ROADMAP FOR INCLUSIVE GREEN FINANCE IMPLEMENTATION
BUILDING BLOCKS TO IMPLEMENT IGF INITIATIVES AND POLICIES
CONTENTS

EXECUTIVE SUMMARY 3

I. INTRODUCTION 5

II. SCOPE AND BACKGROUND 8
   1. Individuals and MSMEs in Focus 9
   2. Financial Inclusion & Sustainability - Two Sides of the Same Coin 10

III. ONE SIZE DOES NOT FIT ALL 11
   1. IGF Framework as Defense of the Public Good 12
   2. Towards Double Materiality 13
   3. The Costs of Doing Nothing 13

IV. BUILDING A HOLISTIC APPROACH TO IGF 15

V. POLICY TOOLS 33
   1. Advocacy for IGF 34
   2. Education and Capacity Building 35
   3. Financial Incentives 36
   4. Voluntary Standards & Recommendations 39
   5. Mandatory Regulations 41

VI. CHALLENGES OF IGF POLICY APPROACHES 44
   1. Challenges Relating to Specific Building Blocks 45
   2. Overarching Challenges 46

VII. CONCLUSIONS 47

REFERENCES 50

ANNEX 53

ACKNOWLEDGMENTS

This special report is a product of the Inclusive Green Finance Working Group (IGFWG) and the University of Luxembourg.

AFI sincerely thanks IGFWG Subgroup Leaders Sameh Sawafta (Palestine Monetary Authority) and Kabinda Kawesha (Bank of Zambia) and the Subgroup members: Golam Sarowar (Bangladesh Bank), Jeanne Neavyrimana (Banque de la République du Burundi), Cristian Vega (Superintendencia General de Entidades Financieras de Costa Rica), Walid Ali (Central Bank of Egypt), Marisela Rivas (Banco Central de Reserva de El Salvador), Tanele Ndlangamandla (Central Bank of Eswatini), Prudence Mnis (Ministry of Finance Eswatini), Patience Yeboa-Nkansah (Bank of Ghana), Khalid Hamdan (Central Bank of Jordan), Monica Arwings (Retirement Benefits Authority of Kenya), Ayudhaida Sulaiman (Bank Negara Malaysia), Mariyam Najeeba (Maldives Monetary Authority), Temuulen Khurelsukh (Financial Regulatory Commission of Mongolia), Najwa Mouhaoouri (Bank Al-Maghrib), Julião Nhantumbo (Banco de Moçambique), Postrick Mushandami (Bank of Namibia), Paul Oluikpe (Central Bank of Nigeria), Albert Mokis Ahlab (Bank of Papua New Guinea), Muhammad Elbead (Central Bank of Sudan), Maltie Kishna (Centrale Bank van Suriname), Salkou Kassama (Banco Central de Timor-Leste), Abrão Ximenes (Central Bank of Timor Leste), Hanhington Wasswa (Bank of Uganda), and Andrew John (Reserve Bank of Vanuatu).

Special thanks to AFI members who contributed to country cases: Golam Sarowar (Bangladesh Bank), Walid Ali (Central Bank of Egypt), Najwa Mouhaoouri (Bank Al-Maghrib), Ayudhaida Sulaiman (Bank Negara Malaysia), Oluikpe (Central Bank of Nigeria), Sameh Sawafta (Palestine Monetary Authority), and Rhodora Brazil-De Vera (Bangko Sentral ng Pilipinas).

This special report was a joint initiative between a team of authors coordinated by the ADA Chair in Financial Law (Inclusive Finance) at the University of Luxembourg with support by ADA and the Directorate for Development Cooperation and Humanitarian Affairs of the Ministry of Foreign and European Affairs of the Grand-Duchy of Luxembourg, and the Alliance for Financial Inclusion (AFI) Inclusive Green Finance Working Group (IGFWG), supported by the German Federal Ministry for Economic Affairs and Climate Action (BMWK).

The report was written by Prof. Dr. Dirk Zetzsche (ADA Chair in Financial Law - Inclusive Finance, University of Luxembourg), Prof. Dr. Ross P. Buckley (KWM & KPMG Law Chair in Financial Disruption, UNSW Sydney), Prof. Dr. Douglas W. Arner (Kerry Holding Professor in Law, University of Hong Kong), Johanna Nyman (Head of Inclusive Green Finance), Laura Ramos (Policy Manager, Inclusive Green Finance) and Jeannette Moling (Policy Specialist, Inclusive Green Finance).

The authors are grateful for comments provided by Prof. Daniel Schydlowski, Prof. Michael Halling, Dr. Mathilde Bauwin, Dr. Marco Bodeelli, Areti Kolovou Nikolakopoulou, and Marian Unterstrell.

We would like to thank our partners and donors for generously contributing to the development of this publication.

AFI’s Inclusive Green Finance workstream is part of the International Climate Initiative (IKI), supported by the German Federal Ministry for Economic Affairs and Climate Action (BMWK), based on a decision by the German Bundestag.

ADA CHAIR IN FINANCIAL LAW (INCLUSIVE FINANCE)
The ADA Chair in Financial Law (Inclusive Finance) at the Faculty of Law, Economics and Finance of the University of Luxembourg benefits from support provided by ADA (Appui au développement autonome), a Luxembourg non-governmental organization focused on strengthening the autonomy of vulnerable people in Africa, Central America and Southeast Asia with inclusive finance since 1994, as well as the Directorate for Development Cooperation and Humanitarian Affairs of the Ministry of Foreign and European Affairs of the Grand-Duchy of Luxembourg.

Baobabs trees, Madagascar. (ANTITES/iStock)
EXECUTIVE SUMMARY

Inclusive Green Finance (IGF) is an emerging policy priority, championed by central banks and financial regulators in the AFI network to help mitigate, and build resilience to, the negative impacts of climate change and biodiversity loss. AFI member institutions agree that policies must address climate change without leading to financial exclusion, and that actively promoting financial inclusion as a tool for climate mitigation and adaptation, reduces environmental degradation, as established in the Sharm El Sheikh Accord (2017) and renewed at the Dead Sea (2022).

Based on research, international approaches and AFI members’ experiences, this roadmap to implement IGF policies (Roadmap to IGF) provides guidance on what central banks and financial regulators can do, on both a small and large scale, to further financial inclusion and enhance climate change resilience in AFI member countries.

This special report, which identifies IGF as a subset of sustainable finance, shows that a successful IGF framework rests on six ‘Building Blocks,’ identifies policy tools to further advance the framework, summarizes the related challenges, and provides recommendations for IGF policy implementation.

Each country has specific climate-related challenges and financial objectives; therefore, the preferable pathway depends on the country’s context, priorities, size of its banking sector, availability and readiness of credit financing schemes, significance of its capital markets, level of development of its digital retail payment system, and market size of its digital financial services (DFS).

IGF, which focuses on individuals and micro, small and medium enterprises (MSMEs), two groups to which financial inclusion provides the broadest societal benefits, describes a coherent ‘holistic’ policy supporting both financial inclusion (as a social goal) and adherence to environmental factors. However, IGF involves more than just access to financial services, regulators must focus on the valuable use of these services and how they benefit individuals and MSMEs.
An IGF policy is necessary for two reasons. First, markets are poor at assessing uncertain, long-term risks due to the lack of reliable data regarding the future trajectory of climate change. Second, the benefits of IGF are primarily societal and long-term, although the long-term consequences of failure will certainly be shown at the individual level as well. As such, both IGF objectives are 'public goods': individual counterparties do not directly reap the full benefits from investments in financial inclusion and environmental protection. In the absence of public policy action, private actors tend to under-invest in financial inclusion and environmental protection.

Much can be learned from the early approaches to sustainable finance regulation worldwide. The European Union is working on a fully-fledged revamp of financial regulation based on 'double materiality', an approach that factors in both sustainability risks and the impact of financial activities on sustainability factors. Yet it is too early to assess whether these ambitious reforms will lead to fundamental changes in economic activity. The EU’s approach has focused, to date, on large companies where cost concerns are less important. By contrast, costs in AFI countries deserve particular attention since most will end up as transaction costs typically paid by poorer members of society, with clear exclusionary risks.

Some AFI member institutions have pursued IGF by issuing Sustainable Banking Principles and ESG-related Sustainable Frameworks. These principles generally comprise risk management requirements, sustainability reporting, and governance requirements. While sustainability risks fall within the logic of traditional credit risk management, the same is not true for the impact of the lending activity of institutions on sustainability factors. Beyond reporting, regulators must actively ensure that these externalities are prioritized within the financial institution under supervision. This is particularly the case where an institution’s short-term interest in profiting from unsustainable businesses collide with the public interest in protecting the environment long-term.

The international discussion is ongoing, specifically for individuals and MSMEs, as to the level of granularity that is feasible in data collection and risk management. The answer to this question will be country-specific and depend on the level of datafication of the public administration and MSME clients. Bulk and sectoral approaches, similar to international standards for capital requirements and new international sustainability standards, may well be in order.

IGF frameworks require solid, long-term political support driven by a dynamic regulator with devoted expert resources and a strong role in shaping the regulatory framework.

Depending on the level of ambition relating to the Roadmap to IGF and the need to harmonize with other national and international frameworks, a Roadmap to IGF may consume an amount of regulatory capital that will need to be committed upfront.

Regulators will need more of their existing resources and entirely new types of resources in technology, hard science and data generation. Nevertheless, significant uncertainty remains on to reduce the negative impacts of business activity on the environment while ensuring financial inclusion. The three imperatives of IGF - financial inclusion, fostering resilience to and mitigation of climate disaster events, and supporting transformation to a sustainable economy - are at times in tension, especially for MSMEs and individuals, and these tensions may not be initially apparent. IGF frameworks will therefore, at times, require quick rebalancing and ad-hoc decision-making. Accordingly, dynamic governance systems with the readiness to constantly reassess policy approaches are also needed.

Each step will require refinement over time, in proportion to the capacity of regulators and regulated institutions. For instance, members can begin with Sustainable Banking Principles of a more general nature, which can be supplemented in due course with relevant and detailed guidelines or different tools like green lending procedures through the Environmental & Social Risk Management guidelines.

Both financial inclusion and climate change concerns differ from country to country, and while mutual learning from other countries is essential, the solutions must be country-specific and tailor-made to the necessities of each AFI member.
I. INTRODUCTION

Financial inclusion and environmental goals may well find themselves in tension.¹ For instance, finance may fund technologies and processes that harm the environment, such as machinery to log rainforests or chemicals that pollute rivers. At the same time, inappropriate or overdone greening of the financial sector may increase financial exclusion.

This is particularly true in a crisis setting:

“There is a risk that policymakers, in the wake of a climate-related crisis, become reticent to reach the financially excluded, the majority of whom are women, because directing emergency funds through digital financial networks can be so much more cost-effective than alternative channels. Such behavior would exacerbate existing inequalities because financially excluded parts of the population are also likely to be those most in need of state support in the wake of a natural disaster.”²

Just as there is no real sustainability without financial inclusion, a stable inclusive financial system requires that regulators and economic actors take sustainability seriously. Economic growth (inclusive or exclusive, as the case may be) in the absence of sustainable economic conduct results, eventually, in a financial system exposed to sustainability risks and societies suffering from the economy’s impact on sustainability factors. If financial institutions fail under these circumstances, the vulnerable will suffer far more than the affluent.³

With extreme weather events on the rise around the globe, dealing with climate change and extreme weather conditions (including heat, drought, floods, storms, and rising sea levels) is an ongoing challenge today in an increasing range of AFI member countries.⁴ To mitigate these impacts, regulators and businesses are increasingly focused on environmental, social and governance concerns, together with enhancing financial inclusion, supporting digital access, and building financial infrastructure to support more gender sensitive crisis resilience, response, and recovery. By way of the Sharm El Sheikh Accord (2017), renewed at the Dead Sea in 2022, financial regulators and central banks across the AFI network agree that policies must address climate change without leading to financial exclusion.⁵ AFI member institutions have taken a leadership role in developing IGF to address climate-related risks within the financial sector.

The dual mission encapsulated by the term “Inclusive Green Finance” is more pressing than ever before. Through effective policies, regulations and national strategies, IGF is helping mitigate and build resilience against the negative impacts of climate change.⁶ Financial institutions engaged in IGF provide vital support to those navigating an uncertain environment by promoting green products within savings, credit, insurance, money transfers and new digital delivery channels.⁷

By doing so, IGF plays a key role in enabling the implementation of the Paris Agreement, nationally determined contributions (NDCs), and the UN Sustainable Development Goals (SDGs).

Particularly SDG 1 (No poverty), SDG 6 (Clean water and sanitation), SDG 7 (Affordable and clean energy), SDG 11 (Sustainable cities and communities), SDG 13 (Climate action), SDG 14 (Life below water), SDG 15 (Life on land), and SDG 17 (Partnerships for the goals).⁸

² Ibid.
⁷ World Bank, Gateway to Financial Inclusion (14 November, 2018). Available at: https://www.worldbank.org/content/gateway-financial-inclusion
ROADMAP FOR INCLUSIVE GREEN FINANCE IMPLEMENTATION

UPDATE OF THE SHARM EL SHEIKH ACCORD ON INCLUSIVE GREEN FINANCE

The Sharm El Sheikh Accord on inclusive green finance was endorsed by an overwhelming 94 percent of the AFI membership and updated during the Global Policy Forum at the Dead Sea from 5-8 September 2022. The main updates are as follows:

- Updating the name of the Accord to ‘Sharm El Sheikh Accord on Inclusive Green Finance’
- Introducing a broader concept of green finance, including environmental degradation and being more precise on the mitigation and adaptation potential of IGF
- Introducing tangible links between the role of financial regulators and the broader global and national green finance and financial inclusion landscapes
- Introducing a more substantial in-country implementation dimension into the agreement section of the Accord
- Updating the technical content and wording throughout to reflect current developments

MAYA DECLARATION COMMITMENTS ON INCLUSIVE GREEN FINANCE

AFI members have leveraged IGF policy implementation through their Maya Declaration Commitment to create a conducive environment for IGF initiatives:

- **Bangladesh Bank and Insurance Development and Regulatory Authority Bangladesh**: A Sustainable Finance Policy: Has been completed.
- **Central Bank of Eswatini**: Developing an inclusive green finance policy.
- **Central Bank of Jordan**: Issuing a green finance strategy.
- **Bank of Ghana**: Launching and implementing sustainable banking principles by 2022.
- **Bank of Zambia**: Developing a Bank of Zambia policy and guidelines on climate change and green finance by 2022.
- **Superintendencia de la Economía Popular y Solidaria de Ecuador**: Developing the required regulations to implement green loans.
- **Banco Central de Reserva de El Salvador**: Updating the National Survey of Access to Financial Services.
- **Reserve Bank of Fiji**: Working with partners on developing and promoting sustainable business models to support the community’s response to climate change.
- **Bank al-Maghrib**: Implementing actions to be undertaken by Bank Al-Maghrib as part of the tripartite “AFI-BAM-CFC” partnership on sustainable finance.
- **Central Bank of Egypt**: Issuing guidelines for climate change and green finance to the banking sector by 2020.
- **Banco de Moçambique**: 1. Coordinating efforts with relevant sectors to ensure that financial technologies implemented by innovative platforms, business models, products and services are in compliance with green technologies; 2. Incorporating actions, during the Medium Term Review of the National Financial Inclusion Strategy, ensuring that green technologies are accessible and affordable for the entire population.
- **Reserve Bank of Zimbabwe**: Creating an enabling environment that encourages sustainable financing (incorporating IGF), specifically, investments in innovation that contribute to a green, inclusive, and sustainable economy which, in turn, encourages, rewards, and fully integrates sustainability principles in financial institutions. The target is 50 percent of banking institutions in Zimbabwe adopting sustainable financing by December 2021.

