ove Office of Evaluation and Oversight

Approach Paper

Climate Change and IDB: Building Resilience and Reducing Emissions

IDB
Inter-American Development Bank
August 2013

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ABBREVIATIONS AND ACRONYMS

AR4	Fourth Assessment Report (IPCC)
CAIT	Climate Analysis Indicators Tool
CCS	Climate Change and Sustainability Division
CGI	General Capital Increase (IDB)
CIF	Climate Investment Funds
COP	Conference of the Parties
DRR	Disaster Risk Reduction
EBRD	European Bank for Reconstruction and Development
EE	Energy Efficiency
GEF	Global Environment Facility
GHG	Greenhouse Gas Emissions
IEG	Independent Evaluation Group, World Bank
IPCC	Intergovernmental Panel on Climate Change
LAC	Latin America and the Caribbean
LUC	Land-use change
MDB	Multilateral Development Bank
OVE	Office of Evaluation and Oversight (IDB)
PBL	Policy Based Loans (IDB)
PCR	Project Completion Report (IDB)
PEC	Policy and Evaluation Committee
PMR	Progress Monitoring Report (IDB)
RE	Renewable Energy
SECCI	Sustainable Energy and Climate Change Initiative
SLR	Sea Level Rise
SPD	Office of Strategic Planning and Effectiveness Database
TC	Technical Cooperation (IDB)
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
WRI	World Resources Institute

I. BACKGROUND

1.1 This paper describes the approach to be taken by the Office of Evaluation and Oversight (OVE) to evaluating the assistance of the Inter-American Development Bank (IDB or Bank) to responses to climate change. Building resilience to the current and likely impacts of global warming and reducing greenhouse gas (GHG) emissions are both necessary to address the current and long-term development challenges of a changing climate. This evaluation documents and draws lessons from what the IDB has done over the past decade with a view to making a strong future contribution to increasing climate-change resilience and reducing GHG emissions in Latin America and the Caribbean (LAC).

1.2 Climate change is now widely recognized as a core development issue, and it affects most sectors and areas. The IDB is the first multilateral development bank (MDB) to set a target for its lending for climate change and sustainable development: 25% of its total commitments, to be reached in 2015. In fact, in recent years climate change has become an important part of the IDB's agenda through the provision of loans and technical cooperation (TC) to both the public and private sectors; during 2007-13 the IDB reportedly provided more than US$8 billion in climate change finance to its member countries.[1]

1.3 The time is ripe for an evaluation of the Bank's experience, as the Bank prepares to provide support for a more ambitious and complex agenda ahead. Moreover, this is an auspicious moment, as major negotiations are under way in preparation for: (a) the 20th session of the Conference of the Parties (COP 20) to the United Nations Framework Convention on Climate Change (UNFCCC), to be held in November 2014 in Lima, Peru, and (b) COP 21 in Paris the following year, where it is expected that a global agreement will be reached.[2] Moreover, and highly relevant for the LAC countries, the Green Climate Fund (GCF) created in 2010 is now being designed and is expected to provide US$100 billion per year in climate finance by 2020.[3] In this context, it is critical to understand how countries have responded to the new environment for climate adaptation and GHG mitigation

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1 The number is based on a preliminary assessment of the IDB portfolio and will be revised as more up-to-date data become available. (CCS has informed OVE that more data will become available in August 2013; According to CCS, during 2006-12 the IDB provided more than US$13.5 billion in climate change finance to its member countries.)

2 The international political response to climate change began with the 1992 adoption of the United Nations Framework Convention on Climate Change (UNFCCC), which sets out a framework for action aimed at stabilizing atmospheric concentrations of GHGs to avoid "dangerous anthropogenic interference" with the climate system. The Convention, which entered into force in March 1994, has 195 parties.

3 The GCF was created in Cancun, Mexico, in 2010 and was designated an operating entity of the Convention's financial mechanism. Parties agreed to set up a Transitional Committee tasked with the Fund's design and a Standing Committee to assist the COP with respect to the financial mechanism. Parties also recognized the commitment by developed countries to provide US$30 billion of fast-start finance in 2010-2012, and to jointly mobilize US$100 billion per year by 2020.

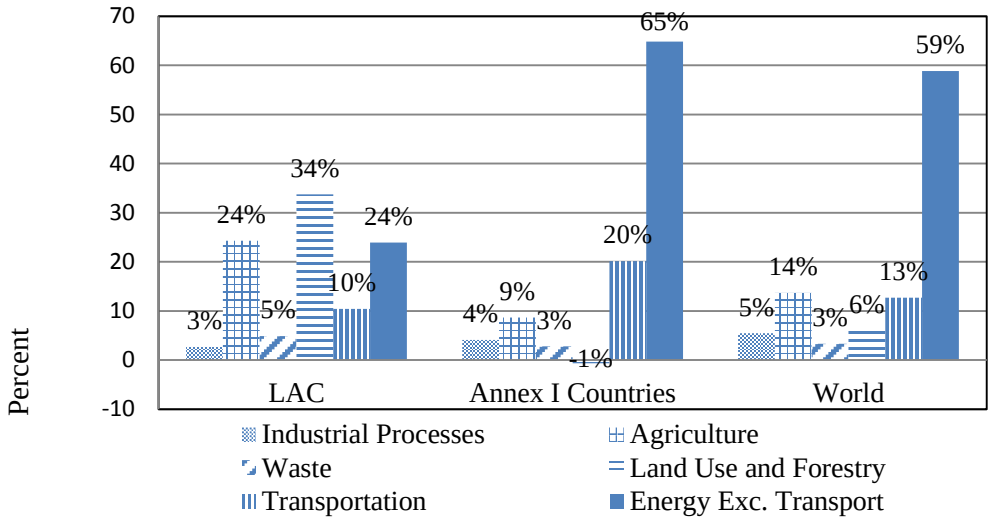
and what the IDB has learned over the past decade from its increasing support for country-level climate change initiatives.

A. Climate change and climate impacts in Latin America and the Caribbean

1.4 The global atmospheric concentration of carbon dioxide (CO_2) has surpassed 400 parts per million for the first time in more than 3 million years. Across the globe more than 30 billion tons of CO_2 are being added yearly from the burning of fossil fuels.[4] About half of these CO_2 emissions remain in the atmosphere, while the other half (or the residual) is absorbed by various "sinks" such as forests, grasslands, and oceans.[5] Forests, an important sink, absorb around 25% of such emissions (see Annex 1 for glossary).

1.5 LAC contributes 8% to global GDP and accounts for 8.6% of the world's population, while its share of GHG emissions is about 10.5%.[6] Annual emissions in LAC are increasing at a slower rate, 0.8% annually since 2001, than the world average of 2.4%, while the region's GDP has increased at a rate similar to the world average of about 3.7%. Land-use change (LUC) is the largest contributor to the Region's GHG emissions, accounting for about 34% of the total; by comparison, for the world as whole, emissions from LUC represent 6%. In LAC energy-related emissions and emissions from agriculture constitute the second-largest share (24%) (Figure 1).

Figure 1. Sector Composition of GHG Emissions, 2009



Source: CAIT-WRI data. Note: Annex I Countries (Parties to the Convention): Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxemburg, Malta, Monaco, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, and United States of America.

