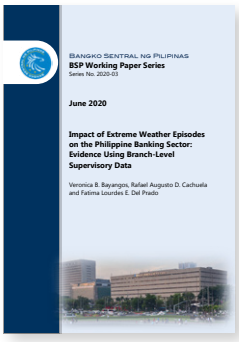
Apart from the cost in terms of forgone output, productivity losses, as well as fiscal and financial sustainability, extreme weather events also pose risks to the soundness of financial institutions and the stability of the overall financial system. The ability of financial institutions to mobilize finance in mitigating disaster impacts and preventing further macroeconomic spillovers is crucially relevant. From a policy perspective, their understanding of the role of access to finance after a natural catastrophe is equally important.

To this end, the Bangko Sentral ng Pilipinas (BSP) has been collecting and analyzing environmental and banking financial data to monitor the effects of extreme weather on the financial system's stability. A study published in 2020 by the BSP cross-referenced a national rainfall damage index (based on rainfall statistics from 53 weather stations across provinces provided by the Philippine Atmospheric, Geophysical and Astronomical Services Administration) with a supervisory dataset of over 92,000 branches across the Philippines to determine the correlation with the impact of extreme rainfall on the selected bank balance sheets and performance variables.

The results showed that in the 2014 to 2018 period, episodes of extreme weather conditions adversely impacted financial intermediation following the negative effects on the growth of deposits and loans, loan quality and profitability. In particular, the results found that savings and time deposit liabilities dropped while non-performing loans surged following extreme rainfall events during the period. These were particularly evident in regions most vulnerable to extreme rainfall episodes and branches of universal and commercial banks as well as with rural and cooperative banks.

These findings highlight the importance of having a framework for collecting data on climate risk impacts on the financial system. The analysis has implications on the development of their micro-prudential policy; BSP supervisors who take a view of the business plans, risk management, governance as well as capital and liquidity models of banks are better informed as to how and when to intervene, should safety and soundness be threatened by climate events.

The BSP noted that data availability and quality can be improved. A better quality of regional data that reflects the source of loan origination and further breakdowns in industry level datasets per region can be explored. Further efforts will be extended towards the accounting and recording of past due loans—pre and post-regulatory relief, which will provide greater transparency and a better validation of disaster relief policies of the government as well as more informed risk-based supervision of the banking system.



For the full report see: Bangko Sentral ng Pilipinas; BSP Working Paper Series No. 2020-03, "Impact of Extreme Weather Episodes on the Philippine Banking Sector: Evidence Using Branch-Level Supervisory Data."

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2 MEASURING FUNDING FOR INCLUSIVE GREEN FINANCE

Tamil women plucking tea leaves on plantation. Sri Lanka. (hadynyah/iStock)

Information about funding and financing needs to be considered once policymakers have a better understanding of the risks, challenges and opportunities for inclusive green finance. Questions such as "who will fund IGF initiatives?" and "how will they be financed?" need to be answered.

Data insights about the sources, availability and performance of inclusive green investments and available financing are increasingly becoming relevant in the AFI network. Mapping such flows and understanding how, for example, the SDGs are being financed and tracked by a variety of investors at the national level, contributes to forming a reliable and comprehensive picture.[21]

2.1 SUPPLIERS OF CAPITAL FOR IGF

The funding sources for IGF may come from a wide range of stakeholders, and thus, it should all be considered to form a holistic view of the state of investment and available capital. As depicted in the table below, sources of capital can be differentiated by private and public sources and may require different considerations when aggregating data on the situation of available and deployed capital for IGF initiatives.

21 Organisation for Economic Co-operation and Development. 2020. "Private Finance for Sustainable Development Conference." Shifting public and private finance towards the Sustainable Development Goals. Available at: https://oecd-development-matters.org/2020/01/09/shifting-public-and-private-finance-towards-the-sustainable-development-goals/

PUBLIC SOURCES OF CAPITAL FOR IGF

- Development Finance Institutions (DFIs)
  - Multilateral
  - Bilateral
  - National
- Government and their agencies (domestic financing through public budgets carried out by central, state or local governments and their agencies)
- National and Multilateral Sustainability and Green Funds
- NGOs

PRIVATE SOURCES OF CAPITAL FOR IGF

- Commercial financial institutions (i.e. green loans to MSMEs)
- Institutional investors (asset managers, pension funds, foundations with a sustainability focus)
- Private equity and venture capital funds
- Foundations
- Informal sources such as friends, relatives, non-registered lenders

BLENDED FINANCE

- Mobilization of equity or debt capital from public or philanthropic sources to catalyze private sector investments by reducing or offsetting risk and return investment barriers.
- Usually set-up as investment funds or vehicles blending public and private investors, often with accompanying technical assistance components.

2.2 MEASURING THE PROVISION OF CAPITAL FOR IGF

The different actors involved in undertaking a transaction need to be defined to identify the potential data and information sources to capture the amount of funding for inclusive green finance that may be happening in a jurisdiction. The actors presented in Figure 3 may be involved in the funding and financing of initiatives for IGF and may potentially provide important data on the overall provision of investment capital for IGF (both debt and equity).

The types of financing instruments and the reporting requirements may vary considerably; for example, data about private equity investments into MSMEs will likely not be easily obtainable under current reporting regimes.

Double counting of overlapping initiatives also needs to be considered; for example, capital that is appropriated for climate adaptation programs by a national agency will usually be channeled to the banking system through the respective national DFIs or through impact funds. The recipient local banks then on-lend earmarked funds to the public. In this situation, data about investment capital appropriated to a DFI should not be aggregated together with bank credits disbursed, as this would overstate the amount of investments into IGF.

An example of this "on-lending" approach is the Global Climate Partnership Fund (GCPF)[22] established by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMU) and KfW Entwicklungsbank in 2009 (managed by responsAbility Investment AG). Investors in the fund comprise a set of DFIs, foundations and institutional investors. Its purpose is to provide debt financing for energy efficiency and small-scale renewable energy projects in developing countries, either directly financing small-scale projects of up to 30 MW or indirectly through local banks. One local example of how the GCPF operates is with Bank Promerica in Costa Rica, which has leveraged GCPF funding for energy impact investments in Costa Rica and finances energy-efficient bus fleets, solar panels, industrial boilers and biomass projects.[23]

Hence, while SMEs and corporates can receive direct financing from local and foreign investment funds or development agencies[24] and from local banks, micro enterprises and individuals will rely on local banks, MFIs and the informal sector to fund their green finance needs (purchasing a home solar system, clean cooking appliances, etc).

2.3 PUBLIC SOURCES OF CAPITAL FOR IGF

Climate is at the core of the development strategies of development finance institutions and government agencies.

27.2%

For example, in 2019, the Organization for Economic Cooperation and Development (OECD) allocated 27.2 percent (USD33 billion) of its bilateral Official Development Assistance (ODA) towards climate-related projects, a remarkable increase from less than USD5 billion in 2005, and USD20 billion in 2010.

Over 2018-19, 45 percent of those climate-related funds had mitigation objectives, 25 percent had adaptation objectives, and 30 percent pursued both.[25]

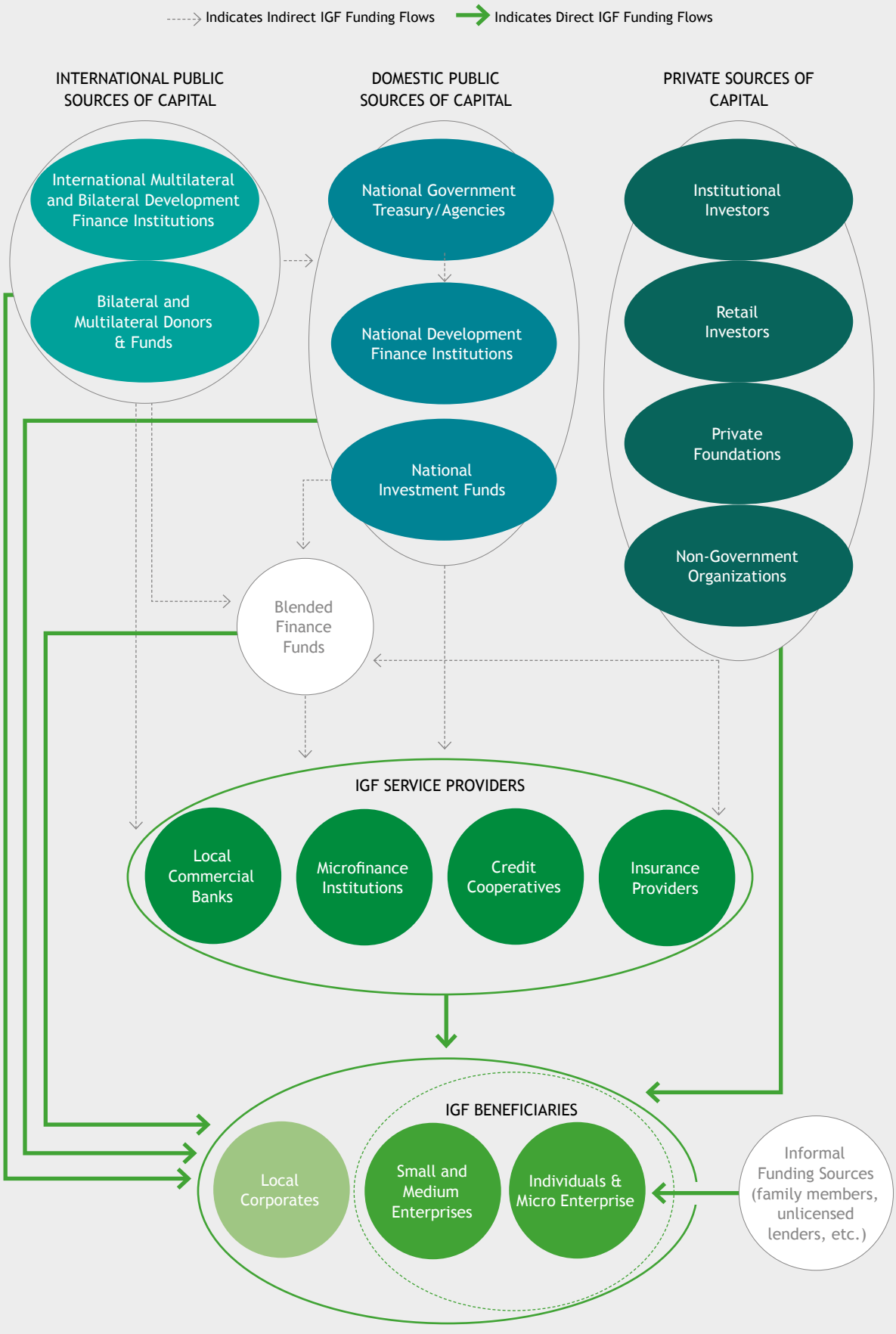
22 The Global Climate Partnership Fund is a blended finance vehicle dedicated to financing projects that demonstrate a reduction of 20 percent of GHGs. It finances projects, both directly and indirectly, via local financial institutions. For more information, see the Global Climate Partnership Fund's "Investing in renewable energy and energy efficiency." Available at: https://www.gcpf.lu/investing-in-renewable-energy-and-energy-efficiency.html

23 For more information, see the Global Climate Partnership Fund's "GCPF partners with Promerica Costa Rica" article. Available at: https://www.gcpf.lu/investing-in-renewable-energy-and-energy-efficiency.html

24 In Kenya, for example, the US Development Finance Corporation financed the development of Sanergy, an SME involved in the circular economy, transforming waste into insect-based protein for the poultry and fish farming sectors.

25 Organisation for Economic Co-operation and Development. n.d. "Climate Change: OECD DAC External Development Finance Statistics." Available at: https://www.oecd.org/dac/financing-sustainable-development/development-finance-topics/climate-change.htm

FIGURE 3: MAP OF IGF INVESTMENT FLOWS AND POTENTIAL DATA STAKEHOLDERS



APPLYING A GENDER LENS TO IGF INVESTMENT DATA

Sex disaggregated data is a rather recent concern among policymakers, public, and private institutions, and is especially incomplete when considering the impact that climate finance has on building gender-differentiated climate resilience, adaptation, and mitigations programs.