Source: Alliance for Financial Inclusion.
This Roadmap to IGF, which is based on both the research and best practices of AFI members and others internationally, provides the AFI membership, other regulatory and international institutions, government agencies, financial institutions, and researchers, with the current state of IGF knowledge and the policy tools to promote an exchange of experiences and mutual learning within the AFI network and beyond. It further identifies policy approaches that positively impact financial inclusion and climate change globally based on an integrated approach that can be transformed into a coherent policy framework.

IGF was identified as a subset of sustainable finance in this roadmap, which shows that a successful IGF Framework rests on six Building Blocks, describes the policy tools that further the framework, together with a summary of the challenges, and presents useful recommendations for financial regulators and policymakers.

The six Building Blocks describe the preconditions for a successful IGF policy approach. Each of these fields must be well developed to achieve an overall well-functioning IGF system. In turn, regulators seeking to strengthen IGF are first encouraged to assess the economic and social environment, the legal framework as well as the financial institutions within their jurisdiction against the six Building Blocks.

A less strongly developed Building Block can then be targeted with further policy action. Once the need for additional policy action is identified, the five tools lend themselves as options on how to strengthen, or initiate development regarding one or several of the Building Blocks.

THE REMAINING SIX SECTIONS OF THIS ROADMAP ARE AS FOLLOWS:

II Defines the scope of analysis and provides an overview of AFI’s existing work on IGF, including a gap analysis.

III Describes IGF’s holistic policy approach, places it within the spectrum of related priorities to financial regulators, and demonstrates why policy action is crucial.

IV By developing the six Building Blocks of an IGF Framework, identifies the state of a country’s financial services sector which policy actions seek to achieve.

V Outlines the tools which regulators may use to further IGF, including advocating for IGF, capacity building, financial incentives, and “soft law” and “hard law” approaches.

VI Identifies the challenges experienced internationally in implementing IGF approaches.

VII Concludes the report.
II. SCOPE AND BACKGROUND
Financial policymakers and regulators across the AFI network recognize the dual threats of financial exclusion and climate change as key risks to financial stability and sustainable development, and the role of financial inclusion in helping communities build resilience, recover from and mitigate losses caused by climate change, while at the same time supporting broader sustainable development.9

1. INDIVIDUALS AND MSMEs IN FOCUS

For AFI member countries, individuals along with micro, small and medium enterprises (MSMEs) are central to increasing financial inclusion, creating climate resilience, and supporting sustainable development across the SDGs. First, the lack of identification needed to open bank accounts and make payments, and other logistical challenges, exposes individuals and MSMEs (especially women, the poor, digitally excluded and those living remotely) to the greatest risk of financial exclusion.10 Further, financially included and excluded populations are vulnerable to climate disaster hazards in the absence of adequate environmental and climate change adaptation capabilities.

MSMEs generate the majority of growth, innovation and employment in most economies, including developing countries.11

From a climate change perspective, emissions generated by individuals and MSMEs can be much lower than those by large companies, yet these emissions are mostly dispersed and decentralized, and therefore, more difficult to measure and govern by environmental laws and regulations, especially as the majority of MSMEs are in the informal sectors and outside the reach of most laws and regulations.12 Additionally, if they cannot include adaptation and mitigation initiatives into their own operations, MSMEs will face difficulties once there are mandatory regulations and laws regarding climate response initiatives. In turn, indirect ways to steer the economic conduct of MSMEs and individuals is of the utmost importance and precisely what an IGF strategy may provide.

At the same time, a policy focus on MSMEs brings particular challenges. First, any additional regulatory demands may be beyond their capacity or available resources.13 Second, official statistics mainly focus on larger enterprises, given that these are less expensive to generate and track, and in many cases, are digitized or automated and responsive to regulatory inquiries.14 This substantial data gap for MSMEs necessitates improving the data-based regulatory approach to IGF.15

---

11 Ibid.
14 Alliance for Financial Inclusion, ICF and IGFWG, supra 5 at 5 (noting that the majority of AFI members do not collect data on the impact of climate change on MSME finance).
15 Measuring Inclusive Finance Special Report: Available at: https://www.afi-global.org/measuring-inclusive-green-finance
2. FINANCIAL INCLUSION & SUSTAINABILITY – TWO SIDES OF THE SAME COIN

Financial access is one way to mitigate life’s challenges, including sickness, crime, poverty, unemployment, old age, exposure to climate events, etc.16 The financially excluded lack the tools to prepare for and manage such risks. For instance, farmers without access to electronic payment systems are vulnerable to theft; and may consume more immediately rather than save for future investments in their farms. Generally, insurance schemes can secure one’s long-term working capacity. Savings can fund children’s education and provide for old age. Financial inclusion in developing economies also supports economic growth by underpinning a currency-based system in which local savings fund local investments.

As it enhances the financing capacity and resilience of domestic financial markets, financial inclusion also reduces dependency on foreign debt.17

Most tellingly, financial exclusion forces people to think and act short-term.18 The result of this short-termism is often unsustainable conduct. Where saving for school fees or energy-efficient machinery is impossible or too risky, goods and services which can be consumed in the short-term become relatively more appealing. This can lead to massive inefficiencies and immediate unnecessary consumption, making long-term environmentally efficient policy approaches far more challenging to implement. Without a long-term perspective, people consume the very sources of their long-term livelihood.19 For instance, during the COVID pandemic, in (some) countries aiming to develop sustainable ecotourism, people turned to exploit the very resources needed to support this sector, while others continued on a sustainable path.20

Further examples in the context of COVID are refugees and disaster relief, which highlight the centrality of inclusion to resilience and response to crises, including climate crises,21 with digital payments and digital skills as key concerns.

For these reasons, financial inclusion and sustainability are two sides of the same coin. In modern and developed societies, sustainability cannot be conceived without also considering financial inclusion.

Yet, IGF requires more than only access to financial services: financial inclusion is not a one size fits all solution but rather a set of tailored approaches that meet the distinct needs of the various target groups.

Regulators must assess the use of finance by individuals and MSMEs to allow vulnerable groups, including women, young people, those living with a disability, and the forcibly displaced, to address climate risks, enhance their resilience to climate-related shocks, and use financial tools to reduce environmental degradation and mitigate climate change.22 Regulations should strive to ensure transparency, identify unintended use and, where possible, remedy the former.23

---

19 Hongda Liu et al. 2021. “Impact of Green financing, FinTech, and financial inclusion on energy efficiency,” 29 Environmental Science and Pollution Research 18955 (E7 economies are deficient in producing the financial resources to ensure the availability of funds for the acquisition of energy efficiency).
III. ONE SIZE DOES NOT FIT ALL
Given the country-specific nature of an IGF Framework, each regulator must seek the best locally for their respective economy and the financial institutions under their supervision, taking into consideration country-specific characteristics and restrictions. Given the divergence across AFI member countries, no two optimal IGF Frameworks look alike.

This local optimization becomes apparent across various factors, including national priorities, the level of ambition, scope, regulatory tools, benchmarks and performance measurement, cooperation, and how a long-term perspective of the IGF Framework can be assured at the national level.

But regardless of the specificities of each country, one thing is common: when developing an IGF framework, some progress is preferable to no progress at all. The regulatory reality is characterized by limited resources for policymaking, consultations, implementation, and adoption of the IGF framework.

1. IGF FRAMEWORK AS A DEFENSE OF THE PUBLIC GOOD

Financial inclusion directly or indirectly enables the achievement of all seventeen UN Sustainable Development Goals. This finding is supported today by major policy bodies around the world.

As a subset of sustainable finance, IGF promotes more long-term investments in sustainable economic activities and projects. This subset is a necessary intermediate step towards long-term thinking and planning for all business actors and individuals.

Sustainable finance describes the policy objective for financial markets to sustainably use natural resources by taking environmental, social and governance (ESG) considerations into account when making investment decisions in the financial sector. ESG includes more than mere finance and environmental characteristics: the financial inclusion dimension of IGF is part of the social characteristics of ESG. For instance, when financial inclusion seeks to further gender-sensitive (or gender-transformative) access to finance, it furthers gender equality as a social factor and as an economic benefit. And, of course, the “Green” in IGF addresses the environmental dimension.

However, in the absence of a coherent approach, sustainable finance may lead to exclusion. For instance, a dogmatic view of the use of environmental resources may restrict access to energy-intensive technologies that could be, by far, the best way to promote financial inclusion. It is also easy to overlook the energy intensity of physical cash usage, from its manufacture to distribution throughout an economy, to the numerous trips required to bank merchants to make deposits.

Furthermore, sustainable finance is pursuing two different ends: ensuring the sustainable use of scarce environmental resources, and mitigating the impacts of climate change and extreme weather conditions. These two aims are not always aligned. The challenge of sustainable finance policies is to balance these diverging effects in complex, very highly connected ecosystems.


25 World Bank. 2022. “Financial Inclusion.” Available at: https://www.worldbank.org/en/topic/financialinclusion/overview (“Financial inclusion means that individuals and businesses have access to useful and affordable financial products and services that meet their needs - transactions, payments, savings, credit and insurance - delivered in a responsible and sustainable way. --- Financial inclusion has been identified as an enabler for seven of the 17 Sustainable Development Goals.”.)


30 See, for example, 2021. “EU Taxonomy, Corporate Sustainability Reporting, Sustainability Preferences and Fiduciary Duties: Directing finance towards the European Green Deal.” Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021DC0188 (the EU Taxonomy Regulation includes these environmental objectives: (a) climate change mitigation; (b) climate change adaptation; (c) the sustainable use and protection of water and marine resources; (d) the transition to a circular economy; (e) pollution prevention and control; and (f) the protection and restoration of biodiversity and ecosystems).
2. TOWARDS DOUBLE MATERIALITY

Sustainable finance, as such, has two dimensions. On the one hand, regulators can focus exclusively on the impact of sustainability factors on firms or portfolio values, through an approach limited to internalizing sustainability risks. For example, rising sea levels may expose coastal real estate to flooding.

On the other, regulators can consider how a financial institution’s internal policies impact externalities. For instance, in pursuing equal pay policies, a financial institution may promote gender equality and societal sustainability. Conversely, distant environmental factors may be considered, for example, biodiversity may be severely damaged by activities within a firm’s supply chain. While the damage to biodiversity may not affect the firm’s value today, the reduction of the damage to biodiversity may, nevertheless, be highly desirable and a public good.

Sustainable finance policies can prevent negative impacts on the environment and climate (climate risk mitigation), while enhancing resilience (climate change adaptation) and actively facilitating positive actions and developments.

3. THE COSTS OF DOING NOTHING

Regulators have the choice to remain passive, in the sense that they neither support nor prevent a given activity from developing. Doing nothing is always an option as long as the risks associated with passivity are too small to care about. For instance, a passive regulatory approach marks the origin of some large-scale Fintech innovation. Yet, a passive approach to IGF is likely to be severely disappointing.

History supports our assessment, as 200 years of laissez-faire approaches have resulted in little financial inclusion in some countries and massive environmental damage, while active regulatory approaches have brought 1.5 billion people into the formal financial system in recent decades, and made truly sustainable finance possible.

A closer look reveals that this outcome is not surprising; it is the result of the entirely different objectives of Fintech and IGF regulations.

SUSTAINABLE FINANCE OBJECTIVES

Sustainable finance approaches that incorporate the risks and impacts of financial activities on sustainability factors and which include as sustainable only economic activities that consider both internalized risks and externalities are based on a ‘double materiality’ standard. IGF, therefore, requires a double materiality approach in response, and the rationale for IGF frameworks is clear: their positive and inclusive societal and environmental impacts.

---

32 Ibid 18.
33 See, for example, Alliance for Financial Inclusion and CDP. 2022. “From Commitments to Action at Scale: Critical Steps to Achieve Deforestation-Free Supply Chains.” Available at: https://www.cdp.net/en/research/global-reports/global-forests-report-2021
From the outset, both Fintech and IGF regulations are about ‘public goods’: innovation in one case, inclusion and the environment, in the other. In the absence of law and regulation, public goods often have few defenders, and many seek to exploit them. However, Fintech regulation is about reducing negative externalities that come as a side effect to innovation in financial services. ‘Innovation’ as a public good comes as a side effect whenever new technologies are developed or used. Fintech does not require regulation to create innovation; nevertheless, regulation can further or reduce the speed of innovation. With this focus on the externalization of risks, Fintech regulation is much like the risk controls of traditional (financial) regulation.

IGF regulation is about creating positive externalities as a side effect of financial services. Regulation must ensure that the public goods of ‘financial inclusion’ and ‘environmental protection’ come about when financial services are delivered.

In the absence of regulatory interference, (1) clients may remain excluded because the services offered are not profitable for financial institutions, and (2) the environment may suffer as long as the immediate benefits from financing environmentally harmful activities are greater than the immediate costs.

Sustainability risks are increasingly identified as long-term systemic risks best mitigated by regulatory action, and various efforts exist to place them within the traditional framework of financial regulations. This explains why central banks are now playing important roles in discussions around sustainable development, particularly, on climate change.

While divergent views persist as to whether, and how, general capital requirements like those laid down in the Basel Accords should be amended to reflect sustainability concerns (which may include both sustainability risks and the impact on sustainability factors), all central banks have a mandate to impose additional capital requirements in response to an institution-specific risk analysis (the so-called Pillar 3 supervisory mechanism). This allows central banks to undertake sectoral classifications and add additional capital requirements on an ad-hoc basis. For instance, based on a portfolio screening, some financial institutions may be seen as overly exposed to flooding, drought, storms, or energy crises, and then subjected to additional risk mitigation and capital measures. Yet the very means that help reduce risk on the side of financial institutions may also preclude vulnerable groups in society from access to finance given that they are particularly exposed to these risks.

Accordingly, more proactive approaches become desirable to further IGF by way of a holistic approach. Frameworks are needed that work well under the realities of financial regulation and supervision worldwide which include limited regulatory capacity and overstretched enforcement resources. These are developed in two steps. The desirable state of IGF implementation is defined first, classified in six ‘Building Blocks’ in section IV, followed by a discussion on the Policy Tools that support achieving the Building Blocks in section V.

---


IV. BUILDING A HOLISTIC APPROACH TO IGF
WHILE INCLUSION AND THE ENVIRONMENTAL MISSION DEFINE THE OBJECTIVE, SUCH A HOLISTIC APPROACH MAY REST ON SEVERAL BUILDING BLOCKS WHICH DESCRIBE THE REGULATORY, SOCIAL, AND ECONOMIC PRECONDITIONS FOR TRANSFORMATIVE CHANGE TOWARDS IGF OBJECTIVES.
The six Building Blocks of a successful IGF Framework identified in this report include:

> The adoption of an IGF strategy at the highest level of financial regulation and central banking aligned with NDCs as well as national climate and environmental policies. A solid strategy rests on a governance structure and coordinating entity in charge of implementing and ensuring the success of the IGF strategy, which involves embedding IGF values in every area of public and private institutions (governance, operations, products, financial and risk management, recruitment, training and development).