4 See: http://ecometrica.com/blog/reflections-on-atmospheric-co2-reaching-400-ppm/

5 The oceans are the true sink for all the extra carbon, while the other sinks also release a lot of carbon.

6 Source: CAIT-WRI 2010. Other databases on GHG emissions exist, such as IIASA.

1.6 The earth's climate is changing, and further change is inevitable because of the accumulation of anthropogenic GHG emissions. In 2007, the Intergovernmental Panel on Climate Change's (IPCC) fourth assessment report (AR4) found that over the last 20 years, the average warming in LAC has increased to about 0.1 degree Celsius per decade, the glacier retreat has intensified, and sea level rise (SLR) has reached 2-3 mm yearly. The report stated that changes in climate variability and extreme events severely affected LAC during the last decades of the 20th century. During the 2007-2012 period alone, LAC experienced around 340 extreme weather and climate events[7] that caused nearly 8,000 fatalities, affected more than 37 million people, and led to economic costs of more than US$32 billion.[8]

1.7 The alterations in the earth's system caused by GHG emissions will likely have long-lasting effects on the climate. Some of the expected impacts for LAC are:

a. more intense cyclones, affecting lives and livelihoods;

b. more intense rainfall, including hurricanes and other tropical storms, causing greater risk of flooding;

c. loss of winter precipitation storage in snow mass and glaciers, inducing summer droughts and potential water shortage;

d. higher temperatures and more frequent and intense heat waves, threatening lives and crops (reduced crop yields in low latitudes);[9]

e. increased frequency of long-term droughts;

f. SLR, threatening small island nations and coastal cities with storm surge, salt-water intrusion, and inundation;

g. loss of coral reefs,[10] affecting tourism and livelihoods;

h. ocean acidification, affecting marine ecosystems, including fisheries;

i. loss of terrestrial biodiversity, profound at higher temperatures; and

j. new areas exposed to malaria, dengue, and other vector-borne diseases.

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7 "Extreme weather and climate events" are storms, droughts, floods, and extreme temperature events. The calculations are made by OVE based on data from EM DAT.

8 EM DAT severely underestimates the losses and damages (it only registers larger events). In particular, landslides and flooding are underestimated since they often cause localized damage only. The World Bank has done analyses of some countries in LAC using DesInventar data (more data points but fewer countries are covered) that indicates that EM DAT probably underestimates the cost of damages by at least 50%.

9 Climate change can lead to a significant reduction in agricultural productivity: e.g., Central America faces a reduction of 12-29% by 2080, South America a reduction of 12-50% by 2100, and Mexico a total loss of economic productivity in 30-85% of farms by 2100 (Mendelsohn 2008; Cline 2007; World Bank 2009.) Estimates account for adaptation but not for technological change. The poorest are worst affected by malnutrition. New research by Save the Children (2013) shows that a child born in the lowest (poorest) 40% of the income distribution in Nicaragua and Peru is 10.6 and 9.2 times, respectively more likely to be stunted than a child in the richest decile.

10 About 30% of coral reefs have already died since the 1980s (World Bank 2009).

These impacts will affect future socioeconomic development if appropriate climate adaptation actions are not taken.

1.8 Across the Region, many poor and indigenous peoples have already felt the impacts of climate change.[11] The poor—especially indigenous peoples and communities living in the highlands, lowlands, and coastal areas of LAC[12]—are often dependent on natural resources for their livelihoods and well-being. Many indigenous communities find it difficult to adapt in a culturally sustainable manner. Not only is the viability of their livelihoods threatened, resulting in food insecurity and poor health, but their cultural integrity is also being challenged.[13] Helping countries cope with the negative impacts of climate change and build resilience requires adaptation at all levels of society, but especially for the most vulnerable populations that are likely to be the most adversely affected.

1.9 As impacts spread and adaptation and mitigation become urgent, LAC countries have increasingly incorporated climate change in their national policy agendas.[14] More than 70% of the LAC countries have established or are implementing a National Adaptation Plan to reduce climate vulnerability. As parties to the UNFCCC and the Kyoto Protocol,[15] all the countries in the Region have submitted at least one National Communication,[16] and around 70% have published at least two. Furthermore, six countries in the Region (Brazil, Chile, Colombia, Costa Rica, Mexico, and Peru) have also committed to Nationally Appropriate Mitigation Actions in the Copenhagen Accord[17] as their contribution to reduce GHG emissions. LAC countries are also showing increasing interest in accessing resources to implement climate change projects.[18]

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11 See Mearns and Norton (2010) and Kronik and Verner (2010).

12 LAC's indigenous population comprises more than 600 ethnicities and is estimated at 40 million. The majority live in the Andes and Mesoamerica, smaller populations are dispersed in other eco-zones in LAC, and there are lower population densities among the tribal peoples throughout the Amazon Region (Layton and Patrinos, 2006).

13 In Mesoamerica and the Caribbean, increasingly severe storms and hurricanes damage infrastructure and property, and even cause loss of land, reducing access to livelihood resources. In the Colombian Amazon, changes in precipitation and seasonality have immediate and direct effects on livelihoods and health, as crops often fail and the reproduction of fish stock is threatened by changes in the river ebb and flow. In the Andean, water scarcity for crops and livestock, erosion of ecosystems, and changes in biodiversity threaten food security, both within indigenous villages and among populations that depend on indigenous agriculture, causing widespread migration to already crowded urban areas.

14 The extent to which climate change has been incorporated in national agendas varies significantly across countries.

15 All IDB borrowing members are parties of the UNFCCC and have ratified the Kyoto Protocol.

16 A National Communication (NC) is a document that informs of activities undertaken to address climate change. Most developed countries have now submitted their fifth NC; most developing countries have completed their first NC and are in the process of preparing their second.

17 The Copenhagen Accord is a document agreed by the parties in COP15 in 2009. The Accord included the long-term goal of limiting the maximum global average temperature increase to no more than 2 degrees Celsius above pre-industrial levels, subject to a review in 2015.

18 The Global Environmental Facility (GEF) has approved US$9.4 billion for 165 national and regional climate change projects in LAC, which represents 17% of the total number of climate change projects approved by the GEF globally.

B. Climate adaptation and mitigation

1.10 The benefits of mitigation to climate change are global, while in general the benefits of adaptation are local (see Box 1 for definitions). Countries, communities, firms, and households can take proactive measures to offset their carbon footprints, and the benefits will be global and can be tracked by changes in atmospheric concentrations of CO_2 and other GHGs. The World Bank (2009) shows that a 1% increase in per capita income leads on average to a 1% increase in GHG emissions. Hence, without offsetting measures, broad-based growth initiatives alone can have severe negative impacts on the environment. Meeting LAC's development goals while contributing to stabilizing the planet's climate will require large investments in mitigation.

Box 1. IPCC definitions of adaptation and mitigation

The IPCC's Third Assessment Report provides the following definitions:

"**Mitigation:** An anthropogenic intervention to reduce the sources or enhance the sinks of greenhouse gases."

"**Adaptation:** Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities."

Source: IPCC 2007.

