

# **CARIBBEAN DEVELOPMENT BANK**



## **CLIMATE RESILIENCE STRATEGY 2019–2024**

**DECEMBER 2018**

## ABBREVIATIONS

AF	-	Adaptation Fund
AP	-	Action Plan
AR	-	Annual Report
BMC	-	Borrowing Member Countries
bn	-	Billion
BNTF	-	Basic Needs Trust Fund
BOD	-	Board of Directors
CALC	-	Climate Action Line of Credit
CC	-	Climate Change
CCA	-	Climate Change Adaptation
CDB	-	Caribbean Development Bank
CIMH	-	Caribbean Institute for Meteorology and Hydrology
CPA	-	Country Poverty Assessment
CRS	-	Climate Resilience Strategy
°C	-	Degree Celsius
DFID	-	Department for International Development
DRM	-	Disaster Risk Management
DRR	-	Disaster Risk Reduction
EE	-	Energy Efficiency
EIB	-	European Investment Bank
ESU	-	Environmental Sustainability Unit
EWS	-	Early Warning System
GCF	-	Green Climate Fund
GDP	-	Gross Domestic Product
GHG	-	Greenhouse Gas
IDB	-	Inter-American Development Bank
IPCC	-	Inter-Governmental Panel on Climate Change
MDB	-	Multilateral Development Bank
mn	-	Million
MSMEs	-	Micro, Small and Medium-Sized Enterprises
M&E	-	Monitoring and Evaluation
NAP	-	National Adaptation Plan
NAPA	-	National Adaptation Programmes of Action
NDC	-	Nationally Determined Contribution
%	-	Percent
PBLs	-	Policy Based Loans
PPP	-	Public Private Partnerships
PRS	-	Policy Reduction Strategies
RE	-	Renewable Energy
SDGs	-	Sustainable Development Goals
TA	-	Technical Assistance
USD	-	United States Dollars
WB	-	World Bank

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1. Number of Mitigation and Adaptation Projects Funded through CDB over the Period 2012-17

## **GLOSSARY<sup>i</sup>**

### **Adaptation**

The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects.

### **Co-benefits**

The positive effects that a policy or measure aimed at one objective might have on other objectives, irrespective of the net effect on overall social welfare. Co-benefits are often subject to uncertainty and depend on local circumstances and implementation practices, among other factors. Co-benefits are also referred to as ancillary benefits.

### **Climate Resilience**

Resilience is the capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganising in ways that maintain their essential function, identity and structure, while also maintaining the capacity for adaptation, learning and transformation. Climate resilience refers to the capacity to cope with climate related hazardous events or trends or disturbances.

In the context of the Climate Resilience Strategy 2019-2024, climate resilient interventions refer to actions taken in the design of projects, programmes or policies to reduce its climate related risks. It does not imply complete elimination of risks.

### **Climate Variability**

Climate variability refers to variations in the mean state and other statistics (such as standard deviations, the occurrence of extremes, etc.) of the *climate* on all spatial and temporal scales beyond that of individual weather events. Variability may be due to natural internal processes within the *climate system* (*internal variability*), or to variations in natural or anthropogenic *external forcing* (external variability)

### **Disaster**

Severe alterations in the normal functioning of a community or a society due to hazardous physical events interacting with vulnerable social conditions, leading to widespread adverse human, material, economic or environmental effects that require immediate emergency response to satisfy critical human needs and that may require external support for recovery.

### **Disaster Risk Reduction**

Disaster risk reduction is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development.

### **Early Warning System**

The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organisations threatened by a *hazard* to prepare to act promptly and appropriately to reduce the possibility of harm or loss.

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<sup>i</sup> Unless otherwise stated definitions in this Glossary are from the Inter-Governmental Panel on Climate Change (IPCC), 2014: *Annex II: Glossary* [Mach, K.J., S. Planton and C. von Stechow (eds.)]. In: *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, pp. 117-130.).

### **Ecosystem-based Adaptation**<sup>ii</sup>

The use of biodiversity and ecosystem services as part of an overall adaptation strategy to help people to adapt to the adverse effects of climate change.

### **Ecosystem Services**

Ecological processes or functions having monetary or non-monetary value to individuals or society at large. These are frequently classified as (a) supporting services such as productivity or *biodiversity* maintenance, (b) provisioning services such as food, fibre or fish, (c) regulating services such as *climate* regulation or carbon *sequestration* and (d) cultural services such as tourism or spiritual and aesthetic appreciation.

### **Low-Regret Options**<sup>iii</sup>

Actions that yield benefits even in the absence of climate change and where the costs of the adaptation are relatively low vis-à-vis the benefits of acting.

### **Maladaptation**

Any changes in natural or *human systems* that inadvertently increase *vulnerability* to climatic *stimuli*; an *adaptation* that does not succeed in reducing vulnerability but increases it instead.

### **Mitigation (of climate change)**

A human intervention to reduce the sources or enhance the *sinks* of greenhouse gases (GHGs). This report also assesses human interventions to reduce the sources of other substances which may contribute directly or indirectly to limiting *climate change*, including, for example, the reduction of particulate matter emissions that can directly alter the radiation balance (e.g., black carbon) or measures that control emissions of carbon monoxide, nitrogen oxides, Volatile Organic Compounds and other pollutants that can alter the concentration of tropospheric ozone which has an indirect effect on the *climate*.

### **Risk**

The potential for consequences where something of value is at stake and where the outcome is uncertain, recognising the diversity of values. Risk is often represented as probability or likelihood of occurrence of hazardous events or trends multiplied by the impacts if these events or trends occur. In the IPCC Fifth Assessment Report (AR5), the term risk is often used to refer to the potential, when the outcome is uncertain, for adverse consequences on lives, livelihoods, health, ecosystems and species, economic, social and cultural assets, services (including environmental services) and infrastructure.

### **Transformation**

A change in the fundamental attributes of natural and human systems.

### **Vulnerability**

The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt.

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<sup>ii</sup> Convention on Biological Diversity (2009).

<sup>iii</sup> Climate Adapt <https://climate-adapt.eea.europa.eu/knowledge/tools/uncertainty-guidance/topic2>

## EXECUTIVE SUMMARY

1. The Inter-Governmental Panel on Climate Change, 2018 Special Report on Global Warming of 1.5 degree Celsius (°C) states that the consequences of a 1.0°C increase in global warming are already being seen through extreme weather events and the rising sea level among other things. For CARICOM States, measurable climate impacts are already observed on agricultural yields, changes in water quality and quantity; damage to coastal zone areas; marine and terrestrial biodiversity loss and associated ecosystem services; and increase in climate change (CC) related disasters and infrastructure damage and loss in urban and rural areas<sup>1</sup>. CC is therefore a threat to the core mission of the Caribbean Development Bank (CDB), to systematically reduce poverty in its Borrowing Member Countries (BMCs). These impacts have a disproportionate impact on the most vulnerable groups, who have less capacity to protect themselves and to adapt or recover losses. There is also increasing concern with gender-specific climate impacts. The gender dimensions and differential impact of CC and disaster risks on the lives and livelihoods of women, men and their families also influences the vulnerability of households and the likelihood of increasing poverty.

2. BMCs experienced significant loss and damage, estimated at twenty seven billion United States dollars, during the period 2000-2017 as a consequence of climate related disasters<sup>2</sup>. Recurrent disasters undermine economic growth and contribute to high levels of debt accumulation, making progress toward the Sustainable Development Goals and the global Small Island Developing States agenda much harder to maintain.

3. All sovereign BMCs have ratified the Paris Agreement and committed to implement their Nationally Determined Contributions (NDCs) as part of the Agreement, to limit global warming to less than 2°C by 2100, and make best efforts to limit warming to 1.5°C. BMCs must be prepared to address the serious economic and social impacts of CC by adopting and implementing clear CC adaptation (CCA) measures and building climate resilience in key climate sensitive sectors such as; agriculture, water resources management, infrastructure and urban development and to take advantage of the new opportunities it presents. They must also incorporate disaster risk management (DRM) and climate risk considerations in national development plans and sector strategies.

4. There is consensus that the scale of technical and financial requirements to build CC resilience across sectors will be high and will require the mobilisation of innovative solutions, financial resources and institutional capacity for effective action. BMCs have indicated that successful implementation of their adaptation actions to achieve the climate commitments in their NDCs, are partially or totally conditional on external support in the form of finance, technology transfer, development and capacity building.

5. CDB is committed to supporting efforts by BMCs to implement their NDCs and enhance climate resilience. The Climate Resilience Strategy (CRS) 2019-2024 gives continuity to CDB's CC work programme and provides the Bank with strategic guidance in implementing its climate actions. It builds on the progress achieved so far and the lessons learnt from CDB's first CRS 2012-2017. It is shaped by the recent global developments that promote effective climate actions, disaster risk reduction (DRR) and

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<sup>1</sup> IPCC Fifth Assessment Report, 2014.

<sup>2</sup> EM-DAT: The Emergency Events Database - Universite catholique de Louvain (UCL) - CRED, D. Guha-Sapir - [www.emdat.be](http://www.emdat.be), Brussels, Belgium.

poverty reduction to support developing countries' efforts to build towards greater resilience and sustainable development.

6. The vision of CRS 2019-2024 is for climate resilient, sustainable development in BMCs through enhanced and sustained climate actions. The expected outcomes of CRS 2019-2024 are: (a) mobilising increased levels of concessionary resources accessible to all BMCs; (b) improved climate resilience in vulnerable sectors; (c) strengthened enabling environment to support resilient climate actions; and (d) improve capacity within CDB for effective and efficient delivery of CC actions.

7. CRS 2019-2024 outlines how CDB intends to meet the challenges and opportunities, by scaling up climate action, integrating CC across its operations, and working more closely with development partners. The Bank is focused on actions that support CDB's core mission, and builds on its comparative advantage. Greater emphasis will be placed on adopting sector wide and multi-sectoral approaches in country work programmes, using more strategic sectoral assessments to support the design of climate resilient policies, plans and governance frameworks, to deliver transformational investment interventions, in keeping with country NDC priorities.

