Green Bond Framework
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>Strategy and Objective</td>
<td>3</td>
</tr>
<tr>
<td>Green Bonds</td>
<td>4</td>
</tr>
<tr>
<td>USE OF PROCEEDS</td>
<td>5</td>
</tr>
<tr>
<td>PROCESS FOR PROJECT EVALUATION AND SELECTION</td>
<td>9</td>
</tr>
<tr>
<td>MANAGEMENT OF PROCEEDS</td>
<td>10</td>
</tr>
<tr>
<td>REPORTING</td>
<td>11</td>
</tr>
</tbody>
</table>
INTRODUCTION

IFC a sister organization of the World Bank and a member of the World Bank Group - is the largest global development institution focused on the private sector in developing countries. IFC is owned by 185 member countries and is one of the world’s largest financiers of climate-smart projects for developing countries.

The World Bank Group has set two goals for the world to achieve by 2030: end extreme poverty and promote shared prosperity in every country. We leverage our products and services—as well as products and services of other institutions across the World Bank Group—to create markets that address the biggest development challenges of our time. We apply our financial resources, technical expertise, global experience, and innovative thinking to help our clients and partners overcome financial, operational, and other challenges.

IFC and the World Bank Group recognize climate change as an acute threat to global development and economic stability and a contributing factor to poverty, fragility, and migration. Climate change must be addressed to sustain development gains, reduce global poverty and increase shared prosperity, all elements of IFC’s mandate.

IFC is a leading mobilizer of third-party resources for projects. IFC’s willingness to engage in difficult environments, its leadership in crowding-in private finance enable it to extend its footprint and have a development impact well beyond its direct resources.

Strategy and Objective

IFC is one of the world’s largest financiers of climate-smart projects for developing countries. Since 2005 - when we started to track climate-smart components of our investments and advisory services - IFC has invested USD 32 billion in climate smart financing and mobilized USD 26 billion through partnerships with investors for climate-related projects.

IFC’s climate business plan is part of the World Bank Group Climate Change Action Plan and its Action Plan on Climate Change Adaptation and Resilience. IFC’s detailed Climate Implementation Plan focuses on creating market-based solutions that mobilize external private capital for investment products that contribute to climate change mitigation and adaptation, such as green bonds and structured products for institutional investors. IFC focuses on helping the private sector address climate change through investments and innovative financing, and by addressing regulatory and policy obstacles to green growth. As IFC follows its blueprint, it will continue in its role as a leader in setting standards and advising clients and the international community.

In line with the World Bank Group’s climate targets for 2021–2025, IFC’s climate investments will comprise, on average, 35 percent of IFC’s own-account investments over the FY21–25 period. The five strategic focus areas of IFC’s climate business are clean energy, climate-smart cities, climate-smart agribusiness, green buildings, and green finance. Energy efficiency and resilience, as well as new technologies and innovations, cut across all five focus areas.
IFC investments are often directed toward companies incorporating climate-smart technologies into their operations. IFC has also strategically supported countries to attract private investment to help implement their Nationally Determined Contributions (NDCs) to achieve the goal of the Paris Agreement. Governments recognize that much of the financing needed to meet their climate pledges will have to come from the private sector. IFC will continue to help emerging economies to turn climate pledges into business opportunities and work with them to guide regulation, provide financing and creative innovative solutions that mobilize external capital and create sustainable markets for climate-smart solutions.

Green Bonds

IFC was one of the first issuers of green bonds and launched its green bond in 2010 to help catalyze the market and unlock investment for private sector climate-related projects.

IFC launched its Green Bond Program in 2010 with a privately placed transaction of $200 million. Over the last decade, IFC’s Green Bond Program has been transformative in setting precedents in benchmark issuance, currency diversification, and impact reporting. As of end of Fiscal Year 2021 (June 30th, 2021), IFC had issued USD 10.5 billion across 178 bonds in 20 currencies. Cumulatively, IFC reports an avoidance of 23.4 million tCO2e per year expected through projects supported by these bonds.

IFC has multiple roles in the green bond market ranging from issuer, to investor and market builder. focuses on building the green bond market by creating supply and investing in green bonds and green bond funds. The Amundi Planet Emerging Green One (EGO) Fund and the HSBC REGIO Fund scale up climate finance in emerging markets. To support these market building efforts, IFC has established technical assistance programs to provide training on green bonds to potential issuers, knowledge-sharing and advisory services on green bond issuances and impact reporting in line with the Green Bond Principles. As a founding member and 2020/2021 chair of the Green Bond Principles Executive Committee and through its active membership in the IFI Framework for a Harmonized Greenhouse Gas Accounting, IFC takes part in developing guidelines and procedures for the green bond market. IFC also participates in the Joint Report on Multilateral Development Banks' Climate Finance, using harmonized criteria for climate-related eligibility.