> Classification of IGF compliant conduct, products, and services, either by way of a catalogue or a taxonomy, to delineate wanted from unwanted economic behavior.

> Establishing IGF as a priority within financial institutions and regulators, for instance, through Sustainable Banking Principles and ESG-related Sustainable Frameworks.

> Data and models are at the heart of the IGF mission, but are lacking in scale. The identification of measurement techniques, combining financial and sustainability data in models with reporting and disclosure to regulators, and the market at large, may facilitate data collection and analysis, and the development of data-driven models for lending and investment as well as algorithms for IGF-related operations.

> Establishing, or enhancing, the IGF ecosystem capable of delivering the elements of a market-driven successful sustainable finance approach, including specialized data intermediaries, technology providers, professionals in the financial sector, and educational resources.

> Building financial infrastructure and resources, including technical systems through which monetary transactions are made and financial services can be provided.

**STRATEGY**

Each country has its own unique financial, environmental, and climate challenges. However, having a clear and focused strategy is critically relevant to success in the implementation of IGF policies and initiatives. An effective strategy is the best tool to align priorities and serve as an actionable plan to reach national goals.

**NATIONAL COORDINATION**

The first and foremost step of implementation is an IGF strategy at the highest levels involved in financial regulation including central banks or financial regulation bodies; this requires a governance structure and coordinating entity in charge of implementing and ensuring the strategy’s success, which can be a standalone or sub-strategy of a comprehensive financial sector or a financial inclusion strategy.

An IGF strategy should be built on broad stakeholder consensus. How this consensus is achieved may vary from country to country. While countries responding to immediate crises often have strong ministerial or regulatory mandates resulting in top-down approaches (e.g. Thailand, the Philippines, Bangladesh, Fiji), in other countries, an IGF strategy is the result of bottom-up initiatives with private financial institutions assuming the role of a driving force to which regulators respond, e.g. Ghana, Paraguay, Honduras, Cambodia). These bottom-up approaches are often driven by funding conditions of international organizations and multilateral development banks, such as the IFC, the EIB and the Green Climate Fund.

Equally important is that an IGF strategy be aligned with the financial sector’s contributions to the government’s priorities on SDGs and environmental commitments in line with the UN Framework Convention on Climate Change (UNFCCC), the Paris Agreement and NDCs, UN Convention on Biological Diversity, and the UN Convention to Combat Desertification.

39 Please refer to: https://www.afi-dataportal.org/user/login
BANK AL-MAGHRIB ROADMAP FOR ALIGNING THE FINANCIAL SECTOR WITH SUSTAINABLE DEVELOPMENT

Bank Al-Maghrib set up a System-Wide Strategic Roadmap on sustainable finance to contribute to the government’s climate and sustainable development objectives.

On the sidelines of COP 22 hosted in Marrakech, the Moroccan financial industry joined the national movement on sustainable development with the active support of Bank Al-Maghrib which coordinated the elaboration of a national Roadmap for Aligning the Moroccan Financial Sector with Sustainable Development, demonstrating a successful collaboration between government agencies and the public-private sector.

With broad representative governance from the financial sector, financial regulators and government bodies, including the Ministry of Finance, this roadmap provides a broad framework and principles to promote sustainable finance at the national level and manage environmental and climate-related risks, and ensures a follow-up process to track progress toward commonly agreed national goals that cover:

> Risk-based governance of environmental and social risks
> Development of green finance products and financial instruments
> Promotion of financial inclusion as a driver for sustainable development
> Capacity building on sustainable finance issues
> Transparency and market discipline on environmental performance and risk management practices

In accordance with this five-pronged roadmap, players in the banking sector have taken several voluntary measures to scale-up financial inclusion and green finance.

BANGLADESH BANK’S IGF STRATEGY

The introduction of an IGF Policy in Bangladesh started in 2010 with Bangladesh Bank (BB)’s IGF strategy - the First Strategic Plan (2010–2014), as the first regulator in the AFI network that connected financial inclusion and climate change.

As envisaged by the strategy, “ERM guidelines” and “policy guidelines for green banking rules” were introduced in 2011 as initial policies: banks and other financial institutions were required to develop green banking strategies, incorporate environmental risks into their CRM, and report quarterly on their green banking activities. BB has focused on data collection and sharing since 2013, with the publication of quarterly reports on green banking activities. In 2014, BB set an annual green finance target which required financial institutions to dedicate five percent of total loan disbursements and investments to green financing.

Following extensive evaluation of the first strategy, BB adopted the Second Strategic Plan (2015–2019). This led to an expansion of the ERM guidelines into ESRM guidelines in 2017; in the same year, BB defined the eligibility for green types of financing in the form of an exhaustive list. In 2018, the data collection and reporting format was revised.

The third Strategic Plan (2020–2024) is now aimed at mainstreaming green finance and sustainable banking, including the integration of carbon footprint measurements.

The Bangladesh example demonstrates the importance of a strategic plan as starting point for any IGF regulatory approach, followed by extensive evaluation and refinement of the initial strategy, with ever more ambitious approaches based on country specific insights and knowledge generation. In all stages of this process, data collection and capacity building are valuable in further implementing the IGF strategy. In principle, the same applies to classification means, i.e. the definition of green finance and a taxonomy may be helpful, yet dispensable for the early steps of an IGF approach, given that Bangladesh had carried out successful policies before a definition was introduced.
19

ROADMAP FOR INCLUSIVE GREEN
FINANCE IMPLEMENTATION

THE PHILIPPINES SUSTAINABLE FINANCE FRAMEWORK

The Bangko Sentral ng Pilipinas’ (BSP) mandates of maintaining price and financial stability provide the opportunity to advocate a sustainability agenda in the Philippine financial system and adopt its Sustainable Central Banking Program as one of its strategic thrusts.

In line with its financial stability mandate, the BSP rolled out a two-pronged approach to promote sustainable finance. First, is increasing awareness and understanding of sustainability concepts among banks and supervisors. Second is mainstreaming sustainable finance through the issuance of enabling regulations.

The latter is built on earlier studies conducted to gauge the knowledge of financial institutions about environmental and social risks and to assess the impact of extreme weather episodes on the performance of the Philippine banking system. Likewise, sustainable finance regulations are anchored on the corporate and risk management standards issued by the BSP.

The BSP issued the first phase of its sustainability-related guidelines in April 2020 in the Sustainable Finance Framework. This sets out the supervisory expectations on the integration of sustainability principles in corporate governance and risk management frameworks as well as in the business strategies and operations of banks.

Banks are given three years to fully adopt and integrate environmental and social risk management in their systems and banking operations. The BSP Sustainable Finance Framework covers:

- Responsibilities of the board of directors and senior management in leading and institutionalizing the sustainability principles across the organization.
- Adoption of the environmental and social risk management system.
- Disclosure requirements.

The framework was followed by the issuance of the Environmental and Social Risk Management Framework and the Guidelines on the Integration of Sustainability Principles in Investment Activities of Banks in October 2021 and August 2022, respectively.

These circulars set out the granular expectations on the management of environmental and social risks in relation to the credit and operational risk exposures of banks as well as in making investment decisions.

Following this landmark policy initiative, the Philippines Inter-Agency Technical Working Group for Sustainable Finance (ITSF) issued the Philippine Sustainable Finance Roadmap and Guiding Principles in October 2021 that aim to create an environment for greener policies, mainstream sustainability in financing activities, and increase investments in low-carbon activities. The Guiding Principles were developed to establish a common understanding among various stakeholders of the economic activities in the Philippines that can be considered sustainable. This approach follows current practices within the ASEAN region to use a principles-based approach in developing national taxonomies.

Taking a holistic approach to sustainable finance, the updated National Strategy for Financial Inclusion (NSFI) 2022-2028 issued by the Financial Inclusion Steering Committee, which is led by the BSP, also embeds the Philippines’ sustainable development agenda. The NSFI strives to further the country’s financial inclusion agenda prioritizing financial resilience, consumer empowerment, financial literacy, and enhancing access to finance for MSMEs and the agriculture sector. The strategy includes social safety nets to promote resilience-building among vulnerable populations to prepare and recover from unexpected events including climate-related disasters. Complementary to the NSFI, the Philippine Sustainable Finance Roadmap also aspires to gender-responsive and rights-based sustainable development, with major strides already being taken with regard to women’s empowerment and gender equality.

2. Circular Letter - Philippine Sustainable Finance Roadmap and Guiding Principles
INTERNATIONAL COORDINATION

Learning from international approaches and coordination is of the utmost importance for any IGF approach for two reasons.

First, some may argue that a standalone IGF approach may decrease competitive capacity and financial stability, while doing little to promote the positive externalities at the heart of IGF: financial inclusion and the environment. Standalone approaches need tight border controls to ensure that production of the non-financial type is not shifted to other countries and reimported, to circumvent IGF-oriented legislation. Such border controls will be expensive to administer and may have numerous other undesirable consequences.40

Second, there are major challenges from the fact that many of the impacts are global, and often not directly tied to the original beneficiary. For instance, how effective might a national policy on air pollution be if all neighboring countries allow air pollution? Nature knows no borders, and this is often the case with environmental elements of IGF.

IGF approaches must be closely aligned with neighbors, resulting in regional or global approaches to remedy environmental issues.41 Simultaneously, these regional and international approaches must be fine-tuned to promote financial inclusion - contrary to environmental issues, financial inclusion relies strongly on national financial infrastructure and, as such, is primarily a local matter.42 IGF approaches, thus, need to balance the regional and international dimensions with local needs for financial inclusion, aiming for a local optimum in each AFI member country.

RESERVE BANK OF FIJI

Fiji is a pioneer among AFI members in terms of IGF, beginning IGF activities in 2009 reflecting the challenge of rising sea levels.

The country began by building the right infrastructure, collecting data, and raising awareness. Following initial measures in response to climate-related disasters that aimed at protecting the less privileged and, therefore, more affected parts of the population, Fiji soon moved towards a more proactive and integrated approach by adopting measures that realize IGF objectives and contribute to sustainability while strengthening the population’s resilience to future climate-related events. In doing so, Fiji has largely relied on voluntary or opt-in measures that incentivize financial inclusion instead of mandatory regulations.

Source: Reserve Bank of Fiji

CCBSBO’S FINANCE REGIONAL APPROACH TO SUSTAINABLE

The regulators organized in the Council of Central American Financial Regulators (CCBSBO) engage frequently in inter-regional coordination to avoid harmful race-to-the-bottom regulatory competitions and achieve greater convergence across the six Central American jurisdictions for which they exercise oversight.

In 2021, CCBSBO, IFC, Norfund, and FMO signed a cooperation agreement on the future regulatory efforts of Superintendencies members of CCBSBO in Central America, Panama, the Dominican Republic, and Colombia.

The agreement focuses on:
> The development of a Sustainability Taxonomy at a regional level.
> ESG criteria, including a roadmap to issue regulation by member countries.
> Including climate and social risks in stress tests and analyzing the impacts of climate and social risks on financial institutions in the region.

Source: Sector financiero en Centroamérica acuerda adoptar estándares y mejores prácticas internacionales para promover la banca sostenible. Available at: https://pressroom.ifc.org/all/pages/PressDetail.aspx?ID=26560

41 See, for example, Mark Dworzanz. 2022. “Can the World Meet Global Climate Targets Without Coordinated Global Action?” Available at: https://news.mit.edu/2022/can-world-meet-global-climate-targets-without-coordinated-global-action-0301
The European Commission (EC) issued their Sustainable Finance Action Plan of 2018 as a core strategy. During its execution, the EC has relied on a number of expert committees to advise on the legislative process.

In 2021, these expert groups were integrated and reorganized in the EU Sustainable Finance Platform which provides guidance on all technical matters.

Three supervisory agencies: the European Supervisory Agencies (ESAs), European Banking Authority (EBA), European Securities & Markets Authority (ESMA), and European Insurance and Occupational Pension Authority (EIOPA) are tasked with the coordination of financial supervision which takes places at the EU Member State level as well as the European Central Bank for large banks and investment firms with systemic importance.

Following the strategy setting by the European Commission, each of the ESAs have issued sustainable finance strategies for their respective sector. See Annex 1 for an overview of these strategies.

Fifty-seven members and 11 observers from industry, academia and civil society. This includes the Technical Working Group advising on the TSC, as well as five sub-groups which advise on the TR review, on significantly harmful and low impact activities and social objectives, on data availability and usability, and in monitoring sustainable investments.

Source: ADA Chair Research based on disclosures on the ESAs’ websites and https://finance.ec.europa.eu/sustainable-finance_en
PRIORITY

Any IGF framework must ensure that concerns are prioritized within financial institutions and regulators at large. And while regulators can rely on dialogue and advocate for IGF, experience shows that in addition to an IGF strategy, the attention of management is needed.

Simultaneously, the private sector needs to understand how IGF considerations can be integrated with financial services provision, insurance, and investment activities, and how the private sector can effectively align with sustainable goals.

This attention is critical to ensuring adequate funding of IGF implementation projects among regulators and financial institutions as regulatory resources are always limited. Sustainability adds entirely new dimensions to the knowledge regulators need, the rules they need to enforce, and both come with costs. Sustainability requires knowledge on a wide range of issues from greenhouse gas emissions to biodiversity, and from rising sea levels to weather issues such as floods and droughts. Many countries may lack extensive human expertise on these issues, especially when it comes to how they intersect with the various population groupings within a country.

Useful tools to achieve the former include (binding or non-binding) IGF policy releases in the form of sustainable banking principles (see the box below) or a regulator-specific policy agenda (see the EU and UK key regulators examples in Annex 1 and 2); in some cases, broadly framed ESG-related risk frameworks may also serve the same purpose.

BANK OF GHANA’S SUSTAINABLE BANKING PRINCIPLES

The Bank of Ghana’s Sustainable Banking Principles, which provide guidance on Environmental and Social Risk Management (ESRM) policies for banks under its supervision, are made up of seven principles (pillars):

- Environmental and Social Risk Management (ESRM)
- Internal Environment Social and Governance (ESG) in bank operations
- Corporate governance and ethical standards
- Gender equality
- Financial inclusion
- Resource efficiency, sustainable production, and consumption
- Reporting on the five most sensitive environmental and social sectors to which banks are widely exposed:
  1. Agriculture and forestry; 2. Construction and real estate; 3. Manufacturing; 4. Oil, gas, and mining; 5. Power and energy.

Sustainable Banking Principles, while covering all dimensions of sustainable finance, addresses sustainability risks with its ESRM and related reporting on sensitive sectors. As to externalities, the principles focus on governance, gender equality, and financial inclusion. In turn, these matters receive the attention of financial institution.

So far, the Bank of Ghana has not modified the capital requirements of banks. Yet, as a general principle, a banking regulator can require risk cushions for risks uncovered by the respective bank’s ESRM. The Bank of Ghana may require additional capital provisioning should ESRM elements contradict the risk reporting.