According to the UN, out of the 231 unique indicators in the SDG framework, 114 are environment-related, and only 20 of these provide for gender-specific or sex disaggregation (9 percent) of the total. There is no gender data systematically available for indicators under eight of the nine environment-related SDGs.

An OECD survey on integrating gender in environmental policies showed that only 11 of the 38 OECD member countries were collecting gender-disaggregated data related to the environment and environmental policymaking.[26]

Although some investors active in climate finance are starting to collect data on the impact of their financing on women as required by their investors, it is governments, development financial institutions or even retail investors that are collecting such data.

From 2000 to 2019, USD546 billion in development assistance from OECD countries had a Rio Marker[27] (including concessional and non-concessional climate-related development finance from bilateral, multilateral and private philanthropic sources). Less than one-third of this funding had a gender equality marker, be it as the principal objective of the funding (USD10 billion) or a significant one (USD141 billion). Sixty-two percent was provided in the form of loans, 32 percent in grants, and only one percent in the form of equity, shares and mezzanine finance.

26 Organisation for Economic Co-operation and Development. 2021. Gender and the Environment: Building Evidence and Policies to Achieve the SDGs. Available at: https://www.oecd.org/environment/gender-and-the-environment-3d32ca39-en.htm

27 Since 1998, the OECD's Development Assistance Committee (DAC) has monitored development finance flows targeting the objectives of the Rio Convention through its creditor reporting system by the use of "Rio markers." A background on the Rio markers is available at: https://www.oecd.org/dac/environment-development/Annex%2018.%20Rio%20markers.pdf

FIGURE 4: OECD CLIMATE-RELATED DEVELOPMENT FINANCE COMMITMENT DATA (USD BN)

Source: OECD DAC External Development Finance Statistics (2000-2019).
*This dataset includes climate-related development finance from bilateral, multilateral and private philanthropic sources (both concessional and non-concessional).

2.3.1 MULTILATERAL GREEN FUNDS

Public sector financing agencies across countries often join forces and resources to address climate change. A number of green funds are being funded by a diversified set of DFIs and development agencies. The Global Environment Facility's Least Developed Countries Fund (LDCF) and Adaptation Fund (AF) were some of the first such funds set up globally that targeted elements of climate change action. Since then, several other significant multilateral funds have been set up, the following are two of the most well-known climate funds today:

THE GREEN CLIMATE FUND

The Green Climate Fund (GCF) defines itself as "the world's largest climate fund mandated to support low-emission, climate-resilient development pathways" and is a critical element of the historic Paris Agreement. It works as an operating entity of the United Nations Framework Convention on Climate Change (UNFCCC) financial mechanism. As of July 2021, 34 contributors have pledged USD10 billion for the GCF, which invests in climate mitigation, concentrating on: 1) the built environment; 2) energy & industry; 3) human security, livelihoods, and well-being; and 4) land-use, forests and ecosystems.

The GCF's approach to climate action includes:[28]

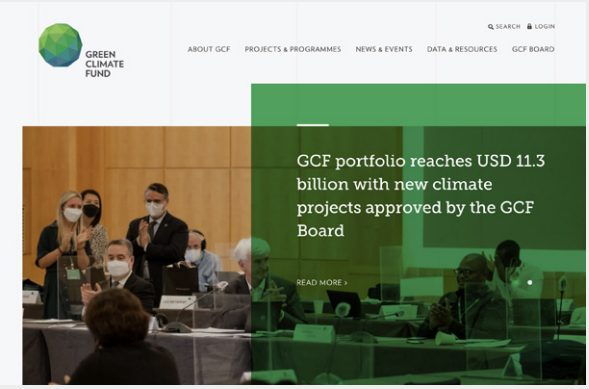
- Transformational planning and programming: by promoting integrated strategies, planning and policymaking to maximize the co-benefits between mitigation, adaptation and sustainable development.
- Catalyzing climate innovation: by investing in new technologies, business models, and practices to establish a proof of concept.
- De-risking investment to mobilize finance at scale by using public resources to improve the risk-reward profile of low emission climate-resilient investment and crowd-in private finance, notably for adaptation, nature-based solutions, least developed countries (LDCs), and small island developing states (SIDS). The GCF employs part of its funds to help mobilize financial flows from the private sector to compelling and profitable climate-smart investment opportunities, and can structure its financial support to developing countries through a flexible combination of grants, concessional debt, guarantees, or equity instruments to leverage blended finance and crowd-in private investment for climate action.
- Mainstreaming climate risks and opportunities in investment decision-making to align finance with sustainable development: by promoting methodologies, standards and practices that foster new norms and values.

As a climate-first fund, GCF data monitoring has mostly prioritized the amount of greenhouse gas emissions avoided and captured, and the number of people impacted.

Through its MSME Pilot Program,[29] the GCF aims to provide financing for MSMEs at all stages of growth and allocated up to USD200 million for the program. The GCF does not issue portfolio-wide data on MSME support, however, a Heinrich-Böll-Stiftung study[30] found 11 GCF funding programs specifically target MSMEs, while an additional 52 funded activities offer support to MSMEs.

They are mostly channeled through regional or international development banks. Others are channeled through local banks: for instance, the GCF provided XacBank, one of Mongolia's leading banks, with a loan to support Mongolian MSMEs investing in energy efficiency and renewable energy projects. At least half of the financial support will go towards women-led MSMEs.[31]

Similarly in Fiji, the GCF provided the Fiji Development Bank with USD5 million to support its agro-photovoltaic project enhancing solar and renewable energy, climate-resilient agriculture, and also promoting gender equity and social inclusion.[32]



> **Link: https://www.greenclimate.fund/**

28 See the Green Climate Fund's 2021 annual report. Available at: https://www.greenclimate.fund/sites/default/files/document/20220412-arr2021.pdf

29 See the Green Climate Fund's MSME Pilot Program. Available at: https://www.greenclimate.fund/msme

30 O. Reyes and L. Schalatek. 2022. "Green Climate Fund - Private Sector Finance in Focus Briefing 2: MSMEs." Heinrich-Böll-Stiftung. Available at: https://us.boell.org/sites/default/files/2022-03/hbs%20Washington_GCF-PrivateSector2_MSME%20briefing_final.pdf

31 Green Climate Fund. n.d. "FP028 MSME Business Loan Program for GHG Emission Reduction." Available at: https://www.greenclimate.fund/project/fp028

32 See "The Ovalau Agrophotovoltaic Project, Part 2 - Inclusive Green Finance Implementation in Fiji." Available at: https://www.youtube.com/watch?v=QJ38LsSx4MM

CLIMATE INVESTMENT FUNDS

Established in 2008, Climate Investment Funds (CIF) is one of the world's largest (USD10 billion) and most ambitious multilateral climate finance mechanisms for developing countries seeking to shift to low carbon and climate-resilient development, and accelerate climate action. It leveraged USD65 billion in co-financing from the private sector, DFIs, and governments in the projects it supports.

Improving the resilience and mitigation of climate change in MSMEs and agroforestry companies or strengthening early warning systems and disaster preparedness are some of the projects they have developed in developing countries.

- Works in partnership with governments, the private sector, civil society, local communities, and six major Multilateral Development Banks (MDBs). The CIF seeds climate action through governments, the private sector, civil society organizations, and six MDBs: The African Development Bank (AfDB), Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), Inter-American Development Bank Group (IDB), and the World Bank Group, including the International Finance Corporation (IFC).
- In 2021, recognizing the strong demand from recipient countries, the G7 committed up to USD2 billion in additional resources for the CIF.

Like the GCF, the CIF does not yet communicate specific data regarding IGF. Its impact is measured in terms of tons of GHG avoided and captured, and the number of people and businesses impacted.

- Link: https://www.climateinvestmentfunds.org

DUTCH ENTREPRENEURIAL DEVELOPMENT BANK (FMO)

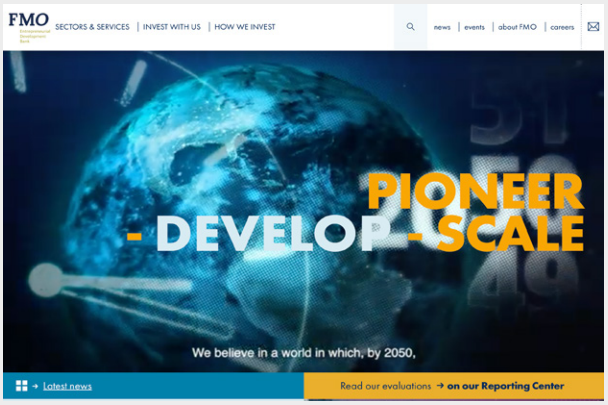
FMO, the Dutch Development Agency, for instance, is active at various levels:

Indirect investments

- Fund of funds: FMO is an investor in the above-mentioned GCPF,
- Local bank refinancing: In early 2022, for instance, FMO provided a EUR30 million loan facility to Sekerbank, in Turkey, earmarked for SMEs in the agriculture supply chain.

Direct investments

- FMO invested USD10.5 million to support Yalelo, a sustainable tilapia farm in Zambia encouraging sustainable business growth, lower greenhouse gas emissions, and Yalelo's social impacts.



- https://www.fmo.nl/

2.3.2 BILATERAL DEVELOPMENT ASSISTANCE PROGRAMS THROUGH DFIs

Bilateral support through government development banks has been active in promoting inclusion and climate finance, and often offers grants and matching funds. They frequently invest in local or international impact funds, through local banks, or have direct investments in local corporates or SMEs to build-up a supply of capital for such initiatives.

Such programs can be a valuable source of data for the jurisdictions where the programs are deployed and should be considered as a potential source or mobilizer of capital for IGF.

2.3.3 CENTRAL BANK REFINANCING FOR IGF

Refinancing operations are a core monetary policy tool providing liquidity to credit institutions, and are a major potential source of funding for IGF. Following the 2008 financial crisis and also during the coronavirus pandemic, several central banks extended the maturity of their lending under these special programs and have targeted lending by offering reduced interest rates for bank refinancing of loans to particular segments of the economy, which could potentially include green and inclusive segments.

Leading think tanks have repeatedly called for the introduction of climate considerations into targeted refinancing operations, and civil society groups have offered proposals for the greening of the European Central Bank (ECB) Targeted Longer-Term Refinancing Operations (TLTROs) and the Bank of England's Funding for Lending Scheme (FLS).[33]

Currently, very few central banks have refinancing facilities specifically for green or inclusive-themed projects. Bangladesh Bank (BB) is an example of an AFI member where a specific refinancing facility is available for green projects (see the BB case study in section 3). The Central Bank of Jordan (CBJ) is another example of an AFI member that provides a facility for subsidized loans for nine sectors deemed critical to development, including renewable energy and agriculture, with SMEs being one of the target recipients.[34]

Reporting data about the use of refinancing facilities is well understood globally and has been a critical part of central bank operational reporting, however, the quality of FI reporting regarding the use of funds for themed facilities is a deep concern for regulators. BB noted they have had mixed success with these themed facilities, citing concerns about the lack of complete information on eco-friendly initiatives from banks which access the facilities.[35]

These data challenges will continue to be of concern to regulators until a climate risk management framework is well-established by FIs.

2.4 POTENTIAL PRIVATE SOURCES OF CAPITAL FOR IGF

According to the latest 2020 "Annual Impact Investor Survey" of the Global Impact Investing Network (GIIN), the impact investment market grew to a market size of USD715 billion in 2019.

54% Asset managers account for 54 percent of industry assets under management (AUM), while pension funds and insurance companies manage three percent of total directly invested AUM, as do diversified financial institutions.

Foundations and family offices account for smaller proportions of total AUM.[36]

2.4.1 IMPACT INVESTMENT FUNDS

Impact investment funds can be active in debt and equity, and claim impacts on a various range of SDGs. According to the GIIN, private debt investments represented around USD253 billion with private equity representing roughly USD125 billion, however, it is difficult to find information on the amount dedicated to climate and gender. These funds usually have one main impact objective, i.e. they are either climate-first or gender-first and sometimes have the other as a secondary objective.

