



**GLOBAL ENVIRONMENT FACILITY**  
INVESTING IN OUR PLANET

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**REPORT OF THE GLOBAL ENVIRONMENT FACILITY TO THE  
TWENTY-FOURTH SESSION OF THE CONFERENCE OF THE PARTIES TO THE  
UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE**

August 31, 2018

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## Abbreviations and Acronyms

AC	Adaptation Committee
ACTFCN	African Climate Technology and Finance Center and Network
ADB	Asian Development Bank
AfDB	African Development Bank
AFOLU	Agriculture, Forestry and Other Land Use
APA	Ad Hoc Working Group on the Paris Agreement
APMR	Annual Portfolio Monitoring Report
AREI	Africa Renewable Energy Initiative
BEA	Building Efficiency Accelerator
BUR	Biennial Update Report
CAF	Development Bank of Latin America
CBD	Convention on Biological Diversity
CBIT	Capacity-building Initiative for Transparency
CBO	Community-based Organization
CCA	Climate Change Adaptation
CCCD	Cross-cutting Capacity Development
CCF	Corporate Carbon Footprint
CCM	Climate Change Mitigation
CCXG	Climate Change Expert Group
CDM	Clean Development Mechanism
CEIT	Countries with Economy in Transition
CEO	Chief Executive Officer
CGE	Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention
CI	Conservation International
CO <sub>2</sub> eq	Carbon Dioxide Equivalent
COP	Conference of the Parties
CPIC	Coalition for Private Investment in Conservation
CPS	Country Programme Strategy
CRAFT	Climate Resilience and Adaptation Finance and Technology Transfer Facility
CSO	Civil Society Organization
CTCN	Climate Technology Centre and Network
CTNFC	Climate Technology Network and Finance Center
DBSA	Development Bank of Southern Africa
DHRS	Dutyion Root Hydration System
EA	Enabling Activity
EBA	Ecosystem-Based Adaptation
EBRD	European Bank for Reconstruction and Development
ECA	Eastern Europe and Central Asia
ECOWAS	Economic Community of Western African States
ECW	Expanded Constituency Workshop
EnMS	Energy Management System
ESCO	Energy Service Company
ESO	Energy System Optimization
EST	Environmentally Sound Technology
ETC	Early Transition Country
ETF	Enhanced Transparency Framework
FAO	Food and Agriculture Organization of the United Nations
FINTECC	Finance and Technology Transfer Centre for Climate Change
FSP	Full-sized Project
FY	Fiscal Year
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEB	Global Environmental Benefit

GEF	Global Environment Facility
GEFTF	Global Environment Facility Trust Fund
GHG	Greenhouse Gas
GHGI	Greenhouse Gas Inventory
GIS	Geographic Information System
GSP	Global Support Program
GWP	Global-warming Potential
HCFC	Hydro-chlorofluorocarbon
HFC	Hydro-fluorocarbon
IAP	Integrated Approach Pilot
IBRD	International Bank for Reconstruction and Development (World Bank)
ICA	International Consultation and Analysis
ICAT	Initiative for Climate Action Transparency
IDB	Inter-American Development Bank
IEE	Industrial Energy Efficiency
IEO	GEF Independent Evaluation Office
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
INDC	Intended Nationally Determined Contribution
INRM	Integrated Natural Resource Management
IPCC	Intergovernmental Panel on Climate Change
IRENA	International Renewable Energy Agency
IRRC	Integrated Resource Recovery Center
IWRM	Integrated Water Resources Management
kt	kilotonne (10 <sup>3</sup> tonnes)
LAC	Latin America and the Caribbean
LCT	Low-carbon Technology
LDC	Least Developed Country
LDCF	Least Developed Countries Fund
LDN	Land Degradation Neutrality
LEG	Least Developed Countries Expert Group
LTF	Long-term Climate Finance
LULUCF	Land Use, Land-Use Change, and Forestry
MEA	Multilateral Environmental Agreement
MFA	Multi-focal Area
MRV	Measurement, Reporting and Verification
MSP	Medium-sized Project
MSW	Municipal Solid Waste
Mt	Megatonne (10 <sup>6</sup> tonnes)
MTF	Multi-trust Fund
MTR	Mid-term Review
NAMA	Nationally Appropriate Mitigation Action
NAP	National Adaptation Plan
NAPA	National Adaptation Program of Action
NC	National Communication
NCSA	National Capacity Self-Assessment
NDC	Nationally Determined Contribution
NDA	Nationally Designated Authority
NDE	Nationally Designated Entity
NEPAD	New Partnership for Africa's Development
NFP	National Focal Point
NGI	Non-grant Instrument
NIS	National Inventory System
NRM	Natural Resources Management
ODS	Ozone Depleting Substance
OECD	Organization for Economic Co-operation and Development
OFP	Operational Focal Point

PaSTI	Partnership to Strengthen Transparency for Co-Innovation
PATPA	Partnership on Transparency in the Paris Agreement
PCCB	Paris Committee on Capacity-building
PES	Payment of Ecosystem Services
PIP	Project Implementation Plan
PIR	Project Implementation Report
PPG	Project Preparation Grant
PPP	Public-Private Partnership
RAC	Refrigeration and Air-conditioning
RBM	Results-based Management
RECP	Resource Efficiency and Cleaner Production
REDD+	Reducing Emissions from Deforestation and Forest Degradation plus <sup>a</sup>
SBI	Subsidiary Body for Implementation
SBSTA	Subsidiary Body for Scientific and Technological Advice
SCF	Standing Committee on Finance
SCCF	Special Climate Change Fund
SCCF-A	Special Climate Change Fund Adaptation Program
SCCF-B	Special Climate Change Fund Program for Technology Transfer
SDGs	Sustainable Development Goals
SEFA	Sustainable Energy Fund for Africa
SEMED	Southern and Eastern Mediterranean
SFM	Sustainable Forest Management
SGP	Small Grants Program
SIDS	Small Island Developing State
SLM	Sustainable Land Management
SME	Small and Medium Enterprise
SPA	Strategic Priority on Adaptation
STAR	System for Transparent Allocation of Resources
TAP	Technology Action Plan
TEC	Technology Executive Committee
TNA	Technology Needs Assessment
TEST	Transfer of Environmentally Sound Technologies
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
WFP	World Food Programme
WHO	World Health Organization
WRI	World Resources Institute
WWF	World Wildlife Fund

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<sup>a</sup> The term REDD+ includes carbon benefits not only from reducing deforestation and degradation, but also from the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.

## EXECUTIVE SUMMARY

1. The Global Environment Facility (GEF), as an operating entity of the Financial Mechanism of the United Nations Framework Convention on Climate Change (UNFCCC, or the Convention), provides financing to country-driven climate change mitigation (CCM) and climate change adaptation (CCA) projects. The Paris Agreement and related Conference of the Parties (COP) decision affirmed the role and contributions of the GEF to address climate change as part of the Financial Mechanism of the Convention. In particular, the GEF, as well as the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF), along with the Green Climate Fund (GCF), were designated to serve the Paris Agreement.
2. This document reports on GEF's activities in fiscal year (FY) 2018, from July 1, 2017 to June 30, 2018. Part I of this report pertains to the implementation of the guidance from the COP. Part II presents updates on GEF initiatives relating to the Paris Agreement and the 2030 Agenda for Sustainable Development, achievements during the sixth replenishment period of the GEF (GEF-6), including the Capacity-building Initiative for Transparency (CBIT), Integrated Approach Pilot (IAP) programs and innovation in blended finance, and an outlook on the GEF support to developing countries in its seventh replenishment period (GEF-7). Part III demonstrates the results of the GEF support for CCM, CCA, CBIT and associated technology transfer and capacity-building activities.

### *Climate Change Mitigation*

3. Since its establishment in 1991, the GEF has been funding projects on CCM in developing countries and countries with economies in transition (CEIT). As at June 30, 2018, the GEF has funded 944 projects on CCM with more than \$5.6 billion GEF funding in over 165 countries. Most of these were funded from the GEF Trust Fund (GEFTF). The GEF funding leveraged over \$47 billion from a variety of sources, including GEF agencies, national and local governments, multilateral and bilateral agencies, the private sector, and civil society organizations (CSOs), with an average co-financing ratio of one (GEF) to 8.4<sup>1</sup> (co-financing).
4. In GEF-6 (July 2014 to June 2018), the GEF allocated approximately \$1.39 billion from the GEFTF to 213 projects, leveraging approximately \$12.71 billion, the co-financing ratio thus being one (GEF) to 9.1. Projects and programs that have been approved in GEF-6 are estimated to deliver 1,419 megatonne (Mt) carbon dioxide equivalent (CO<sub>2</sub> eq) of emission reduction benefits, which is significantly exceeding the GEF-6 target for greenhouse gas (GHG) emission reduction of 750 Mt CO<sub>2</sub> eq.
5. In the reporting period, the GEF allocated \$248 million from the GEFTF to 54 CCM projects.<sup>2</sup> These 54 projects are expected to leverage approximately \$1.21 billion in co-financing, resulting in

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<sup>1</sup> This ratio includes all phases of all projects with climate change resources, including multi-focal area (MFA) projects. An analysis conducted before the 54<sup>th</sup> GEF Council Meeting that took place in June 2018 presented the average and median ratios for GEF-4, GEF-5 and GEF-6 single-focal area climate change projects that have been approved or endorsed by the GEF Chief Executive Officer (CEO), and whose co-financing has thus been confirmed. This analysis shows higher co-financing ratios for single-focal area climate change projects than for MFA projects with climate change components. GEF, 2018, [Updated Co-Financing Policy](#), Council Document GEF/C.54/10/Rev.01.

<sup>2</sup> Sum of CCM stand-alone and MFA projects in the Climate Change Focal Area, excluding Enabling Activities.

a co-financing ratio of one (GEF) to 4.9 (co-financing). They are expected to avoid or sequester over 70.2 Mt CO<sub>2</sub> eq in total over their lifetime.

6. Through CCM projects, the GEF and its partners are supporting GEF recipient countries in key CCM sectors. These include: energy efficiency, renewable energy, sustainable transport and urban systems, and agriculture, forestry and other land use (AFOLU), as well as technology transfer/innovative low-carbon technologies (LCTs). Projects and initiatives that were approved in this reporting period include the following:

- (a) In energy efficiency, the GEF and its partners have supported five projects with energy efficiency components, with funding totaling \$13.9 million. Co-financing leveraged for these five projects amounted to \$39.1 million. Together, the five projects are working to mitigate an estimated 5.6 Mt CO<sub>2</sub> eq.
- (b) In the renewable energy sector, the GEF has supported seven renewable energy projects, facilitating the transfer of various renewable energy technologies, including small hydro, waste-to-energy generation, wind power, solar photo-voltaic, and biomass-to-energy. The GEF funding for these seven projects amounted to \$25.9 million, leveraging \$155.2 million in co-financing. Expected GHG emission reductions amount to 6.4 Mt CO<sub>2</sub> eq.
- (c) The GEF has supported four stand-alone projects in sustainable transport and urban systems, with GEF funding of \$14.3 million and \$93.2 million in co-financing. The total targeted emission reductions are estimated to be 7.6 Mt CO<sub>2</sub> eq. These projects contribute to the design and planning of integrated urban systems, city-wide energy efficiency improvement and green tourism. All projects involve local governments and administrations as potential stakeholders and project partners.
- (d) The GEF has supported twenty-one projects in the AFOLU sector. All projects are categorized as MFA and draw funds from other GEF focal areas in addition to CCM resources. Three of the twenty-one accessed the Sustainable Forest Management (SFM) incentive to achieve multiple benefits from the land use sectors included in the projects. The GEF funding to these twenty-one projects amounts to \$117.1 million and was supplemented by \$606.1 million in co-financing. These AFOLU initiatives aim to reduce approximately 42.9 Mt CO<sub>2</sub> eq.

7. Important contributions to GHG emission reductions are made by the GEF-6 IAPs. The IAP on Taking Deforestation out of Commodity Supply Chains, rebranded in 2017 as the Good Growth Partnership, is estimated to deliver 66 Mt CO<sub>2</sub> eq in emission reductions through advances in SFM and greening the supply chain for major commodities, including palm oil, beef and soy. The Food Security IAP is estimated to deliver approximately 31 Mt CO<sub>2</sub> eq in emission reductions and enhance resilience by supporting sustainable land management (SLM) and climate-smart agriculture techniques. Finally, the Sustainable Cities IAP, which is the largest GEF-6 program approved to date, places strong emphasis on integrated urban planning to achieve climate outcomes, delivering an estimated 98 Mt CO<sub>2</sub> eq. Taken together, the three IAP programs aim to deliver an estimated 195 Mt CO<sub>2</sub> eq.

8. According to the latest GEF Small Grants Program (SGP) report, 641 CCM projects were active in July 2016 to June 2017, with GEF grants amounting to \$21.6 million and co-financing of \$23.1 million, while 201 projects were completed. In GEF-6, the GEF approved 13 full-sized

projects (FSPs) with grants amounting to \$76.0 million and leveraging \$108.6 million in co-financing for eleven upgraded SGP country programs and two global SGP programs supporting 40 additional countries. Since its inception, the SGP has supported more than 22,000 projects implemented by civil society and community-based groups in 131 countries. Among those, 4,861 projects (approximately 23 percent) were community-based CCM projects, totaling over \$143 million in GEF funding and leveraging over \$181 million in co-financing.

9. The Programming Directions of the GEF-7 (July 2018 to June 2022) were endorsed at the 54<sup>th</sup> GEF Council meeting in June 2018. The GEF-7 Programming Directions build upon focal area investments and Impact Programs, aiming to transform urban, food, and land use systems to deliver lasting benefits across all multilateral environmental agreements (MEAs). The GEF-7 Climate Change Focal Area Strategy is focused on the following objectives:

- (a) Promoting Innovation and Technology Transfer for Sustainable Energy Breakthroughs;
- (b) Demonstrating Mitigation Options with Systemic Impacts; and
- (c) Fostering Enabling Conditions for Mainstreaming Mitigation Concerns into Sustainable Development Strategies.

10. The GEF-7 resource allocation framework includes \$802 million for CCM, comprising \$511 million of country allocations from STAR and \$291 million from STAR Set-Asides. Annex 1 provides an overview of GEF-7 STAR country allocations.

11. The CCM focal area investments will include de-centralized renewable energy with energy storage, electric drive technologies and electric mobility, accelerating energy efficiency adoption and cleantech innovation. The Sustainable Cities Impact Program will support nationally determined contributions (NDCs), and LCTs and practices, such as energy efficiency in buildings, renewable energy development and solid waste and wastewater management. The Food, Land Use, and Restoration Impact Program will foster climate-smart agriculture and SLM that reduces GHG emissions by restoring agricultural productivity. The SFM Impact Program will focus on maintaining and restoring carbon stocks in the Amazon, the Congo Basin, and dryland forests.

12. Through a reinforced focus and enhanced efficiency using synergistic programming, the GEF expects to deliver 1.5 billion t CO<sub>2</sub> eq in GHG emission reductions in GEF-7. This is double of what was planned for GEF-6, despite a 36 percent decrease in overall funding for this focal area in GEF-7 compared to GEF-6. The GEF-6 target for GHG emission reduction benefits has been exceeded by 189 percent (see paragraph 4). The GEF-7 target will be achieved through both focal area investments and Impact Programs.

#### *Capacity-building Initiative on Transparency*

13. In response to the COP 21 decision adopting the Paris Agreement, the GEF supported the establishment and operationalization of CBIT as a priority reporting-related need through voluntary contributions during GEF-6. In response to COP 21 guidance, the GEF Council established the CBIT Trust Fund and approved associated programming directions in June 2016.<sup>3</sup> COP 23

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<sup>3</sup> GEF, 2016, [Establishment of a New Trust Fund for the Capacity-building Initiative for Transparency, Council Document](#), Council Document GEF/C.50/05; and [Programming Directions for the Capacity-building Initiative for Transparency](#), Council Document GEF/C.50/06.

welcomed the operationalization of the CBIT and projects approved, and requested the GEF to provide adequate support to developing country Parties, in line with COP 21 guidance. As at June 30, 2018, fourteen donors had signed their respective contribution agreements, and the Trustee had received the majority of the pledges. The total donor contributions to the CBIT Trust Fund to date are \$61.1 million, of which \$56.0 million (or 92 percent) had been paid. \$5.1 million of pledges remained outstanding or unpaid. The Council, at its 54<sup>th</sup> meeting, agreed to extend the CBIT Trust Fund to accept remaining contributions and enable programming until October 2018.

14. In the reporting period, the GEF Secretariat approved one additional global CBIT project and 29 national projects in Antigua and Barbuda, Argentina, Azerbaijan, Bangladesh, Bosnia and Herzegovina, Burkina Faso, Côte D'Ivoire, Cuba, Dominican Republic, Ethiopia, Eswatini, Georgia, Honduras, Jamaica, Lao People's Democratic Republic, Lebanon, Liberia, Madagascar, Mexico, Montenegro, Morocco, Panama, Peru, Rwanda, Serbia, Sierra Leone, Sri Lanka, the former Yugoslav Republic of Macedonia and Togo.

15. Within two years of its establishment, the CBIT Trust Fund has successfully programmed nearly all available resources, with a modest amount of resources set aside for administrative purposes. These resources are supporting a total of 39 national projects and two global projects. This brings the total of approved resources under the CBIT Trust Fund to \$53.2 million or 97 percent of the total funds held in trust. In GEF-7, new CBIT projects will primarily be supported by the GEFTF through resources set aside in the Climate Change Focal Area.

#### *Adaptation to Climate Change*

16. The GEF and its partners also provide significant support to countries' efforts to adapt to climate change. The GEF support for CCA, provided through the LDCF and SCCF, generates critical local benefits in least developed countries (LDCs) and other developing countries in terms of reducing vulnerability to climate change and building adaptive capacity. These benefits are provided through, for example, diversifying livelihoods, reducing the vulnerability of physical assets and natural systems, developing early-warning systems, and developing and strengthening policies, plans and monitoring at the national and sub-national levels.

17. Since its inception, the GEF, through the LDCF, has approved \$1.25 billion in grant funding for CCA projects and programs, as well as enabling activities (EAs). It has financed the preparation of 51 national adaptation programmes of action (NAPAs), all of which have been completed, and 50 countries have had at least one NAPA implementation project approved. In the reporting period, the LDCF supported 13 projects with \$78.4 million, mobilizing \$249.3 million in co-financing.

18. As at June 30, 2018, cumulative pledges to the LDCF amounted to \$1.33 billion, of which \$1.27 billion have been received. The LDCF received over \$95.3 million in new pledges in the reporting period, including by a sub-national government. Additional contributions are urgently needed to enable the LDCF to address the priority CCA needs of LDCs.

19. The GEF has provided \$289.1 million for CCA projects to date through the SCCF Adaptation Program (SCCF-A), through 67 projects approved for funding, mobilizing \$2.3 billion in co-financing. In the reporting period, the GEF Council approved \$1.2 million, through SCCF-A, in support of an innovative project for the Climate Resilience and Adaptation Finance and Technology Transfer Facility (CRAFT), the first private sector climate resilience and adaptation

investment fund and technical assistance facility for developing countries. Since its inception, the SCCF-B (Program for Technology Transfer) has provided \$60.7 million for twelve projects that support technology transfer, mobilizing \$382.3 million in co-financing. No SCCF-B project was approved in the reporting period due to limited resource availability. As at June 30, 2018, funds available for Council/CEO approval amounted to \$8.5 million and \$3.3 million for the SCCF-A and SCCF-B, respectively.

20. Given the important mandate of the LDCF and SCCF to support the National Adaptation Plan (NAP) process<sup>4</sup>, total funding from the LDCF towards the LDCs' NAP processes amounts to \$71.6 million as at June 30, 2018.<sup>5</sup> The SCCF support amounting to \$5.1 million seeks to complement the LDCF initiatives by assisting non-LDC developing countries' NAP processes. This support includes several projects that explicitly seek to advance NAP processes in eleven countries, in addition to targeted technical assistance for tailored one-on-one support that continues to be provided through the NAP Global Support Programme (GSP). In the reporting period, the LDCF/SCCF Council approved \$23.6 million through the LDCF, for four projects supporting the NAP process in LDCs.

21. In June 2018, the GEF Programming Strategy on Adaptation to Climate Change for the LDCF and SCCF and Operational Improvements for the period 2018-2022 was approved by the LDCF/SCCF Council.<sup>6</sup> The goal of the new Strategy is to strengthen resilience and reduce vulnerability to the adverse impacts of climate change in developing countries, and support their efforts to enhance adaptive capacity. This goal is fully aligned with the Paris Agreement's global goal on adaptation, and anchors the contributions of the LDCF and SCCF, which Parties decided "shall serve the [Paris] Agreement."<sup>7</sup> To achieve this goal, the Strategy emphasizes three strategic objectives, namely:

- (a) Reducing vulnerability and increase resilience through innovation and technology transfer for climate change adaptation;
- (b) Mainstreaming climate change adaptation and resilience for systemic impact; and
- (c) Fostering enabling conditions for effective and integrated climate change adaptation.

22. The Strategy also seeks to enhance gender equality and mainstreaming, as well as private sector engagement, across the GEF CCA portfolio, while striving to enhance coordinated and synergistic programming with other major climate funds as well as with other GEF focal areas. The Strategy includes two illustrative financing scenarios for the period 2018-2022. Scenario A envisages \$750 million total, with \$500 million for the LDCF and \$250 million for the SCCF, while Scenario B would add up to \$1 billion total, with \$650 million for the LDCF and \$350 million for the SCCF.

### *Technology Transfer*

23. The GEF, in response to decision 2/CP.17, continues to support pilots and innovative projects for technology transfer and financing, including the Climate Technology Centre and Network

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<sup>4</sup> Decision 12/CP.18, paragraph 1.

<sup>5</sup> This amount comprises projects that are explicitly dedicated, as the sole project objective or through dedicated components, to enhancing a country's NAP process.

<sup>6</sup> GEF, 2018, [GEF Programming Strategy on Adaptation to Climate Change for the LDCF and the SCCF and Operational Improvements](#), Council Document GEF/LDCF.SCCF.24/03.

<sup>7</sup> Decision 1/CP.21, paragraph 58.

(CTCN) and four Regional Climate Technology Transfer and Financing Centers. In the reporting period, for CCM, 27 projects with technology transfer objectives were approved with \$108 million in GEF funding and \$402.9 million in co-financing. For CCA, eight projects with adaptation technology elements were approved with \$49.1 million from the LDCF and SCCF, and \$177.9 million of co-financing.

### *Enabling Activities*

24. Since its inception, the GEF has supported 421 EAs with \$479.0 million from the GEFTF and the LDCF. Of this amount, 370 EAs have received \$466.8 million in funding from the GEFTF, in support of National Communications (NCs), Biennial Update Reports (BURs), and Technology Needs Assessments (TNAs). In the reporting period, the GEF financed, through the GEFTF, 16 EAs, amounting to \$19.7 million for NCs and BURs.

### *Non-grant Financing Instruments*

25. Drawing on its experience in utilizing debt, equity and risk mitigation products in the past, including from the implementation of the GEF-5 private sector set-aside, the GEF launched a \$110 million pilot program for non-grant financial instruments in 2014. By demonstrating and validating successful models for the use of non-grant instruments, the GEF is helping catalyze large-scale changes through broader adoption and generating approaches that may also be useful for other international environmental finance mechanisms such as the GCF. In the reporting period, the GEF approved one non-grant FSP with climate change benefits, providing \$8.2 million and leveraging \$102 million in co-financing. Since the beginning of GEF-6, the GEF has awarded eleven non-grant projects covering multiple focal areas, including eight projects that directly deliver CCM benefits. These projects allocate a total of \$78.4 million in GEF financing and leverage \$1.4 billion in co-financing, including \$1.1 billion from the private sector.

### *Gender*

26. An analysis of GEF-6 projects suggests that GEF is making good progress addressing gender equality. As of March 2018, 66 percent of GEF-6 projects conducted or planned to conduct a gender analysis compared to the GEF-5 baseline of 18 percent. In the reporting period, the Council adopted a new Policy on Gender Equality, introducing new principles and requirements to mainstream gender in the design, implementation and evaluation of GEF programs and projects. The GEF also developed new guidelines to advance gender equality in GEF projects and programs, and a new GEF Gender Implementation Strategy was adopted by the Council to promote gender equality and women's empowerment in the context of GEF-7 programming.

## INTRODUCTION

1. Each year, the Global Environment Facility (GEF), an operating entity of the Financial Mechanism of the United Nations Framework Convention on Climate Change (UNFCCC), reports to the Conference of the Parties (COP). The GEF's report to COP 24 covers climate change mitigation (CCM), climate change adaptation (CCA), and capacity-building activities in fiscal year (FY) 2018 (July 1, 2017 to June 30, 2018). This report consists of three parts: (i) GEF's response to the Paris Agreement and COP 23 guidance as well as the conclusions of the Subsidiary Body for Implementation (SBI) 47 and SBI 48 and Subsidiary Body for Scientific and Technological Advice (SBSTA) 47; (ii) GEF initiatives; and (iii) GEF achievements in the reporting period.

## PART I: GEF'S RESPONSE TO COP GUIDANCE

### **1. *The Paris Agreement, COP 23 Decisions, SBI 47 and 48 and SBSTA 47 Conclusions***

2. The Paris Agreement and related COP decision affirmed the role of the GEF as part of the Financial Mechanism of the Convention. Article 9 of the Paris Agreement stated the Financial Mechanism of the Convention, including its operating entities, shall serve as the financial mechanism of this Agreement. Furthermore, Parties decided that the Green Climate Fund (GCF) and the GEF, as well as the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF), shall serve the Paris Agreement.<sup>8</sup> The GEF is committed to serve the Paris Agreement as its financial mechanism.

3. Concrete steps taken by the GEF in this reporting period in serving the Paris Agreement include continued support for the implementation of nationally determined contributions (NDCs) through 54 projects with \$248 million from the GEF Trust Fund (GEETF). In the field of climate change adaptation (CCA), in the reporting period, the LDCF approved 13 projects with \$78.4 million in LDCF funding to address urgent and immediate needs for CCA support. The Capacity-building Initiative for Transparency (CBIT) continued its operations, and the GEF Secretariat approved one additional global CBIT project and 29 national projects in the reporting period. By the end of the reporting period, full programming of available donor contributions was achieved, with a total of 39 national CBIT projects and two global projects approved by the GEF (see Part II, Section 2).

4. COP 23 provided specific guidance to the GEF, and SBI 47, SBSTA 47 and SBI 48 conclusions also contain matters of relevance for the GEF. Key topics include: Assurance of a robust seventh replenishment of the GEF (GEF-7); enhancement of private sector engagement; the need to foster innovation and investment by undertaking projects; and continuation of capacity-building activities.

5. The GEF continues to be responsive to COP guidance by incorporating it into its CCM and CCA strategies, through approval of projects and programs, and by adapting its policies and procedures. Table 1 describes the GEF's response to the COP decisions and SBI and SBSTA conclusions.

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<sup>8</sup> Decision 1/CP.21, paragraph 58.

**Table 1: COP 23 Decisions, SBI 47 and 48 and SBSTA 47 Conclusions and GEF's Response**

<b>COP 23 decision/SBI 47 and 48 and SBSTA 47 conclusion<sup>9</sup></b>	<b>GEF's response</b>
<b>Decision 1/CP.23, Fiji Momentum for Implementation</b>	
<p><b>Paragraph 17:</b>  <i>Decides</i> to convene a stocktake on pre-2020 implementation and ambition at the twenty-fourth session of the Conference of the Parties, which will apply the format of the 2016 facilitative dialogue and consider, inter alia:</p> <p>(a) The inputs of the Conference of the Parties to the Kyoto Protocol, the Subsidiary Body for Implementation, the Subsidiary Body for Scientific and Technological Advice, the constituted bodies under the Convention and the Kyoto Protocol, and the operating entities of the Financial Mechanism [...]</p>	<p>The GEF, as an operating entity of the Financial Mechanism, stands ready to provide input to the stocktake on pre-2020 implementation and ambition at COP 24.</p>
<b>Decision 6/CP.23, Long-term climate finance</b>	
<p><b>Paragraph 10:</b>  <i>Requested</i> the secretariat, in collaboration with the operating entities of the Financial Mechanism, United Nations agencies and bilateral, regional and other multilateral channels, to explore ways and means to assist developing country Parties in assessing their needs and priorities, in a country-driven manner, including technological and capacity-building needs, and in translating climate finance needs into action.</p>	<p>The GEF continues to provide support to developing country Parties in assessing their needs and priorities, in a country-driven manner, including technology and capacity-building needs, and in translating climate finance needs into action. Among other, the GEF continues to provide resources for the CBIT, technology needs assessments (TNAs), and other initiatives such as expanded constituency workshops (ECWs), in an effort to enhance developing countries' abilities to assess their needs and priorities and to translate climate finance needs into action. The GEF is also a member of the NDC Partnership to this effect.</p>
<b>Decision 8/CP.23, Review of the functions of the Standing Committee on Finance</b>	
<p><b>Paragraph 9:</b>  <i>Encouraged</i> Parties and other constituted bodies under the Convention to continue to provide submissions for the preparation of draft decisions on guidance to the operating entities of the Financial Mechanism, based on the reports of the operating entities, in a timely manner to the Standing Committee on Finance.</p>	<p>No response needed.</p>
<b>Decision 10/CP.23, Report of the Global Environment Facility to the Conference of the Parties and guidance to the Global Environment Facility</b>	
<p><b>Paragraph 2:</b>  <i>Welcomed</i> the decision of the GEF Council to begin the process of updating its minimum agency standards and fiduciary policies.</p>	<p>No response needed.</p>

<sup>9</sup> [COP 23 decisions](#), [SBI 47 conclusions](#), [SBSTA 47 conclusions](#) and [SBI 48 conclusions](#) are available on the UNFCCC website.

<b>COP 23 decision/SBI 47 and 48 and SBSTA 47 conclusion<sup>9</sup></b>	<b>GEF's response</b>
<p><b>Paragraph 3:</b>  <i>Also welcomed</i> the GEF Council's approval of the GEF's policy on ethics and conflict of interest.</p>	<p>No response needed.</p>
<p><b>Paragraph 4:</b>  <i>Reiterated</i> its call in decision 11/CP.22, paragraph 2, to ensure a robust seventh replenishment in order to assist in providing adequate and predictable funding, taking into consideration the Paris Agreement as well as the request of the COP to the GEF contained in decision 11/CP.22, paragraph 3.</p>	<p>In the reporting period, 29 countries jointly endorsed a \$4.1 billion financial support package for GEF-7. According to the GEF-7 resource allocation framework, the CCM focal area has been notionally allocated \$802 million, which will support a corporate mitigation target of 1,500 Mt carbon dioxide equivalent (CO<sub>2</sub> eq).</p>
<p><b>Paragraph 5:</b>  <i>Requested</i> the GEF to enhance the consultation process with developing country Parties and other stakeholders in the context of the GEF replenishment process.</p>	<p>The consultation process for the GEF-7 replenishment included active developing country representation and participation through regional constituency representatives covering all regions. In addition, several developing country Parties also participated as donors in the replenishment negotiations. The GEF Council endorsed the GEF-7 Policy Recommendations, Programming Directions and Replenishment Resolution at its meeting in June 2018.</p>
<p><b>Paragraph 6:</b>  <i>Noting</i> the importance of the existing allocation for climate change, <i>requested</i> the GEF to further consider the needs and priorities of developing countries in the allocation for the climate change focal area in its seventh replenishment period.</p>	<p>The GEF-7 framework is structured to address fundamental COP decisions relating to the Paris Agreement, and to further support developing countries' needs and priorities in line with the GEF's role as an operating entity of the Financial Mechanism of the UNFCCC.</p> <p>The GEF-7 Climate Change Focal Area Strategy aims to support developing countries in their efforts to shift towards low-emission and climate-resilient development pathways. To achieve this goal, the Strategy continues to emphasize three fundamental objectives:</p> <ul style="list-style-type: none"> <li>• Promoting innovation and technology transfer for sustainable energy breakthroughs;</li> <li>• Demonstrating mitigation options with systemic impacts; and</li> <li>• Fostering enabling conditions for mainstreaming mitigation concerns into sustainable development strategies.</li> </ul> <p>In GEF-7, these objectives will be addressed through country-driven investments in the focal area and specific Impact Programs.</p> <p>The GEF-7 resource allocation framework includes \$802 million for CCM, including \$511 million country allocation from the System for Transparent Allocation of Resources (STAR) and \$291 million from STAR Set-Asides. Needs and priorities of developing countries were taken into consideration in the refinement of the resource allocation framework through developing country representation in the replenishment process and analyses of developing country plans and reports under various multilateral environmental</p>

<b>COP 23 decision/SBI 47 and 48 and SBSTA 47 conclusion<sup>9</sup></b>	<b>GEF's response</b>
	agreements (MEAs) for which the GEF serves as financial mechanism.
<p><b>Paragraph 7:</b>  <i>Requested</i> the GEF to continue implementing in its seventh replenishment period its established policies for grants and concessional funding, in support of developing country Parties, in line with the provisions of the Convention, relevant decisions of the COP and the Instrument for the Establishment of the Restructured GEF.</p>	<p>In GEF-7, the GEF continues implementing its established policies for grants and concessional funding, in support of developing country Parties, in line with the provisions of the Convention, relevant decisions of the COP and the Instrument for the Establishment of the Restructured GEF. The GEF-7 Programming Directions include both grant and non-grant instruments, as in previous GEF replenishment cycles, to enable the GEF to utilize instruments tailored to countries' needs and priorities and country-specific contexts.</p>
<p><b>Paragraph 8:</b>  <i>Welcomed</i> the operationalization of the Capacity-building Initiative for Transparency (CBIT) and projects approved during the reporting period, and requested the GEF to provide adequate support to assist developing country Parties, in line with decision 1/CP.21, paragraph 86.</p>	<p>CBIT projects in GEF-7 are supported through set-aside resources, and do not draw on country allocations. Countries also continue to have access to set-asides for their Convention obligations, including the national communications (NCs) and biennial update reports (BURs), up to the agreed full-cost amounts. In addition, country allocations will be available to deliver other enabling activities (EAs) and above the agreed full-cost amounts.</p>
<p><b>Paragraph 9:</b>  <i>Noted</i> the GEF Council decision GEF/C.50/07 and its conclusions, and <i>invited</i> the GEF to further consider ways to improve its access modalities for developing country Parties, including small island developing States and the least developed countries.</p>	<p>The GEF-7 replenishment recognized the needs of all GEF recipient countries, particularly those of least developed countries (LDCs) and small island developing States (SIDS). The replenishment thus includes an increase in the weight of the Gross Domestic Product (GDP) per capita index in the resource allocation system for GEF-7, which will ensure an enhanced emphasis on the poorest and most vulnerable countries. Upon request by the GEF replenishment process participants, the GEF Secretariat is also presenting for Council consideration an updated results architecture, with a view to promoting simplification, with fewer, more relevant indicators and more streamlined reporting on project and program-level results.</p> <p>For CCA, the new strategy for the SCCF recognizes the specific needs of SIDS for adaptation support. All LDCs continue to receive targeted support from the LDCF.</p> <p>Furthermore, the GEF will continue to support developing country Parties, including SIDS and LDCs in accessing funding from the GEF, through the ECWs and regional/national portfolio and programming workshops during GEF-7.</p>
<p><b>Paragraph 10:</b>  <i>Requested</i> the GEF, as appropriate, to ensure that its policies and procedures related to the consideration and review of funding proposals be duly followed in an efficient manner.</p>	<p>The GEF continues to follow its policies and procedures relating to the consideration and review of funding proposals in an efficient manner.</p>

<b>COP 23 decision/SBI 47 and 48 and SBSTA 47 conclusion<sup>9</sup></b>	<b>GEF's response</b>
<p><b>Paragraph 11:</b>  <i>Encouraged</i> the GEF to further enhance engagement with the private sector, including in its technology projects.</p>	<p>One of the three objectives of the GEF-7 CCM Focal Area is to promote innovation and technology transfer for sustainable energy breakthroughs. In GEF-7, partnership with the private sector to promote technology transfer and deployment will be a key priority. Resources from the GEF play a key role in piloting emerging innovative solutions, including technologies, management practices, supportive policies and strategies, and financial tools that foster private sector engagement in technology and innovation.</p> <p>The objective to promote innovation and technology transfer for sustainable energy breakthroughs has four entry points:</p> <ul style="list-style-type: none"> <li>• De-centralized renewable power with energy storage;</li> <li>• Electric drive technologies and electric mobility;</li> <li>• Accelerating energy efficiency adoption; and</li> <li>• Cleantech innovation.</li> </ul> <p>These four entry points have been prioritized to be innovative, align with NDCs, and be complementary to other financial mechanisms.</p> <p>The GEF Programming Strategy on Adaptation to Climate Change for the LDCF and SCCF (2018-2022) also emphasizes the importance of engagement of the private sector and includes an objective to reduce vulnerability and increase resilience through innovation and technology transfer for CCA. Resources from the LDCF/SCCF play a key role in tailoring relevant resilience technologies to national and local circumstances in the most vulnerable developing countries. LDCF and SCCF support seek to be catalytic in testing and adapting technologies and innovative practices to specific conditions and capacity, creating favorable policies and strategies, providing systemic support to innovation through incubation and accelerators, piloting financial tools, risk transfer mechanisms, including risk insurance, climate risk pooling and other risk sharing solutions, and strengthening private sector engagement in CCA.</p> <p>As noted by the Independent Evaluation Office (IEO), “The GEF engages with a wide variety of private sector entities that vary in their industry focus, size, and approach to environmental issues using a mix of intervention models. The range extends from multinational corporations; through large domestic firms and financial institutions; to micro, small, and medium enterprises and smallholders/individuals.”<sup>10</sup> GEF-7 therefore will create opportunities to involve the private sector in new programs through two pillars:</p>

<sup>10</sup> GEF Independent Evaluation Office, 2017, [Sixth Comprehensive Evaluation of the GEF \(OPS6\): The GEF in the Changing Environmental Finance Landscape](#); and [Evaluation of GEF's Engagement with the Private Sector](#), Council Document GEF/ME/C.52/Inf.04.

<b>COP 23 decision/SBI 47 and 48 and SBSTA 47 conclusion<sup>9</sup></b>	<b>GEF's response</b>
	<ul style="list-style-type: none"> <li>• Expanding the use of non-grant instruments; and</li> <li>• Working with the private sector as an agent for market transformation.</li> </ul>
<p><b>Paragraph 12:</b>  <i>Invited</i> the GEF to allocate provisions in the climate change focal area of its seventh replenishment for supporting developing country Parties in undertaking technology needs assessments and piloting priority technology projects to foster innovation and investment.</p>	<p>One of the three objectives of the GEF-7 Climate Change Focal Area is to promote innovation and technology transfer for sustainable energy breakthroughs. In GEF-7, partnership with the private sector to promote technology transfer and deployment is a key priority. GEF resources play a key role in piloting emerging innovative solutions, including technologies, management practices, supportive policies and strategies, and financial tools which foster private sector engagement for technology and innovation.</p> <p>Support for TNAs will be made eligible for SIDS and LDCs in GEF-7.</p>
<p><b>Paragraph 13:</b>  <i>Also invited</i> the GEF to include information in its report to the COP on:</p> <p>(a) The collaboration between the GEF focal points and the national designated entities for technology development and transfer, as communicated by the CTCN to the GEF;</p> <p>(b) Whether and how Parties have used their System for Transparent Allocation of Resources for piloting the implementation of the technology needs assessment results.</p>	<p>In the reporting period, the Climate Technology Centre requested from Nationally Designated Entities (NDEs) information regarding their collaboration with the GEF Operational Focal Points (OFPs) on matters relating to the development and transfer of climate technologies.</p> <p>In total, 69 NDEs responded to the survey. Of these respondents, 64 percent noted that they do have information regarding the GEF portfolio in their respective countries. 49 percent of NDEs indicated that they meet regularly with the GEF OFPs to support coordination at the national level, and of these, half meet every three months or less.</p> <p>Sixty percent of respondents stated that, as NDEs, they did not participate in the GEF portfolio formulation exercise in their countries and thus did not effectively contribute to defining the priority sectors for GEF funding. They suggested that NDEs had much to contribute to climate technology elements in the portfolio formulation exercises.</p> <p>Finally, the survey responses highlighted that four sub-regional meetings organized by the Climate Technology Centre and Network (CTCN) provided a good opportunity for NDEs, GEF OFPs, and Nationally Designated Authorities (NDAs) of the GCF to meet and discuss matters of common interest and share their experiences.</p> <p>In the reporting period, for CCM, 27 projects with technology transfer objectives were approved with \$108 million in GEF</p>

<b>COP 23 decision/SBI 47 and 48 and SBSTA 47 conclusion<sup>9</sup></b>	<b>GEF's response</b>
	funding and \$402.9 million in co-financing. <sup>11</sup> For CCA, eight projects to promote technologies for adaptation were approved with \$48 million from the LDCF and \$1.1 million from the SCCF, and \$177.9 million of co-financing. Under the GEF-6 Programming Directions, support to TNAs for SIDS and LDCs was provided through set-aside resources, while TNAs for other countries were supported using GEF-6 STAR allocations. In the reporting period, there was no national TNA project proposal received, while Ukraine utilized its STAR allocation for its TNA Phase 3 project. This report includes this information in Part III, Section 4 (Technology Transfer).
<p><b>Paragraph 16:</b> Also requested the GEF to include in its annual report to the COP information on the steps that it has taken to implement the guidance provided in this decision.</p>	The GEF has taken steps to implement the guidance, as highlighted in this table and described further in this report.
<b>Decision 11/CP.23, Sixth review of the Financial Mechanism</b>	
<p><b>Paragraph 2:</b> Took note of the efforts made by the operating entities of the Financial Mechanism to enhance complementarity and coherence between them and between the operating entities and other sources of investment and financial flows.</p>	The GEF continues to work closely with the GCF to enhance complementarity and coherence.
<p><b>Paragraph 3:</b> Requested the operating entities of the Financial Mechanism to continue to enhance complementarity and coherence.</p>	In the reporting period, efforts to enhance complementarity with the GCF have continued, in response to COP guidance. The GEF and GCF secretariats organized their first joint side event at COP 23 (on 16 November 2017) on 'Strengthening Collaboration to Support Countries in Implementing the Paris Agreement', co-chaired by the GEF Chief Executive Officer (CEO)/Chairperson and the GCF Executive Director. <sup>12</sup> The GEF Secretariat also hosted a delegation from the GCF Secretariat in Washington, DC for the GCF-GEF Technical Workshop on February 7, 2018 to further advance the action plan. Technical staff from both secretariats agreed on a list of nine next steps, details of which can be found in Part II, Section 4 (Complementarity in Climate Finance) of this report. The GCF and GEF secretariats also participate in joint programming pilot exercise with interested developing countries, as appropriate. The GCF and GEF secretariats further co-organized the "Informal Ministerial Dialogue on GCF and GEF Coordinated Engagement" on 26 June 2018 at the sixth GEF Assembly in Da Nang, Viet Nam, to discuss coordinated national engagements and enhancing linkages and synergies between GEF and GCF projects.

<sup>11</sup> These projects are aligned with the GEF-6 objective of CCM-1: Promote innovation, technology transfer, and supportive policies and strategies. They include projects categorized in the areas of renewable energy, energy efficiency and transport in Table 7.

<sup>12</sup> IISD Reporting Services, 2017, [Summary of the event Strengthening Collaboration to Support Countries in Implementing the Paris Agreement – a Joint GEF-GCF Side Event](#).

<b>COP 23 decision/SBI 47 and 48 and SBSTA 47 conclusion<sup>9</sup></b>	<b>GEF's response</b>
<b>Decision 14/CP.23, Review of the effective implementation of the Climate Technology Centre and Network</b>	
<p><b>Paragraph 2:</b>  <i>Welcomed with appreciation</i> the support provided by Parties and the Global Environment Facility, and the financial and in-kind contributions from UNEP, UNIDO and other consortium partners of the CTCN in supporting the operationalization and activities of the CTCN.</p>	No response needed.
<b>Decision 15/CP.23, Enhancing climate technology development and transfer through the Technology Mechanism</b>	
<p><b>Paragraph 16:</b>  <i>Welcomed</i> the engagement of the Climate Technology Centre and Network with the Global Environment Facility and multilateral development banks regarding collaborative activities, including the implementation of technical assistance requests with scalable investment potential.</p>	No response needed.
<b>Decision 17/CP.23, Fourth review of the implementation of the framework for capacity-building in countries with economies in transition</b>	
<p><b>Paragraph 1:</b>  <i>Recognized that:</i>            (b) Parties included in Annex I to the Convention and the GEF, within its mandate, have provided adequate resources and assistance for the implementation of the framework for capacity-building in countries with economies in transition established under decision 3/CP.7.</p>	No response needed.
<p><b>Paragraph 3:</b>  <i>Invited</i> Parties included in Annex II to the Convention and other Parties in a position to do so, the GEF, multilateral and bilateral agencies, international organizations, multilateral development banks, international financial institutions and the private sector, or any further arrangements, as appropriate and within their mandates, to continue to provide support for capacity-building activities in countries with economies in transition that are currently receiving support.</p>	<p>The GEF continues to provide support for capacity-building activities in countries with economies in transition (CEIT) that are currently receiving support, including through regular projects and programs, as well as for NCs, Biennial Update Reports (BURs), CBIT and the Cross-Cutting Capacity Development (CCCD) program. In the reporting period, the GEF approved two projects in Belarus and two projects in Ukraine, including: \$1.0 million for capacity building for emissions trading and strengthened Measurement, Reporting and Verification (MRV) in Belarus; \$0.9 million for preparation of the Seventh NC on the Implementation of the UNFCCC and the Third BUR in Belarus; \$1.7 million for the Global Cleantech Innovation Programme for small and medium enterprises (SMEs) in Ukraine; and \$2.0 million for the integrated natural resources management in degraded landscapes in the forest-steppe and steppe zones in Ukraine.</p>

<b>COP 23 decision/SBI 47 and 48 and SBSTA 47 conclusion<sup>9</sup></b>	<b>GEF's response</b>
<b>SBI 47, Agenda item 10: Matters relating to the least developed countries</b>	
<p><b>Paragraph 57:</b> Noted with appreciation the financial pledge of EUR 50 million made by Germany to the Least Developed Countries Fund and urged additional contributions to the fund.</p>	<p>The GEF appreciates the continued strong support from Germany to the LDCF.</p>
<b>SBI 47, Agenda item 11: National Adaptation Plans</b>	
<p><b>Paragraph 65:</b> Noted the approval, as at 30 October 2017, by the GCF of 10 out of 38 funding proposals through the GCF Readiness and Preparatory Support Programme to support the formulation of NAPs, as well as the approval by the GEF of funding proposals from four countries to support the process to formulate and implement NAPs.</p>	<p>The GEF continues to support projects for NAP formulation and implementation, as included in the newly approved GEF Programming Strategy on Adaptation to Climate Change for the LDCF and the SCCF (2018-2022).</p>
<b>SBI 47, Agenda item 14(b): Poznan strategic programme on technology transfer</b>	
<p><b>Paragraph 86:</b> Welcomed the report of the GEF, including the information on progress in relation to the Poznan strategic programme on technology transfer (PSP) and related challenges and lessons learned.</p>	<p>No response needed.</p>
<p><b>Paragraph 91:</b> Welcomed the midterm evaluations of the pilot projects of the fourth replenishment of the GEF included in the report referred to in paragraph 86 above. It <i>reiterated</i> its encouragement to the GEF to share the midterm evaluations of the PSP climate technology transfer and finance centres and the aforementioned pilot projects as soon as available in order to the Technology Executive Committee (TEC) to update the evaluation report on the PSP.</p>	<p>The GEF will continue to share midterm evaluations of the PSP climate technology transfer and finance centres and the pilot projects.</p>
<b>SBSTA 47, Agenda item 8: Research and systematic observation</b>	
<p><b>Paragraph 55:</b> Recalling its conclusions from SBSTA 45, the SBSTA: (c) Encouraged Parties and relevant organizations to take advantage of support available via the operating entities of the Financial Mechanism as well as other relevant organizations and channels, as appropriate, to support the Global Climate Observation System regional workshops and projects identified in the resulting implementation plans.</p>	<p>No response needed.</p>

<b>COP 23 decision/SBI 47 and 48 and SBSTA 47 conclusion<sup>9</sup></b>	<b>GEF's response</b>
<b>SBI 48, Agenda item 12: Matters relating to LDCs</b>	
<p><b>Paragraph 4 of the draft decision on the Least Developed Countries Work Programme:</b>  <i>Noted</i> that support for the work programme should come from a variety of sources, including the Least Developed Countries Fund, the Global Environment Facility, the Green Climate Fund, and other bilateral and multilateral sources within their respective mandates, and the private sector, as appropriate.</p>	<p>The GEF, in particular the LDCF, stands ready to continue to support the LDC work programme, as reflected in the new GEF Programming Strategy on Adaptation to Climate Change for the LDCF and the SCCF (2018-2022).</p>
<b>SBI 48, Agenda item 14(b): Review of the effective implementation of the Climate Technology Centre and Network</b>	
<p><b>Paragraph 4 of the draft decision on the review of the Climate Technology Centre and Network:</b>  <i>Also invited</i> the operating entities of the Financial Mechanism to consider implementing the relevant recommendations referred to in paragraph 1 above when implementing their further activities relevant to the work of the Climate Technology Centre and Network.</p>	<p>The GEF has been implementing the recommendations, including, inter alia, by building stronger linkages with the CTCN and the GCF.</p>
<b>SBI 48, Agenda item 18: Ways of enhancing the implementation of education, training, public awareness, public participation and public access to information so as to enhance actions under the Paris Agreement</b>	
<p><b>Paragraph 11 of the draft decision on the ways of enhancing the implementation of education, training, public awareness, public participation and public access to information so as to enhance actions under the Paris Agreement:</b>  <i>Invited</i> Parties, multilateral and bilateral institutions, private sector and other potential sources to support activities related to the implementation of Article 12 of the Paris Agreement.</p>	<p>The GEF provides support to enhance climate change education, training, public awareness, public participation and public access to information relating to the implementation of Article 12 of the Paris Agreement through its regular projects and programs, in line with its mandate.</p>

## **2. Engagement with the UNFCCC**

6. The GEF Secretariat has continued to engage and consult with the UNFCCC Secretariat and various UNFCCC work streams in the reporting period. Key areas of engagement included: GEF-7 replenishment, LDCF/SCCF Programming Strategy development consultations, consultations with UNFCCC national focal points (NFPs), involvement of the UNFCCC Secretariat in GEF ECWs, and GEF Secretariat participation in, and attendance at, various UNFCCC meetings. Further details on these engagements are provided below.

7. The GEF Secretariat has actively consulted with the UNFCCC Secretariat on the GEF-7 replenishment, to ensure that the proposed GEF Programming Directions address UNFCCC and Paris Agreement priorities and recent COP guidance, and facilitate synergies with other conventions towards greater effectiveness and impact. Input from the UNFCCC Secretariat has

been sought through different channels and at various levels, including through bilateral dialogues between the GEF CEO and the UNFCCC Executive Secretary, technical bilateral discussions, engagement of the UNFCCC Secretariat in various thematic discussions and participation in the second, third and fourth GEF-7 replenishment meetings.

8. The UNFCCC Secretariat was also engaged in the consultation process for the development of the GEF Programming Strategy on Adaptation to Climate Change for the LDCF and SCCF and Operational Improvements for the period 2018-2022 that was approved by the LDCF/SCCF Council in June 2018.<sup>13</sup> In particular, the UNFCCC Secretariat took part in the consultative meeting held on April 29, 2018 in Bonn, Germany, and also provided technical feedback on the strategy in writing and through several remote consultations.

9. The GEF Secretariat has also continued its efforts at the country level to promote consultations among the GEF Secretariat, GEF OFPs, and the UNFCCC NFPs. Many of the focal point representatives are also GEF Council members and national climate change decision-makers. Furthermore, the GEF Secretariat has engaged with UNFCCC NFPs by supporting their participation in five GEF ECWs that covered 54 countries in the reporting period.<sup>14</sup>

10. Efforts have also been made to facilitate dialogue and synergy among the conventions secretariats, including the UNFCCC Secretariat, and the GEF stakeholders. At all ECWs held in the reporting period, the GEF continued to conduct a session on 'Facilitating synergies in implementing MEAs towards sustainable development', adding a new perspective to the program. This initiative provided an opportunity for UNFCCC NFPs and multilateral environmental agreement (MEA) secretariat representatives, including the UNFCCC Secretariat, to directly interact with each other and with NFPs of other MEAs, as well as with GEF OFPs, to discuss potential synergy opportunities in programming GEF resources at the country level in the context of sustainable development. The session also enabled the direct transmission of MEA guidance to inform ongoing and future country programming.

11. The GEF Secretariat participated in COP 23 on November 6-17, 2017 in Bonn, Germany and supported countries on their way to implement the Paris Agreement. Highlights of GEF Secretariat activities during the COP included, *inter alia*, interventions on GEF initiatives and achievements based on its annual report as well as an update on NCs and BURs. The GEF Secretariat representatives participated in contact groups and other meetings, as requested, to provide briefings to Parties and to respond to questions on GEF activities, its support to Parties and its responses to COP guidance.

12. The GEF CEO engagements at COP 23 included speaking at the opening of the high-level event on climate action; the NDC Partnership meeting "Champions for Climate Action"; "World Climate Summit: Low-carbon day High-Level Forum on South-South Cooperation on Climate Change"; and the Least Developed Countries Expert Group (LEG) side event. The GEF also organized four side events:

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<sup>13</sup> GEF, 2018, [GEF Programming Strategy on Adaptation to Climate Change for the LDCF and the SCCF and Operational Improvements](#), Council Document GEF/LDCF.SCCF.24/03.

