

IFC's Definitions and Metrics for Climate-Related Activities

IFC CLIMATE BUSINESS DEPARTMENT

VERSION: 3.1

UPDATED: APRIL 2017

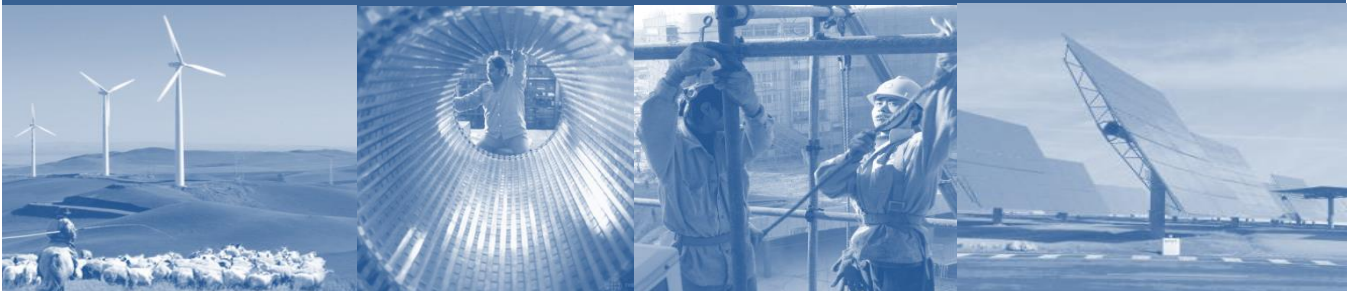


Table of Contents

Introduction 3

Climate Finance Tracking..... 4

Mitigation 5

Adaptation 12

Special Climate 15

Annex 1: Terms of Reference: Climate Metrics Steering Committee 17

Annex 2: History of the Document 18

Annex 3: IFC Adaptation Case Studies 19

Introduction

IFC first started tracking climate finance in 2005 and since then has expanded its climate business, partnering with stakeholders and sharing lessons learned with other financial institutions. In 2011, IFC introduced Definitions and Metrics for Climate-Related Activities (Climate Definitions) to provide institutional guidance to identify climate-related activities. This document outlines the definitions and typology that IFC uses for identifying, promoting, and tracking climate-related investment and advisory projects.

IFC periodically updates its Climate Definitions to take into account changes in the marketplace, changes in IFC's strategy, and updates to the commonly agreed principles¹ for tracking mitigation finance agreed to by the multilateral development banks.²

As part of the 2016 WBG Climate Change Action Plan, IFC's Climate Implementation Plan includes four objectives.

- I. Scale climate investments to reach 28 percent of IFC's annual financing by 2020
- II. Catalyze \$13 billion in private sector capital annually by 2020 to climate sectors through mobilization, aggregation, and de-risking products
- III. Maximize impact through greenhouse gas emissions reduction and resilience
- IV. Account for climate risk—the physical risk of climate impacts and the carbon asset risk in IFC's investment selection

IFC will use the Climate Definitions to realize the goals in the Climate Implementation Plan and, in so doing, seeks to strengthen climate finance governance and better align climate metrics to IFC investment appraisal and business development processes.

¹ <http://www.worldbank.org/content/dam/Worldbank/document/Climate/common-principles-for-climate-mitigation-finance-tracking.pdf>

² See Annex 2 for the evolution of IFC's Climate Definitions and Metrics over time.

Climate Finance Tracking

This section provides guidance on climate finance tracking and reporting and how this will be done.

- IFC climate finance tracking includes all activities classified as Mitigation, Adaptation, and Special Climate in this document.³
- IFC climate finance tracking covers all regions and sectors.⁴
- Climate finance tracking for IFC investments includes only IFC's long-term own-account financing for climate-related projects.⁵ For IFC Advisory Services, it includes IFC expenditures on climate-related activities.⁶
- IFC climate finance tracking volumes include only total commitments from IFC's long-term own-account financing and excludes third-party financing mobilized on behalf of IFC clients.
- Where only a subset of activities of a larger project can be classified as climate related, only the subset is counted and reported.⁷
- Climate finance tracking includes investments made directly with the ultimate user of the funds and investments made indirectly through financial intermediaries.
- All climate-related investments are counted at the time of financial commitment.
- IFC climate finance tracking is reported according to fiscal year⁸ as part of the Joint Report on Climate Finance of Multilateral Development Banks.
- At the end of each fiscal year, a third party audits climate finance tracking reporting.