33 For more information, see "The Case for Climate Objectives in Central Banks' Targeted Refinancing Operations," Council on Economic Policies, 2021. Available at: https://www.cepweb.org/the-case-for-climate-objectives-in-central-banks-targeted-refinancing-operations/

34 Alliance for Financial Inclusion. 2020. "Inclusive Green Finance Policies for MSMEs." Available at: https://www.afi-global.org/publications/inclusive-green-finance-a-survey-of-the-policy-landscape-second-edition/

35 The Business Standard. 2021. "Central bank seeks eco-friendly project details for refinancing." 3 Feb. Available at: https://www.tbsnews.net/economy/banking/central-bank-seeks-eco-friendly-project-details-refinancing-196462

36 Asian Development Bank. 2021. "Financing a Green and Inclusive Recovery." Theme Chapter of the Asian Development Outlook. Available at: https://www.adb.org/sites/default/files/publication/692111/ado2021-theme-chapter.pdf

For example, the Climate-Smart Food Systems investment fund of responsAbility Investment AG is a climate-first fund that provides debt investment to companies in the agricultural value chain, contributing to mitigating climate change. Formalizing a gender thesis was a prerequisite for the junior investors of this fund. The gender indicators applied to this fund relate to the number of women employees, women talent retention, and women's participation in climate smart agriculture training. The climate indicators tracked are GHG emissions reductions, number of hectares, number of farmers reached, water saved, and food loss reduction.

On the other hand, Women's World Banking (WWB) Capital Partners Funds[37] are a gender-first investment fund; Although some of the companies in their portfolio may qualify for green finance, this is not the criteria that is tracked. WWB developed the "Gender Performance Initiative" which measures an institution's current state concerning internal gender diversity and external client outreach and consists of 40 questions. The resulting reporting presents an overall gender diversity result, which includes an evaluation of the investee companies' ability to reach and effectively serve women clients, and provides recommendations for improvement.[38]

The implications for policymakers are that investment funds may have multiple impact objectives so there needs to be awareness of double-counting investments when aggregating funding data in particular segments.

2.4.2 FINANCIAL INSTITUTIONS

Banks and MFIs may dedicate part of their portfolio to green and gender-inclusive finance. Their motivations to monitor such attributes usually stem from the following:

- Regulatory requirements (e.g. European Sustainable Finance Disclosure Regulation,[39] or green lending quotas from Bangladesh Bank[40])
- Rating agencies
- Investor's reporting requirements

Bangladesh Bank's journey with financial inclusion and climate change.

> View here

In most AFI jurisdictions, there are no regulatory requirements for banks to track ESG factors or performance in their portfolios, and the catalyst for producing sustainability reporting often arises from the financial institutions' investors.

For example, AmeriaBank, one of the leading commercial banks in Armenia, has voluntarily reported on green financing of more than USD200 million in renewable energy and energy efficiency projects since 2009 with the support of various international financial institutions and impact investors such as FMO, EBRD, Proparco, IFC, OeEB and the Global Climate Partnership Fund (GCPF).

The GCPF's resources invested in AmeriaBank are earmarked toward the green portfolio of the bank. In addition, the GCPF organizes training for the bank to identify its green portfolio, launch green products, and evaluate the GHG reduction potential. Though the fund does not explicitly target gender equality, it requires that the financial institution's partners report data on borrowers on a sex-disaggregated basis. Although these funds rarely go as far as tracking the ownership or the leadership of the SMEs financed, disaggregated data will only be reported on the retail portfolio.

One of the challenges to applying a gender lens, however, is that the criteria of women-owned or women-led SMEs often varies according to local legislation. The 2X Challenge, for example, only recently brought a tentatively unified definition for their stakeholders; women-owned SMEs being defined as companies whose ownership belongs to at least 51 percent of women, or that are founded by women, and women-led SMEs being companies in which women represent at least 30 percent of either the senior management or the board of directors or the investment committee.[41]

37 See the WWB Asset Management Initiative at Women's World Banking. Available at: https://www.womensworldbanking.org/asset-management/

38 See the WWB Gender Assessment Methodology. Available at: https://www.womensworldbanking.org/take-action/gender-assessment-methodology/

39 See the European Supervisory Authorities Joint Committee Final Report on "Draft Regulatory Technical Standards" with regard to the content, methodologies, and presentation of sustainability-related disclosures. Available at: https://www.eiopa.europa.eu/document-library/technical-standard/final-report-draft-regulatory-technical-standards_en

40 See the Alliance for Financial Inclusion's 2018 report on "Bangladesh Bank's journey with financial inclusion and climate change." Available at: https://www.afi-global.org/publications/bangladesh-banks-journey-with-financial-inclusion-and-climate-change/ ado2021-theme-chapter.pdf

41 See the "2X Challenge: Financing for Women" criteria. Available at: https://www.2xchallenge.org/criteria

2.4.3 THEMATIC BONDS

Thematic bonds are emerging as major sources of financing for green and social projects and can be grouped into three main categories:

- Green (climate bonds, water bonds, and blue bonds)
- Social (affordable housing bonds, gender bonds, education bonds, and food security bonds)
- Sustainability bonds that contain both green and social elements

Thematic bond proceeds are used for eligible projects with positive environmental and social outcomes. Transition bonds have begun to emerge as well to help high-emitting "brown industries" such as steel and mining reduce their emissions. According to the Climate Bond Initiative, annual green bond issuance reached USD522.7 billion in 2021, a 75 percent increase on prior year volumes, cumulating to a total of USD1.6 trillion.[42] The International Capital Market Association outlined a full taxonomy of eligible bonds and developed distinct green bond principles, social bond principles, sustainability bond guidelines, and sustainability-linked bond principles to improve consistency and integrity for policymakers, issuers, and investors.[43]

21% Twenty-one percent of the 2021 green bond volume originated from emerging markets.

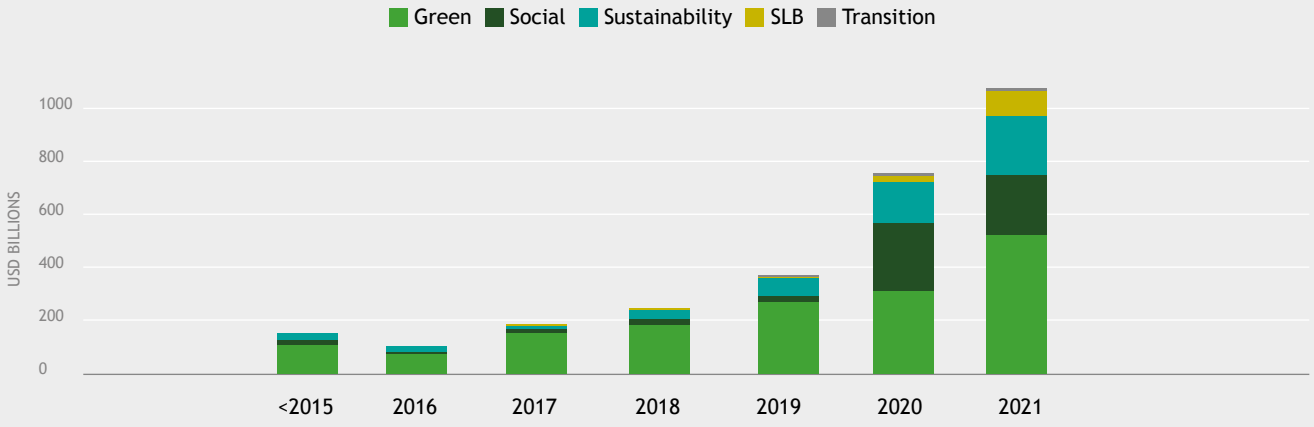
For instance, in 2020, AmeriaBank successfully issued the first-ever green bond in Armenia, in line with the SDGs. The bank established a Green Bond Framework, consistent with the International Capital Market Association (ICMA) current Green Bond Principles (GBP).[44]

42 Climate Bonds Initiative. 2021. "Sustainable Debt, Global State of the Market." Available at: https://www.climatebonds.net/files/reports/cbi_global_sotm_2021_02h_0.pdf

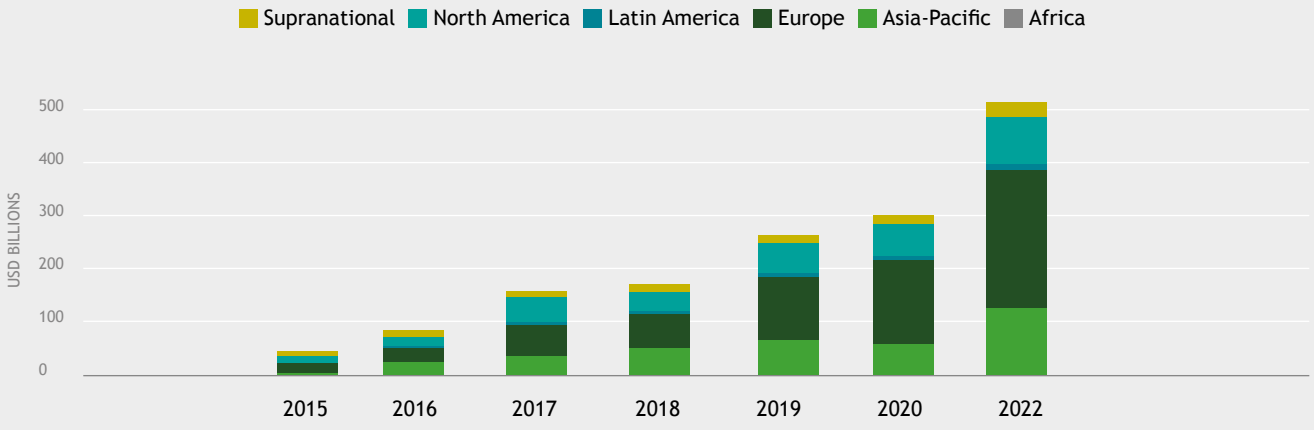
43 Asian Development Bank. 2021. "Financing a Green and Inclusive Recovery." Theme Chapter of the Asian Development Outlook. Available at: https://www.adb.org/sites/default/files/publication/692111/ado2021-theme-chapter.pdf

44 See AmeriaBank 2020 Annual Report. Available at: https://ir.ameriabank.am/docs/default-source/annual-reports/annual-report2020-eng.pdf

GSS+ DEBT VOLUME SURPASSED USD1TN IN 2021



HALF OF THE 2021 GREEN VOLUMES ORIGINATED FROM EUROPE



Source: Climate Bonds Institute

In 2020, Symbiotics used its bond issuance platform (Micro, Small & Medium Enterprises Bonds S.A. to arrange its first Inclusive Green Bond of USD7.75 million for Pan Asia Banking Corporation, a prominent commercial bank in Sri Lanka. The proceeds of the green bond targeted, amongst others, sustainable agriculture, renewable energy, and energy efficiency projects.[45]

The Philippines is also very active in the green and sustainability bond market. As of May 2022, total issued foreign currency denominated green, social and sustainability (GSS) bonds reached USD3.2 billion (excluding the issuances of the national government) while peso-denominated GSS bonds reached PHP179.24 billion.[46]

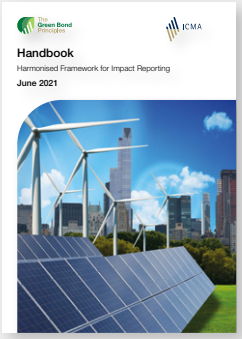
Asia leads in markets for green sukuks, or Islamic bonds,[47] which use their proceeds to fund environmentally friendly projects while observing Sharia restrictions. The first green sukuk was issued by Malaysia in June 2017.[48]

In July 2017, Bank Negara Malaysia (BNM) formulated a set of guidelines, value-based intermediation (VBI), promoting real economic activities resulting in positive social and environmental benefits. And in July 2022, the Securities Commission Malaysia (SC) launched the Sustainable and Responsible Investment linked (SRI-linked) Sukuk Framework, to facilitate fundraising by companies by addressing sustainability concerns aimed at enabling them to transition into a low-carbon or net zero economy.[49]

Debt raising through bond issuances presents an opportunity for obtaining IGF data. Issuers are usually encouraged to put in place a formal internal process for the allocation of proceeds linked to their lending and investment operations for green or inclusive projects and to report on the allocation of proceeds.