<sup>14</sup> In the reporting period, the GEF held five ECWs (in Ghana, Senegal, Tonga, Tunisia and Uzbekistan) that gathered approximately 450 participants from 54 countries. In the first half of 2018, there was no ECW as the new GEF-7 strategy was not yet finalized.

- (a) “Sub-national action on adaptation in and for Least Developed Countries: The role of the LDCF” on November 11, 2017;
- (b) “Early lessons from GEF Integrated Approach Pilots (IAPs): Increasing Impact in GEF-7” on November 13, 2017;
- (c) “Enhancing Transparency through the Capacity-building Initiative for Transparency (CBIT)” on November 15, 2017; and
- (d) Joint GEF/GCF side-event, moderated by the UNFCCC Secretariat, on “Strengthening collaboration to support countries in implementing the Paris Agreement” on November 16, 2017.

13. The GEF Secretariat participated in SBI 48 and SBSTA 48 and the resumed session of the Ad Hoc Working Group on the Paris Agreement (APA) (APA 1-5) from April 30 to May 10, 2018 in Bonn, Germany. Some relevant events that the GEF Secretariat participated in are listed below:

- (a) Side event on adaptation action in LDCs, organized by the UNFCCC and the LEG on May 2, 2018;
- (b) 2018 Expert Meeting on Mitigation: Implementation of circular economies and industrial waste re-use and prevention solutions on the role of the GEF in replicating and scaling up activities on circular economy and waste-to-energy on May 2, 2018;
- (c) Second Meeting of the Paris Committee on Capacity-building (PCCB) on May 3, 2018;
- (d) UNFCCC Side Event on Supporting the Implementation of Technology Action Plans (TAPs) on May 4, 2018;
- (e) UNFCCC side event on tracking and reporting climate action on May 8, 2018;
- (f) Long-term climate finance (LTF) workshop on May 8, 2018;
- (g) International Fund for Agricultural Development (IFAD) – Food and Agriculture Organization of the United Nations (FAO) – World Food Programme (WFP) side event discussing agriculture from a climate finance perspective on May 9, 2018.

14. Furthermore, the GEF participated in the UNFCCC-related meetings listed below and provided updates on GEF programming. GEF’s active engagement to inform Parties about its support options for the implementation of NDCs was of particular relevance at these meetings.

- (a) Thirty-second meeting of the LEG on 7-10 August, 2017 in Port-au-Prince, Haiti;
- (b) Standing Committee on Finance (SCF) Forum on 'Climate-resilient Infrastructure', on September 6-7, 2017 in Rabat, Morocco;
- (c) Sixteenth meeting of the SCF on September 18-21 in Bonn, Germany;
- (d) LEG Regional Training Workshop on NAPs for Francophone Africa on September 25-27, 2017 in Rabat, Morocco;
- (e) NAP Global Support Programme (GSP) Board meeting on February 1-2, 2018 in Bangkok, Thailand;
- (f) Thirty-third meeting of the LEG on February 6, 2018 in Sao Tome, Sao Tome and Principe;

- (g) GCF Technical Workshop on Climate Adaptation Finance on March 2-7, 2018, in Songdo, Republic of Korea;
- (h) Sixteenth meeting of the Technology Executive Committee (TEC) on March 15, 2018 in Bonn, Germany (remote participation);
- (i) NAP Expo on 6-8 April, 2018 in Sharm-el-Sheikh, Egypt; and
- (j) Seventeenth meeting of the SCF on April 10-12, 2018 in Bonn, Germany.

## **PART II: GEF INITIATIVES**

15. Various initiatives are underway to enhance GEF support for CCM and CCA, and for delivery of global environmental benefits (GEBs), in the areas of natural resource management and chemicals and waste. The GEF is also working to assist countries in moving towards the implementation of the Paris Agreement and COP 23 decisions, including as these relate to the CBIT, and to support developing country Parties in aligning, as appropriate, their programming with priorities as identified in their NDCs, where they exist, and promote synergies across its focal areas. The following sections discuss GEF initiatives to implement the Paris Agreement and COP 23 decisions, in addition to other GEF initiatives with clear benefits for CCM and CCA that were underway in the reporting period.

### **1. *The Paris Agreement and the 2030 Agenda for Sustainable Development***

16. The Paris Agreement and related COP decision affirmed the role of the GEF as part of the Financial Mechanism of the Convention. Article 9 of the Paris Agreement stated the Financial Mechanism of the Convention, including its operating entities, shall serve as the financial mechanism of this Agreement. Furthermore, Parties decided that the GCF and the GEF, as well as the LDCF and SCCF, shall serve the Paris Agreement. Given the GEF's mandate by the Paris Agreement, the GEF seeks to reinforce its support to developing country Parties on their efforts to implement the Agreement.

17. In particular, COP 21 requested the GEF to consider how to support developing country Parties in formulating policies, strategies, programs and projects to implement activities that advance priorities identified in their NDCs, starting in 2016. In addition, COP 22 encouraged the GEF to continue its efforts to encourage countries to align, as appropriate, their GEF programming with priorities as identified in their NDCs, where they exist, during GEF-7, and to continue to promote synergies across the focal areas.

18. As part of its response, the GEF, through its regular consultations with governments and agencies, for instance at GEF ECWs, has encouraged countries to consider explicit linkages between their (I)NDCs, planning, reporting and programming of resources from the GEFTF, the LDCF and the SCCF, as well as the CBIT, since the establishment of the CBIT Trust Fund in June 2016. In addition, the GEF consulted regularly with the UNFCCC Secretariat to reflect NDCs and the Paris Agreement in the draft Programming Directions and Policy Agenda for GEF-7, as elaborated in Part I, Section 2, of this report.

19. In addition to supporting CCM and CCA needs identified in (I)NDCs through the GEFTF, the LDCF and the SCCF, the GEF continued its support for projects to strengthen institutional and technical capacities of developing countries to meet the enhanced transparency requirements of

the Paris Agreement. Information to that effect is provided in the section on the CBIT (Part III, Section 3).

20. The 2030 Agenda for Sustainable Development, as embodied in the sustainable development goals (SDGs), was adopted in September 2015. Climate change, while cross-cutting in nature, has a dedicated goal under SDG 13 to take urgent action to combat climate change and its impacts.

21. The GEF support is relevant to help countries make progress on several SDG 13 targets and indicators, such as those relating to integration of climate change measures into national policies, strategies, and planning, climate finance, and capacity-building in LDCs and SIDS. The GEF contributions in this reporting period are summarized in Table 2.

**Table 2: GEF Contributions to Climate Change-Related SDG Targets and Indicators**

<i>Target</i>	<i>Indicator</i>	<i>GEF contributions</i>
13.2 Integrate climate change measures into national policies, strategies and planning	Indicator 13.2.1: Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas (GHG) emissions development in a manner that does not threaten food production (including a NAP, NDC, NC, BUR or other)	<p>The GEF has been supporting integrated policy, strategy, and planning in recipient countries.</p> <p>Among the projects and programs approved in calendar year 2017, 24 address integrated policy, strategy, and planning needs in 22 countries.</p> <p>In FY18, the GEF approved 20 NC and 22 BUR projects.</p> <p>LDCF and SCCF: Total funding from the LDCF towards the LDCs' NAP processes amounts to \$71.6 million<sup>15</sup> as at June 30, 2018. This support includes several projects that explicitly seek to advance NAP processes in Bangladesh, Chad, Democratic Republic of the Congo, Lao People's Democratic Republic, Niger, Rwanda, Sao Tome and Principe, Senegal and South Sudan, in addition to targeted technical assistance for tailored one-on-one support that continues to be provided through the LDCF-financed NAP GSP. In FY18, the LDCF/SCCF Council approved \$23.6 million through the LDCF, for four projects supporting the NAP process in LDCs.</p>

<sup>15</sup> This amount comprises projects that are explicitly dedicated, as the sole project objective or through dedicated components, to enhancing a country's NAP process.

<p>13.3: Improve education, awareness-raising and human and institutional capacity on CCM, CCA, impact reduction and early warning</p>	<p>13.3.2: Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement CCM, CCA and technology transfer, and development actions</p>	<p>Overall: In calendar year 2017, the GEF provided support to 89 countries (through 82 projects totaling \$166.2 million) on various aspects of capacity building as defined by the UNFCCC.</p> <p>CBIT: In FY18, the GEF supported 29 countries in enhancing their institutional and human capacity for transparency.</p>
<p>13.A: Implement the commitment undertaken by developed-country parties to the UNFCCC to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful CCM actions and transparency on implementation and fully operationalize the GCF through its capitalization as soon as possible</p>	<p>13.A.1: Mobilized amount of United States dollars per year starting in 2020 accountable towards the \$100 billion commitment</p>	<p>As a Financial Mechanism of the UNFCCC, the GEF contributes to the mobilization of support to address developing country needs for climate action.</p> <p>In calendar year 2017, the GEF recorded commitments of funding to 296 projects for a total of \$1.51 billion, of which 69 percent (or \$1.04 billion) was climate-related (using the Rio Markers methodology).</p> <p>In calendar year 2016, 63 percent of GEF commitments totaling \$1.18 billion were climate-related, or \$741 million. These figures cover all GEF trust funds, and were reported to the Organisation for Economic Co-operation and Development (OECD).</p>
<p>13.B: Promote mechanisms for raising capacity for effective climate change-related planning and management in LDCs and SIDS, including focusing on women, youth and local and marginalized communities</p>	<p>13.B.1.: Number of LDCs and SIDS that are receiving specialized support, and amount of support, including finance, technology and capacity-building, for mechanisms for raising capacities for effective climate change-related planning and management, including focusing on women, youth and local and marginalized communities</p>	<p>Overall: In calendar year 2017, the GEF supported capacity-building in 45 SIDS and LDCs through 33 projects, amounting to \$67.1 million.</p> <p>LDCF: 13 projects in LDCs (including three projects in SIDS) were approved in FY18, totaling \$78.4 million.</p> <p>CBIT: Of 30 projects totaling \$40.5 million approved in FY18, 13 projects for nine LDCs and four SIDS were supported with \$16.7 million.</p>

22. In line with the integrated, indivisible nature of the SDGs, countries are increasingly interested in pursuing integrated, cross-cutting opportunities for sustainable development that address MEAs and the SDGs. There is a close alignment of multiple SDGs with the GEF focal areas,

in addition to SDG 13, as summarized in Table 2, and many of the targets pertaining to the SDGs are similar or aligned to those being tracked as part of the GEF-6 and GEF-7 Programming Directions. The GEF Secretariat continues to work with relevant institutions and countries to explore possible synergies in addressing the SDGs in GEF programming, within its mandate.

23. The role of the GEF as a/the financial mechanism of multiple conventions that address various aspects of the SDGs is reflected in recent COP decisions of the Convention on Biological Diversity (CBD), Stockholm Convention, and the United Nations Convention to Combat Desertification (UNCCD). Of relevance to climate change is the UNCCD COP decision to request the GEF to support the voluntary target setting of land degradation neutrality (LDN), which is SDG target 15.3. The LDN encompasses the climate agenda, exemplified in the LDN target's sub-indicators 'carbon stocks above and below ground', 'land productivity', and 'land cover and land cover change.' Furthermore, the most recent UNCCD COP decision references "several Sustainable Development Goals, including those relating to climate change": "Further invites multilateral development banks, international development finance institutions, bilateral development organizations, the Global Environment Facility, climate finance institutions including the Green Climate Fund and the Adaptation Fund, the LDN Fund, as well as non-governmental funding facilities, including foundations and private sector entities, to: Scale up financing for activities related to combating desertification/land degradation and drought, achieving land degradation neutrality and advancing the implementation of the Convention, taking into consideration the multiple benefits of these investments and their contribution to the achievement of several Sustainable Development Goals, including those relating to climate change."<sup>16</sup>

24. In the reporting period, the GEF Secretariat undertook initiatives to facilitate synergies in the implementation of MEAs and also highlight interlinkages with the SDGs. For example, a high level roundtable on "Partnerships for Implementing the 2030 Agenda" was organized during the sixth GEF Assembly on June 27, 2018, with participation of the CBD Executive Secretary, United Nations Development Programme (UNDP) Administrator, GCF Executive Director, and a World Bank Vice President, among other high-level panelists. The GEF Secretariat also organized a session on "Financing Synergy: Land and Climate Actions" at the UNCCD COP 13 on September 9, 2017, to explore opportunities and challenges of financing integrated land and climate action from national and global perspectives, including SDG 15.3. The UNCCD Executive Secretary, among other high-level representatives from countries, GCF, GEF and the World Bank, took part in this session.

## **2. GEF-6 Achievements**

### ***a. Capacity-building Initiative for Transparency***

25. Parties at COP 21 decided to establish "a Capacity-building Initiative for Transparency in order to build institutional and technical capacity, both pre- and post-2020" that "will support developing country Parties, upon request, in meeting enhanced transparency requirements as defined in Article 13 of the Agreement in a timely manner." They urged and requested the GEF to make arrangements to support the establishment and operation of the CBIT, including through

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<sup>16</sup> Decision 14/COP.13.

voluntary contributions to support developing countries during GEF-6 and future replenishment cycles.

26. The CBIT Trust Fund was established in September 2016, in accordance with the World Bank's applicable policies and procedures, upon approval by the 50<sup>th</sup> GEF Council meeting and in response to the Paris Agreement and its decision. Since the last GEF report to the COP, one additional donor, Japan, pledged its contribution to the CBIT Trust Fund. As at June 30, 2018, the Trustee has received total donor contributions amounting to \$56.0 million out of the \$61.1 million pledged by fourteen donors.

27. Within two years of the CBIT's establishment, the GEF Secretariat has successfully programmed virtually all available resources in the CBIT Trust Fund, thereby making a significant contribution to supporting the timely implementation of the Paris Agreement.

28. In the reporting period, the GEF Secretariat has approved one additional global CBIT project and 29 national projects in Antigua and Barbuda, Argentina, Azerbaijan, Bangladesh, Bosnia and Herzegovina, Burkina Faso, Côte D'Ivoire, Cuba, Dominican Republic, Ethiopia, Eswatini, Georgia, Honduras, Jamaica, Lao People's Democratic Republic, Lebanon, Liberia, Madagascar, Mexico, Montenegro, Morocco, Panama, Peru, Rwanda, Serbia, Sierra Leone, Sri Lanka, the former Yugoslav Republic of Macedonia and Togo (See Part III, Section 3).

29. The entire CBIT project portfolio under the GEF-6 includes 39 national projects and two global projects, amounting to \$53.2 million or 97 percent of the total funds held in trust. An additional \$31.8 million in co-financing for 41 CBIT projects was leveraged under GEF-6. The CBIT portfolio includes projects in eleven LDCs and five SIDS, or 41 percent of all national projects approved under the CBIT. This is in line with the Programming Directions, which stipulated that "proposals [would] be prioritized for those countries that are in most need of capacity-building assistance for transparency-related activities, in particular [SIDS and LDCs]."<sup>17</sup>

30. The GEF Council at its 54<sup>th</sup> meeting adopted the GEF-7 Programming Directions, which include specific provisions for CBIT support through the Climate Change Focal Area. This is in line with the document on the establishment of the CBIT Trust Fund, which states that the CBIT efforts will be an integral part of GEF's climate change support for GEF-7, financed by the GEFTF under regular replenishment.<sup>18</sup>

31. The GEF Council also adopted a decision at its 54<sup>th</sup> meeting to extend the end contribution date to the CBIT Trust Fund from June 30, 2018 to October 31, 2018 to allow for one final contribution payment to be finalized. No new contributions will be received from donors after this date and funds received will be used to approve projects, activities or programmatic frameworks until the end of October 31, 2018. All other terms, as approved by the GEF Council in the document on the establishment of the CBIT Trust Fund, remain unchanged.

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<sup>17</sup> GEF, 2016, [Programming Directions for the Capacity-building Initiative for Transparency](#), Council Document GEF/C.50/06.

<sup>18</sup> GEF, 2016, [Establishment of a New Trust Fund for the Capacity-building Initiative for Transparency](#), Council Document GEF/C.50/05.

## ***b. Integrated Approach Pilot Programs***

32. A key feature of the GEF since its inception has been to stimulate innovative approaches to deal with existing and emerging complex challenges facing the global environment. One such direction is to reconnect environment-related investments previously dealt with in an isolated manner into more integrated portfolios that can better deal with complex, multi-faceted issues.

33. This integrated thinking was reflected in the GEF-6 CCM Program, aimed at supporting developing countries and CEIT in making transformational shifts towards a low-emission and resilient development path (see Table 8) through objectives that include facilitating innovation, catalyzing systemic impacts, and mainstreaming CCM goals into sustainable development.

34. The GEF-6 Programming Directions identified three priority themes where GEF resources can address key drivers of environmental degradation at global or regional scales; tackle the most urgent time-bound issues or problems which may become too costly to reverse if not addressed; and fulfill a critical niche to help transform and scale up the ongoing work of others. These three efforts, also known as IAP programs, have been applied in the following areas:

- (a) Taking deforestation out of commodity supply chains;
- (b) Fostering sustainability and resilience for food security in Sub-Saharan Africa; and
- (c) Sustainable cities - harnessing local action for global commons.

35. The paragraphs below provide an update on progress across the three IAP programs, which are expected to deliver substantial CCM benefits. The programs also seek to enhance resilience; child projects of the Food Security IAP program, for example, are reducing vulnerability to adverse effects of climate change and variability on smallholder agriculture in the semi-arid region of sub-Saharan Africa. Selected child projects of the Sustainable Cities IAP program (in Senegal, South Africa and Viet Nam) are aiming to reduce flood risk through measures, such as improved storm water management systems.

### *Commodities IAP program*

36. The IAP program on taking deforestation out of commodity supply chains, rebranded in 2017 as the Good Growth Partnership, is a \$40 million<sup>19</sup> GEFTF initiative that builds on the significant commitments made by companies, industry groups and governments to develop results at scale in eliminating deforestation from agricultural commodities production. Leveraging nearly \$263 million of additional resources, this program is working with governments, the private sector, communities, civil society and consumers to tackle a set of key drivers of deforestation. The program is estimated to deliver 66 Mt CO<sub>2</sub> eq in emission reductions through advances in sustainable forest management (SFM), and by greening the supply chain for each of the three commodities it is focused on: palm oil, soy and beef. Table 3 below summarizes the design of the Commodities IAP program. All of five child projects of this program were initiated in the reporting period.

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<sup>19</sup> Excluding agency fees.

**Table 3: Design of the Commodities IAP**

<b>Supply chain element</b>	<b>Palm oil</b>	<b>Soy</b>	<b>Beef</b>	<b>GEF amount (\$ million)</b>	<b>Co-financing (\$ million)</b>	<b>GHG emissions avoided<sup>20</sup> (kt)</b>
<b>Support to production</b> Agencies: UNDP (lead), Conservation International (CI), World Wildlife Fund (WWF)	Indonesia and Liberia as participating countries; engagement with round tables, private sector, production systems and smallholders; Tropical Forest Alliance and Consumer Goods Forum	Brazil <sup>21</sup> as participating country; engagement with market/private sector actors and production systems	Paraguay as participating country; engagement with landscape-level production systems, private sector, production and traceability systems	21.1 <sup>22</sup>	192.9 <sup>23</sup>	66,124
<b>Enabling transactions</b> Agencies: World Bank/International Finance Corporation (IFC) (lead), United Nations Environment Programme (UNEP), WWF	Engagement with the private sector; financial institutions, financial market benchmarking; risk analysis and methodologies	Engagement with the private sector; financial institutions, financial market benchmarking; risk analysis and methodologies	Engagement with private sector; financial institutions, financial market benchmarking; risk analysis and methodologies	6.4	23.0	n/a
<b>Generating responsible demand</b> Agencies: WWF (lead), UNDP	Engagement with the private sector, associations and round tables, Consumer Goods Forum	Engagement with soy traders and round tables, Consumer Goods Forum	Engagement with private sector and round tables, Consumer Goods Forum	8.7	42.3	n/a
<b>Adaptive management and learning</b> Agency: UNDP (lead)	Cross-cutting focus on knowledge management, coordination and global level engagement to advance practices for taking deforestation out of commodity supply chains			4.0	5.3	n/a
<b>Total</b>				<b>40.3</b>	<b>263.5</b>	<b>66,124</b>

<sup>20</sup> The GHG numbers for the three IAP tables presented in this section represent anticipated emissions.

<sup>21</sup> The Government of Brazil requested an explicit focus on the soy supply chain and proposed that a single child project be formulated that brings together substantive aspects of the Production, Enabling Transactions, and Responsible Demand child projects.

<sup>22</sup> The Production child project received \$14.6 million and the Brazil child project \$6.6 million.

<sup>23</sup> The Production child project leveraged \$164.7 million and the Brazil child project \$28.2 million.

### Food Security IAP Program

37. The Food Security IAP program aims to work with small-scale farmers in sub-Saharan Africa to sustainably increase yields, thereby enhancing food security for millions of poor people, while preventing desertification, improving land health, and sequestering carbon through sustainable land management (SLM) and climate-smart agriculture. The program draws on \$106 million in GEF grants, will leverage approximately \$785 million in co-financing, and is expected to deliver more than 31 Mt CO<sub>2</sub> eq in emission reductions. Building resilience to climate variability and change in this highly vulnerable, semi-arid region is also a key consideration of its child projects. In the reporting period, all of thirteen child projects of this program were CEO-endorsed and they are expected to start their implementation.

38. Table 4 below summarizes the participating countries, their respective resource packages and anticipated GHG emission reductions.

**Table 4: Participating Countries of the Food Security IAP Program**

<i>Child projects</i>	<i>Agency</i>	<i>GEF amount (\$ million)</i>	<i>Co-financing (\$ million)</i>	<i>GHG emissions avoided (kt)</i>
Burkina Faso	IFAD	7.2	35.9	12,621
Burundi	IFAD/FAO	7.3	45	2,649
Ethiopia	UNDP	10.2	144	tbd <sup>24</sup>
Eswatini	IFAD	7.2	48	1,303
Ghana	World Bank	12.7	22	4,541
Kenya	IFAD/UNEP	7.2	61	1,646
Malawi	IFAD/FAO	7.1	87.3	1,775
Niger	IFAD	7.6	60.3	346
Nigeria	UNDP	7.1	57	tbd <sup>25</sup>
Senegal	IFAD/UNIDO	7.2	28.5	5,177 <sup>26</sup>
Tanzania	IFAD	7.1	52.9	915
Uganda	UNDP/FAO	7.1	58	481
Cross-cutting capacity-building, knowledge services and coordination	IFAD	11.0	85	n/a <sup>27</sup>
<b>Total</b>		<b>106.3<sup>28</sup></b>	<b>785.2</b>	<b>31,454</b>

### Sustainable Cities IAP Program

39. The Sustainable Cities IAP program is a flagship initiative that draws on \$138 million in GEF resources and \$2.42 billion in co-financing. It aims to support integrated models of urban design, planning, and management to influence cities' resource flows and investments for years to come. Given the extent of urban infrastructure development that is expected to take place in developing countries over the coming decades, the program comes at an opportune time.

<sup>24</sup> Estimates of GHG emission benefits will be established at project inception.

<sup>25</sup> Ibid.

<sup>26</sup> Emission reduction in Senegal is the sum of direct emission reduction (1,642t) and high threshold of indirect emission reduction (6,500t-5,175,000t).

<sup>27</sup> This Food Security IAP hub project will not be engaged in on-the-ground activities to generate GEBs.

<sup>28</sup> This figure does not include agency fees.

40. Child projects under this IAP program include investments in 27 cities that together cover all aspects of urban sustainability: access to services such as public transport and clean water supply, green buildings and other interventions designed to mitigate GHG emissions and air pollution, resource efficiency, waste management, ecosystem protection, and biodiversity. Climate resilience, and resilience to flood risk, was identified as a critical need in selected cities. The expected CCM benefit of the program is 98 Mt CO<sub>2</sub> eq (see Table 5).

41. In addition to funding activities at the city level, \$10 million is allocated for global knowledge coordination, programmatic support, and experience-sharing between IAP and non-IAP cities or sustainability-focused organizations. Out of twelve child projects of this program, one project was CEO-endorsed and eleven projects were initiated in the reporting period.

**Table 5: Participating Countries and Cities of the Sustainable Cities IAP Program**

<i>Child projects</i>	<i>Pilot cities</i>	<i>Agency</i>	<i>GEF amount<sup>29</sup> (\$ million)</i>	<i>Co-financing (\$ million)</i>	<i>GHG emissions avoided<sup>30</sup> (kt)</i>
Brazil	Brasilia, Recife	UNEP	23	196	3,802
China	Guiyang, Shenzhen, Ningbo, Nanchang, Beijing, Tianjin, Shijiazhuang	World Bank	33	1,084	62,000
Côte D'Ivoire	Abidjan	AfDB/UNIDO	5	33	909
India	Vijayawada-Guntur, Mysore, Jaipur, Bhopal	UNIDO	12	114	5,720
Malaysia	Melaka	UNIDO	3	20	4,348
Mexico	La Paz, Campeche, Xalapa	IDB	14	98	457
Paraguay	Gran Asuncion	UNDP	7	240	1,227
Peru	Lima	IDB	6	301	1,805
Senegal	Dakar, Saint Louis, Diamniadio	World Bank/UNIDO	9	52	855
South Africa	Johannesburg	UNEP/DBSA	8	124	4,400
Viet Nam	Hue, Vinh Yen, Ha Giang	ADB	8	148	11,300
Global Platform	N/A	World Bank	10	5	
<b>Total</b>	<b>27 cities</b>		<b>138</b>	<b>2,416</b>	<b>97,661</b>

<sup>29</sup> Excluding agency fees.

<sup>30</sup> The anticipated avoided GHG emissions of the Sustainable Cities IAP program child projects have been accounted in the CCM Section.

### ***c. Innovations in Blended Finance***

42. Building on successful interventions during GEF-4 and GEF-5, the GEF has prioritized innovative approaches for blended finance in GEF-6. In line with COP guidance<sup>31</sup>, the emphasis has been to identify new opportunities to deploy non-grant instruments, including debt, equity, and risk sharing instruments, that deliver innovative projects and catalytic partnerships and help attract additional private sector participation leading to enhanced climate change benefits.

43. Blended finance investments were implemented through a \$110 million pilot program, launched at the beginning of GEF-6, to demonstrate and validate the application of non-grant financial instruments to combat global environmental degradation. Considering GEF's role in innovating high-impact approaches, the GEF offers concessional finance for both public and private sector recipients. By demonstrating and validating successful models for the use of non-grant instruments, the GEF is creating opportunities for large-scale changes through broader adoption that may also be useful for other international environmental finance mechanisms.

44. During the GEF-6 cycle (July 1, 2014 to June 30, 2018), the GEF has supported eleven non-grant projects covering multiple focal areas, including eight projects that directly deliver CCM benefits. These projects allocate a total of \$78.4 million in GEF financing and leverage almost \$1.4 billion in co-financing, including more than \$1.1 billion from the private sector. In the reporting period, the GEF approved one non-grant full-sized project (FSP) with CCM benefits, providing \$8.2 million and leveraging \$102 million in co-financing. This project ("Coalition for Private Investment in Conservation (CPIC) Conservation Finance Initiative - Scaling up and Demonstrating the Value of Blended Finance in Conservation") will improve the conservation and sustainable use of biodiversity by demonstrating innovative finance-blending models to increase return-seeking private investment in conservation, while also delivering CCM benefits.

45. The GEF-6 non-grant pilot has helped de-risk investments by the private sector and other partners, thereby promoting innovation and demonstration of new business models and technologies at the early stages of market development. The GEF-6 portfolio provides strong evidence for an increasing number of opportunities for investment in the Agriculture, Forestry and Other Land Use (AFOLU) sector, where the GEF can provide critical seed capital and de-risking to help pioneering project developers and small-holders implement SLM and SFM practices. The GEF portfolio for these types of projects not only supports the UNFCCC priorities for CCM, but can also promote resilience and help deliver additional GEBs.

## **3. GEF-7 Outlook**

### ***a. Seventh replenishment of the GEF Trust Fund***

46. The GEF-7 replenishment discussions<sup>32</sup> were completed in the Spring of 2018 with consensus reached by the participants on the Programming Directions, Policy Recommendations, and the Financing Framework that will lead to a successful and impactful portfolio of GEF investments for

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<sup>31</sup> Decision 8/CP.21, paragraph 10.

<sup>32</sup> The following replenishment meetings were held: March 2017 in Paris, France; October 2017 in Addis Ababa, Ethiopia; January 2018 in Brasilia, Brazil; and April 2018 in Stockholm, Sweden.

the period of 2018-2022. These documents were formally presented at, and endorsed by, the 54<sup>th</sup> GEF Council and sixth GEF Assembly meetings in Da Nang, Viet Nam in June 2018.

47. The Programming Directions build on GEF's unique position as financial mechanism of several MEAs. The GEF occupies a unique space in the global environmental financing architecture derived from its formal mandate as a financing mechanism under several, multilateral environmental agreements: CBD, UNCCD, UNFCCC, the Minamata Convention, the Stockholm Convention, the Montreal Protocol (where the GEF supports CEIT), in addition to targeted support for transboundary freshwater and marine issues.

48. The Programming Directions also aim to address common drivers of environmental degradation and to foster transformative change in key socio-economic systems that can have lasting and positive impacts in delivering GEBs. The final architecture of the GEF-7 Programming Directions<sup>33</sup> reflects these considerations and combines direct entry points into focal area strategies and investments, including CCM, as well as entry points and investments in Impact Programs on sustainable cities; food, land use, and restoration, and SFM.

49. While finalizing the Programming Directions, the GEF Secretariat followed the COP 23 guidance that encouraged the GEF to further enhance its engagement with the private sector and invited it to support developing countries in piloting priority technology projects to foster innovation and investment. The COP further welcomed the operationalization of the CBIT.

50. Prior COP guidance also encouraged the GEF to align GEF-7 programming with priorities identified in NDCs and to continue to promote synergies across focal areas. In view of the GEF's comparative advantage in fostering innovative project designs, its proven track record of support for technology transfer, and its ability to attract private sector co-financing, and pursuing complementarity with the GCF, the GEF-7 Climate Change Focal Area Strategy is focused on the following objectives:

- (a) Objective 1: Promoting innovation and technology transfer for sustainable energy breakthroughs;
- (b) Objective 2: Demonstrating mitigation options with systemic impacts; and
- (c) Objective 3: Fostering enabling conditions for mainstreaming mitigation concerns into sustainable development strategies.

51. The GEF-7 resource allocation framework includes \$802 million for CCM, including \$511 million country allocations from STAR and \$291 million from STAR Set-Asides. Annex 1 provides an overview of the GEF-7 STAR country allocations. The GEF-7 Programming Directions build upon focal area investments and Impact Programs, aiming to transform urban, food, and land use systems to deliver lasting benefits across all MEAs.

52. Focal area investments will include the following eligible activities:

- (a) De-centralized renewable energy with energy storage;
- (b) Electric drive technologies and electric mobility;

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<sup>33</sup> GEF, 2018, [Summary of the Negotiations of the Seventh Replenishment of the GEF Trust Fund](#), Council Document GEF/C.54/19/Rev.03.

- (c) Accelerating energy efficiency adoption; and
- (d) Cleantech innovation.

53. The Sustainable Cities Impact Program will be critical to address climate change challenges in the rapidly growing urban sector. Cities must be empowered to effectively support the implementation of NDCs and low-carbon development pathways. Examples of low-carbon technologies (LCTs) and practices needed in urban sectors include: energy efficiency (buildings, lighting, air conditioning, transport and district heating systems), renewable energy development (solar, wind, co-generation, waste-to-energy), and solid waste and wastewater management.

54. The Food, Land Use, and Restoration Impact Program will foster climate smart agriculture and SLM that reduces GHG emissions by restoring agricultural productivity. It will also promote a sustainable supply chain for key agricultural commodities that is vital to long-term emission reductions from agriculture through avoided deforestation of tropical forests. In addition, this Impact Program will also support measures that increase storage in farmlands, and may include innovative soil quality improving techniques that reduce GHG emissions.

55. The Sustainable Forest Management Impact Program will focus on maintaining and restoring carbon stocks in the Amazon, the Congo Basin, and dryland forests. Taken together, these three biomes are critical to halting the release of GHG emissions through avoided deforestation and by enhancing carbon stocks.

56. As part of a comprehensive results-based framework<sup>34</sup> for GEF-7, 1.5 billion t CO<sub>2</sub> eq of GHG emissions will be avoided. This represents double the GHG emission reduction benefits compared to the GEF-6 target, despite a 36 percent decrease in overall funding for this focal area in GEF-7 compared to GEF-6. The GEF-6 target for GHG emission reduction benefits has been exceeded by 189 percent. GHG emissions avoided will be achieved through both focal area investments and Impact Programs.

57. Climate Change Focal Area investments, as described above, will be complemented by support for EAs, including NCs, BURs and other Convention obligations, as well as separate grants for the CBIT. They will be supported through set-aside resources, outside the STAR country allocations.

#### ***b. Climate Change Adaptation Programming Strategy***

58. The development of, and consultations on, the document titled GEF Programming Strategy on Adaptation to Climate Change for the LDCF and SCCF and Operational Improvements for the period of July 2018 to June 2022 took place in the reporting period.<sup>35</sup> Initial discussions were held at the 23<sup>rd</sup> LDCF/SCCF Council meeting on November 30, 2017, under the agenda item on the Strategic Alignment of the LDCF Pipeline.

59. The goal of the GEF-7 Adaptation Programming Strategy is to strengthen resilience and reduce vulnerability to the adverse impacts of climate change in developing countries, and

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<sup>34</sup> GEF, 2018, [Updated Results Architecture for GEF-7](#), Council Document GEF/C.54/11/Rev.02.

<sup>35</sup> GEF, 2018, [GEF Programming Strategy on Adaptation to Climate Change for the Least Developed Countries Fund and the Special Climate Change Fund and Operational Improvements](#), Council Document GEF/LDCF.SCCF.24/03.

support their efforts to enhance adaptive capacity. This goal is fully aligned with the Paris Agreement's global goal on adaptation and anchors the contributions of the LDCF and SCCF, which Parties decided "shall serve the [Paris] Agreement."<sup>36</sup>

60. To achieve this goal, the strategy emphasizes three strategic objectives for the LDCF and SCCF:

- (a) Objective 1: Reducing vulnerability and increase resilience through innovation and technology transfer for climate change adaptation;
- (b) Objective 2: Mainstreaming climate change adaptation and resilience for systemic impact; and
- (c) Objective 3: Fostering enabling conditions for effective and integrated climate change adaptation.

61. The Strategy has been developed to continue to respond to COP guidance, to build on the comparative advantages of the GEF, LDCF, and SCCF, to further enhance complementarity among climate financing entities, and to help countries achieve the goals of the Convention and the Paris Agreement related to adaptation.

62. The GEF Secretariat took the following steps in the consultations and technical review of the Strategy, which was approved at the 24<sup>th</sup> LDCF/SCCF Council meeting in June 2018:

- (a) Request at the 23<sup>rd</sup> LDCF/SCCF Council meeting in November 2017 to interested countries and other stakeholders to express their willingness to engage with the GEF Secretariat;
- (b) Distribution of a tentative consultation schedule in mid-January 2018 requesting countries and other stakeholders to confirm their interest to engage;
- (c) Informal bilateral consultations with interested representatives in March and April 2018;
- (d) Technical review of draft Strategy, starting on April 13, 2018, to solicit comments from relevant adaptation-related funds, including the GCF, Adaptation Fund, and Climate Investment Funds (CIF), expert institutions on adaptation, LEG, UNFCCC and UNCCD secretariats, and selected GEF agencies;
- (e) Distribution of draft Strategy on April 17, 2018;
- (f) Consultative meeting with donor representatives, Chair and members of the LDC Group, and UNFCCC representatives on April 29, 2018 in Bonn, Germany;
- (g) Consultations with LDC representatives on May 2, 2018 in Bonn, Germany; and
- (h) Consultation with donor and recipient representatives on May 23, 2018 through a telephone/video conference.

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<sup>36</sup> Decision 1/CP.21, paragraph 58.

#### **4. Complementarity in Climate Finance**

63. In the reporting period, efforts to enhance complementarity with the GCF have continued, in response to COP guidance.

64. The GEF and GCF focal points followed up on items of mutual relevance and the areas previously elaborated for potential enhanced collaboration<sup>37</sup> during several teleconferences.

65. The GEF Secretariat hosted a delegation of the GCF Secretariat in Washington, D.C. for the GCF-GEF Technical Workshop on February 7, 2018 to further advance the action plan. Specifically, technical staff from both secretariats agreed on a list of nine next steps, as follows:

- (a) Organize ECWs/structured dialogues together, or back-to-back, to raise awareness of different support opportunities and access processes;
- (b) Identify countries where joint national dialogue/country programming frameworks could be held;
- (c) Share dates and locations of country/regional outreach meetings;
- (d) Identify additional countries for the joint programming pilot, and agree on a set of approximately five countries;
- (e) Identify current and possible pathways and operational roadmaps for joint programming and share them with countries/agencies, as appropriate;
- (f) Set up a technical platform/group on indicators, results and methodologies;
- (g) Share portfolio-level updates, such as pipelines on NAPs or REDD+, through regular teleconferences every three to four months, or when decisions are made that are of relevance to the other organization;
- (h) Explore feasibility of requesting countries/agencies to summarize GEF and/or GCF support given to them (recent, ongoing, and planned) in project documents, so as to enable better tracking of complementary support and also to identify opportunities for linkages;
- (i) On private sector: Scale up GEF non-grant instrument (NGI) projects, share outreach documentation such as the “Green Finance” brochure, share ideas and experiences on innovative incubators.

66. Upon request from the GCF Secretariat, the GEF Secretariat made arrangements to enable a GCF Secretariat staff member to observe the second, third and fourth GEF-7 replenishment meetings in October 2017, and January and April 2018, respectively, to help prepare for the GCF replenishment. A GCF representative also observed the first replenishment meeting in the previous reporting period.

67. As a follow-up to the GCF-GEF Technical Workshop in February 2018, the GCF and GEF Secretariats co-organized “Informal Ministerial Dialogue on GCF and GEF Coordinated Engagement” on 26 June 2018 at the sixth GEF Assembly meeting in Da Nang, Viet Nam, to discuss

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<sup>37</sup> For the list of areas that emerged in terms of practical steps for potential enhanced complementarity and coherence, see [Report of the Global Environment Facility to the Twenty-third Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change](#), paragraph 53.

coordinated national engagements and enhancing linkages and synergies between GEF and GCF projects. The GCF Secretariat also provided comments on the *GEF Programming Strategy on Adaptation to Climate Change for the Least Developed Countries Fund and the Special Climate Change Fund and Operational Improvements (July 2018 to June 2022)* draft document in April 2018, in response to the request from the GEF Secretariat as part of the technical review of this document. The GEF Secretariat has addressed the comments and suggestions provided, so as to ensure that GCF activities and inputs are reflected in the Strategy to enhance complementarity and financial leverage. The GEF Secretariat also collaborated with the GCF Secretariat and other funds to develop a results framework to identify common sets of indicators and outcomes/outputs across the various adaptation-related funds to inform this Strategy.

68. The GEF and GCF Secretariats organized their first joint side event at COP 23 on ‘Strengthening Collaboration to Support Countries in Implementing the Paris Agreement’, co-chaired by the GEF CEO/Chairperson and the GCF Executive Director. A summary of the event can be found online.<sup>38</sup> The GEF also took part in the Annual Dialogue with the Climate Finance Delivery Channel, organized by the GCF Secretariat during COP 23, and collaborated with the GCF, Adaptation Fund, and UNFCCC secretariats on the organization of a Direct Access Entity event.

69. In addition, since the beginning of 2018, two technical and informal GEF–GCF groups have connected through teleconference: one group facilitating discussions on adaptation and the other on forest and land issues. The objective of these discussion groups is to provide a forum for quarterly updates so that duplication of actions can be minimized and synergies enhanced.

70. The GEF Secretariat representative participated in GCF’s Technical Expert Workshop on Climate Adaptation Finance on March 5-6, 2018, in Songdo, Republic of Korea, where lessons learned from the LDCF and SCCF support to adaptation were shared. The GEF and GCF staff members also held bilateral meetings on key subjects, including organization of an informal ministerial discussion at the GEF Assembly, partnership and collaborative programming potential, and preparations for the UNFCCC meetings in April to May 2018 in Bonn, Germany.

71. The GEF and GCF staff have continued to discuss other items of mutual relevance on a regular basis, as needed.

## **5. Gender Equality**

72. An analysis of GEF-6 projects in response to decision 21/CP.22, paragraph 21, suggests that GEF is making good progress addressing gender equality. As of March 2018, 66 percent of GEF-6 projects conducted or planned to conduct a gender analysis compared to the GEF-5 baseline of 18 percent.<sup>39</sup> The Council adopted a new Policy on Gender Equality in November 2017, introducing new principles and requirements to mainstream gender in the design, implementation and evaluation of GEF programs and projects.<sup>40</sup> It marks a distinct shift in GEF’s approach to gender mainstreaming—from a gender-aware “do no harm” approach to a gender-responsive “do good” approach that will allow the GEF to more strategically seize opportunities to address gender gaps critical to the achievement of global environmental benefits. This new approach reflects increased

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<sup>38</sup> IISD Reporting Services, 2017, [Summary of the event Strengthening Collaboration to Support Countries in Implementing the Paris Agreement – a Joint GEF-GCF Side Event](#).

<sup>39</sup> GEF, 2018, [Progress Report on the Gender Equality Action Plan](#), Council Document GEF/C.54/Inf.04.

<sup>40</sup> GEF, 2017, [Policy on Gender Equality](#), Council Document GEF/C.53/04.

recognition by the parties to the UNFCCC of the importance to involve women and men equally in the development and implementation of national climate policies and projects.

73. With its more integrated systems approach, GEF-7 programming provides renewed opportunities for the GEF to harness opportunities to connect climate benefits and gender equality for more robust results. To support the implementation of the new Policy within the context of GEF-7, the GEF launched new guidelines<sup>41</sup> to advance gender equality in GEF projects and programs, as well as a Gender Implementation Strategy, which was approved by the GEF Council in June 2018.<sup>42</sup> This strategy is organized around key gender gaps relevant to the global environment, and the corresponding strategic entry points for promoting gender equality and women's empowerment in the context of GEF-7 programming. It elaborates on four priority action areas in which the GEF will work to implement the Policy, including: (i) Promoting gender-responsive approaches and results in programs and projects; (ii) enhancing capacity of GEF Secretariat and its partners to address gender equality; (iii) increasing GEF's collaboration with partners to generate knowledge and contribute to learning on links between gender and the environment; and (iv) enhancing GEF's corporate processes and systems for tracking and reporting on gender equality results.

### **PART III: GEF ACHIEVEMENTS**

#### **1. *Climate Change Mitigation***

##### ***a. Overview of GEF Support for Mitigation***

74. Since its establishment in 1991, the GEF has been funding projects on CCM in developing countries and CEIT. As at June 30, 2018, the GEF has supported 944 projects on CCM with over \$5.6 billion GEF funding in more than 165 countries (excluding EAs, NC and BUR projects, see Table 6). Most of these were funded from the GEFTF. The GEF funding leveraged over \$47 billion from a variety of sources, including GEF agencies, national and local governments, multilateral and bilateral agencies, the private sector, and CSOs, with an average co-financing ratio of one (GEF) to 8.4 (co-financing). To date, the GEF has also supported 370 EAs, including NCs and BURs as countries' obligation under the Convention, with over \$460 million in funding from the GEFTF (see Table 17 and Table 18). The GEF's support to EAs is described in Section 5 of Part III.

75. Out of 944 projects that were implemented in developing countries and CEIT (see Table 6), 26.4 percent were in Africa, 30.5 percent in Asia, 18.5 percent in Latin America and the Caribbean (LAC), and 16.4 percent in Eastern Europe and Central Asia (ECA). In addition, there were 77 global and regional projects that account for eight percent of the overall CCM portfolio. Fourteen GEF agencies have participated in the implementation of these CCM projects. The UNDP, the World Bank, the UNEP, and the United Nations Industrial Development Organization (UNIDO) have the major shares of the portfolio in project development and implementation.

76. Table 7 categorizes these 944 projects in the areas of technology transfer, energy efficiency, renewable energy, sustainable transport and urban systems, AFOLU, the Small Grants Program (SGP), and mixed and others. They also include projects with multiple CCM objectives

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<sup>41</sup> GEF, 2018, [Guidance to Advance Gender Equality in GEF Projects and Programs](#), Council Document GEF/C.54/Inf.05.

<sup>42</sup> GEF, 2018, [GEF Gender Implementation Strategy](#), Council Document GEF/C.54/06.

that have direct impact on GHG emission reductions. The total combined share of energy efficiency and renewable energy projects is significant, accounting for approximately 52 percent in terms of total number of projects, and 44 percent in terms of total CCM funding. The AFOLU as single-sector CCM projects accounts for 18 percent of the total project numbers and 23 percent of the total CCM funding. The funding of sustainable transport and urban systems projects has doubled in GEF-6 to reach a total of 99 projects with \$612 million since GEF inception, corresponding to ten percent of the total project numbers and eleven percent of the total CCM funding.

77. The GEF has supported technology transfer in CCM projects and programs. Overall, the GEF CCM portfolio can be characterized as supporting technology transfer as outlined by the COP. The GEF support focuses on testing and demonstrating innovative mechanisms that are complementary to the efforts of other financial mechanisms to scale up, replicate and reach critical mass in a timely manner.

**Table 6: GEF Projects on Climate Change Mitigation by Region (GEF Pilot Phase to GEF-6) (Excluding EA, NC and BUR Projects)**

Region	Projects		GEF amount <sup>a</sup>		Co-financing <sup>b</sup>		Co-financing ratio
	Number	Share	\$ millions	Share	\$ millions	Share	
Africa	249	26.4%	1,200.6	21.3%	8,694.9	18.3%	7.2
Asia	288	30.5%	1,915.0	33.9%	22,124.6	46.6%	11.6
ECA	155	16.4%	758.4	13.4%	6,546.9	13.8%	8.6
LAC	175	18.5%	1,161.0	20.6%	8,047.9	16.9%	6.9
Global	66	7.0%	530.0	9.4%	1,385.9	2.9%	2.6
Regional	11	1.2%	83.1	1.5%	712.4	1.5%	8.6
<b>Total</b>	<b>944</b>	<b>100.0%</b>	<b>5,648</b>	<b>100.0%</b>	<b>47,513</b>	<b>100.0%</b>	<b>8.4</b>

<sup>a</sup> These amounts include all focal area contributions to climate change, including agency fees and project preparation grants (PPGs). The total includes \$1.32 billion from other focal areas and set-asides, including IAPs and non-grant instruments. Parent programs were not counted, only child projects under parent programs were counted. Public-Private Partnerships (PPPs) are not considered as programs for reporting purposes.

<sup>b</sup> These numbers include actual and expected co-financing.

**Table 7: GEF Projects on Climate Change Mitigation by Phase (Excluding EA, NC and BUR Projects) (In \$ Million)**

<i>Phase</i>	<i>Technology Transfer/ Innovative Low-carbon Technologies (LCTs)<sup>a</sup></i>	<i>Energy Efficiency</i>	<i>Renewable Energy</i>	<i>Transport/Urban</i>	<i>AFOLU<sup>b</sup></i>	<i>SGP<sup>c</sup></i>	<i>Mixed and others<sup>d</sup></i>	<i>Total</i>	
<b>GEF Pilot (1991-1994)</b>	<i>Number of projects</i>	2	7	12	2	2	0	3	<b>28</b>
	<i>GEF amount</i>	10.1	33.3	94.5	9.0	4.0	-	46.7	<b>197.6</b>
	<i>Co-financing</i>	0.1	341.2	1,848.0	2.0	0.1	-	145.9	<b>2,337.2</b>
<b>GEF-1 (1994-1998)</b>	<i>Number of projects</i>	2	16	16	0	0	0	6	<b>40</b>
	<i>GEF amount</i>	8.2	134.4	146.9	-	-	-	27.0	<b>316.4</b>
	<i>Co-financing</i>	6.2	447.5	809.7	-	-	-	94.5	<b>1,357.8</b>
<b>GEF-2 (1998-2002)</b>	<i>Number of projects</i>	6	32	44	6	1	0	6	<b>95</b>
	<i>GEF amount</i>	102.3	189.9	227.8	30.0	0.9	-	19.1	<b>570.1</b>
	<i>Co-financing</i>	827.8	2,025.4	1,097.8	28.3	1.0	-	182.9	<b>4,163.3</b>
<b>GEF-3 (2002-2006)</b>	<i>Number of projects</i>	4	29	53	13	0	0	14	<b>113</b>
	<i>GEF amount</i>	64.6	228.2	248.6	88.8	-	-	76.3	<b>706.5</b>
	<i>Co-financing</i>	309.2	1,310.1	1,462.3	886.1	-	-	348.4	<b>4,316.0</b>
<b>GEF-4 (2006-2010)</b>	<i>Number of projects</i>	9	83	47	20	25	3	15	<b>202</b>
	<i>GEF amount</i>	46.3	382.5	117.8	110.9	121.5	65.3	88.6	<b>932.9</b>
	<i>Co-financing</i>	215.2	3,747.4	855.7	2,082.7	870.9	44.5	490.4	<b>8,306.8</b>
<b>GEF-5 (2010-2014)</b>	<i>Number of projects</i>	37	38	56	26	69	10	17	<b>253</b>
	<i>GEF amount</i>	221.5	199.1	206.6	124.2	515.9	159.0	105.7	<b>1,532.0</b>
	<i>Co-financing</i>	1,787.9	4,355.7	2,022.5	2,554.1	2,386.8	160.5	1,046.1	<b>14,313.7</b>
<b>GEF-6 (2014-2018)</b>	<i>Number of projects</i>	12	24	32	32	76	13	24	<b>213</b>
	<i>GEF amount</i>	32.8	113.6	169.0	249.1	669.1	76.0	83.0	<b>1,392.5</b>
	<i>Co-financing</i>	148.5	1,226.6	2,781.4	3,525.2	4,392.0	108.6	535.5	<b>12,717.8</b>
<b>Total</b>	<i>Number of projects</i>	<b>72</b>	<b>229</b>	<b>260</b>	<b>99</b>	<b>173</b>	<b>26</b>	<b>85</b>	<b>944</b>
	<i>GEF amount</i>	<b>485.7</b>	<b>1,281.1</b>	<b>1,211.1</b>	<b>612.0</b>	<b>1,311.5</b>	<b>300.3</b>	<b>446.4</b>	<b>5,648.1</b>
	<i>Co-financing<sup>e</sup></i>	<b>3,294.8</b>	<b>13,453.8</b>	<b>10,877.4</b>	<b>9,078.6</b>	<b>7,650.6</b>	<b>313.6</b>	<b>2,843.6</b>	<b>47,512.6</b>

- <sup>a</sup> 'Technology Transfer' (TT) means 'special initiative on technology transfer' up to GEF-4, 'promoting innovative LCTs' in GEF-5 and 'promoting timely development, demonstration, and financing of LCTs and CCM options' in GEF-6.
- <sup>b</sup> These include projects under the CCM focal objective focused on land use, land-use change and forestry (LULUCF), climate-smart agriculture, and projects receiving SFM incentive.
- <sup>c</sup> In addition to 18 GEF SGPs and one global program in the Table, there were 11 SGP projects from GEF Pilot to GEF-3 that have CCM objectives. However, funding contributed from CCM was not recorded in these early periods. The total GEF amount for these projects is \$261 million, and they have leveraged \$204 million of co-financing.
- <sup>d</sup> Mixed projects are projects with multiple CCM objectives. Mixed projects with technology transfer components are categorized as 'TT'. 'Others' include seven projects relating to methane and three projects relating to fuel substitution. In GEF-6, others include five intended nationally determined contribution (INDC) preparation projects and two applied research projects on the global commons.
- <sup>e</sup> These numbers include actual and expected co-financing.

**b. Achievements in GEF-6**

78. The GEF activities and achievements in the reporting period were consistent with the Programming Directions emphasis on supporting synergies and integration that combine policies, technologies, and management practices with significant CCM potential and resilience (see Table 8).

79. In the GEF-6 period (July 2014 to June 2018), the GEF allocated approximately \$1.39 billion from the GEFTF to 213 projects and programs, leveraging approximately \$12.71 billion in co-financing, the co-financing ratio thus being one (GEF) to 9.1. They are estimated to deliver 1,419 Mt CO<sub>2</sub> eq of mitigation benefit, thus significantly exceeding the GEF-6 target GHG emission reduction of 750 Mt CO<sub>2</sub> eq. These figures do not include EAs, BURs and NCs.

80. The FY 2017 Annual Portfolio Monitoring Report (APMR) for stand-alone CCM projects shows that, out of 244 projects and programs that are currently under implementation for longer than one year and have a completed Project Implementation Report (PIR), 89 percent were rated moderately satisfactory or above on achieving their development objectives. Regarding implementation progress, out of 244 projects and programs, 83 percent have been rated moderately satisfactory or above.

**Table 8: Climate Change Mitigation GEF-6 Strategic Objectives and Results Framework**

<i>Climate Change Mitigation (CCM) objective</i>	<i>Expected outcomes</i>
<b>CCM-1:</b> Promote innovation, technology transfer, and supportive policies and strategies	<b>Outcome A:</b> Accelerated adoption of innovative technologies and management practices for GHG emission reductions and carbon sequestration  <b>Outcome B:</b> Policy, planning and regulatory frameworks foster accelerated low GHG development and emissions mitigation  <b>Outcome C:</b> Financial mechanisms to support GHG reductions are demonstrated and operationalized
<b>CCM-2:</b> Demonstrate systemic impacts of CCM options	
<b>CCM-3:</b> Foster enabling conditions to mainstream CCM concerns into sustainable development strategies	

**c. Achievements in the Reporting Period**

81. In the reporting period, the GEF allocated \$248 million from the GEFTF to 54 CCM stand-alone and MFA projects and program in the Climate Change Focal Area (excluding EAs). They are expected to leverage approximately \$1.21 billion in co-financing, resulting in a co-financing ratio of one (GEF) to 4.9 (co-financing). Out of the 54 projects and programs, 20 were medium-sized projects (MSPs) and 34 were FSPs. Annex 2 lists projects and programs for CCM and EAs approved under the GEFTF in the reporting period.