The Bank of Ghana’s current work focuses on the second principle (ESG operations).

Source: Bank of Ghana.
ROADMAP FOR INCLUSIVE GREEN FINANCE IMPLEMENTATION

CLASSIFICATION

At the heart of all sustainability-oriented rules, including IGF, there is uncertainty as to which conduct qualifies as sustainable. Any IGF framework must thus provide some means to identify IGF compliant conduct.

THE NIGERIAN SUSTAINABLE BANKING PRINCIPLES (NSBP)

Motivated by improving brand reputations, boosting the bottom lines of financial institutions and helping organizations achieve cost-savings thoroughly financial operations, the Central Bank of Nigeria initiated the Nigerian Sustainable Banking Principles (NSBP) with the aim of closing funding, capacity, gender, governance, and financing gaps.

The NSBP pillars are as follows:

- **Our Business Activities - Environmental and Social Risk Management:** We will integrate environmental and social considerations into decision-making processes relating to our business activities to avoid, minimize or offset negative impacts.
- **Our Business Operations - Environmental and Social Footprint:** We will avoid, minimize or offset the negative impacts of our business operations on the environment and local communities where we operate and, where possible, promote positive impacts.
- **Human Rights:** We will respect human rights in both our business and activities.
- **Women’s Economic Empowerment:** We will promote women’s economic empowerment through a gender inclusive workplace culture in our business operations and seek to provide products and services designed specifically for women through our business activities.
- **Financial Inclusion:** We will promote financial inclusion, seeking to provide financial services to individuals and communities that traditionally have had limited or no access to the formal financial sector.
- **E&S Governance:** We will implement robust and transparent E&S governance practices in our respective institutions and assess the E&S governance practices of our clients.
- **Capacity Building:** We will develop individual institutional and sector capacity necessary to identify, assess and manage the environmental and social risks and opportunities associated with our business activities and operations.

> Collaborative Partnerships: We will collaborate across sectors and leverage international partnerships to accelerate our collective progress and move the sector as one, ensuring our approach is consistent with international standards and Nigerian development needs.

> Reporting: We will regularly review and report on our progress in meeting these principles at the individual, institutional, and sectoral levels.

Financial inclusion is a standalone priority pillar in the NSBP and focused on access to finance for the excluded segments of the population.

The CBN measures the impact of the initiatives funded from the balance sheets of banks, in relation to their ability to reduce the negative consequences of climate change, environmental degradation, and impact on human lives by taking a baseline situation from the beginning and comparing this with the future. A reporting template, integrated in risk-based supervision requirements, is used to assess a bank’s carbon and social footprint to realistically measure the footprint reductions linked to funding from their balance sheets.

The CBN implemented the Sustainability Principle Indicators to measure levels of conformity. Some indicators are the following:

- Percentage of female board membership
- Percentage deviation from SP guidelines on lending
- Rate of compliance to sustainable lending standards
- Percentage increase in lending processes incorporating sustainability principles

Source: IGFWG, Internal survey on ‘IGF Roadmaps’ (Ago 2022)

---

43 See the criticism aired on the diversity of the use of the term sustainability by Breuer, Haase, and Breuer. 2013. 83 J. Bus. Econ. 551 (552); Bueren, ZGR 2019, 813 (816 et seq.); see also Möllers, ZHR 185 (2021), 881 (889 et seq.).
EX-ANTE OR ON DEMAND
Classification can be performed ex-ante by way of standards or regulations or on demand; for instance, a review panel can classify economic activities whenever financial institutions or insurance companies seek project finance support from the central bank.

The upside of an ex-ante approach is transparency and legal certainty, yet it will inevitably come with a limited scope:

An ambitious ex-ante approach requires an examination of all details and connections of any business and economic activity of any country. Here, we may see the greatest impact on the economy, both positively and negatively, given that the risk of regulatory errors is real. The challenge of establishing a full taxonomy across all business sectors is massive, and the risks of capital misallocation are real, given the lack of regulatory resources, expertise, and knowledge on dimensions of sustainability. To remedy these risks, the classification can be drafted with less or more ambition; in turn, the scope and granularity of the classification will be limited.

A less ambitious but very effective ex-ante approach focuses on industries with the greatest IGF impact. It sets up detailed rules only for core issues, such as a reduction in dependency on oil and gas, protection against flooding, drought impact mitigation, and other significant concerns.

STANDARDS OR REVIEW PANEL
Classification can be provided as a standard or rulebook, or the classification task can be assigned to a review panel (with the involvement of financial regulators) that classifies conduct whenever there is a specific need. The first option offers more certainty, but also requires more regulatory investments into classification.

A text-based classification may come with the risk of binary decisions and misinterpretation. Scorecard approaches that measure (environmental and social) sustainability impacts in relative terms may facilitate transformative investments.

BINDING OR NON-BINDING CLASSIFICATION
Any framework can rely on binding or non-binding classification. For instance, classification can take the form of a recommendation, best practice standard, or a tight set of rules with binding effect.

Whichever tool is preferable depends on the degree of the binding effect the decision will have and whether non-compliance will be sanctioned. In principle, financial regulation enforcement will need consistent terminology and a binding effect.

The most binding effect can be achieved by creating a mandatory taxonomy and obliging those who use terms such as “sustainability”, “green”, or “the environment” in a financial services context to specify the extent to which their use of the language aligns with the taxonomy.

SUSTAINABLE FINANCE POLICY (BANGLADESH BANK)
Mainstreaming a green definition in Bangladesh’s financial system started with the issuance of the Policy Guidelines for Green Banking and Environmental Risk Management issued by Bangladesh Bank in 2011.

The guidelines included a list of activities that can be considered as green which provided clarity for financial institutions in classifying their portfolios. This catalogue approach provided a basis for the reporting of green financing activities and subsequent policy developments. For instance, when a five percent green lending quota was set in 2014, the catalogue of green activities was used to verify compliance.

The green catalogue was also used to identify green projects when Bangladesh Bank set up a green refinancing facility to support the efforts of financial institutions to meet the green lending quota.

The green catalogue was updated to a full green finance and sustainable finance taxonomy through the Sustainable Finance Policy issued in 2020 which is now the basis for succeeding policy updates on lending quota and others.

Source: Alliance for Financial Inclusion.

THE EU TAXONOMY REGULATION

The EU Sustainable Finance Action Plan of 2018 comprises six elements.

At its heart, lies the Taxonomy Regulation (EU) 2020/852, which introduces a joint terminology and standardized approach to "environmental sustainability". The taxonomy is cross-sectoral, in that it calls for compliance from all parts of the financial services value chain and also covers issuers of corporate bonds and large corporations and limited liability companies. At the time of writing, the European Commission has started work on an additional “Social Taxonomy” covering a set of social matters, including, to a limited extent, financial inclusion. Both taxonomies, together, seek to ensure the consistent use of the term “sustainability” in finance.

An additional four legislative measures aim at enhanced, harmonized and comparable disclosures:

> The cross-sectoral Sustainable Finance Disclosure Regulation (EU) 2019/2088 introduces mandatory disclosures for financial market participants and financial advisers on sustainability factors defined by the Taxonomy Regulation (hereafter SFDR) to all EU financial law legislation.

> The revised Benchmark Regulation (EU) 2019/2089 adds provisions on sustainability benchmarks such as rating agencies and index providers to the EU rules on benchmark providers.

> A set of revisions to EU product distribution rules (in IDD II, MiFID II), demands that sustainability-related information is forwarded by all financial actors within the financial services value chain, ranging from the users of finance to funders, which are either institutional investors (including banks and insurance companies), public investors, or pensions funds;

> The proposed revision of Directive 2014/95/EU on non-financial reporting (NFRD) and a new Corporate Sustainability Directive will further strengthen disclosures on sustainability matters by the 49,000 listed, financial, and large companies residing in the EU.

In addition, a set of rules has been put in place that governs the set-up, operations and business conduct conditions of financial intermediaries, with a view to embedding the analysis of sustainability risks and factors into financial intermediaries’ organizational structures, investment, lending, and risk decisions.

Methodologically speaking, the taxonomy regulation aims to answer the question “what is sustainability?” while the disclosure obligations seek to answer the questions “who acts sustainably?” and “which product is sustainable?” along with the operational rules to ensure that financial intermediaries act sustainably.

ECOSYSTEM

Any IGF approach requires new types of resources, skills, and expertise from financial institutions. In particular, market-based IGF approaches require a range of specialist services and know-how. Examples include universities, rating agencies, index providers, auditors and sustainability advisors, specialist legal advice and consultancy firms on how to include IGF within the business models of financial institutions.

Financial institutions cannot build these in-house as it is not their core business; building it would be extremely costly; and innovative capacity would be lost, given the conflicts of interest present between a financial institution’s core business which would ask for monopolizing the best-in-class services, while the economy at large would benefit from making the service available to all financial institutions due to the economies of scale inherent in these services.

Indeed, if the services are concentrated in one institution, significant dependency risks may arise in the event of institutional failure. For these reasons, successful financial centers have ecosystems that offer these various functions and services from a range of providers.

Some AFI member institutions may have few, or no intermediaries with sufficient resources. This is often the case for MSMEs and individuals, with respect to which an advanced service infrastructure is often not available, given the lack of means to finance the service providers. Cross-border service providers may fill the gap when AFI member countries cannot effectively set-up niche services. Some of them that support IGF policies are available at low or zero costs and may be fit for supporting the IGF transformation of MSMEs.46

Regulators should aim at developing fully-fledged IGF ecosystems over time. In the following, we provide three examples to illustrate what an ecosystem may entail.

46 See, for instance, the tools on emissions calculations and basic education provided by the SME Climate Hub, available at: https://smeclimatehub.org/courses/education/, note that the scientific basis of each of these offerings is not assured, as such, reliance by AFI member institutions as part of their regulatory framework will require an independent assessment of each service provider’s approach.
MONGOLIA’S SUSTAINABLE FINANCE ECOSYSTEM

Mongolia’s financial system is mainly comprised of commercial banks. The country’s financial regulators include the Bank of Mongolia which regulates the banks, the Financial Regulatory Commission which looks after the capital markets, and other non-bank financial institutions such as microfinance, the Ministry of Finance, and the Deposit Insurance Corporation. The Mongolian Bankers Association, which is an organization of commercial banks, also plays an important role in the system including with sustainable finance discussions.

The increasing awareness of the impacts of climate change sparked a discussion on sustainable finance in Mongolia, notably in the banking sector. A working group was formed to work on sustainable finance as regulators realized that the growth trajectory for sustainable finance would require the involvement of the whole sector. Sustainable Financing Principles were issued to the entire financial sector and following this issuance, banks, and non-bank financial institutions (NBFIs) were required to report their activities on sustainable finance. A green loan fund was also established to support green lending activities while the Financial Market Development Program was launched to support greening activities in the capital market.

Given these initiatives from the different finance subsectors, the Sustainable Finance Roadmap was developed to detail what needs to be done for each subsector, including NBFIs, in addition to describing upcoming policy initiatives for each subsector that help build the entire sustainable finance ecosystem of the country. By the end of 2019, the Mongolian Green Finance Taxonomy was issued for use by the whole sector which provides a common understanding of what can be considered as green, including livelihood activities supported by NBFIs.

To ensure the onboarding of NBFIs, FRC Mongolia also commenced capacity building and awareness raising initiatives among these institutions, including technical capacity building such as taxonomy use, integrating IGF in institutional mandates, and ESRM approaches.

Source: The Mongolian Sustainable Finance Roadmap. Available at: https://wedocs.unep.org/handle/20.500.11822/33399 Mongolian Green Taxonomy. Available at: https://www.ifc.org/wps/wcm/connect/0c296cd3-be1e-4e2f-a6cb-f507a07bdfe9/Mongolia+Green+Taxonomy+ENG+PDF+for+publishing.pdf?MOD=AJPERES&CVID=mikyhlh

LUXEMBOURG’S SUSTAINABLE FINANCE ECOSYSTEM

Within European financial services, Luxembourg has assumed a leading role in sustainable finance, with - among others - the largest volume of “Green” assets under management and largest microfinance investment vehicles in the region. Its ecosystem is characterized by a set of general and niche market participants together providing a vibrant ecosystem in the field of sustainable finance at large, and in microfinance and inclusive finance, in particular.

The Luxembourg ecosystem consists of a set of public and private actors, including a number of professional associations representing all kinds of financial services. Jurisdiction for sustainability and sustainable finance is vested in the Ministry of Finance, Ministry of the Environment, Climate and and Sustainable Development, and Ministry of Foreign and European Affairs (Directorate for Development Cooperation and Humanitarian Affairs).

The Luxembourg Sustainable Finance Initiative (LSFI), the Inter-Departmental Commission on Sustainable Development (ICSD), the Superior Council (CSDD), and Lux-Development (LuxDev) coordinate public and private activities.

The set-up is laid down in various strategy documents, such as a government-issued Sustainable Finance Roadmap (2018), a Sustainable Finance Strategy issued in 2021 by the LSFI and the Ministry of Finance as well as an Inclusive and Innovative Finance Strategy issued in 2021 by the Directorate for Development Cooperation and Humanitarian Affairs of the Ministry of Foreign and European Affairs. Sustainability has also been determined as a general objective to lead all aspects of public administration, including inter alia the (public) University of Luxembourg.
## Luxembourg's Sustainable Finance Ecosystem (continued)

<table>
<thead>
<tr>
<th>Strategy and Coordination</th>
<th>Industry Representatives</th>
<th>Supervisors Labels</th>
<th>Education, Business Incubation</th>
<th>International Organizations</th>
<th>Significant Funds</th>
<th>Specialist Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>LFSI</td>
<td>LFF</td>
<td>CSSF</td>
<td>Université du Luxembourg</td>
<td>AFI</td>
<td>INFINE</td>
<td>LMDF</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Luxembourg Green Exchange</td>
<td></td>
</tr>
<tr>
<td>ICSD</td>
<td>ABBL</td>
<td>CAA</td>
<td>House of Training</td>
<td>ADA</td>
<td>European Microfinance Platform</td>
<td>FDC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ETIKA</td>
</tr>
<tr>
<td>CSDD</td>
<td>ALFI</td>
<td>BCL</td>
<td>LGX Academy</td>
<td>SPTF</td>
<td>Micro Insurance Network</td>
<td>FSIL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Microlux</td>
</tr>
<tr>
<td>LUXDEV</td>
<td>ACA</td>
<td>NDR</td>
<td>LIST</td>
<td></td>
<td></td>
<td>LCFP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fondation de Luxembourg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LHOFT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ICFA</td>
</tr>
</tbody>
</table>

### ABSL Luxembourg Bankers' Association
- **IFORD** - Investing for Development

### ACA Luxembourg Reinsurance Association
- **INDR** - National Institute for Sustainable Development

### ADA Appui ou Developpement Autonome
- **INFINE** - Inclusive Finance Network Luxembourg

### AFI Alliance for Financial Inclusion
- **ICFP** - Luxembourg European Investment Bank (BB) Climate Finance Platform

### ALFI Luxembourg Investment Fund Association
- **LGX** - Luxembourg Green Exchange

### BCL Central Bank of Luxembourg
- **LHOFT** - Luxembourg House of Financial Technology

### CAA Commissariat Aux Assurances
- **LISER** - Luxembourg Institute of Socioeconomic Research

### CSDD High Council for Sustainable Development
- **LIST** - Luxembourg Institute of Science and Technology

### CSSF Commission de Surveillance du Secteur Financier
- **LPEA** - Luxembourg Private Equity Association

### ETIKA Development of Ethical Money
- **LSFI** - Luxembourg Sustainable Finance Initiative

### E-MFP European Microfinance Platform
- **LUXDEV** - Luxembourg Development Cooperation Agency

### FDC Fonds de Compensation
- **LFF** - Luxembourg For Finance

### FDLUX Fondation du Luxembourg
- **LUXFLAG** - Luxembourg Finance Labelling Agency

### FSIL Luxembourg Intergenerational Sovereign Fund
- **MICROLUX** - [Microfinance Institution]

### HOT House of Training
- **MIN** - Micro Insurance Network

### ICSD Interdepartmental Sustainable Development Commission
- **SPTF** - Social Performance Task Force

### ICFA International Climate Finance Accelerator
- **UNILUX** - University of Luxembourg

---

THE UK’S SUSTAINABLE FINANCE ECOSYSTEM

The UK has a well-established ecosystem featuring national and international participants, strong expertise, large size, capital, and strong policy support to scale-up sustainable finance.