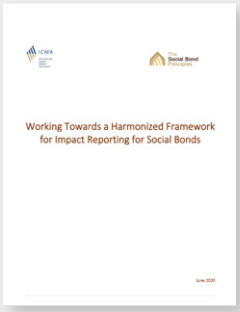
The ICMA's Social Bonds Principles suggest tracking the number of loans to women-owned SMEs, number of equal paying jobs created for women and other under-represented gender groups, unemployment rate for women, number of loans to women-owned micro-enterprises, number of women using technology products, and proportion of women in management positions. They also stipulate indicators for green (e.g. GHG emissions reduced or avoided, or the amount of renewable energy generation). Leveraging these reports can provide deeper insights into the situation of funding availability and effectiveness for IGF.

ICMA RESOURCES ON HARMONIZING BOND REPORTING DATA



Green Bond Principles: A Harmonized Framework for Impact Reporting

> View here



Social Bond Principles: A Harmonized Framework for Impact Reporting

> View here

2.5 IGF INVESTMENT AND IMPACT DATA REPORTING

Key understandings for regulators to be able to collect investment and impact data on IGF include: i) where reporting data is available or already collected; ii) what data falls into "blind spots"; iii) what type of data that is already being collected by the different stakeholders; and iv) who those stakeholders are. The World Economic Forum identifies eight key stakeholders involved in ESG data collection: companies, standard setters, assurance providers, data providers, investment banks, investors, regulators, and research and knowledge management organizations.[50]

45 Symbiotics launches first USD7.75 million Green Bond with Pan Asia Banking Corporation. Available at: https://symbioticsgroup.com/symbiotics-launches-first-usd-7-75-million-green-bond-with-pan-asia-banking-corporation/

46 See the Philippines Securities and Exchange Commission's "Sustainable Finance Market Update 2022. Available at: https://www.sec.gov.ph/cm-sustainable-2022/sustainable-finance-market-update-as-of-31-may-2022/

47 Asian Development Bank. 2021.

48 Southeast Asia Infrastructure. 2021. "Asian Development Outlook 2021: Financing a green and inclusive recovery - Southeast Asia Infrastructure." Available at: https://southeastasiainfra.com/asian-development-outlook-2021/

49 Malaysia International Islamic Finance Centre. 2022. "Securities Commission Malaysia releases new Sukuk framework to facilitate companies' transition to net zero." Available at: https://www.mifc.com/-/sc-releases-new-sukuk-framework-to-facilitate-companies-transition-to-net-zero?redirect=%2Fvalue-based-intermediation

50 World Economic Forum. 2019. "Seeking Return on ESG: Advancing the Reporting Ecosystem to Unlock Impact for Business and Society." Available at: https://www.weforum.org/whitepapers/seeking-return-on-esg-advancing-the-reporting-ecosystem-to-unlock-impact-for-business-and-society

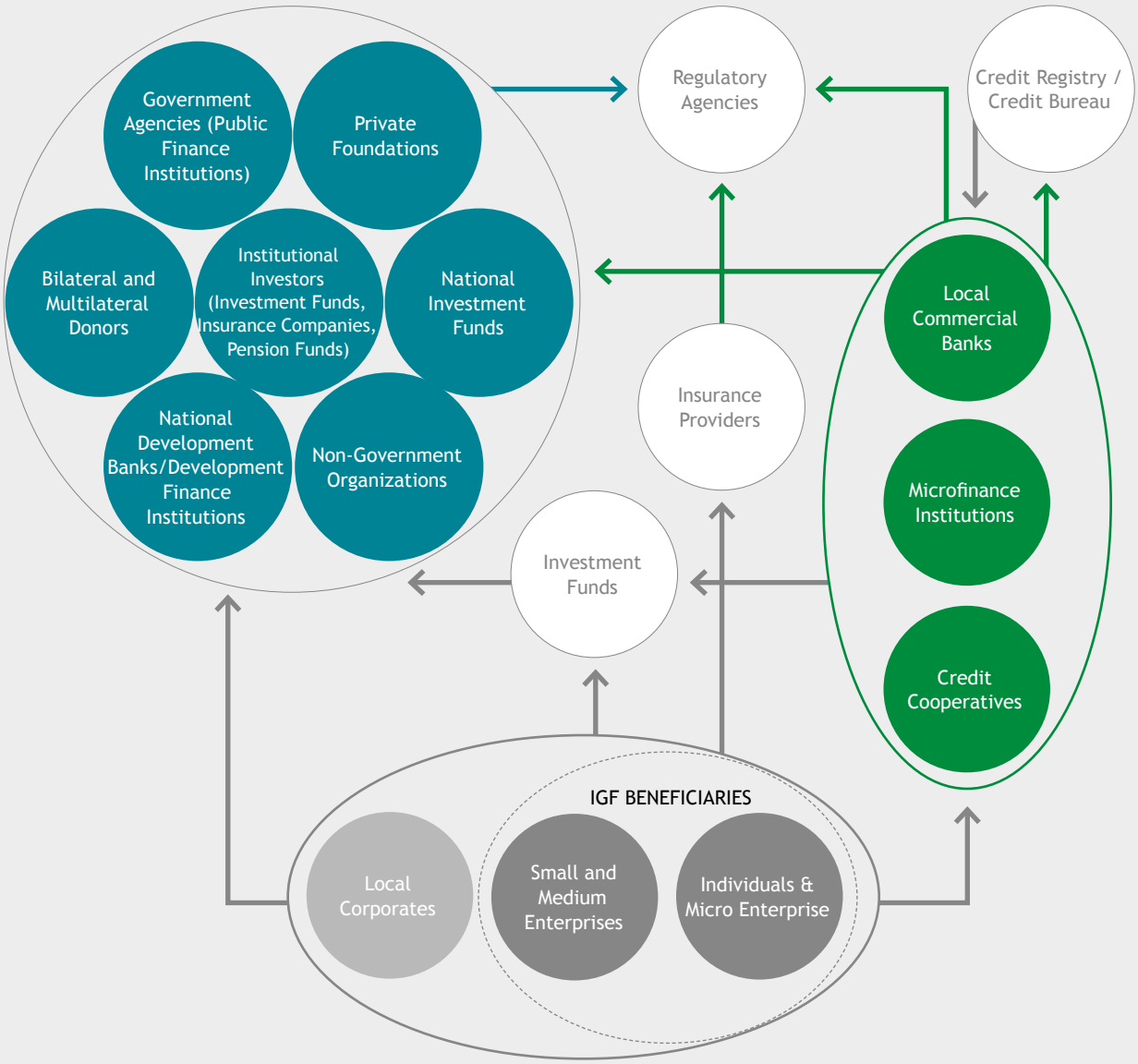
All suppliers of capital will report data to their investors, those subject to regulation to each one of their regulators, those subject to financial audit, their auditors, local regulated FIs and non-bank FIs, and the credit bureau or credit registry (for credit activities only).

The figure below maps the data flows, where the data comes from, and who is the recipient of such data:

However, part of the data is in a "blind zone," for instance, equity and debt investments from non-impact funds, whose investments may fall unintentionally into a climate or gender scope, but do not track the purpose of the investment. Also, international investment funds and in most cases, local investment funds, whether equity or debt, do not report their activity to local regulators and even less so to credit bureaus. And lastly, the lack of access to inclusive green finance for unbanked individuals and MSMEs cannot be tracked through the data flows of financial intermediaries and would require field surveys.

As financial institutions and investment funds also do not track their loan rejections (especially in a sex-disaggregated way), the lack of funding, and reason for rejection falls in the blind zone as well.

FIGURE 5: FINANCIAL PERFORMANCE AND IMPACT DATA FLOWS



As depicted in Figure 6, the depth and nature of the data provided differs significantly depending on both the nature of the data provider and the requirements of the data recipient, and does not always capture the intersection between inclusion, gender and climate:

2.5.1 GREEN AND SUSTAINABILITY INVESTMENT-RELATED DISCLOSURE TO REGULATORS

Until recently, the reporting requirements of financial sector regulators were concerned mostly with financial data and did not capture impact data. However, regulators started to implement sustainability-related disclosure requirements in some legislation to improve transparency in the market for sustainable investment products, prevent greenwashing, and increase transparency around sustainability claims made by financial market participants. The EU, for instance, is implementing a Sustainable Finance Disclosure Regulation (SFDR) and setting up ESG disclosure standards for financial market participants.[51] This has been applicable since March 2021, and imposes comprehensive sustainability disclosure requirements covering a broad range of ESG metrics at both the entity and product-level. Financial market participants must disclose 18 mandatory indicators and choose at least two additional indicators among 46 optional

FIGURE 6: EXAMPLES OF POTENTIAL IGF FUNDING DATA SOURCES AND USERS

DATA RECIPIENTS

DATA PROVIDERS	CREDIT BUREAU / CREDIT REGISTRY	LOCAL REGULATOR	VEHICLE REGULATOR	AUDITORS
MFIs	Volume Invested in Debt Performance of the loan	> Prudential Data > Financial Data	-	Financial Data
LOCAL BANKS	Volume Invested in Debt Performance of the loan	> Prudential Data > Financial Data	-	Financial Data
COOPERATIVES	Volume Invested in Debt Performance of the loan	> Prudential Data > Financial Data	-	Financial Data
LOCAL INVESTMENT FUNDS	-	> Prudential Data > Financial Data	-	Financial Data
INTERNATIONAL INVESTMENT FUNDS	-	-	> Prudential Data > Financial Data	Financial Data
INSURANCE COMPANIES	-	> Prudential Data > Financial Data	> Prudential Data > Financial Data	Financial Data
NGOs	-	-	-	Financial Data

indicators. The mandatory SFDR indicators are divided in two main groups: nine environment-related indicators and six mandatory social and employee, respect for human rights, anti-corruption and anti-bribery indicators. Currently, all large companies are subject to SFDR reporting requirements. However, the commission is proposing to extend the scope to include SMEs with securities listed on regulated markets, except for listed micro-enterprises. Listed SMEs would use simpler standards to meet their legal reporting obligations, while non-listed SMEs could choose to use them voluntarily.[52]

51 European Supervisory Authorities Joint Committee. 2020. Joint Committee on draft Regulatory Technical Standards. Available at: https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Draft%20Technical%20Standards/2021/962778/JC%202021%2003%20-%20Joint%20ESAs%20Final%20Report%20on%20RTS%20under%20SFDR.pdf

52 European Commission. 2021. "Questions and Answers: Corporate Sustainability Reporting Directive proposal." Available at: https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_1806

DATA RECIPIENTS

IMPACT INVESTORS (DFIS, IMPACT INVESTMENT FUNDS, NGOS…)	GENERAL INVESTORS	DONORS	CERTIFICATION AGENCIES
> Impact Data > GHG Saving Data > Gender Data > Financial Performance Data > Sector Data	> Financial Performance Data > Sector Data	> Impact Data > GHG Saving Data > Gender Data	> Impact Data > GHG Saving Data > Gender Data
> Impact Data > GHG Saving Data Gender Data > Financial Performance Data > Sector Data	> Financial Performance Data > Sector Data	> Impact Data > GHG Saving Data > Gender Data	> Impact Data > GHG Saving Data > Gender Data
> Impact Data > GHG Saving Data > Gender Data > Financial Performance Data > Sector Data	> Financial Performance Data > Sector Data	> Impact Data > GHG Saving Data > Gender Data	> Impact Data > GHG Saving Data > Gender Data
> Impact Data > GHG Saving Data > Gender Data > Financial Performance Data > Sector Data	> Financial Performance Data > Sector Data	> Impact Data > GHG Saving Data > Gender Data	> Impact Data > GHG Saving Data > Gender Data
Impact investors (DFIs, Impact Investment Funds, NGOs…)	> Financial Performance Data > Sector Data	> Impact Data > GHG Saving Data > Gender Data	> Impact Data > GHG Saving Data > Gender Data
> Impact Data > GHG Saving Data > Gender Data > Financial Performance Data > Sector Data	> Financial Performance Data > Sector Data	> Impact Data > GHG Saving Data > Gender Data	> Impact Data > GHG Saving Data > Gender Data
> Impact Data > GHG Saving Data > Gender Data > Financial Performance Data > Sector Data	-	> Impact Data > GHG Saving Data > Gender Data	> Impact Data > GHG Saving Data > Gender Data

2.5.2 CREDIT BUREAUS AND CREDIT REGISTRIES

In many jurisdictions, MFIs and banks are required to provide credit data to a national credit registry or credit bureaus. Credit registries tend to be public entities and are usually managed by central banks or financial supervision agencies. In contrast, credit bureaus tend to be privately-owned and operated companies. The data collected is usually related to individuals and consumer credits. Unfortunately, they are usually not sector specific nor sex-disaggregated, and often only contain data on outstanding and non-performing loans.[53]

Credit bureaus and registries currently capture data only on the beneficiaries of loans, and do not consider information about equity investments, insurance or carbon certificates. In addition, the data captured is only from the point of view of those who already have access to finance, and not those who lack finance.