1.11 Adaptation to climate change is more difficult to define and measure, as it is intertwined with development. How much adaptation is needed depends on the climate exposure and adaptive capacity of a country or locality. The benefits are local and cannot easily be compared, as they depend on the socioeconomic contexts in which they occur.

1.12 In addition to reducing GHG emissions, there are development co-benefits from reducing the amount of fossil fuel LAC burns each year, including a lower incidence of local air pollution and related illnesses, which could improve and possibly productivity in the Region.[19] Moreover, new jobs may be created through mitigation (e.g., renewable and alternative energy) initiatives that contribute both to higher adaptation capacity through increased household incomes, and to economic development. Finally, higher energy security is a co-benefit that should be considered in economic decision-making.

C. The IDB and climate change

1.13 The MDBs are increasingly recognizing climate change as an important development, as well as an environmental, issue. In the last decade, the IDB has stepped up its efforts to support LAC countries in their efforts to reduce emissions and build resilience. In 2010, in the Ninth General Capital Increase (GCI-9), the

[19] There is no full health model that can be used to assess climate impacts for LAC. The World Bank (2009) finds increased incidence of tropical diseases in various regions—e.g. in Colombia, where the incidence of malaria increased from 400 to 800 cases/100,000 from the 1970s to 1990s—and national assessments in Panama and Bolivia suggest increased risk of infectious diseases.

IDB identified as one of its five priority areas to "*protect the environment, respond to climate change, promote renewable energy, and ensure food security.*" The GCI-9 Agreement and the Bank's Results Framework for 2012-2015 included a specific target of 25% of the IDB's total commitments by the end of 2015 for "lending to support climate change initiatives, sustainable (including renewable) energy, and environmental sustainability," up from an estimated 2006-09 baseline share of 5%. GCI-9 also required that a Climate Change Strategy be presented to the Bank's Board of Executive Directors to "guide and scale up support for actions for climate change mitigation and adaptation," and be followed by an action plan. The Bank submitted this Strategy to the Board in March 2011, and the associated Action Plan a year later. In early 2012 it transformed the unit responsible for managing the Sustainable Energy and Climate Change Initiative (created in early 2007) into a more permanent part of its organizational structure by establishing a new Climate Change and Sustainability Division (CCS) within the Vice Presidency for Sectors.

1.14 The IDB assists both the public and private sectors. The different instruments offered to the Region include investment loans and policy-based loans (PBLs), guarantees, technical assistance grants, and analytical sector work. During 2007-2013 the IDB have provided more than US$8 billion in climate change finance to its member countries in the form of both investment loans and PBLs. PBLs accounted for about US$2.2 billion, or 17% of total budget support projects from the IDB to the Region.[20] The IDB has reportedly financed climate change-related projects in agriculture and forest management (5%), energy (43%), disaster risk reduction and environment (19%), and transport (4%), among other sectors. About 90% was to the public and about 10% to the private sector.

1.15 The consensus today is that successful adaptation and mitigation require a combination of policies, initiatives, and actions, with the appropriate mix depending on individual country conditions. It is also recognized that the chain of decisions and actions that lead to reducing emissions and building resilience can be long, and that development outcomes vary significantly from country to country depending on initial endowments, social structures, quality of governance, economic systems, and global circumstances. Outcomes result from the support of multiple partners and interventions across sectors and time, which complicates the attribution of results to a single partner or intervention. Moreover,

[20] The data analysis should be seen as preliminary, and the data presented here are from the SPD database. There is a large discrepancy between IDB databases with regard to labeling a project climate change or not. Annex 3 shows that there is less than 30% agreement on which projects are climate-related and which are not, and it presents both the SPD and CCS information. A climate assessment requires a robust marker or labeling system for activities that can track progress toward reaching the goal. Until now the IDB has used different marker/label systems of climate change. At times an adjusted version of the OECD-DAC climate markers has been used to label projects as climate change. At other times, a specific marker system developed by the IDB is applied to label projects as climate change (see Annex 3). Currently, the CCS and SPD divisions are working together on identifying and labeling IDB's climate change related projects (loans and TC) as climate change. Finally, there are projects that have climate adaptation or mitigation impacts that are not labeled a climate change project in the system.

external support that is not grounded in a country's own development approach is acknowledged to stand little chance of sustained success. IDB's support—lending, TC, analytical work, and policy dialogue—can be introduced at distinct points in the results chain to influence national policies and programs and help build resilience and reduce GHG emissions. A simplified representation of the results chain of the IDB's support with respect to climate change, defined by OVE, is shown in Annex 2.

II. EVALUATION OBJECTIVE AND FRAMEWORK

2.1 The challenges related to climate change interventions are multiple and multi-sectoral. Broadly, the operational challenges can be organized in two pillars that this evaluation proposes to use as entry points for the areas and sectors assessed:

a. Mitigation to reduce the emission and accumulation of GHGs; and

b. Adaptation to address current risks and prepare for the climate of the short- and medium-term future.[21]

A. Evaluation objectives and questions

2.2 OVE evaluations are concerned with both accountability and learning from experience. Learning is important, as the climate change agenda is relatively new to the IDB, as to the MDBs in general. The objectives of this assessment, accordingly, are to evaluate what the IDB has done over the past years in relation to climate change, and to contribute to the information base and provide guidance that the Bank (in conjunction with national and subnational governments, the private sector, civil society, and other development partners active in the Region) can use to help LAC increase its climate resilience and reduce GHG emissions.

2.3 OVE will address the following main evaluative questions:

a. How has the IDB's engagement in areas that have significant links to climate change—and specifically the actions taken to increase climate resilience and reduce GHG emissions—evolved over the past decade?

b. How can the IDB best help countries set priorities and design programs for climate adaptation and mitigation?

c. How can the IDB best work with countries to mainstream climate change concerns in Bank activities, and what resources are needed to do so?

[21] Adaptation can be classified in two broad categories: (i) resilient adaptation to climate risks (i.e., climate variability and climate change), which provides net benefits today and in the future; and (ii) anticipatory adaptation, which provides net benefits in the future and net costs today. Investments in capacity building and meteorological services are examples of investments for resilient adaptation and sustainable development in countries. Examples of anticipatory adaptation are planning and management of land and costal zones and climate-proofing of long-lived infrastructure. In contrast, maladaptation interventions are adaptation measures applied to climate risks that provide benefits today but are environmentally unsustainable. An example of a maladaptation intervention is unsuitable extraction of ground water by depleting aquifers (IEG 2013).

d. What are the strengths and weaknesses of the IDB's actions and interventions in support of the Region's efforts to address climate change to date?

e. What have been the main results of IDB support to date? To what extent have IDB's climate actions and interventions translated into reducing GHG emissions and building resilience in the Region? To what extent is IDB able to measure these results?

f. How can IDB increase the impact of its future interventions in increasing resilience and reducing GHG emissions in LAC?