8. CRS 2019-2024 maintains a deliberate focus on adaptation and resilience, since CDB's climate mitigation actions are promoted and implemented through its Energy Sector Policy and Strategy 2015-2019. The Bank's environmental sustainability operational policies and Operations area work programme planning and approval processes allow for synergy and consistency in the delivery of climate actions in the Bank's work programme.

9. CDB actions under CRS 2019-2024 are organised along three main priorities: (a) scale-up of climate resilience actions in climate vulnerable sectors; (b) mobilising concessionary resources; and (c) supporting an enabling environment for climate action and (d) operationalising the strategy within CDB.

### **Mobilising Concessionary Resources**

10. CDB will scale-up climate financing and facilitate BMCs' access to global and other resources available for climate finance; and build stronger partnerships to deliver blended climate finance. The Bank will establish a dedicated pool of grant and or concessional financing for a project preparation facility to support climate and DRR interventions. This will be used to build BMCs' capacity to design projects based on sound adaptation and resilience practices; encourage approaches which identify co-benefits for adaptation and mitigation; support the development of robust, financial, environmental and social governance frameworks to enable BMCs to directly access climate finance resources; and incentivise private investment, thus reducing the need for scarce public finance.

11. The Bank will provide public private partnership (PPP) advisory services to aid BMCs to take advantage of opportunities to increase engagement with the private sector on climate resilient investment using PPP arrangements. The Bank will also continue to support micro, small and medium-sized enterprises (MSMEs) to increase their capacity to integrate renewable energy (RE) and energy efficiency (EE) in their operations; strengthen knowledge flow and information dissemination, adopt clean technology and apply best practices for promoting innovative investments and competitiveness including green competitiveness in the MSME space. The Bank will also provide support to national development finance institutions, to integrate climate risks within their business operations.

## **Scale-up Climate Resilience Actions in Climate Vulnerable Sectors**

12. By 2024, CDB intends to significantly increase its support to BMCs through direct climate action investments, advisory services, and facilitating new and innovative climate solutions in keeping with BMCs NDCs and other rational policies and sector plans. CDB will explore the use of innovative financing instruments which will help to deepen and scale-up its action in five climate vulnerable sectors as detailed below.

### Climate Resilient Infrastructure

13. The Bank will help BMCs to apply structural and “non-structural measures” for resilience and adaptation, including employing ecosystem-based adaptation measures where possible and promoting strengthened routine maintenance regimes. The Bank will also leverage its resources to encourage private sector participation in investments, financing new and retrofitting critical infrastructure assets such as ports, airports and service utilities in water and electricity. Investments that identify and finance actions with adaptation and mitigation co-benefits such as the introduction or expansion of water pumping for irrigation using innovative and clean technologies, RE and EE will be promoted.

### Integrated Resilient Urban Development

14. CDB will adopt a climate resilient approach that integrates infrastructure development, land use planning, DRM, institutions/governance, social components, and infrastructure investment in urban spaces. This integrated urban management multi-sector approach will link the provision of urban services (energy, transport, water and sanitation, settlement upgrading i.e. sites and services, drainage and structural flood defenses) to BMCs’ climate mitigation objectives.

### Climate Resilient Communities

15. The Bank will continue to provide assistance for DRR and promote climate-resilient development at the community level. Investments that adopt community-driven development approaches and interventions that establish early warning systems, support diversification of livelihoods and implement ecosystem-based adaptation measures and information and knowledge sharing will be promoted. The Bank, through its Basic Needs Trust Fund programme and other community-based interventions will support basic services such as water, sanitation and energy and connectivity infrastructure.

### Climate Resilient Land and Water Resources Management

16. CDB will support investments that improve water security and climate resilience of the water sector. These include, among others: sustainable management of critical watersheds to improve water capture and conservation; water infrastructure; initiatives that promote sustainable land-use, reduce land degradation and restore vegetation in degraded areas; improving access to sanitation and potable water in urban and rural areas; and programmes to raise institutional awareness of CCA and co-benefits among utility regulators in order to incorporate climate resilience in operations of utilities.

### Climate Resilient Agriculture

17. The Bank will intensify efforts aimed at supporting BMCs to build the resilience of the agricultural sector to CC impacts. Interventions will focus on, among other things, enhancing capacity and

stakeholders' adoption of climate-smart agriculture, and supporting investment in climate resilient infrastructure including irrigation, drainage and coastal protection systems. Weather index-based and parametric insurance for the agriculture and fisheries sectors will also be supported.

### **Supporting an Enabling Environment for Climate Action**

18. CDB will work with development partners to support countries in translating their NDCs into climate policies and investment plans and in mainstreaming climate considerations into policies and budgets, through advisory services and development policy operations. The Bank will continue to support and build on the work programme begun with regional technical institutions. This work includes improving access to climate-relevant knowledge and information, including regional and country-level data on climate impacts, policy, finance, and projects and geospatial data as well as refining understanding of the economic impact and benefits of climate mitigation and adaptation. The Bank will also strengthen BMCs' institutional frameworks for managing CC and disaster risks; enhance their readiness for accessing external climate finance. CDB will capture and disseminate lessons from the scale-up of climate finance; and implement targeted training and awareness-raising programmes in CC.

### **Operationalising CRS 2019–2024**

19. To achieve the objectives set out in CRS 2019–2024, climate action must permeate the Bank's operational agenda. The Bank is committed to improving institutional capacity and will continue to deliver its climate actions through its programmes of advisory services, training, knowledge building and communication internally and at regional and national levels. CDB already integrates disaster and CC risk screening into project design. The Bank will build on and intensify this effort by ensuring that CC and disaster risk considerations are fully mainstreamed into corporate strategies and policies, sector and thematic operational plans, country programming, implementation, monitoring and evaluation. CDB will also work with multilateral development bank partners to integrate gender considerations into the Bank's climate risk screening tools.

20. Monitoring and reporting is critical for assessing progress in the implementation of CRS 2019–2024. The indicators draw in part on indicators in CDB's corporate results framework where appropriate, adapted to provide a specific CC focus. CRS 2019-2024 therefore contains a limited number of new indicators that will inform the Bank's forthcoming Strategic Plan (2020–2024). Any additional indicators relevant to CRS 2019–2024, arising during the strategic planning process will be integrated into CRS 2019–2024 to ensure alignment with the new Strategic Plan. Advancement of the targets proposed will be dependent on BMCs demand and will need to be adjusted as required over the strategy.

21. CRS will be monitored at various levels across the organisation in alignment with the corporate results-based management framework. To assess the implementation progress, a select number of indicators in the CRS Results Framework will be reported on annually in CDB's Development Effectiveness Review Report.

## **1. CONTEXT AND RATIONALE**

1.01 Climate Change (CC) threatens to undermine the core mission of Caribbean Development Bank (CDB) to systematically reduce poverty in Borrowing Member Countries (BMCs) through inclusive and sustainable development. The *Future Caribbean Climates in a World of Rising Temperatures* study<sup>1</sup> notes that the high vulnerability of Caribbean nations to CC arises from an extreme sensitivity to climate due to, (among other things): (a) the small sizes and/or complex topographies of the territories, which limit where population centres and economic zones may be located; (b) a near-exclusive reliance on climate sensitive economic sectors such as agriculture/fisheries and tourism; (c) an overwhelming dependence on rainfall for water; (d) high public debt; and (e) limited hazard forecasting capabilities. These factors severely limit the capacities of BMCs to adapt to the effects of a changing climate.

1.02 CC is already adversely impacting BMCs' populations and according to the Fifth Assessment Report of the Inter-Governmental Panel on Climate Change (IPCC), its projected impacts are expected to intensify in the coming decades. The high level of vulnerability of BMCs to hydro-meteorological and other natural hazards have resulted in significant social and economic costs that translate directly into adaptation needs. During the period 2000-2017, natural hazard events affected 13 of the 19 BMCs resulting in loss and damage estimated at USD27 billion (bn). In 2017, for example, Hurricane Maria resulted in total damage of USD931 million (mn) and losses of USD382 mn, which amounted to 226 percent (%) of Dominica's 2016 Gross Domestic Product (GDP)<sup>2</sup>. The impact of Hurricane Maria and Hurricane Irma was estimated at over USD3 bn, equivalent to approximately three and a half times the British Virgin Islands' annual GDP<sup>3</sup>. Recurring natural hazard events and disasters undermine economic growth and contribute to high levels of debt accumulation, making BMCs' sustainable development outcomes much harder to achieve.

1.03 Climate-related disasters tend to have a disproportionate impact on the most vulnerable groups, especially the poor who have less capacity to protect themselves and to adapt or recover losses. There is also increasing concern with gender-specific climate impacts. The gender dimensions and differential impact of CC and disaster risks on the lives and livelihoods of women, men and their families influence the vulnerability of households and the likelihood of increasing poverty.

1.04 For CARICOM States, measurable climate impacts are already observed on agricultural yields, changes in water quality and quantity; damage to coastal zone areas; marine and terrestrial biodiversity loss and associated ecosystem services. CC is exacerbating the degradation of the Caribbean Region's marine and terrestrial ecosystems' ability to maintain their ecological functions, and provide related services that are essential for coastal protection, livelihoods and for regional economic development. The agriculture sector contributes significantly to GDP<sup>4</sup> for several BMCs and is a main source of employment especially for the rural poor. Agricultural productivity and food security are threatened by changing precipitation patterns, and climate projections predict more intense drought conditions. CC is expected to adversely impact the water resources sector (quantity and quality) which is already facing significant stress from overexploitation and watershed degradation<sup>5</sup>.

1.05 With an estimated 70% of the population living within five kilometres of the coast, and the majority of economic assets located in coastal areas<sup>6</sup>, critical physical infrastructure and economic activity face severe threats from rising sea levels, coastal and riverine flooding, coastal erosion, storms and hurricanes. To build resilience, BMCs must make substantial investments to develop technical capacities to design, plan and implement effective adaptation policies to increase socio-economic resilience.

1.06 More comprehensive and integrated planning, for development activities which recognise the synergies and benefits possible from adaptation and mitigation investments and the access to and adoption of new and clean technologies are urgently required. Conservative estimates indicate that in order to increase and improve the Caribbean Region's physical infrastructure stocks to acceptable international standards, a total investment of about USD21.4 bn is required over the period 2015-2025<sup>7</sup>.