³ Heretofore defined as climate finance.

⁴ IFC's four investment sectors are Manufacturing, Agribusiness and Services; Infrastructure and Natural Resources; Financial Markets; and Technology, Venture Capital and Funds.

⁵ Investments can include loans, equity, guarantees, and client risk-management products.

⁶ Advisory expenditures are the budgeted cost of advisory services delivered.

⁷ For example, if IFC is financing an existing industrial project for a total of \$100 million including an energy efficiency component of \$30 million, IFC would report only the \$30 million and not the whole facility.

⁸ July 1 – June 30.

Project Classification: Mitigation, Adaptation, and Special Climate categories of climate-related activities are defined in the following sections.

Mitigation

Mitigation means reduction in emissions of GHGs into the atmosphere or absorption of GHGs from the atmosphere.

Mitigation hinges on greenhouse gas (GHG) reductions, brought about by a reduction in GHG emissions into the atmosphere or absorption of GHGs from the atmosphere.⁹ GHG reductions can include a reduction in GHG emissions currently being emitted, lower emissions as a result the project than those of a credible business-as-usual alternative, or sequestration of emissions currently in the atmosphere. The ability to calculate, report, and verify this mitigation is a prerequisite for this project category. GHG reductions are measured against a business-as-usual baseline as described in the calculation guidance notes.¹⁰ To track these GHG reductions, IFC follows the Greenhouse Gas Protocol for terminology and approach, namely:¹¹

- 1) **Relevance:** Use data, methods, criteria, and assumptions that are appropriate for the intended use of reported information.
- 2) **Completeness:** Consider all relevant information that may affect the accounting and quantification of GHG reductions and complete all requirements.
- 3) **Consistency:** Use data, methods, criteria, and assumptions that allow meaningful and valid comparisons.
- 4) **Transparency:** Provide clear and sufficient information for reviewers to assess the credibility and reliability of GHG reduction claims.
- 5) **Accuracy:** Reduce uncertainties as much as is practical.
- 6) **Conservativeness:** Use conservative assumptions, values, and procedures when uncertainty is high.

IFC also draws upon methodologies from the United Nations Framework Convention on Climate Change Clean Development Mechanism, as well as other internationally accepted standards as needed. These are referenced as necessary in each IFC guidance note on calculating GHG reductions of projects.

Investment and Advisory Services mitigation projects can directly or indirectly reduce GHG emissions. Direct (or firm-level) mitigation activities are GHG reductions that occur at an IFC client's operation. Indirect Mitigation results in GHG reductions at a third-party site that result from an IFC investment or from market- or sector-level advice provided through an intermediary. These are described in further detail in the following sections.

⁹ Heretofore referred to as GHG reductions.

¹⁰ GHG Reduction Guidance Notes and other materials can be downloaded at: <http://www.ifc.org/ghgaccounting>.

¹¹ <http://www.ghgprotocol.org/standards/project-protocol>.

DIRECT MITIGATION

Direct Mitigation activities result in GHG reductions attributable to changes in an IFC client's operation as a result of IFC investments or advice. Through investments, IFC finances projects resulting in GHG reductions. Through Advisory Services, clients contract IFC to provide technical assistance to their operations leading to GHG reductions. Both are subject to ex ante appraisal of GHG emissions and other environmental and social effects, as well as ex post verification upon project completion and operation to ensure project objectives were met.

Project categories that qualify as Direct Mitigation, provided that net GHG emissions reductions are calculated,¹² are as follows.

1) 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,¹³ pumped storage¹⁴)
 - iii. New information and communication technology, smart-grid and mini-grid

2) 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 reliability¹⁵ (only if net emission reductions can be demonstrated)
- b. Power plants

¹² If GHG emission reductions are not calculated, activities listed under Direct Mitigation can be considered as Special Climate.

¹³ For a quick reference to the role of thermal storage in renewable energy integration into grids, see <https://www.irena.org/DocumentDownloads/Publications/IRENA-ETSAP%20Tech%20Brief%20E17%20Thermal%20Energy%20Storage.pdf>

¹⁴ For a quick reference to the role of pumped storage in renewable energy integration into grids, see https://www.esmap.org/sites/esmap.org/files/DocumentLibrary/Frederic_Louis_SEMAP_Mexico_Pumped%20storage%20VRE%20Integration.pdf

¹⁵ In the case of capacity expansion, only the part that is reducing existing losses is included.