B. Evaluation scope and outline

2.4 The universe of observations for this assessment will be that part of the Bank's overall 2007-2013 portfolio[22] identified by OVE (with inputs from the Bank's climate change unit) as being of relevance from the perspective of climate change. This includes all investments (sovereign- and non-sovereign-guaranteed) and policy interventions that contribute to climate adaptation and mitigation, either as a primary objective or while promoting other development or sectoral goals, such as economic growth, poverty reduction, agricultural productivity, or energy efficiency. The evaluation aims to review a broad range of the IDB's activities identified as climate-change-related, both for climate adaptation and mitigation.[23] Key climate-related sectors and areas to be examined include agriculture and rural water, disaster risk reduction (DRR), energy, LUC, and climate governance. To keep the evaluation manageable and focused, it will not address certain sectors that are potentially relevant to the climate change debate: health and labor productivity, tourism, housing, urban water and waste management, and social protection.

2.5 The evaluation will be organized into three sections and nine chapters, as described below. A detailed set of evaluative questions and selected methods for each section are included in the Evaluation Matrix in Annex 2.

1. The big picture

2.6 The first section of the evaluation will address the big picture, including climate change challenges and what the IDB is doing to support countries in overcoming these challenges. Section 1 is organized in three chapters.

- **Chapter 1** will outline LAC's climate challenges and the international negotiations and agreements of importance for LAC.

- **Chapter 2** will review and assess the adequacy of the climate change content and priorities identified in recent IDB country and sector strategies, as well as knowledge generation activities and products.[24] It

[22] To allow an assessment of the climate-related results of early and completed Bank operations, in some cases the time period will be extended back to 2004.

[23] Selected TC grants and analytical work will also be reviewed when relevant.

[24] This includes Vergara et al (2012) and other knowledge products.

will also review the information on climate change risks and vulnerability that the IDB has produced and used to guide its interventions.[25]

- **Chapter 3** will assess how the Bank has organized its own internal structure and developed its internal capacity to adequately support its clients in meeting climate-related challenges. This chapter will also address climate change mainstreaming across the Bank, analyzing how the internal structure and mainstreaming compare with those of other multilateral financial and development assistance agencies. Finally, it will assess the effectiveness of the instruments and mechanisms that the IDB uses to increase cross-sectoral information-sharing and collaboration and to promote synergies.

2. Critical topics

2.7 The second section of the evaluation will address the adaptation and mitigation interventions and actions that the IDB has supported through loans and TC operations in key sectors and areas, taking into consideration mainstreaming and any associated co-benefits, when possible.[26] This section will assess project performance and results to gauge whether or not projects are economically and environmentally sustainable and whether the promoted techniques are robust to evolving climatic conditions. The second section is organized in five chapters.

- **Chapter 4** will assess the IDB's contribution to countries' policy and institutional frameworks related to climate change. This includes assessing the climate-related PBLs and associated TC support that the IDB has used extensively in recent years to assist client countries in achieving their climate-change-related goals and agendas.

- **Chapter 5** will address the IDB's actions related to land use. It will review and assess investments in and support to the agricultural and forestry sectors (including addressing slow-onset impacts and the effectiveness of longer-term planning and change). This chapter will also cover interventions related to GHG emissions from LUC and to tropical forest protection.[27]

- **Chapter 6** will review and assess IDB's investments and support for reducing climate-related natural disasters. It will consider the IDB's support to disaster-prone areas and sectors; its effectiveness in anticipating, preparing countries for, and reducing their vulnerability to

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25 Findings reported in the AR4 and the coming Fifth Assessment Report by IPCC (2007 and 2014) and other peer-reviewed scientific research will be used in the assessment.

26 A climate goal assessment requires a robust marker or labeling system for activities that can track progress toward reaching the goal (see footnote 21)..

27 To avoid maladaptation, it is essential to monitor the hydrological and social impacts of land management and forestry interventions.

climate-related natural disasters; and its role in assisting countries to work together on regional weather and climate issues.[28]

- **Chapter 7** will review and assess public and private investments and support to the energy sector.[29] The evaluation will focus on the effectiveness of Bank-supported activities that address GHG emission reductions through the demand and supply sides of energy efficiency and renewable energy. It will also assess the IDB's experience with cross-sectoral approaches to assist client countries in developing and implementing climate-resilient and low-carbon development investments.[30]

- **Chapter 8** will review the IDB's credit lines for green lending, mainly from the private sector window. It will focus on the Bank's contribution to the growth of financial institutions' and national development banks' environmentally-friendly portfolios in the Region. This chapter will also analyze the selection criteria used to determine private sector financing for emissions reduction.

2.8 All of these chapters will consider the IDB's comparative advantage and leverage potential and will address barriers to adoption of climate adaptation actions, including constraints related to vulnerability, capacity, knowledge, and funding. The evaluation will also attempt to assess the distributional impact—by gender, ethnicity, and income level—of projects and other initiatives, provided information is available to do so.

3. Conclusions and recommendations

2.9 The third part will provide conclusions and recommendations. This proposed evaluation, as a whole, will aim to be forward-looking to help the IDB frame its future assistance.[31]

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28 The World Bank (2009), reporting an increased risk of natural disasters, notes that the frequency of such disasters has increased from 1 every 4 to 1 every 3 years (since the 1990s), and that they bring high human cost (Hurricane Mitch, for example caused 10,000-19,000 deaths) and high economic costs (on average, 0.6% of GDP per climatic disaster).

29 Some low-carbon investments are costlier in the short term than high-carbon options; therefore, they are not being made at the required speed both globally and in LAC.

30 OVE might include the results of another ongoing evaluation on Bus Rapid Transport.

31 On a more operational level, the evaluation will aim to: (i) provide pointers to division and country teams in program design; and (ii) provide insight on the relative importance of data and evidence, and highlight areas where there are important gaps.

III. EVALUATION APPROACH AND ORGANIZATION PRINCIPLES

3.1 The evaluation has five components: (i) broad portfolio overview, (ii) in-depth analysis of selected projects by sector/area, (iii) in-depth analysis of selected country programs by bioclimatic condition, (iv) assessment of internal organizational and strategic issues; and (v) focused reviews on particular topics. Each component is briefly described below. A detailed matrix for the country selection process is included in Annex 4.

3.2 The **portfolio overview** will analyze a sample of projects from the entire range of Bank lending and TC operations (2007-2013)[32], focusing on the ones that are relevant to climate change in terms of design, implementation performance, and results. The portfolio overview will provide a picture of what the Bank is doing and proposes to do in (and with) countries that have different geographic, demographic, and socioeconomic characteristics and that represent the principal climate-sensitive ecosystems in various sectors (agriculture, energy, LUC, forestry, etc.).

3.3 **Selected projects by sector/area** will be reviewed and assessed from a climate change perspective. The evaluation is not intended as a comprehensive assessment of the IDB's sector portfolios; rather, it focuses on projects that had or could have had explicit goals or impact on reducing emissions and building resilience. The assessments will include desk reviews, field visits, and meetings with relevant sector and industry experts, financiers, and regulators. The evaluation of investment projects will include an assessment of the relevance of the objectives and design (including their results frameworks and associated indicators and M&E systems) from a climate change perspective, and possibly an identification of missed opportunities in this regard. If the evidence permits, the review will assess efficiency in the use of project resources and efficacy in terms of actual results in view of—and with an eye toward achieving—project objectives. The analyses will critically review projected and measured GHG savings for mitigation projects, when data are available; resilience building and vulnerability reduction for adaptation projects; and co-benefits and other development benefits for both types of projects. The potential for scaling up and replicability will also be addressed. When relevant, analyses of vulnerable populations (particularly indigenous peoples) and gender issues will be considered in the assessment.