82. The 54 projects and programs are expected to avoid or sequester 70.2 Mt CO<sub>2</sub> eq in total over their lifetime. The 54 projects and programs approved in the reporting period are distributed across 40 countries in four regions and include global projects. Nineteen projects are in Africa, seventeen are in Asia and the Pacific, nine are in LAC, five in ECA, while four are global. Regional distribution of GEF investments (\$248 million) is \$86.4 million (35 percent) for African region,

\$88.4 million (36 percent) for Asia and the Pacific, \$40.8 million (16 percent) for LAC, \$7.8 million for ECA (3 percent) and \$25.0 million (10 percent) for global projects.

83. Of the 54 CCM projects and programs, 23 projects (43 percent) are categorized as MFA projects, meaning project components and funding support are aligned with other GEF strategic objectives, such as SFM, land degradation, biodiversity, and chemicals and waste. Table 9 shows the distribution of funding for stand-alone and MFA projects.

84. Of the 54 CCM projects and programs, five focus on energy efficiency; seven on renewable energy; nine on mixed objectives; four on sustainable transport and urban systems; twenty one on AFOLU; and six on technology transfer/innovative LCTs. In addition, there are two SGP projects. Table 10 summarizes estimated emission reductions per type of projects and programs.

85. The 54 projects and programs are distributed over nine GEF agencies. The UNDP has the largest share in terms of number of projects (22, or 41 percent), followed by the UNIDO (eight, or 15 percent), the UNEP (seven, or 13 percent), the FAO (seven, or 13 percent), the World Bank (four, or 7 percent), the Development Bank of Latin America (CAF) (two, or 4 percent), and the Asian Development Bank (ADB), the Inter-American Development Bank (IDB) and the IFAD (one, or two percent, each). In addition, one project is jointly implemented by multiple Agencies (UNEP, FAO and the World Bank). In terms of GEF investments (\$248 million), UNDP has the largest share (42 percent), followed by the UNEP (15 percent), the UNIDO and World Bank (9 percent each), the FAO (8 percent), the ADB (6 percent), the CAF and IFAD (2 percent each), and the IDB (1 percent). The multi-Agency project received 5 percent of the total GEF investments.

86. In addition to financing the implementation of projects, the GEF assists eligible countries at their request with the preparation of complex projects, through PPGs. In the reporting period, the GEF provided a total of \$5.2 million in PPGs from the GEFTF for the preparation of 44 of the 54 projects and programs.

**Table 9: Breakdown of GEF Funding for Projects and Programs with Climate Change Mitigation Components**

	Number of projects			GEF amount (\$ million)			
	<i>CCM stand-alone projects</i>	<i>MFA projects</i>	<i>Total</i>	<i>Funding from CCM Focal Area</i>	<i>Funding from other focal areas<sup>a</sup></i>	<i>Others<sup>b</sup></i>	<i>Total</i>
GEF - 4 (2006-2010)	176	26	202	783.6	149.4	-	932.9
GEF - 5 (2010-2014)	167	86	253	1,041.1	466.9	23.9	1,532.0
GEF - 6 (2014-2018)	107	106	213	708.7	683.8	-	1,392.5
<b>Total</b>	<b>450</b>	<b>218</b>	<b>668</b>	<b>2,533.4</b>	<b>1,300.1</b>	<b>23.9</b>	<b>3,857.4</b>

<sup>a</sup> Includes funding from SFM, IAP set-aside, non-grant instruments set-aside, in addition to other focal areas.

<sup>b</sup> LDCF/SCCF funding.

**Table 10: Expected CO<sub>2</sub> eq Emission Reductions<sup>43</sup> from Projects and Programs Approved in FY 2018 (Excluding EAs and SGP)**

<i>Type of projects and programs</i>	<i>Total emission reductions (Mt CO<sub>2</sub> eq)</i>
<i>Technology Transfer/Innovative LCTs</i>	<i>3.78</i>
<i>Energy Efficiency</i>	<i>5.61</i>
<i>Renewable Energy</i>	<i>6.46</i>
<i>Urban/Transport</i>	<i>7.59</i>
<i>AFOLU</i>	<i>42.95</i>
<i>Mixed/others</i>	<i>3.79</i>
<b><i>Total</i></b>	<b><i>70.18</i></b>

**d. GEF Support for Key Mitigation Sectors**

87. The thematic scope of the GEF portfolio of CCM projects has significantly changed in GEF-6 compared to the previous replenishment cycles. In particular, the development of CCM projects has moved towards more integrated projects with systemic approaches. The following sub-sections discuss CCM activities in key sectors supported by the GEF in the reporting period. Technology transfer is presented in Part III, Section 4, as it is a cross-cutting topic for CCM and CCA.

**d.1. Energy Efficiency**

88. Through its barrier removal strategy, the GEF has invested in energy efficiency projects using the following approaches: (a) policy and regulatory frameworks: energy efficiency and conservation policies, energy tariff regulations, demand side and supply-side measures; (b) standards and labeling: building codes, minimum energy performance standards and energy labels for appliances and equipment, and efficient lighting; (c) market-based approaches: establishment and operation of energy service companies (ESCOs); (d) financial instruments: investment grants, partial loan guarantees, risk-sharing facilities and loan loss reserve funds, special purpose and revolving funds, equity funds; and (e) technology demonstration and diffusion: demonstration, deployment, and transfer of energy-efficient technologies.

89. In the reporting period, five projects with energy efficiency components were approved with funding amounting to \$13.9 million. Co-financing leveraged for these four projects amounted to \$39.1 million. Together, the five projects are working to mitigate an estimated 5.6 Mt CO<sub>2</sub> eq, as shown in Table 10. An example is the GEF/UNDP project “Energy Efficiency through the Development of Low-carbon Refrigeration and Air Conditioning (RAC) Technologies End Use in Trinidad and Tobago”, supporting alternative approaches to displace hydro-fluorocarbons (HFCs)

<sup>43</sup> Emissions estimates are prepared by the GEF agencies using approved methodologies. At each stage in the GEF project cycle, agencies submit revised estimates reflecting additional data collection and progress to date. The GEF works with agencies to ensure that final evaluations of project results reflect the best available data. The GEF IEO regularly assesses project results to evaluate achievements against targets.

with low global-warming potential (GWP) alternatives, including natural refrigerants. This project aims to reduce 1.5 Mt CO<sub>2</sub> eq over the 20-year period.

### ***d.2. Renewable Energy***

90. In the renewable energy sector, the GEF supported seven renewable energy projects in the reporting period, facilitating the transfer of various renewable energy technologies, including small hydro, waste-to-energy generation, wind power, solar photo-voltaic, and biomass-to-energy. The GEF funding to these seven projects amounted to \$25.9 million, leveraging \$155.2 million in co-financing. Expected GHG emission reductions amount to 6.5 Mt CO<sub>2</sub> eq. These renewable projects are expected to entail significant positive impacts on several other environmental and developmental issues in developing countries beyond CCM. An example is the GEF/UNDP project, titled “Myanmar Rural Renewable Energy Development Programme”, facilitating the expansion of rural renewable energy services coupled with productive application by providing technical assistance for both policy and financing de-risking. The project targets rural households, enterprises, clinics and schools as end users, while working across the sector to create an environment for market enablers. This project aims to reduce 0.9 Mt CO<sub>2</sub> eq over the project investment lifetime.

### ***d.3. Sustainable Transport and Urban Systems***

91. In the reporting period, the GEF supported four stand-alone projects in this category, with GEF funding of \$14.3 million and \$93.2million in co-financing. The total targeted emission reductions are estimated to be 7.59 Mt CO<sub>2</sub> eq. The four projects cover every sector in the urban arena, contributing to the development of low-carbon urban system design and management. For example, the project titled “Promoting Low-Carbon Urban Development in Bangladesh” enables investments in renewable energy and waste-to-energy applications in Bangladeshi cities through integration of municipal financing with low-carbon development plans. The project aims to accelerate the uptake of an innovative business model, which promotes waste segregation at the source. Communities can make a profit by selling sorted-out recyclable materials. The separated organic waste is composted to produce organic fertilizer or generate biogas.

### ***d.4. AFOLU***

92. The program under the CCM Focal Area addressing the AFOLU sector provides a suitable avenue through which projects can achieve multiple environmental benefits, including carbon benefits, and leverage funds from other relevant GEF focal areas as well as access SFM incentives. The projects approved in this category are designed to address multiple conventions and are geared towards generating carbon benefits from different ecosystems and production systems. Apart from policy support and financing management practices that favor GHG mitigation, the program also supports the development of new or existing MRV systems relating to AFOLU emissions. In doing so, the program complements and finances implementation of the national REDD+ strategies. These activities help build a foundation for results-based finance for GHG emissions from different land-use types.

93. In the reporting period, the GEF supported twenty-one projects in the AFOLU sector. All projects are categorized as MFA and draw funds from other GEF focal areas in addition to CCM resources. Three out of the twenty-one accessed the SFM incentive to achieve multiple benefits from the land-use sectors included in the projects. The GEF funding for these twenty-one projects

totals \$117.1 million and was supplemented by \$606.1 million in co-financing. The GEF funds supported land and forest management practices targeted at reducing GHG emissions from deforestation, forest degradation, fire prevention in forest and peatlands to conserve carbon stocks, promoted climate-smart agriculture investments, and developed and implemented carbon monitoring systems. The funding through the projects also supported policy formulation, and institutional and technical capacity building to address the drivers of land-use changes that cause GHG emissions. These twenty-one AFOLU initiatives aim to reduce approximately 42.9 Mt CO<sub>2</sub> eq.<sup>44</sup>

#### ***d.5. Mixed Projects***

94. In the reporting period, the GEF supported nine projects that were categorized as mixed, as these included multiple components. The projects were approved with funding amounting of \$38.8 million and supplemented with \$221.3 million of co-financing. An example is GEF/UNEP project titled “Conservation and Improvement of Ecosystem Services for the Atsinanana Region through Agroecology and the Promotion of Sustainable Energy Production” in Madagascar. This project aims to reduce more than 180 kt CO<sub>2</sub> eq from improved forest and agricultural management as well as improved energy efficient cooking and installation of bamboo gasification generator. The nine projects together will contribute to a total of 3.8 Mt CO<sub>2</sub> eq reduction.

#### ***e. Small Grants Program for Climate Change Mitigation***

95. Since its launch in 1992, the GEF SGP, implemented by the UNDP on behalf of the GEF partnership, has been actively supporting community-based actions that lead to GEBs and sustainable development. In GEF-6, the GEF approved 13 FSPs with climate change components for the SGP, amounting to \$76.0 million in GEF resources and leveraging \$108.6 million in co-financing, for eleven upgraded SGP country programs and two global programs supporting 40 additional countries.

96. The GEF SGP provides grants of up to \$50,000 (and on average \$25,000) directly to CSOs and community-based organizations (CBOs) to undertake global environmental projects. Since its inception, the GEF SGP supported a cumulative total of more than 22,000 projects implemented by civil society groups in 131 countries, across all GEF focal areas. In the CCM Focal Area, the GEF has cumulatively supported 4861 community-based CCM projects (about 23 percent of overall SGP portfolio) totaling over \$143 million, and leveraging over \$181 million in co-financing.

97. According to the latest SGP Annual Monitoring Report for July 2016 to June 2017, during FY17, 641 CCM projects were active with GEF grants amounting to \$21.6 million, and leveraging co-financing of \$23.1 million. Additionally, 201 projects were completed, with the majority of the portfolio focused on applying low carbon technologies (67 percent), with renewable energy projects comprising 45 percent and energy efficiency solutions 22 percent. Projects on the conservation and enhancement of carbon stocks accounted for 29 percent. Thirty-four percent of reporting country programmes addressed community-level barriers to deployment of CCM technologies. SGP projects also influenced 13,215 hectares of forests and non-forest lands through

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<sup>44</sup> Emissions estimates are prepared by the GEF agencies using approved methodologies. At each stage in the GEF project cycle, agencies submit revised estimates reflecting additional data collection and progress to date. The GEF works with agencies to ensure that final evaluations of project results reflect the best available data. The GEF IEO regularly assesses project results to evaluate achievements against targets.

restoration and enhancement of carbon stocks. Eighty-six typologies of community-oriented and locally adapted energy access solutions were successfully demonstrated, scaled up and replicated, and 239 communities achieved energy access with locally adapted community solutions. In total, 23,907 households benefitted from energy access co-benefits, including increased income, health and improved environmental services.

## **2. Climate Change Adaptation**

### **a. Background on GEF Support for Adaptation**

98. As an operating entity of the Financial Mechanism of the UNFCCC, the GEF has played a pioneering role in supporting adaptation. The 1995 GEF Operational Strategy<sup>45</sup> notes that “the strategic thrust of GEF-financed climate change activities is to support sustainable measures that minimize climate change damage by reducing the risk, or the adverse effects of climate change. The GEF will finance agreed and eligible enabling, mitigation, and adaptation activities in eligible recipient countries”.

99. The GEF was entrusted with the management of two funds prioritizing CCA, namely the LDCF and the SCCF, both established in 2001 as an outcome of the Marrakesh Accords. The LDCF was established to support the special needs of LDCs, as enshrined in Article 4 of the UNFCCC and the LDC Work Program. The SCCF was established to finance activities, programs and measures relating to climate change that are complementing those funded by the Climate Change Focal Area of the GEFTF, and through bilateral and multilateral sources. While the SCCF has four financing windows<sup>46</sup>, CCA was given top priority, in accordance with COP guidance (decision 5/CP.9).

100. The Strategic Priority on Adaptation (SPA) was launched in 2005 as a \$50 million allocation within the GEFTF, with the objective of reducing vulnerability and increasing adaptive capacity to the adverse effects of climate change within the GEF focal areas<sup>47</sup>. Twenty-six innovative pilot projects were approved under the SPA and initial lessons from the portfolio were captured in a 2010 evaluation.<sup>48</sup> As SPA resources have been fully allocated, the GEF now finances CCA solely through the LDCF and SCCF.

101. All of the GEF’s CCA projects and programs adhere to the guiding principles of country-drivenness, replicability, sustainability, stakeholder participation and strive to improve gender equality. These guiding principles are elaborated in relevant GEF policies, as well as in the programming principles and strategies that guide adaptation finance under the SPA, LDCF and SCCF. Projects and programs supported through these mechanisms are designed based on the

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<sup>45</sup> GEF, 1995, [Revised Draft GEF Operational Strategy](#), Council Document GEF/C.6/3.

<sup>46</sup> In accordance with the COP guidance, the SCCF finances activities relating to climate change that are complementary to those funded by the GEF in the following areas: (a) adaptation to climate change; (b) technology transfer; (c) energy, transport, industry, agriculture, forestry and waste management; and (d) economic diversification. COP 9 decided that CCA activities to address the adverse impacts of climate change shall have top priority for funding and that technology transfer and its associated capacity-building activities shall also be essential areas for funding.

<sup>47</sup> GEF, 2005, [Operational Guidelines for the Strategic Priority “Piloting an Operational Approach to Adaptation” \(SPA\)](#), Council Document GEF/C.27/Inf.10.

<sup>48</sup> GEF, 2010, [Evaluation of the GEF Strategic Priority for Adaptation](#), Council Document GEF/ME/C.39/4.

information and guidance provided in NCs, national adaptation programmes of action (NAPAs) and INDCs, as well as other relevant assessments and action plans.

102. Following the COP guidance to support the preparation of the NAP process (decision 12/CP.18, paragraphs 1 and 4), the GEF provided support to countries to initiate or advance their NAP processes. Further details are contained in Sub-section 2d below.

103. The GEF continues to work with the LEG, the Adaptation Committee (AC) and other relevant bodies to enhance the effectiveness of the support provided through the LDCF and the SCCF to developing countries towards the preparation of their NAP processes.

104. The GEF Programming Strategy on Adaptation to Climate Change for the LDCF and SCCF and Operational Improvements for the period 2018-2022 was approved by the LDCF/SCCF Council in June 2018.<sup>49</sup> In accordance with the guidance provided by the COP, the Strategy has three strategic objectives that will guide programming under the LDCF and SCCF, namely:

- (a) Objective 1: Reducing vulnerability and increase resilience through innovation and technology transfer for climate change adaptation;
- (b) Objective 2: Mainstreaming climate change adaptation and resilience for systemic impact; and
- (c) Objective 3: Fostering enabling conditions for effective and integrated climate change adaptation (See Table 11).

The Strategy also seeks to enhance gender equality and mainstreaming, as well as private sector engagement, across the GEF adaptation portfolio, while striving to enhance coordinated and synergistic programming with other major climate funds as well as with other GEF focal areas.

**Table 11: Climate Change Adaptation: Strategic Objectives and Expected Outcomes**

<i>Climate Change Adaptation (CCA) objective</i>	<i>Expected outcomes</i>
<b>CCA-1:</b> Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation	<b>Outcome 1.1:</b> Technologies and innovative solutions piloted or deployed to reduce climate-related risks and/or enhance resilience <b>Outcome 1.2:</b> Innovative financial instruments and investment models enabled or introduced to enhance climate resilience
<b>CCA-2:</b> Mainstream climate change adaptation and resilience for systemic impact	<b>Outcome 2.1:</b> Strengthened cross-sectoral mechanisms to mainstream climate adaptation and resilience <b>Outcome 2.2:</b> Increased ability of country to access climate finance or other relevant largescale, programmatic investment
<b>CCA-3:</b> Foster enabling conditions for effective and integrated climate change adaptation	<b>Outcome 3.1:</b> Climate-resilient planning enabled by stronger climate information decision-support services, and other relevant analysis <b>Outcome 3.2:</b> Institutional and human capacities strengthened to identify and implement adaptation measures

<sup>49</sup> GEF, 2018, [GEF Programming Strategy on Adaptation to Climate Change for the LDCF and the SCCF and Operational Improvements](#), Council Document GEF/LDCF.SCCF.24/03.

**b. Least Developed Countries Fund**

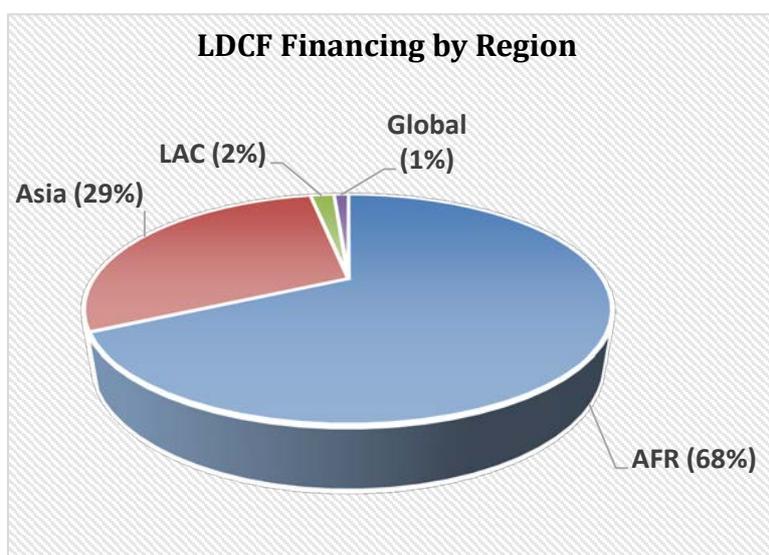
*LDCF Achievements since Inception*

105. The LDCF was designed to address the special needs of LDCs under the UNFCCC. From its inception to June 30, 2018, \$1,253.6 million has been approved for projects, programs, and EAs to meet this mandate, mobilizing an additional \$5.07 billion in co-financing. This includes financing the preparation of 51 NAPAs, all of which have been completed, and the approval<sup>50</sup> of 212 NAPA implementation and NAP projects. Africa received most of the LDCF financing, in line with the geographical distribution of LDCs (see Figure 1).

106. The LDCF received over \$95.3 million in new pledges in the reporting period, including by a sub-national government.<sup>51</sup> As at June 30, 2018, cumulative pledges to the LDCF amounted to \$1.33 billion, of which \$1.27 billion have been received (see Annex 8). Additional contributions are urgently needed to enable the LDCF to address the priority adaptation needs of LDCs.

107. In the reporting period, the LDCF supported 13 projects with \$78.4 million (Figure 2). As of June 30, 2018, funds available for new funding approvals amounted to \$96.3 million<sup>52</sup> (see Annex 8).

**Figure 1: Regional Distribution of Adaptation Projects and Programs under the LDCF at June 30, 2018**

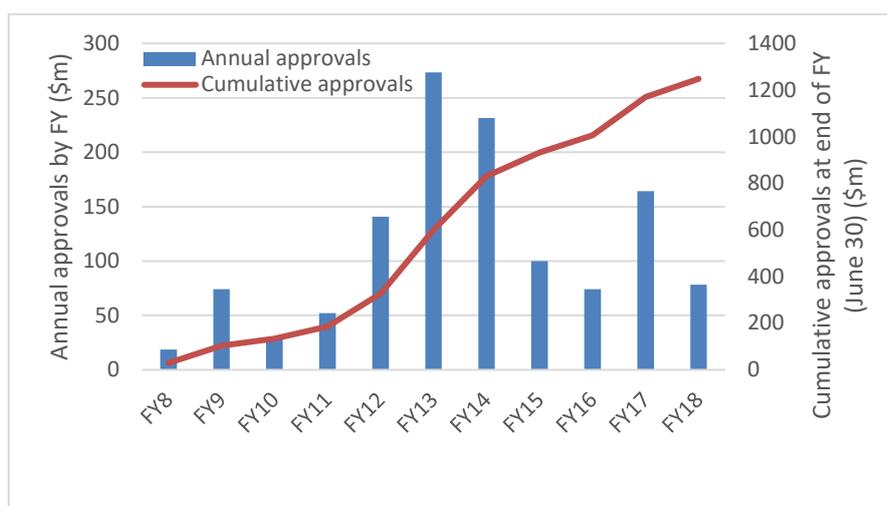


<sup>50</sup> Approval is granted by the LDCF/SCCF Council or the GEF CEO under delegated authority.

<sup>51</sup> Pledges were made by Belgium, Germany, Sweden and the Walloon Region of Belgium.

<sup>52</sup> This amount does not yet account for five LDCF projects that were approved by the Council in the last week of the reporting period, amounting to \$30.3 million total.

**Figure 2: Annual and Cumulative Funding Approvals under the LDCF as at June 30, 2018**



108. The LDCF supported 51 countries to prepare their NAPAs, all of which submitted their completed NAPA to the UNFCCC: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cabo Verde, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Guinea, Guinea Bissau, Haiti, Kiribati, Lao People’s Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, Sudan, The Gambia, Timor-Leste, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen and Zambia.

#### *LDCF Achievements in the Reporting Period*

109. The maximum amount that each country could access was raised from \$20 million to \$30 million in December 2013 in response to the significant additional contributions received between June and December 2013. In June 2016, the \$30 million flexible ceiling was further raised to \$40 million to accommodate growing demand from LDCs. In July 2018, the ceiling was further raised to \$50 million to enable full implementation of the GEF Programming Strategy on Adaptation for the LDCF and the SCCF (2018-2022).<sup>53</sup>

110. In the reporting period, LDCF resources amounting to \$78.4 million were approved by the LDCF/SCCF Council, for 13 FSPs. Ten of these 13 projects were in Africa and three in Asia (Table 12). These projects will mobilize over \$249.3 million in indicative co-financing from the governments of the recipient countries, GEF agencies, other multilateral and bilateral agencies, the private sector, and others. These projects will support adaptation planning and NAP processes in Bangladesh, Democratic Republic of the Congo and Lao People’s Democratic Republic, and help countries such as Cambodia and Somalia to enhance the resilience of their costal fishery-

<sup>53</sup> GEF, 2018, [GEF Programming Strategy on Adaptation to Climate Change for the LDCF and the SCCF and Operational Improvements](#), Council Document GEF/LDCF.SCCF.24/03.

dependent communities. Others are supporting NAPA implementation through measures such as landscape restoration, sustainable water supply, and ecosystem-based adaptation (EBA).

111. The FY 2017 Annual Monitoring Review of the LDCF and the SCCF provides information on 88 active projects under the LDCF.<sup>54</sup> Seventy-five of the 88 LDCF projects under implementation, or 86 percent, were rated moderately satisfactory or higher in terms of their progress towards development objectives. As at June 30, 2017, the 88 projects contained in the active LDCF portfolio have already reached more than 4.4 million direct beneficiaries and trained some 358,000 people in various aspects of CCA. Through these 88 projects, an estimated 1.5 million hectares of land have also been brought under more resilient management. Moreover, 48 regional, national and sector-wide policies, plans or processes in 21 LDCs have been strengthened or developed to better address climate change risks and adaptation, while 31 projects have enhanced climate information services in 27 countries.

**Table 12: Regional Distribution of Adaptation Projects under the LDCF Approved in FY 2018**

<i>Region</i>	<i>Number of projects</i>	<i>LDCF financing (\$ million)</i>	<i>Co-financing (\$ million)</i>
Africa	10	61.5	171.5
Asia	3	16.9	77.8
<b>Total</b>	<b>13</b>	<b>78.4</b>	<b>249.3</b>

### ***c. Special Climate Change Fund***

#### *Achievements since Inception*

112. The SCCF was established under the UNFCCC in 2001 to finance activities, programs and measures relating to climate change that are complementary to those funded under the Climate Change Focal Area of the GEFTF and through other bilateral and multilateral sources. While the SCCF has four financing windows, CCA was given top priority in accordance with the UNFCCC guidance (decision 5/CP.9). As at June 30, 2018, the GEF, through the SCCF-A (CCA window), has provided \$289.1 million for adaptation projects. Sixty-seven projects were approved for funding, mobilizing nearly \$2.3 billion in co-financing (see Table 13). The SCCF-B (technology transfer window) has provided \$60.7 million for twelve projects that support technology transfer, mobilizing \$382.3 million in co-financing (see Table 14).

113. As at June 30, 2018, \$352.3 million have been pledged to the SCCF, of which \$347.3 million were received. The demand for SCCF resources continues to be far higher than the resource availability. As at June 30, 2018, funds available for Council/CEO approval amounted to \$8.4 million and \$3.5 million for the SCCF-A and SCCF-B, respectively (see Annex 8).

<sup>54</sup> GEF, 2018, [Annual Monitoring Review of the Least Developed Countries Fund and the Special Climate Change Fund](#), Council Document GEF/LDCF.SCCF.24/05.

**Table 13: Regional Distribution of Adaptation Projects under the SCCF-A as at June 30, 2018**

<i>Region</i>	<i>Number of projects</i>	<i>SCCF-A financing (\$ million)</i>	<i>Co-financing (\$ million)</i>
Africa	20	83.0	753.1
Asia	17	80.3	900.9
ECA	11	44.8	290.3
LAC	15	70.1	265.2
Global	4	12.9	463.3
<b>Total</b>	<b>67</b>	<b>289.1</b>	<b>2,272.8</b>

Includes all MSPs and FSPs approved under the SCCF-A.

**Table 14: Regional Distribution of Adaptation Projects under the SCCF-B as at June 30, 2018**

<i>Region</i>	<i>Number of projects</i>	<i>SCCF-B financing (\$ million)</i>	<i>Co-financing (\$ million)</i>
Africa	2	10.3	183.5
Asia	3	11.3	43.2
ECA	2	7.6	89.9
LAC	3	16.9	28.1
Global and Regional	2	14.5	37.7
<b>Total</b>	<b>12</b>	<b>60.7</b>	<b>382.3</b>

114. The portfolio of projects and programs financed under the SCCF represents a broad range of highly innovative adaptation approaches. The Progress Report on the LDCF and the SCCF describes the progress made in the operations of the LDCF and the SCCF since their inception.<sup>55</sup> As at April 30, 2018, 76 SCCF projects have been endorsed or approved by the GEF CEO and were in some stage of implementation or ready to enter implementation. In total, 52 out of these 76 projects provided an estimate of the number of direct beneficiaries. These projects aim to directly reduce the vulnerability of close to seven million people.

#### *SCCF Achievements in the Reporting Period*

115. This reporting period has seen the approval of one innovative MSP, as announced during COP 23,<sup>56</sup> that supports the establishment and resource mobilization for the Climate Resilience and Adaptation Finance and Technology Transfer Facility (CRAFT), the first private sector climate resilience and adaptation investment fund and technical assistance facility for developing

<sup>55</sup> GEF, 2018, [Progress Report on the Least Developed Countries Fund and the Special Climate Change Fund](#), Council Document GEF/LDCF.SCCF.24/04.

<sup>56</sup> GEF press release, 2017, [GEF Joins Forces with Partners to Promote New Fund for Resilience in the Poorest Countries](#).

countries, consistent with the goals of the Paris Agreement. The GEF support aims to facilitate the completion of CRAFT's investment strategy, technical assistance facility strategy, and overall impact strategy, including adaptation-focused impact metrics. The project further entails the development of a fundraising strategy and initiation of fundraising activities and is expected to be the first stepping stone towards catalyzing a broader market for climate-resilient solutions and investments, in addition to providing direct benefits to reduce the vulnerability of businesses and communities through resilience-intelligence solutions.

116. The FY 2017 Annual Monitoring Review of the LDCF and the SCCF<sup>57</sup> states that 34 of the 36 SCCF projects under implementation, or 97 percent of projects that reported on their performance, were rated moderately satisfactory or higher in terms of their progress towards development objectives. As at June 30, 2017, the 36 projects contained in the active SCCF portfolio have already reached more than 1.6 million direct beneficiaries and trained some 25,000 people in various aspects of CCA. Through these 36 projects, some 5.5 million hectares of land have also been brought under more resilient management. Moreover, 101 regional, national and sector-wide policies, plans and processes in nine countries have been strengthened or developed to better integrate and address climate change risks, while seven projects have enhanced climate information services in seven countries.

**d. Support for NAP Process**

117. Given the important mandate of the LDCF and the SCCF to support the NAP process<sup>58</sup>, total funding from the LDCF towards the LDCs' NAP processes amounts to \$71.6 million<sup>59</sup> as at June 30, 2018. This support includes several projects that explicitly seek to advance NAP processes in Bangladesh, Chad, Democratic Republic of the Congo, Lao People's Democratic Republic, Niger, Rwanda, Sao Tome and Principe, Senegal and South Sudan, in addition to targeted technical assistance for tailored one-on-one support that continues to be provided through the LDCF-financed NAP GSP. In the reporting period, the LDCF/SCCF Council approved \$23.6 million through the LDCF, for four projects supporting the NAP process in LDCs. The SCCF support amounting to \$5.1 million seeks to complement the LDCF initiatives by assisting non-LDC developing countries with their country-driven processes to advance NAPs.

118. Notably, several projects combined requests for funding to support NAP processes with requests to support concrete adaptation investments for NAPA implementation. Such requests may, for instance, comprise investments in hydro-meteorological infrastructure to provide climate and weather data that are intended for use by decision-makers when integrating climate change impacts and adaptation measures into regional, national and sub-national policies and plans, including for NAPs; such joint NAPA-NAP projects include separate components that are solely devoted to the NAP process through technical assistance and capacity-building. In its support of NAP processes, the GEF follows the country needs and priorities, providing flexibility to combine NAP and NAPA financing in joint projects, enhancing efficiency and simplifying access to finance in response to COP guidance requesting the GEF to simply access modalities.

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<sup>57</sup> GEF, 2018, [Annual Monitoring Review of the Least Developed Countries Fund and the Special Climate Change Fund](#), Council Document GEF/LDCF.SCCF.24/05.

<sup>58</sup> Decision 12/CP.18, paragraph 1.

<sup>59</sup> This amount comprises projects that are explicitly dedicated, as the sole project objective or through dedicated components, to enhancing a country's NAP process.

### **3. Capacity-Building Initiative for Transparency**

#### **a. CBIT Trust Fund Capitalization**

119. The establishment of the CBIT Trust Fund was finalized in September 2016. At COP 22, twelve donors (Australia, Canada, Germany, Italy, Japan, Netherlands, New Zealand, Sweden, Switzerland, United Kingdom, United States of America, and the Walloon Region of Belgium) issued a joint statement pledging and expressing their intention to support the CBIT Trust Fund with over \$50 million. The CBIT Trust Fund received the first donor contributions prior to COP 22 and the GEF Secretariat approved the first set of projects under the CBIT.

120. As at June 30, 2018, a total of fourteen donors had signed their respective contribution agreements, and the Trustee had received the majority of the \$61.1 million in pledges. The total donor contributions to the CBIT Trust Fund were \$56.0 million, with \$5.1 million of pledges outstanding or unpaid. More information is provided in Annexes 4 and 9).

#### **b. CBIT Trust Fund Operationalization**

121. In the reporting period, the GEF Secretariat approved one global CBIT project and 29 national projects in Antigua and Barbuda, Argentina, Azerbaijan, Bangladesh, Bosnia and Herzegovina, Burkina Faso, Côte D'Ivoire, Cuba, Dominican Republic, Ethiopia, Eswatini, Georgia, Honduras, Jamaica, Lao People's Democratic Republic, Lebanon, Liberia, , Madagascar, Mexico, Montenegro, Morocco, Panama, Peru, Rwanda, Serbia, Sierra Leone, Sri Lanka, the former Yugoslav Republic of Macedonia and Togo (See Annex 4).

122. The entire CBIT project portfolio under GEF-6 includes 39 national projects and two global projects, amounting to \$53.2 million or 97 percent of the total funds held in trust. An additional \$31.8 million in co-financing for CBIT's 41 projects was leveraged under GEF-6. The CBIT portfolio includes projects in eleven LDCs and five SIDS, or 41 percent of all national projects approved under the CBIT.

123. An analysis of timeliness of project review, approval and preparation of CBIT projects showed a high level of compliance with the GEF project cycle policy and standards. The average amount of time for the GEF Secretariat to complete the initial project review was ten working days, meeting current corporate standards, while the overall time for project proposal approval was on average 60 working days. In addition, all projects to date have met the twelve-month standard to submit full project proposals for MSP approval.

124. Overall, the CBIT Trust Fund is supporting a regionally balanced portfolio. The Africa region had the most CBIT projects approved (14 projects, \$18.5 million), followed by LAC (12 projects, \$16.3 million), Asia (seven projects, \$7.4 million), and ECA (six projects, \$7.8 million). Two CBIT projects with a global scope were also approved in GEF-6 (\$3.1 million).

125. The CBIT projects have so far been supported by five out of the 18 GEF agencies. The UNEP has the largest share with 17 projects, followed by the UNDP with nine projects, the FAO with seven, the CI with five, and the IDB with two projects. Notably, the IDB is the first multilateral development bank to be involved with the CBIT.

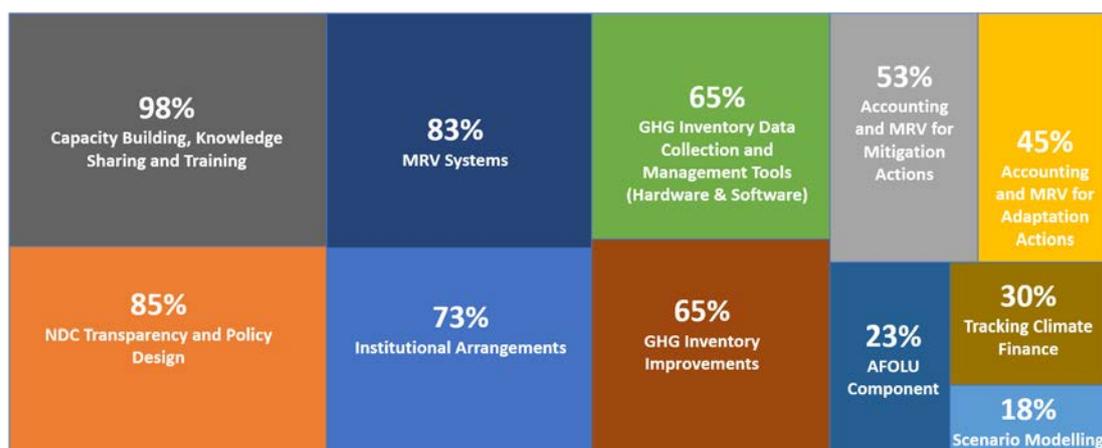
126. The national projects respond to nationally identified priorities, and are thus specific to each country’s transparency-related capacity-building needs. In general, they all seek to enhance coordination at the national level, improve or further develop national MRV frameworks, and strengthen the institutional capacity for transparency-related activities.

127. Overall, the approved CBIT project proposals largely mirrored the eligible programming activities set forth in the CBIT Programming Directions. The most common CBIT project activities among the 41 approved projects were grouped into the following eleven types of activities:

- (a) Enhancement and/or establishment of new institutional arrangements;
- (b) Use of NDC transparency activities to inform policy design;
- (c) Accounting and MRV methodologies for mitigation actions;
- (d) Accounting and MRV methodologies for adaptation actions;
- (e) Economic and GHG emissions scenario modelling;
- (f) GHG inventory (GHGI) data collection and management tools;
- (g) Enhancement and/or establishment of new MRV systems;
- (h) GHGI improvements including development of country-specific emission factors and activity data;
- (i) Capacity building, training, and knowledge sharing;
- (j) Tracking climate finance; and
- (k) AFOLU-focused activities.

128. Figure 3 illustrates the percentage of approved CBIT projects that included a particular type of activity in their proposal, while also showing the overall proportion of project activity types as they relate to one another. The percentages in the figure represent a count of occurrences of type of activity across the portfolio and are not correlated to the amount of resources designated for specific activities.

**Figure 3: Type of Transparency Activities Supported in National CBIT Projects**



129. Capacity building, knowledge sharing and training was the most common activity (98 percent) included in the projects approved, whereas scenario modelling of economic and/or GHG emission trends was the least common activity (18 percent) included in project concepts.

130. Strong institutional arrangements are the cornerstone of every country's GHGI accounting and reporting program, and this is reflected by the fact that 73 percent of all approved CBIT projects included a component focused on the establishment and/or enhancement of national institutional arrangements.

131. Similarly, as the Paris Agreement's enhanced transparency framework (ETF) has underlined the importance of establishing and maintaining strong MRV systems, 83 percent of approved CBIT projects requested GEF support for this type of activity.

132. In contrast, less than a third (30 percent) of CBIT projects included a project component dedicated towards the tracking and transparent reporting of support needed and received. This illustrates the higher level of interest among countries to date in addressing the transparency of action, and relatively modest interest in enhancing transparency of support.

133. While adaptation is a major focus of many developing countries' NDCs, 45 percent of CBIT proposals included a component specific to the establishment or improvement of MRV for adaptation activities.

134. Another noteworthy aspect of approved CBIT projects was that almost a quarter (23 percent) of them included a specific component for enhancing measurement and transparency of GHG emissions from the AFOLU sector. This may be indicative of the relative importance of emissions from the AFOLU sector in the countries that have been supported by the CBIT to date, such as Bangladesh, Cambodia, Kenya and Mongolia. It also reflects the inherent challenges in the sector to quantify and report emissions and removals due to limited data, and need for technical capacities for the quantification and projections of AFOLU-related emissions as compared to other sectors.

135. Five projects have received CEO approval after the successful submission of their full project proposals since the last reporting period: these projects are from Chile, Costa Rica, Kenya, Uganda and Uruguay. With the inclusion of the CBIT Global Coordination Platform project - the first CBIT project to receive CEO Endorsement - a total of six projects have been approved by the CEO. As these five projects have only recently been fully approved, project activities are just beginning implementation.

136. Several CBIT-supported countries have shared during bilateral meetings with the GEF Secretariat and technical workshops that they are making significant progress in advancing the MRV and transparency agenda at the national level, by:

- (a) enhancing institutional arrangements and making structural adjustments;
- (b) exploring opportunities to link MRV and transparency with broader national development agendas; and
- (c) enhancing their internal capacity to deliver.

137. Many countries have also detailed how their progress on transparency is leading to domestic benefits in the form of new policy tools; improved inter and intra-agency coordination and consolidation; implementation of NDCs; enhanced trust, both nationally and internationally, that actions are indeed happening; and an improved understanding of how current resources are being utilized.

**c. CBIT Coordination and Engagement**

138. With regard to coordination with other transparency-related support, countries and agencies are making efforts to identify relevant sources of support and ensure that CBIT projects are incremental and synergistic. This ensures an efficient use of resources by both the donor and recipient sides, as well as a coordinated strategy to implement a long-term vision for transparency.

139. The GEF continues to engage and coordinate with existing and emerging GHG transparency initiatives to help implement the CBIT, including the Initiative for Climate Action Transparency (ICAT), the Coalition on Paris Agreement Capacity Building, the Partnership on Transparency in the Paris Agreement (PATPA), the NDC Partnership, the Partnership to Strengthen Transparency for Co-Innovation (PaSTI), and other entities engaged in enhancing transparency.

140. Coordination activities have also included relevant bilateral agencies, national institutions, international organizations, UNFCCC bodies and workstreams, including the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE), among others.

141. Through various meetings, the GEF Secretariat and existing initiatives have shared information on ongoing and planned activities, particularly as it relates to ongoing activities at the country and regional levels, to enhance coordination, where possible. The GEF Secretariat continued awareness raising and outreach efforts for CBIT through various channels. The CBIT web page continues to be regularly updated, including links to approved project documents.

142. At COP 23 in November 2017, in Bonn, Germany, the GEF Secretariat reported on the CBIT progress and multiple engagements on the CBIT. It held a high-level side event on "Enhancing Transparency through the CBIT" on November 15, 2017. Chile, Japan, Papua New Guinea and South Africa shared their experiences with MRV and transparency efforts of climate action and support. The discussion focused on the identification of gaps and needs, the development of institutional frameworks and systems, and the strengthening of national capacities to meet the requirements of the ETF. The GEF Secretariat was invited to participate in several COP 23 side events related to the transparency framework, during which the GEF continued to raise awareness of support available through the CBIT, progress to date and lessons learned.

143. On March 1, 2018, a representative from the GEF Secretariat gave a virtual presentation on the CBIT at the Scoping Workshop on PaSTI held in Bangkok, Thailand.

144. On March 7-8, 2018, a representative from the GEF Secretariat attended the Climate Change Expert Group (CCXG) Global Forum on the Environment and Climate Change in Paris, France. The forum was an opportunity to focus on the development of modalities, procedures and guidelines under the Paris Agreement's ETF. The GEF shared its experiences with providing, and reporting on, capacity-building and technology support, as well as national priorities identified by CBIT projects

and recent efforts to collaborate and share information about transparency initiatives through the CBIT GCP.

145. On April 24, 2018, a CBIT Coordination Meeting was held in Berlin, Germany and featured the participation of GEF agency representatives, donor countries, the EU Commission, the UNFCCC, and members of various transparency initiatives. The GEF provided an update on the CBIT's progress over the past year as well as an outlook of CBIT support under GEF-7. The meeting featured an open discussion on enhancing coordination among support providers, given the number of initiatives working on different, but often overlapping aspects of the transparency framework.

146. On April 25-26, 2018, the CBIT's Second Annual Technical Workshop took place in Berlin, Germany, and included the participation of 40 developing countries that had submitted CBIT proposals to the GEF Secretariat. The workshop was designed to strengthen the national transparency capacities of attendees by fostering dialogue and sharing among CBIT countries about their experiences, lessons learned and challenges in addressing institutional arrangements, tools to support national MRV systems, NDC tracking, monitoring and evaluation (M&E) of adaptation activities, and experiences with peer-to-peer and regional networks. Country representatives expressed the importance of these types of face-to-face meetings to share experience and make contacts as they move forward with implementation of their CBIT projects.

147. The CBIT Global Coordination Platform (GCP) was launched during the Second Annual CBIT Technical Workshop. The GCP is a web-based platform that aims to bring together practitioners from countries and agencies in order to enable coordination of transparency actions, identify needs and gaps in national transparency systems, share lessons learned through regional and global meetings, and to facilitate access to emerging practices, methodologies, and guidance on transparency of climate action.

148. The GEF attended the Bonn Climate Change Conference from April 30 to May 10, 2018 in Bonn, Germany. The conference included the 48<sup>th</sup> sessions of the SBI and SBSTA, and the fifth session of the first meeting of the APA. The GEF provided an update on progress under the CBIT, including identified priorities from national projects and an outlook for CBIT support under GEF-7 at a UNFCCC side event on tracking and reporting climate action.

149. The most recent Progress Report on the CBIT was published on June 14, 2018, and was presented as an information document for the 54<sup>th</sup> GEF Council Meeting.<sup>60</sup>

150. On June 24, 2018, during the 54<sup>th</sup> GEF Council Meeting and the Sixth GEF Assembly, CI, FAO, UNDP and UNEP hosted a side event on "CBIT: Strengthening national capacities to meet enhanced transparency requirements." The GEF presented on the CBIT establishment and support in GEF-6, early observations and findings, and GEF-7 outlook. The side event featured country experiences from Argentina, Mongolia and Uruguay, as well as insights from the GEF agencies.

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<sup>60</sup> GEF, 2018, [Progress Report on the Capacity-building Initiative for Transparency](#), Council Document GEF/C.54/Inf.08.

#### **d. CBIT in GEF-7**

151. The adopted GEF-7 Programming Directions include specific provisions for CBIT support through the Climate Change Focal Area. This is in line with the “Establishment of the CBIT Trust Fund” document, which states that the CBIT efforts will be an integral part of GEF's climate change support for GEF-7, financed by the GEFTF under regular replenishment.

152. Under the GEF-7 Climate Change Mitigation Strategy, countries will have access for Convention obligations and CBIT support from set-asides that do not draw on country allocations. Country allocations will be available to deliver on other EAs. Furthermore, all investment projects will be required to demonstrate alignment to national priorities included in national climate strategies and plans, NDCs, TNAs, NCs, and BURs.

153. The GEF Secretariat has continued to engage with GEF agencies and countries about their interest to submit CBIT proposals and national priorities during GEF-7. Due to the high level of demand for support by countries that exceeded resources availability in GEF-6, eleven proposals were deferred to GEF-7 for consideration of support. Some of these countries required more time to develop their proposals and complete the Paris Agreement ratification process. Many of these countries have communicated that they are likely to resubmit existing or enhanced proposal concepts for approval during GEF-7. The GEF Secretariat stands ready to work with these countries and others upon request to address and respond to their needs.

#### **4. Technology Transfer**

154. The transfer of low-carbon and climate-resilient technologies has been a key cross-cutting theme for the GEF since its establishment. The GEF-6 CCM Strategy promoted the timely development, demonstration and financing of LCTs and CCM options. The GEF supports the development, adoption and implementation of policies, strategies, regulations and financial or organizational mechanisms that accelerate CCM technology innovation and uptake.<sup>61</sup> Similarly, in GEF-6, the results-based management (RBM) framework for the SCCF and LDCF included climate-resilient technologies and practices adopted and scaled up as one of nine overarching outcomes. Furthermore, the entire GEF climate change portfolio can be characterized as supporting technology transfer as defined by the Intergovernmental Panel on Climate Change (IPCC) and by the technology transfer framework adopted by COP 7.<sup>62</sup> Building on the GEF-6 Climate Change Focal Area Strategy and in alignment with the COP guidance, the GEF-7 Climate Change Focal Area Strategy aims to support developing countries in making transformational shifts towards low-emission and climate-resilient development pathways. To achieve this goal, the strategy emphasizes three fundamental objectives, one of which is to promote innovation and technology transfer for sustainable energy breakthroughs. In GEF-7, partnership with the private sector is a key priority in promoting technology transfer and deployment. Similarly, the results framework for the LDCF and the SCCF includes an outcome on “technologies and innovative solutions piloted or deployed to reduce climate -related risks and/or enhance resilience” under CCA objective 1: Reducing vulnerability and increase resilience through innovation and technology transfer for climate change adaptation.

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<sup>61</sup> GEF, 2014, [GEF-6 Programming Directions](#), Extract from GEF Assembly Document GEF/A.5/07/Rev.01, page 60.

<sup>62</sup> Decision 4/CP.7.

155. In the reporting period, for CCM, 27 projects with technology transfer objectives were approved with \$108 million in GEF funding and \$402.9 million in co-financing.<sup>63</sup> For CCA, eight projects to promote technologies for adaptation were approved with \$48 million from the LDCF and \$1.1 million from the SCCF, and \$177.9 million of co-financing. Detailed project descriptions are provided in Annex 6 and Annex 7.

156. In November 2008, the GEF Council and the LDCF/SCCF Council approved the Strategic Program on Technology Transfer, which included a funding window of \$50 million with \$35 million from the GEFTF and \$15 million from the SCCF Program for Technology Transfer (SCCF-B).<sup>64</sup> This program included three funding windows to support technology transfer, namely: (a) technology needs assessments (TNAs); (b) piloting priority technology projects linked to TNAs; and (c) dissemination of GEF experience and successfully demonstrated environmentally sound technologies (ESTs).

157. In December 2008, COP 14 welcomed the GEF's Strategic Program on Technology Transfer (renaming it the Poznan Strategic Program on Technology Transfer) as a step towards scaling up the level of investment in the transfer of ESTs to developing countries. In response to decision 2/CP.14, the GEF submitted a Plan for the Long-Term Implementation of the Poznan Strategic Program on Technology Transfer to COP 16.<sup>65</sup> The GEF submission included the following elements to further scale up investments in ESTs in developing countries in accordance with the GEF Climate Change Focal Area Strategy, and to enhance technology transfer activities under the Convention:<sup>66</sup>

- (a) Support for Climate Technology Centers and a Climate Technology Network;
- (b) Piloting Priority Technology Projects to Foster Innovation and Investments;
- (c) PPP for Technology Transfer;
- (d) TNAs; and
- (e) GEF as a Catalytic Supporting Institution for Technology Transfer.

158. The following sub-sections describe the progress made on the Poznan Strategic Program on Technology Transfer according to the three areas recommended by the evaluation of the Poznan Strategic Program by the TEC submitted to SBI 43.<sup>67</sup> The sub-sections also include challenges and lessons learned in the implementation of the projects.

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<sup>63</sup> These projects are aligned with the objective of CCM-1: Promote innovation, technology transfer, and supportive policies and strategies. They include projects categorized in the areas of renewable energy, energy efficiency and transport in Table 7.

<sup>64</sup> Financing details can be found in the [Report of the Global Environment Facility on the elaboration of a strategic programme to scale up the level of investment in the transfer of environmentally sound technologies](#), SBI Document FCCC/SBI/2008/16.

<sup>65</sup> UNFCCC, 2010, [Report of the Global Environment Facility on the progress made in carrying out the Poznan strategic programme on technology transfer](#), SBI Document FCCC/SBI/2010/25.

<sup>66</sup> Three of the long-term elements (piloting projects, TNAs, and GEF as a catalytic supporting institution) are a direct continuation and scaling up of the three elements of the initial Poznan Strategic Program. See [Report of the Global Environment Facility to the Conference of the Parties](#), COP Document FCCC/CP/2013/3, annex, paragraph 140.

<sup>67</sup> UNFCCC, 2015, [Evaluation of the Poznan strategic programme on technology transfer: final report by the Technology Executive Committee](#), SBI Document FCCC/SBI/2015/16.

**a. Regional and Global Climate Technology Activities**

159. The GEF is supporting four regional projects and the CTCN through one global project, listed in Table 15. The detailed activities of these projects are described in Annex 6. These projects receive funding from the GEFTF for CCM as well as from the SCCF-B for CCA. The regional projects are generating lessons learned to help inform the Technology Mechanism, in particular the CTCN, and facilitate coordination and cooperation on climate technology development and transfer.

**Table 15: GEF Projects for Climate Technology Transfer and Financing Centers and the CTCN**

Title	Region	Agency	GEF financing (\$ million)		Co-financing (\$ million)	Status
			GEFTF	SCCF		
Promoting accelerated transfer and scaled-up deployment of CCM technologies through the CTCN	Global	UNIDO	1.8	0	7.2	Under implementation
Pilot Asia-Pacific Climate Technology Network and Finance Center	Asia and Pacific	ADB/ UNEP	10.0	2.0	74.7	Under implementation
Pilot African Climate Technology Finance Center and Network	Africa	AfDB	10.0	5.8	89.0	Under implementation
Finance and Technology Transfer Center for Climate Change	ECA	EBRD	10.0	2.0	77.0	Under implementation
Climate Technology Transfer Mechanisms and Networks in LAC	LAC	IDB	10.0	2.0	63.4	Under implementation

160. In addition, in the reporting period, global and regional CCM projects with technology transfer objectives were approved by the GEF. They include a global project aiming to provide support for the Building Efficiency Accelerator (BEA), aligned with the Sustainable Energy for All (SEforAll), to support market transformations that will enable a doubling of the rate of energy efficiency improvements in buildings by 2020, by linking global market experience, national policy, and local action and capacity building.

161. In response to invitations from SBI 37, SBI 39, SBI 40, SBI 41, SBI 42, SBI 45, SBI 46, and SBI 47, the GEF Secretariat, the CTCN and the GEF agencies consulted on the collaboration between the CTCN and the regional technology and finance centers on numerous occasions, including in the reporting period. Constructive dialogue has been established with the respective GEF agencies to seek synergies and avoid duplication.

162. *The Pilot Asia-Pacific Climate Technology Network and Finance Center (CTNFC)* has a component that is aligned with the role and mission of the CTCN as described in COP decisions. UNEP project focal points are also the NDEs to the CTCN; therefore, while the project continues to

support its partner countries in identifying potential technical assistance activities for its services, it also does so for prospective requests for submission to the CTCN. UNEP also uploads its outputs and reports onto the CTCN Knowledge Partners web page. The project is also looking at completed technical assistance activities in the region from both the CTNFC and CTCN for upscaling to larger national programme implementation through GCF funding to facilitate technology use and NDC implementation, as well as financing incentives and mechanisms to promote the use of technology. Furthermore, the project closely coordinates with the CTCN in the region, including on the organization of events for dissemination of information, as well as with countries to discuss their priorities.