IFC Green Bond Program follows best practices and the Green Bond Principles, a voluntary set of guidelines for transparency and disclosure. IFC Green Bond Program has been reviewed by the Center for International Climate and Environmental Research at the University of Oslo (CICERO), which provided a Second Opinion on IFC's framework and guidance for assessing and selecting eligible projects for green bond investments.

The next sections of this document detail how the IFC Green Bond Program aligns to the four core components of the Green Bond Principles (GBP):

i. Use of Proceeds
ii. Process for Project Evaluation and Selection
iii. Management of Proceeds
iv. Reporting
The first step in the alignment to the Green Bond Principles is to be clear about the taxonomy used to identify climate related loan components within IFC investments. The backbone of this step is the application of the IFC Definitions and Metrics for Climate-Related Activities. This policy document is based on the Joint MDB Methodology for Climate Finance Tracking and is adapted to the context and language of the private sector. The following activities are included in the IFC Definitions and Metrics for Climate-Related Activities and are potentially eligible for IFC Green Bond finance:

<table>
<thead>
<tr>
<th>Category</th>
<th>Activities in IFC Definitions and Metrics for Climate-Related Activities</th>
</tr>
</thead>
</table>
| **Renewable energy** (greenfield and brownfield) | a. Renewable energy in electricity generation  
  i. Wind power  
  ii. Geothermal power  
  iii. Solar power (concentrated solar power, photovoltaic power)  
  iv. Biomass or biogas power  
  v. Ocean power (e.g., wave, tidal, ocean currents, salt gradient)  
  vi. Hydropower plants  
  vii. Renewable energy power plant retrofits  
 b. Heat production or other renewable energy application  
  i. Solar water heating and other thermal applications of solar power in all sectors  
  ii. Thermal applications of geothermal energy, including space and district heating, heating of greenhouses, heating soils and facilities for agriculture, heating aquaculture ponds  
  iii. Wind-driven pumping systems or similar  
  iv. Thermal applications of sustainably produced bioenergy in all sectors, including efficient, improved biomass stoves if no associated deforestation  
 c. Measures to facilitate integration of renewable energy into grids  
  i. New, expanded, improved transmission systems (lines, substations)  
  ii. Storage systems (battery, mechanical, thermal storage, pumped storage)  
  iii. New information and communication technology, smart-grid and mini-grid |
| **Lower-carbon and efficient energy generation** | a. Transmission and distribution systems  
  i. Retrofit of transmission lines or substations and distribution systems (software and hardware changes) to reduce energy use and technical losses per unit of end-use consumption, including improving grid stability and reliability (only if net emission reductions can be demonstrated)  
 b. Power plants  
  i. Thermal power plant retrofit to enable switch from more-GHG-intensive fuel to different, less-GHG-intensive fuel type |

---

### Energy efficiency

#### Energy efficiency in industry
- i. Industrial energy efficiency improvements in existing facilities through the installation of more-efficient equipment, changes in processes, reduction of heat losses, and greater waste heat recovery
- ii. Installation in existing facilities of co- or tri-generation equipment
- iii. Implementation of greenfield manufacturing facilities that exceed global energy use standards
- iv. More-efficient facility replacement of older facility (old facility retired)

#### Energy efficiency improvements in existing industrial, commercial (including warehouses), public, and residential buildings
- i. Energy efficiency improvement in lighting, appliances, and equipment
- ii. Substitution of co- or tri-generation plants that generate electricity in addition to providing heating and cooling for existing heating and cooling systems for buildings
- iii. Retrofit of existing buildings: architectural or building changes that enable reduction of energy consumption

#### Energy efficiency improvements in the utility sector and public services
- i. Energy efficiency improvement in utilities and public services through the installation of more-efficient lighting or equipment
- ii. Reduction of losses in utility water
- iii. Utility natural gas loss reduction
- iv. Utility auxiliary electricity consumption reduction

#### Vehicle energy efficiency fleet retrofit
- i. Existing vehicles, rail or boat fleet retrofit or replacement (e.g., use of lower-carbon fuels, electric or hydrogen technologies)

#### Energy efficiency in new commercial, public, and residential buildings
- i. Green buildings
- ii. Use of highly efficient architectural designs, energy-efficient appliances and equipment, and building techniques that reduce building energy consumption, exceeding available standards and complying with high energy efficiency certification or rating schemes