3.4 The **climate country case studies** will be broad in nature and will allow for assessing co-benefits and broader development achievements in each country. In these reviews the emphasis on climate change in the country strategy papers, both as an objective and in terms of the proposed lending and TC program, will be addressed. Specifically, the focus will be on issues such as building climate resilience through disaster risk management and agriculture, reducing emissions

[32] As mentioned above, in some cases the time period will be extended back to 2004.

through renewable energy, increasing energy efficiency, reducing deforestation, and implementing policy reforms. The selection of the countries for case studies has sought to highlight geographical, income, and climate (Box 2) while emphasizing countries with high levels of Bank activity and focus (including the Bank's relevant portfolio and priority as assigned in the IDB Country Strategies; see Tables 1-5 in Annex 4). The country selection also represents different levels of climate vulnerability and readiness (see Tables 6 and 7 in Annex 4). On this basis, six countries have been tentatively selected for case studies: Barbados, Brazil, Dominican Republic, Haiti, Mexico, and Peru.

3.5 The country case studies will include the following activities: (i) review of the government's climate change strategy or related documents and priorities with respect to climate change adaptation and mitigation; (ii) assessment of the extent to which the Bank strategies for the country reflect these national strategies and priorities, and of how the Bank is presently assisting and proposes to assist the country in this regard through its ongoing (portfolio) and proposed (pipeline) interventions; and (iii) assessment of the relevance of the objectives and design of all projects, and of the efficiency and efficacy of completed projects. Where relevant the evaluative work will include an assessment of the timeliness and comprehensiveness of climate-related diagnostic work prepared by the IDB; a review of the availability of climate-specific evidence collected through monitoring and evaluation, and impact evaluations.

Box 2. Climate in the selection of country case studies

- Brazil has the largest part of the Amazon basin. Rainfall has decreased in the northern part of Amazonia, whereas both positive and negative changes have occurred in southern Amazonia. Sea level rise has reached 4 mm/year in several ports, and around 3 mm/year around the river mouth of Amazonas. In addition, Brazil is the largest emitter in the region, but has recently been very successful in reducing GHG emissions that originate from the forestry sector. Peru is part of the mountain ecosystems in the Andes, where glaciers are retreating drastically—temperatures have increased by 0.1°C per decade over the last 25 years, and annual rainfall has generally been decreasing. Also, Peru has experienced increased El Niño occurrences, with a positive tendency for intense precipitation and consecutive dry days.
- Barbados, Dominican Republic, and Haiti have experienced intensifying hurricanes and a positive tendency for intense precipitation and consecutive dry days. Moreover they have experienced an increased number of intense hurricanes and they face bleaching of coral biome and coastal issues.
- Mexico has experienced intensifying El Niño occurrences and hurricanes, a positive tendency for intense precipitation and consecutive dry days, and, in central Mexico, a positive trend in the frequency of very heavy rains. Moreover, Mexico is the second largest GHG emitter in the Region and has a broad experience in designing and implementing climate change mitigation strategies and policies.

Source: The climate information is based on Christensen (2010).

3.6 **Assessment of organizational and strategic issues.** Discussions with IDB staff and Management will be used to examine strategies, incentives, and constraints affecting the choice of interventions. Strategic elements to be examined will include, for example, country strategies, the climate change strategy, and other sector strategies. The nature, quality, and usefulness of climate-related analytical

work—such as climate change technical notes for country strategies, research papers, and publications—will also be assessed.

3.7 **Focused reviews**. As an input to the Final Report, background/working papers will be prepared on agriculture and LUC, disaster risk management, energy, green lending and the impact of climate change on overall GDP, gender, households and sectors, and rural and urban areas. Previous IDB-9 evaluation findings on climate change will also be reflected in this evaluation. In addition, OVE's ongoing agriculture and transport sector reviews will address climate change.

A. Outputs, Process, Timing, and Staffing

3.8 The main outputs of the evaluation will be: (a) an in-depth report that presents findings, lessons, and suggestions for future actions and changes, and (b) a more focused overview (30 pages or less) that summarizes the main conclusions and recommendations.

3.9 The anticipated timetable and proposed evaluation process is as follows:

a. Approach paper sent to the Board of Directors: August 2013

b. Analyses to inform the final report, including field visits and preparation of background reports: August 2013–March 2014

c. Workshop in the Region on climate change evaluation (TBD)

d. Internal review: May 2014

e. Management review: July 2014

f. Submission to Board: August 2014

g. PEC discussion: September 2014

h. Dissemination of the final report in the case study countries and other LAC countries based on demand: Fall 2014

3.10 The evaluation is planned for release before the 20th UNFCCC Conference of the Parties (COP 20) in Peru in November 2014 (a presence is anticipated at COP 19 and COP 20.) The evaluation may serve as an input into the process leading up to COP 21 in Paris.

3.11 The evaluation will be funded by OVE's budget. Additionally, the Swiss Trust Fund will fund work on the economic impacts of climate change, including gender and climate vulnerability. The task and team will be coordinated by Dorte Verner and Veronica Gonzalez from OVE. Team members include Maria Elena Corrales, Lynn Scholl, Juan Manuel Puerta, Adriana Molina, David Suárez, Maria Paula Mendieta, Ricardo Marto, Carlos Morales, and Lourdes Alvarez Prado from OVE, and a number of senior consultants and advisors.

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ANNEX 1: GLOSSARY

The definitions in this annex are from the IPCC AR4 Synthesis Report Glossary:
http://www.ipcc.ch/publications_and_data/publications_and_data_glossary.shtml

Adaptation
Initiatives and measures to reduce the vulnerability of natural and human systems against actual or expected *climate change* effects. Various types of adaptation exist, e.g. *anticipatory* and *reactive*, *private* and *public*, and *autonomous* and *planned*. Examples are raising river or coastal dikes, the substitution of more temperature-shock resistant plants for sensitive ones, etc.

Adaptive capacity
The whole of capabilities, resources and institutions of a country or *region* to implement effective *adaptation* measures.

Anthropogenic emissions
Emissions of *greenhouse gases*, greenhouse gas precursors, and *aerosols* associated with human activities, including the burning of *fossil fuels*, *deforestation*, *land-use changes*, livestock, fertilization, etc.

Carbon dioxide (CO2)
A naturally occurring gas, also a by-product of burning fossil fuels from fossil carbon deposits, such as oil, gas and coal, of burning *biomass* and of *land use changes* and other industrial processes. It is the principal *anthropogenic greenhouse gas* that affects the Earth's radiative balance. It is the reference gas against which other greenhouse gases are measured and therefore has a *Global Warming Potential* of 1.

Climate
Climate in a narrow sense is usually defined as the average weather, or more rigorously, as the statistical description in terms of the mean and variability of relevant quantities over a period of time ranging from months to thousands or millions of years. The classical period for averaging these variables is 30 years, as defined by the World Meteorological Organization. The relevant quantities are most often surface variables such as temperature, precipitation and wind. Climate in a wider sense is the state, including a statistical description, of the *climate system*. In various parts of this report different averaging periods, such as a period of 20 years, are also used.