163. *The Pilot African Climate Technology Finance Center and Network* project has participated in several regional events organized by the CTCN in the reporting period. The projects and the CTCN exchanged on project proposals from Africa, particularly in the two focus sectors of the project: energy and water. The collaboration should be further strengthened, building on the comparative advantage and focus of both the project and the CTCN.

164. *The Finance and Technology Transfer Centre for Climate Change (FINTECC)* project in Europe and Central Asia has established good collaboration with the CTCN since its onset and this collaboration continues to grow. Further coordination meetings are planned between the CTCN and the FINTECC teams in the second half of 2018.

165. *The Climate Technology Transfer Mechanisms and Networks in LAC* project has continued to communicate on a regular basis with the CTCN and provide updates on the project's status. Representatives from the IDB met with their CTCN counterparts in April 2018 in Washington, D.C. to discuss sharing of lessons learned on technology transfer in the region, and of experiences from GEF-funded technology transfer projects, including pilot projects under the Poznan Programme.

166. The GEF Secretariat participated in, and/or observed, key international discussions supporting the development of technology transfer initiatives and raised awareness of the Program in the reporting period. Examples include:

- (a) Fifteenth meeting of the TEC, on September 12-15, 2017 in Bonn, Germany;
- (b) Sixteenth meeting of the TEC, on March 13-16, 2018 in Bonn, Germany (remotely);
- (c) IDB event on Climate Change Technology Transfer in Latin America and the Caribbean, on April 24-25, 2018 in Washington, D.C.

167. In the reporting period, the Climate Technology Centre requested from NDEs information regarding their collaboration with the GEF OFPs on matters relating to the development and transfer for climate technologies. In total, 69 NDEs responded to the survey. Of these respondents, 64 percent noted that they do have information regarding the GEF portfolio in their respective countries. Forty-nine percent of NDEs indicated that they meet regularly with the GEF OFPs to support coordination at the national level, and of these, half meet every three months or less. Sixty percent of respondents stated that, as NDEs, they did not participate in the GEF portfolio formulation exercise in their countries and thus did not effectively contribute to defining priority sectors for GEF funding. They suggested that NDEs had much to contribute to climate technology elements in the portfolio formulation exercises. Finally, the survey responses highlighted that four sub-regional meetings organized by the CTCN provided a good opportunity for NDEs, GEF OFPs,

and NDAs of the GCF to meet and discuss matters of common interest and share their experiences.

**b. National Climate Technology Activities**

168. In the reporting period, 23 CCM national projects with technology transfer objectives were approved with \$83.2 million in GEF funding and \$372.5 million in co-financing. For CCA, eight national projects to promote technologies for adaptation were approved with \$49.1 million from the LDCF and SCCF, and \$572.5 million in co-financing. Detailed project descriptions are provided in Annex 2 and Annex 3.

169. Guided by COP decision 2/CP.14, the call for proposals for technology transfer pilot projects under window two of the Poznan Strategic Program, issued in March 2009, led to the selection of 14 proposals. Only one proposal for CCA was received. This proposal was funded, along with three other proposals that included CCA elements. Total GEFTF<sup>68</sup> and SCCF-B funding for the 14 pilot projects amounted initially to \$58 million, and total co-financing for these projects was initially more than \$195 million.

170. Eleven projects have been endorsed by the GEF CEO and are progressing in their implementation. These are in: Cambodia, Chile, Colombia, Côte D'Ivoire, Eswatini, Jordan, Kenya, Mexico, Russian Federation, Sri Lanka and Thailand. The funding from the GEFTF and SCCF-B for these projects amounted to \$49.4 million and \$2.4 million, respectively, and the total co-financing amounted to \$223.2 million and \$5.7 million, respectively.

171. Three projects were cancelled upon request from the GEF agencies and/or the concerned national government, one in July 2011, one in February 2012 and one in June 2012.

172. The technologies targeted by the endorsed projects address both CCM and CCA, and are diverse and innovative. They include technologies on renewable energy (solar, biomass, wind), energy efficiency (insulation materials, efficient and hydro-chlorofluorocarbon (HCFC)-free appliances), transport ("green" trucks), and composting. Membrane drip irrigation, flood- and drought-resistant crops with SLM practices were included as CCA-related technologies.

173. In response to SBI 36 conclusions, the GEF requested the GEF agencies to provide updates to further elaborate on the experiences gained and lessons learned in carrying out the Poznan pilot projects and the progress made by the GEF agencies in the delivery of technology transfer. The eleven projects have implemented their activities, including demonstration, policy and standards development and capacity-building. They have identified and trained local companies and technicians to adopt innovative technologies. Some projects experienced challenges, such as the elections and governmental change, as well as low price of fossil fuel, and have implemented CCM actions.

174. SBI 45 encouraged the GEF to share the mid-term evaluations of the Poznan Strategic Program climate technology transfer and finance centers and pilot projects of the fourth

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<sup>68</sup> Financing details can be found in the [Report of the Global Environment Facility on the elaboration of a strategic programme to scale up the level of investment in the transfer of environmentally sound technologies](#), SBI Document FCCC/SBI/2008/16.

replenishment of the GEF with the TEC and the CTCN as soon as available. The GEF projects are required to implement mid-term and terminal evaluations, and to submit reports to the GEF.<sup>69</sup> Of eleven projects, three projects (in Chile, Jordan and Senegal) submitted their mid-term review (MTR) reports to the GEF in the reporting period. Based on the experience from the projects, these reports highlight the importance of flexibilities in the project design and commitments of the governments as key factors for achieving their overall goals. The compiled summaries of these projects are presented in Annex 7.

### **c. Technology Needs Assessments**

175. The GEF provides financial support for developing countries to undertake TNAs. Since 2001, more than 80 developing countries have undertaken TNAs. The first TNA project concept under the Poznan Strategic Program (called the Global TNA project, phase I) was approved by the LDCF/SCCF Council in April 2009 and endorsed by the GEF CEO in September 2009. Project implementation by the UNEP started in October 2009 and was completed in April 2013. Total SCCF-B funding for this project was \$9 million.

176. The Global TNA project (TNA Phase I) aimed to provide targeted financial and technical support to assist 36 developing countries in developing and/or updating their TNAs within the framework of Article 4.5 of the UNFCCC and to support them in preparing TAPs. The project sought to use methodologies in the updated TNA Handbook and to provide feedback to fine-tune the methodologies through an iterative process.

177. The TNA Phase I supported 36 countries between 2009 and 2013. These countries were:

- (a) Africa and the Middle East: Côte D'Ivoire, Ethiopia, Ghana, Kenya, Lebanon, Mali, Mauritius, Morocco, Rwanda, Senegal, Sudan, Zambia;
- (b) Asia and Eastern Europe: Azerbaijan, Bangladesh, Bhutan, Cambodia, Georgia, Indonesia, Kazakhstan, Lao People's Democratic Republic, Mongolia, Nepal, Republic of Moldova, Sri Lanka, Thailand, Viet Nam;
- (c) LAC: Argentina, Bolivia, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Peru.

178. The second TNA project concept (TNA phase II) to support 28 countries was approved by the GEF Council in April 2013 and endorsed by the GEF CEO in August 2014. Total GEF funding for this project is \$6.1 million. Project implementation by the UNEP started in November 2014. Two additional countries that already participated in TNA Phase I (namely, Kazakhstan and Lao People's Democratic Republic) have been supported in concluding their TAP reports. The Phase II countries are:

- (a) Africa and the Middle East: Burkina Faso, Burundi, Egypt, Eswatini, The Gambia, Jordan, Madagascar, Mauritania, Mozambique, Seychelles, Tanzania, Togo, Tunisia;
- (b) Asia and Eastern Europe: Armenia, Kazakhstan, Lao People's Democratic Republic, Malaysia, Pakistan, Philippines, Uzbekistan, Turkmenistan;
- (c) LAC: Belize, Bolivia, Grenada, Guyana, Honduras, Panama, Uruguay.

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<sup>69</sup> Note that not all reports are made publicly available.

179. The project comprises two components: (a) an in-depth analysis of the actual market and trade barriers that hinder the transfer of prioritized technologies, followed by an assessment of the policy, institutional and finance options to overcome these barriers; and (b) preparation of TNAs and TAPs through improved training and material.

180. The third TNA project concept (TNA phase III) to support 22 SIDS and LDCs and Ukraine was approved by the GEF Council in June 2016 and endorsed by the GEF CEO in March 2018. Total GEF financing for this project is \$5.9 million from the CCM Focal Area set-aside and \$270,000 from Ukraine's STAR allocation. These countries are as follows:

- (a) Africa and the Middle East: Benin, Central African Republic, Chad, Djibouti, Eritrea, Guinea, Liberia, Malawi, Niger, Sao Tome and Principe, Uganda;
- (b) Asia and the Pacific: Afghanistan, Fiji, Myanmar, Nauru;
- (c) Europe and Central Asia: Ukraine;
- (d) LAC: Antigua and Barbuda, Dominica, Haiti, Jamaica, Suriname, Trinidad and Tobago.

181. Based on the experience from two previous projects, this new project will be improved by: (a) implementing national training for a wider team of stakeholders in the country in order to strengthen their capacities; (b) peer-to-peer inter-country workshops; and (c) national event and roundtable to present TNA/TAP products to potential donors, development partners and investors for the financing and implementation of technology actions prioritized by the countries.

182. Under the GEF-6 Programming Directions, support to other countries' TNAs was possible using national allocations. In the reporting period, there was no national TNA project proposal received.

183. Five projects on NCs and BURs (in Albania, Bosnia and Herzegovina, Bangladesh, Chile and Lebanon) prioritize, among other information, TNA for various sectors in relation to CCM and CCA.

## **5. *Enabling Activities and Capacity-Building***

### ***a. Overview of GEF Support for Enabling Activities***

184. The GEF has supported various types of EAs, including NCs, BURs, and NAPAs. They fulfill essential communication requirements to the UNFCCC, and provide information to enable policy and decision-making.

185. Since its inception, the GEF has funded 421 EAs with \$479.0 million from the GEFTF and the LDCF. Of this amount, 370 EAs have been supported with \$466.8 million in funding (see Table 17 and Table 18) from the GEFTF, in support of NCs and BURs.

**Table 16: GEF Trust Fund Enabling Activities Projects by Region (GEF Pilot Phase to GEF-6)**

<i>Region</i>	<i>Number of projects</i>	<i>GEF amount (\$ million)</i>	<i>Co-financing (\$ million)</i>
Africa	108	40.2	20.1
Asia	78	74.4	59.8
ECA	56	24.2	5.8
LAC	98	86.0	71.8
Global	30	242.0	42.7
<b>Total</b>	<b>370</b>	<b>466.8</b>	<b>200.2</b>

**Table 17: GEF Trust Fund Enabling Activities Projects by Phase**

<i>Phase</i>	<i>Number of projects</i>	<i>GEF amount (\$ million)</i>	<i>Co-financing (\$ million)</i>
GEF Pilot (1991-1994)	8	34.1	9.5
GEF-1 (1994-1998)	96	49.3	10.8
GEF-2 (1998-2002)	105	49.8	17.6
GEF-3 (2002-2006)	36	83.2	10.5
GEF-4 (2006-2010)	8	56.1	31.2
GEF-5 (2011-2014)	59	111.6	102.4
GEF-6 (2014-2018)	58	82.7	18.2
<b>Total</b>	<b>370</b>	<b>466.8</b>	<b>200.2</b>

186. In the reporting period, the GEF financed, through the GEFTF, 16 EAs, in the amount of \$19.7 million. Annex 2 lists projects and programs for CCM and EAs approved under the GEFTF in the reporting period.

187. As at June 30, 2018, a total of 160 BURs have been approved for GEF funding in 126 countries.

188. The LDCF has supported the preparation of 51 NAPAs since its inception, in the total amount of \$12.2 million. All requests for NAPAs from LDCs have been financed by the previous reporting period and no additional request was received in this reporting period.

***b. National Communications and Biennial Update Reports***

189. The GEF continues to provide full-cost funding for NCs and BURs, and all requests to support NCs and BURs have been met by the GEF. The GEF has set-aside resources, separate from the STAR allocations, so that each country can access up to \$500,000 for NCs and \$352,000 for BURs. There are currently four options for countries to access GEF resources for NCs and BURs. In the first option, countries can work with a GEF agency of their choice to develop a project proposal. In the second option, countries can be part of a UNEP umbrella project for NCs and BURs. In the third option, countries can access the set-aside resources via direct access from the GEF Secretariat. Fourthly, those countries that wish to allocate additional resources can use their STAR allocation to complement the set-aside resources.

190. Information on the status of resources approved by the GEF Secretariat for the preparation of BURs and NCs from non-Annex I Parties will be submitted as an addendum to this report.

191. In the reporting period, 19 non-Annex I Parties submitted their NCs, and 12 non-Annex I Parties submitted their BURs, to the UNFCCC. The GEF, through its agencies, continues to provide assistance to Parties in formulating project proposals identified in their NCs (in accordance with Article 12 of the Convention and decision 5/CP.11) and in their BURs.

192. In order to submit any project proposal for approval, GEF agencies need to ensure the proposal's consistency with country's national priorities. A country confirms its endorsement of a proposal by providing a letter signed by the GEF OFP. Following the proposal submission, the GEF Secretariat, as a prerequisite for approval, examines and confirms its linkage to national priorities or programs. All the projects that have been approved by the GEF in the reporting period have been confirmed to correspond explicitly to national priorities, including those identified in NCs, BURs, TNAs and, since COP 21, their INDCs or NDCs, as applicable.

***c. Global Support Program for National Communications, Biennial Update Reports and Intended Nationally Determined Contributions***

193. The GSP for NCs and BURs is jointly implemented by the UNDP and UNEP. It provides technical support to developing countries to prepare quality NCs and BURs, while also facilitating backstopping for the submission and improvement of INDCs. Technical support is provided on-line, off-line and, as feasible, on-site to all interested developing countries and complements the work of other supporting bodies, such as the CGE.

194. The five-year program started in late 2015 and has so far provided support to more than 100 countries in Africa, Asia and the Pacific, LAC, and Eastern Europe, through a wide range of activities at national and regional levels.

195. In the reporting period, these activities included: reviews and technical backstopping of NCs, BURs, and (I)NDCs, including through in-country technical support to four countries; technical workshops for NCs and BURs in different regions, for example, on enhancing national capacities on MRV and transparency, uncertainty management in GHGIs, preparation and reporting of mitigation actions and mainstreaming of gender into NCs and BURs; sharing of best practices, guidance and methodologies through publications, webinars and virtual courses, including on establishment and improvement of national technical teams for GHGIs, the use of the 2006 IPCC guidelines on GHGIs and inventory management systems, performing peer reviews of GHGI reports and management systems through quality assurance/quality control procedures, measuring and evaluating vulnerability and adaptation, and introducing gender as a cross-cutting issue to the MRV process; translation of the IPCC primer on the 2006 IPCC guidelines into all official United Nations languages; and continued support for the two South-South communities of practice established in Latin America and in West Africa, including through peer-to-peer events, as well as the establishment of a new East and Southern African regional MRV hub.

196. The program recently went through a MTR whose final report was expected to be made available by July 2018.

#### **d. Capacity-Building**

197. Capacity-building is a key theme of GEF projects, and it is embedded in the design of both CCM and CCA projects. In addition, capacity-building for EAs and fulfillment of Convention obligations is identified as a distinct objective in a large number of projects.

198. The UNFCCC capacity-building framework identifies fifteen priority areas for capacity-building, as listed in decision 2/CP.7:

- (a) Institutional capacity-building, including the strengthening or establishment, as appropriate, of national climate change secretariats or NFPs;
- (b) Enhancement and/or creation of an enabling environment;
- (c) NCs;
- (d) National climate change program;
- (e) GHGIs, emissions database management, and systems for collecting, managing and utilizing activity data and emission factors;
- (f) Vulnerability and adaptation assessment;
- (g) Capacity-building for implementation of adaptation measures;
- (h) Assessment for implementation of mitigation options;
- (i) Research and systemic observation, including meteorological, hydrological and climatological services;
- (j) Development and transfer of technology;
- (k) Improved decision-making, including assistance for participation in international negotiations;
- (l) Clean Development Mechanism (CDM);
- (m) Needs arising out of the implementation of Article 4, paragraphs 8 and 9, of the Convention;
- (n) Education, training and public awareness; and
- (o) Information and networking, including the establishment of databases.

199. In the calendar year 2017, the GEFTF, LDCF and SCCF portfolios supported 82 (69 CCM and 13 CCA) stand-alone and MFA projects with various capacity-building priorities as listed above, in the form of technical assistance. The total GEF funding towards supporting these capacity-building activities in 2017 amounted to approximately \$166.2 million. Of these activities, 33 projects provided support to 45 SIDS and LDCs with capacity-building activities amounting to \$67.1 million. These activities were communicated to the UNFCCC through its capacity-building portal in February 2018.

200. These projects cut across thirteen UNFCCC-defined priority areas for capacity-building. The majority of CCM projects address institutional capacity-building (including the strengthening or establishment of national climate change secretariats or NFPs), development of national reports such as NCs, BURs and other EAs, enhancement and transfer of technologies, and enhancement of

enabling conditions, among others. Similarly, in the field of CCA, efforts include institutional development and strengthening, vulnerability and adaptation assessments, development of national climate change programs, implementation of adaptation measures, research and systemic observation through climate information systems, and public awareness/education programs.

201. The GEF continues to support the implementation of Article 6 of the Convention and the Doha Work Program, including by providing financial resources to non-Annex I Parties, in particular African countries, LDCs and SIDS. In the calendar year 2017, the GEF provided a minimum of \$13.0 million towards education, training and public awareness through its regular CCM and CCA programming. In addition, many NC projects contain components that provide support in this regard.

***e. GEF-6 Cross-Cutting Capacity Development***

202. Since its inception, the GEF has supported capacity development at all levels, within regular GEF programs and projects, through specific activities targeted specifically at capacity development and EAs. Guidance from the COP, and consistent demand from countries for tangible capacity development actions, have emphasized the importance of developing countries' capacities, and have called for the GEF to provide targeted funding for country-driven capacity development activities to developing countries.

203. The CCCD in the GEF context traditionally referred to the targeted support provided to countries to strengthen their capacities to meet their commitments under the Rio conventions and other MEAs. This type of capacity development focused on addressing systemic cross-cutting national environmental management matters in GEF recipient countries, and was complementary to capacity development under individual focal area projects.

204. The CCCD strategy for GEF-6 was distinct from capacity development at the individual focal area level as it aimed to address those transversal issues that focal area projects alone do not address. Cross-cutting refers to the GEF's ability to establish synergies between the Rio conventions and other MEAs and the consequent possibility to work across sectors of the economy. In GEF-6, special emphasis was placed on the projects bringing together the national and local stakeholders, in particular the ministries of finance, agriculture, industry, energy, planning, budget, as appropriate, so that the matters referring to the global environment were understood as an essential part of national interest and are incorporated into the regular process of decision-making. In the reporting period, the GEF supported one country with a CCCD project, "Systemic, Institutional and Individual Capacity for the Implementation of the Rio Conventions in the Republic of South Sudan", implemented by the UNEP.

205. The main feature of the CCCD in GEF-6 was that, in addition to mainstreaming of MEAs into the national and sub-national policy, legal and planning agendas, the strategy emphasized the integration of environmental sustainability across key development sectors, and across various actors, including government, civil society and the private sector. The strategic objectives were to:

- (a) Integrate global environmental needs into management information systems and monitoring;
- (b) Strengthen consultative and management structures and mechanisms;

- (c) Integrate MEAs' provisions into national policy, legislative, and regulatory frameworks;
- (d) Pilot innovative economic and financial tools for Convention implementation; and
- (e) Update National Capacity Self-Assessments (NCSAs).

206. Some of the funded activities included the following:

- (a) Development of coordinated environmental knowledge and information management systems that include a reporting analysis for the different conventions from various line ministries;
- (b) Enhancement of institutional and technical capacities to mainstream, develop, and utilize policies for effective implementation of the Rio conventions, other MEAs and relevant SDGs;
- (c) Comprehensive assessment of economic indicators and information systems for improved monitoring and decision-making on the global environmental matters;
- (d) Development of improved institutional mechanisms, standards, norms, and procedures to catalyze the integration of the global environmental matters into sectoral development plans;
- (e) Learning-by-doing workshops on best practice and innovations for Rio conventions mainstreaming through the use of environmental accounting and natural resource valuation; and
- (f) Resource mobilization strategy for the long-term financial sustainability of improved planning and decision-making for the global environmental matters.

207. The GEF is committed to provide support for countries to build their capacities to meet the challenges of climate change. The CCCD was discontinued in GEF-7 and capacity-building support will be provided through other means, including regular programming provided by the GEF as well as country engagement by the GEF Secretariat. Most GEF projects include capacity-building components and deliver such support in an integrated fashion together with investment components. In terms of country engagement, the GEF Country Support Program for GEF-7 includes the following activities:<sup>70</sup>

- (a) GEF programming and training activities, including GEF National Dialogues and GEF Workshops (\$14.7 million);
- (b) GEF constituency meetings (\$5 million);
- (c) GEF introduction seminars (\$1 million);
- (d) Pre-Council meetings for recipient country Council members/alternates (\$0.3 million).

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<sup>70</sup> GEF, 2018, [Country Support Program Implementation Arrangements for GEF-7](#), Council Document GEF/C.54/04/Rev.01

## ANNEXES

### ANNEX 1: GEF-7 FUNDING ENVELOPES AND ALLOCATIONS

The following Table provides the initial STAR country allocations for all countries that receive an allocation in GEF-7.<sup>71</sup>

**Table A1.1: Initial GEF-7 STAR Country Allocations (\$ million)<sup>72</sup>**

<i>Country</i>	<i>Climate change</i>	<i>Biodiversity</i>	<i>Land degradation</i>	<i>Total</i>	<i>Fully flexible</i>	<i>Marginal adjustment<sup>73</sup></i>
Afghanistan	1.50	3.00	4.43	8.93	no	2.00
Albania	1.00	2.00	1.00	4.00	yes	
Algeria	4.18	3.46	2.08	9.71	no	2.00
Angola	2.01	6.37	2.05	10.42	no	2.00
Antigua and Barbuda	1.00	2.00	1.00	4.00	yes	
Argentina	6.38	13.10	5.23	24.71	no	3.21
Armenia	1.31	2.00	4.14	7.45	no	2.00
Azerbaijan	5.06	2.00	3.42	10.48	no	2.00
Bahamas	1.00	4.76	1.22	6.98	yes	
Bangladesh	2.16	3.00	1.50	6.66	yes	
Barbados	1.00	2.00	1.00	4.00	yes	
Belarus	5.64	2.00	1.00	8.64	no	2.00
Belize	1.00	2.60	1.00	4.60	yes	
Benin	1.50	3.00	5.11	9.61	no	2.00
Bhutan	1.50	3.00	1.50	6.00	yes	
Bolivia, Plurinational State of	2.05	12.57	3.19	17.82	no	2.32
Bosnia and Herzegovina	1.00	2.00	1.00	4.00	yes	
Botswana	1.00	2.21	4.10	7.31	no	2.00
Brazil	17.62	52.88	6.98	77.48	no	10.07
Burkina Faso	1.50	3.00	6.69	11.19	no	2.00
Burundi	1.50	3.00	1.50	6.00	yes	
Cambodia	1.50	3.42	1.50	6.42	yes	
Cameroon	1.63	10.96	1.40	13.99	no	2.00

<sup>71</sup> GEF, 2018, [Initial GEF-7 STAR Country Allocations](#), Council Document GEF/C.55/Inf.03.

<sup>72</sup> The figures presented here are rounded to two decimal places. On the GEF Portal, these figures are presented as their actual initial amounts.

<sup>73</sup> This represents the marginal adjustments allowed for countries with total initial STAR country allocations exceeding US\$7 million, at US\$2 million or 13 percent of their total initial STAR country allocations, whichever is higher.

<i>Country</i>	<i>Climate change</i>	<i>Biodiversity</i>	<i>Land degradation</i>	<i>Total</i>	<i>Fully flexible</i>	<i>Marginal adjustment<sup>73</sup></i>
Cape Verde	1.00	6.28	1.21	8.49	no	2.00
Central African Republic	1.50	3.00	1.79	6.29	yes	
Chad	1.50	3.00	3.89	8.39	no	2.00
Chile	2.99	13.28	2.13	18.41	no	2.39
China	80.15	33.85	4.38	118.38	no	15.39
Colombia	10.85	39.10	2.05	52.00	no	6.76
Comoros	1.50	3.00	1.50	6.00	yes	
Congo	1.00	3.05	1.00	5.05	yes	
Cook Islands	1.00	2.00	1.00	4.00	yes	
Costa Rica	1.00	9.76	1.00	11.76	no	2.00
Côte D'Ivoire	1.00	4.70	3.29	8.99	no	2.00
Cuba	1.86	9.26	1.00	12.12	no	2.00
Democratic Republic of the Congo	3.10	16.26	2.22	21.58	no	2.81
Djibouti	1.50	3.00	2.70	7.20	no	2.00
Dominica	1.00	2.00	1.00	4.00	yes	
Dominican Republic	1.00	4.98	1.00	6.98	yes	
Ecuador	1.45	24.38	3.06	28.89	no	3.76
Egypt	5.93	4.18	1.67	11.77	no	2.00
El Salvador	1.00	2.00	1.00	4.00	yes	
Equatorial Guinea	1.00	2.00	1.00	4.00	yes	
Eritrea	1.50	3.00	3.74	8.24	no	2.00
Ethiopia	3.76	11.53	6.01	21.30	no	2.77
Fiji	1.00	6.13	1.00	8.13	no	2.00
Gabon	1.00	3.45	1.00	5.45	yes	
Gambia	1.50	3.00	5.33	9.83	no	2.00
Georgia	1.50	2.00	2.20	5.70	yes	
Ghana	1.00	4.27	4.20	9.47	no	2.00
Grenada	1.00	2.00	1.00	4.00	yes	
Guatemala	1.00	7.38	1.00	9.38	no	2.00
Guinea	1.50	3.70	1.92	7.12	no	2.00

<i>Country</i>	<i>Climate change</i>	<i>Biodiversity</i>	<i>Land degradation</i>	<i>Total</i>	<i>Fully flexible</i>	<i>Marginal adjustment<sup>73</sup></i>
Guinea-Bissau	1.50	3.00	1.50	6.00	yes	
Guyana	1.00	2.96	1.00	4.96	yes	
Haiti	1.50	5.70	1.50	8.70	no	2.00
Honduras	1.00	9.13	1.00	11.13	no	2.00
India	47.24	34.02	4.36	85.61	no	11.13
Indonesia	12.04	64.59	2.25	78.88	no	10.25
Iran (Islamic Republic of)	4.85	3.17	2.87	10.89	no	2.00
Iraq	3.55	2.00	3.13	8.69	no	2.00
Jamaica	1.00	4.12	1.84	6.96	yes	
Jordan	1.18	2.00	3.45	6.63	yes	
Kazakhstan	7.19	3.24	6.27	16.70	no	2.17
Kenya	1.66	9.61	4.71	15.98	no	2.08
Kiribati	1.50	3.14	1.50	6.14	yes	
Kyrgyzstan	1.02	2.00	2.70	5.71	yes	
Lao People's Democratic Republic	1.50	5.07	1.50	8.07	no	2.00
Lebanon	1.00	2.00	2.50	5.50	yes	
Lesotho	1.50	3.00	1.50	6.00	yes	
Liberia	1.50	3.13	1.50	6.13	yes	
Libya	1.78	2.00	1.11	4.89	yes	
Madagascar	1.50	33.79	3.16	38.45	no	5.00
Malawi	1.50	3.16	1.60	6.27	yes	
Malaysia	5.77	15.18	1.00	21.95	no	2.85
Maldives	1.00	2.44	1.00	4.44	yes	
Mali	1.50	3.00	5.84	10.34	no	2.00
Marshall Islands	1.00	3.31	1.00	5.31	yes	
Mauritania	1.50	3.00	2.93	7.43	no	2.00
Mauritius	1.00	4.24	1.00	6.24	yes	
Mexico	13.46	47.04	4.04	64.54	no	8.39
Micronesia (Federated States of)	1.00	4.46	1.00	6.46	yes	
Mongolia	2.35	3.39	3.34	9.09	no	2.00

<i>Country</i>	<i>Climate change</i>	<i>Biodiversity</i>	<i>Land degradation</i>	<i>Total</i>	<i>Fully flexible</i>	<i>Marginal adjustment<sup>73</sup></i>
Montenegro	1.00	2.00	1.00	4.00	yes	
Morocco	2.49	3.48	4.44	10.41	no	2.00
Mozambique	2.08	10.84	4.47	17.39	no	2.26
Myanmar	4.26	9.84	1.50	15.59	no	2.03
Namibia	1.00	6.25	6.62	13.88	no	2.00
Nauru	1.00	2.00	1.00	4.00	yes	
Nepal	1.50	3.75	1.77	7.03	no	2.00
Nicaragua	1.00	5.37	1.00	7.37	no	2.00
Niger	1.50	3.00	5.07	9.57	no	2.00
Nigeria	10.78	5.64	4.26	20.68	no	2.69
Niue	1.00	2.00	1.00	4.00	yes	
Pakistan	5.93	3.81	4.36	14.10	no	2.00
Palau	1.00	2.06	1.00	4.06	yes	
Panama	1.00	10.71	1.00	12.71	no	2.00
Papua New Guinea	1.00	17.31	1.00	19.31	no	2.51
Paraguay	1.00	2.48	2.88	6.36	yes	
Peru	3.06	29.17	2.57	34.80	no	4.52
Philippines	4.28	32.86	1.11	38.25	no	4.97
Republic of Moldova	1.00	2.00	5.28	8.28	no	2.00
Russian Federation	39.86	13.46	6.68	60.00	no	7.80
Rwanda	1.50	3.00	1.50	6.00	yes	
Saint Kitts and Nevis	1.00	2.00	1.00	4.00	yes	
Saint Lucia	1.00	2.00	1.00	4.00	yes	
Saint Vincent and the Grenadines	1.00	2.00	1.00	4.00	yes	
Samoa	1.00	2.00	1.00	4.00	yes	
Sao Tome and Principe	1.50	3.38	3.41	8.28	no	2.00
Senegal	1.50	4.45	5.19	11.14	no	2.00
Serbia	1.47	2.00	1.00	4.47	yes	
Seychelles	1.00	4.59	1.00	6.59	yes	
Sierra Leone	1.50	3.00	1.50	6.00	yes	
Solomon Islands	1.50	7.31	1.50	10.31	no	2.00

<i>Country</i>	<i>Climate change</i>	<i>Biodiversity</i>	<i>Land degradation</i>	<i>Total</i>	<i>Fully flexible</i>	<i>Marginal adjustment<sup>73</sup></i>
Somalia	1.68	7.31	4.70	13.69	no	2.00
South Africa	10.15	23.83	4.12	38.11	no	4.95
South Sudan	1.50	3.00	1.50	6.00	yes	
Sri Lanka	1.00	8.15	1.70	10.85	no	2.00
Sudan	1.50	3.00	2.87	7.37	no	2.00
Suriname	1.00	2.00	1.00	4.00	yes	
Swaziland (Eswatini)	1.00	2.00	2.67	5.67	yes	
Syrian Arab Republic	1.15	2.00	3.10	6.24	yes	
Tajikistan	1.00	2.00	2.73	5.73	yes	
Thailand	7.36	9.60	1.61	18.56	no	2.41
The former Yugoslav Republic of Macedonia	1.00	2.00	2.18	5.18	yes	
Timor-Leste	1.50	3.00	1.50	6.00	yes	
Togo	1.50	3.00	2.73	7.23	no	2.00
Tonga	1.00	2.89	1.00	4.89	yes	
Trinidad and Tobago	1.05	2.07	1.16	4.27	yes	
Tunisia	1.29	2.00	4.32	7.61	no	2.00
Turkey	7.25	4.53	3.59	15.37	no	2.00
Turkmenistan	2.37	2.00	3.15	7.52	no	2.00
Tuvalu	1.50	3.00	1.50	6.00	yes	
Uganda	1.50	3.84	2.39	7.74	no	2.00
Ukraine	10.01	2.00	3.39	15.39	no	2.00
United Republic of Tanzania	1.79	16.79	5.42	24.00	no	3.12
Uruguay	1.00	2.54	1.00	4.54	yes	
Uzbekistan	10.94	2.00	5.34	18.28	no	2.38
Vanuatu	1.50	3.91	1.50	6.91	yes	
Venezuela (Bolivarian Republic of)	3.76	15.05	1.00	19.82	no	2.58
Viet Nam	3.62	13.00	1.39	18.01	no	2.34
Yemen	1.50	5.64	2.19	9.33	no	2.00
Zambia	3.32	5.08	2.41	10.81	no	2.00
Zimbabwe	1.32	3.53	4.40	9.25	no	2.00

## ANNEX 2: LIST OF FY 2018 PROJECTS AND PROGRAMS UNDER THE GEF TRUST FUND

This Annex lists projects and programs on CCM and EAs approved under the GEFTF in the reporting period (July 1, 2017 to June 30, 2018).

### 1. List of FY 2018 Climate Change Mitigation Projects

**Table A2.1: FY 2018 Climate Change Mitigation Projects**

<i>GEF ID</i>	<i>Country</i>	<i>Agency</i>	<i>Title</i>	<i>Type<sup>a</sup></i>	<i>Total GEF (\$ million)</i>	<i>Co-financing (\$ million)</i>	<i>Total (\$ million)</i>
<b>Stand-alone projects</b>							
9368	Bangladesh	UNDP	<i>Promoting Low-carbon Urban Development in Bangladesh</i>	TU	4.3	24.3	28.5
9561	Guinea-Bissau	UNDP	<i>Promoting Better Access to Modern Energy Services through Sustainable Mini-grids and Low-carbon Bioenergy Technologies Among Guinea-Bissau's Forest-dependent Communities</i>	RE	3.3	9.0	12.3
9581	Colombia	CAF	<i>Transformation of Colombia's Panama Subsector through the Nationally Appropriate Mitigation Action (NAMA)'s Initial Implementation (CPS-NAMA)</i>	TT	2.2	7.9	10.1
9585	Pakistan	UNIDO	<i>Transforming the Leather Processing Industries towards Low-emission and Climate-resilient Development Paths in Pakistan</i>	TT	2.2	7.2	9.5
9683	Democratic Republic of the Congo	UNIDO	<i>Promotion of Waste-to-Energy Options for Sustainable Urban Management in the Democratic Republic of the Congo</i>	TU	4.5	16.0	20.5
9706	Cuba	UNDP	<i>Low-carbon Transport Systems in the City of La Havana</i>	TU	2.2	15.4	17.6
9714	Nigeria	UNIDO	<i>Improving Nigeria's Industrial Energy Performance and Resource Efficient Cleaner Production through Programmatic Approaches and the Promotion of Innovation in Clean Technology Solutions</i>	TT	4.4	22.0	26.4
9742	Chile	CAF	<i>Supporting the Chilean Low-emission Transport Strategy (CLETS)</i>	TU	3.3	37.6	40.8
9743	Nigeria	UNDP	<i>De-risking Sustainable Off-grid Lighting Solutions in Nigeria</i>	RE	3.0	10.6	13.6
9749	China	World Bank	<i>China Distributed Renewable Energy Scale-up Project</i>	RE	8.0	80.0	88.0
9752	Niue	UNDP	<i>Accelerating Renewable Energy and Energy Efficiency Applications in Niue (AREAN)</i>	Mixed	3.8	16.4	20.2
9787	Solomon Islands	UNDP	<i>Stimulating Progress towards Improved Rural Electrification in the Solomon Islands (SPIRES)</i>	Mixed	3.0	15.6	18.6
9789	Trinidad and Tobago	UNDP	<i>Energy Efficiency through the Development of Low-carbon RAC Technologies in Trinidad and Tobago</i>	EE	5.8	13.6	19.4
9810	Angola	UNDP	<i>Promoting Sustainable Energy Access for Rural Communities in South-Eastern Angola</i>	RE	4.0	18.0	22.0
9811	Ukraine	UNIDO	<i>The Global Cleantech Innovation Programme for SMEs</i>	TT	1.7	4.6	6.3
9812	Cabo Verde	UNIDO	<i>Sustainable Energy Access to Manage Water Resources: Addressing the Energy-water Nexus</i>	Mixed	2.0	6.0	8.0
9830	Myanmar	UNIDO	<i>Climate Change Mitigation through Methane Recovery and Reuse from Industrial Wastewater Treatment</i>	TT	4.5	19.1	23.6
9863	Micronesia (Federated States of)	UNDP	<i>Micronesia Public Sector Buildings Energy Efficiency (MPSBEE) Project</i>	EE	2.0	3.5	5.5
9890	Myanmar	UNDP	<i>Myanmar Rural Renewable Energy Development Programme</i>	RE	5.5	33.0	38.5
9895	Belarus	UNDP	<i>Capacity Building for Emissions Trading and Strengthened MRV</i>	Mixed	1.0	4.0	5.0
9897	Sao Tome and Principe	UNIDO	<i>Strategic Program to Promote Renewable Energy and Energy Efficiency Investments in the Electricity Sector of Sao Tome and Principe</i>	Mixed	1.8	10.5	12.2
9905	Kiribati	UNDP	<i>Promoting Outer Island Development through the Integrated Energy Roadmap (POIDIER)</i>	Mixed	6.0	26.9	32.9

<i>GEF ID</i>	<i>Country</i>	<i>Agency</i>	<i>Title</i>	<i>Type<sup>a</sup></i>	<i>Total GEF (\$ million)</i>	<i>Co-financing (\$ million)</i>	<i>Total (\$ million)</i>
9921	Philippines	UNIDO	<i>Global Partnership for Improving the Food Cold Chain in the Philippines</i>	EE	2.2	12.0	14.2
9931	Regional	UNDP	<i>Clean Rural Electrification for African Countries</i>	RE	1.1	0.6	1.6
9935	Global	World Bank	<i>Global Green Residential Housing Finance Program (GreenHF)</i>	EE	1.6	1.9	3.5
9947	Global	UNEP	<i>The SEforALL Building Efficiency Accelerator (BEA): Expanding Local Action and Driving National Change</i>	EE	2.2	8.1	10.3
9950	Montenegro	UNDP	<i>Growing Green Business in Montenegro</i>	TT	0.8	4.6	5.5
9974	Nauru	UNDP	<i>Supporting Mainstreamed Achievement of Roadmap Targets on Energy in Nauru (SMARTEN)</i>	Mixed	3.8	13.4	17.1
10034	Equatorial Guinea	FAO	<i>Promoting Community-Based Forestry for Climate Change Mitigation and Sustainable Livelihoods in Equatorial Guinea</i>	AFOLU	6.0	18.2	24.2
10051	Djibouti	UNDP	<i>Promoting a Better Access to Modern Energy Services through Sustainable Mini-grids and Hybrid Technologies in Djibouti</i>	RE	1.0	4.0	5.0
10054	Dominican Republic	FAO	<i>Promoting Climate-smart Livestock Management in the Dominican Republic</i>	AFOLU	1.7	8.1	9.9
<b>Stand-alone projects Subtotal</b>					<b>99.0</b>	<b>471.9</b>	<b>571.0</b>
<b>Multi-focal area projects</b>							
9239	Indonesia	IFAD	<i>Integrated Management of Peatland Landscapes in Indonesia (IMPLI)</i>	AFOLU	5.5	20.7	26.2
9261	Myanmar	FAO	<i>My-Coast: Ecosystem-Based Conservation of Myanmar's Southern Coastal Zone</i>	AFOLU	3.5	15.7	19.2
9400	United Republic of Tanzania	UNDP	<i>Safeguarding Zanzibar's Forest and Coastal Habitats for Multiple Benefits</i>	AFOLU	5.8	23.0	28.8
9405	Niger	UNEP	<i>Integrated Management of Oasis Ecosystems of Northern Niger (IMOE-NN)</i>	AFOLU	5.2	34.3	39.5
9426	Namibia	UNDP	<i>Namibia Integrated Landscape Approach for Enhancing Livelihoods and Environmental Governance to Eradicate Poverty (NILALEG)</i>	AFOLU	12.0	65.2	77.2
9558	Thailand	UNDP	<i>Sixth Operational Phase of the GEF Small Grants Programme in Thailand</i>	SGP	2.7	8.7	11.4
9575	Sudan	World Bank	<i>Sudan Sustainable Natural Resources Management Project-Additional Financing</i>	AFOLU	6.0	18.8	24.8
9738	Regional	UNEP	<i>GLOBE Legislators Advancing REDD+ and Natural Capital Governance Towards the Delivery of the 2030 Agenda</i>	AFOLU	1.2	3.4	4.6
9760	Democratic Republic of the Congo	World Bank	<i>Mai-Ndombe REDD+ Integrated Project</i>	AFOLU	6.8	32.4	39.2
9764	Burkina Faso	UNDP	<i>Integrated and Sustainable Management of Ponasi Protected Area Landscape</i>	AFOLU	6.0	19.2	25.2
9768	China	UNDP/FAO, World Bank	<i>PRC-GEF Partnership Program for Sustainable Agricultural Development</i>	AFOLU	13.4	83.3	96.7
9770	Regional	UNEP	<i>Implementation of the Strategic Action Programme to Ensure Integrated and Sustainable Management of the Transboundary Water Resources of the Amazon River Basin Considering Climate Variability and Change</i>	Mixed	13.1	108.5	121.6
9783	Guinea	UNDP	<i>Integrated Management of Natural Resources in Middle and Upper Guinea</i>	AFOLU	8.0	25.0	33.0
9785	St. Kitts And Nevis	UNEP	<i>Improving Environmental Management through Sustainable Land Management in St. Kitts and Nevis</i>	AFOLU	3.4	14.5	17.9
9791	Bahamas	UNEP	<i>Meeting the Challenge of 2020 in The Bahamas</i>	AFOLU	7.0	12.0	19.0
9793	Madagascar	UNEP	<i>Conservation and Improvement of Ecosystem Services for the Atsinanana Region through Agroecology and the Promotion of Sustainable Energy Production</i>	Mixed	4.3	20.1	24.4

<b>GEF ID</b>	<b>Country</b>	<b>Agency</b>	<b>Title</b>	<b>Type<sup>a</sup></b>	<b>Total GEF (\$ million)</b>	<b>Co-financing (\$ million)</b>	<b>Total (\$ million)</b>
9795	Azerbaijan	FAO	<i>Forest Resources Assessment and Monitoring to Strengthen Forest Knowledge Framework in Azerbaijan</i>	AFOLU	2.3	7.0	9.3
9803	Haiti	IDB	<i>Managing the Human-Biodiversity Interface in the Southern Marine Protected Areas of Haiti (MHBI)</i>	AFOLU	2.0	10.6	12.6
9813	Ukraine	FAO	<i>Integrated Natural Resources Management in Degraded Landscapes in the Forest-Steppe and Steppe Zones of Ukraine</i>	AFOLU	2.0	10.3	12.3
9857	Global	UNDP	<i>GEF SGP Sixth Operational Phase-Strategic Implementation using STAR Resources, Tranche 2 (Part IV)</i>	SGP	19.9	19.9	39.9
9880	Fiji	FAO	<i>Community-based Integrated Natural Resource Management Project</i>	AFOLU	2.4	13.4	15.8
9909	Regional	ADB	<i>Sustainable Management of the Bay of Bengal Large Marine Ecosystem Programme</i>	AFOLU	15.6	165.0	180.6
9993	Global	FAO	<i>AVACLIM: Agro-ecology, Ensuring Food Security and Sustainable Livelihoods while Mitigating Climate Change and Restoring Land in Dryland Regions</i>	AFOLU	1.3	6.1	7.4
<b>Multi-focal area projects Subtotal</b>					<b>149.4</b>	<b>737.0</b>	<b>886.4</b>

a EE: energy efficiency, RE: renewable energy, TU: sustainable transport and urban systems, TT: demonstration, deployment, and transfer of innovative LCTs.

## 2. List of FY 2018 Enabling Activity Projects

**Table A2.2: FY 2018 Enabling Activity Projects**

<i>GEF ID</i>	<i>Country</i>	<i>Agency</i>	<i>Title</i>	<i>GEF amount (\$ million)</i>	<i>Co- financing (\$ million)</i>	<i>Total (\$ million)</i>
9733	Serbia	UNDP	<i>Second Biennial Update Report and Third National Communication under the UNFCCC</i>	0.9	0.1	1.0
9831	Chile	UNDP	<i>Third Biennial Update Report and Fourth National Communication under the UNFCCC</i>	0.9	0.1	1.0
9844	Guatemala	UNDP	<i>First Biennial Update Report and Third National Communication on Climate Change</i>	0.9	0.5	1.5
9871	Colombia	UNDP	<i>Colombia's Second Biennial Update Report</i>	0.4	0.0	0.4
9877	Bosnia and Herzegovina	UNDP	<i>Fourth National Communication and Third Biennial Update Report under the UNFCCC</i>	0.9	0.2	1.1
9929	Belarus	UNDP	<i>Preparation of the Seventh National Communication for the Implementation of the UNFCCC and the Third Biennial Report</i>	0.9	0.0	1.0
9945	Albania	UNDP	<i>Albania's First Biennial Update Report and Fourth National Communication under the UNFCCC</i>	0.9	0.1	1.0
9952	Argentina	UNDP	<i>Argentine Republic's Third Biennial Update Report</i>	0.4	0.1	0.4
9957	Bangladesh	UNDP	<i>Bangladesh: First Biennial Update Report (BUR1) to the UNFCCC</i>	0.4	0.1	0.5
9977	Togo	UNDP	<i>Preparation of the Fourth National Communication and of the Second Biennial Updated Report to the UNFCCC</i>	0.9	0.3	1.3
9982	Lebanon	UNDP	<i>Lebanon's Fourth National Communication and Third Biennial Update Report under the UNFCCC</i>	0.9	0.1	1.0
9996	Niger	UNDP	<i>Fourth National Communication on Climate Change</i>	0.5	0.4	0.9
10010	Egypt	UNDP	<i>Fourth National Communication to the UNFCCC</i>	0.5	0.1	0.6
10019	Global	UNEP	<i>Umbrella Programme for Preparation of National Communications and Biennial Update Reports to the UNFCCC</i>	8.1	0.7	8.8
10024	The former Yugoslav Republic of Macedonia	UNDP	<i>Fourth National Communication and Third Biennial Update Report on Climate Change under the UNFCCC</i>	0.9	0.4	1.3
10045	Algeria	UNDP	<i>Third National Communication and First Biennial Update Report of Algeria to the UNFCCC</i>	0.9	2.4	3.3
<b>Enabling activities Subtotal</b>				<b>19.7</b>	<b>5.6</b>	<b>25.2</b>

### 3. Summaries of Climate Change Mitigation Stand-alone Projects Approved in FY 2018

Bangladesh: *Promoting Low-carbon Urban Development in Bangladesh (GEFID: 9368, UNDP, GEFTF: \$4.3 million. Total Cost: \$28.5 million)*. This project will enable investments in renewable energy and waste-to-energy applications in Bangladeshi cities through the integration of urban investment with low-carbon development plans. The project will support the integration of urban investment with Bangladesh's low-carbon development initiatives; implement selected low-carbon interventions in four cities: Dhaka, Chittagong, Gazipur and Khulna; and sensitize city dwellers on low-carbon efforts. The project will accelerate the uptake of an innovative business model - integrated resource recovery center (IRRC), which promotes waste segregation at the source. Through selling sorted-out recyclable materials, communities can make a profit. The separated organic waste is composted to produce organic fertilizer or generate biogas. The IRRC business model has a great potential to be scaled up in many developing cities where waste management remains to be a major urban development hurdle. The total emission reductions are estimated at 857,500 t CO<sub>2</sub> eq, including direct and consequential emission reductions.

Guinea-Bissau: *Promoting Better Access to Modern Energy Services through Sustainable Mini-grids and Low-carbon Bioenergy Technologies Among Guinea-Bissau's Forest-dependent Communities (GEFID: 9561, UNDP, GEFTF: \$3.3 million. Total Cost: \$12.3 million)*. Guinea-Bissau has one of the lowest electrification rates and highest electricity service costs in Africa. The country is completely dependent on petroleum products, despite its own high energy potential, especially in terms of hydroelectric power. Energy use in Guinea-Bissau is one of the world's lowest per capita. The national final energy consumption is characterized by the predominance of traditional use of biomass (up to 87.8percent), followed by 11.7percent from petroleum products and only 0.5 percent from electricity. This project aims to promote integrated investment in sustainable mini-grids and low-carbon bioenergy technologies, and develop an appropriate business model for the sustainability of the system. It includes three major components: (a) policy and financial instruments and incentive scheme for sustainable mini-grids and low-carbon bioenergy technologies; (b) capacity building for renewable energy-based mini-grid and low-carbon bioenergy system management; and (3) renewable energy-based mini-grids and low-carbon bioenergy technologies rollout. The GEB target is to directly reduce 190,288 t CO<sub>2</sub> eq.

Colombia: *Transformation of Colombia's Panela Subsector through the Nationally Appropriate Mitigation Action (NAMA)'s Initial Implementation (CPS-NAMA) (GEFID: 9581, CAF, GEFTF: \$2.2 million. Total Cost \$10 million)*. This project aims to contribute to the implementation of the NAMA through the productive and technological transformation of the Panela sub-sector. Colombia is the second largest producer of panela in the world and this a socio-economically important sub-sector for the rural population. This project will improve panela production practices through a series of agro-ecological and energy-efficient measures. It will work with 45 local production units in 14 departments in Colombia and build their capacity adopt these best practices and technologies. The project will also elaborate a business plan to scale up and mobilize resources for the national implementation of the NAMA. It is estimated that the project will reduce GHG emissions by 208,400 t CO<sub>2</sub> eq directly through the implementation of energy efficiency measures.

Pakistan: *Transforming the Leather Processing Industries towards Low-emission and Climate-resilient Development Paths in Pakistan (GEFID: 9585, UNIDO, GEFTF: \$2.2 million. Total Cost \$9.48 million)*. Pakistan is suffering from the worst electricity crisis in its history, resulting in extended load-shedding, which significantly affects national economy and social security. Inadequate energy supply has severely impacted the growth of industries and businesses as well as the welfare of the public. The Government has developed an Action Plan for implementing CCM measures in the energy sector, including introduction of energy conservation measures and promotion of renewable power for the country. This project aims to transform industrial processing zones in Sindh Province towards widespread adoption of low-carbon technologies. It will work with facilitation towards climate-resilient and low-emission industrial processing; capacity building on the Corporate Carbon Footprint (CCF) approach; pilot demonstration of CCFs, intelligent waste management and practices within the leather processing sectors of Sindh Province. It is estimated to reduce 202,589 t CO<sub>2</sub> eq, including 190,000 t directly, and 12,589 t consequentially over the project lifetime.

Democratic Republic of the Congo: *Promotion of Waste-to-Energy Options for Sustainable Urban Management in the Democratic Republic of the Congo (GEFID: 9683, UNIDO, GEFTF: \$4.5 million. Total Cost: \$20.5 million)*. Accumulation of solid waste leads to a visible effect of local and global environmental degradation in all of the country's cities. In the municipal solid waste (MSW) management sector, the country faces several challenges. Rapid urbanization and population growth has led to vast solid waste generation every day. Total MSW generation in the country was at 4.55

Mt in 2010. This business-as-usual trend needs to be transformed. The project aims to promote sustainable waste management and energy technologies in the Democratic Republic of the Congo through: policy and regulation formulation; establishment of sustainable waste collection system; and demonstration of municipal waste-to-energy recovery technologies, such as land fill gas-to-power generation, through a value chain approach and stakeholder analysis. The GEB target is to reduce 5.79 Mt CO<sub>2</sub> eq, including 2.48 Mt directly, and 3.31 Mt consequentially over the project lifetime.

*Cuba: Low-carbon Transport Systems in the City of La Havana (GEFID: 9706, UNDP, GEFTF: \$ 2.2 million. Total Cost \$ 17.6 million).* This project aims to promote the implementation of a low-carbon urban transport system in the city of La Havana. It will build upon ongoing efforts of the Government of Cuba to implement its National Plan for Climate Change. The central Government has passed several regulations on traffic management policies and environmental guidelines. In La Havana, the city authority has made an effort to integrate territorial development planning with the Urban Transport Development Program, and approved a public budget for the design of a bus rapid transit system. The project will enhance the technological transition of low-carbon mobility and facilitate the implementation of the Urban Transport Development Program through improving institutional capabilities, empowering stakeholders, updating the current system of regulations, and incorporating appropriate technical and operational guidelines. It will also enable the integrated public transport system to increase urban mobility. It will update regulatory and operational framework for sustainable public transport, fostering sustainable mobility and greater resilient urban environment; implement public bicycle system and transport-oriented development; and implement innovative pilot interventions on low-carbon investments in urban transport. It is estimated to generate 218,598 t CO<sub>2</sub> eq in direct emission reductions.

*Nigeria: Improving Nigeria's Industrial Energy Performance and Resource Efficient Cleaner Production through Programmatic Approaches and the Promotion of Innovation in Clean Technology Solutions (GEFID: 9714, UNIDO, GEFTF: \$4.4 million. Total Cost: \$ 26.4 million).* In the industrial sector in Nigeria, non-optimization of raw materials has resulted in unnecessary wastages and reduced profits. Promoting energy efficiency and cleaner production will help reach economic and energy system transformations and reduce pollution. This project aims to accelerate the adoption of industrial energy efficiency (IEE) for selected industrial enterprises in Nigeria through: strengthening of national industrial and environmental policies and regulatory frameworks for IEE and environmental management standards; modular development of IEE Energy Management Systems/Energy System Optimization (EnMS/ESO) and Resource Efficiency and Cleaner Production (RECP) for Industrial Enterprise and Engineering Consultancy Base Training and Capacity Building; EnMS/ESO and RECP piloting and demonstration; enhanced investment in IEE improvement and cleaner production within relevant sections of the Nigerian industrial sector; industrial and commercial EnMS/ESO and RECP awareness, promotion, service demand generation and sharing of lessons learned. The GEB target is to reduce 2.72 million t CO<sub>2</sub> eq, including 850 kt directly, and 1.87 Mt consequentially over the project lifetime.