- i. Thermal power plant retrofit to enable switch from more-GHG-intensive fuel to different, less-GHG-intensive fuel type
 - ii. Conversion of existing fossil fuel-based power plant to co- or tri-generation¹⁶ technologies that generate electricity in addition to providing heating and cooling
 - iii. Energy-efficiency improvements in existing thermal power plant, including conversion from single- to combined-cycle electricity generation, operating changes, rehabilitation of major equipment, and installation of waste heat recovery units
- c. Other
 - i. Rehabilitation of district heating and cooling systems
 - ii. Utility heat loss reduction and greater waste heat recovery

3) Energy efficiency:

- a. Energy efficiency in industry
 - i. Industrial energy efficiency improvements in existing facilities through the installation of more-efficient¹⁷ equipment, changes in processes, reduction of heat losses, and greater waste heat recovery¹⁸
 - ii. Installation in existing facilities of co- or tri-generation equipment
 - iii. Implementation of greenfield manufacturing facilities that exceed global energy use standards¹⁹
 - iv. More-efficient facility replacement of older facility (old facility retired)
- b. 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
- c. 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
- d. 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)
- e. Energy efficiency in new commercial, public, and residential buildings
 - i. Green buildings

¹⁶ In all co- and tri-generation projects, it is required to have lower GHGs than the option without combined heat and power.

¹⁷ Upon documented reduction in energy consumption beyond business-as-usual.

¹⁸ GHG calculation methodology will allow for heat recovery for reduction of process heating need.

¹⁹ Applicable to activities meeting global energy use standards ensuring best-in-class technologies and providing demonstration value within markets of operation and subject to previous guidance approved by the IFC Climate Metrics Steering Committee.

- 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

4) Agriculture, forestry, and land use

- a. Activities that contribute to Climate Smart Agriculture²⁰
 - 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
 - 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.)
- 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
- c. Biofuels
 - i. Production of biofuels (including biodiesel and bioethanol)

5) 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

²⁰ IFC follows the Climate Smart Agriculture definition of the World Bank <http://www.worldbank.org/en/topic/agriculture/brief/foster-climate-smart-agriculture>

- 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

6) 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)

7) 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)

8) Carbon Markets and Finance

- a. Carbon markets and finance (e.g., purchase, sale, trading, financing, guarantee, Advisory Services, technical assistance), including all activities related to current and future compliance and voluntary carbon market mechanisms

INDIRECT MITIGATION²¹

To expand the effects of mitigation through all private sector interventions available, IFC also promotes Indirect Mitigation whereby activity of an IFC client leads to GHG reductions by third parties. Direct Mitigation categories are considered to be Indirect Mitigation if enabled by climate finance or market-level interventions through IFC

²¹ Indirect Mitigation means GHG reductions and requires ex post verification. Where data are not available, Indirect Mitigation is classified as Special Climate (see below section).

Advisory Services. These projects are still subject to ex ante appraisal and ex post verification up to the project boundaries. Projects for which data are not available and verification requirements are not met are not classified as mitigation but are accounted for under a Special Climate category.

The following interventions can be considered Indirect Mitigation.

1) 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

2) 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-related²² activities
- c. Climate finance provided to micro and small or medium enterprises through financial intermediaries²³
- d. IFC investment in third-party private equity and venture capital funds²⁴
- e. Technical advice and standards for financial institutions that enable mitigation activities

3) Advisory Services Activities and others

- a. Energy audits of energy end-users, including industry, buildings, and transport systems
- b. Technical advice and standards in market transformation programs where barriers to adoption of technologies or practices are addressed
- c. Advisory Services for national, sectoral, or territorial mitigation policies, planning, and institutions
- d. Advisory Services for energy sector policies and regulations leading to climate change mitigation or mainstreaming of climate action (energy efficiency standards or certification schemes, energy efficiency procurement schemes, renewable energy policies)
- e. Systems for monitoring GHG emissions
- f. Efficient pricing of fuels and electricity (subsidy rationalization; efficient end-user tariffs; efficient regulations on electricity generation, transmission, distribution)
- g. Education, training, capacity building, and awareness-raising on climate change mitigation, sustainable energy, sustainable transport; mitigation research
- h. Other policy and regulatory activities, including those in nonenergy sectors, leading to climate change mitigation or mainstreaming of climate action
- i. Technical advice, training, capacity building, and awareness-raising provided at the firm, financial institution, or sector level to reduce client or sector energy or resource consumption and help increase the uptake of renewable energy
- j. Research and studies, advocacy activities, knowledge sharing on climate change mitigation

²² The investment team will make a case-by-case estimation of the climate share of investment in third-party Green Bonds, and the Climate Policy Team of the Climate Business Department will crosscheck the estimation before counting the transaction toward the IFC climate finance target.