Climate change
Climate change refers to a change in the state of the *climate* that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or *external forcings*, or to persistent *anthropogenic* changes in the composition of the *atmosphere* or in *land use*. Note that the *United Nations Framework Convention on Climate Change (UNFCCC)*, in its Article 1, defines climate change as: 'a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to

natural climate variability observed over comparable time periods'. The UNFCCC thus makes a distinction between climate change attributable to human activities altering the atmospheric composition, and climate variability attributable to natural causes. See also *Climate variability; Detection and Attribution*.

Co-benefits
The benefits of policies implemented for various reasons at the same time, acknowledging that most policies designed to address *greenhouse gas mitigation* have other, often at least equally important, rationales (e.g., related to objectives of development, sustainability, and equity).

Food security
A situation that exists when people have secure access to sufficient amounts of safe and nutritious food for normal growth, development and an active and healthy life. *Food insecurity* may be caused by the unavailability of food, insufficient purchasing power, inappropriate distribution, or inadequate use of food at the household level.

Forest
A vegetation type dominated by trees. Many definitions of the term forest are in use throughout the world, reflecting wide differences in biogeophysical conditions, social structure, and economics. Particular criteria apply under the *Kyoto Protocol*. For a discussion of the term *forest* and related terms such as *afforestation*, *reforestation*, and *deforestation* see the IPCC Special Report on Land Use, Land-Use Change, and Forestry (IPCC, 2000). See also the Report on Definitions and Methodological Options to Inventory Emissions from Direct Human-induced Degradation of Forests and Devegetation of Other Vegetation Types (IPCC, 2003)

Fossil fuels
Carbon-based fuels from fossil hydrocarbon deposits, including coal, peat, oil, and natural gas.

Greenhouse effect
Greenhouse gases effectively absorb *thermal infrared radiation*, emitted by the Earth's surface, by the *atmosphere* itself due to the same gases, and by clouds. Atmospheric radiation is emitted to all sides, including downward to the Earth's surface. Thus greenhouse gases trap heat within the surface-*troposphere* system. This is called the *greenhouse effect*. Thermal infrared radiation in the troposphere is strongly coupled to the temperature of the atmosphere at the altitude at which it is emitted. In the troposphere, the temperature generally decreases with height. Effectively, infrared radiation emitted to space originates from an altitude with a temperature of, on average, –19°C, in balance with the net incoming *solar radiation*, whereas the Earth's surface is kept at a much higher temperature of, on average, +14°C. An increase in the concentration of greenhouse gases leads to an increased infrared opacity of the atmosphere, and therefore to an effective radiation into space from a higher altitude at a lower temperature. This causes a *radiative forcing* that leads to an enhancement of the greenhouse effect, the so-called *enhanced greenhouse effect*.

Greenhouse gas (GHG)
Greenhouse gases are those gaseous constituents of the *atmosphere*, both natural and *anthropogenic*, that absorb and emit radiation at specific wavelengths within the spectrum of *thermal infrared radiation* emitted by the Earth's surface, the atmosphere itself, and by clouds. This property causes the *greenhouse effect*. Water vapour (H2O), *carbon dioxide* (CO2), *nitrous oxide* (N2O), *methane* (CH4) and *ozone* (O3) are the primary greenhouse gases in the Earth's atmosphere. Moreover, there are a number of entirely human-made greenhouse gases in the atmosphere, such as the *halocarbons* and other chlorine and bromine containing substances, dealt with under the Montreal Protocol. Beside CO2, N2O and CH4, the *Kyoto Protocol* deals with the greenhouse gases *sulphur hexafluoride* (SF6), *hydrofluorocarbons* (HFCs) and *perfluorocarbons* (PFCs).

Kyoto Protocol
The Kyoto Protocol to the *United Nations Framework Convention on Climate Change (UNFCCC)* was adopted in 1997 in Kyoto, Japan, at the Third Session of the Conference of the Parties (COP) to the UNFCCC. It contains legally binding commitments, in addition to those included in the\ UNFCCC. Countries included in *Annex B* of the Protocol (most Organization for Economic Cooperation and Development countries and countries with *economies in transition*) agreed to reduce their *anthropogenic greenhouse gas* emissions (*carbon dioxide*, *methane*, *nitrous oxide*, *hydrofluorocarbons*, *perfluorocarbons*, and *sulphur hexafluoride*) by at least 5% below 1990 levels in the commitment period 2008 to 2012. The Kyoto Protocol entered into force on 16 February 2005.

Land use and Land-use change
Land use refers to the total of arrangements, activities and inputs undertaken in a certain land cover type (a set of human actions). The term *land use* is also used in the sense of the social and economic purposes for which land is managed (e.g., grazing, timber extraction, and conservation). *Land-use change* refers to a change in the use or management of land by humans, which may lead to a change in land cover. Land cover and landuse change may have an impact on the surface *albedo*, *evapotranspiration*, *sources* and *sinks* of *greenhouse gases*, or other properties of the *climate system* and may thus have a *radiative forcing* and/or other impacts on *climate*, locally or globally. See also: the IPCC Report on Land Use, Land-Use Change, and Forestry (IPCC, 2000).

Mitigation
Technological change and substitution that reduce resource inputs and emissions per unit of output. Although several social, economic and technological policies would produce an emission reduction, with respect to *Climate Change*, mitigation means implementing policies to reduce *greenhouse gas* emissions and enhance *sinks*.

Resilience
The ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organization, and the capacity to adapt to stress and change.

Sink
Any process, activity or mechanism which removes a *greenhouse gas*, an *aerosol* or a precursor of a greenhouse gas or aerosol from the *atmosphere*.

United Nations Framework Convention on Climate Change (UNFCCC)
The Convention was adopted on 9 May 1992 in New York and signed at the 1992 Earth Summit in Rio de Janeiro by more than 150 countries and the European Community. Its ultimate objective is the "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system". It contains commitments for all Parties. Under the Convention, Parties included in *Annex I* (all OECD member countries in the year 1990 and countries with *economies in transition*) aim to return *greenhouse gas* emissions not controlled by the Montreal Protocol to 1990 levels by the year 2000. The Convention entered in force in March 1994. See *Kyoto Protocol*.

Vulnerability
Vulnerability is the degree to which a *system* is susceptible to, and unable to cope with, adverse effects of *climate change*, including *climate variability* and extremes. 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*.