### Agriculture, forestry, and land use

#### Activities that contribute to Climate Smart Agriculture
- i. Reduction in energy use in traction (e.g., efficient tillage) and other agricultural processes
- ii. Reduction in water consumption (efficient irrigation), laser soil leveling, switching to less-water-intensive crops, water harvest and storage facilities
### Agricultural projects

- iii. Agricultural projects that improve existing carbon pools (e.g. rangeland management; collection and use of bagasse, rice husks, or other agricultural waste; reduced tillage techniques that increase carbon contents of soil; rehabilitation of degraded lands; peatland restoration)
- iv. Reduction of non-carbon dioxide GHG emissions from agricultural practices (e.g. paddy rice production, fertilizer use)
- v. Livestock and aquaculture projects that reduce methane and other GHG emissions (e.g., improved animal health, animal husbandry, manure management with biodigesters, improved nutrition, increased productivity, etc.)

### Afforestation, reforestation, biosphere conservation

- b. Afforestation, reforestation, biosphere conservation
  - i. Afforestation (plantations) of nonforested land
  - ii. Reforestation on previously forested land
  - iii. Sustainable forest management activities that increase carbon stocks or reduce the effect of forestry activities
  - iv. Reduced emissions from deforestation and forest degradation
  - v. Biosphere conservation projects (including payments for ecosystem services) targeting reduction of emissions from the deforestation or degradation of ecosystems

### Biofuels

- c. Biofuels
  - i. Production of biofuels (including biodiesel and bioethanol)

### Nonenergy GHG reductions

- a. Fugitive emissions
  - i. Reduction of gas flaring or fugitive methane emissions in existing oil and gas industry installations
- b. Carbon capture and storage
  - i. Carbon capture and storage projects not involving enhanced oil recovery
- c. Air conditioning and refrigeration
  - i. Replacement of refrigerants with high global warming potential in existing industrial, commercial, or residential infrastructure with solutions with lower global warming potential
- d. Industrial processes
  - i. Reduction in GHG emissions resulting from industrial process improvements and cleaner production (e.g., cement, chemical), excluding carbon capture and storage

### Waste and wastewater

- a. Waste and wastewater
  - i. Treatment of wastewater if not a compliance requirement (e.g. performance standard or safeguard) as part of a larger project that reduces methane emissions
  - ii. Waste management projects that capture or combust methane emissions
  - iii. Waste-to-energy projects
  - iv. Waste collection, recycling, and management projects that recover or reuse materials and waste as inputs into new products or as a resource (only if net emission reductions can be demonstrated)

### Transport

- a. Urban transport modal change
  - i. Urban mass transit
  - ii. Nonmotorized transport (bicycles and pedestrian mobility)
b. Transport-oriented urban development
   i. Integration of transport and urban development planning (e.g., dense development, multiple land use, walking communities, transit connectivity) leading to a reduction in use of passenger cars
   ii. Transport demand management measures dedicated to reducing GHG emissions (e.g., speed limits, high-occupancy-vehicle lanes, congestion charging or road pricing, parking management, restriction or auctioning of license plates, car-free city areas, low-emission zones)

c. Interurban transport
   i. Railway transport ensuring a modal shift of freight and passenger transport from road to rail (improvement of existing lines or construction of new lines)
   ii. Waterway transport ensuring a modal shift of freight and passenger transport from road to waterways (improvement of existing infrastructure or construction of new infrastructure)

| Climate-Related Products | a. Manufacture and sale of finished products that when used result in increased renewable energy generation by others
b. Manufacture and sale of finished products that when used result in energy efficiency in others’ operations
c. Manufacture and sale of finished products that when used enable others to decrease or destroy GHGs |
| Mitigation through Financial Intermediaries | a. Finance of activities listed in Direct Mitigation through financial intermediaries
b. IFC investments in third-party Green Bonds that comply with the Green Bond Principles and whose proceeds are used for climate-related activities
c. Climate finance provided to micro and small or medium enterprises through financial intermediaries
d. IFC investment in third-party private equity and venture capital funds
e. Technical advice and standards for financial institutions that enable mitigation activities |
| Climate Adaptation | Adaptation projects are IFC investments or Advisory Services that incorporate information about climate change risks into decision-making (ex ante) and directly address identified risks, vulnerabilities, or effects while avoiding inadvertent increases in vulnerability of systems or social groups and avoiding placing assets or systems in harm’s way. An adaptation project should:
   i. reduce risk, exposure, or sensitivity to climate change;
   ii. increase climate resilience;
   iii. build problem-solving capacity to develop responses to identified risks, vulnerabilities, or effects; or
   iv. address effects directly linked to climate change. |

*Being included in the IFC Definitions and Metrics for Climate-Related Activities is a necessary but not sufficient condition for a loan component to be included in IFC Green Bond.** Equity investments and other financial products as guarantees, rights, etc. are ineligible for funding via green bonds.
If a loan component\(^2\) is included within the IFC Definitions and Metrics for Climate Related Activities, then it goes to the second step: evaluation and selection. This second step is detailed in the next section.