1.07 BMCs must be prepared to address the serious social and economic impacts of CC by promoting clear climate change adaptation (CCA) measures in key economic sectors such as agriculture, water resources management, infrastructure and also in urban development, as well as at the community level. BMCs must also incorporate disaster risk management (DRM) and CCA in national development plans and sector strategies. The scale of technical and financial requirements to build CC resilience across sectors is enormous and will require policy coherence, adoption of innovative solutions, significant financial resources and institutional capacity for effective action.

1.08 Responding to CC presents immense challenges and opportunities for development, making it essential that climate and development issues be tackled in an integrated way. Innovative strategies are required to shift the development trajectory necessary for a climate resilient future, and that will also enable BMCs to achieve their wider national Sustainable Development Goals (SDGs) outcomes.

### **Climate Resilience Strategy 2012-2017**

1.09 CDB prepared its first Climate Resilience Strategy (CRS) 2012-2017, to provide the Bank with a framework for integrating resilience into its core business and to support BMCs' climate action work programmes. A two-phased approach was implemented to "build a CDB-explicit value chain to support climate resilience in BMCs". Phase 1 (2012-2015) placed emphasis on mobilising concessionary resources and building internal capacity within the Bank's core operations, to support climate resilience actions and to design and deliver an initial programme of capacity building. The second phase (2015-17) sought to scale-up investment interventions as capacity strengthened and financing levels improved. CDB made significant progress implementing the actions in CRS 2012-17.

1.10 The main achievements from the implementation of CRS 2012-17 are highlighted in the section below.

### **Mobilising Concessionary Resources**

- (a) The Bank catalysed climate action investments under its CRS 2012-17 with a USD65 mn line Climate Action Line of Credit (CALC) and an associated USD4.0 mn technical assistance (TA) grant from the European Investment Bank (EIB) signed in December 2011. Climate action investments were made in projects with a total value of USD180 mn for road transport, renewable energy (RE) and energy efficiency (EE) water and community infrastructure. With the success of the CALC, a second Line of Credit (CALC II) was signed with EIB in 2017 for USD110 mn, later increased by USD25 mn. The Bank accessed additional resources totalling USD33.6 mn from Agence Française de Développement for resilient infrastructure projects.
- (b) The Bank also partnered with other multilateral development banks (MDBs) and development partners to advance its climate action agenda. It supported CC mitigation efforts and energy security by leveraging concessional financing for sustainable energy initiatives. Under the Sustainable Energy Facility, which is a partnership with the Inter-

American Development Bank (IDB), USD71 mn is being made available in loans and grants to facilitate the growth of RE in the Eastern Caribbean. The Sustainable Energy for the Eastern Caribbean Programme, a multi-partner (European Union [EU]-Caribbean Infrastructure Financing Facility, Department for International Development [DFID] and CDB) loan and grant facility with a budget of approximately USD26 mn, is under implementation. It promotes the use of RE and EE among BMCs in the Eastern Caribbean.

- (c) Using the Joint MDB Methodology for Tracking Climate Finance<sup>8</sup>, climate financing represented 14% of total CDB project financing in 2015, compared with 15.3% for the Asian Development Bank, 15.6% for the African Development Bank, 16.1% for IDB and 17.9% for the World Bank (WB). Since 2012, CDB's annual climate financing has varied, but shows an upward trend which is expected to continue over time has been discernible since 2015.
- (d) CDB gained accreditation to the Adaptation Fund (AF) in 2015 and the Green Climate Fund (GCF) in 2016. Accreditation as a Regional Implementing Entity to these climate finance streams provides access to BMCs' for concessionary resources to finance their climate action work programmes. CDB's accreditation to the GCF offers the opportunity for the Bank to provide a range of financing instruments such as grants, concessional loans and equity, as well as risk mitigation instruments such as guarantees for financing projects to BMCs. The first projects to be submitted for financing are at an early stage of development.
- (e) As part of its efforts to build climate resilience in the private sector and encourage and promote improved EE and the adoption of RE technologies by micro, small and medium-sized enterprises (MSMEs), CDB provided concessional financing as a pilot initiative with National Development Banks in Belize and Dominica to support MSME adoption of RE, EE and clean technologies.
- (f) The Community Disaster Risk Reduction Fund (CDRRF) was established with the support of Global Affairs Canada, DFID and EU to finance projects to reduce the risks of poor vulnerable communities to the impacts of extreme weather events and to enhance livelihoods streams to adapt to a changing climate. The competitive demand driven initiative currently has eight projects under implementation in four BMCs. Similar community driven initiatives have been financed and are under implementation for example, capacity building for DRM and climate resilience in Ile-à-Vache, Haiti, the Belize Social Investment Fund, and for irrigation in Essex Valley, Jamaica. See Boxes 1 and 2.

### **Building Internal Capacity**

- (a) An Enhanced Country Poverty Assessment (CPA) methodology framework was developed taking into account CC and disaster risks. The new methodology is being used to better define poverty reduction strategies (PRS) and social protection plans.
- (b) To enable mainstreaming of CC into its operations and to build internal staff capacity, CDB used TA grants provided by EIB, DFID and technical support from the WB. This helped to operationalise an internal integrated climate risk framework that includes: (a) initial climate risk screening of projects through the application of a high-level Screening Tool; (b) climate vulnerability risk assessments of projects at greatest risk; (c) a CC results framework with SMART indicators; and (d) training of CDB's staff in the use of climate

screening tools and climate vulnerability risk analysis to support mainstreaming climate resilience into portfolio risk assessments, country strategy work, and project appraisals. An e-learning platform has been developed to sensitise Operations staff about environmental sustainability issues and provide technical resources to support mainstreaming climate resilience. It is now in its testing phase and should be fully operational by the first quarter of 2019.

- (c) All Country Strategies approved by CDB's Board of Directors since 2015 have been screened for climate risks. All investment projects are now routinely screened for climate and natural hazard risks, to enable the integration of adaptation measures and the adoption of RE and EE measures, as appropriate, to enhance resilience.

### **Building National and Regional Capacities and Knowledge**

- (a) Under an African Caribbean Pacific(ACP)–EU–CDB Natural Disaster Risk Management (NDRM) in CARIFORUM Countries Project (USD14.8 mn), the Bank is developing sector strategies and designing customised tools to support policy design and decision-making for climate and natural hazard resilience in the road transport and water sectors. The Project also provides support for preparing national risk profiles and promoting community disaster risk reduction (DRR).
- (b) Recognising the importance of reliable and credible scientific climate data, knowledge and information, during the period 2012-2017, CDB invested over USD20 mn in TA to strengthen national capacities and regional institutions responsible for CC, DRM and meteorology to enhance these services, expand coverage levels and develop new climate-smart products. With this support, the Caribbean Institute for Meteorology and Hydrology (CIMH)<sup>9</sup> is helping countries to improve weather and climate forecasting and to develop climate early warning system (EWS) for the public health sector; and the Caribbean Disaster Emergency Management Agency (CDEMA)<sup>10</sup> is working on an initiative to strengthen DRM in schools. Support to BMCs included elaboration of environment policies, preparation of land use plans, policies and enhancing public awareness for CC.

**BOX 1**

**BUILDING CAPACITY IN COMMUNITIES**

The impact of CC is mainly felt at a local level, and the poor are most disadvantaged. Thus, building community resilience to both climate and disaster risks is essential in fighting poverty. CDB through a number of projects and initiatives, supports capacity building in communities to strengthen their resilience to CC while reducing poverty levels locally.

**Building Capacity for Disaster Risk Management and Climate Resilience Project (Ile-à-Vache)**

A USD5.5 mn grant from CDB's Special Development Fund resources, which includes a contribution of USD896,000 from resources under ACP-EU-CDB NDRM has been provided to the Government of Haiti (GOH) in support of the Building Capacity for Disaster Risk Management and Climate Resilience Project. The grant aims to assist the GOH in financing interventions to improve the capacity of communities to respond to climate variability and CC threats.

Ile-à-Vache is already experiencing the effects of climate variability and change (CVC). However, the area is plagued with issues that hinder effective decision making, such as insufficient information on CVC and its effects, and which hinder the ability of responsible agencies to design effective interventions for improving the adaptive capacity of communities. These issues include inadequate equipment for data collection, limited resources for acquiring and maintaining equipment, and limited technical staff capacity and financial resources. The Building Capacity for Disaster Risk Management and Climate Resilience Project (Ile-à-Vache), integrates multi-sectoral interventions that will directly benefit communities by (a) building adaptive capacities of communities for DRM and climate resilience by supporting opportunities for enhanced livelihood streams; (b) financing investments to improve access to electricity and potable water to establish proof of concept of successful demonstrations; and (c) catalysing innovative solutions for natural resources conservation and protection, through training, technical support, environmental data collection, monitoring and developing management plans.

**Belize Social Investment Fund**

Since establishment in 1996, the Belize Social Investment Fund (BSIF) has supported poverty reduction through the provision of basic social and economic infrastructure and social services to poor and vulnerable communities. CDB is a contributor to the BSIF, with the most recent initiative being a USD10 mn project with CALC co-financing to continue poverty reduction efforts. The outcome of the project is increased gender-equitable and inclusive access to climate resilient infrastructure and quality, and basic social services for poor and vulnerable communities. This will be achieved through investments in social infrastructure (education, health, water and sanitation), social services and sub-projects for organisational strengthening, aimed at contributing to the Government of Belize's national development objective of poverty reduction in poor communities in Belize. The project was screened for climate risks and its design includes risk management procedures to ensure that climate resilience is integrated into the design of social infrastructure at the community level.

**Community Disaster Risk Reduction Fund**

The CDRRF finances projects which reduce the risks of natural disasters and supports CCA efforts in communities across the Caribbean. CDRRF is a multi-donor trust fund managed by CDB. Contributions to the fund come from the Department of Foreign Affairs, Trade and Development, Canada, the United Kingdom's Department for International Development (DFID) and the CDB.

Communities in the Caribbean are severely affected by CC and extreme weather events. These events destroy crops, damage homes, disrupt livelihoods and can cause job losses, injury, sickness and death. They also damage roads, bridges and other infrastructure.