²³ Climate finance volume to be conservatively estimated through a periodic sampling of micro and small or medium enterprise finance lines committed by IFC through financial intermediaries.

²⁴ Climate finance volume to be conservatively estimated through a periodic sampling of subprojects within IFC investments in third-party funds.

CALCULATING AND REPORTING GHG REDUCTIONS

Because mitigation projects require a GHG reduction calculation, the following procedures and assumptions apply.

1. GHG reductions are calculated according to IFC GHG Reduction Calculation Guidance Notes.
2. Project GHG reductions are calculated ex ante project implementation based on appraisal data and the client's business plan at the time of IFC's investment decision.
3. The GHG reduction calculation is an ex ante project target to be achieved and verified ex post.
4. Projects are counted at the financial commitment stage of the IFC project cycle.
5. IFC reports the whole GHG reduction of an activity.
6. GHG reductions are measured in tons of carbon dioxide equivalents
7. GHGs considered are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride.
8. To avoid double counting GHG reductions, IFC will disaggregate reporting according to investment and advisory services and according to direct and Indirect Mitigation.
9. When reporting GHG reductions, IFC will report by fiscal year (July 1 – June 30).

Adaptation

Adaptation means reduction in the vulnerability of human or natural systems to the effects of climate change and climate variability–related risks by maintaining or increasing adaptive capacity and resilience.

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.

Adaptation finance tracking methodology²⁵ comprises the following key steps.

- Setting out the **climate vulnerability context** of the project²⁶
- Making an **explicit statement of intent** to address climate vulnerability as part of the project
- Articulating a **clear and direct link** between the climate vulnerability context and the specific project activities

Reported adaptation finance is limited to project activities (projects, project components, portions of projects) that are clearly linked to the climate vulnerability context.

Background and Guiding Principles: The multilateral development bank (MDB) adaptation finance tracking methodology uses a context- and location-specific, conservative, granular approach that is intended to reflect the specific focus of adaptation activities and reduce the scope of over reporting of adaptation finance against projects. The approach drills down into the “subproject” or “project element” level as appropriate, in line with the overall MDB climate finance tracking methodology. It also employs a clear process to ensure that project activities address specific climate vulnerabilities identified as being relevant to the project and its context and location.

The reported adaptation finance, therefore, captures only the amounts associated with specific activities identified in the project document and contribute to overall project outcomes. Likewise, the approach might not always capture and count activities that may significantly contribute to resilience but cannot always be tracked in quantitative terms, such as some operational procedures that ensure business continuity, or may not have associated costs, such as siting assets outside of future storm surge range.

This granular approach is not intended to capture the value of the entire project or investment that may increase resilience as a consequence of specific adaptation and resilient activities within the project (e.g., improved drainage

²⁵ IFC follows the MDB Adaptation Finance Tracking Methodology and Guidance

²⁶ Vulnerability is a function of the character, magnitude, and rate of climate change and variation to which a system is exposed, its sensitivity, and its adaptive capacity.

of a section of a newly constructed road to address effects of heavy rainfall or storm surges that then contributes to overall road and investment resilience).

Overview of the Adaptation Finance Tracking Methodology

Context of vulnerability to climate variability and change: For a project to be viewed as one that contributes to adaptation, the context of climate vulnerability must be set out clearly using a robust evidence base. This could take a variety of forms, including use of material from existing analyses and reports or original climate vulnerability analysis conducted as part of the preparation of a project. Examples of good practice in the use of existing analyses or reports include using sources that are authoritative and preferably peer reviewed, such as academic journals, national communications to the United Nations Framework Convention on Climate Change, and reports of the Intergovernmental Panel on Climate Change and Strategic Programs for Climate Resilience.²⁷

Examples of good practice in conducting original analysis include using records from trusted sources showing communities or ecosystems that are particularly vulnerable to climate change and recent climate trends, including any departures from historic means. These may be combined with climate change projections drawn from a wide range of climate change models, with high and low GHG emission scenarios, to explore the full range of projected outcomes and uncertainties. Climate projection uncertainties should be presented transparently and interpreted carefully. The timescale of the projected climate change effects should match the intended lifespan of the assets, systems, or institutions being financed through the project (e.g., time horizon of 2030, 2050, 2080).