*Chile: Supporting the Chilean Low-emission Transport Strategy (CLETS) (GEFID: 9742, CAF, GEFTF: \$3.3 million. Total Cost: \$ 40.8 million).* The transport sector is responsible for over 11 percent of GHG emissions in Chile, of which public urban mobility accounts for about a fifth. Chile has identified integrated zero- or low-emission urban public mobility systems as a key priority of the Chilean Low-emission Transport Strategy and related national legislation. The project aims to change the public-transport market in Chile by accelerating the adoption of zero- and low-carbon technologies in public transport systems through targeted investments, while supporting the formalization of the new transport strategy at the national and subnational levels. To this end, the project will work on the promotion of policy, planning and regulatory frameworks that foster accelerated adoption of integrated low-emission mobility systems in the framework of the Chilean Low-Emission Transport Strategy and on demonstrative and catalytic actions that demonstrate and operationalize financial mechanisms to support integrated low-emission mobility systems. The project will lead to at least 719,936 t CO<sub>2</sub> eq mitigated through the introduction of zero- and/or low-emission public buses and collective taxis in the main metropolitan areas of Chile.

*Nigeria: De-risking Sustainable Off-grid Lighting Solutions in Nigeria (GEFID: 9743, UNDP, GEFTF: \$3 million. Total Cost: \$ 13.6 million).* In 2012, an estimated 93 million people did not have access to electricity and an additional 24 million people had very unreliable and intermittent electricity access in Nigeria. The Council for Renewable Energy of Nigeria estimates that power outages cause an annual loss to the economy of \$984 million. In 2012, black carbon emissions from kerosene lamps in Nigeria were estimated at 63,400 t. This project aims to promote private sector investment in sustainable off-grid lighting technologies by establishing a sound policy environment that facilitates the creation of a self-functioning and sustainable market in Nigeria. It will involve policy and financial de-risking of sustainable off-grid lighting solutions and facilitating the use of solar photo-voltaic technologies to replace kerosene lamps in rural

communities. A focus on innovative business models in the sustainable off-grid lighting market, such as Pay-As-You-Go, can additionally lead to sustainability effects and benefits. The GEB target is to reduce 4,626,312 t CO<sub>2</sub> eq, including 92,832 t CO<sub>2</sub> eq directly and 4,533,480 t CO<sub>2</sub> eq consequentially.

China: *China Distributed Renewable Energy Scale-up Project (GEFID: 9749, World Bank, GEFTF: \$8 million. Total Cost: \$88 million)*. The Government of China pledged to increase its non-fossil energy share from 11 percent in 2015 to 20 percent by 2030. Without enlargement of renewable energy investment, it is impossible for China to achieve this goal. For this reason, China has made a very ambitious target for renewable energy investment, including reaching 210 GW of wind and 110 GW of solar photo-voltaic by 2020. This project aims to support the scale-up and acceleration of distributed renewable energy in China, thereby reducing GHG emissions. It will therefore support developing and implementing distributed renewable energy policies, with a focus on pricing, grid access and connection, standards, and urban planning in China; piloting scalable business and financing models and applying in selected cities and district/industrial parks. It proposes to pilot innovative "proof-of-concept" and technology characteristics that go beyond the traditional roof-top model in China, to include non-rooftop applications of distributed renewable energy, as well as new micro-grid configurations. The project will have a scaling up potential with the development of new battery technologies, solar photo-voltaic technology as one of the distributed renewable energy technologies, due to its reduced costs, flexibility, reliability, and simplicity in installation. The GEB target is to directly reduce 438,240 t CO<sub>2</sub> eq.

Niue: *Accelerating Renewable Energy and Energy Efficiency Applications in Niue (AREAN) (GEFID: 9752, UNDP, GEFTF: \$3.8 million. Total Cost: \$20.2 million)*. In Niue, electricity is predominantly generated through diesel fuel powered generators. Only 2 percent of energy resources are from renewables. With the current condition of the electricity sector, increased integration of renewable energy-based energy systems is affecting the grid performance. This project aims to enable the achievement of the energy access, sustainable energy, and green growth targets of Niue. The project will facilitate the application of policies, institutional, financial, technological and information-oriented options that would enable the removal of the current gaps in the widespread application of energy efficiency and renewable energy technologies in the energy sector. The project will implement cost-effective demonstrations of the application of climate-resilient and low-carbon technologies, techniques and practices that can be adopted and implemented in the energy end use sectors. The project will generate 110,000 t CO<sub>2</sub> eq in direct and indirect emission reductions, giving a cost efficiency ratio of \$30 GEF financing per t CO<sub>2</sub> eq.

Solomon Islands: *Stimulating Progress towards Improved Rural Electrification in the Solomon Islands (SPIRES) (GEFID: 9787, UNDP, GEFTF: \$3 million. Total Cost: \$18.6 million)*. The draft National Energy Policy Framework developed in 2014 includes a renewable energy target of 50 percent by 2020. In order to provide electricity access to 35 percent of households in rural areas by 2020 in time, as stated in the target, there is a need to address existing barriers in the outer islands and off grid areas. These is a lack of financing and there are weak institutional arrangements. The project aims to facilitate and increase electricity access in rural communities in the Solomon Islands by addressing these barriers. It will focus on the application of low-carbon technologies, techniques and practices to support national rural electrification program, particularly to strive for the achievement of 35 percent electricity access in rural areas as well as the global effort to mitigate climate change as stated in the INDC. The project will support enhanced and accelerated electrification of the off-grid areas through the enforcement of appropriate policy, planning and regulatory frameworks, the development of institutional and financial mechanisms in the integrated planning and implementation of rural electrification, cost effective demonstrations for rural electrification schemes involving all stakeholders and capacity building and awareness raising activities on climate resilient and low-carbon development of off grid areas. The project will generate 508,900 t CO<sub>2</sub> eq in direct and indirect emission reductions with 20 years of lifetime, giving a cost-efficiency ratio of \$ 5.2 GEF per t CO<sub>2</sub> eq.

Trinidad and Tobago: *Energy Efficiency through the Development of Low-carbon RAC Technologies in Trinidad and Tobago (GEFID: 9789, UNDP, GEFTF: \$5.8 million. Total Cost: \$19.4 million)*. Trinidad and Tobago has relatively high per-capita emissions, the highest in the Caribbean region as a result of having a small population coupled with being a leading producer of oil and natural gas. Although it has committed to the elimination of HCFCs, HCFC-22 most likely will be displaced by consumption of HFC refrigerants. This project aims to promote the adoption of LCTs for refrigeration and air conditioning (RAC) end-use in Trinidad and Tobago through; enhancement of national policy, regulatory and institutional frameworks for sustainable end-use of RAC technologies and accelerate RAC market transformation towards less energy intensive and low-GWP technologies. The project will generate 1.5 Mt CO<sub>2</sub> eq in direct and indirect emission reductions.

Angola: *Promoting Sustainable Energy Access for Rural Communities in South-Eastern Angola (GEFID: 9810, UNDP, GEFTF: \$4 million. Total Cost: \$22 million)*. Over 15 million Angolans, or nearly 60 percent of the population, do not have access to electricity. In rural areas, only 18 percent of the population have access to electricity. Oil production and related activities contribute about 50 percent of GDP, more than 70 percent of Government revenue and more than 90 percent of the country's exports. Improving access to modern, reliable and affordable renewable energy is essential for Angola's economic and human development, and for transforming the energy system of the country. The project aims to catalyze investments in decentralized renewable energy systems to expand energy access for base-of-the-pyramid consumers and to reduce GHG emissions. The project include the development of policy de-risking and finance for decentralized renewable energy; market for off-grid renewable energy systems developed, including solar home systems, advanced cook stoves and solar lanterns. It will facilitate a private sector-driven model with solar photo-voltaic systems and other household-level clean energy products to rural households. A pioneer activity whereby a private sector model has been employed for small-scale renewables in Angola. The project will also seek to bring to the market innovative technology solutions such as advanced cook stoves and solar-powered kiosks that foster local entrepreneurship in the rural areas. The GEB target is to reduce 478,400 t CO<sub>2</sub> eq, including 119,600 tonnes directly and 358,800 tonnes consequentially.

Ukraine: *The Global Cleantech Innovation Programme for SMEs (GEFID: 9811, UNIDO, GEFTF: \$1.7 million. Total Cost: \$6.3 million)*. Ukraine awards high priority to the innovation, technology development and capacity building as part of the overall industrial strategy to address country's competitiveness, climate change and overall resource efficiency. This project aims to create low-carbon economic growth by promoting clean technology innovations and entrepreneurship through a Cleantech innovation platform and accelerator programme. The promotion of innovation ecosystem approach will be driven by incentives, to encourage the development and commercialization of innovative clean energy technology products in small businesses and SMEs in the country. It will also support capacity building at national level to promote clean energy technology innovations and strengthening policy and regulatory frameworks for the creation of a nurturing local innovation ecosystem. The project aims to support a transformational shift towards a low-emission and climate-resilient development path that would result in a reduction of 200 Mt CO<sub>2</sub> eq.

Cabo Verde: *Sustainable Energy Access to Manage Water Resources: Addressing the Energy-water Nexus (GEFID: 9812, UNIDO, GEFTF: \$2 million. Total Cost: \$8 million)*. Like other SIDS, Cabo Verde is extremely vulnerable to climate change and faces severe adaptation challenges associated with water resources availability and energy security. Desalination plants in urban areas and underground boreholes in rural areas have been used to secure access to freshwater even though they require large amounts of energy to operate. Cabo Verde is facing an increasing power deficit which is already hampering economic and social development. To improve water access, the production of affordable energy and its adequate use are of outmost importance. The project aims to catalyze market-based integration of renewable energy and energy efficiency (sustainable energy) technologies in water resource management. It will mainly focus on the integration of an Energy-water nexus and ESCOs approach in relevant national policies and regulations and on the enhancement of private investments in projects addressing the energy-water nexus. The project will generate 76,600 t CO<sub>2</sub> eq in direct and 88,000 t CO<sub>2</sub> eq in indirect emission reductions.

Myanmar: *Climate Change Mitigation through Methane Recovery and Reuse from Industrial Wastewater Treatment (GEFID: 9830, UNIDO, GEFTF: \$ 4.5 million. Total Cost: \$23.6 million)*. The food processing industry is accounting for 64 percent of industrial activity mostly consisting of registered SMEs in the industrial zones of Yangon and Mandalay. This industry generates large quantities of effluents with a high organic load, hence significant quantities of GHG are emitted. The root causes of wastewater management problems include poor regulatory framework, lack of policy incentives and absence of environmentally-sound treatment systems. The project aims for the application of integrated low-emission wastewater treatments and the transfer of environmentally sound technologies (TESTs). The proposed project will build on UNIDO's capacity-building activities in Myanmar by introducing necessary policies, economic incentives and awareness raising to enable a self-sustaining environment encouraging low-carbon industrial development centered in Yangon and Mandalay. The project will generate up to 350,000 t CO<sub>2</sub> eq in direct and indirect emission reductions.

Micronesia (Federated States of): *Micronesia Public Sector Buildings Energy Efficiency (MPSBEE) Project (GEFID: 9863, UNDP, GEFTF: \$2 million. Total Cost: \$5.5 million)*. Micronesia has a National Energy Policy that compiles the planned actions on energy, including electricity supply and distribution, as well as on energy conservation and energy efficiency . However, the policy/regulatory barriers, such as lack of supporting rules, regulation and building energy codes as well as technical and financial barriers, hinder the implementation of pertinent actions. The project aims to improve the application of energy conserving and energy-efficient techniques and practices in the design, retrofit, operation

and maintenance of public sector buildings in Federated States of Micronesia. The project will include the establishment of the required enabling conditions that will make possible supportive actions for the promotion and application of energy conservation and energy efficiency technologies in the building sector, particularly the public sector buildings. It will also increase capacity of the private sector, such as service industry and banking/finance sector. The project estimates to generate 300,300 t CO<sub>2</sub> eq in direct and indirect emission reductions.

*Myanmar: Myanmar Rural Renewable Energy Development Programme (GEFID: 9890, UNDP, GEFTF: \$5.5 million. Total Cost: \$38.5 million).* Currently, about 33 percent of the Myanmar population has access to electricity and over 90 percent of households depend on solid biomass for cooking. The energy access situation is aggravated in rural areas where less than 16 percent of the households have access to electricity. Although renewable energy – mostly hydropower – comprises about 76 percent of the energy generated in Myanmar, most rural areas remain un-electrified. Where electricity is available in rural areas, much of it is generated from expensive fossil fuels – mostly diesel – despite an over-100GW potential for renewable energy in the country. Trends in rural electrification since 2012 show that when villages are electrified, an average of 55 percent are using diesel generators. Thus, even where there is an electricity access in rural areas, electricity is unlikely used for production. Rural residents without electricity depend on dry cells (batteries), kerosene, candles and firewood for their energy needs at a high economic, environmental and social (health and gender) costs. This project aims to increase access to rural renewable energy services and productive applications in Myanmar. The project will work on policy and regulatory de-risking for improved renewable energy services and productive application; strengthening the capacity and awareness raising for market enablers on rural renewable energy application; and rural renewable energy financial de-risking through financial support mechanism. Where self-reliant electrification initiatives exist, the project will convert these to PPPs, providing much needed technical expertise and improved governance, hence improving sustainability of rural electrification. The GEB target is to reduce 0.9 Mt CO<sub>2</sub> eq, including 0.22 Mt directly and 0.68 Mt CO<sub>2</sub> eq consequentially over the project lifetime.

*Belarus: Capacity Building for Emissions Trading and Strengthened MRV (GEFID: 9895, UNDP, GEFTF: \$ 974, 550. Total Cost: \$4.97 million).* Belarus ratified the Paris Agreement. The country has committed in its INDC to a 28 percent reduction of GHG emissions below 1990 levels by the year 2030. Implementing the Paris Agreement effectively will require MRV. Timely and accurate updating of GHG emissions from projects/programs will also greatly support the country in legislation, policies and strategies. The project aims to build capacity in Belarus to help design and implement a national emissions trading scheme; strengthen capacity to develop NDCs and to support strengthened MRV capacity through supporting the development of a national emission trading scheme and capacity building related to NDCs; strengthen GHG modelling and enhanced system of MRV; and demonstrate projects using MRV best practice. The project aims to reduce 40,500 t CO<sub>2</sub> eq.

*Sao Tome and Principe: Strategic Program to Promote Renewable Energy and Energy Efficiency Investments in the Electricity Sector of Sao Tome and Principe (GEFID: 9897, UNIDO, GEFTF: \$ 1.8 million. Total Cost: \$12 million).* The Sao Tome and Principe electricity system is characterized by low levels of supply-side and demand-side efficiency. The national utility mainly relies on a thermal electricity production which represents over 93 percent of the overall installed capacity of 26 MW. There is also an unequal access to energy services across social groups. Universal access to sustainable energy in the country requires the replacement of old diesel generators and investments into new transmission and distribution infrastructure. This project aims to promote investments in renewable energy and energy efficiency solutions with high GHG emission reduction and local value creation potential in the electricity sector. The project will contribute to the transformational change of the electricity sector to a sustainable low-carbon development path by strengthening the policy, legal and regulatory framework for sustainable energy solutions; promoting investments in sustainable energy solutions; and strengthening capacities on sustainable energy island solutions. It is estimated to generate 603,000 t CO<sub>2</sub> eq in direct and indirect emission reductions.

*Kiribati: Promoting Outer Island Development through the Integrated Energy Roadmap (POIDIER) (GEFID: 9905, UNDP, GEFTF: \$ 6 million. Total Cost: \$32.9 million).* Guided by its NDC and the Kiribati Integrated Energy Roadmap (KIER), the government of Kiribati is working towards achieving its set renewable energy and energy efficiency targets, as part of its commitment to reduce costs and addressing climate change. In order to achieve the KIER targets, Kiribati has implemented the energy efficiency and renewable energy programs/projects with the support from bilateral agencies mainly in the electricity sector (supply side). Such limited and fragmented initiatives in the country will fall short of reaching its target setting for increasing the share of renewable energy in the overall national electricity generation mix. This project aims to enable enhanced outer island development through the achievement of the renewable energy and energy efficiency targets of Kiribati. The proposed project will facilitate the application of appropriate

technological, institutional and policy-oriented options that would enable the widespread application of renewable energy and energy efficiency technologies for supporting the sustainable development of Kiribati's citizens in all communities, particularly in the outer islands. The project will comprise on capacity development for Low-Carbon Outer Island Development; improvement of Energy Policy and Institutional Frameworks for Low-Carbon Outer Island Development; financial Support Mechanism Project Development for Low-Carbon Development Initiatives in Outer Islands. The project will generate 1,141,000 t CO<sub>2</sub> eq in direct and indirect emission reductions within 20 years of its lifetime.

Philippines: *Global Partnership for Improving the Food Cold Chain in the Philippines (GEFID: 9921, UNIDO, GEFTF: \$ 2.2 million. Total Cost: \$ 14 million)*. Fresh and safe food is critical to the Philippines; end-to-end cold chain services that require inventory management, order scheduling, order forecasting, warehousing, and delivery management consume a large amount of energy. In addition, the cold chain services leak a considerable amount of man-made F-gases (Fluorinated gases including HFCs, perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>) and nitrogen trifluoride (NF<sub>3</sub>) in their refrigeration systems. The cold chain industry in the Philippines currently has a capacity of approximately 300,000 metric tons, and will grow significantly since consumption levels of fresh and safe food are currently low and economic development will enhance purchasing power of fresh and safe food. The project aims to reduce GHG emissions in cold food transport and storage chain in the Philippines. It will facilitate energy efficiency and non-F-gas technology transfer in the cold chain services. Further, it will help create synergies with the Montreal Protocol and the recent Kigali Amendment to foster low-GWP refrigerants. The project focuses on policy and regulatory assessment; awareness raising and capacity building; technology demonstration and transfer. The GEB target is to reduce 503,750 t CO<sub>2</sub> eq.

Regional: *Clean Rural Electrification for African Countries (GEFID: 9931, UNDP, GEFTF: \$1 million Total Cost: \$1.65 million)*. By 2040, sub-Saharan Africa is forecasted to consume 1,600 terawatt hours (TWh) of electricity and emit nearly 700 million metric tons of CO<sub>2</sub>. In the meantime, over 600 million people in sub-Saharan Africa lack access to reliable electricity, which in turn hampers their ability to get rid of poverty. While pursuing traditional efforts of macro-grids, hub and spoke models for electrification have provided energy access to millions of people and businesses, such a solution is not a panacea due to three primary reasons: (a) deploying conventional technologies will increase the already dire impact of humans on climate change; (b) grid access for low-density, low-power demand and/or isolated communities is not economically affordable; and (c) grid expansion is too slow to meet the needs of rapidly burgeoning populations. Many efforts have been made to bring low-cost, sustainable energy in form of solar lanterns and individual solar-based household lighting and mobile phone charging systems. This project aims to develop a distinctive approach and accelerate the deployment of rural electrification utilizing renewable mini-grids. It will work on the design scaling-up mechanisms for mini-grids to be funded by the GEF; and conduct a mini-grid summit. It aims to mitigate 18.69 million t CO<sub>2</sub> eq, including 4.69 Mt directly and 14 Mt consequentially over the lifetime of the project.

Global: *Global Green Residential Housing Finance Program - (GreenHF) (GEFID: 9935, World Bank, GEFTF: \$ 1.62 million. Total Cost: \$3.5 million)*. This global/regional project aims to advance the understanding of green finance, accessing the global/regional set-aside of the CCM Focal Area. The objective is to support policy reforms to enable sustainable long-term "green" lending and capital market funding solutions ("green bonds") for the residential housing finance sector, with a focus on the financing mechanisms for retrofit of the existing stock. The cross-border nature of the "green bond" marketplace (global investors seeking opportunities in many markets) dictates a uniform approach to jurisdictional policy design and implementation to facilitate sustainable funding channels, which are required to support large-scale residential energy efficiency improvement measures. As asset standardization is required for sustainable capital market activities, and relevant Green House Finance (GreenHF) loan "lending" policy measures need to be designed with the global experience in mind as well. The project will implement the "GreenHF Benchmark" - a series of reports with the compilation of the best global GreenHF practices; the "GreenHF Guidebook" that provides the country-level authorities with guidance on implementing the global benchmarks in local policy and legal reform. The implementation of sustainable GreenHF funding solutions will lead to improved residential sector energy efficiency with quantifiable household, national, and environmental benefits, e.g. higher property values and dwelling comfort, improved fiscal efficiency and reduced GHG emissions. Estimated emission benefits are 650,000 t CO<sub>2</sub> eq over a five year period.

Global: *The SEforALL Building Efficiency Accelerator (BEA): Expanding Local Action and Driving National Change (GEFID: 9947, UNEP, GEFTF: \$ 2.2 million. Total Cost: \$10.3 million)*. This project will continue and strengthen the GEF-supported BEA first launched in 2015 at COP 21 in Paris, France. In the first phase of the BEA, funded in 2016-2017 by

the GEF, the partnership rapidly scaled up action with cities and global partner organizations. In the first two years, the City partners were building stakeholder engagement, identifying policy priorities, and reviewing demonstration project options. As at September 2017, the BEA includes 28 cities and 40 partner organizations. This Phase II project will help the BEA scale up from 30 cities to 60 cities, enhance deep-dive engagement, and bring in enhanced national engagement. The project will support building partnerships, technical assistance and share of best practices and market transformation through public-private engagement and project development. The project estimates to reduce emissions by 2.7 million t CO<sub>2</sub> eq.

Montenegro: *Growing Green Business in Montenegro (GEFID: 9950, UNDP, GEFTF: \$845 000. Total Cost: \$5.49 million)*. Montenegro's energy intensity was 3.4 times higher than the average of the European Union in 2016, due to the widespread use of electricity for heating and inefficient building structures, almost completely lacking insulation. There is a significant scope for private investment in energy efficiency in public and residential sectors in Montenegro, including energy service company based model (ESCO model), which could bring double and even triple economic, environmental and social dividends for the country. However, a number of barriers, including the absence of appropriate legal framework for private investment in energy efficiency hamper realization of this vast potential. This project aims at promoting private sector investment in low-carbon and green businesses in Montenegro. The project consists of three major components: (a) policy development and business support services for green start-ups and SMEs; (2) green business financing and (c) raising awareness of green business practices and financing opportunities. The GEB target is to reduce 102,000 t CO<sub>2</sub> eq, including 20,400 t CO<sub>2</sub> eq directly and 81,600 t CO<sub>2</sub> eq consequentially in the lifetime of the project.

Nauru: *Supporting Mainstreamed Achievement of Roadmap Targets on Energy in Nauru (SMARTEN) (GEFID: 9974, UNDP, GEFTF: \$3.8 million. Total Cost: \$17.1million)*. The project aims to enable the increased applications of feasible renewable energy and energy efficiency technologies for supporting socio-economic development in Nauru in accordance with the country's energy roadmap targets. Although Nauru contributes with very low levels of CO<sub>2</sub> eq emissions to the world (0.02 percent of global emissions in 2014), it endeavors to play its part in addressing the threat of global warming. The local infrastructure, including power generation, drinking water and health services, have been adversely affected in recent years by the decline in income from the phosphate industry. Nauru is dependent on imports for almost everything for domestic consumption. Fossil fuels are imported for power generation and transport and they are the major sources of the country's GHG emissions. Integrated planning that involves both demand side with large-scale energy efficiency technology applications and generation side with decentralized renewable energy-based energy systems in the country is new in Nauru. The promotion of community-based and private sector-financed and commercial business-operated energy service provision is also a novel approach in the country. The innovative approaches will facilitate community-based, private sector-financed renewable energy-based electricity systems. The project will enable the establishment of grid-connected and/or decentralized renewable-based energy systems in the country. The GEB target is to reduce 1.029 Mt CO<sub>2</sub> eq, including both direct and consequential emission reductions over the project lifetime.

Equatorial Guinea: *Promoting Community-Based Forestry for Climate Change Mitigation and Sustainable Livelihoods in Equatorial Guinea (GEFID: 10034, FAO, GEFTF: \$6 million. Total Cost: \$24.2 million)*. Between 80 and 90 percent of Equatorial Guineans rely on forest ecosystem services, such as wildlife hunting, forest products and natural fibers to meet their needs for food, timber, fuel, generation of income, medicines and even for spiritual purposes. The project objective is to conserve and enhance forest carbon stocks in Equatorial Guinea through active engagement of local communities in forest management, promoting sustainable local livelihoods and low-emission development. It is intended to act as a bridge between national policy and local level interventions, contributing to the mainstreaming of climate action and community-based forestry in national instruments, while promoting change in eight pilot areas that can lead to scaled up action. The project aims to strengthen the legal and policy framework for the development of community-based sustainable forest and land management; strengthen the institutional capacity and knowledge for community-based and land management and climate change, and support mitigation actions through inclusive governance, land/forest planning and management in pilot communal forest landscapes. The pilot project sites stretch over an area covering approximately 15,000 ha, where 13,000 ha of natural tropical moist forests will be put under sustainable communal management and where 750 ha of slash and burn annual cropping systems will be converted into diverse agro-forestry systems. Preliminary emission reduction estimates indicate that the project could reduce emissions by 5 Mt CO<sub>2</sub> eq over 20 years. In addition, the project will also enhance livelihoods and socio-economic development of families and local communities in rural areas by encouraging more sustainable forest and land management practices.

Djibouti: *Promoting a Better Access to Modern Energy Services through Sustainable Mini-grids and Hybrid Technologies in Djibouti* (GEFID: 10051, UNDP, GEFTF: \$1 million. Total Cost: \$5 million). This project aims to promote investment in sustainable mini-grids and hybrid technologies, and develop an appropriate business model for the sustainability of the system. The overall electrification rate in Djibouti was 47 percent on average in 2016. In the rural areas, this rate was about 10 percent. The country is completely dependent on petroleum products for electricity generation, despite its own high renewable energy potential, especially in terms of solar, wind and geothermal. In its NDC, Djibouti indicated a reduction target of 40 percent in GHG emissions by 2030 on the basis of its business-as-usual scenario. This will be achieved through various initiatives including: (a) an additional 50 MW of hydro power import from Ethiopia, (b) installation of a 60 MW wind farm power plant, (c) several solar photo-voltaic plants reaching 250 MW, and (d) geothermal exploitation. This project will support the country to achieve the targets of the NDC. It will pilot a combination of two business models (the community business model and the private sector business model) to support decentralized mini-grids. It will also explore the pay-as-you-go model as a pre-payment tool for rural electrification. It will focus on identifying and supporting private sector-led renewable energy projects to maximize long-term financial and operational sustainability. Finally, the project will work with the entire domestic value chain of solar photo-voltaic, starting with design through construction and commissioning and up to operation, maintenance and management. The GEB target is to directly reduce 27,540 t CO<sub>2</sub> eq.

Dominican Republic: *Promoting Climate-smart Livestock Management in the Dominican Republic* (GEFID: 10054, FAO, GEFTF: 1.7 million. Total Cost: \$9.8 million). The project seeks to mitigate climate change and to restore degraded lands through the promotion of climate-smart practices in the livestock sector, whilst focusing on family farming. The agricultural sector is a key contributor to the economy of the Dominican Republic at 7.6 percent of GDP. Within the project target area, the Yuna River Basin (5,498 km<sup>2</sup>), 16 percent of the area of land is dedicated to cattle raising. Therefore, as with the Dominican Republic as a whole, agriculture production and, in this case, bovine production, generates significant GHG emissions and exerts pressure on natural resources such as land, soil, water, forest and biodiversity. The agricultural sector is responsible for 7 Mt CO<sub>2</sub> eq per year, equivalent to 20 percent of total emissions. In addition, there are multiple institutional, capacity and financial barriers that impede the livestock sector's advance towards climate smart livestock management and reductions of carbon footprints. The project therefore seeks to develop, introduce and upscale climate-smart livestock management on small and medium-sized farms that are engaged in intensive livestock production on natural rangelands. A key feature of the project which will facilitate scaling up is the development of a national strategy and road map for implementation beyond the Yuna Basin as well as the involvement of key stakeholders in the process- farmers cooperatives, government and financial institutions. The project will contribute to mitigation of 958 kt CO<sub>2</sub> eq of emissions through direct and indirect means and indirect SLM benefits on 5,000 hectares of farmlands.

#### **4. Summaries of Climate Change Mitigation Multi-Focal Area Projects Approved in FY 2018**

Indonesia: *Integrated Management of Peatland Landscapes in Indonesia (IMPLI)* (GEFID: 9239, IFAD, GEFTF: \$5.5 million, Total Cost: \$26.2 million). Indonesia has the largest tropical peatland area of 21 million hectares that comprises approximately 50 percent of world's tropical peatlands. Indonesia's peatlands are under high threat with key drivers including increasing global demand for palm oil, pulp and paper; and increasing population in peatland regions. Large areas have been severely degraded leading to high GHG emissions and loss of biodiversity. This project supports an integrated approach to intersectoral coordination and engagement to address major threats to Indonesia's peatland ecosystems. This project will enable: scaling up of the implementation of the Indonesian National Peatland Regulations; the establishment of innovative multi-stakeholder institutional framework for sustainable peatland management; the enhancement of integrated management and biodiversity conservation and community livelihood in one of the key peatlands in the Giam Siak Kecil Peatland Landscape in Riau Province; and contribute to local, national, and regional knowledge exchange on sustainable peatland management. The project estimates to mitigate 3.83 Mt CO<sub>2</sub> eq from improved peatland management.

Myanmar: *Integrated Management of Peatland Landscapes in Indonesia (IMPLI)* (GEFID: 9261, FAO, GEFTF: \$3.5 million, Total Cost: \$19.1 million). Myanmar's southeastern coast faces multiple inter-related threats spanning tourism, commercial development, unsustainable fuel-wood consumption, and overfishing. A lack of shared priorities is accelerating changes along the coast, with negative impacts being observed on marine biodiversity, mangroves and reefs. The project identifies sustainable coastal fisheries as a policy and investment area that is likely to have high community support and has potential to catalyze integrated coastal zone management and conservation. The project

will focus on building national capacities to develop and implement a coastal zone conservation strategy covering southern Tanintharyi (including Myeik Archipelago). It will take an agro-ecological approach, anchoring conservation efforts in productive landscapes. Associated activities include: development of a spatial plan for the region; mainstreaming the strategy within national, regional and local land-use and development policies and plans; identifying the areas of highest biodiversity conservation importance; prioritizing potential expansion of marine protected areas to increase protected area connectivity; and mechanisms to strengthen monitoring and carbon accounting. In addition, the project will focus on demonstrating strategic coastal zone conservation management at the site level, as well as on building local capacity for this (e.g., of small-scale fishing families and extension officers). The project is expected to yield 2.3 million t CO<sub>2</sub> eq in carbon benefits through avoided deforestation/degradation of mangroves and seagrasses, and through improved management practices.

United Republic of Tanzania: *Safeguarding Zanzibar's Forest and Coastal Habitats for Multiple Benefits* (GEFID: 9400, UNDP, GEFTF: \$5.8 million, Total Cost: \$28.8 million). Zanzibar shares many of the sustainable development challenges facing most SIDS, as a result of its small size, remoteness, narrow resource and export base, and high dependency on imported fossil fuel. Nature-based activities account for a large share of economic activity and job opportunities, and negative impacts from unsustainable use of natural resources significantly exacerbate the sustainable development challenges faced by Zanzibar. The objective of this project is to implement a landscape approach to safeguard Zanzibar's terrestrial and coastal forest habitats for multiple benefits. The project is expected to result in the strengthening of Zanzibar's policy and institutional framework for effective biodiversity and ecosystem management; expansion of community-managed forest areas (COFMAs) as biological corridors/buffer zones; improved effectiveness of the network of protected areas and wildlife reserves and COFMAs; and restoration and rehabilitation of degraded forests and mangroves. The project is expected to yield 3.3 Mt CO<sub>2</sub> eq in carbon benefits.

Niger: *Integrated Management of Oasis Ecosystems of Northern Niger (IMOE -NN)* (GEFID: 9405, UNEP, GEFTF: \$5.2 million, Total Cost: \$39.5 million). In Niger, only half of the land is habitable due to adverse climatic and soil conditions. Less than 4 percent of the country is arable, 9 percent consist of permanent pastures, and only 2 percent are forests and woodlands. There is an increasing competition between agriculture and livestock. The natural vegetation is considerably modified because woodlands are cleared for arable soil and wood - just for the capital city Niamey, more than 11,000 tons of firewood per year are needed. The main threats of ecosystem degradation are deforestation and fragmentation of forest complexes, land degradation and climate change. The identified barriers include the lack of a framework for sustainable management and conservation of oases and arid valley forests, the lack of integrated management plans integrating oasis and arid valley ecosystem conservation in the overall sustainable development of the Air massif, and inadequate experiences in integrated landscape management. The project is based on three technical components: (a) to develop an enhanced enabling environment for oasis and arid valley forests ecosystem conservation in Niger; (b) design an integrated landscape plan for oasis and arid valley forests in Air massif supporting the communities, including multi-stakeholder planning for different stakeholders; and (c) oasis and arid valley forest ecosystem conservation measures, inspired by the Bonn Challenge and the forest landscape restoration principles to restore ecological connectivity between forest complexes, and improve SLM in agricultural lands. The project is estimated to avoid emission of 1.1 Mt CO<sub>2</sub> eq and a sequestration of 2 Mt CO<sub>2</sub> eq within a 10-year period.

Namibia: *Namibia Integrated Landscape Approach for Enhancing Livelihoods and Environmental Governance to Eradicate Poverty (NILALEG)* (GEFID: 9426, UNEP, GEFTF: \$12 million, Total Cost: \$77 million). In 2013, Namibia suffered one of the worst droughts in 30 years, and rainfall patterns stayed below average in 2014 and 2015. Namibia is a country at risk in terms of agricultural production losses due to climate change. Crop productivity is declining, while a vast area of shrubs and grasslands now show declining productivity threatened by bush encroachment. The capacities of ecosystems are under pressure with damaging practices (forest clearing, unsustainable groundwater exploitation, overgrazing, burning, disturbances of topsoil, etc.). The project aims to promote an integrated landscape management approach in key agricultural and forest landscapes, reducing poverty through sustainable nature-based livelihoods, protecting and restoring forests as carbon sinks, and promoting Land Degradation Neutrality. The project is based on strengthening institutional coordination and governance mechanisms for an integrated landscape management approach (ILMA), implementing ILMA in target landscapes, and implementing sustainable financing mechanisms in view of upscaling ILMA. The project estimates to reach avoided emissions of 631,500 t CO<sub>2</sub> eq over 20 years.

Thailand: *Sixth Operational Phase of the GEF Small Grants Programme in Thailand* (GEFID: 9558, UNDP, GEFTF: \$2.69 million, Total Cost: \$11.35 million). Thailand is a biodiverse country, whose many species and forests are under threat

from on-going urban, agricultural and infrastructure development that is resulting in extensive habitat destruction or degradation from unsustainable use driven by increasing demand for natural resources. The Sixth Operational Phase of the GEF SGP in Thailand has been conceived to engage community organizations in four diverse regions of Thailand to take collective action for adaptive landscape and seascape management for socio-ecological resilience - through design, implementation and evaluation of grant projects for GEBs and sustainable development. It will promote SLM through the strengthening of viable agro-forestry and sustainable agriculture practices and systems that improve soil and water conservation, increase the conservation and sustainable use of biodiversity, and enhance the innovative use of renewable energy. This project proposes to carry out participatory, multi-stakeholder, landscape management in rural and peri-urban or suburban areas aimed at enhancing social and ecological resilience through community-based, community-driven projects to conserve biodiversity, optimize ecosystem services, manage agro-ecosystems and water sustainably, and mitigate climate change.

*Sudan: Sudan Sustainable Natural Resources Management Project - Additional Financing (GEFID: 9575, UNDP, GEFTF: \$6 million. Total Cost: \$24.8 million).* This project and the additional finance requested by means of this project aims at improving sustainability of land and water management, and contribute to climate change resilience, through a community-based approach. With the implementation of the project, the Government of Sudan will expand coverage of the current sustainable land and water management activities to the most vulnerable areas and will increase the adoption of these landscape practices across the desert frontline in the northern part of the country. The participating communities will be supported by the project to invest in climate adaptive activities, such as the use of drought-resistant seed varieties, poultry and fish production varieties, introduction of new water harvesting/spreading techniques making use of intermediate technologies, diversified crops and livestock breeds, energy conserving technologies, food processing and preservation, drinking water supply and control of livestock diseases. In the Northern State, it will support the preparation of integrated land management plans for rehabilitation of the shelterbelts establishment of village windbreaks; in the River Nile State the reforestation of River Atbara reserve forests, identification of a biosphere reserve and preparation of a wildlife conservation and management Plan and in North Kordofan State, it will support the rehabilitation of Gum Arabic belt, rehabilitation of rangelands and setting up of a Wildlife Management and Conservation Plan for a biosphere reserve in Al Baja area (an area that is shared with the White Nile State). The project is estimated to sequester 2 Mt CO<sub>2</sub> eq per year.

*Regional: (Democratic Republic of the Congo, Nigeria, Senegal,): GLOBE Legislators Advancing REDD+ and Natural Capital Governance Towards the Delivery of the 2030 Agenda (GEFID: 9738, UNEP, GEFTF: \$1.2 million. Total Cost: \$4.6 million).* The global conversation on policy and legislative responses to address deforestation and forest degradation, as well as the net depletion of natural resources and loss of biodiversity and ecosystem services, is well articulated. However, the proposed responses to these issues often require a fundamental redirection of existing economic and social development models to a more sustainable path, which, in turn, require robust political ownership and steering at the national level. This is frequently missing at both the executive and legislative levels. The objective of this project is to enable legislators to advance policies and laws for integration of natural capital approach and REDD+ into the development policies, laws and regulations. This project is expected to achieve the integration of the natural capital approach in decision-making and adoption of REDD+ legislation in the partner countries; enhanced technical capacity of national decision-makers in the executive branch on integration of the natural capital approach and REDD+ into national development plans. The project will use the GLOBE network as a channel for dissemination and replication of best legislative practices. The project provides an innovative solution to the lack of articulation between the national and the international levels of decision-making, and the technical and political discourses on appropriate policy responses to meet national development objective. The national GLOBE programs on forests and natural capital will provide cross-party political traction with related national GEF and UNEP projects on forests and natural capital, facilitating their successful implementation and the scaling-up and institutionalization of their outcomes through legislation.

*Democratic Republic of the Congo: Mai-Ndombe REDD+ Integrated Project (GEFID: 9760, World Bank, GEFTF: \$6.8 million. Total Cost: \$39.2 million).* The umbrella REDD strategy for Mai Ndombe proposes a model for green development at provincial level that provides alternatives to deforestation and rewards performance to mitigate climate change, reduce poverty, manage natural resources sustainably and protect biodiversity. It is designed to combine different sources of funding, including the Forest Investment Program (FIP), the Central African Forest Initiative (CAFI), and to leverage private funding to scale up pilot activities and support the shift of a land use trajectory at large scale. This project is expected to help reduce carbon emissions with a special focus on community-managed forestry; ensure an adequate consideration of biodiversity conservation in the province; focus on working with indigenous peoples in the management of their own biodiversity/forest resources; and apply incremental

resources for the development of capacity at the policy and regulatory levels, both at the national and provincial levels. Biodiversity conservation issues will also be mainstreamed in the local management plans, including indigenous people managed community forest concessions. The project estimates a reduction of 1.45 million t CO<sub>2</sub> eq of carbon emissions.

Burkina Faso: *Integrated and Sustainable Management of Ponasi Protected Area Landscape* (GEFID: 9764, UNDP, GEFTF: \$6 million. Total Cost: \$25.2 million). Burkina Faso faces many challenges to generate growth and distribute social goods to an income-deprived population with low levels of human development. The targeted area of the project is the Ponasi landscape, which comprises a large area in southern-central Burkina Faso dominated by parklands and protected areas. One of the key feature of the landscape is the presence of the country's second most important elephant range, along with a rich biodiversity including iconic species of mammals and birds. The Ponasi landscape's biodiversity and land and water resources are under increasing pressure which results in habitat loss and degradation, unsustainable agricultural practices, poaching and illegal wildlife trade, over-harvesting of natural resources and uncontrolled bushfires. The project will aim at safeguarding critical wildlife habitat, biodiversity and ecosystem services through integrated landscape management, focusing in particular on stabilizing land-use, strengthening biodiversity conservation measures and safeguarding a stream of ecosystem services. The proposed project builds on a large baseline investment by the Government and the international partners, focusing on land-use planning and management applied to community-based rural development, protected areas, forest and carbon stock management and sustainable livelihoods. The project is expected to improve the management of protected areas, corridors and community-managed hunting zones ("ZOVICs"); to increase the land area under SLM in with effective agricultural, rangeland and pastoral management practices and supporting climate-smart agriculture, enhancing vegetation cover, protecting water resources and conserving soils; and to avoid 4 Mt CO<sub>2</sub> eq (decreasing by half the deforestation rate).

China: *PRC-GEF Partnership Program for Sustainable Agricultural Development* (GEFID: 9768, UNDP/FAO, World Bank, GEFTF: \$13.4 million. Total Cost: \$96.7 million). The Government of China has recognized the importance of sustainable agricultural development. Specifically, it has been conserving its agrobiodiversity and grassland ecosystems and made a significant financial commitment to ex-situ conservation of its genetic resources as well as conservation of its grassland ecosystems. China has conserved over 400,000 genetic agricultural resources ex-situ in gene banks and within special conservation areas and implemented various payment of ecosystem services (PES) schemes to slow down and revert the degradation of grassland ecosystems. However, there is rapidly decreasing on-farm use of agrobiodiversity by farming communities and a continued degradation of grassland ecosystems. The continued use of crop and livestock genetic resources within agroecosystems is considered critical to sustain a diverse agricultural resource base that can provide resilience against external factors such as insects and other pests and plant diseases, along with supporting adaptation to climate change. The program is expected to pilot and scale up effective policy and investment measures to mainstream in-situ conservation and sustainable use of globally important genetic resources for food and agriculture; improve the prevention, control and management of invasive alien species (IAS); conserve and enhance carbon stock and promoting evidence-based and climate-smart conservation of grassland ecosystems; and collaborative innovation in climate change and biodiversity from the aspects of policy, mechanism, knowledge sharing and partnerships. The policy reform, institutional strengthening and mainstreaming to be achieved under the program's focus on in-situ agrobiodiversity conservation, IAS prevention and control in agroecosystems, and evidence-based policy making and climate-smart grassland management could reach across much of China's 120 million ha of arable land and 400 million ha of grasslands. These benefits will be provided through the improved legal protection of agrobiodiversity, increased Government investment in both in-situ agrobiodiversity conservation and IAS management, improved grassland conservation PES schemes, and strengthened capacity, coordination and partnerships among public agencies, farmers/herders and the private sector. The program estimates reducing GHG releases from degraded grasslands and livestock production with 1.1 Mt CO<sub>2</sub> eq of avoided emissions.

Regional (Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, Venezuela (Bolivarian Republic of)):  
*Implementation of the Strategic Action Programme to Ensure Integrated and Sustainable Management of the Transboundary Water Resources of the Amazon River Basin Considering Climate Variability and Change* (GEFID: 9770, UNEP, GEFTF: \$13.2 million). Total Cost: \$121.7 million). The Amazon Basin faces numerous challenges for the integrated management of transboundary water resources in the context of its socio-economic development and anthropogenic and climate impacts. The basin is a unique water system that crosses national borders of eight countries - Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and the Bolivarian Republic of Venezuela - which consider the need for a regional framework for the Integrated Water Resources Management (IWRM) to satisfy the urgent needs of the population and to promote the sustainable development of the Amazon Region and

safeguarding of the precious resources that it holds. This project aims to implement the Strategic Action Program (SAP), promote IWRM and source-to-sea approaches, improve environmental, social and economic benefits and enable the countries to meet their relevant SDGs and Convention targets in the Amazon basin. The project will focus mainly on the development of the IWRM governance model for the Amazon basin.

Guinea: *Integrated Management of Natural Resources in Middle and Upper Guinea (GEFID: 9783, UNDP, GEFTF: \$8 million. Total Cost: \$33 million)*. Guinea is threatened by dramatic deforestation threatening ecosystem services and biodiversity. The main drivers are agriculture expansion, slash and burn agriculture, logging and mining (industrial and small scale). Construction of hydropower dams is a long term risk, also because in view of forest clearing and construction of transmission lines on long distances. Around ten companies operate in Middle and Upper Guinea for bauxite, diamond and gold. This project aims to promote an integrated and sustainable management of natural resources by introducing landscape approach, focused on the establishment and operationalization of the Bafing-Faleme Protected Area, surrounded by classified forests and corridors along the two rivers. The Bafing-Faleme Landscape Management Board will be established to develop a management planning process and empower local communities and vulnerable groups, including women groups. The management plan will include conservation, sustainable use of natural resources, and development of income generating activities, including transformation of non woody forest products, artisanal, cultural, and ecotourism sector. The project will also include a support to develop eco-villages around the protected area, promoting low-carbon technologies, climate-smart agriculture and look for alternatives to firewood. The project will support integration of landscape management, operationalization of the Bafing-Faleme protected area and buffer zone management and the establishment of the eco-village model in the protected area buffer zone. It is estimated that a potential carbon storage and emissions avoided will amount to 7 Mt CO<sub>2</sub> eq through decreased deforestation rate on 517,000 ha, restoration of 10,000 ha, and 56,608 t CO<sub>2</sub> eq emissions avoided from the use of clean cooking technologies.

St. Kitts And Nevis: *Improving Environmental Management through Sustainable Land Management in St. Kitts and Nevis (GEFID: 9785, UNEP, GEFTF: \$3.4 million. Total Cost: \$18 million)*. In St. Kitts and Nevis, agriculture faces significant challenges from pests and diseases, water shortages and low productivity resulting from unsustainable production practices. As a result, production of food is insufficient and the country has started importing larger quantities of food at a greater economic and environmental cost (e.g. land degradation through abandonment of arable productive land, carbon emissions). In addition, the country has designated three terrestrial key biodiversity areas and three additional terrestrial protected areas have been established or in the process of establishment. Due to its geographical location, topography and recent economic developments, in particular the closing of the sugar production sector and parallel growth of the tourism and construction sectors, St. Kitts and Nevis is facing increasing environmental pressures, which are limiting the country's ability to achieve its sustainability objectives. The project aims to support St. Kitts and Nevis to transition away from sugar and monocrop agriculture and to reorient all sectors of the economy towards sustainable resource use policies and practices, in order to provide economic opportunities, while also sustaining ecosystem services and globally significant biodiversity. The key interventions in support of this project include strengthened environmental planning and management through the development of physical development planning frameworks, digital land use mapping and training and capacity building of national personnel; mainstreaming biodiversity conservation, SLM and CCM into key development and resource management sectors through forest restoration, assisted natural regeneration, restoration of degraded lands for productive use and adoption of climate-smart agriculture practices. It is estimated for the project activities to generate 88,523 t CO<sub>2</sub> eq of emission reductions.

Bahamas: *Meeting the Challenge of 2020 in The Bahamas (GEFID: 9791, UNEP, GEFTF: \$7.03 million. Total Cost: \$19 million)*. As a part of the Caribbean Challenge Initiative, the Bahamas committed to protecting 20 percent of near-shore marine waters by 2020. While the Bahamas has received support from other institutions to establish these protected areas, there is a need to ensure that these protected areas are effectively managed and not adversely impacted by activities outside of the protected areas. The project will seek the strengthened management of marine protected areas in the Bahamas and integrate protected areas into broader landscape planning in order to reduce pressures on ecosystem services and biodiversity from competing resource uses. The project will support integrated natural resource management (NRM) systems for marine protected areas and adjacent land and seascapes through land use planning for surrounding areas using an integrated natural resource management framework. It will also support effective protected area management through the establishment of advisory boards, management plans, business plans, monitoring and climate smart infrastructure that demonstrates renewable energy technologies. The project will also pilot "adopt a park" activities to engage community organizations in protected area management. Five of the six protected areas included in this project are key biodiversity areas. The project estimates to achieve a

emission reduction of 2.1 Mt CO<sub>2</sub> eq.

Madagascar: *Conservation and Improvement of Ecosystem Services for the Atsinanana Region through Agroecology and the Promotion of Sustainable Energy Production (GEFID: 9793, UNEP, GEFTF: \$4.3 million. Total Cost: \$24.3 million)*. Madagascar has experienced severe deforestation and fragmentation. Slash-and-burn farming (tavy in local terms), logging for timber, land conversion for agriculture, fuelwood and charcoal production, and overgrazing are the major sources of deforestation and land degradation in the country. These practices are aggravated by the high demand for agricultural land, population growth, and the declining productivity of existing croplands. Lack of access to electricity and the inability of most rural inhabitants to pay generators, renewable energy production and other options produces a high level of demand for wood products from a degraded forest landscape. The development of sustainable and profitable wood resources production systems, including bamboo, could reduce the pressure on natural forest landscape, as well as the support of more efficient wood energy production processes (more efficient charcoal production and wood burning stoves). The project objective is to contribute to sustainable land use management, biodiversity conservation, renewable household energy security and CCM in Madagascar. The project is developed on the three components: (a) strengthening of national policies and the legal and institutional framework for mainstreaming biodiversity and landscape restoration; (b) ensuring scaling up of SLM practices and agroecology in a wider landscape; and (c) improving rural energy generation systems and wood services to reduce deforestation. The project will promote a stronger inter-sectoral coordination, planning, and capacity-building on integrated natural resource management (INRM), with a particular focus on agroecology and ecological intensification through SLM and SFM in four communes of the Vohibinany and Vatomandry districts. In addition, improved cook stove technologies will be disseminated (stove models to be determined at PPG level), a pilot gasification generator will be tested, and a training plan will target the local communities. Over a 10-year period, the project estimates to avoid 84,895 t CO<sub>2</sub> eq and sequester 104,453 t CO<sub>2</sub> eq.

Azerbaijan: *Forest Resources Assessment and Monitoring to Strengthen Forest Knowledge Framework in Azerbaijan (GEFID: 9795, FAO, GEFTF: \$2.28 million. Total Cost: \$9.3 million)*. Azerbaijan's forests cover only 1.8 percent of the total country area. Forests are currently managed for protection purposes only, yet these represent an untapped potential in terms of production, including in terms of carbon sequestration. The project aims to introduce SFM into Azerbaijan in order to increase social and economic benefits from forests, to improve the quality of existing forests and to increase carbon sequestration. The project will aim to support a Forest Resource Information Management System to provide country-wide reliable, up-to-date information on forest resources and; multifunctional forest management leading to carbon sequestration, improvement in forest and tree resources and their contribution to local livelihoods. The project estimates to mitigate 3.1 million t CO<sub>2</sub> eq.

Haiti: *Managing the Human-Biodiversity Interface in the Southern Marine Protected Areas of Haiti - MHBI (GEFID: 9803, IDB, GEFTF: \$2 million. Total Cost: \$12.6 million)*. A total of 31 key biodiversity areas (KBAs) have been identified in Haiti, of which 14 are marine or coastal. While just the east part of the marine protected area Saint-Louis is considered as a key biodiversity area, the marine protected area Grosse Caye is entirely considered as a key biodiversity area (Maducaque). Due to a lack of marine protected areas management and fishery sector regulation and organization, this natural capital is at high threat for overfishing and degradation of mangrove forests. The project aims to improve the conservation and management effectiveness of the Grosse Caye/Zone humide d'Aquin and Olivier/Zanglais marine protected areas in order to reduce the pressure on marine biodiversity and on mangroves well known for their capacity of storing large amounts of carbon. The project will focus on strengthening management of marine protected areas, by promoting biodiversity conservation into local fishery sector; the development of sustainable alternative economic activities for communities depending on marine protected area' ecosystems and national and local authorities strengthened in monitoring CO<sub>2</sub> storage. The project will also facilitate the development of a managed access plans for fishery including no-take zones, which has not yet been implemented in the country. The project estimates to mitigate 2,985 t CO<sub>2</sub> eq.

Ukraine: *Integrated Natural Resources Management in Degraded Landscapes in the Forest-Steppe and Steppe Zones of Ukraine (GEFID: 9813, FAO, GEFTF: \$2 million. Total Cost: \$12.3 million)*. The objective of the project is to promote restoration of degraded landscapes in the forest-steppe and steppe zones of Ukraine through upscaling of INRM practices. To remove barriers to scaling up, the project has been designed around three components that will: (a) create an enabling environment for INRM in Ukraine at national and sub-national levels; (b) restore the productivity and resilience of production landscapes through INRM; and (c) ensure learning and sharing of lessons learned through effective project monitoring and evaluation and adaptive management. Capacity to scale up conservation agriculture with no-till and minimum tillage, use of green manure and useful micro-flora in the forest-steppe and steppe zones

will be developed. This is a sustainable and effective climate-smart agricultural practice, which will reduce soil erosion and enhance carbon stocks in the rich black soils (chernozems) that cover most of these agro-ecological zones. The project estimates a total of 365,495 t CO<sub>2</sub> eq mitigated.