<table>
<thead>
<tr>
<th>PARTICIPANTS</th>
<th>ROLES IN SUSTAINABLE FINANCE</th>
<th>UK’S STRENGTHS AND OFFERINGS</th>
</tr>
</thead>
</table>
| Government and regulators         | Building a ‘green’ financial system through policy and regulations to drive momentum for sustainable finance | > Targeted policies and regulations to systematically change the financial system  
> Thought leadership by promoting best practices in the UK and internationally |
| Market infrastructure and domestic standard-setting bodies | Providing platforms and tools to commercialize and scale up sustainable finance | > Pioneers in innovations of platforms and tools  
> Ideal location for knowledge exchange  
> Thought leadership through standard setting and promoting ESG integration |
| Investors and investment managers | Investing by considering sustainability factors and for positive impacts | > Great size and depth of international capital pool  
> Strong capability in implementing sustainable investment strategy |
| Corporates and issuers            | Supplying green finance opportunities by developing qualified projects and products          | > Strong ESG awareness and integration  
> The hub for both UK and international issuers |
| Professional services providers   | Providing supporting services to investors and issuers                                      | > The global finance center with top talent and expertise in sustainable finance  
> Innovative solutions for sustainable finance |

<table>
<thead>
<tr>
<th>STRATEGY AND COORDINATION</th>
<th>ORGANIZATIONS</th>
<th>FINANCIAL INDUSTRY AND REGULATORS</th>
<th>RESEARCH AND BUSINESS INCUBATION</th>
<th>NETWORKS, FORUMS</th>
<th>SIGNIFICANT FUNDS AND CHARITY</th>
<th>SPECIALIST SERVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>G F Taskforce</td>
<td>Efeca</td>
<td>CBI, FCA</td>
<td>UKRI</td>
<td>EKN</td>
<td>CIFS, ICF</td>
<td>Salix Finance</td>
</tr>
<tr>
<td>GFI</td>
<td>OEP, ABI, BBA</td>
<td>OxFSG</td>
<td>CFF</td>
<td>UKSPF</td>
<td>GIB</td>
<td></td>
</tr>
<tr>
<td>TCFD Taskforce</td>
<td>Access</td>
<td>CISI, TPR</td>
<td>CISL</td>
<td>UN GCN UK</td>
<td>Floodre</td>
<td>UKNIB</td>
</tr>
<tr>
<td>ODA</td>
<td>CSB, CFA</td>
<td>PSR, UCL ISR</td>
<td>UKSIF</td>
<td>GSG</td>
<td>Carbon Trust</td>
<td></td>
</tr>
<tr>
<td>BII</td>
<td>Impact</td>
<td>SOAS, CSF</td>
<td>FIPF</td>
<td>Toynbee Hall</td>
<td>CG DP</td>
<td></td>
</tr>
<tr>
<td>MaPS</td>
<td>3keel</td>
<td>LSX</td>
<td>UKSA</td>
<td>CCLA</td>
<td>Big Society Capital</td>
<td></td>
</tr>
<tr>
<td>Fair4All Finance</td>
<td>YFF</td>
<td>UK Finance</td>
<td>Catapult</td>
<td>ShareAction</td>
<td>UKCI</td>
<td></td>
</tr>
<tr>
<td>CoL</td>
<td>BSI</td>
<td>BoE (PRA)</td>
<td>CGFI</td>
<td>ClientEarth</td>
<td>Open Banking</td>
<td></td>
</tr>
<tr>
<td>Carbon Trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catapult</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBI</td>
<td>Chartered Banker Institute</td>
<td>EFN</td>
<td>EKN</td>
<td>Ecosystems Knowledge Network</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCLA</td>
<td>Churches, Charities, and Local Authorities Investment Management limited</td>
<td>Fair4All Finance</td>
<td>Fair4All Finance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFA Society</td>
<td>Chartered Financial Analyst Society of the UK</td>
<td>FCA</td>
<td>Financial Conduct Authority</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFIT</td>
<td>Centre for Finance, Innovation and Technology</td>
<td>FIPF</td>
<td>Financial Inclusion Policy Forum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFRF</td>
<td>Climate Financial Risk Forum</td>
<td>Flood Re Fund</td>
<td>Flood Re Fund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CGDP</td>
<td>Centre for Global Disaster Protection</td>
<td>FRC</td>
<td>Financial Reporting Council</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: The Global City, available at: https://www.theglobalcity.uk/championing-sustainable-finance; Research provided by ADA Chair in financial Law (Inclusive Finance).
INFRASTRUCTURE

Infrastructure has two dimensions. The first involves ensuring that technical solutions allow those at risk of financial exclusion to connect to the financial system, while the second facilitates that financial institutions can effectively provide services to this clientele, for example, at costs as low as possible.

ENSURING ACCESS

One major infrastructure element includes Digital Financial Services. As shown in the AFI report, “FinTech for Financial Inclusion (FT4FI),” a robust Fintech ecosystem is a powerful tool to support financial inclusion, through electronic payments, client identification, client onboarding and long-distance access to financial services, addressing the last-mile-issue.

Fintech can also play an important role in supporting and implementing IGF policies, as both require financial, technical, and social innovations. For instance, regulations may promote IGF innovations by opening regulatory sandboxes and innovation hubs to them - two regulatory tools that have come to prominence in the Fintech context.

THE BAHAMAS SAND DOLLAR AND DIGITAL SOCIAL PAYMENTS IN FIJI

The Bahamas provides an interesting example how DFS can make payments disaster-proof. After the devastating impact of Hurricane Dorian in 2019, the central bank designed the first operational central bank-issued digital currency (CBDC) in the world, the Sand Dollar, to guarantee access to payments for everyone, even in remote places and in the wake of natural calamities, when internet service might be disrupted. Anyone with a data-enabled mobile phone can use the Sand Dollar.

The use of digital finance and mobile money to disburse social payments has been a big success in Fiji. Under its Help for Homes Initiative in 2016, the Fijian government has partnered with technical services providers and leveraged digital payments to disburse FJD130.4 million (roughly USD57.3 million) in aid to those affected by Tropical Cyclone Winston. The number of registered users to the digital payment platform increased by 12.3 percent in less than a year, followed by an even larger increase but reduced to a certain extent after the government aid program expired. The Fijian government believes that G2P payments need to evolve and has taken action to promote green financial inclusion via digital finance inclusion.


EFFECTIVE INTERMEDIATION

Technology is also a powerful tool when making any IGF approach operational. For instance, central banks could provide an online tool for checking whether a given project qualifies for privileged interest rates due to its IGF footprint.

In addition, technology can form part of the new foundational infrastructure that lowers the costs of IGF, for example, by reducing the costs of access to data through a standardized platform that bundles all financial and sustainability data.

THE EU’S SINGLE ACCESS POINT FOR SUSTAINABILITY AND FINANCIAL INFORMATION (ESAP)

Sustainability information (understood as social and environmental dimensions) may be made accessible at a single access point to reduce information costs, facilitate market approaches, combat greenwashing, and reduce agency conflicts.

An important example is the European Single Access Point (ESAP) project, which will be infrastructure supervised by the European Securities and Markets Authority for the submission of all mandatory ESG and financial disclosures required under EU law. It will be a single place where standardized data is submitted via market participants in digital form. This data can then form the basis not only for monitoring compliance with regulatory requirements - both financial and non-financial - but also as a source of data for investors and governments to use in monitoring and evaluating investment decisions and progress in terms of SDG and IGF objectives in relation to financial and economic objectives and performance.


50 See, for example, the Monetary Authority of Singapore, “Green FinTech.” Available at: https://www.mas.gov.sg/development/fin-tech/Green-FinTech. See also the European Investment Bank’s Green Eligibility checker. Available at: https://greenchecker.eib.org/
LEVERAGING DIGITAL FINANCIAL SERVICES TO ADVANCE IGF POLICIES

A joint initiative between the AFI’s IGFWG and the Digital Financial Services Working Group (DFSWG) recently launched the “Leverage Digital Financial Services to Advance IGF Policies” special report.

This report shows how digital payment platforms, digital financial products, and enabling policies can make a difference in helping the most vulnerable populations adapt to and mitigate climate risk and environmental degradation: for low-income, rural households payment services function as an informal, yet essential risk management device against climate-related economic shocks; government to person (G2P) payments may be channeled to those in need in times of crisis and disasters; DFS facilitates savings and loans with a green tone, and niche services, such as pay-as-you-go solar as a green digital asset, enhanced digitalization in the field of index agro-insurance providers as well as digital agro-market places.

Six main recommendations can be formulated on DFS-based IGF initiatives:
1. Allow non-banks to establish digital retail payment platforms.
2. Consider policy sequencing.
3. Lower barriers to entry by adopting a risk-based approach.
4. Remove obstacles to private-sector investments in digital financial inclusion for green purposes.
5. Focus on supervisory engagement and outreach.
6. Address gaps in access by encouraging uptake among targeted customer groups.


DATA & MODELS

Data and models are at the heart of the IGF mission but are lacking in terms of their size and scale.

MODEL DEVELOPMENT

In particular, models linking sustainability data to financial data are in their infancy. So far, most models used in practice rely on exclusionary lists of more or less sophistication. Advanced models relying on proven causal links or at least correlations between allocating finance and achieving sustainable outcomes are in high demand.51

This state may improve, over time, as more structured data is available and put to econometric testing. Yet, it is crucial that regulators further data generation within their jurisdiction to create models reflecting local circumstances to provide for locally optimal outcomes of any IGF framework.

Models can hardly be put to good use in the absence of expansive testing in theoretical model portfolios, and then smaller experimental portfolios before they are set to practice within larger financial institutions to steer lending and investments.

MEASURING IGF

Regulators may further model development by policy approaches that:

1. produce quantitative structured data and estimations
2. identify innovative measurement techniques on social and sustainability factors
3. require granular reporting to the market at large (as this ensures access to the ‘public’ and academia), with reported data reflecting national priorities
4. facilitate granular data collection

Further, analogous to the Hackathon in the FinTech domain, IGF-oriented “model contests” and other innovative methods that incentivize the search for algorithm-based IGF operations and risk steering by financial institutions could inspire the development of new measuring techniques.

The role of regulators and central banks could range from that of a moderator over a reviewer, a developer of innovative measurement techniques to that of a data host for official sustainability data, depending on resources and expertise.


MEASURING IGF

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

Several initiatives are seeking to improve the identification and measurement of progress regarding financial inclusion and financing climate change mitigation and adaptation as separate issues. There is, however, no unified approach to address these issues.

A joint initiative between the IGFWG and the Financial Inclusion Data Working Group (FIDWG) addressed these issues in two innovative publications. The first is a guideline note on collecting IGF-related data from the demand-side, specifically, from demand-side surveys (DSS). The Reserve Bank of Fiji has incorporated a section into its 2020 Financial Services DSS that will provide a deeper understanding of coping strategies by different segments of the society and in particular, women’s resilience to climate change.1

Their recent publication identifies the priorities of AFI members concerning inclusive green finance regulatory reporting that may be relevant to other policymakers and financial regulatory authorities that oversee financial inclusion and climate change development agendas. The report is built up on three themes that were found to be recurring priorities for AFI members.2

The report highlights some AFI member examples, such as Bangladesh Bank which 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 for its green banking activities but now also covers components of sustainable finance defined in their Sustainable Finance Taxonomy. The Bangko Sentral ng Pilipinas (BSP) has also been collecting and analyzing environmental and banking financial data monitoring the effects of extreme weather on the stability of the financial system, while the Reserve Bank of Fiji included climate-related questions into its Financial Inclusion Demand Side Survey.

I. ASSESSING THE INTEGRATION OF CLIMATE RISK MANAGEMENT IN MSME SEGMENTS

- **DATA THEMES**: Financial regulators and policymakers need to ensure that financial institutions are adequately managing the climate risks of their portfolio of customers.
- **TYPES OF DATA**: Supervisors, financial institutions, third party data providers, survey data, environmental data, stress test results.
- **DATA SOURCES**: Supervisors, Financial Institutions, Third-party Data providers (credit Bureaus, environmental ministries, rating agencies, ESG data firms, etc.).

II. MEASURING FUNDING FOR IGF

- **DATA THEMES**: Financial regulators and policymakers need to monitor the availability of capital for funding inclusive and green segments.
- **TYPES OF DATA**: Funding allocations, disbursements/utilizations, fund performance indicators.
- **DATA SOURCES**: DFIs, IGOs, climate and sustainable finance/investment commissions, finance ministries, investment funds.

III. MEASURING THE PROVISION OF INCLUSIVE GREEN FINANCIAL PRODUCTS

- **DATA THEMES**: Financial regulators and policymakers need to track the provision and delivery of inclusive green financial products (supply side).
- **TYPES OF DATA**: Supply-side financial and transactional data such as volumes and number of financial instruments deployed.
- **DATA SOURCES**: Financial institutions, payment processors, insurance providers, credit guarantee providers.

ROADMAP FOR INCLUSIVE GREEN FINANCE IMPLEMENTATION

GREEN FINTECH
Combining the ecosystem with infrastructure and data dimension results in a powerful wide-ranging grouping of quality services for an IGF-oriented financial sector that may address some of the pain points of any sustainability and IGF-approach in particular.

For instance, Blockchain and distributed ledger technology (DLT) may be used to render sustainability information traceable and less easy to manipulate.52

A few examples can highlight the scope of these Green Fintech business models.

GREEN FINTECH

**Tred**, a UK fintech, launched the country’s first green debit card which helps people spend more sustainably. The Tred card tracks a user’s carbon footprint, helps reduce their impact, and works to offset emissions as it funds reforestation projects with card revenue.

**Sugi** is the UK’s first platform that seeks to simplify green investing by enabling investors to check and compare their carbon impact with industry benchmarks. Sugi currently displays impact data for roughly 95 percent of the listed equity market, over 3,500 exchange traded funds (ETFs), and certain actively managed funds.