Effective credit reporting systems can mitigate several market failures that are common in financial markets around the world, and most severely apparent in less developed economies.[54] If they keep track of sector-specific and gender-disaggregated data, for example, by using a commonly accepted definition of women-owned and women-led SMEs or green finance products and sectors, they could not only lower the risk of default and improve the allocation of new credit but also serve as a key resource for policymakers in terms of information on the debt supply.[55] Credit bureaus and registries, therefore, present an opportunity for IGF data, but there are currently many limitations in the generation of the relevant data.

2.5.3 DATA REPORTED TO INVESTORS

In the ecosystem of impact measurements, investees act as data producers and investors as data consumers.[56]

89% Eighty-nine percent of impact investors (impact investment funds, DFIs and IGOs) use specific external systems, tools and frameworks for reporting their climate and gender portfolio metrics to their investors and donors.[57]

According to the GIIN, the most commonly used impact measurement and management resources used by investors are the SDGs[58] (73 percent), the IRIS Catalog of Metrics[59] (46 percent), IRIS+ Core Metrics Sets[60] (36 percent), and the Impact Management Project's five dimensions of impact convention[61] (32 percent).

Impact data sources, which may include relevant financial data for regulators that is reported to investors, however, may not contain the whole picture. For example, when MFIs and local banks obtain specific climate-related funding in the form of debt, they are required to report to their lender (investment funds, DFIs, MDBs, etc.) a certain set of indicators related to the use of those funds. Thus, the other climate related lending activities of the FI's portfolio may not be captured by the funder, and consolidated impact data from funders may not represent the entirety of IGF funding being utilized by an FI. Cross-referencing data from FI annual reports and impact investors reports may be necessary to account for this.

2.6 CHALLENGES WITH INVESTMENT DATA

Consequently, one of the main challenges is the exhaustivity of available data and the possibility of some of the investment streams towards IGF not being actively captured or tracked by any of the data collectors, or being collected in an unstructured way by various entities.

The other main constraint relates to the comparability of data. The ADB highlights in its annual outlook that collecting meaningful data is a challenge and there is a crucial need for common standards and coherent guidelines for measurement and reporting: "While there is some consensus on green impact indicators, based on scientifically measurable observations, such as reduced emissions of GHG, improved water quality, and greater biodiversity in a specific locality, no internationally agreed standards exist yet for impact measurement."[62]

53 M. Rothemund and M. Gerhardt. 2011. "An analysis of a survey of credit bureaus in Europe." European Credit Research Institute. Available at: http://aei.pitt.edu/33375/1/ACCIS-Survey_FinalReport_withCover.pdf

54 World Bank. 2011. "Global Financial Development Report." Background on credit bureaus. Available at: https://www.worldbank.org/en/publication/gfdr/gfdr-2016/background/credit-bureau

55 Ibid.

56 Asian Development Bank. 2021.

57 Global Impact Investing Network. 2020. "Annual Impact Investor Survey." Available at: https://thegiin.org/assets/GIIN%20Annual%20Impact%20Investor%20Survey%202020.pdf

58 See "Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development." Available at: https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%202022%20refinement_Eng.pdf

59 See IRIS+ System and Standards. Available at: https://iris.thegiin.org/metrics/

60 See IRIS+ Core Metrics Sets. Available at: https://s3.amazonaws.com/giin-web-assets/iris/assets/files/guidance/20190507-IRIS-FND-Core%20Metrics%20Sets_r8.pdf

61 See Impact Frontiers, "Five dimensions of impact." Available at: https://impactfrontiers.org/norms/

62 Asian Development Bank. 2021.

There is still a lack of collaboration between stakeholders to agree on common units of analysis and more specifically on IGF leading to a lack of common impact and investment metrics and a scarcity of consistent and reliable data. Some efforts are being done in this regard: International Finance Corporation principles[63] offer initiatives that engage existing ESG models at the fund level, as do SDG standards at the deal level. The European Union's regulations on non-financial information disclosure and consultation on sustainable disclosure under the International Financial Reporting Standards[64] is another significant step toward common standards.

Some transnational networks, such as the Impact Management Project, work to consolidate existing competing international, regional, and national standards.[65] The Global Landscape of Climate Finance states that, "Wherever possible, use project-level data to check and select flows. Project-level information is more likely to provide verifiable details on project characteristics, instruments, destinations of financing and financing structures. Where project-level data is not available or insufficiently complete, aggregated data must be used."[66]

63 See "Operating Principles for Impact Management." Available at: https://www.impactprinciples.org/

64 European Financial Reporting Advisory Group. 2021. "European Sustainability Reporting Standards." Available at: https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSiteAssets%2FCOP26%2520EU%2520side%2520event%2520-%25204%2520Nov%2520-%2520PTF%2520ESRS%2520overview%2520%28slides%29.pdf

65 Asian Development Bank. 2021.

66 Climate Policy Initiative. 2019. "Global Landscape of Climate Finance." Available at: https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2019/

FIGURE 7: IGF MEASUREMENT FRAMEWORK FOR THEME 2

THEME 2: IGF FUNDING

SUB THEMES	INDICATOR	NO.	EXAMPLES OF UNDERLYING DATA POINTS
2.1 INTERNATIONAL GREEN/ CLIMATE FUNDING	Availability of International Capital for IGF	1	Total amount of inclusive green funding pledged/committed/raised for the country (through bond issues, investment funds and development banks)
	Direct Financing from Blended Finance Programs	2	Amount committed for MSME lending segments
		3	Amount disbursed for MSME lending segments
	Direct Financing from Public Programs	4	Amount committed for MSME lending segments
		5	Amount disbursed for MSME lending segments
	Direct Financing from Private Investors	6	Amount committed for MSME lending segments
		7	Amount disbursed for MSME lending segments
2.2 NATIONAL GREEN/CLIMATE FUNDING	DFI Directed Lending Facilities for MSME/ Green Segments	8	Amount approved/committed for Green MSME lending segments (wholesale and/or direct)
		9	Amount disbursed for MSME lending segments
	Funding for Green Credit Guarantee Schemes Covering MSME Segments	10	Amount committed/approved for MSME Green loans
		11	Amount disbursed for MSME lending segments
	Central Bank Climate Refinancing Facilities	13	No. of loan applications received
		14	No. and volume of loans disbursed
		15	No. and vloume of loans outstanding
		16	No. and volume of loans recovered

3 MEASURING THE PROVISION OF IGF PRODUCTS AND SERVICES

Environment engineer Thailand. (image/iStock)

The collection of access, usage and performance data on financial products and services provided by regulated entities is a core role of financial supervisors, however, few regulators have differentiated inclusive green segments. While at this time, there are no definitive benchmarks for inclusive green finance, there are several relevant green finance and financial inclusion initiatives that the members of the AFI network are developing.

Each jurisdiction will have its priorities for financing sustainability and promoting financial inclusion, but the following insights and resources may prove useful for considering what an inclusive green finance supply-side data monitoring and measurement framework might look like.

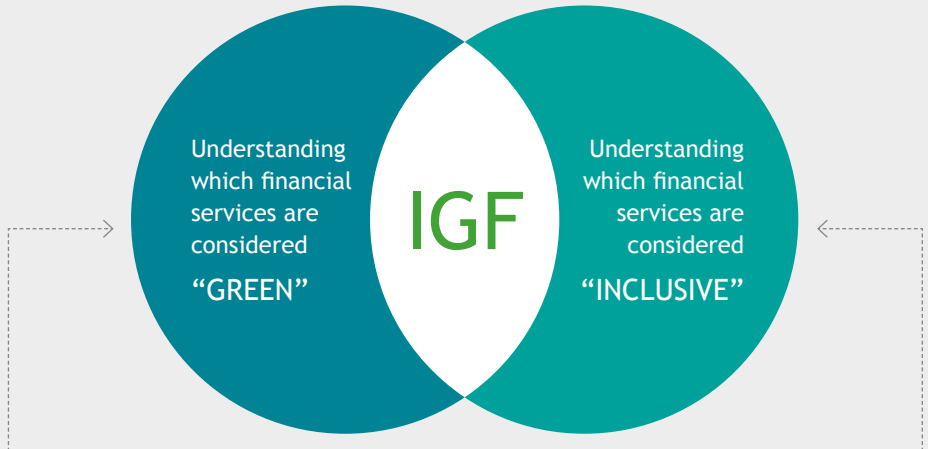
Regulators need to define the nexus of inclusive and green finance so that FSPs can report on how inclusive green financial services are being accessed and used.

AFI resources on understanding Inclusive Green Finance

> View here

Throughout the AFI network, many regulators have been collecting data from FSPs relating to the state of financial inclusion for some time, in much the same manner as data has been collected relating to assessing the stability of the financial system. On the green finance side, a few jurisdictions have adopted green definitions which are defined through a national taxonomy or industry guidelines and which may present opportunities to cross-reference reporting to measure the provision of inclusive green products and services (see the Bangladesh case study in page 39).

FIGURE 8: DEFINING THE NEXUS OF INCLUSIVE GREEN FINANCE PRODUCTS AND SERVICES



CONNECTED/DEFINED/PRIORITIZED IN GREEN OR SUSTAINABLE FINANCE ROADMAPS

- Green Taxonomy (for defining in-scope economic activities)
- Environmental Social Risk Guidelines (for defining/ disclosing risks)
- Green Loan Principles
- Green Bond/ESG Investing Guidelines (for defining investment capital)
- Economic Sector Prioritizations for Climate adaption mitigation

CONNECTED/DEFINED/PRIORITIZED IN NATIONAL FINANCIAL INCLUSION STRATEGIES

- Poverty Definitions
- Geographic/Demographic Priority Areas
- MSME Definitions
- Financial Services Categories
- Priorities from Gender Action Plans

The following categories of financial services and products are presented from an IGF perspective which can serve as examples of what might be relevant for an IGF data reporting framework:

3.1 MEASURING THE PROVISION OF IGF IN LENDING SEGMENTS

MSMEs are major drivers of local economies, thus, they play a potentially significant role in strengthening a country's resilience to climate change and can also contribute to climate change mitigation.[67] This includes making a transition to renewable energies, adopting green technologies as well as contributing to the low-carbon value chain. Therefore, ensuring the uptake of credit services for these segments is critical. The challenge is that tracking the debt financing of such initiatives can be complicated as there are numerous sources and categories of MSME finance. The following highlights examples of specific credit services and indicators that may be relevant to an IGF data reporting framework:

SME LENDING

SMEs upgrading their production processes for energy efficiency, switching to renewable energy sources, diversifying to climate-friendly inputs, and shifting production to climate-friendly products or climate-sensitive services are all examples of the use of loan funds that may qualify as "green" cap-ex loans.