CDRRF assists community members and groups to find ways to reduce their vulnerability to risks associated with natural disasters and to adapt to a changing climate. Disasters affect men and women differently so these projects must identify and address the priorities and needs of both men and women. Participation of both men and women

in project development, planning and implementation is therefore essential. Successful projects will not only serve the needs of beneficiary communities, they will also become demonstration projects for communities across the Caribbean. CDRRF projects are currently being implemented in Jamaica (five projects) and one project each in British Virgin Islands, St. Vincent and the Grenadines and Belize.

## **BOX 2**

### **ESSEX VALLEY AGRICULTURE DEVELOPMENT PROJECT – JAMAICA**

Financed through the United Kingdom Caribbean Infrastructure Partnership Fund and administered by CDB, the project will provide £35.5 mn to finance the development of an irrigation system and associated marketing facilities and systems, and farmer advisory services for farmers operating on about 700 hectares of arable land in Essex Valley, St. Elizabeth, Jamaica. With agriculture being the most dominant sector in St. Elizabeth, employing 40% of the population, the area is historically drought-prone with lengthier dry periods and increased evapotranspiration associated with CC. Availability of water is considered a major challenge, and the Essex Valley area is characterised by low rainfall. Some 55% of farmers depend exclusively on rain for irrigation, 18% use tank water, and an additional 18% purchase water from trucks. As such, this project is expected to significantly improve the social and economic prospects of Essex Valley and its environs.

In addition to improving irrigation systems, the project includes other components to boost agriculture in Essex Valley, including:

- (a) Training for farmers and other stakeholders in food safety standards and climate smart agriculture practices.
- (b) The design and construction of a photovoltaic plant to power the irrigation system and related administrative buildings.
- (c) Financing for a climate vulnerability assessment study to enhance the sustainability of the systems developed under the project; the development of guidelines to support the participation of men, women, youth, and persons with disabilities; and an Operational Plan to enhance the viability and sustainability of the facilities and services.
- (d) The allocation and/or purchase of approximately 14 acres of land for a photovoltaic plant, administrative building, and pumps.

### **Scale-up Adaptation and Climate Resilience**

CDB accelerated its development of climate resilient programmes. Of the 59 projects approved between 2012 and mid-2016, 58% included CCA and/or mitigation (compared with 20% planned). In the sectors of water, social (e.g. educational institutions), infrastructure (e.g. buildings, sea defences, and roads), agriculture and vulnerable communities, 82% of approved investments were made climate resilient by 2017 (compared with 60% planned).

### **Lessons Learned**

1.11 The Bank has utilised the knowledge and expertise developed by the wider development community in the implementation of CRS over the past five years. Implementation of CRS 2012-2017 yielded valuable lessons which will be used to shape future operations and which have been incorporated in this CRS update. These include:

- (a) Concessional financing is a powerful incentive to encourage countries to undertake climate action investments. Given BMCs' fiscal constraints, and weak technical capacity the EIB/CDB partnership allowed blending of concessional resources with CDB's market resources. Further the support provided through grant resources allowed CDB to give significant technical support to BMCs while at the same time enhance CDB's own staff capacity. The experience of the CALC through which CDB made concessional and grant resources available to BMCs, demonstrated the value of leveraging significant amounts of co-funding that can be rapidly programmed and reduces the cost of borrowing for BMCs. The Bank's continued response to supporting BMCs' climate action will depend largely on its ability to provide additional concessional resources and grants.
- (b) Targeted training and the development and use of tool kits and knowledge platforms are essential for internal capacity building. The Bank's Environmental Sustainability Unit (ESU) performed the role of coordinating CC activities. The small size of the Bank limits the opportunity for dedicated staff personnel for CC mainstreaming and mobilising climate finance at scale. However, the Bank has been generally successful in mainstreaming CC by ensuring that all Operations staff possess a basic level of competency for climate risk screening and identifying opportunities to integrate climate resilience into their work programming. This enhancement of staff capacity has been facilitated through training programmes and the development and use of CC screening tools. Continued enhancement of staff capacity and the use of external CC expertise will be required to help drive the new CRS 2019-2024 agenda further, as lending volumes increase.
- (c) Climate vulnerability and risk assessments are important to inform climate action investments, however, they require appropriately scaled credible climate datasets, as well as robust environmental, biological, hydro-meteorological, geospatial and socio-economic datasets. Critical datasets at the regional and national levels are sparse or absent and substantially more investment is required to develop and expand network coverage, monitor, collect, archive, ease access, and disseminate data and information to a wide range of stakeholder groups.
- (d) Tracking and reporting financial flows that support CC is required for transparency, accountability and monitoring of progress and trends in climate-related investment. The absence of a dedicated system to track CC related activities limited the Bank's ability to easily monitor progress. Going forward the Bank will formally adopt the Joint MDBs climate finance methodology for identifying and tracking climate finance in a consistent, comparable and transparent manner.

**Global Developments: Small Island Developing States Development Agenda, Sustainable Development Goals, Paris Agreement and Nationally Determined Contributions**

1.12 The Inter-Governmental Panel on Climate Change warns that if global society continues to emit greenhouse gases (GHG) at current rates, the average global temperature could rise by 2.6-4.8°C by 2100<sup>11</sup>. Urgent action is therefore required to reduce GHG emissions and prevent some of the worst impacts of CC from occurring. The Small Island Developing States (SIDS) Agenda for development<sup>12</sup> which was given further impetus through the SIDS Accelerated Modalities of Action (Samoa Pathway) adopted in 2014 at the third Conference on SIDS, reaffirmed that CC continued to be a major challenge and poses significant risk to SIDS and their efforts to achieve sustainable development. The Samoa Pathway emphasizes that

adaptation to CC represents an immediate and urgent global priority and reiterated the importance of engaging a broad range of stakeholders at the global, regional, sub-regional, national and local levels. It calls for specific support of SIDS efforts to:

- (a) build resilience to the impacts of CC and to improve their adaptive capacity through the design and implementation of CCA measures appropriate to their respective vulnerabilities and economic, environmental and social situations;
- (b) improve the baseline monitoring of island systems and the downscaling of climate model projections to enable better projections of the future impacts on small islands;
- (c) raise awareness and communicate CC risks, including through public dialogue with local communities, to increase human and environmental resilience to the longer-term impacts of CC; and
- (d) address remaining gaps in capacity for gaining access to and managing climate finance.

1.13 The Paris Agreement adopted in 2015, set the goal of keeping the increase in the average global temperature to below 2°C above pre-industrial levels, and pursuing efforts to limit the increase to 1.5°C. The Agreement, also established the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to CC, so as to contribute to sustainable development. In 2015, the world also committed to the SDGs and the Sendai Framework for DRR signalling that climate action, DRR and sustainable development were inextricably linked. Addressing CC is a specific goal (SDG 13: Take urgent action to combat CC and its impacts) as well as a cross-cutting goal and affects the achievement of all other SDGs. BMCs' achievement of the SDGs will not be possible without simultaneous progress in tackling the adverse impacts of CC. A proactive strategic approach is therefore required towards achieving the SDGs in tandem with climate actions and managing disaster risks.

1.14 CDB has been an active supporter of the BMCs' advocacy for global action supporting participation in the global negotiations which led to the Paris Agreement. BMCs participation in the global dialogue and United Nations Framework on Climate Change negotiations. All sovereign BMCs have since ratified the Agreement and have committed to implement Nationally Determined Contributions (NDCs)<sup>13</sup>, outlining their climate actions for achieving the objectives of the Paris Agreement. BMCs' NDCs include actions to adapt to the impacts of CC and reduce national GHG emissions. The NDCs are the basis upon which finance, capacity building, and technology will be provided to help countries curb emissions to keep global warming at acceptable limits and to adapt to changes in climate. The priority sectors outlined in their NDCs include: RE and EE; transportation; ecosystem/protected areas, land use and forestry; coastal resilience; water resources; infrastructure; and agriculture. Appendix 2 provides a snapshot of BMCs' NDC priorities.

1.15 Given their heightened vulnerability to projected CC impacts and their minimal contribution to GHG emissions<sup>14</sup>, BMCs' NDCs place emphasis on adaptation actions. BMCs have however, also incorporated into their NDCs, targets for RE and EE, recognising that implementing low carbon strategies can provide a range of benefits. Some of these benefits are, increased energy security; competitiveness; lower energy costs and enhancing energy access for all; energy service business expansion; and macro-economic and environmental benefits.

1.16 An assessment of the adaptation priorities shows that most have not articulated specific commitments or quantitative investment adaptation targets. In addition, only seven BMCs have specific national adaptation plans (NAPs) or national adaptation programmes of action (NAPA). BMCs will

therefore need assistance to translate their NDCs into targeted climate investment and financing plans and prioritised policy interventions towards their adaptation goals.

1.17 The United Nations Environment Programme Adaptation Finance Gap Report (2016) found that the cost of adaptation in developing countries could range from USD140 bn to USD300 bn by 2030<sup>15</sup>. The IPCC affirms that adaptation costs for infrastructure in small islands like the BMCs are high, due to substantially higher unit cost per capita than for a similar structure in a larger territory with a larger population<sup>16</sup>. All sovereign BMCs have indicated that implementation of their adaptation actions to achieve climate commitments, are partially or totally conditional and contingent on external support in the form of finance, technology transfer and development and capacity building.

1.18 As small states are some of the most vulnerable countries, many have argued that on account of their inherent vulnerabilities, continued access to concessional financing and donor support should be provided despite current income graduation criteria. An International Monetary Fund (IMF) study of 24 small states found that more than one third of the sample are at significant risk from CC and natural disasters, compared to only a quarter of other countries (IMF 2016). This risk is exacerbated by the increased frequency and intensity of natural disasters across the globe in the past 50 years (Laframboise et al. 2012; IMF 2016). However, accessing financing for climate action is particularly challenging for Caribbean countries. Eleven of the BMCs are considered upper-middle income and high-income SIDS, and many have graduated from Overseas Development Assistance. These BMCs also face severe budget constraints due in part to unsustainable debt burdens. Furthermore, owing to capacity limitations they have not been able to meaningfully access additional finance. Furthermore, in the case of the Overseas Territories, which are all middle income SIDS, access to the global concessional climate finance architecture is even more challenging, since they are unable to access resources of GCF and AF.