ANNEX 2: EVALUATION MATRIX AND RESULTS CHAIN MODEL

1. EVALUATION MATRIX

TOPICS	SPECIFIC QUESTIONS	METHODS
PART I: The big picture		
Regional and International Context: • Climate change science – The big picture for LAC. • Climate change challenges in LAC • Climate change impacts on economies, sectors and households. • International climate change negotiations and the GCF.	- What are the main climate change concerns in the region? - What are the main opportunities for addressing climate change in the Region? - What is the status of the international negotiations and climate finance?	Literature review. Country data analysis (socio-economic and climate data). Interviews with country representatives.
IDB's role, experience, and impact on climate change in LAC: • Climate change in IDB's country and sector strategies. • IDB's knowledge generation activities. • IDB's organization and resources in climate change. • IDB's role channeling resources for climate change in LAC.	- What have been the climate change concerns and priorities in IDB country and sector strategies? - What has been the response of the Bank to challenges related to GHG emission patterns and climate risk and vulnerability of different people and places in LAC? - So far, how effective are country and sectorial strategies for integrating mitigation and adaptation to climate impacts into existing country policies and new projects and interventions? - How responsive is the information to the Region's needs and, thus, adequate to guide the climate-related actions and initiatives undertaken by the IDB? - How has the Bank's institutional response to the climate change challenges faced by its client countries, in terms of its internal structure and lending and non-lending instruments, evolved over time? - How effective has this response been in terms of: (i) identifying and providing the analytical, technical cooperation, policy, institutional, and investment support required by its clients; and (ii) ensuring the multi- and cross-sectoral interventions and internal capacity, as well as the intra-institutional coordination, necessary to maximize the quality and usefulness of this support?	Review of IDB's country and sector strategies. Content analysis of IDB's climate change knowledge documents. Interviews with IDB officials. Country interviews. Portfolio analysis. Review of the IDB budget allocation to climate change data.

TOPICS	SPECIFIC QUESTIONS	METHODS
	- Which mechanisms are in place for and how effective is the IDB in integrating synergies and trade-offs between mitigation and adaptation, and identifying opportunities for future strategies and policy measures? - How is Bank funding and staffing allocated to climate change-related concerns and are these resources sufficient for the IDB to be on top of global climate knowledge, including best practice adaptation and mitigation actions?	
IDB's contribution to national climate change policy and institutional frameworks for LAC countries.	- How has the IDB supported emission-reduction plans and other national climate-policy and other initiatives prepared by LAC countries (such as the one submitted by the countries to the UNFCCC)? - How has the design of individual and programmatic PBLs concerned with climate change-related issues, including sustainable energy, evolved over time? What specific policy and institutional measures have they contained, what has been the analytical basis for their inclusion? - What has been the results and implementation experience of PBLs to date? - How, and how effectively, were monitoring and evaluation systems in connection with PBLs? - What are the direct and indirect results and impacts of PBLs, including in relation to subsequent investments directly intended to promote climate change mitigation and/or adaptation measures?	Desk review of national climate change related strategies and government planning documents. Desk review of loan preparation and loan documents. Review of loans monitoring data (PMRs). Review of climate change technical cooperation data. Interviews with national stakeholders.

TOPICS	SPECIFIC QUESTIONS	METHODS
PART II: Critical Topics		
LUC and agriculture	- How effective is the IDB program in supporting "big issue areas", in terms of emissions reduction, such as assisting LAC in reducing emissions from LUC through land use planning (zoning), forestry, or hydro projects and related areas? How have IDB projects contributed to improvements in LUC? - How, and how effectively, is the IDB program addressing issues arising from climate change in agriculture and forestry? Is the IDB doing enough to contribute to resolve the basic adaptation needs efficiently or effectively and increase climate resilience through adaptation in agriculture in LAC? - How, and how effectively, is the IDB in promoting climate-resilient agricultural practices and promoting research in order for agricultural systems—including crops and livestock—to become economically and environmentally sustainable in a changing climate, taking into account mitigation co-benefits in agriculture?	Desk review of national policies, plans or programs in each topic. Desk review of relevant IDB loans and technical cooperation documents. Interviews with government officials, think tanks, academics and relevant organizations. Field visits.
Disaster risk reduction	- How, and how effectively, is the IDB program supporting disaster-prone areas and sectors, and targeting pockets of at-risk areas? - How, and how effectively, is the IDB helping to anticipate and prepare for climate-related natural disasters and reduce the vulnerability to these events in LAC? - How can the IDB best assist countries in working together on regional weather and climate issues?	

TOPICS	SPECIFIC QUESTIONS	METHODS
Energy	- How, and how effectively, have energy projects promoted emissions reductions, and with what co-benefits? What has been the experience with cross-sectoral approaches to assist client countries in developing and implementing climate-resilient investments to reduce GHG emissions? - How effective have the IDB's operations been in supporting countries in increasing energy efficiency on both the demand and supply sides, for example reducing energy subsidies and other low cost and win-win initiatives that reduce GHG emissions?	
Green lending	- How has the IDB integrated climate mitigation considerations into its portfolio of investments to support the private sector? What organizational goals, strategies, and constraints have shaped the mix of low carbon investments? - How and what were the selection criteria used to determine private sector financing for emissions reduction?	

2. RESULT CHAIN MODEL

Results Chain of the IDB Assistance to Increase Resilience and Reduce GHG Emissions[33]

Inputs

1. Bank contribution to analysis of climate change and specific country context, including identification of binding constraints to GHG emission reduction and resilience building;
2. Climate-oriented country strategies that include climate change-related objectives and actions;
3. Increased focus of the IDB's program on climate change including increased resilience and GHG emissions reduction;
4. Partnerships with the other development organizations and non-state actors.

Outputs

1. Improved knowledge base, identification of capacity in emission reductions and resilience building, monitoring of explicit climate change targets;
2. Improved delivery of services/knowledge for emission reduction and resilience building;
3. Improved capacity of people and firms or their representatives for greater government and/or IDB accountability.

Country implements action of its development program → ← Support from multiple development partners

Intermediate Outcomes and Impacts

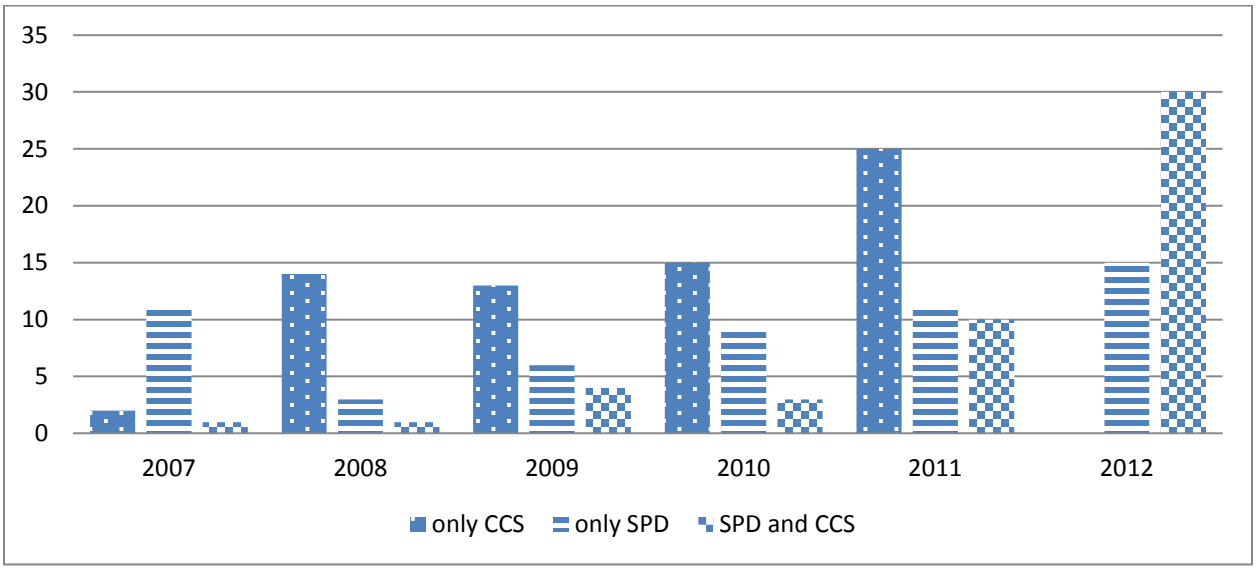
1. Low carbon economic growth and green businesses;
2. Increased climate resilience of vulnerable people and businesses;
3. Increased asset base for vulnerable people and firms and improved insurance and social safety nets;
4. Increased resilience of vulnerable people, regions and countries and reduced GHG emissions of sectors and countries.