Additional AFI Resources on MSME and Gender Inclusive Finance Data Collection

> View here

MICROFINANCE

Microcredit makes it possible for the poor to build-up assets and adapt to climate change. These products allow borrowers to diversify their sources of income and build adaptive capacity against climate shocks.[68]

67 Alliance for Financial Inclusion. 2020. "Inclusive Green Finance Policies for MSMEs."

68 A. Dowla. 2009. "Climate Change and Microfinance." Grameen Foundation. Available at: https://grameenfoundation.org/documents/Climage-Change-and-Microfinance_Asif-Dowla.pdf

FIGURE 9: CONSIDERING CREDIT INSTRUMENTS IN THE CONTEXT OF THE 4P FRAMEWORK

4P FRAMEWORK	TYPE OF IGF SERVICE	PRODUCT EXAMPLES	POTENTIAL DATA SOURCES	POTENTIAL DATA USERS	EXAMPLE OF SUPPLY-SIDE SEX-DISAGGREGATED DATA INSIGHTS
PROVISION	Microfinance lending	Renewable energy and energy efficiency loans Disaster preparedness loans	MFIs and Cooperatives	Microfinance Supervisor Disaster and Emergency Services	Loan approval rates between men and women (individuals)* Amounts disbursed
PROVISION	Smallholder agriculture lending	Climate-smart value chain lending programs	MFI, Cooperatives, and lending facilities Guarantee schemes Rural credit rating agencies Farmer's associations	Microfinance Supervisor Environmental Agencies	Loan approval rates between men and women (applicants)* Amounts disbursed
PROVISION	SME Green lending	Loans to finance specific eligible green projects*	Commercial banks DFIs	Banking Supervisor National Planning/ Development Commissions	Loan approval rates between men and women-led SMEs Amounts disbursed

* Problems persist with microfinance gender disaggregation household vs individual data.

For example, microcredit can provide much-needed cash to prepare for hazardous events, such as building more resilient houses.[69] Microcredit has proved effective not only in strengthening livelihood activities in preparation for eventualities but also in rebuilding livelihoods after a disaster. Additionally, access to credit for women provides the most vulnerable with additional cash, which can be particularly effective in restoring livelihood activities or repairing assets following a hazardous event. Disaster resilience microfinancing programs are increasingly taking a gender-sensitive approach and monitoring systems should take this into account.[70]

AGRICULTURE FINANCE

The agricultural sector, in particular, offers a huge opportunity for inclusive, economic growth, particularly in developing countries. With sufficient financing for sustainable and climate-smart production systems, the sector can unlock enormous economic potential while achieving several of the UN SDGs.[71] Worth noting is that the majority of women reside in rural areas, with the agriculture sector as the major source of livelihoods in many developing countries. Classifying lending in priority agricultural sectors (i.e. loans to grow certain crops that have been identified or defined as climate-resilient or "climate-smart") will be a key feature of measuring progress on IGF. The World Bank calls on jurisdictions to develop processes for classifying agricultural projects and portfolios that achieve positive climate outcomes based on a set of accurate climate-smart metrics.[72]

3.2 MEASURING THE PROVISION OF DIGITAL FINANCIAL SERVICES IN THE CONTEXT OF IGF

Digital financial services (DFS) play an important role in financial inclusion by providing a cost-efficient way to reach the most vulnerable with financial services that help strengthen their resilience and better prepare for any hazardous event.[73]

Payments are also a channel for delivering humanitarian assistance after a disaster. Cash transfer programming is a form of humanitarian response that provides for basic needs and can also protect, establish, or restart livelihoods and economic activities following a hazardous event.[74]

In addition, the uptake of financial services opens channels for the distribution of social payments offering an opportunity for greater financial inclusion. The use of these financial services enables disaster risk finance flows that help to smooth household consumption during and after a disaster and to prepare for such events.

AFI Resources on Defining DFS Data Indicators

> View here

Empirical studies across the African continent have shown that mobile money services which facilitate person-to-person (P2P) and government-to-person (G2P) payments help households smooth their consumption in the face of unpredictable events, such as health or weather disasters.[75] Payment platforms can also be an important tool for smallholder farmers particularly exposed to climate risks.

In some instances, the use of mobile money was found to increase the resilience of women to environmental shocks in agro sectors, such as droughts, soil degradation, and the destruction of crops.[76]

Relevant DFS and payment data related to gender-inclusive green finance may require gender-disaggregated data from both the supply and demand-side.

The AFI DFS "basic set" proposes three categories of reporting data that can be standardized: access to DFS; usage of DFS; and the quality of DFS offerings to users which can be leveraged to measure its usage in the context of a climate emergency or disaster.

69 Alliance for Financial Inclusion. 2021.

70 Inter-American Institute for Cooperation on Agriculture. 2021. "Microfinancing as a mechanism to increase climate resilience in rural women in Dominica." Available at: https://www.iica.int/en/press/news/micro-financing-mechanism-increase-climate-resilience-rural-women-dominica

71 World Bank. 2016. "Making Climate Finance Work in Agriculture." Available at: https://documents1.worldbank.org/curated/en/986961467721999165/pdf/ACS19080-REVISED-OUO-9-Making-Climate-Finance-Work-in-Agriculture-Final-Version.pdf

72 Ibid.

73 Alliance for Financial Inclusion. 2021.

74 International Federation of Red Cross and Red Crescent Societies. n.d. "Types of Disasters: Definition of Hazard." International Federation of Red Cross and Red Crescent Societies. Available at: https://www.ifrc.org/what-disaster

75 Alliance for Financial Inclusion. 2020. "Inclusive Green Finance: From Concept to Practice."

76 K. Afawubo, M. Couchoro, M. Agbaglah, and T. Gbandi. 2019. "Mobile money adoption and households' vulnerability to shocks: Evidence from Togo." Applied Economics Volume 52, 2020 - Issue 10. Available at: https://doi.org/10.1080/00036846.2019.1659496

FIGURE 10: CONSIDERING DIGITAL PAYMENT SERVICES DATA IN THE CONTEXT OF THE 4P FRAMEWORK

4P FRAMEWORK	TYPE OF IGF SERVICE	PRODUCT EXAMPLES	POTENTIAL DATA SOURCES	POTENTIAL DATA USERS	EXAMPLE OF SUPPLY-SIDE SEX-DISAGGREGATED DATA INSIGHTS
PROVISION	Government and Welfare Payments	Mobile-Based and e-payment solutions	PSPs, FinTechs, and Telcos	Payment Services Regulator	No. of women with a registered mobile money or e-money accounts
PROVISION	P2P Money Transfer				

3.3 MONITORING RISK SHARING INSTRUMENTS THAT SUPPORT IGF

AFI Resources on Defining Disaster Resilience

> View here

Access to insurance allows the most vulnerable to protect their assets, livelihoods and lives by sharing or transferring disaster risks to third parties. Examples of risk-sharing and risk-transfer mechanisms that can protect beneficiaries against adverse effects of climate change include microinsurance, crop insurance, credit guarantees and other non-life insurances.

SME CLIMATE INSURANCE

Natural catastrophes and climate change have an impact on the SME sector by affecting infrastructure, business continuity and employee health and safety. Firstly, destruction of infrastructure including damage to business premises or required transport infrastructure can be a severe source of financial stress for SMEs. Secondly, SMEs can be confronted with the related disruption of business that is triggered by damage along the value chain (e.g. losses of raw materials or inventory). Thirdly, disasters can harm employees, either with immediate injuries or much later due to water-borne diseases, such as malaria or epidemics.[77] Obtaining data from insurance providers about the types of climate insurance products and the number of policies issued in those respective categories will start to inform the level of financial protection these segments have in the face of climate change-induced negative effects.

MICRO INSURANCE AND INDEX BASED SERVICES

Interest and support for addressing climate risk through insurance-related products is growing among governments and regulators. Sole proprietors who make up the majority of the world's informal-sector workers are often excluded from social protection schemes, which may require special insurance protection in times of climate-related disaster.

Index insurance schemes (schemes that pay out claims based on a predetermined index such as rainfall, rather than individual claims assessment) have great potential to lower costs and scale IGF protection. Many jurisdictions have continued to pass or amend legislation to clarify that index insurance qualifies as insurance and is governed by insurance regulation.[78]

Tracking usage data from microinsurance providers, for example, about the volume and number of such policies is a rudimentary example of data that can form a baseline for scaling up climate microinsurance. The next level of indicators regarding quality and usage data will help regulators ensure minimum quality standards are being met with index-based decision making for example. In the Philippines, for example, microinsurance statistical data is collected by the insurance regulator on a quarterly basis however more specific information like type of claim (i.e. disaster-related) or gender type is not disaggregated yet in the regulatory reporting.[79]

77 Alliance for Financial Inclusion. 2020. "Promoting Inclusive Green Finance Initiative and Policies."

78 Micro Insurance Network. 2021. "The Landscape of Microinsurance." Available at: https://microinsurancenetwork.org/resources/the-landscape-of-microinsurance-2021

79 See the Philippines Insurance Commission Statistical Summary 2016-2020. Available at: https://www.insurance.gov.ph/summary-from-2016-2020/

FIJI'S WEATHER INDEX-BASED PARAMETRIC MICROINSURANCE PRODUCT

On 26 August 2021, the United Nations Development Fund's (UNCDF), Pacific Insurance and Climate Adaptation Program (PICAP)[80] together with the Fijian Government as well as support from the Governments of Australia, India, and New Zealand, launched Fiji's first climate risk parametric microinsurance product and digital on-boarding platform.

Notably, the first of its kind in the Pacific region, it provides affordable insurance to farmers through aggregators mainly to protect them from climate related events (heavy rain & strong winds). The microinsurance product is currently admitted for 12 months of pilot testing through the Reserve Bank of Fiji's FinTech Regulatory Sandbox.

The basic maximum cover for wind or wind and rainfall is FJD1,000, with a premium of FJD100 per year or less than FJD2 a week. Trigger events (wind speed, rainfall level) once determined, sets in motion the beneficiary pay-outs. No claims verification or loss assessors are needed once a trigger event is confirmed through digital onboarding and underwriting via aggregators as well as payouts via mobile money wallets. To date, the scheme covers more than 1,200 active beneficiaries from five aggregators in the sugar, rice, copra, and dairy sectors – 32 percent of which are women.

80 Underwritten by its partners, namely FijiCare Insurance Limited and Sun Insurance Limited.

CONSIDERATIONS FOR EXCLUDED GROUPS

Further inclusive nuances such as the unique protection needs and different preferences of insurance products between men and women should also be considered.

For example, in the context of agriculture climate resilience insurance, a study found that female farm managers were less likely to purchase agricultural insurance and more likely to invest in savings for emergencies.[81] It found that a rainfall insurance product appeals less to women than to men. While men and women are equally exposed to agricultural yield risk, women face additional sources of lifecycle risks, particularly health risks related to fertility and childcare, which are uninsured, and fall primarily on women.[82]

There is a growing trend towards sex-disaggregating data related to the uptake of inclusive insurance in the AFI network. For example, the Philippine Insurance Commission is supporting the development of health and other insurance products targeting single mothers, while supervisors from Ghana and the CIMA region are encouraging insurance products for women-owned or led MSMEs. However, data on women's risk management behavior, product preferences, distribution channels and insurance education are needed.[83]

81 C. Delavallade, F. Dizon, R. Vargas Hill, and JP. Petraud. 2015. "Managing Risk with Insurance and Savings : Experimental Evidence for Male and Female Farm Managers in the Sahel." World Bank Working Paper Series. Available at: https://openknowledge.worldbank.org/handle/10986/21393

82 K. Miles and M. Wiedmaier-Pfister. 2018. "Applying a Gender Lens to Climate Risk Finance and Insurance." InsuResilience Global Partnership. Available at: https://www.insuresilience.org/wp-content/uploads/2018/11/insuresilience_applygender_181128_web.pdf

83 Micro Insurance Network. 2021.

GREEN CREDIT GUARANTEES FOR MSME LENDING

AFI Resources on Green Credit Guarantees for MSMEs

> View here

Credit guarantees are another type of risk-sharing mechanism that is typically used to support credit extension to MSMEs. Credit guarantee schemes (CGS) enable third parties to absorb a lender's losses on loans made to MSMEs in return for a fee. Green credit guarantee schemes can be established to address market failures that prevent MSMEs from accessing credit for greening purposes at socially desirable levels.