**Greenomy** offers a software as a service solution that helps corporates, credit institutions and asset managers measure, disclose, and improve their sustainability levels according to the new EU Sustainable Finance standards (EU Taxonomy, SFDR, NFRD and CSRD) and upcoming green taxonomies.

**Granular** is building a market for hourly certificates of renewable electricity, which comply with the guidelines of EnergyTag, a global, non-profit, and industry-led initiative. It provides tools and market solutions to facilitate continuous clean energy sourcing, helping firms progress towards net-zero and improve the transparency of emissions reporting.

**Ekofolio** is a Fintech headquartered in Luxembourg, working to make global forest assets investable for a broader range of investors. Globally, forests are an over USD100 billion investment market, currently for institutional investors, family offices and high net-worth individuals. Ekofolio’s vision is to facilitate the growth of this specialty sector towards a trillion-dollar, transparent and liquid global market where institutional and retail investors can participate on comparable terms.

Source: Research provided by the ADA Chair in financial Law (Inclusive Finance).

52 Zetzsche/Anker-Sørensen. “Regulatory Building Blocks of a Green FT System.” SSRN.
V. POLICY TOOLS
THE THAI BANKERS ASSOCIATION’S SUSTAINABLE BANKING GUIDELINES

The Thai Bankers Association, in cooperation with the Bank of Thailand (BoT), launched the “Sustainable Banking Guidelines” in 2019, which arose from an industry-led initiative supported by the BoT.

The guidelines define responsible lending for all Thai banks and were supported by the BoT, which also encourages banks to internalize ESG risks. The responsible lending approach includes material ESG issues and encourages members to establish effective internal controls along with transparent disclosures in line with internationally accepted concepts of ‘double materiality’ consistent with the notion of sustainable finance laid out in this special report: climate change is part of environmental, and financial inclusion part of social risks. The guidelines have been endorsed by the Association of International Banks.


ADVOCACY FOR IGF

Multiple options around advocating for IGF were laid out in the AFI's “Promoting IGF initiatives and policies” report.53

On the one hand, relevant tools include those of external advocacy for IGF through press releases, progress reports, ministerial and regulatory speeches, surveys, participation in working groups, technical roundtables, etc. On the other, tools of internal advocacy for IGF within the financial institution or regulator include: (1) the creation of specific financial inclusion or sustainable finance departments, (2) national or regional coordination through working groups, expert circles, workshops (for instance, on specific IGF policies), and conferences.

Activities to support the implementation of IGF policies and initiatives, such as ongoing revisions of frameworks, measurements of performance and changes to strategy should be widely publicized, and each should be based on a broad consultation with stakeholders.

That said, all other tools mentioned in this section also have positive side effects on advocacy for IGF.
EDUCATION & CAPACITY BUILDING

IGF requires knowledge of the social and economic structure of the particular country (to address the financial inclusion dimension) and understanding of the science that underpins sustainability assessments.

The needed scientific knowledge is broad indeed, spanning the environmental sciences, energy production, climate research, and the biological and chemical components of sustainability. Financial inclusion expertise may be available on demand as a consultancy service, but the consultant’s perspectives may well be affected by their own incentives and issues or the views of their donors.

For these reasons, regulators should encourage education and capacity building throughout the industry; they could further these, for instance, by sponsoring or endorsing inter-institutional staff and executive training.

For the same reasons, the capacity building of local financial regulators is extremely crucial. Just as regulators have had to build IT expertise to respond to the Fintech challenge, regulators need a new, broad range of expertise in the social and hard sciences to assess IGF factors, all the more so, if they are tasked with drafting and applying inclusive sustainability standards and rules.

Internal capacity building efforts can take many forms, from executive-level coaching to department training, training of individual staff by external experts, and peer learning activities. While these activities will likely be ad hoc at the beginning, as institutional knowledge builds and IGF policy engagement becomes more intensive, a systematic learning system will likely be needed.

CAPACITY BUILDING IS ESSENTIAL IN IMPLEMENTING SUSTAINABLE FINANCE ROADMAPS

The Central Bank of Egypt (CBE), motivated by physical risks to property, infrastructure and land, and transition risks from global adjustments to lower carbon economies, developed its own Sustainable Finance Roadmap (SFR) and Sustainable Finance Guiding Principles (SP).

The CBE, after building capacity and raising knowledge within the organization and among relevant stakeholders, issued the SFR with four elements: capacity building; non-binding SP; gap analysis; and a mandatory regulation based on the SP.

The CBE’s Guiding Principles on Sustainable Finance, in turn, rely on six main pillars:
1. Building the necessary capabilities and knowledge.
2. Enhancing sustainable finance.
3. Involving stakeholders.
5. Sustainability orientation of the banks’ internal activities and operations.
6. Reporting.

The CBE’s sustainability department drafted the SP and SFR to increase the banking sector’s adoption of sustainable finance and sustainability in their internal activities. This entailed a gradual process in which building the sector’s capacity was vital, followed by market assessments through annual surveys and the development of a regulatory framework. Both the SP and SFR were carefully designed to ensure the sector remains competitive and undisrupted by abrupt policy changes.

The CBE is currently developing a governance structure for operational aspects of sustainability reporting once the mandatory regulation comes into force.

Source: IGFWG. Ago 2022. Internal survey on ‘IGF Roadmaps’.

virtual events targeting both supervisors and banking institutions. Using international experience and expertise, these events train supervised banks on how to best implement supervisory guidance on climate risk management with a focus on climate risk stress testing and reporting, to insure consistency across the banking industry.

**CAPACITY BUILDING USING INTERNATIONAL EXPERTISE - THE CASE OF BANK AL-MAGHRIB**

Aware of the importance of training to accelerate the consideration of climate and environmental-related issues in its missions, Bank Al-Maghrib (BAM) set an objective of building in-house knowledge and capacities and fostering the awareness of credit institutions.

BAM initially targeted supervisors in its own green finance unit whose activities are dedicated to carrying out studies and analysis on climate-related and environmental risks and deploying preventive and corrective actions to mitigate these risks, as well as members of the broader working group involved in related regulatory projects and studies. Training takes the form of participation in conferences, workshops and seminars or webinars whose themes aim to be broad enough to cover the green economy, green and sustainable finance, and climate risk.

These trainings are mostly organized by international specialized organizations, multilateral development banks, regulators or central banks, networks and associations or international financial institutions. A study visit was also organized to an advanced central bank which provided more practical and focused training on topics related to climate risk supervision. To ensure a wider benefit within the organization, BAM’s specialized supervisors organize in-house trainings for managers with a view to popularizing and increasing awareness of climate risk concepts and practical management tools.

At the banking sector level, BAM is working to build on the knowledge developed internally and by market players to accelerate capacity building among all stakeholders through quarterly meetings. To this end, BAM is regularly updating the banking sector on the Network of Central Banks and Supervisors for Greening the Financial System (NGFS)’s recent publications.

These are presented to and discussed with risk management and green finance specialists with a focus on NGFS best practices for banking institutions. These periodic informative meetings aim to build a collective understanding and potentially trigger actions by banks that promote green finance as well as risk management.

As part of the ongoing two-year work program on climate-related risks supervision and monitoring, BAM also decided to build on World Bank expertise to raise capacities on climate change-inherent financial risks through a series of trainings and peer learning.

**FINANCIAL INCENTIVES**

**CREDIT GUARANTEES, SYNDICATION, AND RISK SHARING SCHEMES**

Regulators can further advance IGF by setting financial incentives, for example, by providing credit guarantees, participating as partners in syndicates or share lending and investment risks with financial institutions engaged in IGF. All of these measures reduce the risks of IGF finance from the financial institution's perspective and offload capital needs from their balance sheet; in turn, IGF activities are more profitable, on a risk-adjusted perspective basis, and financial institutions may engage in more IGF finance in total.

Also possible may be a combination of the former with more altruistic or even donor-supported financing schemes, including crowdfunding for certain sectors or projects that may provide risk-patient capital for the IGF transformation.

Provisions for risk-sharing schemes of any kind must be tied to the national priorities identified in the IGF strategy, with essential minimum standards for classifications.
GREEN LENDING PROGRAMS

Green lending programs by some central banks, as well as regional and international (multilateral) development banks, may support awareness of an IGF strategy. These lending programs tie privileged refinancing of institutions (including microfinance institutions) to IGF-related disclosures and minimum IGF standards.

For instance, the European Investment Bank (EIB)’s Green Gateway program, which provides indirect financing to MSMEs and small municipalities, rests on green eligibility criteria to which the lending institution commits when receiving refinancing from the EIB. The EIB’s green eligibility criteria rely on the EU’s taxonomy, with modifications and adjustments based on the Multilateral Development Bank’s Principles of Sustainable Finance.

THE CENTRAL BANK OF EGYPT (CBE)

Egypt is one of the countries in the MENA region that is rapidly developing in terms of both green and climate finance.

The CBE has also commenced green initiatives to draw the private sector towards greener investments. As part of its initiatives to implement the Sustainable Finance Principles (2021), the CBE issued policies and established facilities that allow bakeries to use natural gas instead of more carbon-intense energy sources.

GREEN CREDIT RISK GUARANTEES

Despite the widespread use for credit enhancements and risk sharing, the global experience of credit guarantee schemes (CGSs) to support the financing of green initiatives of MSMEs is limited, according to the IGFWG publication “Green Credit Guarantee Schemes for MSMEs”, a joint initiative of the AFI’s IGFWG and SME Finance Working Group (SMEFWG).

CGSs can help bridge the initial uncertainty around MSME financing of green projects by:

- Improving the bankability of transactions, where collateral is poor.
- Encouraging lenders to provide financing to target groups by sharing credit risk.
- Creating market learning opportunities for green businesses and technologies.
- Improving the ability of lenders to price risk for MSMEs and green projects.
- Helping banks to initiate and grow their green lending business by revealing new clients.

In the context of IGF, the design of any scheme must reflect the particular challenges of the project, ranging from the low-risk appetite of lenders to the lack of awareness of borrowers. A CGS can be designed to accompany other government support interventions such as concessional refinancing facilities, capacity building programs, and targeted regulatory treatments.

Capacity building to improve credit risk assessment skills for green transactions and operational experiences gained from existing CGGs will be important to the success of green CGGs for MSMEs.

Once green finance policies and guidelines are in place, opportunities to kickstart green lending include adapting existing CGGs and leveraging programs by regional and international donors.

PRIORITY SECTOR LENDING

Similar to green lending programs, priority sector lending grants regulatory privileges if the financial institutions meet a certain lending quota for MSMEs active in specific sectors. This may be particularly effective in shifting economic activity from unwanted sectors (e.g. energy-intensive sectors) to wanted sectors (e.g. the tertiary sector), and can also be used to support women SMEs, if a quota is provided.

Source: CBE. Available at: https://www.cbe.org.eg/en/Pages/HighlightsPages/Circular-dated-5-April-2021-regarding-including-local-bakeries-in-the-small-size-initiative.aspx


57 Already starting in 2012, a group of MDBs released principles on sustainable finance, the five common core Principles to Support Sustainable Private Sector Operations. These principles were supplemented over time, while some more recent releases include the MDB Just Transition High-Level Principles (2021).
The financial privilege can be justified given the diversification away from sectors potentially at risk due to climate change, and in turn, better refinancing conditions.

THE CENTRAL BANK OF JORDAN

The Central Bank of Jordan’s Medium-Term Advances to Licensed Banks Program provides subsidized loans for nine sectors deemed critical to development, including renewable energy and agriculture.


THE PMA’S SUSTAINABLE ECONOMIC DEVELOPMENT

To promote sustainable finance, the Palestine Monetary Authority (PMA), in 2019, issued instructions to enhance the role of the banking sector in sustainable economic development by investing in innovative sustainability-oriented projects.

Under these instructions, banks may be shareholders of up to 80% of the enterprise’s shares, for up to 10 years, with a gradual exit plan in place. The PMA incentivized these activities by exempting banks from forming a mandatory reserve and allowing the consideration of only half of the assets at risk (50%) for capital adequacy.

In 2020, the PMA capitalized the new ISTIDAMA Fund with USD300 million, allowing MSMEs to obtain indirect financing from banks and microfinance institutions at privileged interest rates, including one product with zero interest.

The Fund targeted MSMEs through mission-based sectorial programs, focusing on micro-enterprises, the health sector, electronic learning sector, digital transformation, and recovery.

In 2021, the PMA launched the “Manshati platform” as a national incubator that provides guidance, technical and administrative support, and facilitates access to finance to develop enterprises of all sizes. This platform is embedded in a wide network of public and private partners interested in developing these businesses, as they constitute the backbone and the largest component of the Palestinian economy.

Source: Palestine Monetary Authority. Available at: https://monshati.ps/page/about/en

CAPITAL PROVISIONING

Using capital requirements - either in general or institution-specific ways relying on Pillar II and III approaches - for subsidizing IGF approaches is less straightforward:

First, many institutions lack structured and granular data on the past realization of climate-related risks while the future remains uncertain.

Second, IGF is in many respects about externalities. Addressing externalities within the risk policy and capital surcharge model is difficult to justify. By definition, an externality does not impact a firm’s balance sheet. As such, adding capital to combat externalities is beyond the risk logic of risk management and capital requirements as a standardized assessment of future risks.

Third, individuals and MSMEs at risk of financial exclusion are high risk where the risks exceed the returns; otherwise, they would be included. Risk-based provisioning of that risk will result in fewer, rather than more, potentially excluded clients.

However, capitalization-based subsidies can be justified in two cases. First, where including so-far excluded clients allows for better diversification of the bank’s portfolio. For instance, a financial institution may be exposed to the risk of exports. Here, local clients can reduce risks from exports. Second, where the risk of an existing portfolio of potentially excluded clients is reduced by risk mitigation means positively improving the risk-return ratio, rendering the bulk of risky clients less risky in total. This may be the case where IGF tools, particularly capacity building, allow clients to diversify their services or reduce their risks. For instance, farmer dependency on rain as water supply may be reduced by irrigation systems.
In many AFI member countries, Sustainable Banking Principles and Environmental & Social Risk Management (ESRM) Guidelines are implemented voluntarily, but over time, compliance becomes mandatory.

**ENVIRONMENTAL & SOCIAL RISK MANAGEMENT (ESRM) GUIDELINES**

Financial regulators play a key role in guiding financial institutions on environmental and social (E&S) credit risk management relating to E&S risks from the business operations of their clients. An ESRM policy furthers sustainable business while lowering financial and reputational risks.

An increasing number of regulators in the AFI network encourage FIs to adopt ESRM Guidelines - initially on a voluntary basis - to identify, assess and mitigate E&S externalities and risks.

- **Bangladesh Bank** introduced an Environmental Risk Management (ERM) Guideline and Environmental Due Diligence Checklists (2011) to regulated financial institutions.
- **The Superintendencia de Banca, Seguros y AFP of Peru** issued a mandatory regulation for Social and Environmental Risk Management (2015).
- **Bangladesh Bank** updated its Guidelines on Environmental & Social Risk Management (ESRM) for Banks and Financial Institutions in Bangladesh (2017). These guidelines expand the scope of social risk assessments and introduce a number of social parameters in addition to environmental parameters for risk assessments. The guideline also exemplifies the sources of both environmental risks and social risks for banks and FIs and highlights the benefits of having an Environmental & Social Management System (ESMS) in place. Moreover, an exhaustive approach was introduced in this version to make the assessment of risks more objective.