## **2. LOOKING AHEAD: CLIMATE RESILIENCE STRATEGY 2019-2024**

### **Strategic Vision and Outcomes**

2.01 CRS 2019-2024 gives continuity to CDB's CC programme and provides the Bank with strategic guidance in implementing its climate actions. CRS 2019-2024 builds on the progress achieved so far and the lessons learnt from the implementation of CRS 2012-2017. It is shaped by recent global agreements and objectives that have been framed to promote effective climate actions, DRR and poverty reduction to support developing countries' efforts towards greater resilience and sustainable development.

2.02 CRS 2019-2024 maintains a deliberate focus on adaptation and resilience, since the Bank's climate mitigation actions are promoted and implemented through its Energy Sector Policy and Strategy. The Bank's environmental sustainability operational policies and Operations Area work programme planning and approval processes allow for synergy and consistency in the delivery of climate actions in the Bank's work programme. This approach emphasizes exploiting the opportunities for adaptation and mitigation co-benefits, taking advantage of multiple benefits across diverse national development strategies and action agendas. This has the potential to increase the effectiveness of the Bank's work programme and enhance development impacts in BMCs.

2.03 The vision of CRS 2019-2024 is for climate resilient, sustainable development in BMCs through enhanced and sustained climate actions. The expected outcomes of CRS 2019-2024 are: (a) improved climate resilience in vulnerable sectors; (b) strengthened enabling environment for resilient climate actions;

(c) increased levels of concessionary resources accessible to all BMCs; and (d) improved capacity within CDB for effective and efficient delivery on CC actions.

### **Guiding Principles**

2.04 CDB's interventions in its BMCs will continue to be shaped by their demand, alignment with its poverty reduction mandate, concessionary resource availability, its comparative advantage and the competencies and experience of its staff. The Bank will design and align its actions and interventions having regard to its own lessons of experience, and "good practices" employed by the wider development community to deliver effective development assistance. The key guiding principles for designing and implementing CRS 2019-2024 are:

- (a) Regional Action: As a regional Bank, CDB is fully cognisant of the opportunities and efficiencies to be gained from regional action and the need to develop and work for effective solutions at both regional and national levels. Climate risk management and adaptation will require extensive cross-country collaboration, planning and monitoring for effective management and protection of both global and regional public goods. The Bank's approach to address climate protection as a regional public good will complement national actions that are unable to achieve planned results individually. CARICOM's Regional Framework for Achieving Development Resilience to CC<sup>17</sup> highlights CDB's role in delivering transformation, through the Bank's lending decisions and as an intermediary for accessing and channeling climate finance.
- (b) Country Ownership: In keeping with the core principles of the Paris Declaration on Aid Effectiveness, the Bank will develop and tailor its assistance to address the priorities of the BMCs' approved national policies, development plans, enhanced PRS, sector strategies, CC policies and strategies NAPs, NAPAs and NDCs etc.
- (c) Selectivity and Focus: CRS 2019-2024 will focus on the Bank's comparative advantages and areas of competence as well as the potential for partnerships and the use of other sources of development assistance. BMCs reflect a broad range of priority areas in their NDCs and other plans and policies to build climate resilience. The Bank will be selective in its support ensuring investments not only generate climate co-benefits, but also contribute to national economic and social development outcomes.
- (d) Knowledge-Based Approach: The implementation of CRS 2019-2024 will be informed by up-to-date scientific knowledge, including the analysis of potential CC impacts and their interactions with socio-economic, environment and natural resources management factors. This implies the development, dissemination and use of tools and methods to identify risks at an early stage of the project cycle, and to plan appropriate actions to minimise adverse impacts and enable project sustainability.
- (e) Reporting and Monitoring and Evaluation: CDB is committed to ensuring the reporting and monitoring and evaluation (M&E) of the outcomes and impacts of its interventions to build resilience to the impacts of CC within its overall M&E framework. This will ensure that there is systematic assessment of its contributions and their effectiveness to inform its future work programme. CRS 2019-2024 Results Framework will be amended as required and integrated with CDB's forthcoming new Strategic Plan 2020-2024 that will guide the Bank's mission for poverty reduction and a more sustainable Region.

## **Priority Areas for CDB's Intervention**

2.05 The priorities to be addressed under CRS 2019-2024 will reflect demand from BMCs, based on analytical policy work and agreed work programmes using the Bank's country strategy development process and specifically their NDC priorities. The resource needs of BMCs are enormous relative to CDB's resources, however, CDB can bring value and enhance its impact in BMCs by improving access to climate funds (e.g. GCF and AF), coordinating and giving advice on structuring financing for climate action from the myriad of multilateral and bilateral sources. It will continue to leverage its own financial resources and partnerships to attract concessionary resources in support of BMCs' climate investments and associated capacity building and institutional strengthening initiatives. CDB will take a proactive approach to reinforce BMCs efforts to twin their climate actions with the achievement of SDGs and disaster risk management. Policies and operations will be designed to optimise the co-benefits of actions taken in response to the Samoa Pathway, Paris Agreement, SDGs and Sendai Framework. The Bank will place greater emphasis on adopting sector wide and cross sectoral approaches to resilience building. This will be promoted through engagement with the highest levels of government and will facilitate implementation effectiveness and planned scaling up<sup>18</sup>. CDB will employ more strategic sectoral assessments to support the design of climate resilient policies, plans and governance frameworks to deliver transformational investment interventions at the regional level and in keeping with country NDCs and other key policy priorities. The Bank will also identify opportunities to generate environmental benefits including ecosystem-based adaptation measures for rural and urban resilience, with a focus on biodiversity protection and rehabilitation.

2.06 The four priority areas to be addressed by CRS 2019-2024 are:

### **Priority 1 - Mobilising Concessionary Resources**

2.07 The experience over the last five years has shown that significant increases in dedicated concessionary CC and DRM resources are needed to incentivise and facilitate BMCs' climate resilience work programmes. Further, to enable all BMCs to have a better chance to achieve resilience, CDB will require sustained flow of concessionary resources to finance climate action to increase impact. Given the limited availability of concessional financing, the Bank is cognisant of the need to be strategic about how it deploys such resources including targeting sectors and beneficiaries.

2.08 Large investments beyond what the BMCs' public sector can afford to provide are required to increase and accelerate climate resilience actions. The fragmented nature of the emerging climate finance architecture, the range of actors, and the often complex features of financing demands, dedicated expertise and time to navigate. This poses a serious challenge for many BMCs with small public sector staff and limited finance expertise. The Bank will accelerate its drive for increased levels of concessionary financing to help fill the financing gap, given BMCs' NDC ambitions and their wider development activities. CDB will continue to seek opportunities to leverage its resources, as well as resources from climate finance sources to which it has access, to support BMCs climate action agendas. The Bank will continue to use the experience gained from CALC and apply these capabilities to new lines of funding.

2.09 The establishment of a dedicated pool of grant and or concessional financing for a project preparation facility for climate and DRR interventions will be pursued to:

- (a) facilitate improved coordination with bilateral and other multilateral partners; provide climate finance information and advice on accessing and structuring of climate financing;
- (b) build BMCs' capacity to develop project concepts and proposals and enable the design of projects based on good adaptation and resilience practices; and encourage approaches which identify co-benefits for adaptation and mitigation in investment projects;
- (c) support the development of robust, financial, environmental and social governance frameworks for national entities to enable them to directly access climate finance resources; and
- (d) give priority to promoting, establishing and managing administrative and regulatory regimes that effectively incentivize private investment thus reducing the need for scarce public finance.

2.10 The Bank will continue its collaboration with the GCF, AF and other multilateral and bilateral partners, to increase concessional fund flows to BMCs and to facilitate blending with its own resources. Considerable opportunity remains for CDB to complement its own actions, by working with a range of development partners and regional institutions like the Caribbean Community Climate Change Centre (CCCCC)<sup>19</sup> to catalyse actions, ensure synergy, and foster efficient division of labour and competencies to improve the scale and impact of interventions.

2.11 CDB joined the Global NDC Partnership in 2017. The Partnership, comprising multilateral financing institutions, donor countries and developing countries, seeks to identify the capacity needs of developing countries and determine appropriate means to address those needs. The Bank is therefore committed to working with partners to assist its BMCs to implement actions currently set out in their NDCs, and as requested, to prepare more targeted NDCs.

2.12 Through its private sector operations and public private partnership (PPP) advisory services, the Bank will aid BMCs to take advantage of opportunities to increase engagement with the private sector on climate investment using PPPs. The Bank will encourage private capitalising PPP modalities, particularly for investments for critical public infrastructure. In addition, the Bank's support to MSMEs to increase their capacity to integrate RE and EE in their operations will continue, however additional areas such as business continuity planning and technology improvements will be pursued. The Bank will also provide support to national development financial intermediaries (FIs) to address climate risks as part of their credit risk due diligence. This support will also serve to strengthen knowledge flow and information dissemination about CC to MSMEs and FIs to help inform business decisions.

2.13 The Bank is currently establishing internal processes to streamline monitoring, reporting and evaluation of climate action. This will include the use of climate resilience indicators, GHG accounting and the use of the MDB joint climate finance methodology, to allow more accurate tracking and reporting on the impact of its climate finance operations. Implementation roll out of the climate finance methodology within CDB is planned for the second quarter of 2019.

2.14 Although outside the scope of this CRS 2019-2024, given the high debt burden of BMCs; and increasing frequency and intensity of hydro-meteorological events requiring post disaster financing, CDB in consultation with its shareholders, will have to determine and articulate a broader strategy to establish a dedicated pool of resources to provide sustained financing for DRR, (including expanding parametric insurance coverage), and for CCA, or expand the pool of resources currently provided from the Special Development Fund. Financing the management of disaster risks is a challenge for BMC governments all of which have limited capacity to manage the impact on public finances. Among BMCs there is now recognition that DRR requires governments to develop and implement clear risk financing strategies embedded in an integrated disaster risk management framework. The forthcoming revision of the Bank's Disaster Mitigation Strategy and Operational Guidelines, will speak specifically to feasible disaster risk financing instruments that can be employed both ex ante and ex post by BMCs.