Global: (Afghanistan, Albania, Armenia, Bahamas, China, Cuba, Ethiopia, Georgia, Jordan, St. Kitts And Nevis, Lao People's Democratic Republic, St. Lucia, Marshall Islands, Mali, Niger, Nigeria, Papua New Guinea, Palau, Sierra Leone, Turkey, Tuvalu, Ukraine, Uganda and the United Republic of Tanzania): *GEF SGP Sixth Operational Phase- Strategic Implementation using STAR Resources, Tranche 2 (Part IV) (GEFID: 9857, UNDP, GEFTF: \$20 million. Total Cost: \$40 million)*. This project includes 24 countries that have endorsed supplementary STAR funding aiming to sustain and increase involvement of communities and civil society in advancing the impact of the SGP and ensuring safeguarding the global environment from the bottom up. Among the 24 countries, there are 16 SIDS and LDCs where SGP plays an important role in building necessary capacity for conserving the global environment. This Part IV will complement the core investment in Parts I, II and III through the following complementary strategic initiatives: (a) community landscape and seascape conservation, (b) climate-smart innovative agro-ecology, and (c) low-carbon energy co-benefits. The grant-making at the country level will be implemented based on the SGP Country Programme Strategies (CPS) for GEF-6 that have been prepared by each country to enable more strategic and integrated investments at the country and landscape/seascape levels. In all countries, CPS development process has been undertaken in a consultative manner to identify SGP's value added within the priority global environmental issues to guide SGP grant-making and ensure its complementarity with other donor and country supported initiatives.

Fiji: *Community-based Integrated Natural Resource Management Project (GEFID: 9880, FAO, GEFTF: \$2.43 million. Total Cost: \$15.8 million)*. Forest cover in Fiji amounts to about 1 million ha, which is 60 percent of the total land area. Mangroves cover 57,000 ha but play a significant role for the biodiversity and coast protection. The rate of forest degradation has been quite high in the provinces of Ra and Tailevu due to subsistence agriculture, pastoral practices, illegal and unregulated logging among other forest activities. The project aims to strengthen local-level capacities for INRM and support an integrated management of natural resources with local communities and indigenous people. The project will set up training programmes on climate-smart agriculture techniques as well as agroforestry, forest protection and improved management measures implemented through farmer field schools. It will support the preparation of nine district-level participatory land-use plans and village-level INRM plans covering 71,500 ha. It will help restore 10,500 ha of degraded forests (including 700 ha of mangroves). The project estimates to generate 2 Mt CO<sub>2</sub> eq mitigated directly.

Regional: (Bangladesh, India, Indonesia, , Malaysia, Maldives, Myanmar, , Sri Lanka, Thailand): *Sustainable Management of the Bay of Bengal Large Marine Ecosystem Programme (GEFID: 9909, ADB, GEFTF: \$15.6 million. Total Cost: \$180.6 million)*. The Bay of Bengal provides critical ecosystem services to the region's dependent coastal populations. Bay of Bengal Large Marine Ecosystem hosts 12 percent of the world's mangroves, 8 percent of the world's coral reefs, extensive areas of seagrass and numerous endangered and vulnerable species. Ocean-based activities include fishing, aquaculture, tourism, shipping and oil and gas exploration. The region is experiencing over-exploitation of marine living resources, particularly unsustainable fisheries, degradation of critical habitats, including mangroves, coral reefs and seagrasses, and pollution from nutrient inputs, marine litter and toxins. Recognizing the value of the region's marine ecosystem and the threats facing it, the eight bordering nations developed the Bay of Bengal Large Marine Ecosystem Strategic Action Program, which has been signed at the ministerial level by all eight countries. The proposed Programme was specifically designed to implement the Strategic Action Programme by addressing the three major pressures: unsustainable fisheries; pollution; and habitat degradation, while also improving socioeconomic conditions, specifically livelihoods and resiliency. The overall objective of the Programme is to contribute to sustainable management of fisheries, marine living resources and their habitats in the Bay of Bengal region for the benefit of coastal states and communities. This Programme will also highlight the role of large marine ecosystems.

Global: (Burkina Faso, Brazil, Ethiopia, India, Morocco, Senegal, South Africa): *AVACLIM : Agro-ecology, Ensuring Food Security and Sustainable Livelihoods while Mitigating Climate Change and Restoring Land in Dryland Regions (GEFID: 9993, FAO, GEFTF: \$1.3 million. Total Cost: \$7.4 million)*. The project will be implemented addressing dryland ecosystems in seven countries: Burkina Faso, Brazil, Ethiopia, India, Morocco, Senegal, , , and South Africa. The project aims at promoting agro-ecological approaches in drylands to restore degraded land, mitigate climate change, and improve food security. In this regard, the project seeks to strengthen stakeholders' capacities on agro-ecology, and support the integration of agro-ecology into development planning, and policies. The project is committed to disseminating best practices and learning to scale-up agroecological practices and technologies in a community of

practice. The project is structured around four components: (a) building partnerships for experience sharing and capacity building of agro-ecology practitioners at the local level; (b) assessment of existing initiatives for evidence-based decision-making at the national, local and landscape levels; (c) advocacy for informed decision-making (internationally and nationally); and (d) communication and project monitoring, evaluation and reporting. All the selected countries need to address agriculture productivity and food security in a context of drylands, land degradation and climate change. Most of the targeted countries referred to ecosystem conservation and agriculture practices under a changing climate in their NDCs. The project is also expected to contribute to the implementation of current NAPs. Compared to current agricultural patterns and practices, the promotion and dissemination of agro-ecology practices as proposed by the project is very innovative. The issues of sustainability and scaling will be facilitated by the choice of targeted countries, sites and stakeholders. It will also depend on the local appropriation and enabling conditions. By its nature (research, capacity building and advocacy), the project is expected to obtain mainly indirect GEBs, as the expected results focus on behavioral changes of different stakeholder groups, including primarily producers and decision-makers at multiple levels. At this stage of project elaboration, the estimates foresee the following benefits: 200,000 hectares of SLM and 319,000 t CO<sub>2</sub> eq sequestered as direct benefits (24 million hectares and 38,280,000 t CO<sub>2</sub> eq as indirect benefits).

## 5. Summaries of Enabling Activity Projects Approved in FY 2018

*Serbia: Second Biennial Update Report and Third National Communication under the UNFCCC (GEFID: 9733, UNDP, GEFTF: \$0.9 million. Total Cost: \$1 million).* The objective of this project is to support Serbia in the preparation and submission of its Third NC and its BUR to the UNFCCC. The Government of Serbia will be supported through the implementation of this project to mainstream and integrate climate change considerations into development strategies and sector-based policy frameworks, ensuring the continuity of the institutional and technical capacity building, partly initiated and consequently sustained by reporting instruments under the UNFCCC and ensuring a regular mechanism of national MRV, and move towards a low-carbon and climate-resilient development pathway. The project will provide support to update and improve GHGIs by filling out the gaps and reducing the uncertainties encountered in the previous inventories; build national capacities allowing the country to apply improved 2006 IPCC Guidelines for National GHGIs and to establish national emission factors; set up and operationalization of the National MRV system with defined institutional arrangements to support it, based on recommendations arising out of similar European Union-funded projects; update existing and proposing new programmatic mitigation measures for abating GHG emissions in key economic sectors; prepare a roadmap and plan for implementation of NDCs by 2030; revisit and upgrade climate change scenarios and upgrade of policy framework and programmatic measures for CCA in the most vulnerable sectors in Serbia (energy, agriculture, forestry, water, health, transport, biodiversity and tourism) with in-depth regional/local focus using the Geographic Information System (GIS) technology, cost-benefit analyses socio-economic assessments, gender aspects; collect and analyze gender disaggregated data in relation to the climate change; update information on constraints, gaps and related financial, technical and capacity-building needs; and compile information, including preparation of final version, publication and promotion of the NC and BUR.

*Chile: Third Biennial Update Report and Fourth National Communication under the UNFCCC (GEFID: 9831, UNDP, GEFTF: \$0.9 million. Total Cost: \$1 million).* The project aims to support the Government of Chile to prepare its Third BUR and Fourth NC under the UNFCCC. The project will build on findings and recommendations from previous NC and BUR work, and will strengthen the technical and institutional capacity of Chile. It will identify synergies with the recently approved project under the CBIT. The project will focus on the update of the national circumstances and institutional arrangements relevant to the preparation of NCs and BURs; update the national GHGI up to 2015 (1990-2015) for the Third BUR and up to 2016 for the Fourth NC; strengthen Chile's capacity to adapt to climate change by deepening the knowledge of the impacts and vulnerability and planning; create the enabling conditions for the implementation, compliance and follow-up of GHG emission reduction goals, and contribute consistently to a low-carbon economy; update the domestic MRV; compile and submit the compilation and the Third BUR and Fourth NC to the UNFCCC.

*Guatemala: First Biennial Update Report and Third National Communication on Climate Change (GEFID: 9844, UNDP, GEFTF: \$0.9 million. Total Cost: \$1.5 million).* The objective of this project is to assist Guatemala in building the Third NC and first BUR in compliance with obligations under the UNFCCC. The project's outcomes will contribute towards generating information, creating and consolidating the conditions for systematizing the NCs and BURs, which will allow the incorporation of actions in compliance with the 2030 SDGs, the goals of the Government General Policy

2016—2020, the national goals related to Climate Change 2030, and the goals of the Global Climate Change Agenda. The project will support national circumstances, institutional arrangements, the assessment of constraints and gaps, financial, technical and capacity needs; the development of a National GHGI; vulnerability assessment and CCA; and the development of a domestic MRV.

Colombia: *Colombia's Second Biennial Update Report (GEFID: 9871, UNDP, GEFTF: \$0.4 million. Total Cost: \$0.4 million)*. The objective of this project is to assist Colombia in the preparation and submission of its Second BUR for the fulfilment of the obligations under the UNFCCC. The long-term goal of the project is to assist Colombia in deepening the mainstreaming and integration of climate change into national and sectorial development goals by giving continuity to the institutional and technical capacity strengthening process, partly initiated and sustained by the NCs and the First BUR. The project will support the national GHGI for year 2014 and update of the GHGIs for the 1990-2013 time series, with the respective estimation of the uncertainty and key categories and advances in the GHGI's systematization; update the description of Colombia's mitigation actions, (I)NDC, and MRV system; national circumstances; financial, technology transfer and capacity-building needs; the submission of the second BUR to the UNFCCC and the MRV.

Bosnia and Herzegovina: *Fourth National Communication and Third Biennial Update Report under the UNFCCC (GEFID: 9877, UNDP, GEFTF: \$0.9 million. Total Cost: \$1.1 million)*. The project will support Bosnia and Herzegovina in the preparation and submission of its Fourth NC and its Third BUR to the UNFCCC. The goal is to assist Bosnia and Herzegovina in deepening the mainstreaming and integration of climate change into country and sectoral development goals, and to enable the entity and state level governments to respond to international environmental obligations by strengthening and giving continuity to the institutional and technical capacity development that has been initiated and sustained by the NC and BUR processes to date. The project will support the update on the national circumstances and institutional arrangements relevant to the preparation of the Fourth NC; assessment on the progress towards mainstreaming climate change considerations into key development strategies and sector-based policy frameworks; identification of constraints and gaps; assessment of financial, technology, policy and capacity building needs and provide recommendations for addressing these; update GHGI up to year 2017 and improve GHGI system; the establishment of domestic MRV arrangements; the compilation of the Third BUR and the Fourth NC approved by the Council of Ministers and submitted to the UNFCCC.

Belarus: *Preparation of the Seventh National Communication for the Implementation of the UNFCCC and the Third Biennial Report (GEFID: 9929, UNDP, GEFTF: \$0.9 million. Total Cost: \$1 million)*. The objective of this project is to support Belarus in the preparation and submission of its Seventh NC and its Third BUR to the UNFCCC. The aim is to assist Belarus in fulfilling its reporting requirements; build and enhance national technical and institutional capacities in data collection, processing, archiving interpretations, and dissemination for GHGI, development of mitigation and adaptation actions, integrating climate change issues into sectoral and national development priorities, and improving the quality of inventory in the LULUCF sector; and further develop and improve the legislative framework taking into account the provisions of the Paris Agreement. The project will support the preparation of the GHGI, including information on the national inventory system (NIS) and national registry of carbon units; policies and measures, including those in accordance with Article 2 of the Kyoto Protocol, and domestic and regional programs and legislative arrangements and enforcement and administrative procedures; preparation of projections and assessment of the total effect of policies and measures, and flexibilities relating to Kyoto Protocol mechanisms (Articles 6, 12, and 17); assessment of the expected impacts of climate change, vulnerability and development of adaptation measures; assessment of the financial resources and transfer of technology, including information under Article 10 and 11, of the Kyoto Protocol, for the developing countries being a Parties to the UNFCCC, among others.

Albania: *Albania's First Biennial Update Report and Fourth National Communication under the UNFCCC (GEFID: 9945, UNDP, GEFTF: \$0.9 million. Total Cost: \$1 million)*. The objective of this project is to assist Albania in the preparation and submission of its Fourth NC and its First BUR to the UNFCCC. It is expected that the proposed project will add up to the efforts undertaken so far to enhance the institutional capacities to generate information that helps understanding the obstacles and development opportunities associated with climate change. The project will support the update on the national circumstances and the institutional arrangements relevant to the preparation of the NCs and BURs described on a continuous basis; progress towards mainstreaming of climate change considerations into key development strategies; the update of the National GHGI up to 2014 (period 2010-2014) for the First BUR and the Fourth NC up to 2016; the establishment of the domestic MRV system; and the submission of the First BUR and the Fourth NC to the UNFCCC.

Argentina: *Argentine Republic's Third Biennial Update Report (GEFID: 9952, UNDP, GEFTF: \$0.4 million. Total Cost: \$0.4 million)*. The objective of this project is to assist Argentina in the preparation and submission of its Third BUR to the UNFCCC. The project will also assist in the process of integrating climate change into national and sectoral development goals, continuing the strengthening process of institutional and technical capacity under the National Cabinet on Climate Change. The project will support the review and update national circumstances and institutional arrangements relevant to the preparation of NCs on a continuous basis; preparation of the National GHGI of emissions by sources and their respective report for the year 2016; description of mitigation measures, methodologies, assumptions, indicators, institutional arrangements for the design of MRV activities; update of the report on financial, technical and capacity constraints, as well as on financial resources, transfer of technology and technical assistance.

Bangladesh: *First Biennial Update Report to the UNFCCC (GEFID: 9957, UNDP, GEFTF: \$0.4 million. Total Cost: \$0.5 million)*. The objective of this project is to assist Bangladesh in the preparation and submission of its First BUR to the UNFCCC. Currently, Bangladesh is preparing its Third NC that is to be submitted to the UNFCCC by February 2018. The BUR project will build on findings and recommendations from previous NC work. Bangladesh will prepare and submit its First BUR to the UNFCCC in December 2019. The project will support the strengthening of institutional arrangements and update on national circumstances; the preparation of the National GHGI for the years 2013, 2014 and 2015, highlighting emission sources and sinks including key source analysis; mitigation actions and their effects analyzed and information on domestic MRV; description of institutional arrangements for the design of MRV activities of mitigation measures; the identification of constraints and gaps, and related financial, technical and capacity needs and solutions formulated; information on support received to enable the preparation and submission of BURs; the preparation of BUR report, its publication and submission to the UNFCCC.

Togo: *Preparation of the Fourth National Communication and of the Second Biennial Updated Report to the UNFCCC (GEFID: 9977, UNDP, GEFTF: \$0.9 million, Total Cost: \$1.3 million)*. The objective of this project is to assist Togo in the development of its Fourth NC and the Second BUR for the fulfilment of the obligations under the UNFCCC. Togo is an LDC and thus an example to other non-Annex I Parties having already completed its First BUR and carrying on with plans to prepare their Second BUR. The Second BUR is expected to be finalized and submitted to the UNFCCC in June 2020 and the Fourth NC in June 2021. Thus, this project aims to build upon previous efforts and capacities developed with a focus on improving the GHGI and other areas. The project will support the development of national inventory of anthropogenic sources and sinks of all GHGs not controlled by the Montreal Protocol, including a national inventory report ; information on the assessment of GHG mitigation, mitigation actions and their effects; information on climate change vulnerability and adaptation measures; compilation of the Fourth NC and the Second BUR, and project monitoring and evaluation.

Lebanon: *Lebanon's Fourth National Communication and Third Biennial Update Report under the UNFCCC (GEFID: 9982, UNDP, GEFTF: \$0.9 million. Total Cost: \$1 million)*. The objective of this project is to assist Lebanon in preparation of its Fourth NC and the Third BUR for the implementation of the obligations under the UNFCCC. Lebanon is one of the limited number of countries that submitted the second BURs and experienced international consultation and analysis (ICA) process. Therefore, Lebanon can take a lead for other non-Annex I parties to promote BUR and following transparency reporting process in the future. According to the proposal, the Project Management Unit of Lebanon will aim to improve the reporting of support received from the GEF as well as the private sector, based on a recommendation by the Team of Technical Experts during the ICA process. The project will support information on national circumstances, institutional and MRV arrangements pertinent to UNFCCC implementation; identification of gaps and constraints and related support needed and received for capacity building, technology transfer and finance; update of national GHGI; information on vulnerability assessment and adaptation to climate change, including MRV of adaptation; mitigation analysis and related MRV arrangement; compilation, endorsement and submission of the Third BUR and the Fourth NC, and preparation and submission of project financial and progress reports.

Niger: *Fourth National Communication on Climate Change (GEFID: 9996, UNDP, GEFTF: \$0.5 million. Total Cost: \$0.9 million)*. The objective of this project is to assist Niger in the preparation of its Fourth NC for the implementation of its obligations under the UNFCCC. Niger is an LDC that lacks national expertise as well as the data and information necessary to formulate NCs, including GHGIs, scenario analyses and vulnerability assessments to climate change. This project will assist Niger in submitting not just the Fourth NC but also other relevant reports under UNFCCC/COP decisions (i.e., BUR), and the Paris Agreement (i.e., Transparency Report) in the future. The expected outcomes include information on national circumstances and institutional arrangements relevant to the Fourth NC; assessment on mainstreaming of climate change considerations into key development strategies; consolidation of constraints, gaps and other information relevant for the preparation of the Fourth NC; update of the National GHGI using the 2006

IPCC guidelines and enhancement of capacity to collect this information; in-depth vulnerability assessment including adaptation measures; update of mitigation analysis and policy and measures and; compilation, endorsement and submission of the Fourth NC to the UNFCCC.

*Egypt: Fourth National Communication to the UNFCCC (GEFID: 10010, UNDP, GEFTF: \$0.5 million. Total Cost: \$0.6 million).* The project aims to support Egypt to prepare its Fourth NC, building on the previous and on-going work carried out under previous NCs, the First BUR that will be completed in 2018, and other national strategies and plans on climate change. Through this EA activity, Egypt is expected to get capacity to implement the Paris Agreement in more effective manner by updating national GHGI system, collecting data and information for scenario development and policies and measures on climate mitigation as well as vulnerability assessment and adaptation, and gender elements. The expected outcomes of the project include information on national circumstances and other information useful for the development of the Fourth NC; reports on national GHGIs and archives of previous GHGIs; update report on policies and measures on climate mitigation and analysis of the mitigation scenarios; information on climate change vulnerability and adaptation measures; preparation, submission, monitoring and evaluation of the Fourth NC to the UNFCCC.

*Global: Umbrella Programme for Preparation of National Communications and Biennial Update Reports to the UNFCCC (GEFID: 10019, UNDP, GEFTF: \$8.1 million. Total Cost: \$8.8 million).* The project aims to support 13 governments to prepare and submit their NCs and BURs under the UNFCCC. The goal of the project is to continue supporting developing countries in preparing NCs and BURs in a coordinated manner, using the umbrella program approach to streamline project approval and funds disbursement. Considering that countries are in different phases of NC and BUR preparation, the GEF funding will support Second, Third or Fourth NC and/or First, Second and Third BUR preparation. Four countries are requesting support for NC preparation; five countries are requesting support for BUR preparation; and four countries are requesting to combine NC and BUR preparation. The project includes three components: namely, preparation of Project Implementation Plans (PIPs) for NCs and BURs; preparation of NCs and BURs; national stakeholders' involvement and institutional arrangements for preparation of subsequent BUR and NC. It will support assessments of national GHGIs, GHG mitigation, and vulnerability and adaptation to climate impacts. Furthermore, five of the 13 countries the program is supporting are LDCs and SIDs, which will receive enhanced administrative and technical support.

*The former Yugoslav Republic of Macedonia: Fourth National Communication and Third Biennial Update Report on Climate Change under the UNFCCC (GEFID: 10024, UNDP, GEFTF: \$0.9 million. Total Cost: \$1.3 million).* The objective of this project is to assist the former Yugoslav Republic of Macedonia in the development of its Fourth NC and Third BUR for the fulfillment of the obligations under the UNFCCC. The project outputs include national GHGIs for 2015-2016 and 2017-2019, using the 2006 IPCC guidelines, as well as improving the existing time series 1990-2015. The former Yugoslav Republic of Macedonia has participated in the International Consultation and Analysis (ICA) process with its First BUR and will participate again with its recently submitted Second BUR. Conclusions and recommendations from this process will be incorporated into this project. Further, both reports will be instrumental in identifying the country's potential for raising ambitions within the 2020 NDC cycle. The expected components include the development of its Fourth NC and the development of its Third BUR.

*Algeria: Third National Communication and First Biennial Update Report of Algeria to the UNFCCC (GEFID: 10045, UNDP, GEFTF: \$0.9 million. Total Cost: \$3.3 million).* The project aims to assist Algeria in preparation of its Third NC and First BUR for the fulfillment of the obligations under the UNFCCC. Building on the initial and second NC, as well as lessons learned throughout, Algeria plans to submit its First BUR in December 2020 and the Third NC in December 2022 to the UNFCCC. The project will contribute to the strengthening of the country's institutional and technical capacities in the field of climate change to ensure the sustainability of the national system in charge of preparing continuous and regular reports to be submitted to the UNFCCC in accordance with the four-year cycle for NCs and two-year cycle for BURs. The expected outcomes include the development of a GHGI system and MRV; mitigation actions and domestic MRV system; assessment of vulnerability to climate change of key sectors and development of adaptation measures; national circumstances, institutional arrangements, constraints and gaps, related financial, technical and capacity needs, and other relevant information and; compilation of the Third NC and First BUR.

### ANNEX 3: LIST OF FY 2018 PROJECTS UNDER THE LDCF AND THE SCCF

This Annex provides lists and summaries of projects on CCA approved under the LDCF and the SCCF in the reporting period (July 1, 2017 to June 30, 2018). GEF funding includes PPGs and agency fees. The total cost is the sum of GEF funding and co-financing.

#### 1. List of LDCF Projects Approved in FY 2018

**Table A3.1: FY 2018 LDCF Projects**

<i>GEF ID</i>	<i>Country</i>	<i>Agency</i>	<i>Title</i>	<i>GEF amount<sup>a</sup> (\$ million)</i>	<i>Co-financing (\$ million)</i>	<i>Total (\$ million)</i>
<i>LDCF stand-alone<sup>74</sup> projects</i>						
8028	Somalia	UNDP	<i>Support for Integrated Water Resources Management to Ensure Water Access and Disaster Reduction for Somalia's Pastoralists</i>	9.9	21.1	31.0
8036	Bangladesh	UNDP	<i>Integrating Climate Change Adaptation into Sustainable Development Pathways of Bangladesh</i>	6.3	17.7	24.0
8022	Lao People's Democratic Republic	UNEP	<i>Building the Capacity of the Lao People's Democratic Republic Government to Advance the National Adaptation Planning Process</i>	4.1	40.0	44.1
9194	The Gambia	UNIDO	<i>Strengthening Adaptive Capacities to Climate Change through Capacity Building for Small-scale Enterprises and Communities Dependent on Coastal Fisheries in The Gambia</i>	2.5	5.5	8.0
9303	Ethiopia	UNDP	<i>Climate Change Adaptation in the Lowland Ecosystems of Ethiopia</i>	6.5	41.2	47.7
8034	Zambia	UNEP	<i>Building the Resilience of Local Communities in Zambia through the Introduction of Ecosystem-based Adaptation (EBA) into Priority Ecosystems, including Wetlands and Forests</i>	6.9	17.7	24.6
9113	Sao Tome and Principe	AfDB	<i>Strengthening Resilience and Adaptive Capacity to Climate Change in Sao Tome and Principe's Agricultural and Fisheries Sectors</i>	4.0	17.0	21.0
9131	Myanmar	UNDP	<i>Reducing Climate Vulnerability of Coastal Communities of Myanmar through an Ecosystem-based Approach</i>	7.9	21.8	29.7
9318	Burkina Faso	UNDP	<i>Climate Resilience in the Nakambe Basin</i>	5.0	4.8	9.8

<sup>74</sup> No multi-trust fund (MTF) project drawing on LDCF resources was approved in the reporting period.

<b>GEF ID</b>	<b>Country</b>	<b>Agency</b>	<b>Title</b>	<b>GEF amount<sup>a</sup> (\$ million)</b>	<b>Co-financing (\$ million)</b>	<b>Total (\$ million)</b>
9201	Cambodia	FAO	<i>Climate Adaptation and Resilience in Cambodia's Coastal Fishery Dependent Communities</i>	4.9	16.0	20.9
9364	Sao Tome and Principe	World Bank	<i>Sao Tome and Principe Adaptation to Climate Change - Additional Financing</i>	6.6	8.4	15.0
9166	Chad	FAO	<i>Strengthening Agro-ecosystems' Adaptive Capacity to Climate Change in the Lake Chad Basin (Lac, Kanem, Bahr El Ghazal, and Part of the Hadjer-Lamis Region)</i>	4.6	18.1	22.7
9392	Democratic Republic of the Congo	UNDP	<i>Climate-resilient Growth and Adaptation in the Democratic Republic of the Congo</i>	9.2	19.9	29.1
<b>Stand-alone LDCF projects Subtotal</b>				<b>78.4</b>	<b>249.2</b>	<b>327.6</b>

<sup>a</sup> These amounts include all focal area contributions, including PPGs and agency fees.

## 2. List of SCCF-A Projects Approved in FY 2018<sup>75</sup>

Table A3.2: FY 2018 SCCF-A Projects

<b>GEF ID</b>	<b>Country</b>	<b>Agency</b>	<b>Title</b>	<b>GEF amount<sup>b</sup> (\$ million)</b>	<b>Co-financing (\$ million)</b>	<b>Total (\$ million)</b>
<b>SCCF-A Stand-alone projects</b>						
9941	Global	CI	<i>Structuring and Launching CRAFT: the First Private Sector Climate Resilience and Adaptation Fund for Developing Countries</i>	1.2	1.4	2.6
<b>SCCF-A Stand-alone projects Total</b>				<b>1.2</b>	<b>1.4</b>	<b>2.6</b>

<sup>b</sup> These amounts include all focal area contributions, including PPGs and agency fees.

<sup>75</sup> No SCCF-B project or program was approved in the reporting period.

### 3. Summaries of LDCF Stand-Alone Projects Approved in FY 2018

Bangladesh: *Integrating Climate Change Adaptation into Sustainable Development Pathways of Bangladesh (GEFID 8036; UNDP; LDCF: \$6.3 million; Total Cost: \$24 million)* Bangladesh decision-makers have recognized the risks associated with climate change, against the backdrop of high incidence of poverty and limited scope of formal employment of the poorer segments of its population. It is recognized that Bangladesh must make adaptation to climate change a national priority. Within this context, this project aims to support Bangladesh in addressing urgent, medium and long-term climate change risks in selected agro-ecological zones through four components: (a) enhancing information on climate change in support of the NAP process; (b) appraisal of adaptation options; (c) national adaptation process is supported by the implementation of adaptation interventions in selected agro-ecological zones; and (d) institutional capacity building for successful integration of climate change into national processes.

Burkina Faso: *Climate Resilience in the Nakambe Basin (GEFID 9318; UNDP; LDCF: \$5 million; Total Cost: \$21 million)* The Nakambe Basin, with its reservoirs and tributaries, holds some 85 percent of Burkina Faso's national water storage capacity. The capital, Ouagadougou, relies almost entirely on the Basin's surface water resources. The capacity of the Nakambe Basin to meet the region's demand for water is under threat from the combined effects of environmental degradation (deforestation, overgrazing and unsustainable agricultural expansion) and a changing climate. This project aims to enhance the resilience of vulnerable communities in the Nakambe Basin. The project is structured around two main components: (a) seeking to strengthen the technical and institutional capacities of the Directorate General for the Nakambe Water Agency, particularly in the application of hydro-meteorological and climate information for resilient water resources management; and (b) to carry out targeted, EBA benefits with multiple benefits for resilience, environmental sustainability and local livelihoods.

Cambodia: *Climate Adaptation and Resilience in Cambodia's Coastal Fishery Dependent Communities (GEFID 9201; FAO; LDCF: \$4.9 million; Total Cost: \$26.1 million)* This project will support CCA in the fisheries and aquaculture sector of four coastal provinces of Cambodia. The sector is of great significance for the population (sustenance, livelihood, economy), but is highly vulnerable to coastal erosion, saltwater intrusion, and inundation from rising sea levels, in addition to a range of non-climate-related factors. The project will improve the climate resilience of coastal communities, which frequently suffer damage to crops and housing from coastal storms; and of coral reefs, seagrasses and estuaries, which are deteriorating due to destruction of mangroves. The project will support the rehabilitation of over 11,000 ha of mangrove in protected areas to increase ecosystem resilience and protection against coastal storms, improve regulatory frameworks for protected areas, and enhance community resilience through livelihood diversification, improved aquaculture management practices, uptake of appropriate technology, and other measures. In addition, it will support an assessment of the vulnerability of coastal fishing communities to climate change; development of a strategy (with financial models) to support communities of protected areas and fishing areas to adapt to climate change; development of technical guidelines on how to undertake mangrove-friendly aquaculture and replant coastal mangroves; and trainings for technical staff on climate-sensitive mangrove restoration.

Chad: *Strengthening Agro-ecosystems' Adaptive Capacity to Climate Change in the Lake Chad Basin (Lac, Kanem, Bahr el Ghazal, and part of the Hadjer-Lamis Region) (GEFID 9166; FAO; LDCF: \$4.6 million; Total Cost: \$23.7 million)* Characterized by a hot and dry climate, Chad has experienced severe drought conditions, which are particularly pronounced in the Lake Chad, Kanem and Bahr El Ghazal regions, which also suffer from high food insecurity, siltation and erosion. This project will provide targeted support for the wider adoption of climate-resilient agricultural and agro-pastoral technologies and practices, and promote a sector-wide integration of CCA into Chad's agricultural and pastoral development policies and plans. The project is structured around three main components, seeking to: (a) enhance the capacities of local authorities, farmer organizations as well as transhumant and sedentary herders to understand the impacts of climate change and the associated vulnerabilities, and to identify and carry out appropriate adaptation measures; (b) expand the adoption of SLM practices through farmer field schools and agro-pastoral field schools; and (c) strengthen the capacity of key institutions at the national level to integrate climate risks and adaptation into relevant policies and decision-making processes in the agricultural sector.

Democratic Republic of the Congo: *Climate-resilient Growth and Adaptation in the Democratic Republic of the Congo (GEFID 9392; UNDP; LDCF: \$6.9 million; Total Cost: \$24.5 million)* With its vast natural resources and the current prevalence of low-input subsistence farming, Democratic Republic of the Congo (DRC) holds tremendous potential for agricultural growth. The Eastern provinces of Maniema, North Kivu and South Kivu are in many respects particularly

promising, with widespread access to transport networks and agro-processors, as well as a vibrant network of agricultural cooperatives. Due to the adverse effects of climate change, including rising temperatures, changing rainfall patterns, and the growing frequency and intensity of extreme events, rural and agricultural development strategies are at risk. This project seeks to strengthen the enabling environment for effective climate change adaptation at the national and sub-national levels in DRC, while improving agricultural and natural resources management practices to enhance the resilience of smallholder farmers in forested and mountainous agro-ecological zones. The project is structured around two main components, seeking to (i) integrate climate change risks and appropriate adaptation strategies and measures into national and provincial planning processes; and (ii) promote the broader adoption of proven, climate-resilient agricultural production and natural resources management practices with a view to reducing the vulnerability of smallholder farmers in the forested and mountainous agro-ecological zones of North Kivu, South Kivu and Maniema.

*Ethiopia: Climate Change Adaptation in the Lowland Ecosystems of Ethiopia (GEFID 9303; UNDP; LDCF: \$6.5 million; Total Cost: \$47.7 million)* Ethiopia's lowland systems are characterized by heavy dependence on agriculture, an arid climate with highly variable rainfall patterns; and rapid population growth. Higher temperatures and changing precipitation patterns, severe flooding and drought has undermined Ethiopia's efforts to reduce poverty, combat food insecurity, and promote broad-based economic growth through agricultural intensification and value-addition. The project aims to promote CCA and sustainable economic growth among communities in Ethiopia's lowland ecosystems. The project is structured around three principal components, seeking to: (a) strengthen technical and institutional capacities for implementing diversified CCA strategies and measures; (b) promote climate risk management practices among smallholder farmers through the provision of climate information and tailored decision support; and (c) scale up community-based adaptation practices in lowland ecosystems.

*The Gambia: Strengthening Adaptive Capacities to Climate Change through Capacity Building for Small-scale Enterprises and Communities Dependent on Coastal Fisheries in The Gambia (GEFID 9194; UNIDO; LDCF: \$2.4 million; Total Cost: \$7.9 million)* The Gambia is highly dependent on rain-fed crops and livestock, with 80 percent of the rural population engaging in subsistence farming, including fisheries and 48 percent of the population living below the poverty line. The project's objective is to increase the adaptive capacities and climate change resilience of coastal fisheries and dependent populations and enterprises by mainstreaming climate change adaptive measures, demonstrating and scaling up of climate resilient business models for value addition and employment along the fisheries value chain. The project specifically targets vulnerable youth and women. The project consist of four main components, including: (a) strengthening national capacities to mainstream CCA and gender equality into sectoral policies and development strategies, with relevant climate resilient regulatory and policy measures piloted to promote adoption of quality and safety standards and systems and environmental safeguards by the private sector; (b) piloting demonstrations of improved post-harvest fisheries technologies, practices and business operations integrating adaptation; (c) training business service providers as trainers and subsequently training enterprises on business skills to develop climate-resilient business plans and innovative strategies for value added fish processing and export trade; and (d) raising awareness through public awareness campaigns, training workshops, and documenting and disseminating of lessons learned.

*Lao People's Democratic Republic: Building the Capacity of the Lao People's Democratic Republic Government to Advance the National Adaptation Planning Process (GEFID 8022; UNEP; LDCF: \$4 million; Total Cost: \$44 million)* Lao People's Democratic Republic is highly vulnerable to climatic variability and change (rainfall variability, floods and drought, and increasing mean temperatures and sea levels). Climate change is expected to adversely impact key sectors such as agriculture, forestry, water resources and health. The project aims at enabling the country to move beyond a project-based approach to adaptation to climate change towards long-term, cross-sectoral and comprehensive solutions. It will do so by increasing institutional and technical capacity in the country to: (a) integrate CCA systematically over time into policies and development plans; and (b) implement prioritized activities that include the following elements: (i) institutional and technical capacity (support for a National Coordination Mechanism to facilitate the NAP process and outline institutional roadmaps; training; and awareness-raising across key stakeholders); (ii) climate information systems (to strengthen systems for developing and sharing climate information through gap analysis of technical and financial capacity; research on effectiveness of adaptation initiatives; and establishment of a web-based climate information sharing platform); (iii) integration of adaptation in social and economic development (recommendations on adaptation-relevant policy revisions for each sector and dynamic institutional arrangements; development of standardized guidelines to advance the NAP process in the medium and long term; establishment of policy dialogue platforms; development of adaptation finance strategy for the country; and training toolkits); and (iv) monitoring, reviewing and reporting on the NAP Process in the country.

Myanmar: *Reducing Climate Vulnerability of Coastal Communities of Myanmar through an Ecosystem-based Approach (GEFID 9131; UNDP; LDCF: \$7.8 million; Total Cost: \$21.8 million)* Rakhine State has been identified as a particularly vulnerable coastal area in Myanmar's NAPA, as it is highly susceptible to cyclones, mudslides and floods, and has a dense population with high rates of malnourishment and poverty. The Rakhine State's mangrove forest, which contributes critical resilience benefits, is under threat from human and environmental factors. Over 65 percent has been cut down, and much of the remaining is severely degraded. This project aims to enhance, manage and protect mangrove ecosystems to protect vulnerable coastal areas and communities against the adverse impacts of climate change and climate variability through EBA in the Rakhine State of Myanmar. The project will achieve this through the implementation of three components: (a) conflict-sensitive CCA in coastal areas is mainstreamed into sub-national and national development planning frameworks; (b) strengthened coastal resilience and improved ecosystem integrity and functionality; and (c) strengthened links between disaster risk reduction, livelihoods, and ecosystems.

Sao Tome and Principe: *Strengthening Resilience and Adaptive Capacity to Climate Change in Sao Tome and Principe's Agricultural and Fisheries Sectors (GEFID 9113; AFDB; LDCF: \$4 million; Total Cost: \$21 million)* Sao Tome and Principe is a highly vulnerable LDC SIDS with fragile coastal and inland ecosystems and low levels of economic development. Climate change is expected to impact on livelihoods and economy through adverse effects on food production, freshwater resources, infrastructure, health, and ecosystem services. This project aims to reduce the vulnerability of agricultural and fisheries communities to the adverse impacts of climate change in Sao Tome and Principe through adaptation measures meant to enhance the resilience of affected sectors, natural systems and communities. The project will achieve this objective through the implementation of three components: (a) strengthening resilience of the agricultural and fisheries sectors, natural systems and communities to climate change and variability; (b) Enhancing technical and institutional capacities for adaptation to climate change at all levels; (c) Monitoring, evaluation and knowledge management for effective adaptation.

Sao Tome and Principe: *Additional Financing – West Africa Coastal Area Resilience Investment Project (GEFID 9364; World Bank; LDCF: \$6 million; Total Cost: \$14.4 million)* This project will build on and scale up LDCF project ID 4019, 'Sao Tome and Principe: Adaptation to Climate Change', maintaining the focus on (a) coastal early warning and safety at sea; and (b) coastal protection for vulnerable communities. The project will mainstream CCA considerations in the Sao Tome and Principe's related activities of the World Bank's \$210 million financing package for 'West Africa Coastal Areas Resilience (WACA) Investment Project', of which the GEF is providing a \$20.25 million grant. Led by West African governments, the WACA project will protect against coastal erosion through a range of activities, including fixing dunes, restoring wetlands and mangroves, replenishing beaches, and building seawalls and dikes. This project will supplement coastal resilience measures with specific activities to reduce vulnerability of coastal communities to adverse impacts of climate variability and change. The project will also consolidate adaptation processes and behavior change in the four communities covered by its predecessor project, while expanding pilot actions to an additional six highly vulnerable communities (and thereby, all districts of the country). Measures include: geomorphological and social assessment studies and appropriate adaptation design; risk-based planning and assistance in establishing safer settlement expansion areas (any resettlement of persons living in high-risk areas to safer expansion areas would be purely voluntary); medium-scale structural and ecosystem-based coastal adaptation activities; and small-scale community-based adaptation actions (including maintenance of drainage and revegetation).

Somalia: *Support for Integrated Water Resources Management to Ensure Water Access and Disaster Reduction for Somalia's Pastoralists (GEFID 8028; UNDP; LDCF: \$9.8 million; Total Cost: \$31 million)* Arid and semi-arid lands comprise 80 percent of Somalia's territory. These areas rely heavily on nomadic pastoralism, and are highly vulnerable to climate change. This project aims to build the climate resilience of pastoralists in Somalia by strengthening their technical and operational capacities to manage water resources sustainably. The project has three main components, seeking to: (a) enhance policy, legislative and institutional frameworks and governance capacities for the sustainable and integrated management of water resources; (b) strengthen the capacities of Somalia's national hydro-meteorological services and drought and flood monitoring systems, particularly in arid and semi-arid lands; and (c) reduce the vulnerability of pastoralists to the impacts of climate change on water resources through investments in water resources management infrastructure and training on livestock value chains. The project will address Somalia's NAPA priorities in the areas of IWRM, and it contribute towards other priorities in the areas of SLM, watershed management and disaster risk management.

Zambia: *Building the Resilience of Local Communities in Zambia Through the Introduction of Ecosystem-based Adaptation (EBA) Into Priority Ecosystems, Including Wetlands and Forests (GEFID 8034; UNEP; LDCF: \$6.9 million;*

*Total Cost: \$24.5 million*) In Zambia, communities living around forests and wetlands are vulnerable to the degradation of ecosystems and associated reduction in ecosystem services. This problem is further aggravated by the limited technical and institutional capacity at local and national level to adapt to these predicted effects of climate change. Consequently, there is an urgent need to build capacity to conserve wetlands and forests to address the vulnerability of local communities to climate change and the ongoing degradation of the wetlands and forests in Zambia. This project proposes to increase the resilience of local people living around the wetlands and forests by strengthening the capacity of local communities as well as local and national governments to implement ecosystem-based adaptation (EBA) interventions. This will be achieved by demonstrating on-the-ground EBA interventions in pilot sites in wetlands and forests in the Bangweulu Wetlands ecosystem and by providing training to local and national governments to implement EBA as a tool to adapt to climate change. The project has three components: (a) institutional and technical capacity development for EBA in Zambia; (b) implementation of wetland and forest EBA interventions in Zambia; and (c) knowledge and research on EBA and climate resilient livelihoods.

#### **4. Summary of the SCCF Stand-alone Project Approved in FY 2018**

*Global: Structuring and Launching CRAFT: the First Private Sector Climate Resilience and Adaptation Fund for Developing Countries (GEFID 9941; Conservation International; SCCF: \$1.1 million; Total Cost \$2.5 million)* Between 2003 and 2013, disasters triggered by natural hazards caused \$1.5 trillion in economic damage worldwide, with \$550 billion of this economic damage in developing countries, affecting 2 billion people. The impacts of climate change are affecting all sectors of the economy, and are in particular affecting developing countries with less capacity to adapt. To address these impacts of climate change, massive investments in adaptation are needed – some estimates are as high as \$300 billion annually by 2030, yet less than 7 percent of public climate finance is currently being directed toward adaptation and resilience. This project's objective is to establish and mobilize resources for the CRAFT, the first private sector climate resilience and adaptation investment fund and technical assistance facility for developing countries. The project is structured around three components: (a) CRAFT investment and impact strategy; (b) CRAFT resource mobilization; and (c) CRAFT legal setup. These components will deliver the following outcomes: (a) Fund investment strategy prepared; (b) Fund investment pipeline expanded; (c) CRAFT impact strategy and technical assistance facility strategy developed; (d) key marketing documents written and web site and online data room functional; (e) fundraising strategy developed and implementation started; (f) legal structuring of CRAFT determined; and (g) Fund regulatory compliance plan prepared.

## ANNEX 4: LIST AND SUMMARIES OF PROJECTS UNDER THE CBIT TRUST FUND IN FY 2018

### 1. List of Projects Approved under the CBIT Trust Fund in FY 2018

**Table A4.1: FY 2018 Projects under the CBIT Trust Fund**

<i>GEF ID</i>	<i>Country</i>	<i>Agency</i>	<i>Title</i>	<i>GEF amount (\$ million)</i>	<i>Co-financing (\$ million)</i>	<i>Total (\$ million)</i>
9828	Côte D'Ivoire	UNDP	<i>Strengthening the Transparency System for Enhanced Climate Action in Côte D'Ivoire</i>	1,303,050	210,000	1,513,050
9849	Antigua and Barbuda	UNEP	<i>Capacity Building for Improved Transparency on Climate Actions through an Environment Registry in Antigua and Barbuda</i>	1,149,750	200,000	1,349,750
9864	Global	FAO	<i>Global capacity-building products towards enhanced transparency in the AFOLU sector (CBIT-AFOLU)</i>	2,000,000	3,000,000	5,000,000
9869	Dominican Republic	UNEP	<i>Strengthening the Capacity of the Dominican Republic to Generate Climate Information and Knowledge in the Framework of the Paris Agreement</i>	1,237,350	360,000	1,597,350
9872	Peru	UNEP	<i>Capacity Building for Peru's Transparency System for Climate Change Mitigation and Adaptation</i>	1,367,655	700,000	2,067,655
9923	Liberia	CI	<i>Building and Strengthening Liberia's National Capacity to Implement the Transparency Elements of the Paris Climate Agreement</i>	1,520,000	1,500,000	3,020,000
9925	Lebanon	UNDP	<i>Establishing Lebanon's Transparency Framework</i>	1,084,050	632,000	1,716,050
9942	Honduras	UNEP	<i>Support in the Design and Implementation of the Integrated Monitoring System of Climate Change for Honduras</i>	1,171,650	150,000	1,321,650
9948	Madagascar	CI	<i>Building and Strengthening Madagascar's National Capacity to Implement the Transparency Elements of the Paris Agreement</i>	1,520,000	620,000	2,140,000
9955	Argentina	UNEP	<i>Strengthening Argentina's Transparency Framework on GHG Inventories and Mitigation</i>	2,244,531	350,000	2,594,531
9966	Bosnia and Herzegovina	UNDP	<i>Integrated Reporting and Transparency System of Bosnia and Herzegovina</i>	1,335,900	150,000	1,485,900
9967	Ethiopia	UNDP	<i>Capacity-building Program to Comply with the Paris Agreement and Implement its</i>	1,331,520	192,000	1,523,520

<b>GEF ID</b>	<b>Country</b>	<b>Agency</b>	<b>Title</b>	<b>GEF amount (\$ million)</b>	<b>Co-financing (\$ million)</b>	<b>Total (\$ million)</b>
			<i>Transparency Requirements at the National Level</i>			
9970	Cuba	FAO	<i>Enhancing Cuba's Institutional and Technical Capacities in the Agriculture and Land-use Sectors for Enhanced Transparency under the Paris Agreement.</i>	1,000,000	550,000	1,550,000
9986	Bangladesh	FAO	<i>Strengthening Capacity for Monitoring Environmental Emissions under the Paris Agreement in Bangladesh</i>	1,000,000	1,000,000	2,000,000
9997	Rwanda	CI	<i>Strengthening the Capacity of Institutions in Rwanda to implement the Transparency Requirements of the Paris Agreement</i>	1,144,500	600,000	1,744,500
10002	Eswatini	UNEP	<i>Capacity Building for Enhanced Transparency in Climate Change Monitoring, Reporting and Verification</i>	1,133,325	270,000	1,403,325
10004	Morocco	UNDP	<i>Developing an Integrated Transparency Framework for NDC Planning and Monitoring</i>	1,675,350	390,000	2,065,350
10014	Jamaica	IDB	<i>Strengthening Jamaica's Capacity to Meet Transparency Requirements under the Paris Agreement</i>	1,423,500	159,000	1,582,500
10021	Montenegro	UNDP	<i>Strengthening Nationally Determined Contribution and Adaptation Activities Transparency Framework</i>	1,204,500	275,000	1,479,500
10023	Panama	UNEP	<i>Development of the National Framework for Climate Transparency of Panama</i>	985,500	150,000	1,135,500
10025	Burkina Faso	UNEP	<i>Capacity Building for Burkina Faso's Transparency System for Climate Change Mitigation and Adaptation</i>	1,346,850	150,000	1,496,850
10026	Togo	UNEP	<i>Togo Climate Transparency Framework</i>	1,160,992	1,167,000	2,327,992
10027	Sierra Leone	UNEP	<i>Building and Strengthening Sierra Leone's National Capacity to Implement the Transparency Elements of the Paris Agreement</i>	1,526,972	200,000	1,726,972
10028	Georgia	UNEP	<i>Georgia's Integrated Transparency Framework for Implementation of the Paris Agreement</i>	1,127,850	137,340	1,265,190
10029	Serbia	UNDP	<i>Capacity Building to Enhance the Transparency Framework for the Republic of Serbia under the Framework of the Paris Agreement</i>	1,204,500	100,000	1,304,500
10031	Mexico	IDB	<i>Transparency under the Paris Agreement: National and Subnational Contribution and Tracking towards Mexico's NDC</i>	2,050,000	1,500,000	3,550,000
10039	Lao People's Democratic Republic	UNEP	<i>Strengthening Lao People's Democratic Republic's Institutional Capacity to Comply</i>	1,357,800	150,000	1,507,800

<b>GEF ID</b>	<b>Country</b>	<b>Agency</b>	<b>Title</b>	<b>GEF amount (\$ million)</b>	<b>Co-financing (\$ million)</b>	<b>Total (\$ million)</b>
			<i>with the Enhanced Transparency Framework under the Paris Agreement</i>			
<b>10040</b>	Sri Lanka	FAO	<i>Enhancing and Bridging Knowledge Gaps in Sri Lanka's NDC implementation of AFOLU Sector for Enhanced Transparency Framework</i>	1,000,000	1,796,000	2,796,000
<b>10042</b>	The former Yugoslav Republic of Macedonia	UNDP	<i>Strengthening FYRoM's Institutional and Technical Capacities to Enhance Transparency in the Framework of the Paris Agreement</i>	1,445,400	1,410,000	2,855,400
<b>10043</b>	Azerbaijan	UNEP	<i>Capacity Building to Meet Enhanced Transparency Framework of the Paris Agreement</i>	1,470,585	350,000	1,820,585
			<b>Total</b>	<b>40,523,080</b>	<b>18,418,340</b>	<b>58,941,420</b>

## 2. Summaries of Projects Approved under the CBIT Trust Fund in FY 2018

This Annex summarizes projects and programs approved under the CBIT Trust Fund in the reporting period (July 1, 2017 to June 30, 2018).

The project concepts that have been approved since July 1, 2017 include one global project and 29 country proposals from: Antigua and Barbuda, Argentina, Azerbaijan, Bangladesh, Bosnia and Herzegovina, Burkina Faso, Côte D'Ivoire, Cuba, Dominican Republic, Ethiopia, Eswatini, Georgia, Honduras, Jamaica, Lao People's Democratic Republic, Lebanon, Liberia, Madagascar, Mexico, Montenegro, Morocco, Panama, Peru, Rwanda, Serbia, Sierra Leone, Sri Lanka, the former Yugoslav Republic of Macedonia and Togo. These projects amount to \$40.5 million in resources from the CBIT Trust Fund. Individual projects are summarized in this section.

*Antigua and Barbuda: Capacity Building for Improved Transparency on Climate Actions through an Environment Registry in Antigua and Barbuda (GEFID: 9849; UNEP, CBIT Trust Fund \$1.1 million; Total Cost: \$1.3 million).* The objective of Antigua and Barbuda's CBIT project with the UNEP is to promote mainstreaming of NDC MRV into its domestic systems, and to strengthen the country's institutional capacity to facilitate sound monitoring processes necessary for enhanced transparency under the Paris Agreement. On September 6, 2017, the second most powerful hurricane on record—Hurricane Irma—made direct landfall on Barbuda, the northern island of the twin island state of Antigua and Barbuda. The hurricane destroyed 90 percent of the building stock in Barbuda, Government agencies lost years' worth of data and information and physical infrastructure, computing equipment, and paper records were damaged. More importantly, human resources were also lost as people had to migrate following the destruction of their homes and livelihoods. The CBIT project will help to address data management and security risks to establish and maintain a robust and transparent information system.

*Argentina: Strengthening Argentina's Transparency Framework on GHG Inventories and Mitigation (GEFID: 9955; UNEP, CBIT Trust Fund \$2.2 million; Total Cost: \$2.6 million).* The CBIT project in Argentina with the UNEP will help the country develop and strengthen its transparency mechanisms over time by supporting the design of country-specific methodologies for an MRV system, starting from enhancing measurement through a robust national GHGI system and strengthening institutional arrangements. The project will also improve local sectoral capacities for accounting of GHG mitigation actions, tracking support received, and precise monitoring of progress on short, mid and long-term NDC targets, including the ability to adjust if needed.

*Azerbaijan: Capacity Building to Meet Enhanced Transparency Framework of the Paris Agreement (GEFID: 10043; UNEP, CBIT Trust Fund \$1.5 million; Total Cost: \$1.8 million).* Azerbaijan's CBIT project with the UNEP seeks to strengthen the necessary institutional arrangements and human capacities to monitor progress and report on the implementation of the country's NDC. The project responds to needs and gaps identified through the ICA process of Azerbaijan's First BUR, Third NC, NDC, and findings from a working group on adaptation planning, and a working commission on low-carbon development strategy development. The project will also establish a tracking system to support reliable domestic MRV activities, including the performance indicators for mitigation policies, programs and actions.

*Bangladesh: Strengthening Capacity for Monitoring Environmental Emissions under the Paris Agreement in Bangladesh (GEFID: 9986; FAO, CBIT Trust Fund \$1.0 million; Total Cost: \$2.0 million).* Bangladesh is extremely vulnerable to the impacts of climate change, and the AFOLU and waste sectors are described in high priority in the country's NDC. In 2012, agriculture, LULUCF and the waste sectors accounted for 33 percent, five percent and 18 percent, respectively, of total GHG emissions in Bangladesh. This CBIT project with the FAO will improve Bangladesh's institutional arrangements to better integrate the AFOLU and waste sectors into national GHGI reporting, and will help the country implement its NDC by enhancing the transparency and monitoring of mitigation and adaptation actions in both sectors.

*Bosnia and Herzegovina: Integrated Reporting and Transparency System of Bosnia and Herzegovina (GEFID: 9966; UNDP, CBIT Trust Fund \$1.3 million; Total Cost: \$1.5 million).* Bosnia and Herzegovina's CBIT project with the UNDP seeks to build its GHG monitoring and reporting capacities to meet the requirements of the ETF by specifically aligning the CBIT project outcomes with the capacity needs identified in the ICA of its First BUR. Bosnia and Herzegovina will establish an overarching structure across sectors and key institutions through an inter-ministerial coordination

committee. The project will also strengthen institutions to establish and improve MRV systems and practices; improve GHGs and NDC information; and generate new data and data flows to monitor mitigation actions and policies for multiple key sectors, coupled with specific training in data analysis and quality assurance and quality control procedures.