The three primary monitoring and evaluation aspects were noted by AFI members in deploying credit guarantee schemes:

I. **Financial additionality:** the increase in loan volume (and often loan conditions) for targeted borrowers as a result of the scheme.

II. **Economic additionality:** the effect of increased access to finance. This could include, for example:
   a. At the business level: increased sales, investment, or innovation of supported MSME
   b. At the employment level: i.e. number of women employed
   c. At the environmental level: increased resilience to climate change effects, measurable reductions in pollution, or adaption and conversion to renewable inputs of production or technologies (i.e. photovoltaic energy usage, recycling, etc.

III. **Financial Performance:** This is the ability of a CGS to cover its costs whilst increasing leverage towards its target group. This requires reporting on the efficiency and health of the scheme's portfolios and will need to employ financial reporting metrics such as loss rates, recovery rates, guarantees at risk, operational efficiency key performance indicators, and portfolio quality metrics.

Monitoring the usage and extension of credit risk guarantees that are applied to agricultural loans received by female farmers or female-owned agriculture- related businesses may provide additional insights into gender equality in the context of climate risk. Other types of credit guarantees could be further explored to increase lending for resilience building, such as for housing loans, asset purchase loans, and business-related green loans.

FIGURE 11: CONSIDERING RISK SHARING INSTRUMENTS IN THE CONTEXT OF THE 4P FRAMEWORK

4P FRAMEWORK	TYPE OF IGF SERVICE	PRODUCT EXAMPLES	POTENTIAL DATA SOURCES	POTENTIAL DATA USERS	EXAMPLE OF SUPPLY-SIDE SEX-DISAGGREGATED DATA INSIGHTS
PROTECTION	Disaster Risk Microinsurance	Crop insurance Term life insurance Property insurance Livelihood insurance	Insurance providers Knowledge hubs Agriculture and Business associations	Insurance regulator Central bank	No. of women covered
PROTECTION	Business Disaster Insurance	Property Insurance Business Interruption Insurance		Insurance regulator Central bank	No. of female-women owned enterprises covered
PROTECTION	Risk Sharing and Risk Transfer Mechanisms	Green Credit Risk Guarantees	Guarantee scheme and Program providers DFIs	Insurance regulator Central bank	No. of female-women owned enterprises qualified

IGF AND THE AFI CORE SET

AFI Resources on Collecting and Measuring Financial Inclusion Data

> View here

AFI's Core Set of Financial Inclusion Indicators (the Core Set) is a limited set of quantitative indicators that capture the state of financial inclusion in a country. The indicators have been effectively used by many AFI members and can serve as a basis for a gender inclusive green finance measurement framework. Three dimensions in the core set were developed to provide deeper insights into the situation of financial inclusion. Adapting the core set with an overlay of "green" considerations and a "gender lens" may be useful to understand IGF-specific indicators.

DIMENSION	FINANCIAL INCLUSION CONCEPT	GREEN CONSIDERATIONS	GENDER LENS
ACCESS	Ability to use the services and products offered by formal financial institutions. Determining levels of access may require identifying and analyzing potential barriers to opening and using a bank account, such as cost or physical proximity of bank service points (branches, ATMs, etc.).	climate disaster-prone geographies Focus on green priority economic sectors	Sex-disaggregated reporting
USAGE	Depth or extent of financial services and product use. Determining usage requires gathering details about the regularity, frequency and duration of use over time.	Indicators related to disaster resilience and climate risk management	Sex-disaggregated reporting
QUALITY	Quality can be defined as a dimension that evaluates how financial services fulfil the needs of their users from different angles, including affordability, convenience, fair treatment, choice and other aspects related to consumer protection, financial education and other areas.	The extent of public support for green facilities (guarantee programs, technical assistance, concessionary interest rates, etc.)	Sex-disaggregated reporting

FIGURE 12: IGF MEASUREMENT FRAMEWORK FOR THEME 3

THEME 3: IGF PRODUCTS (SUPPLY SIDE)

SUB THEMES	INDICATOR	NO.	EXAMPLES OF UNDERLYING DATA POINTS	POTENTIAL FOR SEX-DISAGGREGATION
3.1 INTERNATIONAL GREEN/CLIMATE FUNDING	Financing of climate change mitigation projects	1	Number/volume of MSME loans disbursed for energy efficiency projects (i.e. projects that reduce energy use such as switching to energy efficient approached for lighting, buildings, and refrigeration)	✓
		2	Number/volume of MSME loans used for renewable energy projects (i.e. projects that support a switch to renewable energy sources)	✓
		3	Number/volume of MSME loans used for energy reduction projects (i.e. projects that improve improving water conservation by supporting behavioural change towards pollution and water use)	✓

FIGURE 12: *continued*

SUB THEMES	INDICATOR	NO.	EXAMPLES OF UNDERLYING DATA POINTS	POTENTIAL FOR SEX-DISAGGREGATION
3.1 INTERNATIONAL GREEN/CLIMATE FUNDING *continued*	Financing of resilience and adaptation activities	4	Number/volume of MSME agriculture loans granted in priority agriculture sectors (i.e. loans given for growing certain crops that have been identified or defined as climate resilient or "climate smart")	✓
		5	Number/volume of MSME loans for value chain/input diversification (i.e. supply chain financing for more climate resilient inputs)	✓
		6	Number/volume of MSME loans for climate responsive product design (i.e. development of new climate resilient goods or services, or consumer loans used for upgrading property for climate resilience)	✓
	Customer "Green" Awareness Building	7	Number of awareness building events held for MSME sector (i.e. No. of workshops, conferences, branch events, etc.)	
		8	Number of MSME participants in training/ sensitization workshops (i.e. formal and semi-formal trainings)	✓
3.2 DIGITAL FINANCIAL SERVICES	Access of Digital payment services in high climate risk/disaster prone areas/ geographies	9	Percentage of administrative units with agent outlet (province, local government or municipality level in priority areas)	
		10	No. of DFS agents per 10,000 adults in priority regions	
		11	Percentage of adult population with registered DFS accounts in priority areas	✓
		12	Number/volume of micro-loans issued through digital channels for greening products/ projects (i.e. solar home energy solutions, environmentally friendly cooking stoves, etc.)	✓
3.3 CREDIT ENHANCEMENT	MSME Green Credit Guarantees	13	Number/volume of qualifying MSME loans receiving credit guarantee approval	✓
		14	Calculation of financial additionality (Increase in overall loan volumes to green segments as result of scheme)	✓
		15	Number/volume of loss payouts	
3.5 CREDIT ENHANCEMENT	SME Climate Risk Insurance	16	No. of SMEs who have a climate/disaster risk insurance policy	✓
		17	Amount of claims payouts	✓
	Climate Event related Microinsurance services	18	No. of policies issued	✓
		19	Amount of claims payouts	✓
	Index-based climate risk agricultural insurance	20	No. of policies issued	✓
		21	Amount of claims payouts	✓
		22	Value covered by parametric insurance policies in the country	✓

MEASURING SUSTAINABILITY AND GREEN FINANCE IN BANGLADESH

Bangladesh Bank (BB) has made a steady effort to collect and share data on green finance, beginning in 2013, with the publication of the Sustainable Finance Department's "Quarterly Report on Green Banking Activities of Banks & Financial Institutions and Green Refinance Activities." The report was introduced not only for green banking activities but now also covers components of sustainable finance defined in their Sustainable Finance Taxonomy.

Policy Initiatives

Bangladesh Bank introduced a Sustainable Finance Policy in 2020 which requires all scheduled banks and FIs to form their Sustainable Finance Units. The additional data reporting requirements reflect a deeper review of the efforts of banks and FIs concerning people, planet and profit. Through this policy action, BB has also provided further guidance on sustainable finance to banks and FIs. All banks and FIs have to develop their sustainable finance policies and procedures. As part of the reporting guidelines issued by BB, FIs are to set their targets and report on progress in the following areas:

Environmental & Social Risk Management Practice	Capacity Building and Training for Sustainable Finance
Recovery and Rescheduling of Sustainable Finance	Environmental Conservation in Business Centers

Monitoring of Sustainable and Green Finance activities of Banks and Non-Bank Financial Institutions (NBFIs)

Reporting by banks and FIs is organized by the provision of the following categories of borrowers and types of sustainable finance (these must now be disaggregated by rural or urban categories and by gender):

Examples of Categories or Sectors of Borrowers	Examples of Types of Sustainable Finance
Agriculture	Working Capital and Demand Loans for Green Products, Projects, and Initiatives
Cottage, Micro, Small and Medium Enterprises	Socially Responsible Financing
Trading	Green Finance

Green finance activities are further defined into areas for the purposes of data collection, some examples include:

Renewable Energy	Liquid Waste Management	Environmentally Friendly Brick Production
Energy Alternative	Solid Waste Management	Green Agriculture
Efficiency Energy	Recycling and Manufacturing of Recyclable Goods	Green or Environmentally Friendly Establishments

Refinancing from BB in green products or sectors

To broaden the financing avenue for green products like solar energy, bio-gas plants and effluent treatment, BB established revolving refinance schemes. Examples of fund activity reporting are as follows:

Disbursement Data from Refinancing Schemes for Environmentally-Friendly Products and Initiatives	Disbursement Data from Technology Developments and the Upgradation Fund
Disbursement Data from Refinancing Schemes for Islamic Banks and Financial Institutions for Investments in Green Products and Initiatives	Disbursement Data from the Green Transformation Fund

BB's initiatives for environmental management

Bangladesh Bank also collects data about its internal sustainable banking activities and publishes this in its annual report, a practice which has been emulated by the rest of the country's banks and financial institutions. At the beginning of 2018, BB significantly revised its internal reporting format to include sex-disaggregated data on sustainable and green finance.

For the full report example see Bangladesh Bank's Sustainable Finance Department "2021 Quarterly Review Report on Sustainable Finance of Banks & Financial Institutions"

> View here

4 RECOMMENDATIONS FOR IMPROVING IGF DATA REPORTING

Harvesting coffee, Monteverde, Costa Rica. (Jeffry Arguedas/iStock)

GENERAL RECOMMENDATIONS

NO.	OBJECTIVES OR MEASURES	TIMELINE FOR IMPLEMENTATION
1	**Cooperate with other regulators and agencies where necessary** > Responsibility for the supervision of different financial service providers, funding institutions and environmental rules will vary from country to country. To obtain a unified view of IGF, regulators may work together to ensure that collected data sets are consistent and can be combined. > Statistical frameworks for climate finance-related indicators will be necessary. The abundance and complexity of climate-related data will require coordination with other government authorities (in the areas of, for example, the environment, finance and economic affairs), regulatory institutions, and national statistical offices.	Short-term
2	**Leverage ongoing international activities with respect to sustainable finance data** The central banking community is already playing a leading role in developing climate finance-related initiatives – especially those led by: > The Network for Greening the Financial System (NGFS) > The Financial Stability Board (FSB) > Various financial standard-setting bodies, including the Basel Committee on Banking Supervision (BCBS)	Short-term
3	**Close data gaps by improving data collection and dissemination activities** > Consider the use of digital data exchange with FIs (i.e. through the use of data portals and APIs) > Adhere to best practices for data protection and security control > Recognize the role of third-party data providers and emerging data technologies (such as artificial intelligence, machine learning, and web-scraping) > Disseminate insights and findings through public reporting > Involve credit bureaus and registries in IGF data collection.	Medium-term
4	**Standardize reporting across jurisdictions** > Climate change is a global problem which needs global coordination to be solved. The lack of uniformity in the data collected across institutions, markets and countries also presents a global challenge. The development of a common data lexicon remains a critical missing link in the harmonization of indicators, the unification of data sets, and the establishment of benchmarks for sustainable finance.	Long-term