Statement of purpose or intent: How the project will address the context- and location-specific climate change vulnerabilities as set out in existing analyses, reports, or the project’s climate vulnerability assessment should be stated. This is important for distinguishing between a development project contributing to climate change adaptation and a standard “good development” project. The methodology is flexible regarding exactly where and how the statement of intent or purpose is documented. As long as the MDB concerned is able to record and track the rationale for each adaptation project or adaptation component of a project linked to the context of climate vulnerability established above, this could be described in the final technical document, board document, internal memo, or other associated project document.

Clear and direct links between climate vulnerability and project activities: In line with the principles of the overall MDB climate finance tracking methodology, only specific project activities that explicitly address climate vulnerabilities identified in the project documentation are reported as climate finance. If climate change adaptation is incorporated into project activities that also have other objectives, the amount of adaptation finance counted at the project level depends on the project context, location, and characteristics. It is based on the estimated incremental cost or investment associated with discrete project components or elements of project design that address risk and vulnerabilities under current and future climate change. If incremental cost or investment cannot be estimated directly from project cost information—for example, when using policy instruments, balance sheet lending, equity investments, or credit line lending through financial intermediaries—a proportion of the project cost or investment corresponding to adaptation activities may be used to represent the incremental amount. This approach may also be applied to project preparation activities if appropriate, depending on the standard practices of the MDB in question.

EXAMPLES OF ADAPTATION INVESTMENTS ACCORDING TO SECTOR

²⁷ Strategic Programs for Climate Resilience are country- or region-based documents elaborated in the framework of the Pilot Program for Climate Resilience (Climate Investment Funds) that examine climate resilience priorities in key economic sectors and stakeholder groups, identify gaps, and ultimately produce a strategic program for climate resilience for a country or a region.

The following list of projects illustrates potential adaptation activities in some sectors. These examples are primarily sourced from the MDB Joint Climate Finance 2014 report.²⁸ The report includes a longer list of examples of adaptation activities according to sector and adaptation case studies.

Project Subsector	Climate Vulnerabilities	Adaptation Investment
Hydropower	Increased flows leading to flooding	Investments in additional turbines or spill ways
Thermal power	Increased seasonality of rainfall leading to low river flows	Investments in thermal power generators with minimal cooling water requirements
Agribusiness	Increasing drought and shorter rainy season	Investments in supplemental irrigation, multi-cropping systems, drip irrigation, levelling, and other approaches and technologies that reduce risk of large crop failures
Agribusiness	Increased variability in crop productivity	Investments in research and development of crops that are more resilient to climate extremes and change
Food processing & beverages	Diminishing water resources	Investments in water-efficient technologies
Mining	Increased precipitation intensity causing floods in open-pit mines	Improvements in design and construction of tailings
Construction & real estate	Increased frequency of heatwaves	Improvements through additional insulation design
Transport	Sea level rise and increased precipitation intensity increasing risk of flooding	Changes in level of roads or materials
Forestry	Increase in number of drought days	Investments in resilient hybrid crops and improved water management
Commercial banking	Inadequate small and medium enterprise access to adaptation finance	Development of financial instruments to support climate related adaptation
Insurance	Increased negative effects of extreme weather events and payout	Changes in structuring of index-based insurance products
Technology	Lack of relevant climate data to respond adequately to climate hazards	Provision of financing for early warning systems

Annex 3 of this document shows adaptation case studies.

²⁸ The MDB joint report can be found here. See pages 28-33:

<http://www.worldbank.org/content/dam/Worldbank/document/Climate/mdb-climate-finance-2014-joint-report-061615.pdf>

Special Climate

Special Climate activities are activities that contribute to mitigation but for which GHG reduction calculations are not available.