### **Priority 2 – Scale-up Adaptation and Climate Resilience in Climate Vulnerable Sectors**

2.15 The Bank will accelerate and scale-up investments that incorporate climate adaptation and resilience in climate sensitive sectors of: water (including wastewater); agriculture; transportation; infrastructure (including drainage, coastal and river defences); and urban development. The Bank has gained valuable experience in designing and financing climate resilient infrastructure during the previous strategy period. Interventions to build resilient infrastructure in BMCs will need to be aligned with the Region's priorities under the Global Sendai Framework for DRR and the Caribbean Regional Comprehensive Disaster Management Framework<sup>20</sup>. To effectively accelerate and scale-up climate investment actions, the Bank will need to establish innovative financing products which allow for coordination and integration of evidenced based policies, while strengthening institutions and enhancing technical capabilities in BMCs.

2.16 Priority areas to scale-up adaptation and climate resilience in vulnerable sectors include:

#### Resilient Infrastructure

2.17 Delivering on BMCs' NDCs ambitions for resilient infrastructure will require substantial resources for high capital infrastructure investments, given the pre-existing deficits and service delivery levels for potable water, sanitation, transport, flood management infrastructure (drainage coastal and river defences) and irrigation. For transformational impact, more emphasis will need to be given to addressing the drivers of vulnerability in these sectors: inadequate sector planning; poor asset management and limited resources for effective routine maintenance; and weak physical planning and development controls. CDB's actions will involve:

- (a) provision of tools and analytical support to facilitate improved planning and investment programming decisions;
- (b) strengthening institutional and technical capabilities for planning and improved sector governance, encouraging alignment of incentives for development, environmental and climate action;
- (c) leveraging its resources to encourage private sector participation in critical infrastructure investments such as financing new and retrofitting of ports and airports;
- (d) adoption of approaches that promote "low regrets actions" such as awareness raising, EWS;

- (e) supporting application of “non-structural measures” for resilience and adaptation such as planning design or legislation to create setback zones in low lying coastal areas, employing ecosystem based measures where possible. Ecosystem based adaptation interventions include integrated watershed management, restoring coastal ecosystems such as coral reefs and mangrove forests; sustainable fisheries management, marine and terrestrial protected areas. Support to integrate ecosystem based adaptation into national development and sector policies;
- (f) promoting strengthened routine maintenance regimes; and
- (g) identifying and financing actions with adaptation and mitigation co-benefits such as the adoption of innovative and clean technologies, RE and EE.

#### Integrated Resilient Urban Development

2.18 The Bank will support the development and implementation of policies and programmes that promote integrated and sustainable urban and environmental management towards climate resilience. The activities and investments to be supported include the promotion of: urban-planning systems (i.e. land use, national and local area spatial plans, etc.) that take climate resilience and DRR into account; building designs and standards that support the capacity of buildings to withstand extreme weather; and integrated urban management systems that will link the provision of urban services (energy, transport, water and sanitation, settlement upgrading i.e. sites and services, drainage and structural flood defences), to BMCs’ climate mitigation objectives.

#### Climate-Resilient Communities

2.19 The Bank will continue to provide assistance for DRR and promote climate-resilient development at the community level. Investments that adopt community-driven development approaches and interventions that establish EWS, support diversification of livelihoods and implement ecosystem-based adaptation measures will be supported.

2.20 The Bank will, through its Basic Needs Trust Fund (BNTF) programme and other standalone community-based interventions or those embedded in larger capital projects, support basic infrastructure services such as water, sanitation and energy, and connectivity infrastructure. BNTF, will continue to screen for climate and disaster risks and integrate CCA and mitigation enhancements, where possible, in these interventions across the participating BMCs. The Bank will continue to develop and promote tools for undertaking community climate vulnerability assessments and integrating resilience measures into community infrastructure projects. CDB will also build on the successes of community-targeted projects such as CDRRF that take account of climate risks. Opportunities to replicate and/or expand positive experiences will be pursued. The Bank will also repackage and disseminate knowledge derived community level financed operations including knowledge specific to BMCs and/or cross-cutting lessons.

2.21 The Bank will promote the use of the ongoing enhanced CPA methodology to examine distributional impacts of poverty, climate and disaster risk considerations to support policy design, capacity building and investment programming in its work programme with BMCs. In addition, CDB will support regional and national approaches for realising synergies between social protection, CCA and DRR. The Bank is also in the process of preparing its Social Protection Strategy in which it will further consider social resilience.

### Climate Resilient Land and Water Resources Management

2.22 Technical assistance and investment programmes that mainstream CCA priorities in water sector infrastructure and water resources management operations will be prioritised. This will include: supporting sustainable management of critical watersheds to improve water capture and conservation; initiatives that promote sustainable land-use and management, reduce land degradation and restore vegetation in degraded areas; water saving technologies like climate smart irrigation techniques and reduction of non-revenue water and water metering; providing policy and technical support to identify and address CCA options linked to the water sector; investing in integrated water resources development and management; improving access to sanitation and potable water in urban and rural areas; and programmes to raise institutional awareness of CCA and co-benefits among utility regulators in order to incorporate climate resilience in operations of utilities.

### Climate Resilient Agriculture

2.23 The Bank will intensify efforts aimed at supporting BMCs to build the resilience of the agricultural sector to CC impacts. Interventions will focus on enhancing capacity and stakeholders' adoption of climate-smart agriculture, and supporting investment in climate resilient infrastructure including irrigation, drainage and coastal protection systems.

2.24 Significant progress is being made in developing new weather products and enhancing agrometeorological services to BMCs, through CIMH, with the support of CDB and other development partners. The Bank will also support the Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company (CCRIF SPC) in its efforts to develop and offer weather index-based and parametric insurance for the agriculture and fisheries sectors. Currently, pilot projects for agricultural parametric insurance products are being tested in Grenada, St. Lucia and Jamaica.

### **Priority 3 - Supporting an Enabling Environment for Climate Action**

2.25 The Bank will continue to support BMCs to strengthen their capabilities for mainstreaming and implementing climate risk management through direct capacity building initiatives, strengthening administrative and legislative frameworks, public education and awareness as well as by promoting the tools required for risk assessments, identification and integration of resilience measures and the development and application of knowledge management tools.

2.26 Regional institutions and BMCs will be supported to build technical capacity through improved data and information analysis, establishment of knowledge and information systems that inform actions on environment, DRR and climate resilience; and strengthen hydrological and meteorological services to deliver EWS for climate related hazards.

2.27 Regional agencies such as CIMH, CCCCC, CDEMA and the University of the West Indies Climate Studies Group Mona will be supported to implement regional initiatives that promote the use of climate data and information in decision-making, joint research and information sharing with the regional and international scientific research community. The Bank will also support development of monitoring networks and public education and awareness for CC and DRR.

2.28 Interventions to strengthen the enabling environment for climate resilience within BMCs will be supported, for example:

Strengthening Institutional and Technical Capacity, Policy and Planning Frameworks for Climate Action

- (a) Strengthening capacity to integrate climate risk management into national development planning, investment finance programming and sectoral policies; and facilitate the design of appropriate legal, administrative and governance reforms, to support an enabling environment for the effective and successful implementation of climate resilient programmes and investments.
- (b) Improvements to spatial and environmental planning systems to better regulate and control development and establish more effective and efficient administration of physical planning/land use and environmental management performance systems and processes towards increased climate resilience.
- (c) Collaboration with development partners to determine opportunities to help BMCs accelerate implementation of their NDCs. As far as it is feasible, CDB will reflect NDCs in its country programming by ensuring that new Country Strategies reflect the priorities and actions outlined in NDCs. Development of NAPs and NAPAs will also be supported in collaboration with partners including GCF's readiness programme through which funding is available to develop such plans. Country strategies and policy development operations and TA will be used to support policy and institutional reforms aligned to BMCs climate priorities.
- (d) Assessing and strengthening BMCs' readiness for accessing climate finance and to help generate a pipeline of adaptation projects that could access global adaptation finance.
- (e) Establishment of more participatory governance and administrative processes for climate resilience, DRR and environmental management results oriented education and awareness programmes.
- (f) Establishment of arrangements and mechanisms for improved cooperation and collaborative arrangements within the public sector and between public sector, private sector and civil society to design, finance and implement climate resilient development initiatives.
- (g) Supporting resilient land use, urban planning and the adoption and implementation of improved building and construction standards and "best practices" such as resilient building codes.

Generation of Climate-Relevant Tools, Knowledge and Information

2.29 The Bank will support the establishment and expansion of data collection and reporting systems for environment, DRR and climate risk monitoring and information systems at both the regional and national levels e.g. Light Detection and Ranging Surveys, refinement and downscaling of climate prediction models to support decision-making at macro (policy) and micro (project) levels. Communication and dissemination of generated scientific and technical information to enhance knowledge and communication to relevant stakeholders at different scales and levels will also require support.

2.30 The Bank will continue building the awareness and knowledge base to support expanded and sustained climate action as required, including, through the education system. Actions to strengthen CC knowledge and awareness will be undergirded by adequate and gender-responsive and socially inclusive formal and non-formal learning necessary to build the human capital to sustain climate action. The Bank will support learning about climate action/resilience to galvanise ongoing support for engendering an informed national and regional response to climate vulnerability, and enhance inclusive climate smart solutions throughout the economy and society.

#### **Priority 4 - Implementation: Operationalising the Climate Resilience Strategy**

2.31 Achieving CRS 2019-2024 outcomes will be challenging and will require CDB to continue to strengthen its existing Environmental Sustainability Risk Framework that allows it to systematically assess and manage environment, disaster and climate-related risk at the country, sector, programme and project levels.

2.32 CDB has initiated several internal actions to strengthen its institutional capacity and operational procedures to meet current and projected demand for support from its BMCs. For the Bank to effectively respond to the immediate needs of BMCs, as well as longer-term transformation when needs may be even greater, climate action must permeate the Bank's operational agenda. Given its small size, the Bank will ensure that internal cooperation, coordination, and knowledge sharing are improved, so that implementation of the Bank's climate resilience agenda is spread across the institution and that staff clearly understand their roles and responsibilities in that approach.