*Burkina Faso: Capacity Building for Burkina Faso's Transparency System for Climate Change Mitigation and Adaptation (GEFID: 10025; UNEP, CBIT Trust Fund \$1.3 million; Total Cost: \$1.5 million).* Burkina Faso is a landlocked Sahelian country in West Africa and an LDC with more than 80 percent of the population directly dependent on natural resources and vulnerable to the impacts of climate change. Burkina Faso's NDC identifies AFOLU as the largest source of GHG emissions in the country (88 percent), followed by waste (4 percent) and transport (4 percent). Accordingly, this CBIT project with the UNEP will focus on activities to enhance transparency in Burkina Faso's AFOLU and waste sectors. The project will strengthen institutional arrangements by establishing an inter-ministerial coordination framework. It will also allow Burkina Faso to design, test and operationalize a domestic MRV system for tracking progress of the country's NDC and National Adaptation Plan (NAP).

*Côte D'Ivoire: Strengthening the Transparency System for Enhanced Climate Action in Côte D'Ivoire (GEFID: 9828; UNDP, CBIT Trust Fund \$1.3 million; Total Cost: \$1.5 million).* The CBIT project in Côte D'Ivoire aims to strengthen the capacities of the country in transparency, according to the decisions of Paris Agreement, by putting in place institutional arrangements for climate transparency; enhancing GHGs, including improved methodological guidance and design of a domestic MRV system; and establishing effective progress tracking tools on NDC implementation and transparency.

*Cuba: Enhancing Cuba's Institutional and Technical Capacities in the Agriculture and Land-use Sectors for Enhanced Transparency under the Paris Agreement (GEFID: 9970; FAO, CBIT Trust Fund \$1.0 million; Total Cost: \$1.5 million).* Cuba's CBIT project with the FAO will support the development of an MRV system in the AFOLU sector, which complements the Caribbean country's NDC and its national climate change plan, "Tarea Vida". Cuba's NDC identifies a series of proposed GHG mitigation actions in the energy sector linked to the AFOLU sector, such as new renewable energy generation from biomass, solar pumps for agricultural use, and processing organic waste for energy generation. Adaptation is also a priority for the Caribbean SIDS country, and key actions include incorporating adaptation in programs, plans and projects linked to food production, integral water management, land-use, forestry, fishery, tourism and health planning. The first in a step-wise approach, Cuba's CBIT project will coordinate with the preparation of its Third NC and First BUR supported by the GEF, as well as with REDD+ technical assistance from FAO.

*Dominican Republic: Strengthening the Capacity of the Dominican Republic to Generate Climate Information and Knowledge in the Framework of the Paris Agreement (GEFID: 9869; UNEP, CBIT Trust Fund \$1.2 million; Total Cost: \$1.6 million).* The Dominican Republic's CBIT project with the UNEP aims to improve its ability to track its NDC and clarify future NDC information by strengthening the institutional arrangements and technical capacities of relevant ministries. The project will target key remaining barriers in monitoring and projecting GHG emissions, developing country-specific activity data and higher-tier emission factors, tracking climate finance support and estimating budgetary needs to support mitigation efforts. Adaptation is a constitutional priority for the Caribbean country, which is committed to increase the resilience of the most vulnerable social groups and economic sectors. In addition to coordinating with existing GHG transparency projects, the Dominican Republic's CBIT project will establish a long-term capacity building strategy through arrangements with local academia.

*Ethiopia: Capacity-building Program to Comply with the Paris Agreement and Implement its Transparency Requirements at the National Level (GEFID: 9967; UNDP, CBIT Trust Fund \$1.3 million; Total Cost: \$1.5 million).* Ethiopia's CBIT project with the UNDP is focused on strengthening its institutional and technical capacities for transparency-related activities, including tracking the progress of Ethiopia's NDC commitments and support received. Using the CBIT support, the country will establish a permanent inter-ministerial body for leadership and planning support for the implementation of the transparency requirements. Ethiopia also plans to improve its national GHGI system by improving data collection tools and processes, as well as carrying out training and capacity building activities for relevant ministries and other organizations.

*Georgia: Georgia's Integrated Transparency Framework for Implementation of the Paris Agreement (GEFID: 10028; UNEP, CBIT Trust Fund \$1.1 million; Total Cost: \$1.3 million).* Georgia is in the process of enhancing its GHG transparency framework and through this CBIT project, it will establish a mechanism for tracking the implementation of its NDC both at the national and local levels. Georgia will implement its CBIT project with the UNEP through the

Municipal Development Coordination Platform - a vertical coordination mechanism - that will help the country improve its national GHGI system and quality assurance and control procedures in key sectors. Georgia's CBIT project will also complement and support other relevant activities, such as its Fourth NC and Second BUR to be submitted to the UNFCCC.

Global: *Global Capacity-building Products towards Enhanced Transparency in the AFOLU sector (CBIT-AFOLU) (GEFID: 9864; FAO, CBIT Trust Fund \$2.0 million; Total Cost: \$5.0 million)*. The Global CBIT-AFOLU project aims to help developing countries to establish national institutional arrangements and enhance technical capacities for AFOLU-focused transparency efforts, including GHGIs, domestic MRV systems and tracking of NDCs. The CBIT-AFOLU project will coordinate with the CBIT Global Coordination Platform and FAO-supported national CBIT projects. It will also coordinate with the FAO's activities supporting the NDC Partnership, PATPA, and ICAT.

Honduras: *Support in the Design and Implementation of the Integrated Monitoring System of Climate Change for Honduras (GEFID: 9942; UNEP, CBIT Trust Fund \$1.2 million; Total Cost: \$1.3 million)*. Honduras' CBIT project with the UNEP will develop the technical and logistical capacities for the creation and operation of a centralized, integrated GHG monitoring system for improved management and access to country-specific data. Adaptation is a priority for the Central American country and a robust data management system will enable Honduras to track the mitigation and adaptation commitments in its NDC, as well as to identify support needed and received. Responsibilities, mechanisms and procedures for access and exchange of information will also be defined, with a supporting capacity-building program.

Jamaica: *Strengthening Jamaica's Capacity to Meet Transparency Requirements under the Paris Agreement (GEFID: 10014; IDB, CBIT Trust Fund \$1.4 million; Total Cost: \$1.6 million)*. The purpose of Jamaica's CBIT project with the IDB is to strengthen the country's transparency framework through the design and implementation of a fully functional and harmonized domestic MRV system. Jamaica's CBIT project is particularly innovative as it will test the viability of blockchain technology to monitor progress towards implementing its NDC. If successful, Jamaica will deploy the technology to test other possible NDC-support activities, such as facilitating clean energy trading, enhancing climate finance flows, and improving carbon emissions trading. The project is aligned with existing support from the IDB through its NDC Invest Initiative, and is the first CBIT project that will be implemented by a multilateral development bank.

Lao People's Democratic Republic: *Strengthening Lao PDR's Institutional Capacity to Comply with the Enhanced Transparency Framework under the Paris Agreement (GEFID: 10039; UNEP, CBIT Trust Fund \$1.4 million; Total Cost: \$1.5 million)*. Lao People's Democratic Republic is an LDC that is highly vulnerable to the impacts of climate change, such as floods, epidemics, droughts and storms, but with limited capacity to adapt. A key focal area of the country's CBIT project with the UNEP is agriculture - a major economic sector in the country that is highly exposed to the risks of climate change, and, in terms of GHG emissions, represents 87 percent of total GHG emissions. This CBIT project will support the country's efforts to strengthen its institutional arrangements and improve its technical capacity to meet the enhanced transparency requirements under the Paris Agreement. Notably, the CBIT project will help establish a GHGI training curriculum at the national university and assist the country in developing a national GHG database management system.

Lebanon: *Establishing Lebanon's Transparency Framework (GEFID: 9925; UNDP, CBIT Trust Fund \$1.1 million; Total Cost: \$1.7 million)*. Lebanon's CBIT project with the UNDP will include developing progress indicators and establishing appropriate institutional arrangements for holistic MRV approaches, while also improving the quality of reporting to the UNFCCC by enhancing its systems for the calculation of GHGIs and the tracking of mitigation and adaptation actions (including already developed National Mitigation Actions). The CBIT project will also address capacity-building, institutional and technology needs as identified in the BUR, NCs and TNA.

Liberia: *Building and Strengthening Liberia's National Capacity to Implement the Transparency Elements of the Paris Climate Agreement (GEFID: 9923; CI, CBIT Trust Fund \$1.5 million; Total Cost: \$3.0 million)*. The focus of Liberia's CBIT project with the CI is the establishment of protocols and methodologies for data collection across multiple sectors in Liberia, and includes the development of an online system for the collection and management of all NDC data and information. In collaboration with the Liberian Environmental Protection Agency, the CBIT project will support the training of at least 300 stakeholders to utilize the NDC transparency system and manage relevant data. The project will also expand and strengthen Liberia's National Climate Change Steering Committee.

The former Yugoslav Republic of Macedonia: *Strengthening FYRoM's Institutional and Technical Capacities to Enhance Transparency in the Framework of the Paris Agreement* (GEFID: 10042; UNDP, CBIT Trust Fund \$1.5 million; Total Cost: \$2.9 million). The CBIT project in the FYRoM with the UNDP aims to improve its ability to meet the enhanced transparency requirements of the Paris Agreement by strengthening institutional and technical capacity for measuring and reporting on emissions, mitigation and adaptation activities, and support received. The key components of the CBIT project are to: strengthen the country's national institutions for MRV and ensure its transparency activities are aligned with country's priorities; provide the necessary training and tools to both organizations and individuals that conduct MRV activities; and shift the arrangements for data collection, analysis, and reporting from a project-based cycle to a continuous process.

Madagascar: *Building and Strengthening Madagascar's National Capacity to Implement the Transparency Elements of the Paris Agreement* (GEFID: 9948; CI, CBIT Trust Fund \$1.5 million; Total Cost: \$2.1 million). The CBIT project in Madagascar implemented by the CI includes as outcomes an assessment and recommendations for improved institutional arrangements, and the development and deployment of policies, strategies and programs that enhance climate accounting transparency. Madagascar's CBIT project will utilize the National Bureau of Coordination's REDD+ work as the basis for building new national MRV frameworks, and key stakeholders will be trained on domestic GHGI and MRV systems, and procedures for tracking the country's NDC commitments, among other activities.

Mexico: *Transparency under the Paris Agreement: National and Subnational Contribution and Tracking towards Mexico's NDC* (GEFID: 10031; IDB, CBIT Trust Fund \$2.1 million; Total Cost: \$3.5 million). The second of two CBIT projects to be implemented by the IDB, Mexico's CBIT project will build on, and enhance, current efforts to develop a platform for the tracking and reporting of climate change mitigation and adaptation actions under the SIAT-PECC (Sistema de Informacion de la Agenda de Transversalidad del Cambio Climatico). Eventually, SIAT-PECC and the platform proposed under this project (SIAT-NDC) will be fully integrated and follow the same principles in terms of transparency. The project will build on a results-based loan of \$600 million from the IDB, which is supporting Mexico in improving land management to reduce emissions and vulnerability to climate change. Current GHG capacity-building efforts in Mexico include the definition of mitigation and adaptation measures within its NDC, as well as activities with sub-national authorities, many of whom have incorporated mitigation and adaptation targets into their Climate Change Action Plans.

Montenegro: *Strengthening Nationally Determined Contribution and Adaptation Activities Transparency Framework* (GEFID: 10021; UNDP, CBIT Trust Fund \$1.2 million; Total Cost: \$1.5 million). Montenegro's CBIT project with the UNDP is focused on strengthening the engagement of high-level decision makers to accelerate and monitor climate action measures in harmony with Montenegro's broader national strategies. The work will strengthen Montenegro's transparency instruments under the Paris Agreement's transparency framework and integrate them within existing national functions, where possible. Montenegro's CBIT project also aims to enhance the country's technical capacities and to strengthen its institutional memory and coordination of MRV activities via an open data communication system.

Morocco: *Developing an Integrated Transparency Framework for NDC Planning and Monitoring* (GEFID: 10004; UNDP, CBIT Trust Fund \$1.7 million; Total Cost: \$2.1 million). Morocco's CBIT project implemented by the UNDP will initiate a project that will provide the necessary information to track the implementation progress of its NDC, to help alleviate the capacity constraints highlighted in Morocco's most recent NC to the UNFCCC. The country's CBIT project includes the testing and establishment of an integrated MRV system to sustain national tracking of NDC progress, strengthening the GHG accounting and reporting capacities of sectoral inventory experts and data focal points, and designing and procuring GHG data platforms to improve data processing, reporting and developing country-specific emission factors. Morocco's CBIT project will also help the country to identify best practices and improve vital inputs in preparation for the first Global Stocktake, which is scheduled to take place in 2023.

Panama: *Development of the National Framework for Climate Transparency of Panama* (GEFID: 10023; UNEP, CBIT Trust Fund \$1.0 million; Total Cost: \$1.1 million). The CBIT project in Panama implemented by the UNEP will develop the national Framework for Climate Transparency of Panama - Panama Reports - to facilitate the transparent collection, management and dissemination of climate-related data. Panama's proposed transparency framework will include mitigation, adaptation, climate finance, and consists of the following main components: a GHGI management system; a mitigation actions registry; a monitoring and evaluation system for adaptation; and a national emissions registry. This CBIT project will also help Panama address other areas of technical focus, such as accounting for, and tracking, mitigation actions in the AFOLU and energy sectors, as well as evaluating climate change impacts on

Panama's cities, coasts and human health.

Peru: *Capacity Building for Peru's Transparency System for Climate Change Mitigation and Adaptation (GEFID: 9872; UNEP, CBIT Trust Fund \$1.4 million; Total Cost: \$2.1 million)*. The CBIT project in Peru aims to support a whole range of components of the transparency system, including transparency of action (mitigation and adaptation) and support. National mitigation MRV will be strengthened with emission quantification methodologies, capacity building in different sectors and reliable emission projections to inform national planning. On adaptation, the project will specifically support the health sector, a priority sector in the NAP process. It will also support Peru in its efforts to track financial resources for climate and train public servants on identifying financial needs for climate change actions.

Rwanda: *Strengthening the Capacity of Institutions in Rwanda to Implement the Transparency Requirements of the Paris Agreement (GEFID: 9997; CI, CBIT Trust Fund \$1.1 million; Total Cost: \$1.7 million)*. The objective of Rwanda's CBIT project with the CI is to improve the capacity of its institutions to fulfill the transparency requirements of the Paris Agreement. The country aims to achieve this by improving the quality and quantity of its GHGI data through enhanced collaboration between the Rwanda Environment Management Authority (REMA) and sector-based institutions that support the GHGI. The capacity of key stakeholders responsible for GHG data collection and processing will be further strengthened by the procurement of state-of-the-art equipment and tools.

Serbia: *Capacity Building to Enhance the Transparency Framework for the Republic of Serbia under the Framework of the Paris Agreement (GEFID: 10029; UNDP, CBIT Trust Fund \$1.2 million; Total Cost: \$1.3 million)*. With support from the UNDP, Serbia's CBIT project will complete and enact its MRV system that will improve the country's ability to effectively define and implement climate change mitigation and adaptation measures, financing, capacity building and transfer of technologies. Serbia also expects its CBIT project to help raise the level of ambition of its NDC commitments, as well as improve institutional capacities, stakeholder awareness, and the integration of sub-national contributions to the process of NDC preparation and implementation. All three components of Serbia's project are focused on the development of tools, training and assistance for meeting the provisions stipulated in Article 13 of the Paris Agreement.

Sierra Leone: *Building and Strengthening Sierra Leone's National Capacity to Implement the Transparency Elements of the Paris Agreement (GEFID: 10027; UNEP, CBIT Trust Fund \$1.5 million; Total Cost: \$1.7 million)*. Sierra Leone is an LDC and has been ranked as the third most vulnerable nation after Bangladesh and Guinea Bissau to the adverse effects of climate change, and the country's NDC includes both mitigation and adaptation components. The CBIT project implemented by the UNEP will coordinate with existing REDD+ readiness support, which intends to complete forest cover and forest carbon inventories. The project will strengthen institutional arrangements for data collection and processing through inter-ministerial coordination frameworks for the energy and transport, agriculture, LULUCF and waste sectors. National capacity to track and report mitigation and adaptation data from these sectors will be built, supported by user-friendly guidelines and methodologies, and a centralized digital system. The project will also help build the capacities of ministries to analyze climate data and build climate vulnerability projections.

Sri Lanka: *Enhancing and Bridging Knowledge Gaps in Sri Lanka's NDC Implementation of AFOLU Sector for Enhanced Transparency Framework (GEFID: 10040; FAO, CBIT Trust Fund \$1.0 million; Total Cost: \$2.8 million)*. Sri Lanka's CBIT project with the FAO will focus on improving the island nation's capacity to meet the mitigation and adaptation components for the AFOLU sector, as described in the country's NDC. The Sri Lankan economy is growing rapidly, and consequently, the country's natural resource base is experiencing increased deforestation, land degradation and food insecurity. These negative externalities are further compounded by the ever-increasing negative impacts of climate change. This CBIT project will enhance the transparency of Sri Lanka's actions within the AFOLU sector and create clear and robust institutional arrangements for more regular and comprehensive GHG reporting.

Swaziland/Eswatini: *Capacity Building for Enhanced Transparency in Climate Change Monitoring, Reporting and Verification (GEFID: 10002; UNEP, CBIT Trust Fund \$1.1 million; Total Cost: \$1.4 million)*. The aim of the CBIT project in Eswatini with the support of the UNEP is to provide targeted technical support and tools to strengthen capacity in data collection, archiving within a centralized platform, and to support the establishment of effective institutional arrangements in order to plan, implement and report on climate actions. Eswatini expects its project to result in the development of a national strategy for mainstreaming climate change into national development policies and programs, as well as the development of climate-specific indicators that will be used to track, monitor and report Eswatini's NDC targets.

Togo: *Togo Climate Transparency Framework* (GEFID: 10026; UNEP, CBIT Trust Fund \$1.2 million; Total Cost: \$2.3 million). Like many LDC countries, the Western African country of Togo is highly vulnerable to the dangers of climate change and has prioritized action on agriculture, which is very vulnerable and is the basis of its economy, employing about 70 percent of the working population and accounting on average for 40 percent of its GDP. The CBIT project in Togo implemented by the UNEP will enable the establishment of an efficient and comprehensive climate-related information system, as well as build the technical and human capacities. Togo's project, for example, will create a system in which each relevant sector involved will have a "cell" responsible for managing GHG data; these cells will compose a national accounting and reporting mechanism hosted by the Ministry of Environment and Forest Resources.

## ANNEX 5: GEF PROJECTS UNDER THE STRATEGIC PRIORITY ON ADAPTATION

**Table A5.1: GEF Projects under the Strategic Priority on Adaptation**

<i>Country(ies)</i>	<i>Project title</i>	<i>Status</i>
Regional (Argentina, Bolivia, Brazil, Paraguay, Uruguay)	<i>Sustainable Management of the Water Resources of the La Plata Basin with Respect to the Effects of Climate Variability and Change</i>	Under implementation
Regional (Indonesia, Malaysia, Philippines)	<i>Coral Triangle Initiative (CTI): Coast and Marine Resources Management in the Coral Triangle: Southeast Asia under Coral Triangle Initiative</i>	Under implementation
Albania	<i>Identification and Implementation of Adaptation Response Measures in the Drini-Mati River Deltas</i>	Project completion
Armenia	<i>Adaptation to Climate Change Impacts in Mountain Forest Ecosystems of Armenia</i>	Project completion
India	<i>Sustainable Land and Ecosystem Management (SLEM)/ Country Partnership Program (CPP): Sustainable Rural Livelihood Security through Innovations in Land and Ecosystem Management</i>	Project completion
	<i>SLEM/CPP: Sustainable Land Water and Biodiversity Conservation and Management for Improved Livelihoods in Uttarakhand Watershed Sector</i>	Project completion
	<i>SLEM/CPP: Integrated Land Use Management to Combat Land Degradation in Madhya Pradesh</i>	Project completion
India, Global	<i>SLEM/CPP: Reversing Environmental Degradation and Rural Poverty through Adaptation to Climate Change in Drought-stricken Areas in Southern India: A Hydrological Unit Pilot Project Approach</i>	Project completion
Mozambique	<i>Zambezi Valley Market Led Small-holder Development</i>	Project completion
Regional (Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, Venezuela (Bolivarian Republic of))	<i>Integrated and Sustainable Management of Trans-boundary Water Resources in the Amazon River Basin Considering Climate Variability and Climate Change</i>	Project completion
Regional (Fiji, Micronesia, Palau, Papua New Guinea, Solomon Islands, Timor-Leste, Vanuatu)	<i>Pacific Alliance for Sustainability (PAS): Strengthening Coastal and Marine Resources Management in the Coral Triangle of the Pacific Under the Pacific Alliance for Sustainability Program</i>	Project completion
Sri Lanka	<i>Participatory Coastal Zone Restoration and Sustainable Management in the Eastern Province of Post-Tsunami Sri Lanka</i>	Project completion
Tajikistan	<i>Sustaining Agricultural Biodiversity in the Face of Climate Change</i>	Project completion
Tunisia	<i>MENARID: Second Natural Resources Management Project</i>	Project completion
Yemen	<i>Middle East and North Africa Regional Programme for Integrated Sustainable Development (MENARID): Adaptation to Climate Change Using Agro-biodiversity Resources in the Rained Highlands of Yemen</i>	Project completion

## ANNEX 6: REGIONAL AND GLOBAL CLIMATE TECHNOLOGY ACTIVITIES

This Annex summarizes the status of implementation of GEF-supported global and regional climate technology projects, as referred to in Part III, Sub-section 4a. It presents the progress made by the GEF agencies in the delivery of these projects and summarizes experience gained and lessons learned so far.

- (a) *Promoting Accelerated Transfer and Scaled-up Deployment of CCM Technologies through the CTCN (UNIDO)*. The project was endorsed by the GEF CEO in June 2015. The project includes the following components: (a) technical assistance for climate technology in response to requests to the CTCN; (b) partnerships to accelerate the investment and transfer of climate technology; and (c) networks and capacity-building for climate technology.

The project has supported six requests as at June 2017, as previously reported. They include: (a) supporting the replacement of F-refrigerants used in refrigeration system in food processing, production and exports in Chile; (b) developing a NAMA to leapfrog to advanced energy-efficient lighting technologies in Dominican Republic; (c) study of technical and economic feasibility to remove barriers to the implementation of drying and storage technologies for okra, mango and potatoes to support food security in Mali; (d) development of energy efficiency projects in industries and services, and green technology development in industrial zones in Senegal; (e) formulating geothermal energy policy, legal and regulatory framework in Uganda; (f) bio-waste minimization and valorization for low-carbon production in the rice sector in Viet Nam.

Activities in all countries have progressed well. The interventions in Uganda and Mali were completed in late 2016. In Uganda, technical assistance was well received, notably in the context of developing the policy and regulatory framework of the deployment of geothermal energy. In Mali, the focus was on leveraging the private sector finance for an investment in renewable energy to support production activities. Significant progress has also been made in the Dominican Republic to identify opportunities to deploy efficient lighting at large scale. In Chile, Senegal and Viet Nam, activities are at an advanced stage and are anticipated to be completed by the end of 2018.

### Progress on Delivery of Technology Transfer

- In Chile, an inventory of F-refrigerant appliances has been completed, training workshops raised awareness of 50+ agro-industry companies, three Memorandums of Understanding were signed with Chilean companies that will apply the refrigeration system conversion, 30+ refrigeration technicians were trained on the installation and maintenance, and one company invested in new technology.
- In the Dominican Republic, mandatory minimum energy performance standards for efficient lighting products in residential, commercial and industrial applications were established. Furthermore, the CAF and IDB expressed interest in funding and upscaling the project.
- In Senegal, savings for enterprises by improving resource productivity and waste valorization were created.
- In Viet Nam, appropriate technology options were selected for paddy drying, briquette production and combustion. The CTCN identified a business development strategy for industrial use, designed to attract external investment, including development and validation of business model. Furthermore, a feasibility study for two innovative valorization routes (biochar and amorphous silica) was prepared.

### Success Stories

Success stories include high levels of satisfaction from the beneficiaries, provision of follow-up assistance and support, as well as the demand largely exceeding the supply. Due to demand-driven nature, the CTCN was well positioned to gauge the needs and priorities. Concretely, this GEF-funded project is supporting around nine CTCN requests. This represents a fraction of the currently growing portfolio.

Technical assistance was well received, notably in the context of deploying an alternative technology for a MSW treatment plant in the city of Cali, Colombia. Significant progress has also been made in Senegal to identify opportunities relating to industrial symbiosis and green technologies in industrial parks. In Chile, support was provided for the replacement of F-refrigerants used in refrigeration system in food processing production and exports.

### Challenges

Being a demand-driven mechanism by design, it is at times challenging to ensure that the requests reaching the CTCN have the attributes needed to meet the requirements of the GEF.

### Lessons Learned and Captured

There is a significant demand from developing countries for the types of services that the CTCN delivers. Indeed, increasing numbers of requests for technical assistance are reaching the CTCN. However, not all requests relate to the actual deployment of climate technologies directly and hence cannot be treated as part of this project.

- Both the GEF and CTCN pursue compatible objectives. Yet, a balancing act to identify common ground between GEF requirements and CTCN modus operandi is required.
- There is a demonstrated appetite for CTCN-like services as a complement to other mechanisms and initiatives. In particular, the CTCN can contribute to an early-stage support.
- The CTCN has a wide range of ready-to-use resources and network of international expertise and technologies.
- There are multiple opportunities for scale up and replication, and the CTCN, due to its demand-driven nature, is well positioned to gauge the needs and priorities.

The project is planning to respond to additional requests by Zimbabwe and the Economic Community of West African States (ECOWAS) region<sup>76</sup>.

The fourth Steering Committee meeting is planned to take place at the sidelines of the upcoming 12<sup>th</sup> CTCN Advisory Board meeting.

### Collaboration between the CTCN and the Regional Technology Transfer and Finance Centers

CTCN endeavors to coordinate with relevant activities in the regions, and notably the GEF-financed regional projects. Constructive dialogue has been established and is being pursued with the respective agencies to seek synergies and avoid overlaps.

### Outreach, Public Awareness and Knowledge-sharing Opportunities

These include: the Vienna Energy Forum 2018, 12<sup>th</sup> CTCN Advisory Board Meeting, COP 24, CTCN website and events. The project team is planning to present the promising project ideas to investor forums in respective regions.

The Project Steering Committee meeting is commonly organized in conjunction with the CTCN Advisory Board meeting. This provides an opportunity to the recipients of the assistance to showcase the accomplishments to the governing body of the CTCN.

- (b) *Pilot Asia-Pacific Climate Technology Network and Finance Center (CTNFC) (ADB and UNEP)*. The project was endorsed by the GEF CEO in May 2012, and has started implementation. This is a joint initiative of the UNEP and ADB. The project's objective is to pilot a regional approach to facilitating deployment of climate technologies (mitigation and adaptation) that combines capacity development, enhancement of enabling environment for market transformation, financial investments, and investment facilitation. Project components are as follows: (a) facilitating a network of national and regional centers, networks, organizations, and initiatives; (b) building/strengthening national and regional technology transfer centers and centers of excellence; (c) design, development and implementation of country-driven EST transfer policies, programs, demonstration projects, and scale-up strategies; (d) integrating climate technology financing needs into national development strategies, plans, and investment priorities; (e) catalyzing investments in EST deployment; and (f) establishing a marketplace

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<sup>76</sup> A formal MTR exercise is not considered, given the short timeframe of the project and the institutional context involving UNIDO, UNEP, the CTCN, and the COP meetings, which expectedly offers sufficient opportunity for feedback and reflection. The independent evaluation of the CTCN that was presented at COP 23 in November 2017 provided recommendations that will be taken into consideration.

of owners and users of LCTs to facilitate their transfer. The UNEP is leading interventions to enhance the enabling conditions for climate technology transfer and deployment (a-c), and the ADB is leading the financial investment and investment facilitation interventions (d-f).

### Status Update

The first phase of the UNEP project component supported the build-up of institutions for technology and capacities to assess technology needs for climate change. With the adoption of the Paris Agreement and submission of NDCs, the countries have defined their national strategies for addressing climate change. The current focus of the project is on providing technical assistance to partner countries to support them in designing and developing programmes to facilitate technology use for NDC implementation. The countries are working towards elaborating NDC implementation plans and developing institutional arrangements for implementing and tracking the implementation. The coordination among the various focal points on climate change and interactions with stakeholders is still being built up. The ownership of support provided is dependent on ownership by stakeholders responsible for addressing the issues. The main lesson for UNEP's components is that it is a challenge to assess if or how long it will take for technical assistance to be translated to policies, larger programmes or demonstration projects, or for investment to happen. Maintaining strong ties with focal points and stakeholders is crucial for exploring options for scaling up the technical assistance through collaboration with the ADB, CTCN, and GCF.

The ADB continued to support activities to catalyze increased investments in climate technologies by venture capital and private equity funds. The project continued to: (a) assist climate technology-focused venture capital and private equity funds and investors; (b) support clean technology accelerators and incubators to create a deeper pipeline of investable cleantech entrepreneurs; and (c) support knowledge sharing and collaboration between climate technology investors, providers, startups and adopters in the region. The project also continued to support activities to accelerate adoption of low-carbon technologies by promoting LCT options to potential adopters and connecting potential technology providers and adopters of LCTs.

The extension to December 2018 has provided the UNEP project with the time required to complete its ongoing technical assistance activities - achieving several milestones and developing a pathway to ensure their sustainability in facilitating technology transfer, in particular through assisting countries in achieving their NDCs. In addition, the extension allowed for further strengthening of sector-specific technology transfer networks and additional capacity-building efforts.

Based on prior technical assistance, INDC analysis, and consultations with NDEs and other national stakeholders, the project is supporting countries in developing full implementation plans based on policy and legal frameworks required to facilitate technology use and stakeholder engagement important for implementation of the technology, as well as financing incentives and mechanisms to promote the use of technology. This will include working closely with the UNEP, GEF and GCF teams and other possible avenues to facilitate access to financing for implementation of the programmes developed.

The ADB project components continued to: (a) mobilize venture capital and private equity funds, accelerator platforms and start-ups for climate technologies; and (b) establish a "marketplace" of LCT users and providers. The first project is focused on four core activities: (a) developing entrepreneurs and generating a pipeline of investment-ready clean technology businesses and attracting venture capital funds and other investors; (b) helping new early-stage venture capital funds enter the market and supporting existing clean technology venture capital and private equity funds; (c) connecting clean technology investors and start-ups and promoting the sharing of resources; and (d) knowledge sharing. The second ADB project component was principally implemented through a marketplace operator, IPEX Cleantech Asia, that served until June 30, 2017. With the conclusion of the services of the IPEX Cleantech Asia, the project carried on with activities that seek to promote LCT solutions and connect technology providers with potential adopters and stakeholders, including ADB operations departments, developing member country governments, and other organizations, to facilitate technology transfer. The two ADB project components will conclude on December 31, 2018.

In accordance with the new UNEP workplan until December 2018, technical assistance is being provided to partner countries to support them in designing and developing programmes to facilitate technology use and NDC implementation:

- Activities have begun for developing an investment plan for introducing energy efficiency and renewable energy technologies in District Heating Systems in Mongolia. As part of this technical assistance, the project supported the development of a GCF Readiness Proposal on “Scaling-up of Implementation of Low-carbon District Heating Systems (DHS)” that has been reviewed by the GCF and is pending approval.
- The project provided support to Viet Nam Electricity (EVN) to undertake a feasibility study with the aim of developing a conceptual design for a domestic efficient lighting programme (DELP). The CTNFC and Energy Efficiency Services Limited (EESL) have completed the final conceptual design of the DELP program and options for accessing GCF funds are being explored.
- E-vehicles have been identified as a technology that a number of countries are focusing on to address air pollution, energy security, and climate change. The project will undertake a gap assessment for identified countries and outline the actions required in achieving the transformation to e-vehicles.
- Malaysia is working towards solutions to cooling demand that are efficient and contribute to sustainable development. The project will support the assessment of potential for district cooling systems and investment strategies for leveraging the private sector investment.

Focusing on its core activities, the ADB’s achieved outputs for the period include, among others:

- Organizing the 2017 Asia-Pacific Forum on Low-Carbon Technology with the Development and Reform Commission of Hunan Province, China (on behalf of the People’s Government of Hunan Province). The Forum held on November 29-30, 2017, showcased global, regional, and country success stories and experiences in promoting the development and deployment of low-carbon technologies.
- Organizing 2017 TusStar-ADB’s Cleantech Startup Competition in China that identified and showcased investable cleantech startups to potential investors.
- Supporting the preparation of “Low-Carbon Technologies for Low-Carbon Cities: A Brief Overview”. The booklet, produced by the Hunan Provincial Government and Hunan Provincial Development and Reform Commission, presents a summary of some of the commercially available LCTs for major city sectors, such as waste management, buildings, transport, and manufacturing. This booklet was distributed during the 2017 Asia-Pacific Forum on Low-Carbon Technology.
- Assisting cleantech investors Asia Climate Partners (ACP) and Infuse Ventures develop their deal pipeline, manage their portfolios, and conduct due diligence.
- Supporting Beijing Energy Club’s Technology Assessment and Dissemination (BEC-TAD) of next-generation clean technologies.
- Organizing a site visit to two solar photo-voltaic farms in China - one is a floating solar farm and the other is a fishery and solar integrated farm - to showcase and promote innovative forms of solar farms to ADB developing member countries. The project also explored opportunities for greater adoption of innovative cleantech solutions within ADB operations.
- Supporting ADB’s Sustainable Energy for All team in co-organizing the Workshop on Accelerating Clean Heating and Cooking Access, an international workshop jointly organized by the ADB, Tsinghua University, Beijing Energy Club, and Changzhi Energy Revolution Institute in January 2018. The project collaborated with the ADB’s Sustainable Energy for All team in identifying local partners and promising clean heating and cooking technologies.

### Success Stories

The relationships built by the UNEP over the last few years with project focal points/NDEs and regional technical institutions, through technical assistance and capacity building and networking events, have set the stage for collaboration in designing and developing identified programs and strategies for supporting countries with NDC implementation.

### Challenges

There continue to be challenges associated with limited and unclear demands for targeted technical assistance by countries, limited human and technical capacity of national institutions to provide support for undertaking technical assistance, or lack of interest for, and/or understanding of, small-scale technical assistance (and funding) for achieving larger outcomes/opportunities. In addition, with the CTCN being up and running for some time now, most requests for technical assistance support are submitted to Copenhagen. As mentioned above, in response,

most CTNFC technical assistance going forward will be focused on supporting partner country focal points to identify priority areas and design and develop programmes based on policy and legal frameworks required to facilitate technology use and NDC implementation, as well as financing incentives and mechanisms to promote the use of technology.

Through its knowledge sharing events, collaboration with partners, and support provided to several cleantech accelerators, investors, technology adopters and providers, the ADB continued to expand its role in minimizing the risks faced by climate technology businesses in Asia and increasing the number of investable projects in the Asia-Pacific region.

#### Lessons Learned and Captured

Implementing the ADB project components showed that early-stage climate technology businesses play a critical role in developing, validating and de-risking the new climate technologies, business models and services needed to deploy and finance next-generation climate solutions at scale in Asia and the Pacific. The project has also witnessed the lack of investable deals in Asia and the Pacific, reflecting the fact the early-stage climate technology businesses in the region still face considerable sector and location-specific risks. The project sees that greater support for accelerator programs, new types of market-based partnerships with larger companies/adopters, policy support for new startups, and blended financing, among others, are critical to de-risk early stage climate technology businesses and help grow the number of investable projects in Asia and the Pacific. These activities, in turn, need to be underpinned by a much stronger climate tech ecosystem in developing Asia, involving many more types of stakeholders and enabling completely new types of interactions and collaborations.

#### Examples of Collaboration between the CTCN and the Regional Technology Transfer and Finance Centers

UNEP project focal points are also the NDEs to the CTCN; therefore, while the project continues to support its partner countries in identifying potential technical assistance activities for its services, it also does so for prospective requests for submission to the CTCN. The UNEP will also be uploading its outputs and reports onto the CTCN Knowledge Partners page. The project is also looking at completed technical assistance activities in the region from both the CTNFC and the CTCN for upscaling to larger national programme implementation through the GCF funding to facilitate technology use and NDC implementation, as well as financing incentives and mechanisms to promote the use of technology.

Further, the project closely coordinates with the CTCN in the region, including on the organization of events for dissemination of information as well as discussing the countries' priorities.

#### Outreach, Public Awareness and Knowledge-sharing Opportunities

The UNEP has finalized three e-newsletters (on energy efficiency in industry, coastal adaptation, and e-vehicles) – two more e-newsletters will be developed and disseminated over the course of 2018 on different prioritized themes. The project will also be uploading its outputs and reports onto its CTCN Knowledge Partners page.

The ADB is organizing two cleantech events in 2018. The first event is the “Asia Clean Energy Forum Deep Dive: From Start-Up to Scale Up” on June 5, 2018. The second event is the 2018 “Asia-Pacific Forum on Low-Carbon Technology” to be organized with the Government of Hunan, China in October 2018. The Forum intends to showcase local and international efforts to promote the development and deployment of low-carbon technologies; encourage greater levels of investments; and stimulate South-South as well as North-South transfer of technologies.

- (c) *Pilot African Climate Technology Finance Center and Network (AfDB)*. The project was endorsed by the GEF CEO in April 2014 and is under implementation. The project supports the deployment of technologies for both CCM and CCA in Sub-Saharan Africa. CCM activities focus exclusively on the energy sector and are more specifically aligned with the SEforAll initiative, whereas the CCA activities focus exclusively on the water sector. The project intends to mobilize additional financing, notably from the African Development Bank (AfDB)-managed instruments, such as the Sustainable Energy Fund for Africa or the African Water Facility. The project components include: (a) enhancing networking and knowledge dissemination with respect to climate technology transfer and finance; (b) enabling scale-up of technology transfer through policy, institutional and organizational reforms of the enabling

environments at the national and regional levels through technical assistance; and (c) integrating climate change aspects into investment programs and projects.

Following a competitive selection process, nine research projects were selected for support from the African Climate Technology and Finance Center and Network (ACTFCN). The most recent implementation status report from February 2018 shows that most projects were expected to be completed by the end of March 2018, with few having requested a no-cost extension until June 2018. The research projects cover the following three thematic areas: (a) integration of intermittent renewable energy technologies in on-grid and off-grid markets; (b) market-based approaches on the diffusion of clean cooking solutions; and (c) efficient use of climate change adaptation technologies in water usages (e.g. irrigation, supply) (or) storm water/flood management in Sub-Saharan African cities. The ACTFCN - through the SEforALL Africa Hub - is currently supporting the Government of Rwanda in the development of an investment prospectus with the aim of mobilizing investments to realize the national energy access goals. SEforALL Action Agendas and Investment Prospectus documents for Botswana, Malawi and Zimbabwe and were finalized in 2017, while those for Cameroon, the Democratic Republic of the Congo and Zambia are in the pipeline.

The ACTFCN also supported the organization of the Fourth Annual Sustainable Energy for All African Workshop, hosted by the SEforALL Africa Hub in partnership with the Africa Union Commission, the New Partnership for Africa's Development (NEPAD) Agency and UNDP, in collaboration with the SEforALL Global Facilitation Team at the premises of the AfDB in Abidjan, Côte D'Ivoire, on the March 29-30, 2017. The theme for the workshop was "Joining forces for universal energy access in Africa; From SEforALL to SDG7, Africa Renewable Energy Initiative (AREI) and the New Deal on Energy". The meeting brought together over 110 participants, from SEforALL focal persons across Africa, development partners, financiers, national and regional institutions, civil society organizations (CSOs) and the private sector.

#### Success Stories

One of the research projects supported by the ACTFCN, led by the Council of Scientific and Industrial Research (CSIR) in South Africa, has made groundbreaking progress with using algae for waste-water treatment, an innovative and climate-resilient solution for waste water treatment.<sup>77</sup>

#### Lessons Learned and Captured

The project has had a very strong focus on mitigation-related activities, with very good results, which may be due to the fact that the AfDB is strongly involved in supporting the deployment of the SE4All initiative in Africa, as host of the SE4All Africa Hub, whose mission is to facilitate and coordinate information sharing and mobilization of financing to achieve the goals of this initiative. The project has enjoyed strong collaboration with the Hub, as well as with the Sustainable Energy Fund for Africa (SEFA), hosted by the Bank, which supports Africa's sustainable energy agenda with a focus on unlocking private sector investments. The ACTFCN is in the position to support first-mile actions required to prepare projects for large technical assistance packages provided by the SEFA. Having AfDB executing the technical assistance, rather than providing individual grant agreements to different countries/beneficiaries, favored positively in the realm of project efficiency. The project has made good efforts to ensure ownership of beneficiaries and stakeholders over the processes/activities it supports.

#### Outreach, Public Awareness and Knowledge-sharing Opportunities

On May 4, 2018, the fifth Annual SEforALL Africa Workshop was held in Lisbon, Portugal. The focus of the workshop was to lay out the essential elements to mobilize finance for a systematic implementation of the SEforALL agenda in Africa. Investment Prospectuses, aimed at matching the SEforALL country project pipelines with the right sources of finance, were at the center point of the discussions. One of the main topics on the agenda was how to best mainstream the SEforALL process in the climate agenda, in particular with NDCs, as well as project preparation towards climate finance (e.g. the GCF).

The project submitted the MTR report to the GEF, which was referred to in GEF's report to COP 23.<sup>78</sup> The

<sup>77</sup> <http://www.dst.gov.za/index.php/media-room/latest-news/2470-algae-proves-a-hit-in-the-treatment-of-wastewater>

<sup>78</sup> [https://www.african-ctc.net/fileadmin/uploads/actc/Documents/Final\\_ACTFCN\\_Mid-term\\_Review\\_Report\\_20161011.pdf](https://www.african-ctc.net/fileadmin/uploads/actc/Documents/Final_ACTFCN_Mid-term_Review_Report_20161011.pdf)

terminal evaluation is expected for June 2019.

- (d) *Finance and Technology Transfer Centre for Climate Change (FINTECC) (European Bank for Reconstruction and Development (EBRD))* The project was endorsed by the GEF CEO in July 2013 and has started implementation. This project aims to accelerate investments in CCM and CCA technologies in the Early Transition Countries (ETCs) and Southern and Eastern Mediterranean (SEMED) countries. It also aims to incentivize deployment of climate technologies with low market penetration, in order to create demonstration projects across these countries. The project components include: (a) regional technology transfer networks; (b) technology transfer technical assistance; and (c) financing pilots.

In the reporting period, three new projects have been signed, in the ETC region and three grants have been disbursed (two in the ETC region and one in the SEMED region).

In the reporting period, all aspects of the project have progressed. Concerning the allocation of non-technical cooperation grants within EBRD investments:

- To date, EUR 0.532 million have been disbursed, while a total of EUR 3.8 million has been committed in the ETC region. This results in a headroom of EUR 3.5 million, out of an initial allocation of EUR 7.8 million.
- In the reporting period, three new projects have been signed, with clients in the manufacturing and services and property sector. FINTECC technologies to be implemented in these projects range from regenerative thermal oxidizers (RTO) with absorption chillers, to advanced thermal insulation of buildings, with LED lighting, waste heat recovery systems and energy management systems. The projects will result in CO<sub>2</sub> savings of 2,500 t/year.
- There are currently 10 to 15 additional projects in the FINTECC pipeline under assessment.

Concerning technical cooperation assignments, the FAO study in Kazakhstan and Kyrgyzstan is approaching its conclusion and a draft final report is expected to be delivered by the end of 2018. There are two results dissemination events planned in the region, with one in each country. The results from this study are expected to develop a pipeline of projects with specific focus on the agribusiness sector and giving emphasis on climate-resilient technologies. The study also led to an update of the original methodology, now including an approach to identify specific investment opportunities and giving special emphasis to adaptation technologies to reinforce and further promote the climate resilience angle in the programme. As such, the study integrates the application of a water shadow pricing methodology that has been developed by the EBRD.

The main outputs can be summarized as follows:

- Extended knowledge management activities have been undertaken: detailed case studies, an animated infographic and a short film have been developed and a side event at COP 23 has been organized, where the EBRD presented the challenges faced in climate technology transfer.
- Two training sessions have been organized for local consultants on energy efficiency together with the EBRD's Advice for Small Businesses (ASB) in Kyrgyzstan and Morocco.

In addition to that, extensive communication activities have been undertaken, as well as detailed case studies for individual FINTECC projects, which have been published on the dedicated [FINTECC website](http://fintecc.ebrd.com/case-studies)<sup>79</sup>. These case studies provide information on the specific projects and provide examples to potential future beneficiaries on the FINTECC process and impact. A short film "What's in store?"<sup>80</sup> has been produced and will have been screened by the end of April 2018, exploring the future of the retail industry and how innovative technology can help economies make the transition to a sustainable, low-carbon future. The short film is giving visibility to the FINTECC sector by also highlighting opportunities in the retail sector which functions as an aggregator of all supply chain elements and that is currently underrepresented in the FINTECC programme.

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<sup>79</sup> <http://fintecc.ebrd.com/case-studies>

<sup>80</sup> Short preview can be seen at: <https://vimeo.com/258967090>

## Successes and Challenges

In the reporting period, some high-quality FINTECC projects were developed, in particular projects that are financed by the EBRD Risk Sharing Facility, where the EBRD partners with local banks in addressing the need for financing of local SMEs. This co-financing approach allows using various types of finance mechanisms to operationalize the FINTECC programme and crowd in additional finance to support these types of projects.

Some remaining challenges associated with the programme implementation are related to the early mover objectives that can be seen across countries in the FINTECC region. The objective of the FINTECC programme is to support early movers in adopting high-impact climate technologies that will provide a showcase for other sector players to adopt similar practices and follow the example. The FINTECC is setting the example, however, the experience with the programme shows that there remain challenges associated with technology transfer in terms of increasing market penetration with this model. Therefore, the EBRD has extended the duration of the FINTECC programme until 2019.

Setting up the network activities in Morocco under the FINTECC umbrella has proven to be challenging. Since the right partner to implement this network model was not identified, another activity for the year to come will be to define a better network model and redesign the strategy for future network activities in 2018 and 2019.

The key challenge inhibiting the scaling up of the successful FINTECC programme is the lack of dedicated funding from donor sources to support technology transfer approaches. One of the strengths of the FINTECC programme is its ability to accommodate regional, not solely country-specific, issues, and to respond to changing market demand and circumstances. The existing Poznan Program funding will not be sufficient to catalyze the kinds of systemic changes that are needed to operationalize technology transfer as a dedicated focus of the Convention. To continue to address barriers to technology transfer in EBRD's region beyond 2019, a dedicated and permanent window within the financial mechanisms of the Convention for technology transfer on a regional scale is recommended.

The following opportunities support the purpose of acknowledging the accomplishments of the Poznan Programme:

- Through the FINTECC website<sup>81</sup>, increased visibility continues to be given to climate technologies and the FINTECC financed projects.
- The development of case studies for each project supported under the FINTECC will provide information about how the FINTECC is supporting the adoption of advanced climate technologies and will give specific examples to potential clients and information to the donor community and wider public on how technology transfer can be operationalized. These case studies will continue to be published in addition to news articles, other publications and event announcements.
- A FINTECC side event at COP 24 on technology transfer (to be confirmed).

On the marketing of the FINTECC program, the EBRD continued working on implementing the FINTECC communication strategy. In the reporting period, seven detailed case studies were prepared and published on the FINTECC website and a case study will be developed for each project by the end of the program. The case studies support the knowledge transfer and network building activities. In collaboration with the EBRD Communications department, a FINTECC Thursday has been promoted for several weeks in October and November 2017, promoting the program on various EBRD Social Media Channels, as well as the main EBRD website to give the program extra visibility leading up to COP 23. Furthermore, a [FINTECC animated infographic](#)<sup>82</sup> has been developed and published, outlining the technology transfer facilitation under the program, as well as a short film on the technology transfer opportunities in the retail sector. Moreover, the leaflet has been updated as a key communications tool for the FINTECC.

The mid-term evaluation for this project was delivered in May 2017 but not made publicly available. The terminal evaluation is expected to be delivered by December 2019.

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<sup>81</sup> <http://fintecc.ebrd.com/index.html>

<sup>82</sup> <https://www.youtube.com/watch?v=UyInmmOvwI8>

- (e) *Climate Technology Transfer Mechanisms and Networks in Latin America and the Caribbean (IDB)*. The project was endorsed by the GEF CEO in September 2014, and has started implementation. The legal agreements with the five agencies, *Instituto Nacional de Ecología y Cambio Climático* (Mexico), *Fundación Bariloche* (Argentina), World Resources Institute (WRI)/Embarq (United States of America), *Centro Agronómico Tropical de Investigación y Enseñanza* (Costa Rica) and the IDB and the Secretariat for the Regional Fund for Agricultural Technology were signed in the first semester of 2015. The project aims to promote the development and transfer of environmentally sustainable technologies in LAC, in order to contribute to the ultimate goal of reducing GHG emissions and reducing the vulnerability to climate change in specific sectors in LAC. The components of the project include: (a) development of national policy and institutional capacities; (b) strengthening of technology networks and centers; (c) pilot technology transfer mechanisms; and (d) leveraging private and public investments

#### *Achievements toward Project Implementation and Delivery of Outputs*

Agencies continue to respond to in-country requests and support the identification and development of sector-specific Environmentally Sound Technologies (ESTs). Some are still developing proposals for piloting selected technology solutions and others are directly working on the pilot projects, as well as seeking funding from different sources for the viable cases.

Dialogue on policy and capacity building continues to develop across the region, with the participation of experts from Ecuador, Colombia and Mexico and representatives from government institutions (experts in climate change and national systems of technology and innovation), academic institutions and the private sector. The project also continues to provide technical assistance to the projects selected jointly by the International Renewable Energy Agency (IRENA) and the IDB.

The project currently supports Costa Rica, Mexico and Suriname with the development and improvement of their forest monitoring systems. A similar initiative for the Dominican Republic is under discussion.

Contracts for the assessment of technologies for CCA in the agriculture sector are under execution (four contracts are financed by GEF's contribution and an additional four are financed with co-financing resources), as well as the one to define technology packages for agroforestry in the Dominican Republic.

Thus far, cumulative disbursements to the five agencies is at 56 percent. To continue executing the project activities, agencies have requested an extension, and the IDB has granted them a 12-month extension.

Progress has been made against specific project outputs on the following activities:

- A study on national innovation systems in the region is progressing, and a contract for the climate change study has been awarded.
- Results from the study on energy efficiency standards in buildings in the Galapagos Archipelago have been collected.
- Contracts for the comparative analyses of the regulatory and commercial frameworks for co-generation and for solar roofs have been awarded.
- A contract to perform a comparative analysis of quality standards, verification procedures and consumer information tools of solar water heaters for commercial and residential buildings in LAC has been awarded.
- A contract to study successful business models for street lighting in LAC has been awarded.
- The overview on climate technologies related to transportation is under editorial process.
- A pilot project in the city of Bogota, Colombia on the use of GPS data for planning purposes is under implementation.
- The project is coordinating with the Federal Government of Mexico to develop an action plan for the adoption of electric buses.
- The project supervised the assessment carried out by the Government of Colombia of its bicycle-sharing systems and has also provided technical support to some of the cities.
- The project is currently supporting the development of Brazil, Costa Rica, Mexico and Suriname's workplans on EST development and transfer.

- Based on the project's recommendations, the Government of Chile opened a tender process for the procurement of 90 electric buses after assessing the feasibility of adoption.
- The city of Belo Horizonte, Brazil incorporated into its Sustainable Urban Mobility Plan (municipal law) the targets for electric bus adoption created through the project.
- The Government of Colombia has adopted the roadmap for the development of a fuel economy standard developed by the project.
- Finalization of 26 case studies on the adoption of electric buses.
- Completion of two technology roadmaps, one for energy efficiency in buildings in the Dominican Republic, and another one proposing action lines for the adoption of renewable energy technologies in Costa Rica (solar water heating and cooling, and biomass energy conversion in the industrial sector).
- A comparative assessment of energy efficiency standards in residential, commercial and public buildings in LAC has been completed.
- A technical memo from the Second Symposium on Climate Change Adaptation "Climate Change Adaptation in family agriculture in LAC" was published.

### Challenges

The IDB assigned a new team leader to this project and hired a consultant to support the project's management; therefore, a challenging transition and learning period occurred in the realm of project management during the third quarter of 2017.

### Outreach, Public Awareness and Knowledge-sharing Opportunities

Besides presenting preliminary results and lessons learned from this project, strategic dissemination mechanisms were discussed during the event "Climate Technology Transfer Mechanisms and Networks project in LAC: Lessons Learned" (April 2018). Additionally, the five project agencies will continue to organize workshops and dissemination events during 2018 and 2019. Finally, since some activities and consultancies hired under the project have finished, and others are in their final phase, the agencies are preparing different publications (working papers, monographies, etc.). The project has also supported the creation of a platform to serve as a network bringing together key stakeholders from public and private sectors, to promote the sustainable intensification of low-GHG emission livestock production systems in LAC (together with Centro Agronómico Tropical de Investigación y Enseñanza (CATIE), Instituto Interamericano de Cooperación para la Agricultura (IICA), the Ministry of Primary Industries of New Zealand, the Global Research Alliance and their partners).

### Cooperation between the CTCN and Regional Activities

The IDB has continued to communicate with the CTCN to provide updates. Representatives of the CTCN met the IDB and the executing agencies in Washington, D.C. in April 2018, and presented on project experiences assisting numerous actors and countries in the development, promotion and transfer of climate technologies.

The mid-term evaluation of this project is expected to be delivered in October 2018.