Special Climate activities include

- 1) Mitigation activities for which quantifying GHG emission reduction effects are not possible because of methodological limitations
 - a. Activities listed in the Mitigation category of this document but for which a GHG reduction calculation is not available because of lack of client-specific data because of legal or privacy concerns or high uncertainty or because the activity does not include data collection and verification
 - b. New mitigation project types for which the absence of an approved GHG reduction methodology, because of data constraints, requires IFC to rely on external and independently verifiable research to ensure mitigation benefits
 - c. Water-saving projects²⁹ if not otherwise considered Mitigation
- 2) Trade and short-term financing³⁰ specific to climate-related activities through financial intermediaries, although these activities are tracked and reported separately from long term financing³¹
- 3) Activities and investments in suppliers or users of technologies and services that contribute to Climate Smart Agriculture by reducing agricultural losses or increasing productivity and thereby directly or indirectly support climate mitigation or adaptation, as below:^{32 33}
 - a. Reduction of losses, improvement in productivity, or feed-to-food conversion efficiency in livestock and aquaculture production through improved animal health, genetics, feeding practices, and storage facilities (including cold storage), which can reduce GHGs per unit of animal product
 - b. Promotion or implementation of crop intensification (produce more on land already in production) using higher-yield seeds, efficient irrigation, storage facilities, appropriate use of fertilizers, and precision farming³⁴ to increase production without expansion of agricultural land into forests, which can reduce GHGs per unit of land or food produced

²⁹ Although onsite water savings can reduce onsite energy use and be classified as Mitigation, some projects reduce water consumption solely for water-saving purposes with no onsite energy benefits. IFC would still classify the latter as Special Climate because research shows that water savings can lead to energy savings at the macro level (<https://www3.epa.gov/region9/waterinfrastructure/waterenergy.html>).

³⁰ Not included in MDB report and does not count toward the annual corporate target for climate finance.

³¹ Short-term finance also supports existing mitigation projects and will be categorized as Special Climate, report climate finance volumes, and exclude GHG reductions to avoid double counting the same mitigation project if operations remain unaffected.

³² The proposed list of activities that would count aligns with World Bank Operations Policy and Country Services Climate Typology.

³³ If GHG estimation is feasible, then the project should be reported as mitigation; if GHG calculation is not feasible or practical, then one or more of the following proxy indicators can be used to demonstrate climate benefits: (i) milk yield per cow; (ii) feed-to-food conversion ratio; (iii) reduction in post-harvest losses; (iv) reduction of water used per acre, animal, or ton of crops; (v) reduction in fertilizer used per acre or ton of crops; (vi) increase in crop or feed production per acre. This can include estimates ex-ante and ex-post project estimates.

³⁴ Precision agriculture is a management system that is information and technology based to manage production inputs (e.g., seed, fertilizer, chemicals, irrigation) to be applied at the farm level as and where needed for the most economic production.

- c. Capacity building, training centers, training of farmers, building awareness, research and development, and other agricultural extension and research services that serve to increase the adoption of technologies that contribute to Climate Smart Agriculture.

Annex 1: Terms of Reference: Climate Metrics Steering Committee

Background

All climate-related projects are subject to review by the Climate Policy Team of the Climate Business Department (CBD) in collaboration with regional and global climate change teams to determine a project's eligibility based on IFC definitions and metrics. Revisions or addition of new project types to the definitions can be brought to the attention of the Climate Metrics Steering Committee for resolution. Steering Committee resolution is intended to ensure consistent and appropriate reporting of IFC climate business.

Composition

The Steering Committee will consist of six members drawn from:

- Manager, Climate Policy Unit (Chair)
- Manufacturing, Agribusiness and Services
- Infrastructure and Natural Resources
- Financial Institutions Group
- Environmental and Social Unit of the Transactional Risk Solutions Department
- Crosscutting Advisory Services

Representatives can delegate meetings and decisions to a peer if they are not available.

Process

- **Quorum:** A minimum of four of the six Steering Committee members (or a delegated representative) are required for decisions.
- **Materials:** Because it is likely that meetings will cover a wide range of topics, background documents and proposals must be distributed to the group 1 week in advance of a decision meeting.
- **Decisions:** Decisions are made in-person or in an online vote, with a majority carrying the vote. In the event of a tie, the decision can be referred for final decision to the CBD Director if related to climate finance tracking or to the CBD Director and the Director of the Results Measurements Department to decide jointly if related to GHG reductions.
- **Transparency:** All Steering Committee decisions and supporting reasons and explanations will be posted on an internal website for staff review. Individual votes of Steering Committee members will not be posted to maintain anonymity.

Additional Considerations

Decisions requiring the Steering Committee include (but are not limited to) new project types to be included in IFC Climate Definitions, GHG accounting policies for metrics and guidance, and when staff disagree with a decision related to IFC climate finance tracking or GHG accounting.