### **3. IMPLEMENTATION**

#### **Mainstreaming Climate Change Considerations**

3.01 The process of mainstreaming climate risk management will be strengthened across the Bank. CDB will continue to integrate CC considerations into its corporate policies and strategies, sector operational plans and project design. CDB country strategies will take account of CC issues, risks, adaptation and resilience priorities and needs. Country strategies will also include as appropriate, priorities in NDCs or similar plans and CDB's assistance will be demand driven and targeted accordingly. Project design will consider climate risks through robust climate risk screening and integrating adaptation measures to improve resilience. Given that CDB's work in the BMCs is largely demand-driven and the Bank has a track record largely as a financier of traditional infrastructure projects, creating and increasing demand for climate investment and related support is crucial. The Bank will strengthen its position as a provider of climate-related support, from climate risk assessments to climate finance mobilisation and project implementation. CDB's staff across the Bank will work together to create and fulfil the demand for CC action.

3.02 Although the Bank's CRS provides the focus for climate specific actions, it is specifically supported and aligned with related CDB policies. CRS 2019-2024 is aligned to the Bank's Energy Sector Policy and Strategy, the Environmental Policy and the Environmental and Social Review Procedures. The Bank recently updated and is currently revising a number of its sector policies, strategies and guidelines all of which will integrate CC considerations to support implementation of CRS 2019-2024. These include the Bank's Private Sector Development Policy and Strategy; Enhanced Poverty Assessment Guidelines; Agriculture Policy and Strategy; Urban Sector Policy, Strategy and Operational Guidelines; Housing Sector Policy and Strategy; Transportation Policy and Strategy; and Disaster Management Strategy and Operational Guidelines.

### **Optimising Staff Capacity and Skills**

3.03 The Bank will ensure that all staff have adequate knowledge and receive targeted training on climate-related issues. Staff will be trained and equipped with key skills e.g. climate risk screening, climate safeguards, methods and tools for climate risk analysis, integrating resilience into projects, climate finance tracking and access to climate finance.

3.04 Internal knowledge management will be increased through workshops and online courses. An e-learning module on CC is being developed for all staff to support the Bank's Operational Policies in this thematic area. CDB staff will also increase CC knowledge through participation in facilitated e-learning, open online courses and learning modules, workshops and webinars hosted by other MDBs and development partners. Capacity gaps will be addressed through combinations of continuous staff training, short-term appointments and the use of consultants and other appropriate approaches<sup>21</sup>.

### **Enterprise Risk Management**

3.05 In 2016, CDB took the decision to formally include natural hazards, CC and environmental and social risks as part of its corporate Enterprise Risk Management Framework, in recognition of the potential impacts these can have on the operations and viability of the institution and its BMCs. In addition, the international rating agencies have signaled that environmental risks will increasingly be in their sovereign risk assessments. In keeping with this decision, the Coordinator, ESU serves as a member of the Enterprise Risk Committee and environmental risks are included as part of the routine Enterprise Risk reports to the Board of Directors.

### **Partnerships and Cooperation**

3.06 CDB remains committed to leveraging its successful partnerships to secure more concessional and grant resources towards achieving lasting results for its BMCs climate resilience agendas. The Bank will continue to collaborate with these development partners and new institutions (bilateral and multilateral) as well as regional institutions working to improve environmental and social safeguards issues, DRR and climate resilience in BMCs. The Bank will also continue to support resource mobilisation of CCRIF SPC to enhance product offerings including targeting specific key stakeholder groups e.g. utilities, agriculture, fishing, tourism and to expand country membership. CDB will also continue its efforts through its country strategy negotiations to encourage countries to improve on minimum coverage levels recommended by CCRIF SPC and provide support for the development of plans to achieve adequate coverage.

3.07 Replicating "good practices" and building synergies across work programmes will assist in avoiding duplication of work with the interventions of development partners working in the Region. CDB will also seek to improve its engagement with the private sector, non-governmental and civil society organisations. CDB will continue to participate in global processes that are relevant to climate action, including the Global NDC Partnership and Conference of the Parties to the United Nations Framework Convention for CC.

### **Cross-cutting Issues**

3.08 Through its forthcoming revision of the Gender Equality Policy and Operational Strategy (GEPOS), CDB intends to improve gender equality results in its operations by ensuring gender mainstreaming into its projects across sectors; enhancing the capacity of women, children and men to

overcome barriers; building institutional capacity and knowledge; and supporting governance and policy reform. The Bank recognises the opportunities for increased gender equality through CC actions. CC commitments call for gender-sensitive approaches and recognise that effective action on all aspects of climate change assumes gender equality and the participation of women.

3.09 CDB's support for its BMCs climate resilience actions will be gender responsive and will promote differentiated gender responses in climate investments to advance gender equality. It will also build in-country capacity for gender-responsive CC and disaster risk management, planning, and project preparation, to strengthen women's climate resilience. Support will be provided for actions to develop effective gender mainstreaming project pipeline designs such as for RE/EE, climate-smart agriculture, water resources and sustainable urban development. While gender co-benefits through climate investments will be prioritised, the Bank will also support CC or DRM projects that have gender equality as a primary focus. GEPOS will further develop entry points for addressing gender mainstreaming within the CRS.

#### **4. MONITORING AND REPORTING**

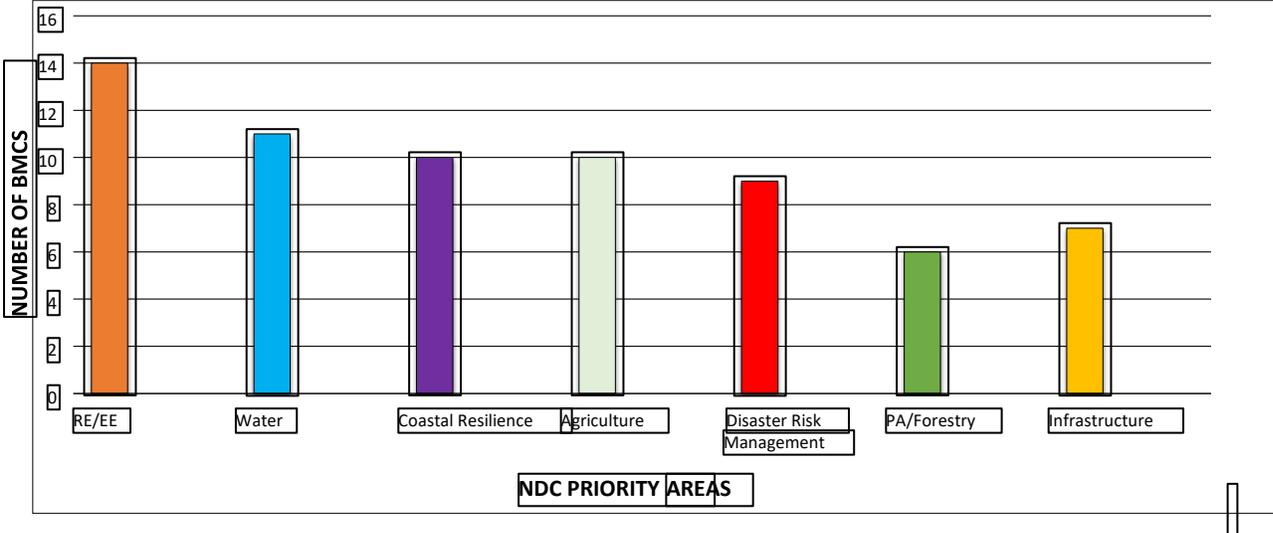
4.01 CDB is committed to monitoring and reporting the outcomes of its climate actions. CRS 2019-2024 outcomes, performance indicators, including baselines and indicative targets, are presented in the Results Framework at Appendix 3. The indicators draw in part on indicators in CDB's corporate results framework where appropriate, adapted to provide a specific CC focus. CRS 2019-2024 therefore contains a limited number of new indicators that will inform the Bank's forthcoming Strategic Plan (2020–2024). Any additional indicators relevant to CRS 2019–2024, arising during the strategic planning process will be integrated into CRS 2019–2024 to ensure alignment with the new Strategic Plan.

4.02 Achievement of the targets will be contingent as always on BMC demand and will be adjusted over time. CRS 2019-2024 will be monitored at various levels across the organisation. To assess the implementation progress, a select number of indicators in the Results Framework will be reported on annually in the Bank's Development Effectiveness Review Report.

#### **Climate Finance Tracking**

4.03 Under the Paris Agreement, tracking climate finance flows is a requirement of developed countries who are Parties to the Agreement and all other Parties are encouraged to voluntarily communicate this information. The Bank will adopt the climate finance tracking methodology used by other MDBs, to track and report on its climate finance activities. It will formally monitor financial flows for CC mitigation and adaptation activities to the BMCs and its internal operations. In this way the Bank will be able to measure, monitor trends and progress in climate related investments and enhance the Bank's transparency and accountability to its BMCs and international partners. Formal tracking will commence in the second quarter of 2019.

NATIONALLY DETERMINED CONTRIBUTION PRIORITY AREAS



## RESULTS FRAMEWORK FOR CLIMATE RESILIENCE STRATEGY 2019 -2024

**Notes to AMT:**

*TBD - Data is in the process of being collected. Note that Baseline and Indicative Targets for some indicators may increase since all information was not readily available. UK CIF projects not yet included in Indicative Targets.*

**Impact:** Contribute to climate resilient development and poverty reduction efforts of BMCs towards achievement of the Special Development Goals.