**PROCESS FOR PROJECT EVALUATION AND SELECTION**

The long list of climate related loan components coming from the application of the IFC Definitions and Metrics for Climate Related Activities is subject to a thorough process for evaluation and selection of projects before being included in the IFC Green Bond portfolio. This process includes:

I. Confirmation of the good standing of the project regarding compliance with the IFC Sustainability Framework. This framework entails a Policy on Environmental and Social Sustainability, which defines IFC’s commitments to environmental and social sustainability, IFC’s Performance Standards\(^3\), and the Access to Information Policy, which articulates IFC’s commitment to transparency. Environmental, Social and Corporate Governance (ESG) assessment at IFC is based on the application of the IFC Performance Standards, including WBG Environmental, Health, and Safety Guidelines\(^4\), and the Corporate Governance Methodology\(^5\) to all investments. These standards establish requirements that the client is to meet throughout the life of an investment by IFC, including:
  - Assessment and Management of Environmental and Social Risks and Impacts
  - Labor and Working Conditions
  - Resource Efficiency and Pollution Prevention
  - Community Health, Safety, and Security
  - Land Acquisition and Involuntary Resettlement
  - Biodiversity Conservation and Sustainable Management of Living Natural Resources
  - Indigenous Peoples
  - Cultural Heritage

II. Confirmation that the project has successfully passed a rigorous due diligence\(^6\) process which includes disclosure and consultation requirements, and integrity due diligence.

III. When IFC invests in third-party green bond, it is required that the green bond is aligned with the Green Bond Principles, has a second party opinion and that the issuer is committed to publicly report on use of proceeds.

The following projects are *not* eligible for the IFC Green Bond Program:

---

\(^2\) IFC’s climate classification is centered on a follow-the-money approach. In some cases, the climate-related component of a project supported by green bonds may be a part of a larger investment. In such cases the IFC’s climate portfolio only accounts for the project’s share of climate financing.


\(^4\) [http://www.ifc.org/ehsguidelines](http://www.ifc.org/ehsguidelines)

\(^5\) [https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC+CG](https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC+CG)

\(^6\) [https://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/solutions/due+diligence](https://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/solutions/due+diligence)
- Projects involving new or existing extraction, production and distribution of fossil fuels, including improvements and upgrades.
- Projects where the core source of energy is based on fossil fuels and other projects that support carbon intensive activities.
- Hydropower projects with a capacity larger than 10MW of installed capacity.
- Any power project with a carbon intensity above 100grCO2eq/kWh.
- Assets that partly combusts fossil fuels (e.g., hybrid vessels). Only replacement of existing fleets with electric, hybrid or hydrogen-based fleets is eligible.
- Livestock projects.

IFC supervises all its investments – including green bond investments. The supervision process comprises regular reports by the investee company on project activities and performance and is monitored by IFC throughout the lifetime of the investment. In addition, IFC’s Anticipated Impact Measurement and Monitoring (AIMM) system enables the estimation of the expected development impact of its investments and selection of projects with the greatest potential for financial sustainability and development impact. Compliance is assessed at the individual project level and through independent reviews of about a quarter of all projects. Project level reviews are undertaken by the portfolio teams in environment, social aspects, financial management, and procurement ensure that adequate controls and management capacity are in place at the project level.

In addition, the World Bank Group’s Independent Evaluation Group (IEG) assesses the performance of about one out of four projects, measuring outcomes against original objectives, sustainability of results and institutional development impact. IEG conducts not only project-level evaluations, based on the review of self-evaluation reports prepared by Bank Group staff and supplemented by independent assessments, but also reviews of literature, analytical work, and project documentation, portfolio reviews, country case studies, structured interviews and surveys of staff and stakeholders, and impact evaluations. In addition, IEG has evaluated the World Bank Group’s experience in climate change on a sector-wide basis and IFC continues to implement IEG’s recommendations to scale impact.

The Office of the Compliance Advisor/Ombudsman (CAO) oversees investigations of IFC’s social and environmental due diligence at the project-level. Investigations aim to enhance project outcomes and strengthen adherence to relevant standards which is the independent recourse mechanism for IFC. CAO’s mission is to address complaints by people affected by IFC/MIGA projects and to enhance the social and environmental accountability of both institutions’ CAO’s Compliance function.