**Bank Al-Maghrib** defined its high-level expectations on how financial institutions should manage climate and environmental risks, in line with its efforts to advance sustainable development. BAM requires banks to progressively manage financial risks from climate change and environmental decline through governance & strategy, risk management, trainings, and disclosures. BAM’s expectations are supplemented by technical guidance over time as expertise and regulations develop and capacities improve.

**The Central Bank of Brazil** issued detailed guidelines to support the adoption of a Social-Environmental Responsibility Policy (Política de Responsabilidad Socioambiental, or PRSA) and made the application of these guidelines a condition for commercial banks to operate.

**The State Bank of Pakistan** issued Green Banking Guidelines (2017) with a sizable section on ERM that offers guidance to banks on developing their own green financing products and services.

**Nepal Rastra Bank** adopted Guidelines on Environmental and Social Risk Management for Banks and Financial Institutions (2018), which apply to bank lending for SME finance, commercial leasing, term finance, and project finance.


**Bangko Sentral ng Pilipinas** approved the Environmental and Social Risk Management Framework (2021) setting strategic E&S objectives covering short, medium and long-term horizons.

**Superintendencia de Economía Popular y Solidaria** issued the Norma de Control para la Administración del Riesgo Ambiental y Social en las Cooperativas de Ahorro y Crédito and Asociaciones Mutualistas de Ahorro y Crédito para la Vivienda (2022).


---

MARKET-DRIVEN

Standardization can also arise from market participants’ initiatives without any regulatory endorsement. For instance, many standards on impact investing are purely market-based standards.

THE PRINCIPLES FOR RESPONSIBLE INVESTMENTS (PRI)

Many institutional investors have committed to the six United Nations Principles for Responsible Investments (PRI), the developments of which are governed by the PRI Association, represented by its Board.

Market participants sign up to the PRI, establishing worldwide soft law standards, such as:

> Principle 1: We will incorporate ESG issues into investment analysis and decision-making processes.
> Principle 2: We will be active owners and incorporate ESG issues into our ownership policies and practices.
> Principle 3: We will seek appropriate disclosure on ESG issues by the entities in which we invest.
> Principle 4: We will promote acceptance and implementation of the Principles within the investment industry.
> Principle 5: We will work together to enhance our effectiveness in implementing the Principles.
> Principle 6: We will each report on our activities and progress towards implementing the Principles.

Source: https://www.unpri.org/

The upside of private initiatives is openness to innovation and flexibility, plus a degree of competition that can heighten or possibly depress quality. However, market initiatives may suffer from dependency on a particular private actor that funds the initiative, or staff that develop and govern the standards. This may harm, over time, the acceptance of the standards throughout the market.

Regulatory endorsements may facilitate widespread acceptance of a given standard in a region, thus enhancing compliance. Yet, the regulatory endorsement may also make adjustments more difficult, as regulators may require additional procedures and reviews.

To balance the upsides and downsides of private and public involvement, we often see a mix of private and public bodies involved in standards development, maintenance, and enforcement.

CAMBODIAN SUSTAINABLE FINANCE INITIATIVE

The Association of Banks in Cambodia (ABC), in collaboration with the Ministry of Environment and the National Bank of Cambodia, adopted the Cambodian Sustainable Finance Initiative (CSFI) to develop and strengthen finance sector safeguards and risk management standards on social and environmental impacts. The initiative has taken a bottom-up approach led and owned by the banks to develop and design E&S standards appropriate for Cambodia’s national context.

> Principle 1: We will assess and manage environmental risks relating to climate change, pollution and waste management and the protection of our critical natural resources.
> Principle 2: We will assess and manage risks that could potentially negatively impact our people, in particular local communities, workers, and indigenous, and minority populations.
> Principle 3: We will assess and manage risks that could potentially negatively impact aspects of our cultural heritage, including our language, culture, traditions, and monuments.
> Principle 4: We will increase the financial awareness and literacy of the Cambodian people and improve our approach to customer and client protection.
> Principle 5: We will expand our reach to those who previously had no or limited access to the formal banking sector, as well as providing more innovative solutions to improve banking access and service levels.
> Principle 6: We will finance innovations that create efficiencies and improvements of existing, traditional sectors and business activities, as well as to develop new green economy activities.
> Principle 7: We will seek to build capacity across banks to deliver on our commitments as well as raise awareness of our customers and communities about sustainable, inclusive finance.
> Principle 8: We will manage our own environmental and social (E&S) footprints and request similar standards from our suppliers.
> Principle 9: We will annually report our individual and sector progress against these commitments to hold ourselves accountable and to share the story and outcomes of our journey and the value we believe can be created for Cambodia.


61 For example, in August 2019, the Business Roundtable - an association of CEOs of leading US companies - issued a Statement on the Purpose of a Corporation, which included a commitment to ‘protect the environment by embracing sustainable practices across our businesses’: see Business Roundtable. 2020. “One Year Later: Purpose of a Corporation.” Available at: https://purpose.businessroundtable.org
Mandatory Regulation

As to mandatory regulation, we differentiate between market and non-market approaches. Each approach works best in certain conditions. For example, a market approach works better where infrastructure is more advanced.

Non-Market Approaches (Prohibition, Environmental Law)

Non-market approaches seek to prohibit unsustainable conduct. Every country has environmental laws that can be tailored as to granularity, and considerably varying degrees of discretion in government institutions.63 For instance, cars with excessive emissions can be prohibited or permitted only with modifications.64 In the same vein, a parliament or legislative body can prescribe maximum fees for financial services provided to low-income populations.

The upside of non-market approaches is that, if compliance is ensured, they can totally prevent unsustainable conduct. However, non-market approaches impose costs on the regulated parties, which will pass these on to consumers or hesitate to comply. For instance, simply prescribing financial inclusion achieves little true inclusion; in practice, financial institutions will deliver sub-standard services and erect other barriers to avoid the associated costs. The downsides of non-market approaches center on compliance, and on how to manage the transition from an unsustainable to a sustainable state.65 Further, the relevant rules tend to only be binding locally, as global, or regional rules are scarce, and an overly strict approach may lead to an undersupply of goods and services because they infringe on the rules but are yet crucial for local economic development.66

Rules between central banks and supervised institutions often have mandatory effects. For example, compulsory ESRM guidelines have been adopted in Brazil and Ecuador for the cooperative and microfinance sectors.

LuxFlag Governance

Many institutional investors have committed to the six United Nations Principles for Responsible Investments (PRI), the developments of which are governed by the PRI Association, represented by its Board.

Market participants sign up to the PRI, establishing worldwide soft law standards, such as:

- **Principle 1**: We will incorporate ESG issues into investment analysis and decision-making processes.
- **Principle 2**: We will be active owners and incorporate ESG issues into our ownership policies and practices.
- **Principle 3**: We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- **Principle 4**: We will promote acceptance and implementation of the Principles within the investment industry.
- **Principle 5**: We will work together to enhance our effectiveness in implementing the Principles.
- **Principle 6**: We will each report on our activities and progress towards implementing the Principles.

Source: [https://www.unpri.org/](https://www.unpri.org/)

LuxFlag Governance

Independent non-profit association since 2006

Charter members: ABBL, ADA, ALFI, EIB, Luxembourg Stock Exchange, Luxembourg for Finance and the Government of Luxembourg

General Meetings of the Board of Directors as supreme authority

Promotes the raising of responsible capital by
- Recognizable label to eligible funds and financial market products
- Membership platform for Sustainable Finance showcasing and networking
- Sustainable Knowledge Center

The LuxFLAG label supports the development of sustainable finance in Europe and beyond, resting on an independent, internationally recognized validation of compliance with the label criteria. The LuxFLAG Label is a unique tool and signal for asset managers and other financial industry actors to highlight the Sustainability/ESG/Impact credentials of their products. Investors rely on the LuxFLAG Label to identify sustainable investment products.

LuxFlag Governance

LUXFLAG GOVERNANCE

Many institutional investors have committed to the six United Nations Principles for Responsible Investments (PRI), the developments of which are governed by the PRI Association, represented by its Board.

Market participants sign up to the PRI, establishing worldwide soft law standards, such as:

- **Principle 1**: We will incorporate ESG issues into investment analysis and decision-making processes.
- **Principle 2**: We will be active owners and incorporate ESG issues into our ownership policies and practices.
- **Principle 3**: We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- **Principle 4**: We will promote acceptance and implementation of the Principles within the investment industry.
- **Principle 5**: We will work together to enhance our effectiveness in implementing the Principles.
- **Principle 6**: We will each report on our activities and progress towards implementing the Principles.

Source: [https://www.unpri.org/](https://www.unpri.org/)

LuxFlag Governance

Independent non-profit association since 2006

Charter members: ABBL, ADA, ALFI, EIB, Luxembourg Stock Exchange, Luxembourg for Finance and the Government of Luxembourg

General Meetings of the Board of Directors as supreme authority

Promotes the raising of responsible capital by
- Recognizable label to eligible funds and financial market products
- Membership platform for Sustainable Finance showcasing and networking
- Sustainable Knowledge Center

The LuxFLAG label supports the development of sustainable finance in Europe and beyond, resting on an independent, internationally recognized validation of compliance with the label criteria. The LuxFLAG Label is a unique tool and signal for asset managers and other financial industry actors to highlight the Sustainability/ESG/Impact credentials of their products. Investors rely on the LuxFLAG Label to identify sustainable investment products.

LuxFlag Governance

LUXFLAG GOVERNANCE

Independent non-profit association since 2006

Charter members: ABBL, ADA, ALFI, EIB, Luxembourg Stock Exchange, Luxembourg for Finance and the Government of Luxembourg

General Meetings of the Board of Directors as supreme authority

Promotes the raising of responsible capital by
- Recognizable label to eligible funds and financial market products
- Membership platform for Sustainable Finance showcasing and networking
- Sustainable Knowledge Center

The LuxFLAG label supports the development of sustainable finance in Europe and beyond, resting on an independent, internationally recognized validation of compliance with the label criteria. The LuxFLAG Label is a unique tool and signal for asset managers and other financial industry actors to highlight the Sustainability/ESG/Impact credentials of their products. Investors rely on the LuxFLAG Label to identify sustainable investment products.
MARKET APPROACHES

In light of the downsides of binding standards, market approaches have been given more prominence of late, both among regulators and in the literature.

Disclosure rules are among the first choice of many regulators.67 These allow market participants to assess the sustainability risks and impacts of an activity and respond by reallocating their funding and investments. By influencing capital flows by way of disclosure obligations, the financing of sustainable activities in the real economy becomes cheaper, while non-sustainable activities are less well-supported. This generates increased capital market interest and thus growth potential for sustainable products and services. Through this steering effect, innovations should be increasingly oriented towards sustainability in the future. As a long-term consequence, fewer natural resources may be used overall, greenhouse gas emissions may be reduced, and a climate-neutral economy may be achieved in the long-run. In the same vein, financial institutions that serve financially excluded parts of society may find beneficial refinancing from socially conscious investors and development banks. To achieve these ends, sustainable finance-related disclosure rules encompassing capital, credit and insurance markets are required.68

Market approaches work particularly well if paired with investments in data and models as well as infrastructure and adequate technology for operations and supervision of financial institutions.

At the same time, financial intermediaries may use certain environmental or social characteristics to market their products and services to socially conscious investors and clients.69 Labelling products and services as green or inclusive appeal both to lending and investment clients. Regulation addressing greenwashing is thus really important to any IGF framework.

DIRECT AND INDIRECT (AGGREGATE) APPROACHES

Regulation can directly mandate businesses to disclose sustainability-related information. For instance, the EU’s SFAP submits all large enterprises and enterprises of public importance – approximately 50,000 enterprises in total – to demanding disclosure rules with the proposed Corporate Sustainability Reporting Directive.70 Yet, even the EU’s SFAP does not impose direct requirements on the 23 million SMEs residing in the EU.

For MSMEs, an indirect approach to regulation can work by addressing the lending by intermediaries such as banks and microfinance institutions to MSMEs. This requires the financial institutions to collect and assess data with regards to MSMEs.

Regulation in this way seeks to embed IGF concerns in the frameworks applicable to the lending institutions. Tools that are particularly relevant in this context include:

> risk management policies
> reporting on sustainability matters to regulators
> general or risk-specific capital requirements
> governance, in particular: board composition, board awareness, remuneration systems and training on sustainability matters; and establishing IGF as a regular board matter
> internal and external audits with special focus on sustainability
> conflicts of interest assessments, with a focus on conflicts between long-term (sustainability) interests and short-term profit generation

While dealing with sustainability risks within the financial institution’s risk management, a particular challenge for SME lending is to adequately deal with externalities, that is the impact of the institution’s lending activity on sustainability factors.71 (Example: MSMEs may use credit to purchase environmentally harmful chemicals for their business). For capital market active entities, the capital market model assumes that institutional investors may seek to uphold environmental long-term interests against those of bank management.

Yet, the shareholders of the lending institution may be more or less sustainability aware. This could be particularly true in light of more pressing short-term interests, for instance, survival of the bank’s clients in light of challenging economic or disaster-driven

---


68 The most ambitious market-based approach so far is the European Union’s Sustainable Finance Action Plan (see supra, at IV.1).


circumstances, with the pandemic as a prime example. In such sensitive situations, which may often arise in AFI member countries, regulators need to play an active role to protect societal and environmental concerns against the self-interests of financial institutions, while also addressing the challenges borrowers face.

The above measures, including the taxonomy, disclosure, conduct of business rules, and capital requirements may be utilized for MSMEs. Yet, the challenge remains that MSMEs have little data (and even less granular and structured, that is disaggregated data), and thus, a bottom-up data approach as prescribed by some sustainable finance frameworks for listed companies is not feasible. Very few MSMEs have a rating, and generating one for MSMEs makes little sense where, as in most AFI member countries, the operational basis for SME activity is highly personal and dependent on local circumstances.72

National data aggregation strategies are emerging worldwide, including in AFI members, to seek to maximize the value of aggregated data while minimizing concentration risks.

For the same reasons, most banking laws apply to individuals and MSMEs together with all other classes of borrowers, and it is only when clients are categorized and grouped by specific characteristics that capital and risk management can then be tailored towards these characteristics. Transferring the same approach to IGF, a sectoral approach (a focus on sectors of the economy rather than individuals and MSMEs, as such) paired with additional tests for project finance may achieve better results by reducing the regulatory burden of the standards and their data gathering requirements.

For instance, a subject group could consist of all individuals and MSMEs involved in making clothes, either as sewers or otherwise in the supply and delivery chain. Risks – both sustainability and financial risks – as well as emissions are then assessed based on sectoral data generated for the clothing sector of a given country; and where this data is missing, official estimates, or privately provided data and estimates that regulators endorse as sufficiently neutral and reliable, may assist in calculating sustainability exposures.

Such a sectoral rather than an individualized approach in sustainable finance matters would copy the aggregate, or ‘bulk’, approach prevalent in capital requirements relating to small banking clients. Real opportunities exist in supporting the development of data aggregation systems to reduce customer acquisition costs, support better credit and reputational analysis, reduce costs of finance, and thereby enhance MSME inclusion and support overall sustainable development.