Expected Outcomes	Performance Indicators <sup>6</sup>	Baseline (2017)	Indicative Targets
<b>Priority Area 1: Scale-up Adaptation and Climate Resilient Investments in Key Vulnerable Sectors</b>			
Improved climate resilience in vulnerable sectors.	People using climate resilient roads constructed/rehabilitated (no.)	21,000	275,185
	Households with reduced flood risk due to construction of climate resilient (sea/coastal defences/landslip protection/urban drainage/) built (no.).	730	9,791
	Households benefitting from increased installed water capacity (no.)	21,660	93,539
	Farmers engaged in climate smart/resilient agriculture (technology and practices) (no.).	3,000	6,000
	Land with improved water (irrigation, drainage and/or flood) management (ha).	1,770	3,970
<b>Priority Area 2: Mobilising Concessional Financial Resources</b>			
Increased levels of concessionary climate resources and risk sharing instruments accessible to all BMCs.	BMCs accessing climate finance for project preparation (no.).	2	10
	Projects financed through global climate funds (no).	0	8

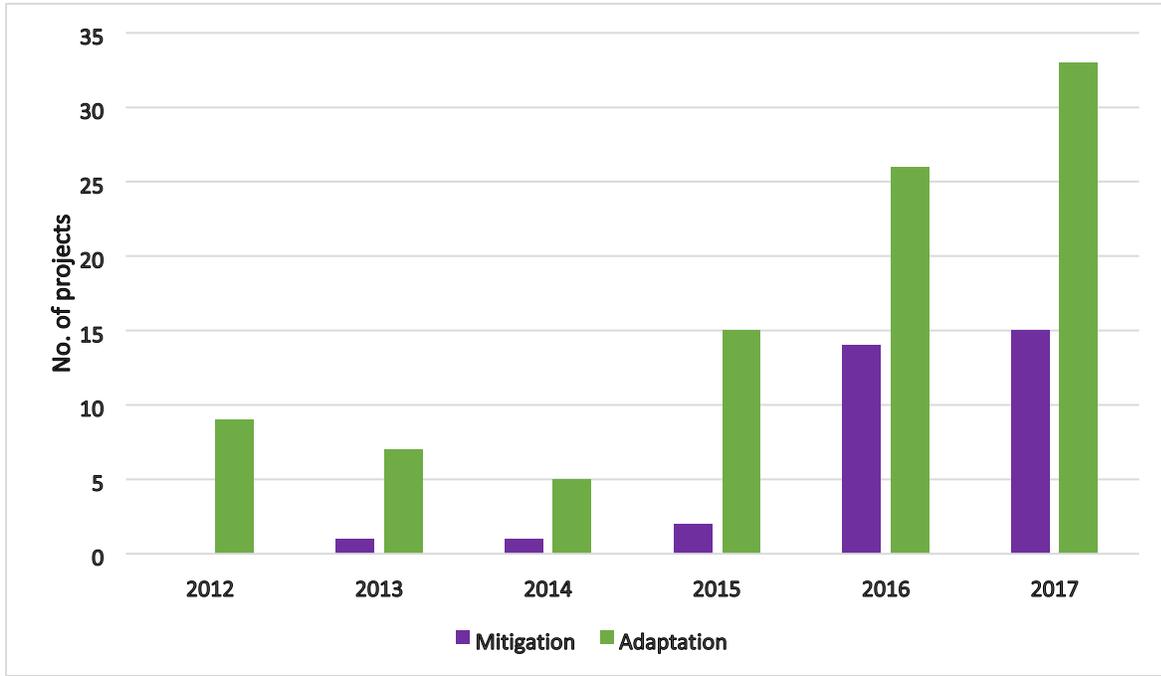
<sup>6</sup> Specific indicators for CDB operations, when provided, are based on existing pipeline and estimated demand.

**RESULTS FRAMEWORK FOR CLIMATE RESILIENCE STRATEGY 2019 -2024**

<b>Expected Outcomes</b>	<b>Performance Indicators</b>	<b>Baseline (2017)</b>	<b>Indicative Targets</b>
	New risk sharing instruments developed and deployed. (no.)	0	1
	Financial Institutions integrating CC risks assessments into operations and risk management plans. (no.).	1	6
<b>Priority Area 3: Supporting an Enabling Environment for Climate Action</b>			
Strengthened enabling environment for resilient climate actions.	New enhanced environment/CC/DRR monitoring, data collection and/or observational networks and EWS operational. (no.).	3	4
	Regulatory frameworks; building codes developed/revised incorporating CC considerations. (no.).	0	5
	National spatial/land use plans and policies integrate CC and disaster risks (no.).	1	5
	BMCs with disaster risk management plans and national adaptation plans (no.).	14	15
<b>Operationalising CRS 2018 – 2023</b>			
Improved capacity within CDB for effective and efficient delivery on CC actions.	Investments in climate sensitive sectors approved that incorporate climate adaptation and resilience measures (%)	82	95
	New Bank policies/strategies integrating CC considerations (%).	1	100
	CPAs, Country Strategy Papers (CSPs) and Policy Based Loans (PBLs) that incorporate CC considerations.	0 CPAs; 0 CSPs; 2 PBLs	10 CPAs; 7 CSPs; 7 PBLs
	Projects systematically screened for climate and disaster risks (%).	80	100
	CC knowledge products (tools and guidance resources, education and awareness) produced and applied.	2	2
	Operations staff trained on CC issues. (%)	60	100
	New climate initiatives implemented jointly with development partners.	1	4

**FIGURE 1**

**NUMBER OF MITIGATION AND ADAPTATION PROJECTS FUNDED  
THROUGH CARIBBEAN DEVELOPMENT BANK OVER THE PERIOD 2012-2017**



## ENDNOTES

- <sup>1</sup> Taylor, M.A, L.A. Clarle, A. Centella, A. Bezanilla, T.S. Stephenson, J.J. Jones, J.D. Campbell, A. Vichot and J. Charlery, 2017. Future Climates in a World of Rising Temperatures: The 1.5 vs 2.0 Dilemma.
- <sup>2</sup> Government of the Commonwealth of Dominica (2017). Post-Disaster Needs Assessment Hurricane Maria, September 18, 2017. A Report by the Government of the Commonwealth of Dominica.
- <sup>3</sup> British Virgin Islands National Emergency Operations Center (2017). Hurricane Irma Preliminary Impact Report – British Virgin Islands.
- <sup>4</sup> Bugler, W. and Palin, O. Acclimatise (2017) Climate impacts on agriculture and tourism: the case for climate resilient investment in the Caribbean. Climate and Development Knowledge Network Policy Brief. <https://www.weadapt.org/climate-change/climate-impacts-on-agriculture-and-tourism>. Primary agriculture contributed 5% of regional GDP in 2012; however, there are considerable sub-regional variations ranging from over 20% in Guyana to just 0.5% in Trinidad and Tobago.
- <sup>5</sup> Many BMCs now record an annual per capita freshwater availability far below the 1,000 cubic metres commonly used to measure scarcity.
- <sup>6</sup> Cashman, A. and Nagdee, M. A. Impacts of Climate Change on Settlements and Infrastructure in the Coastal and Marine Environments of Caribbean Small Island Developing States (SIDS) Caribbean Marine Climate Change Report Card: 2017 *Science Review 2017: pp 155-173*. Centre for Resource Management and Environmental Studies, University of the West Indies, Cave Hill Campus, Bridgetown, Barbados.
- <sup>7</sup> Caribbean Development Bank, Public Private Partnership in the Caribbean. Building on Early lessons, May 2014.
- <sup>8</sup> In May 2015, a group of six Multilateral Development Banks (MDBs) agreed the Joint MDB Methodology for tracking and reporting on climate change adaptation and mitigation finance. The methodology categorises climate co-financing sources of funds<sup>[1]</sup> as: (a) other MDBs; (b) IDFC member institutions, including bilateral and multilateral members;<sup>[2]</sup> (c) other international public entities such as donor governments; (d) contributions from other domestic public entities such as recipient-country governments; and (e) all private entities (defined as those with at least 50 per cent of their shares held privately) split by private direct mobilisation and private indirect mobilisation.
- <sup>9</sup> The Caribbean Institute for Meteorology and Hydrology (CIMH) is a regional training and research organisation to improve the meteorological and hydrological services and assist in promoting the awareness of the benefits of these services for the economic well-being of the Caribbean meteorological organisation countries.
- <sup>10</sup> The Caribbean Disaster Emergency Management Agency (CDEMA) is a regional inter-governmental agency for disaster management in the Caribbean Community
- <sup>11</sup> IPCC, 2013. Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- <sup>12</sup> The SIDS development agenda is reflected within the Barbados Programme of Action for the Sustainable Development of SIDS (BPOA) adopted in 1994, further complemented by The Mauritius Strategy of

Implementation (MSI) of 2005 and MSI+5 Outcome document recognised the peculiar vulnerabilities of SIDS and identified priority areas and specific actions necessary for addressing the special challenges faced by SIDS. This was highlighted in “The Future We Want”, adopted at The United Nations Conference on Sustainable Development (Rio+20). The Third International Conference on SIDS was held in Apia, Samoa, in September 2014, with the overarching theme of “The sustainable development of Small Island developing States through genuine and durable partnerships”.

- 13 The NDCs link national policy setting with a global framework under the Paris Agreement, and provide a constructive feedback loop between national and international decision-making on climate change (World Resources Institute). Once ratified the NDCs become legally binding.
- 14 Climate Policy Observer, (2017, November 10) SPECIAL COP23: With SIDS’ prominent role, adaptation challenges take centre stage. The article states that together SIDS contribute an almost-zero level of GHG emissions (0.54% of global emissions).
- 15 United Nations Environment Programme (UNEP) 2016. The Adaptation Finance Gap Report 2016. UNEP, Nairobi, Kenya.
- 16 IPCC Fifth Assessment Report, 2014.
- 17 Delivering Transformational Change 2011–21: Implementing the CARICOM Regional Framework for Achieving Development Resilient to Climate Change.
- 18 Kanta Kumari, World Bank May 2015, Shaping Climate Resilience for Transformational Change: Key Lessons from PPCR World Bank PPCR Team.
- 19 Caribbean Community Climate Change Centre coordinates the Caribbean region’s response to climate change. The Centre is the key node for information on climate change issues and on the region’s response to managing and adapting to climate change in the Caribbean. It is a repository and clearing house for regional climate change information and data and provides climate change-related policy advice and guidelines to the Caribbean Community (CARICOM) Member States through the CARICOM Secretariat. CCCCC is now accredited to GCF for up to USD50,000 only for grant financing.
- 20 The Comprehensive Disaster Management (CDM 2014-2014) strategy promotes an integrated risk management approach to building resilience and safeguarding lives and livelihoods against multiple risk scenarios in the Caribbean region.
- 21 Based on the CDB’s experience with the EIB CALC, which has been an innovative modality underpinning CDB’s climate action agenda, CDB will continue to seek financing to retain a climate change support technical team, as the Bank continues along the steep learning curve of the ever growing science and practice of climate change.