[33] Note: The link between outputs and intermediate outcomes and impacts is shown here as direct. In practice, this is the link in the chain where country partners pursue their development agenda, with support from the IDB and other partners. This includes specific investments and changes to policies and systems. Direct attribution of the outcomes and long-term impacts to the Bank or any development partner is not plausible and therefore not listed.

ANNEX 3: CLIMATE CHANGE PROJECT LABELING

This annex presents IDB's climate change labeled loans as per: (i) the SPD dataset labeled climate change projects and (ii) projects labeled climate change by the Climate Change and Sustainability Division (CCS). There is a large amount of discrepancy between the two sources (see figure below). As a matter of fact there is only concordance with respect to 49 projects or 28.3% between the two systems.

IDB Projects Labeled as Climate Change, 2007-2012 (number of loans)



Annex 4: Countries selection criteria

Reference	
	Low
	Medium
	High

Table 1: CDH

Region	Country	Income level	Total CC Portfolio*		Country Strategy		
			# Loans	Amount approved	Period	Rating	Selected Countries
CDH	Haiti	**D**	8	181,500,000	2011-15	3	*

Table 2: CAN

Region	Country	Income level	Total CC Portfolio*		Country Strategy		
			# Loans	Amount approved	Period	Rating	Selected Countries
Andean Group	Peru	**B**	17	845,000,000	2012-16	4	*
Andean Group	Colombia	**B**	8	1,195,000,000	2011-14	2	
Andean Group	Bolivia	**D**	6	266,100,000	2011-15	2	
Andean Group	Ecuador	**D**	5	380,000,000	2012-17	4	
Andean Group	Venezuela	**A**	5	1,920,000,000	2011-14	3	

Table 3: CSC

Region	Country	Income level	Total CC Portfolio*		Country Strategy		
			# Loans	Amount approved	Period	Rating	Selected Countries
Southern cone	Brazil	**A**	16	1,803,941,000	2012-14	4	*
Southern cone	Argentina	**A**	12	1,764,000,000	2012-15	4	
Southern cone	Uruguay	**C**	9	560,700,000	2010-15	1	
Southern cone	Chile	**B**	3	438,500,000	2011-14	4	
Southern cone	Paraguay	**D**	1	50,000,000	2009-13	3	

Table 4: CID

Region	Country	Income level	Total CC Portfolio*		Country Strategy		
			# Loans	Amount approved	Period	Rating	Selected Countries
CID	Mexico	**A**	15	1,782,431,547	2010-12	4	*
CID	Panama	**C**	12	664,000,000	2010-14	1	
CID	Dominican Republic	**D**	8	445,300,000	2010-13	2	*
CID	Nicaragua	**D**	7	223,500,000	2012-17	2	
CID	Guatemala	**D**	3	327,000,000	2012-16	2	
CID	Costa Rica	**C**	3	700,000,000	2011-14	1	
CID	El Salvador	**D**	3	345,000,000	2010-14	1	
CID	Honduras	**D**	3	69,000,000	2011-14	1	
CID	Belize	**D**	2	16,910,000	2008-12	2	

Note: In the case of CID, OVE decided to include two countries to increase the balance between A/B and C/D countries.

Table 5: CCB

Region	Country	Income level	Total CC Portfolio*		Country Strategy		
			# Loans	Amount approved	Period	Rating	Selected Countries
Caribbean Group	Guyana	**D**	4	38,500,000	2012-16	3	
Caribbean Group	Trinidad & Tobago	**C**	3	386,500,000	2011-15	4	
Caribbean Group	Barbados	**C**	3	117,000,000	2009-13	4	*
Caribbean Group	Suriname	**C**	2	27,000,000	2011-15	2	
Caribbean Group	Jamaica	**C**	1	20,000,000	2012-14	2	

Note: In the case of CCB, OVE did not choose Guyana and Trinidad and Tobago since half of the climate change portfolio is in a sector not included in the evaluation (water and sanitation).

* The loan information is based on CCS and SPD databases for the period 2007-2012.

Table 6: Ranking by vulnerability score (GAIN index):**

Country	Income level	Vulnerability score (GAIN- red most vulnerable)	Selected Countries
Haiti	D	0.512	*
Guyana	D	0.411	
Dominican Republic	D	0.403	*
Honduras	D	0.393	
El Salvador	D	0.375	
Bolivia	D	0.372	
Nicaragua	D	0.364	
Peru	B	0.363	*
Jamaica	C	0.358	
Guatemala	D	0.347	
Costa Rica	C	0.33	
Barbados	C	0.33	*
Panama	C	0.325	
Paraguay	D	0.318	
Suriname	C	0.311	
Ecuador	D	0.305	
Trinidad & Tobago	C	0.302	
Belize	D	0.296	
Mexico	A	0.289	*
Brazil	A	0.288	*
Colombia	B	0.285	
Chile	B	0.282	
Venezuela	A	0.272	
Uruguay	C	0.258	
Argentina	A	0.251	

Table 7: Ranking by readiness score (GAIN index)**

Country	Income level	Readiness score (GAIN - red most ready or resilient)	Selected Countries
Chile	B	0.773	
Barbados	C	0.737	*
Uruguay	C	0.736	
Costa Rica	C	0.652	
Panama	C	0.639	
Peru	B	0.611	*
El Salvador	D	0.609	
Jamaica	C	0.6	
Colombia	B	0.591	
Brazil	A	0.59	*
Argentina	A	0.581	
Belize	D	0.578	
Trinidad & Tobago	C	0.575	
Mexico	A	0.574	*
Dominican Republic	D	0.572	*
Paraguay	D	0.57	
Guatemala	D	0.53	
Honduras	D	0.525	
Suriname	C	0.519	
Bolivia	D	0.515	
Nicaragua	D	0.512	
Ecuador	D	0.495	
Guyana	D	0.479	
Haiti	D	0.45	*
Venezuela	A	0.447	

** The GAIN index was produced by the Global Adaptation Institute in 2012. The vulnerability score seeks to capture exposure to climate related hazards, sensitivity to these impacts and adaptive capacity to cope with those impacts (includes indicators of water, food, health, ecosystem services and human habitat). The Readiness Score measures the ability of a country to successfully absorb additional private sector investment resources and apply them effectively toward increasing resiliency to climate change and other global challenges (includes economic, social and governance indicators).