VI. CHALLENGES OF IGF POLICY APPROACHES
Experiences in AFI and non-AFI member countries demonstrate a number of challenges, even where an active IGF or sustainable finance approach has strong political and financial support. Some of these challenges relate only to one of the six Building Blocks, while we also observe overarching challenges affecting all six.

1. CHALLENGES RELATING TO SPECIFIC BUILDING BLOCKS

A) STRATEGY
Setting a strategy requires active and sufficient regulatory leadership for collective bargaining with multiple stakeholders, sufficient long-term financial resources to sustain the IGF strategy over time, and to find common ground with neighbors for the resources to sustain the IGF strategy over time, multiple stakeholders, sufficient long-term financial resources to sustain the IGF strategy over time, and to find common ground with neighbors for the development of regional approaches.

Developing an effective strategy would require a whole-industry approach for the financial sector to encompass banking, microfinance, insurance, and capital market considerations, with each sector being given consideration relative to its economic importance and (potential) contribution to financial inclusion, climate change mitigation and adaptation.

B) PRIORITIZATION
Establishing IGF as a priority needs to overcome pertinent issues, such as the interest of all stakeholders and the public at large to avoid transition costs and risks and to leave profitable businesses unharmed, potentially resulting in a push for vagueness in regulatory releases, lack of granular milestones, and a passive approach to performance measurement.

C) CLASSIFICATION
Classification provides the challenge of how to:
- find coherent and consistent definitions across sectors and activities
- avoid binary classification results while incentivizing the transformation of the economy
- adhere to both the short-term versus long-term perspective in assessing the sustainability of a given conduct or business activity
- as a derivative of the former, but also a stand-alone issue, how to set the correct level of sustainability risk surcharge in light of uncertainty as to future developments

Also, a matter of classification is the issue of how externalities may be addressed within the risk policy and capital surcharge model established in the Basel Capital Accord for banks. By definition, an externality does not have an impact on a firm’s balance sheet.

D) ECOSYSTEM
To the same extent that an ecosystem evolves, and many intermediaries are involved in the value chain, conflicts of interest become a more severe problem that requires regulatory attention. All of these intermediaries contribute to, and seek to deal with, the core issue of sustainable finance: the severe information asymmetry as to which firms or financial products truly deliver on green priorities while also providing financial returns. Indeed, if there was no information asymmetry, many of the intermediaries would be superfluous. Therefore, a certain degree of opacity serves many of the information intermediaries in the chain. Accordingly, there are a wide range of so-called sustainability ratings and ESG criteria and indices, but the results of all these ratings and criteria are often not well understood.

These information asymmetries and agency conflicts interact with capital seeking ‘green cash flows’. The capital comes from investors, such as pension funds, that seek to meet political expectations or their own investors’ beliefs that asset owners will pursue the broadest long-term as well as financial interests of their investors.


75 See, for example, Jebe. 2019. The Convergence of Financial and ESG Materiality: Taking Sustainability Mainstream. 56 Am. Bus. L. J. 645, 685 (for the need to merge ESG and financial reporting); ferner Möllers, ZHR 185 (2021), 881 (885 et seq.).


In turn, many investors are willing to pay for green cash-flows, which may, from a theoretical perspective, result in an asset price bubble, if a lot of capital seeks few green investments. At the same time, uncertainty abounds as to whether specific cash flows are truly green.\(^7\) A large number of issuers and intermediaries pretend to act sustainably but major questions arise when the relevant business models are examined.\(^7\)

One response for these uncertainties is greenwashing (or green dyeing), a marketing and communications strategy that seeks to manipulate the image of the company rather than address the substance of its problematic business practices.

**E) INFRASTRUCTURE**

Building foundational inclusive infrastructure requires long-term certainty as to the conditions for investing in, and benefiting from, the infrastructure. Furthermore, payment infrastructure must evolve, and legacy systems potentially replaced, to allow for additional consideration of sustainability risk and sustainability factors in all financial transactions. Finally, regulators must look for adequate technical solutions where market forces lead to undesirable results, such as the information oligopoly of sustainability rating providers.

**F) DATA & MODELS**

The main issues regarding data and models include:

> data availability, particularly a lack of structured data, and permissiveness of using estimates

> making use of existing data, including data models and rating models employed by existing rating and index providers

> the impact and success measurement of the approach used

While additional approaches to data generation based on e-invoicing and payment transactions are also seen, these are only practical for some AFI member institutions.

Additionally, significant difficulties exist with regard to output measurement. This is often due to the multi-causality of environmental factors and the lack of regulatory expertise in conducting multi-factor analysis necessary for proper output measurement.

---


80 Source: CSSF website, available at: https://www.cssf.lu; research provided by the ADA Chair in Financial Law (Inclusive Finance).
VII. CONCLUSIONS
IGF is a subset of sustainable finance. AFI members have strong reasons to develop IGF frameworks within which financial services are utilized to address the two major policy goals of financial inclusion and combating climate change.

While sustainability risks fall within the logic of traditional bank risk management, the same does not apply to the impact of bank lending activity on sustainability factors. Beyond reporting, regulators must actively ensure that these externalities are addressed within financial institutions and across the financial system. Regulators must strive to further IGF.

IGF frameworks require solid, long-term political support driven by a dynamic regulator with devoted expert resources and a strong role in shaping the regulatory framework.

This Roadmap for Inclusive Green Finance Implementation has identified Six Building Blocks of an IGF Framework: Strategy, Prioritization, Classification, Data & Models, Ecosystem, and Infrastructure.

1 First and foremost, regulators must adopt a strategy on green or sustainable finance, including inclusive green finance, at the highest levels involved in financial regulation and central banking; this comes with the set-up of a governance structure and coordinating entity in charge of implementing and ensuring the success of IGF policy development and implementation. Setting the strategy comes with challenges including the need for active and sufficient regulatory capital for collective bargaining with multiple stakeholders, sufficient long-term financial resources to sustain the IGF strategy over time, and to find common ground with neighbors for the development of regional approaches.

2 Second, regulators need to establish IGF as a priority within both financial institutions and regulators, for instance, through Sustainable Banking Principles and ESG-related Risk Frameworks. Establishing IGF as a priority needs to overcome pertinent issues, such as the interest of all stakeholders in avoiding transition costs and risks and to leave profitable businesses unharmed, potentially resulting in a push for vagueness in regulatory releases, lack of granular milestones, and a passive approach to performance measurement.

3 Third, a classification of IGF-compliant conduct, products, and services, either by way of a catalogue or a taxonomy becomes necessary to delineate wanted from unwanted economic behavior. Classification comes with the following challenges: finding coherent and consistent definitions across sectors and activities, avoiding binary classification results while incentivizing economic transformation, and adhering to both the short-term versus long-term perspective in assessing the sustainability of a given conduct or business activity. Also, a matter of classification is the issue of how externalities may be addressed within the risk policy and capital surcharge model established in the Basel Accord for financial institutions. By definition, an externality does not impact a firm’s balance sheet. As such, adding capital to combat externalities is beyond the logic of risk management and capital requirements as standardized assessments of future risks.

4 Fourth, data and models are at the heart of the IGF mission but are typically lacking in scale. Techniques that combine financial and sustainability data in models are in high demand to identify which data may be collected and used for data analysis. Likewise, data-driven models for lending and investment, and algorithms for IGF-related operations are all needed. The Data and Model Building Block suffers from under-investment in both the granular data provided by economic actors on sustainability risks and factors, and models linking sustainability and financial data. This has led to issues relating to:

- Data availability, particularly disaggregated and aggregate data, and permissiveness of using estimates.
- Making use of existing data, including data models and rating models employed by existing rating and index providers, which comes with conflicts of interests.
- Impact, output, and success measurements of the approach applied.
- Setting the correct level of sustainability risk surcharge in light of uncertainty as to future developments.
- Developing a sound methodology for output measurement.
Fifth, the IGF ecosystem must be capable of delivering the elements for a market-driven, successful sustainable finance approach, including specialized auditors, lawyers, rating and index providers, data transmitters, technology solution providers, professionals in the financial sector, and advanced research and educational resources. An IGF ecosystem will be the result of a dynamic market development, creating sufficient demand, which triggers the supply of specialist services. Challenges resulting from a vibrant market environment include increasingly conflicting interests among many agents involved in the IGF value chain.

Sixth, a well-functioning IGF system requires foundational infrastructure and technical resources, including technical systems through which monetary transactions are made, and financial services can be provided. Building foundational infrastructure requires long-term certainty as to the conditions for investing in, and benefiting from, the infrastructure.

Finally, all six Building Blocks of an IGF system face four fundamental challenges:
1. Staff qualification, as expertise goes beyond financial and regulatory knowledge.
2. Capacity building across the economy, financial industry, and regulators.
3. Ensuring long-term political and financial support across all institutions.
4. At least initially, dependency on advisors and institutions less familiar with financial regulations and banking principles.

Regulators can best advance IGF policy development and implementation by applying the five groups of policy tools identified in this Roadmap to Inclusive Green Finance:
1. Internal and external advocacy for IGF.
2. Education and capacity building of regulators, financial institutions, and the overall ecosystem with a particular view on the interlinkages between the financial and the natural science sustainability world.
3. Voluntary standards, in particular on best practices for lending and the standardization of green financial products.
4. Financial incentives through credit guarantees, syndication and other risk-sharing or green lending programs, as well as capital relief for prioritized sectors.

5. Mandatory regulation, in particular, on reporting and disclosures, capital provisioning as well as fiduciary duties to address any conflicts of interest emerging in an IGF ecosystem; depending on the scope and national strategy, mandatory regulation may also be instrumental, for instance, for a binding classification system (taxonomy), setting IGF oriented operating, risk, and fiduciary standards and disclosure rules.

Specifically for individuals and MSMEs, the international discussion regarding what level of granularity is feasible relating to data collection, investment and risk management is still ongoing. The answer to this question will be country-specific and depends on the level of datafication of the public administration and the MSME clients. Similar to international standards for capital requirements and the new international sustainability standards, bulk and sectoral approaches may well be in order.

Each regulatory tool requires refinement over time in proportion to the capacity of regulators and regulated institutions. For example, members can start with Environmental & Social Risk Management guidelines and Sustainable Banking Principles of a more general nature, and over time, supplement these principles with further relevant detailed elements.

While mutual learning from other countries remains important, both financial inclusion and climate change concerns differ from country to country. Solutions must, therefore, be country-specific and tailor-made to the necessities of each AFI country.
REFERENCES

SPECIFICALLY ON INCLUSIVE GREEN FINANCE (IGF)


Ali, Climate Change. 2020. “Financial Inclusion and Inclusive Green Finance.” Available at: https://www.bis.org/review/r201223d.htm


ON FINANCIAL INCLUSION


ON SUSTAINABLE FINANCE


# ANNEX

## 1) SUSTAINABLE FINANCE PRIORITIES OF THE EUROPEAN SUPERVISORY AGENCIES

<table>
<thead>
<tr>
<th>EBA Action Plan on Sustainable Finance 2019</th>
<th>Priorities:</th>
<th>Focus Areas:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Introduce sustainability considerations in institutions' strategy and risk management;</td>
<td>1. Strategy and risk management uniform definition of ESG risks, development of criteria/methods to determine ESG impact;</td>
</tr>
<tr>
<td></td>
<td>2. Providing supervisors with adequate tools for ESG risks</td>
<td>2. Key metrics and disclosure;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ESMA's Sustainable Finance Road Map 2022 - 2024</th>
<th>Priorities:</th>
<th>Focus Areas:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Tackling greenwashing and promoting transparency;</td>
<td>1. Cross sectoral;</td>
</tr>
<tr>
<td></td>
<td>2. Building NCA's and ESMA's capacities;</td>
<td>2. Investment management;</td>
</tr>
<tr>
<td></td>
<td>3. Monitoring, assessing and analysing ESG markets and risks;</td>
<td>3. Investment services;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EIOPA's work program 2022 – 2024</th>
<th>Priorities:</th>
<th>Focus Areas:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Integrate ESG risks in the prudential framework of insurers and pension funds</td>
<td>1. Cross sectoral;</td>
</tr>
<tr>
<td></td>
<td>2. Consolidate the macro/micro-prudential risk assessment of ESG risks</td>
<td>2. Investment management;</td>
</tr>
<tr>
<td></td>
<td>3. Promote sustainability disclosures and a sustainable conduct of business framework</td>
<td>3. Investment services;</td>
</tr>
<tr>
<td></td>
<td>4. Support supervision of ESG risks and supervisory convergence</td>
<td>4. Issuers' disclosure and governance;</td>
</tr>
<tr>
<td></td>
<td>5. Address protection gaps</td>
<td>5. Benchmarks;</td>
</tr>
<tr>
<td></td>
<td>6. Promote the use of open source modelling and data in relation to climate change risks</td>
<td>6. Credit ratings and ESG ratings;</td>
</tr>
<tr>
<td></td>
<td>7. International convergence for the assessment and management of sustainability risks</td>
<td>7. Trading and posttrading;</td>
</tr>
</tbody>
</table>

## 2) UK KEY AUTHORITIES’ RELEASES ON SUSTAINABLE FINANCE

<table>
<thead>
<tr>
<th>Financial Conduct Authority</th>
<th>ESG Strategy 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Transparency</strong> - Task Force on Climate-related Financial Disclosures (TCFD) developed Disclosure Rules in 2020, which were extended in 2021, introducing TCFD-aligned disclosure requirements for asset managers and asset owners</td>
<td></td>
</tr>
<tr>
<td>2. <strong>Trust</strong> – Promoting Sustainability Disclosure Requirements and sustainable investment labels by publishing a Discussion Paper on SDR and investment labels (DP21/4) and setting up a Disclosures and Labels Advisory Group</td>
<td></td>
</tr>
<tr>
<td>4. <strong>Transition</strong> – proposal to integrate the new guidance on transition planning published by the TCFD and implementation of new rules on shareholder engagement with the revised Shareholder Rights Directive (PS19/13)</td>
<td></td>
</tr>
<tr>
<td>5. <strong>Team</strong> – integration of ESG across the FCA</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bank of England</th>
<th>10-part pledge to advance the climate agenda with 5 Key Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ensuring the financial system is <strong>resilient to climate-related financial risks</strong> – The Prudential Regulation Authority (PRA) will embed climate change in its supervision and the bank will introduce further capital requirements for material climate risks</td>
<td></td>
</tr>
<tr>
<td>2. Supporting an orderly <strong>economy-wide transition to net zero emissions</strong> – The Bank will publish scenario analysis and PRA will explore transition plans</td>
<td></td>
</tr>
<tr>
<td>3. Promoting the adoption of <strong>effective TCFD-aligned climate disclosure</strong> – international promotion</td>
<td></td>
</tr>
<tr>
<td>4. Contributing to a <strong>co-ordinated international approach to climate change</strong> - Alignment with International climate agenda and further analysis on the impacts of climate change and the net-zero transition from macro-economic and financial stability perspectives</td>
<td></td>
</tr>
<tr>
<td>5. Demonstrating <strong>best practice through our own operations</strong> – The Bank will practice TCFD-aligned climate-related financial disclosure, implement its 2050 net zero pledge and promote greening of the corporate bond portfolio</td>
<td></td>
</tr>
</tbody>
</table>