A decision that the Steering Committee has made can be revisited only if a member of the Steering Committee raises it again and with the approval of the Steering Committee Chair.

If the Steering Committee is unable to come to a decision, the matter can be referred for final decision to the CBD Director if related to climate finance tracking or to the CBD Director and the Director of the Results Measurements Department to decide jointly if related to GHG reductions.

Annex 2: History of the Document

Version	Date	Changes
3.0	September 2016	<p>Definitions amended in line with “Common Principles for Climate Mitigation Finance Tracking” Version 2 – June 15, 2015 agreed by IFC in the context of the joint MDB Report on Climate Finance.</p> <p>Introduction of IFC investments that contribute to Climate Smart Agriculture in line with World Bank Operations Policy and Country Services Climate Typology document.</p> <p>IFC investments in third-party green bonds and funds, including SME finance, introduced.</p> <p>Adaptation section updated completely.</p> <p>Role of Climate Metrics Steering Committee enhanced.</p>
2.2	June 2015	<p>Adjustments made based on recommendations of the second opinion of the Center for International Climate and Environmental Research - Oslo:</p> <p>Category “enhanced oil recovery” removed from climate definitions pertaining to mitigation</p>
2.1	November 2012	First external version published
n/a	October 2011	First internal Climate-Related and “Green” Activities Definitions and Guidance Note published internally

Annex 3: IFC Adaptation Case Studies

Kazakhstan: Kaiima		
Project-specific climate vulnerabilities	Project-specific impacts	Adaptation investments
<p>Because of increasing temperatures and effects on glaciers, river runoff in the project region has been decreasing, affecting the water supply. Coupled with heatwaves and changes in precipitation, this is having a negative effect on crops cultivated in the region.</p>	<p>Extreme temperatures and changes in precipitation affect castor seeds, grown in the region because of critical (seasonality) requirements for their growth. Surface irrigation (generally gravity) is the most-used method to water castor seeds, so changes in river runoff are hindering their development.</p>	<p>Kaiima develops non-genetically modified castor seeds that are more resistant to extreme temperature and precipitation levels. Plants grown from hybrid seeds produce bigger castor beans and greater yield (20-50%), photosynthesize more efficiently, and are more resistant to drought and extreme pH.</p> <p>IFC financing will allow Kaiima to accelerate the development of castor seeds. The funds will be for research and development, local field testing, growing operations, and distribution activities.</p>

Nicaragua: Roya Renovation		
Project-specific climate vulnerabilities	Project-specific impacts	Adaptation investments
<p>Climate projections for the project location show an increase in temperature (2.25-2.50°C) and a decrease in precipitation (up to 10%).</p>	<p>These changes will further fuel the spread of Roya (coffee rust) which is already affecting the coffee plantations in the region. Roya is a fungus that debilitates coffee trees, resulting in dramatic reductions in yield. Projected climate change will foster Roya's geographic spread and its outbreak intensity and frequency. By 2050, approximately 99% of coffee plantations will reduce their growing suitability and shrink Nicaragua's coffee production.</p>	<p>IFC is providing financing to farmers to enable renovation of coffee plantations affected by Roya. The renovation will be done using Roya-resistant coffee varieties and management practices that reflect the production needs of the new crops.</p>

Turkey: CPLF-Modern Karton		
Project-specific climate vulnerabilities	Project-specific impacts	Adaptation investments
<p>High levels of water extraction for industrial use and the effects of</p>	<p>The company manufactures cardboard from waste paper and</p>	<p>IFC is providing financing for a new wastewater recovery system with 15,600</p>

<p>climate change have affected groundwater levels in the project basin. The recharge levels of groundwater resources are lower because of decreases in precipitation and increases in temperature. Because groundwater recharge is closely linked to precipitation and evapotranspiration, it is very likely that natural recharge levels will progressively diminish.</p>	<p>straw pulp. Water, which comes from groundwater resources, is a key input in production. Without water security, the company will not be able to expand production and may face business interruption risks during prolonged drought periods.</p>	<p>m³/day treatment capacity using ultrafiltration and reverse osmosis technologies. The investment will allow continued business operations even in the face of climate change-related lack of availability of water resources.</p>
---	--	---



IFC Climate Business Department
2121 Pennsylvania Avenue, NW
Washington, DC 20433

For more information, please visit:

<http://www.ifc.org/climatebusiness>