**MANAGEMENT OF PROCEEDS**

All proceeds from IFC green bonds are set aside in a special sub-portfolio within IFC Treasury and are invested in accordance with IFC’s liquidity policy until disbursement to eligible projects including renewable energy, energy efficiency, and other climate-related projects in developing countries. Disbursements are often made over a period, depending on a project’s amortization schedule. As green bond proceeds are disbursed, corresponding amounts are adjusted from the sub-portfolio accordingly.
REPORTING

On an annual basis, IFC publishes the list of projects that have received funding from green bond proceeds. Subject to confidentiality approvals, the list of projects includes: a brief description of the project, the amount disbursed, the expected climate impact(s) and links to relevant public documents about the project. IFC’s annual Green Bond Impact Report is based on the recommendations of the Green Bond Principles’ Handbook – Harmonized Framework.

The four core indicators are:

i. Annual energy savings
ii. Annual greenhouse gas emissions reduced or avoided
iii. Annual renewable energy produced
iv. Capacity of renewable energy plant(s) constructed or rehabilitated

The impact indicators are tracked on a project level basis and are not pro-rated for the portion of IFC’s contribution. Impact of direct investments is based on ex-ante estimates (developed prior to project implementation) of expected annual results for a representative year once a project is completed and operating at normal capacity. Impact of indirect investments (i.e. through financial intermediaries) are conservatively estimated based on the likely allocation of use of proceeds among the eligible project types. Indirect investments ensure that climate finance is available for smaller clients that IFC cannot reach directly, such as small and medium enterprises. It is important to IFC that our partner financial intermediaries assess climate impacts of their investment portfolio on real time with the support of the CAFI platform (Climate Assessment for Financial Institution Investment), which enables financial intermediary clients to assess sub-loans and estimate impact as they execute climate related lending from IFC.

Reporting allows for quantification of a few core indicators, but it is important to appreciate the limitations of data reported. The main considerations to adequately interpret results are:

- Scope of results: Reporting is based on ex-ante estimates at the time of project appraisal and mostly for direct project effects.
- Uncertainty: An important consideration in estimating impact indicators is that they are often based on a number of assumptions. While technical experts aim to make sound and conservative assumptions that are reasonably based on the information available at the time, the actual environmental impact of the projects may diverge from initial projections. In general, behavioral changes or shifts in baseline conditions can cause deviations from projections.
- Comparability: Caution should be taken in comparing projects, sectors, or whole portfolios, because baselines (and base years) and calculation methods may vary significantly. In addition, cost structures between countries will also vary, so that developing cost efficiency calculations (results

---

per unit of amount invested in eligible projects) could place smaller countries with limited economies of scale at a disadvantage and will not take into consideration country specific context.

- Omissions: Projects may have impact across a much wider range of indicators than captured in the Impact Assessment table and may have other important impacts on development.

Furthermore, there may be some projects for which the proposed core indicator is not applicable, or the data are not available.

While IFC takes efforts to improve the consistency and availability of reported metrics over time, projects with climate impact can span over a wide diversity of sectors and sub-sectors, making complete harmonization of reporting metrics challenging.

IFC also link the green bond projects to relevant Sustainability Development Goals.

In addition to Green Bond reporting, IFC’s climate-related portfolio – from which green bond-eligible projects are selected – is reported through several channels, e.g., in the annual report and in accordance with the Operating Principles for Impact Management. In addition, IFC also participates in the Joint Report on Multilateral Development Banks’ Climate Finance which utilizes harmonized definition criteria.

**IFC Access to Information Policy**

The Access to Information Policy is the cornerstone of the IFC Sustainability Framework and articulates our commitment to transparency. We seek to provide accurate and timely information regarding our investment and advisory activities to clients, partners, and stakeholders, and we strive to disclose the relevant information pertaining to project, environmental, and social implications, as well as expected development impact prior to consideration by our Board of Directors. This commitment also applies to the impact reporting process of projects funded by the IFC Green Bond Program.
DISCLAIMER: The above examples of Eligible Projects are for illustrative purposes only and no assurance can be provided that disbursements for projects with these specific characteristics will be made by IFC during the term of the Notes. This summary has been prepared by IFC (International Finance Corporation) for information purposes only, and IFC or the World Bank Group make no representation, warranty, or assurance of any kind, expressed or implied, as to the accuracy or completeness of any of the information contained herein. This summary includes references to and information relating to IFC securities. Any such information is provided only for general informational purposes and does not constitute an offer to sell or a solicitation of an offer to buy any IFC securities. The securities mentioned herein may not be eligible for sale in certain jurisdictions or to certain persons.