THEME 1 – MEASURING IMPLEMENTATION OF CLIMATE RISK MANAGEMENT

NO.	OBJECTIVES OR MEASURES	TIMELINE FOR IMPLEMENTATION
1	**Coordinate and outline upcoming supervisory expectations with regards to FI climate-related and environmental risk management in MSME segments.** > Ensure the banking industry has guidelines for Climate Risk Management that applies to MSME segments covering the areas of: - Strategy and Governance - Policies and Procedures - Portfolio-level assessments - Capacity building > Announce a timetable for the required implementation (could be in phases)	Short-term
2	**Develop and require climate-related and environmental disclosure and reporting standards for SME and microfinance lenders and insurers.** Develop and codify standards that define the obligation to disclose current and forward-looking (scenario) climate and environmental risks by licensed entities at both the strategic and operational levels. > Publish (supervisory) guidance requiring financial institutions to disclose material climate and environmental risks under existing disclosure regimes (e.g. Basel Pillar 3). > Develop a strategy to fill data gaps and enhance the quality and availability of existing data. > Develop or make use of existing green or sustainability taxonomies to enhance the transparency and availability of data. > Communicate corporate climate-related disclosure expectations to industry (borrowers). > Consider mandating climate-related disclosure requirements for medium-sized enterprises.	Medium-term
3	**Monitor climate risks in MSME segments and conduct climate-related risk assessments.** > Develop standardized qualitative and quantitative data requests via surveys or templates from FIs (i.e. covering physical and transition risks). > Collect quantitative data on regional and sectoral exposures. > Collect qualitative data (e.g. interviews) on scenarios, transmission channels, the exposures of financial institutions, and current risk management practices. > Assess quantitative and qualitative information and map relevant climate and environmental risk transmission channels. > Determine the climate-related and other environmental exposures in the financial sector in terms of financial risks (including credit, operational, and market risks). > Determine which climate-related and environmental risks are most material in the jurisdiction. > Develop macro-prudential scenario modeling and set up vulnerability assessments of MSME sector exposures to the aforementioned identified climate risks.	Long-term

THEME 2 – MEASURING IGF FUNDING

NO.	OBJECTIVES OR MEASURES	TIMELINE FOR IMPLEMENTATION
1	**Obtain a view of the current and potential future sources of funding for IGF and aggregate data that are in the public domain.** > Obtain publicly available reporting data from relevant international climate funds, bond issues and programs that are operating in the local jurisdiction. > Define an investment size limit for which the investment can be considered "inclusive" (i.e. individuals and MSMEs). > Cross-reference green definitions that are applicable in the domiciles of investor jurisdictions.	Short-term
2	**Request specialized reporting from FIs.** > Funding received from international funds and investors for green lending: - Of which funding has been earmarked for a portfolio qualifying as inclusive according to the criteria defined above. > Funding received from local investment funds for green lending: - Of which funding has been earmarked for a portfolio qualifying as inclusive according to the criteria defined above.	Medium-term
3	**Undertake information exchanges with foreign regulators in investor jurisdictions about the investments qualifying as inclusive and green being deployed locally.** > Improve clarity around definitions of green investments and the size of investments being deployed in inclusive segments. > Identify relevant active investment funds in the country (international and domestic). > Obtain data on relevant thematic bond issues and the associated impact reporting data. > Determine the volume of green lending made in the recipient country (with considerations of funding committed vs. disbursed and indirect vs. direct sources). > Volume of qualifying inclusive and green equity investments made in the recipient country. > Volume of qualifying guarantees for inclusive green lending made in the recipient country.	Medium to Long-term
4	**Identification of the public with no or restrictive access to IGF.** > Identify regions and sub-regions where inclusive green finance volume are below average. > Perform field surveys on the appetite of the public for such instruments and the reasons for lack of access to inclusive green finance for unbanked individuals and MSMEs.	Short to Medium-term

THEME 3 – MEASURING THE PROVISION OF IGF PRODUCTS AND SERVICES

NO.	OBJECTIVES OR MEASURES	TIMELINE FOR IMPLEMENTATION
1	**Define the data collection process and determine supply-side reporting indicators.** > Provide guidance to industry on which industries and economic activities are considered in scope as "green" (i.e. green or sustainable national taxonomy). > Provide guidance to industry on which lending segments are considered "inclusive" (i.e. definitions for MSME segments, definitions for what is considered "women-owned or women-led" SMEs).	Short-term and ongoing
2	**Augment the current financial inclusion data collection framework to include indicators for qualifying "green" financial services.** > Define the specific qualifying green activities by sub-segments (e.g. individual, micro, small, medium, and agriculture enterprise level) that are aligned with national green policy priorities and require reporting against. > Integrate new green indicators into the current financial inclusion strategy and associated data collection framework that may already exist. > Consider inter-agency cooperation measures as this may apply across different regulatory authorities (i.e. commercial banking, microfinance, insurance, and payment services).	Medium-term
3	**Promote the collection and analysis of sex-disaggregated data.** Collecting sex-disaggregated data from FSPs and analyzing gender-differentiated effects can provide insights into closing the gender equality gap in the usage of micro credits and smallholder agriculture finance. Require sex-disaggregated reporting from FIs: > Microfinance credit disbursement. > Retail (consumer and SME) disbursement.	Medium-term

ACRONYMS

4P	Four Policy: Promotion, Provision, Prevention and Protection
ADB	Asian Development Bank
AF	Adaptation Fund
AfDB	African Development Bank
AFI	Alliance for Financial Inclusion
AUM	Assets Under Management
BIS	Bank of International Settlements
BB	Bangladesh Bank
BMU	German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
BNM	Bank Negara Malaysia
BSP	Bangko Sentral ng Pilipinas
CBJ	Central Bank of Jordan
CDP	Carbon Disclosure Project
CG	Credit Guarantee
CGS	Credit Guarantee Scheme
CIF	Climate Investment Funds
CIMA	Conférence Interafricaine des Marchés d'Assurances
DFS	Digital Financial Services
DFI	Development Finance Institution
EBRD	European Bank for Reconstruction and Development
ECB	European Central Bank
E&S	Environmental and Social
ESG	Environmental, Social and Governance
ESRM	Environmental and Social Risk Management
EU	European Union
FI	Financial Institution
FIDWG	Financial Inclusion Data Working Group
FJD	Fijian Dolar
FLS	Funding for Lending Scheme
FMO	Dutch Entrepreneurial Development Bank
FSB	Financial Stability Board
G2P	Government-to-Person
GCF	Green Climate Fund
GCPF	Global Climate Partnership Fund
GHG	Greenhouse Gas
GIIN	Global Impact Investing Network
GRI	Global Reporting Initiative
GSS	Green, social and sustainability
ICMA	International Capital Market Association
IDB	Inter-American Development Bank
IFC	International Finance Corporation
IGFWG	Inclusive Green Finance Working Group
IGF	Inclusive Green Finance
IGO	Inter Government Organization
LDCF	Least Developed Countries Fund
LDCs	Least Developed Countries
MDB	Multilateral Development Banks
MFI	Microfinance Institution
MSME	Micro Small and Medium Enterprises
MW	Megawatt
NBFI	Non-Bank Financial Institutions
NFIS	National Financial Inclusion Strategy
NGFS	Network for Greening the Financial System
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
OeEB	Development Bank of Austria
P2P	Person-to-Person
PHP	Philippines Peso
PICAP	Pacific Insurance and Climate Adaptation Program
SASB	Sustainable Accounting Standards Board
SC	Securities Commission
SDG	Sustainable Development Goals
SFDR	Sustainable Finance Disclosure Regulation
SIDS	Small Island Developing States
SRI	Sustainable and Responsible Investment
SME	Small and Medium Enterprises
TCFD	Task Force on Climate-related Financial Disclosures
TLTROs	Targeted Longer-Term Refinancing Operations
UN	United Nations
UNCDF	United Nations Development Fund
UNFCCC	United Nations Framework Convention on Climate Change
VBI	Value-based intermediation
WB	World Bank
WG	Working Group
WWB	Women's World Banking

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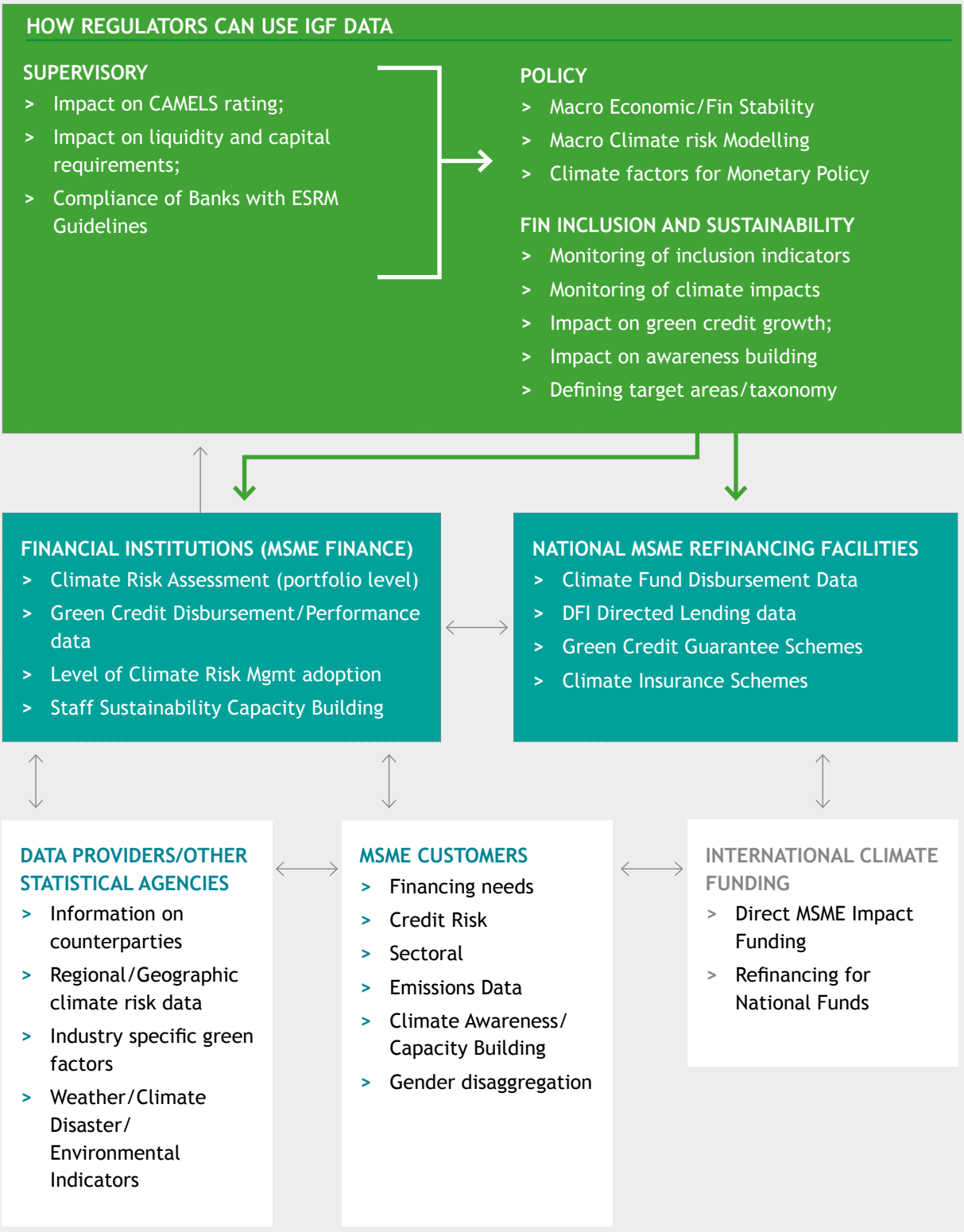
ANNEX

FIGURE 13: EXAMPLES OF VARIOUS TYPES OF IGF DATA AND HOW THEY CAN BE USED BY FINANCIAL REGULATORS



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