## ANNEX 7: NATIONAL CLIMATE TECHNOLOGY ACTIVITIES

This Annex summarizes the status of implementation, as requested in the conclusions of SBI 36 agenda item 12, of the technology transfer pilot projects supported within the framework of the Poznan Strategic Program on Technology Transfer. It also includes the information provided by the MTR report submitted for the three pilot projects, as requested in the conclusions of SBI 43 agenda sub-item 10(b).

**Table A7.1: Implementation Progress of Technology Transfer Pilot Projects under the Poznan Strategic Program (as at May 29, 2018)**

<i>GEF ID</i>	<i>Country</i>	<i>Agency</i>	<i>Title</i>	<i>GEF Poznan Program funding (\$ million)<sup>a</sup></i>	<i>Total GEF funding (\$ million)<sup>a</sup></i>	<i>Co-financing (\$ million)</i>	<i>Status of project</i>
3541	Russian Federation	UNIDO	<i>Phase-out of HCFCs and Promotion of HFC-free Energy Efficient Refrigeration and Air-Conditioning Systems in the Russian Federation through Technology Transfer</i>	3.0	20.0	40.0 <sup>c</sup>	The project was endorsed by the GEF CEO in August 2010 and is under implementation.
4032	Cook Islands, Turkey	UNIDO	<i>Realizing Hydrogen Energy Installations on Small Island through Technology Cooperation</i>	3.0	3.0	3.5 <sup>b</sup>	The project was cancelled in March 2012 upon request from the agency, following changes in the concerned governments' priorities.
4036	Jordan	IFAD	<i>Dutyion Root Hydration System (DRHS) Irrigation Technology Pilot Project to Face Climate Change Impact</i>	2.4	2.4	5.5 <sup>c</sup>	The project was endorsed by the GEF CEO in August 2011 and is under implementation.
4037	Thailand	UNIDO	<i>Overcoming Policy, Market and Technological Barriers to Support Technological Innovation and South-South Technology Transfer: The Pilot Case of Ethanol Production from Cassava</i>	3.0	3.0	31.6 <sup>c</sup>	The project was endorsed by the GEF CEO in March 2012 and is under implementation.
4040	Brazil	UNDP	<i>Renewable CO<sub>2</sub> Capture and Storage from Sugar Fermentation Industry in Sao Paulo State</i>	3.0	3.0	7.7 <sup>b</sup>	The project was cancelled in February 2012 upon request from the agency. The project preparation identified investment costs far higher than initially expected, exceeding the available financing.
4042	Cambodia	UNIDO	<i>Climate Change-related Technology Transfer for Cambodia: Using Agricultural Residue Biomass for Sustainable Energy Solutions</i>	1.9	1.9	4.6 <sup>c</sup>	The project was endorsed by the GEF CEO in May 2012 and is under implementation.
4055	Senegal	UNDP	<i>Typha-based Thermal Insulation Material Production in Senegal</i>	2.3	2.3	5.6 <sup>c</sup>	The project was endorsed by the GEF CEO in August 2012 and is under implementation.

<i>GEF ID</i>	<i>Country</i>	<i>Agency</i>	<i>Title</i>	<i>GEF Poznan Program funding (\$ million)<sup>a</sup></i>	<i>Total GEF funding (\$ million)<sup>a</sup></i>	<i>Co-financing (\$ million)</i>	<i>Status of project</i>
4060	Jamaica	UNDP	<i>Introduction of Renewable Wave Energy Technologies for the Generation of Electric Power in Small Coastal Communities</i>	0.8	0.8	1.4 <sup>b</sup>	The project was cancelled in October 2011 upon request from the agency.
4071	Côte D'Ivoire	AfDB	<i>Construction of 1000 Tonne-per-day Municipal Solid Waste Composting Unit in Akouedo Abidjan</i>	3.0	3.0	36.9 <sup>c</sup>	This project was endorsed by the GEF CEO in October 2013 and is under implementation.
4114	Sri Lanka	UNIDO	<i>Bamboo Processing for Sri Lanka</i>	2.7	2.7	21.3 <sup>c</sup>	The project was endorsed by the GEF CEO in April 2012 and is under implementation.
4129	China	World Bank	<i>Green Truck Demonstration Project</i>	3.0	4.9	9.8 <sup>c</sup>	The project was endorsed by the GEF CEO in March 2011, and closed in December 2015.
4132	Mexico	IDB	<i>Promotion and Development of Local Wind Technologies in Mexico</i>	3.0	5.5	33.7 <sup>c</sup>	The project was endorsed by the GEF CEO in December 2011 and is under implementation.
4136	Chile	IDB	<i>Promotion and Development of Local Solar Technologies in Chile</i>	3.0	3.0	31.8 <sup>c</sup>	The project was endorsed by the GEF CEO in June 2012 and is under implementation.
4682	Colombia, Kenya, Eswatini	UNEP	<i>SolarChill: Commercialization and Transfer</i>	2.8	3.0	8.0 <sup>b</sup>	This project was endorsed by the GEF CEO in February 2014 and is under implementation.
<b>Total</b>				<b>36.9</b>	<b>58.6</b>	<b>241.4</b>	
<b>Total (cancelled projects excluded)</b>				<b>30.1</b>	<b>51.6</b>	<b>228.8</b>	

<sup>a</sup> Includes PPGs and agency fees.

<sup>b</sup> Co-financing amount at the GEF Council approval.

<sup>c</sup> Co-financing amount at the GEF CEO endorsement.

Information, provided by the GEF agencies concerned, on the implementation status and experience and lessons learned of the eleven CEO-endorsed projects in the reporting period is summarized below:

- (a) Russian Federation: *Phase-out of HCFCs and Promotion of HFC-free Energy Efficient Refrigeration and Air-Conditioning Systems in the Russian Federation through Technology Transfer (UNIDO)*. The project began implementation in March 2011. The project includes the following components: (a) building institutional capacity; (b) HFC and HCFC life cycle performance analysis; (c) phase-out of HCFC consumption in the key consuming sectors of foam and refrigeration; (d) development of ozone depleting substance (ODS) destruction facility and supporting recovery network; (e) stimulating market growth for energy-efficient refrigeration and air conditioning equipment; (f) technology transfer; and (g) integrated strategy for HCFC production closure.

In the reporting period, the project built on the results achieved in the previous implementation period, particularly in the area of the promotion of HCFC-free technologies, phasing out of HCFCs, and awareness raising activities.

This project is in its termination stage, and is also focusing on finalizing the project activities and monitoring the sustainability of results. The project's agency – the International Center for Scientific and Technical Information – in cooperation with professional associations and governmental bodies, continued its activities on promotion of HCFC phase-out.

In view of the current political and economic conditions in Russian Federation, which could have negative impacts on the longer-term sustainability of project activities, the agency has made concerted efforts to monitor project activities. To ensure sustainability on the mid-term horizon, extra attention is being paid to national policy in the areas of lawmaking, law enforcement effectiveness, and adapting the respective legislative practices of other countries. Efficient implementation of the Montreal Protocol programmes in Russian Federation requires strong cooperation between the private sector and the Government. Particularly important is to consider the private sector's interests when amending laws and developing the Government directives.

Russian Federation is also preparing to ratify the Kigali amendment to the Montreal Protocol and to amend relevant national legislation accordingly. UNIDO experts are providing the responsible Ministry on Natural Resources and Environment with advice relating to this process, particularly to determine the baseline levels for reducing HCFC consumption in the country.

#### Success Stories

- Specialists and students working on air-conditioning and refrigeration systems were trained by project consultants, including Mr. Vadim Polyakov, a university student who won the World Skills Championship on "Refrigerating systems and air-conditioning."
- A meeting was convened in 2017 in Moscow, bringing together the heads and representatives of various professional associations working with refrigerating and air-conditioning systems from Russian Federation and their colleagues from Armenia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Tajikistan, , and Ukraine, and members of the working groups from Azerbaijan and Turkmenistan. During this meeting, the industrial and training activities created under the project were presented. The meeting resulted in the establishment of the Intergovernmental Technical Council, tasked with work on the creation of the common technical policy between countries, training and certification of professionals, as well as facilitation of knowledge sharing and exchange.

#### Achievements toward Project Implementation and Delivery of Outputs

- The project is supporting the Russian Association of Producers of Cooling Facilities (RosSoyuzKholodProm) in disposing end-of-life refrigerating equipment. As a result of these activities, the quantity of safely disposed HCFC equipment is expected to increase by 5 percent-15 percent annually.

#### Outreach Public Awareness and Knowledge-sharing Opportunities

- The project is also overseeing public awareness and knowledge-sharing activities, including the Ozone

Layer Day, which is an annual public event created under the project – and is now conducted annually in all educational centers (schools and pre-schools) around the country. A magazine published through the project, “The World of Climate”, is now printed every two months. Project training activities have also been highlighted in different mass media, including on-line sources as well as print media.

The mid-term evaluation report was referred to in the GEF report to COP 22 and the terminal evaluation was expected for May 2018.

- (b) Jordan: *Dutyion Root Hydration System (DHRS) Irrigation Technology Pilot Project to Face Climate Change Impact (IFAD)*. This CCA project seeks to reduce the vulnerability of irrigated agriculture to climate change by testing innovative and efficient water-use technologies. The project was endorsed by the GEF CEO in May 2011 and has been re-designed, as initial field trials carried out during the project inception showed that the proposed technologies did not perform as expected under the local conditions. After the minor amendment of the planned technologies, the project became effective in January 2014. The project includes the following components: (a) pilot DRHS technology for efficient water use; and (b) targeted training on the installation/use of the system.

In the reporting period, the project was successful in building on the achievements of previous implementation periods, disseminating technologies to additional farmers and promoting ownership through the project’s 25 percent cost-sharing mechanism. Smallholders who were reluctant to adopt new technologies and practices at the beginning of the project, as described in previous implementation status report updates, have become amenable to participating in the project after witnesses concrete results relating to increased productivity and income(s). While the project’s cost-sharing model was initially aimed at expanding the participant base and to promote ownership, the participation of the lowest-income farmers was lower than initially expected, as cost remained an issue for this subset of farmers.

As the project is now close to completion, key success stories relate to long and medium term yield increases and cost-savings reported by participating farmers, as well as increased participation of smallholders over time, once results were demonstrated, as stated above. This is very significant in a country like Jordan, where water resources scarcity is a limiting factor negatively impacting productivity and income generation for smallholders. The project has also succeeded in different technologies that are specifically suitable for different crops and landscape characteristics of Jordan, which has high replication potential for scaling-up across the country and, eventually, the region.

The IFAD has provided the MTR<sup>83</sup> to the GEF, which subsequently shared it with the UNFCCC Secretariat, and the terminal evaluation was expected to be completed in May 2018.

- (c) Thailand: *Overcoming Policy, Market and Technological Barriers to Support Technological Innovation and South-South Technology Transfer: The Pilot Case of Ethanol Production from Cassava (UNIDO)*. The key objective of the project is to foster technical innovation and South-South technology transfer from Thailand to neighboring countries, notably Lao People’s Democratic Republic, Myanmar and Viet Nam, to address the issue of the region’s high dependence on fossil fuels for transportation. The project includes the following components: (a) institutional capacity-strengthening for very high-gravity – simultaneous saccharification and fermentation (VHG-SSF) technology dissemination; (b) South-South technology transfer: capacity-building and policy dialogue with participants from the Lao People’s Democratic Republic, Myanmar and Viet Nam; and (c) demonstration and commercialization of the technology and private sector development. The GEF agency is King Mongkut’s University of Technology Thonburi (KMUTT).

In the reporting period, the KMUTT was approached by Sapthip. Co., Ltd., a manufacturer of cassava ethanol in Thailand, to integrate the project’s plant piloting its new technology into their production line, which has an industrial scale ethanol production capacity of 200 liters per day (l/d). After the plant was developed and the test run of the integration of high gravity (HG)/VHG-SSF technology to the existing commercial bioethanol plant at Sapthip bioethanol Factory was completed with good success, and the factory is considering extending the capacity to 4,000 l/d of ethanol production. The KMUTT also approached another factory that produced ethanol from cassava to adopt KMUTT technology in their existing plant.

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<sup>83</sup> The MTR is not provided online, but additional information regarding the project can be found at the following link: <https://www.ifad.org/web/knowledge/publication/asset/39570390>.

### Achievements toward Project Implementation and Delivery of Outputs

- An ethanol pilot plant with a capacity of 50 l/d at the Food Industry Research Institute in Viet Nam is under construction and is planned to be completed before the end of 2018. A unit test run was conducted in May 2018 with oversight from the KMUTT.
- A pilot commercial ethanol plant with a capacity of 10,000 l/d at Khongsedone Ltd. in the Lao People's Democratic Republic is being designed and in the process of securing a co-investor. It is expected to get financial closure by the end of 2018.
- A pilot plant for ethanol production from cassava using KMUTT technology with alcohol is in the process of entering a memorandum of cooperation with a Thai factory. The KMUTT will supporting technological design of the factory, which is expected to be completed by third quarter of 2018.
- Policy support provided to the Lao People's Democratic Republic on ethanol production is in progress and to be completed by the end of 2018.
- A financial model integrating KMUTT technology in an existing ethanol plant and green field ethanol project using KMUTT technology was completed in February 2018.
- A study documenting Thailand's experiences in oil tax revenue recycling and subsidization of gasohol prices for supporting policy makers was completed in October 2017. A training on this topic was executed in Thailand with approximately 30 policy makers from the Lao People's Democratic Republic, Myanmar and Viet Nam in May 2018.
- Several trainings and workshops were conducted on topics relating to ethanol technology, feedstock supply, and policy support for ethanol production took place targeting a wide group of stakeholders including engineers (train-the-trainers), policy makers, farmers, investors, etc.

### Success Stories

- An awareness raising campaign and the analysis of lessons learned on policy support in ethanol production in Thailand have been reported as very useful for Ministry of Industry and Trade (MOIT) in Vietnam. MOIT reported to UNIDO that it used this report to adopt and implement similar policies in Viet Nam. The MOIT recently announced the use of E5 (bioethanol) across Viet Nam.
- Thanks to the training courses organized by the KMUTT, with participants from Lao People's Democratic Republic and Viet Nam, some private sector companies have expressed their interest to adopt the technology. One of the most matching and pro-active companies is Khongsedone Ltd from Lao People's Democratic Republic that has interest to adopt the technology in their first pilot bio-ethanol plant with capacity of 10,000 l/d in Salavan Province, Lao People's Democratic Republic. In addition, Khongsedone has approached the project for consultancy support in terms of provision of experts to support Khongsedone to integrate cassava fresh root for bio-ethanol production in parallel with the existing line. The project has provided advisory service of plant design, fermentation technology, and training for plant operation, financial modelling and farmer training workshops to this company and other interested stakeholder. The UNIDO has supported a detailed financial feasibility study for green field project of ethanol production from fresh root cassava using KMUTT technology, which will allow Khongsedone Ltd to evaluate the potential of investing in the project.

### Challenges

Numerous challenges were reported relating to securing the private sector investment, including:

- Hesitation of the private sector to integrate KMUTT technology into their existing operations, due to cost constraints. Costs of integrating KMUTT technology into existing operations are often reported as higher than building a new facility.
- Lack of strong policy framework and price incentives in Lao People's Democratic Republic, Myanmar and Viet Nam,, particularly Lao People's Democratic Republic.
- Low oil prices on the global market have had a significant impact on the bio-fuel industry, as often ethanol costs are higher than fossil fuel.
- Ethanol over-supply in Thailand has negatively influenced project impacts.
- While the technical requirements of the ethanol demonstration plant at the Food Industries Research

Institute (FIRI) in Viet Nam were finalized by KMUTT in January 2017, the procurement process for the equipment took longer than expected, due to numerous issues, including adjusting KMUTT's design to suit local conditions, as well as FIRI's due diligence procedures, which required high levels of transparency relating to procurement. Tendering must be announced at least a month in advance, and requires proposals from at least three contractors.

### Lessons Learned and Captured

- To ensure effective coordination between different stakeholders, good communication is key, particularly for consensus building and achieving project outputs. As this project involves transfer of technology to Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam, regular communication among participating countries was crucial to project success. The role of a facilitating body was particularly critical to ensure effective communication and coordination.
- The provision of capacity-building activities to promote the use of the technology amongst consumers/investors is important. In addition, it is important to also build the capacity and knowledge of financial institutions. They are required to develop adequate financing packages that can support commercialization of South-South technology, in this case, the technology from the KMUTT for production of ethanol from cassava.
- A strong policy and regulatory framework that supports and encourages investment in technology is critical, especially for renewable energy, to build confidence of the private sector and banks to finance new technologies. Favorable policies are a key factor in driving the implementation of new technologies and projects. In order for the project to be successful in the long term, it is crucial to develop and introduce market-driven strategies rather than only depend on subsidy programs by the Government. Those incentives should support business models that promote innovation and technology transfer and over long-term time horizons.
- In order to allow for a successful transfer of technology, a project must demonstrate that it is both technically and financially feasible through knowledge and information sharing and exchange. Feasibility studies and business models that provide assumptions and projections can support decision-makers in assessing the potential for raising funds and should be shared with potential stakeholders, funders and investors.
- Proper intellectual property protection is key for motivating technology owners/developers to share their technologies across borders. Technology know-how is still limited when transferring technology across borders, mainly due to the reluctance of technology owners to share proprietary information and engineering designs without proper protections. Cross-border legal protection on copyrights of technology design and know-how is still not strongly regulated and is difficult to monitored.
- Awareness raising is important to project success, and show-casing the technical and financial feasibility on industrial scale VHG-SSF technology is very important to promote replication, both for integrating the VHG-SSF process in the existing ethanol plants, as well as for establishing new plants, as investors, banks and policy-makers require confidence about the technology. However, it has proven difficult to find interested ethanol producers who are willing to adopt the new technology into their existing plants due to operational risks and a lack of confidence in the new technology.

### Outreach, Public Awareness and Knowledge-sharing Opportunities

- The project's lessons learned are being documented on an ongoing basis; including the organization of a closing workshop to share lessons learned; roadshows/seminars with potential investors will be organized in Bangkok, Thailand in December 2018; an investment forum on financing an ethanol production plant through South-South technology transfer will be organized in Hanoi, Viet Nam, around the same time.
- The project web site<sup>84</sup> and Facebook group<sup>85</sup> are live.
- A training center set up at the FIRI will have begun training courses in April 2018.
- A report on lessons learned from South-South technology transfer conducted by the KMUTT was drafted in March 2018 and finalized in June 2018.
- A report summarizing lessons learned will be drafted in the third quarter of 2018.
- A video show-casing the project activities will be developed in the third quarter of 2018.

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<sup>84</sup> <http://www.aseancassava.info/>

<sup>85</sup> <https://www.facebook.com/groups/295688677261203/about/>

The mid-term evaluation report was referred to in the GEF report to COP 22 and the terminal evaluation is expected to be delivered in December 2018.

- (d) Cambodia: *Climate Change-related Technology Transfer for Cambodia: Using Agricultural Residue Biomass for Sustainable Energy Solutions (UNIDO)*. The project is under implementation following the GEF CEO endorsement in May 2012. The project includes the following components: (a) technology transfer and implementation of three pilot plants; (b) capacity-building and development of tools for technology adaptation and transfer; (c) strengthening of institutional framework for technology transfer; (d) upscaling of biomass fueled technologies in Cambodia; and (e) policies, regulations and mechanism to promote sustainable renewable energy generation.

In the reporting period, the project experienced substantial delays, attributable to considerable changes in the project context and baseline, which was captured in the mid-term evaluation. Setbacks were largely due to the withdrawal of co-financing commitments made by three enterprises identified during the project design phase. The initially identified technologies were not suitable for the (initially identified) companies in the country, and only in a limited manner for other companies in Cambodia. Therefore, the focus of the project during the last year has been on identifying new companies as well as new, more suitable technologies (e.g. tri-generation technology combining heating and cooling) to realize pilot projects to demonstrate that biomass is both technically and economically viable for providing electrical and thermal energy and can meet market demand.

#### Achievements toward Project Implementation and Delivery of Outputs

- A comprehensive screening of the industrial sector and potential factories was conducted, and it was found that, while many factories utilize both electrical and thermal energy, they require a rather limited amount, with some having operating hours of less than 10h/d, which is not economically viable.
- A preliminary assessment conducted in March 2018 identified eight factories and companies that could be potential partners for the project. Five showed interest and submitted a Letter of Intent (LoI) to participate as part of the feasibility study, and company visits and preliminary feasibility studies were undertaken. The results of those studies showed that three fit the feasibility standards to implement the project. The factories were selected on the basis of their energy needs (electrical, thermal and cooling energy) for their respective production processes, as well as in-country biomass availability. Technologies proposed to the companies/factories are: biomass-based co-generation/tri-generation and biomass-based gasification using rice husk and wood (as container solution) to produce electricity and heat.

Additional achievements in the reporting period include two trainings that were conducted on biomass technologies, project development, and financial modelling for local staff of consulting firms, Government institutions, factories and banks.

#### Lessons Learned and Captured

- The baseline(s) for comparison in emerging economies change(s) quickly.
- Industrial biomass combined heat and power (CHP) projects are only economically viable for a limited group of factories, taking into consideration the following:
  - Energy demand (electricity, heating, cooling) is a crucial factor in determining the economic viability of the technology.
    - CHP is not suitable for white rice production, since air temperature required is around 850 degrees Celsius, while the heat out of the CHP is on a lower-temperature level.
    - CHP is suitable for parboiled rice production, since lower temperatures are needed in the production process.
  - Biomass availability, i.e. a biomass surplus, is crucial for the economic viability of the technology.
- The viability of industrial biomass CHP projects requires that factories receive services/support, including handholding to develop bankable proposals, conduct feasibility studies, design the technical aspects of the CHP plant (definition of technical project interfaces, frame conditions, conditions precedent, performance guarantees and penalties, etc.), and on de-risking of such investment on the side of the financiers. Without additional technical support, the companies do not seem to be in a position to install such a complex system.
- Lastly, setting realistic targets is important, as while significant investment is needed for these initiatives,

expected emission reductions targets (calculated during the design phase) will likely be unachievable.

The mid-term evaluation report was referred to in the GEF report to COP 22 and the terminal evaluation is expected to be delivered in December 2018.

- (e) Senegal: *Typha-based Thermal Insulation Material Production in Senegal (UNDP)*. The project was endorsed by the GEF CEO in August 2012. It started implementation in November 2013. The project includes the following components: (a) sustainable typha management; (b) transfer of typha raw material processing technology; (c) development of local production; (d) transfer of bio-climatic and energy efficient building technology; (e) typha-based building materials application demonstration; and (f) marketing and dissemination.

The project, which was scheduled to close at the end of 2017, was extended until June 2018, in line with the recommendations from the project's MTR. This extension period has allowed the project to make progress to achieve its objective; and the transfer of knowledge and know-how for the production of insulation components such as typha-based panels or blocks is virtually complete.

Building on the previous reporting period's achievements, this year saw the training of youths in the manufacture and installation of typha-based construction materials; over a 15-day period, 15 youths developed their skills in blending earth and typha to create reinforced insulation panels and bricks. These techniques are allowing youths to obtain a tradable skill that can be utilized within the construction industry, whilst also encouraging them to improve the built environment.

#### Achievements toward Project Implementation and Delivery of Outputs

- In the reporting period, demonstration projects, which involved the construction of small buildings, were implemented. This allowed the stakeholders to compare the costs of different typha-based construction materials, as well as the differences in techniques used in contrast to conventional methods and materials. It also allowed stakeholders to gain a better understanding of how these would perform on the open market. Also, an architectural competition was launched to demonstrate eco-architectural designs employed by local architects when utilizing typha-based construction materials.
- The design and manufacture of typha-based construction materials is now well understood by producers – artisans and youths participating in the project have acquired know-how and specific skills in the use of typha-based construction materials.
- The tools used for the production of typha-based construction materials have been adjusted for the local market and are being manufactured by local artisans.

#### Lessons Learned and Captured

- The use of these materials in Dagana showed that local artisans are able to learn techniques with relative ease; of note, the system required the cultivation of large volumes of typha, which, once scaled up, makes this practice useful in containing the growth of this invasive plant.
- The use of bio-climatic materials in design and construction – such as typha – depends heavily on their 'workability', i.e., to what extent they are disruptive to existing workflows.
- Youths and artisans have shown enthusiasm for, and are motivated by, the access to vocational training (to become typha-insulation specialists) that will give them opportunities to obtain employment in the construction industry.

#### Success Stories

- Demand for typha materials, tools and know-how has increased significantly; that is a direct result of increased confidence and trust in the work done to de-risk investments in these materials under the project, and is also attributable to an effective education and awareness campaign delivered under the project.
- The project launched an architectural contest, which was an excellent activity to showcase design and construction skills learned by those participating in the project. Architects were able to demonstrate the use of typha-based materials in bioclimatic designs, leading to higher energy efficiency through increased thermal performance. Through this contest, engineers and construction workers acknowledged that training construction teams to easily integrate energy efficiency in buildings utilizing typha-based

insulation materials is challenging and that training for this is essential.

- The techniques that have been taught through trainings and are now employed in the manufacture of typha-based insulation materials have also allowed for standardization, whilst also improving the environmental performance of buildings – 35 cm of typha-based insulation is equivalent to 15-20 cm of fiberglass insulation.
- The project, which responds to the scarcity of resources and raw materials for the industrial production of building materials, contributes to building energy efficiency and comfort improvement, while also contributing to the socio-economic development of the building sector by creating green jobs. The promising results of the materials testing carried out allow the project to confirm the choice of materials “Typha australis” and “Typha-earth” for the construction of high-performance building materials in terms of hygro-thermal regulation. These bio materials offer a measurable improvement in the comfort in the habitat (both for thermal rehabilitation and new constructions).

#### Progress on Technology Transfer

Over the past year, the success of this technology transfer is illustrated by:

- increased capacity in terms of number of trained and qualified persons able to design and build typha-based construction materials;
- the continued production of typha-based construction materials;
- the use of these materials in a demonstration project, which has proven useful in a number of ways, not least of which was its effectiveness in generating interest within the industry;
- cooperation with the Climate Change Center of the Republic of Korea in the reporting period allowed for the development of a concept note for the upscaling of results under this GEF-funded project.

#### Challenges

- The design and construction relating to demonstration projects was time consuming; and until there is critical mass to manufacture, for example, prefabricated panels, the manufacturing process is labour intensive, thus making it more difficult to justify its use in larger projects.
- Although there is a good level of standardization, professionals within this sector need to be persuaded to invest in this material since its mechanical, hygroscopic, thermal and other behavioral characteristics are relatively unknown to developers and architects.

#### Outreach, Public Awareness and Knowledge-sharing Opportunities

- In 2018, two research papers focusing on typha and its use in construction projects were published by Senegalese researchers who were supported under this project. Both of these papers will be published in the international scientific peer-reviewed journals.
- A film that captures the implementation of the demonstration project will soon be released; articles, written by students, covering the use of typha as a roof insulation material for classrooms will also be published.

The mid-term evaluation of this project has been shared with the UNFCCC Secretariat and is also available online: <https://erc.undp.org/evaluation/evaluations/detail/7334>.

- (f) Côte D'Ivoire: *Construction of 1000 Tonne per day Municipal Solid Waste (MSW) Composting Unit in Akouedo Abidjan (AfDB)*. This project was endorsed by the GEF CEO in October 2013. After several years of delay, the project conducted activities relating to studies and environmental assessment impact in the reporting period, finalized project preparation, and implementation was started in November 2016. The project includes the following components: (a) sustainable integrated MSW management framework for Abidjan; (b) improvement of the door-to-door MSW collection system and installation of a sustainable information system; (c) construction of a turnkey project for the MSW treatment and industrial composting unit; and (d) technology transfer, capacity-building and dissemination, transfer of technical and financial know-how, prefeasibility and pilot testing activities.

The project began implementation in December 2016, but suffered substantial delays, with the official start of the investment activities only in 2017. In 2017, the project team undertook procurement activities to select the operators for the waste composting unit. The preparatory activities, including draft of term of references and set

up of the project implementation unit, were completed in 2017. Initial activities are being finalized before the recruitment of contractors to build the main infrastructural components.

The project is now at the investment stage and specific success stories have not yet been captured. However, the involvement of a private company to address waste issues in a city like Abidjan is an important factor to highlight. The EOULE Group has been a key partner in this project and despite delays occurred during project implementation, the company has continued funding activities under its co-financing part.

### Challenges

As already raised in the previous report, the project has faced some issues during preparation and approval process by the AfDB Board. Main challenges included the difficulty to approve the GEF funding together with the AfDB's baseline investment. Difficulties were also experienced in adequately mobilizing the private sector co-financing committed at CEO endorsement stage; as well as in moving from the planning stage to actual implementation due to Government's new waste regulation (waste collection and recycling).

### Lessons Learned and Captured

- Co-financing from the private sector should be confirmed and disbursed as part of the project institutional arrangement to insure commitments from all stakeholders involved in the project.
- The private sector (sponsor) participation in this project was difficult to confirm (funding) and has delayed the implementation arrangement.
- Since the agency baseline project is an important part of the GEF funding, any change during the project design and preparation will have a significant impact on the project implementation. The AfDB takes this project as an example for any future investments for which baseline will be deeply assessed before CEO endorsement to avoid any delay due to change of baseline.

The mid-term evaluation of this project was expected to be delivered in July 2018 and the terminal evaluation in December 2019. However, due to delays during project preparation, a two-year extension is to be requested for this project.

- (g) Sri Lanka: *Bamboo Processing for Sri Lanka (UNIDO)*. The project was endorsed by the GEF CEO in April 2012. The launch of the project took place in September 2012. The project includes the following components: (a) policy framework; (b) bamboo tissue production; (c) plantation establishment; (d) plantation operation; and (e) bamboo processing equipment.

### Achievements toward Project Implementation and Delivery of Outputs

- A comprehensive policy review for the national bamboo framework was completed with valuable findings and recommendations, taken up by the Prime Minister Office, for enhancing and accelerating bamboo development in Sri Lanka.
- Implementation activities on the policy component (Outcome 1) have seen significant progress, and the outputs produced have set the foundations for the remaining activities in the forthcoming year. Capacities to reproduce bamboo via tissue culture exist in the country and are broadening the number of available species, depending on the market demand (Outcome 2).
- Propagation of planting material through conventional reproduction and from seeds is supported by the project, so as to ensure that the scope of available bamboo species is sufficient for the development of the sector.
- Initial training to harvest and manage bamboo resources was conducted in coordination with existing governmental programmes. A programmatic initiative to train the trainers of an institution that could conduct the training in a sustainable manner is under development and a local university is developing training manuals on this matter in local languages.
- The project successfully produced its first comprehensive progress report. The report was distributed to all stakeholders and became the cornerstone for resuming the activities of the Project Steering Committee that was previously interrupted for several years.

### Lessons Learned and Captured

- Taking into consideration the relatively low-value addition of commercially grown energy biomass, and highly fragmented land availability in Sri Lanka, which would result in substantial transport costs, it is difficult to develop bamboo only for fuel, without also having components of higher-value addition. Therefore, production of fuel wood should remain a by-product for the waste material and should be developed as a side industry in Sri Lanka.
- The originally intended scope of bamboo plantations expected in the project document (under Outcome 3) will most likely not be able to be achieved, because of a misconception of the market requirements and the lead times needed to develop such an industry. Land availability for new, non-food crops is another limiting factor. However, tea and cocoa estates are increasingly engaging in bamboo plantations, among other purposes, also in order to establish a responsible feedstock material for biochar production and this could be an opportunity. Furthermore, the project is supporting communities' plantations in order to develop livelihood activities. Further support to drive the development of bamboo as a source of energy is still needed.
- A revolving fund was created to support the development of the bamboo sector, but was determined to not be an appropriate tool to support the growing industry. The project launched a call for proposals to be funded by the revolving fund and received 12 applications. This allowed a better understanding of all stakeholders interested in the sector: individual farmers, CBOs, SMEs and large companies. They represented the entire value chain, including the tissue culture and nursery segment, planting and processing, handcraft and industrial manufacturing, as well as the energy sector. However, it was determined that the majority of the proposals received would most likely not be commercially viable without undergoing a substantial technical review. Thus, it was determined that establishing a loan-based financing scheme, with a private bank under this circumstance, would not be a sustainable implementation strategy. Additionally, at the end of the project, a revolving fund would have to be transferred to the Government of Sri Lanka. A financial instrument cannot be created without the consultation of the Central Bank of Sri Lanka and the Treasury, which is a timely process. Taking into consideration that this procedure had not begun one year prior to the project's end, it was not advisable to further implement a fund without having the exit strategy in place. Furthermore, taking into consideration that the revolving fund was not mentioned in the project document, the delegated GEF focal point advised the project management team that it would be necessary to obtain approval to move forward with this model. Under these circumstances, the project management team and the Project Steering Committee jointly decided not to proceed with project implementation via a revolving fund, but instead to pursue a grant-based approach to communities and SMEs along the bamboo value chain, as originally envisioned in the project document. Substantial changes to the work plan were made, since the revolving fund was scrapped, but the most promising proposals received for the revolving fund were retained.
- The development of the bamboo industry (under Outcome 5) was hindered by the collapse of a large bamboo processing company and initial private sector consortium partner in Sri Lanka in 2014. New private sector actors that are potential partners have been identified, and additional pilot processing plants are expected to be established by the end of the project, providing valuable experience and lessons learned in several bamboo processing forms (shoots, construction, board or handcraft).
- The use of bamboo in the energy sector (under Outcome 6) remains challenging, due to low readiness by large enterprises and estates to depart from established processes. In order to convince the private sector to use bamboo as fuel wood, the project identified a proposal to combine the environmental benefits of bamboo with the energy needs and an additional pilot on this is expected to be tested.

### Progress on Delivery of Technology Transfer

Technology transfer activities is focused on three main areas:

- Bamboo value chain - Project proponents are cooperating to provide support to stakeholders, from academia to private investors, to ensure the availability of different bamboo species for diverse climatic and geological conditions. While tissue culturing is one effective way for propagation of planting material, and new species are now available, conventional propagation of species was also supported. The UNIDO has been working in cooperation with Ruhuna University to study and document effective propagation and cultivation techniques and to increase the number of species available locally from the University, from a seed farm of the agricultural ministry and from the tissue culture laboratory of the

Mahaweli Authority.

- Planting systems - Ruhuna University has developed methodologies for planting inter-cropping systems with tea, coconut, spices and other plants. Detailed methodology material has been made available in local languages. A scheme for plantation of bamboo as timber substitute is being set up as part of the plantation management knowledge and technology transfer.
- Pelletizing, Briquetting, Chipping - Ruhuna University is testing the potential and effectiveness of bamboo charcoal production (various designs of low-cost kilns) also for the manufacture of activated carbon or the fabrication of biochar. Biochar is being promoted as soil amendment in the plantation industries (also on other crops, such as tea, rubber or coconut) and the private sector plantations are taking up this product. In addition to being a negative emission technology, biochar application also offers considerable opportunities for CCA: increasing the water holding capacity of the soil reduces exposure to impacts of draughts and helps to prevent flooding downstream. Moreover, it improves fertilizer efficiency and thereby contributes to enhancing food security, the economics of commercial farming, and reduces nitrogen losses through fertilizer run-off, with associated environmental costs.

### Success Stories

- The recently completed policy review, mentioned as part of progress made toward project implementation, has paved the way for a national dialogue among all national stakeholders on how to abolish current barriers and strengthen the policy framework for supporting various types of operations in bamboo. This is a nationally owned process under the leadership of the Prime Minister's Office and is the first such undertaking in the country fully harmonized with the national commitments for the achievement of the SDGs and other national strategic objectives. Furthermore, communities; micro, small, and medium enterprises; as well as large companies along the bamboo value chain, have been identified and tailor-made activities have been jointly planned to fulfil the outputs of the project and to push the development of the bamboo industry in Sri Lanka.

### Challenges

- Communication across Government agencies is challenging in Sri Lanka. In addition, heavy fragmentation at the ministerial level, which makes coordination and communication problematic and often ineffective, and frequently changing leadership all pose a serious threat to continuity and undermine long-term agreements and commitments.

### Outreach, Public Awareness and Knowledge-sharing Opportunities

- The project website<sup>86</sup> and Facebook page are regularly updated and promoted. A national symposium on bamboo policy is under discussion with the Prime Minister's Office and other stakeholders, which will be a great opportunity to increase visibility of the project's achievements and increase recognition of the UNIDO and GEF's efforts in strengthening the bamboo sector in Sri Lanka. A project brochure has been published – "Perennial benefits – Developing a bamboo supply chain and industrial base in Sri Lanka."<sup>87</sup>

The UNIDO has provided a link to the MTR of this project to the GEF<sup>88</sup>, and the terminal evaluation is expected for December 2020.

- (h) China: *Green Truck Demonstration Project (International Bank for Reconstruction and Development - IBRD)*. Following its endorsement by the GEF CEO in March 2011, the project was launched in October 2011. The project components included: (a) green truck technology demonstration; (b) green freight logistics demonstration; (c) capacity-building; and (d) project implementation support. The project was completed in December 2015.

The project submitted the implementation completion and result report to the GEF.<sup>89</sup> The report concludes that the achievement of project development objectives is substantial. The objective relating to "demonstrating the global and local environmental benefits of the application of energy efficiency vehicle technologies and operating techniques" was measured by the three indicators that were largely achieved. The project piloted seven United

<sup>86</sup> UNIDO, 2018, [Bamboo Processing for Sri Lanka](#), Project Website.

<sup>87</sup> UNIDO, 2016, [Perennial benefits: Developing a bamboo supply chain and industrial base in Sri Lanka](#), Brochure.

<sup>88</sup> UNIDO, 2016, [Mid-Term Evaluation Review of the UNIDO Bamboo For Sri Lanka Project](#), UNIDO Report.

<sup>89</sup> World Bank, 2016, [Implementation Completion and Results Report](#), World Bank Report.

States Environmental Protection Agency-verified vehicle technologies and three operating techniques. The fuel savings achieved through these technologies translated into a significant reduction in GHG (826 t CO<sub>2</sub> eq during the pilot period and 8,662 t CO<sub>2</sub> eq in eight years, which is the typical life-span of a truck in China) and could have tremendous global and local environmental benefits.

Three low-carbon logistics operating techniques were also piloted through two logistics platform pilots and a drop-and-hook pilot. Each technique achieved fuel savings of 4 percent - 5 percent. The project also included a strong public education and outreach component. The green freight website was established to provide better information on the performance of proven energy efficiency technologies. A series of training programs, workshops and symposiums were organized to advertise and promote green freight concepts. Over 3,200 truck drivers, a significant number of managers in logistics enterprises, and Government officials in the freight and logistics sectors received training. The project demonstrated that significant fuel savings and GHG emission reductions can be obtained from a relatively low-cost investment. The recommendations from three studies under the capacity-building component have been incorporated in the Guangdong 13<sup>th</sup> Five-Year Plan.

The report provided lessons learned on results framework, Government leadership and design of a demonstration project. Firstly, results framework should be clear, measurable and flexible. Its design should ensure that data is available and the values are properly assessed. The results framework should also be flexible and be able to adapt to changed circumstances. Rather than having indicators based on absolute values of fuel saved and GHG emissions reduced, it would have been preferable to have used percentage changes as project targets.

Secondly, strong Government leadership is key to successful implementation, especially for demonstration projects. The leadership of Guangdong placed a high priority on this project and spent much time coordinating among line departments and resolving any issues encountered during preparation and implementation. Such strong leadership, vision, and enthusiasm from senior management within the Government was a key to the successful outcome of the project and should be a prerequisite for demonstration projects.

Lastly, the design of a demonstration project should be flexible and include a strong outreach component. Given the innovative nature of this demonstration project, awareness of energy-efficient truck technologies was low at the beginning. The public education and outreach component included detailed information on energy efficiency and cost savings, which were targeted at trucking companies and shippers in Guangdong, as well as major technology vendors. The successful outreach program increased the number of trucks participating in the phase II demonstration. Project activities were not rigidly defined, which offered flexibility to adopt a phased approach, add new activities, and improve the design as new situations emerged.

- (i) *Mexico: Promotion and Development of Local Wind Technologies in Mexico (IDB)*. The project was approved by the IDB in May 2012, following the GEF CEO endorsement in December 2011. The project includes the following components: (a) design and specification of the wind turbine components of the Mexican Wind Machine (MEM) project; (b) procurement, manufacturing and assembly of the components of the MEM Project; (c) erection, start up and operational testing of the wind turbine of the MEM Project; and (d) capacity-building and institutional strengthening to promote wind power market through distributed generation by small power producers.

#### *Achievements toward Project Implementation and Delivery of Outputs*

The IDB worked jointly with the agency to develop an action plan to achieve the project's goals, which prioritizes hiring processes and related activities. Since 2017, this project is part of the "Early implementation strategy" promoted by the Energy Division of the IDB. Under this strategy, the project was able to double the amount disbursed since the project began, with disbursement increasing from 9 percent to 20 percent. Three main procurement processes were successfully awarded, the contracts were signed, and initial disbursements were confirmed. The total amount committed in 2017 amounts to \$2.0 million. For 2018, the action plan involves the progress of contracts awarded and the completion and execution of the procurement process for the construction of the foundation of the wind turbine. With this action plan in progress, the project is expected to be fully disbursed by 2019.

Good progress has been made against the delivery of outputs. Under the first component, which includes activities supporting the delivery of the design and specifications of the wind turbines, the design and validation of the prototype and the blueprints have been completed.

Under the second component, which covers the procurement, manufacturing and assembly of the turbines, contracts have been signed with Temaco Co., CENER, and Trinity for the execution of these activities, and the contractual process for the construction of the foundation of the wind turbine has been initiated. Activities have not yet begun under Component 3, but will begin once activities under Component 2 are completed. Under Component 4, under which training will be delivered to support capacity building and institutional strengthening, the first training was delivered at the beginning of this year.

### Success Stories

The execution of the training program in design and operation of the wind turbine implemented by the agency in Oaxaca, is expected to result in a tremendous impact for the local population. The interest in such training is expected to show an increased demand in wind energy. There is evidence that new employees hired by international companies are recruiting local people for operation and maintenance of wind farms located at the Isthmus of Tehuantepec.

### Challenges

The IDB reported having limited experience in the execution of projects involving intellectual property and proprietary information, with related copyrights and patents. The execution of activities requiring special treatment in these areas resulted in long lead times to accommodate ongoing discussions for approval and procurement. Specifically, delays resulting from these discussions impacted the procurement processes for the manufacturing of blades, which was awarded to Temaco Co., a local company; the supervision of blade manufacturing, which was awarded to a Spanish company, Cener; and the manufacturing of the wind tower, which was awarded to Trinity, a local enterprise. However, as a result of this challenge, the IDB team has gained experience dealing with these issues and establishing a frame of reference for future projects.

### Outreach, Public Awareness and Knowledge-sharing Opportunities

The IDB, jointly with the agency, is working to achieve this objective, which will allow for proper disclosure of the operation. A video to showcase the execution of the project and impacts at national level is expected to be completed during the first semester 2018.

The project submitted the MTR to the GEF, which referred to it in its report to COP 23 and the terminal evaluation is expected to be delivered by December 2018.

- (j) Chile: *Promotion and Development of Local Solar Technologies in Chile (IDB)* The project was endorsed by the GEF CEO in June 2012, and started implementation in November 2013. The project has begun to disburse resources in March 2014. The project includes the following components: (a) technology transfer and capacity-building for solar technology; (b) development of demonstrative projects using solar power; and (c) design of incentives and financial mechanisms to promote solar power.

### Achievements toward Project Implementation and Delivery of Outputs

The agency has focused on training solar technicians and raising awareness regarding the benefits of distributed generation. In the reporting period, ten workshops were organized and attended by approximately 200 technicians.

The agency also hired a consultant to produce a report on "Analysis of characterization of the protections systems that prevent the injection of energy of the systems of auto-generation," which aimed to identify control and/or protection systems that allow distributed generation projects to be connected in parallel to the electric grid, and to operate without adding any surplus of active power into the grid.

The project also supported the Public Solar Rooftops Program, installing 20 kW of photo-voltaic panels on public buildings in the city of Talca.

### Lessons Learned

Lessons learned from the MTR submitted by the IDB include that the GEF has played a catalytic role in promoting

and supporting the building of institutional capacities and the transfer of critical know-how for the introduction of innovative technologies, such as solar water heating, concentrated solar power and photo-voltaic in distributed generation, and the development of the solar industry in general. Additionally, GEF resources, along with the IDB's, have been key in removing barriers that were hindering the development, growth, and commercialization of these technologies, in line with the Government of Chile's new energy agenda.

It was documented that the project successfully supported the promotion of these technologies in three ways: (a) by increasing Government's institutional capacities in solar technologies; (b) by supporting the development of pilot projects with escalation and demonstrative effects using solar photo-voltaic and contributing to the maturation of markets for such technology; and (c) by fostering fiscal incentives and financial mechanisms to implement solar projects with solar water heating and power generation technologies.

Technology transfer and institutional strengthening activities under Component 1 of the project enabled the Government of Chile to understand critical determinants for the introduction of solar technologies in Chile, including the economic and technical potential of different technologies, the selection of the most effective public policy instruments according to their economic impact, and the prioritization of installation locations. The project also supported the upgrade of skills and capacity building for solar companies and business in order to improve their abilities to install, connect, operate and maintain photo-voltaic panels; and to bring awareness on how to apply a new net metering law.

The Public Solar Rooftops Program (PTSP) also contributed to the institutional strengthening of the Government and market development in two ways. First, by increasing the availability of public information and price transparency on photo-voltaic installation costs, and obtaining marginally lower costs through a tender process (from \$4/watt on the first tender to \$1/Watt on the fourth tender). Second, by providing a large sample of demonstrative pilots in public buildings (150 KWh), which contributed to building confidence in the market, the Government, and the participating engineering companies; many of which were small enterprises.

Finally, the project also helped the Government to analyze the gap in the current regulatory framework and in the design of fiscal incentives and mitigation strategies to define actions to support and promote the deployment of solar technologies, in particular photo-voltaic and solar water heating. With the project, Ministry of Energy was supported in implementing Law 20.897, which provides tax incentives to engineering companies for the installation of solar water heating projects in new social housing accounting. In terms of emission reductions, to date, the project has achieved lifetime direct GHG emissions avoidance of 22,400,578 t CO<sub>2</sub> eq.

#### Outreach, Public Awareness, and Knowledge-sharing Opportunities

The following links contain relevant information regarding the Solar Roof program supported by this project.

<http://www.minenergia.cl/techossolares/>

[http://www.minenergia.cl/techossolares/?page\\_id=15](http://www.minenergia.cl/techossolares/?page_id=15)

[http://www.minenergia.cl/techossolares/?page\\_id=9](http://www.minenergia.cl/techossolares/?page_id=9)

<http://www.energia.gob.cl/tema-de-interes/inauguraron-primer-condominio>

The project submitted the MTR report to the GEF.<sup>90</sup>

- (k) Colombia, Eswatini, Kenya: *SolarChill: Commercialization and Transfer (UNEP)*. This project was initially approved with the World Bank as the GEF Agency. However, the World Bank withdrew in 2010 from the project. The project was then re-submitted by the UNEP with the addition of Swaziland. The project was endorsed by the GEF CEO in February 2014. After two years of discussion and planning, and a new GEF Agency, the project was started in the last reporting period. The project includes the following components: (i) procure and install 200 SolarChill A units in three countries; (ii) laboratory testing of prototypes, procurement and field testing of 15 SolarChill B units in each of the three countries; and (iii) information dissemination and technology transfer.

During the reporting period, it was conveyed that, in general, all the three governments of participating countries have continued to be supportive of the SolarChill Project, albeit with very different levels of facilitation and cooperation. All three countries also have limited capacities for providing financial support.

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<sup>90</sup> IADB, [Mid-Term Evaluation of the Technical Cooperation, Promotion and Development of Local Solar Technologies in Chile](#), IADB Project Report.

The Colombian Government is collaborating with the Project and maintains its commitment to contribute as stated in the endorsement documents. Kenya stated that though this project is in-line with their national policies on climate change mitigation strategies, it may not be able to fulfill the financial commitments made in 2011, in particular, related to granting the customs duty exemptions for imported technologies, will likely not be granted, despite several requests from the project. The Swaziland government is keen to strengthen its local refrigerator production sector by supporting the development of a production new line of sustainable solar fridges. The new line is being developed in collaboration with the SolarChill Project and is based on enhanced international technology design, components and production know-how support.

#### Achievements toward Project Implementation and Delivery of Outputs

During the reporting period, the Swaziland refrigerator manufacturer Palfridge/The Fridge Factory (TFF) adopted the SolarChill design. The prototype was analyzed in Germany and shipped to Swaziland for further analysis, improvement and production of the compressor technology. The new batch will be completed with an upgraded compressor designed specifically for it. Large-scale production of the prototype and a WHO/ PQS pre-qualification, will be undertaken in partnership with TFF. The batch of 20 SolarChill medical units will be manufactured and undergo field testing. The production of the units are co-funded through the IKI SolarChill project with support from GIZ.

Other specific achievements include:

- Site selection for where SolarChill fridges will be installed and monitored in each of the three countries has been completed;
- Establishment of local partners and a list of technicians to be trained has been completed;
- Procurement of the first batch of SolarChill vaccine coolers for all three countries has been completed - All Fridges have arrived in Colombia; while shipments have been completed for Kenya and Swaziland, with Swaziland having received the first shipment of units;
- Three prototypes for the SolarChill food refrigerator have been laboratory tested at the Danish Technological Institute;
- In Swaziland, transfer of technology to produce medical and commercial refrigerators has begun with input from both international technical advisors and a local domestic manufacturer.

#### Progress on Delivery of Technology Transfer

As previously mentioned, the Fridge Factory in Swaziland, has adopted the SolarChill design and is developing a new line of solar direct drive medical and food refrigerators. The company is also discussing with major private pay-as-you-go operators of off-grid appliances, such as Mobisol, on the utilization of the technology.

#### Success Stories

In Colombia, installers for the medical units received training on SolarChill appliances. Those who participated in the trainings gained essential information on the technological characteristics of the distinct brands of the units. The MoH of Colombia provided substantial support related to transportation, custom exemptions, and provided the premises for storage and training. The inspection of the units and the training provided helpful information on the future development of user friendly SDD refrigerators.

Knowledge highlighted and transferred included proper installation and inspection techniques of units; and information relating to storing vaccines, in accordance with WHO PQS requirements. Based on the successful installation of the SolarChill units in participating countries under this project, it is expected that wider deployment and market uptake of solar fridges for the medical and commercial applications as a result.

#### Challenges

Key challenges in this reporting period include that countries are lacking local capacities for having qualified trainers, installers and know-how of the health facilities operating the equipment. The project is addressing this barrier by providing train-the-trainer education and enhanced the know-how of operators.

Importing equipment has also proven to be challenging. Obtaining legally available documents for custom

clearance is a lengthy process in the countries, as all relevant ministries need to be involved. In Kenya, custom exceptions that were promised were not enacted.

#### *Outreach, Public Awareness and Knowledge-sharing Opportunities*

The SolarChill Project website ([www.solarchill.org](http://www.solarchill.org)) was updated in both English and Spanish. Project results and lessons were presented at a conference organized by Solafrica in Cameroon in June 2018. The results of the comparative monitoring of installed units in 2018 are published on the project website and in media publications. Presentations will be made at appropriate fora (such as joint GEF events and regional CTCN events). The training materials have been uploaded onto the website, and translated in English and Spanish .

Following the delivery of the first batch of SolarChill units to the three countries in June/July 2018, the project engaged knowledge sharing activities with interested stakeholders. This included providing updates of the project through various information networks, newsletters, websites, such as: UNEP OzoneNews; TechNet-21 of the Technical Network for Strengthening Immunization Services; ATMOSphere Europe and North America; Accelerate America and other industry publications, for example, "Cooling India Magazine". Information was also shared at the Meeting of the Parties to the Montreal Protocol in Montreal (November 20-24, 2017), and at the 13th IIR Gustav Lorentzen Conference on Natural Refrigerants in Valencia (June 18th-20th, 2018). Other opportunities in Latin America and Africa will be considered under the technology transfer component of the project.

Lastly, the SolarChill logo was updated, and the new logo is being used on training materials and outreach materials.

## ANNEX 8: STATUS REPORTS ON THE LDCF AND THE SCCF FOR FY 2018<sup>91</sup>

1. **The Least Developed Countries Fund for Climate Change (LDCF)** was established in November 2002 to address the needs of the least developed countries whose economic and geophysical characteristics make them especially vulnerable to the impact of global warming and climate change. **The Special Climate Change Fund (SCCF)**, consisting of two active funding windows, i.e., Program for Adaptation and Program for Technology Transfer, was established in November 2004 to finance activities, programs and measures relating to climate change that are complementary to those funded by resources from the GEF Trust Fund and with bilateral and multilateral funding. The GEF administers both the SCCF and LDCF and the World Bank acts as trustee for both funds.

### 1. Least Developed Countries Fund

#### a. Status of Pledges and Contributions

2. As of June 30, 2018, pledges had been received from 25 Contributing Participants: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Romania, Spain, Sweden, Switzerland, the United Kingdom and the United States. The total amount pledged to date is \$1.33 billion eq.<sup>92</sup> and signed contribution agreements for \$1.31 billion eq. Of this, payments amounting to \$1.27 billion have been received from donors since inception of the Trust Fund. Table A8.1 shows details of the status of pledges, contributions<sup>93</sup> and payments made to the LDCF since inception.
3. During the financial year July 1, 2017 to June 30, 2018, the LDCF Trust Fund received pledges amounting to \$101.59 million eq. from four Contributing Participants: Belgium, Germany, Iceland and Sweden. The Trustee has received \$84.21 million eq. against signed contribution agreements during this period.

#### b. Summary of Funding Approvals, Trustee Commitments and Cash Transfers

4. As of June 30, 2018, cumulative net funding decisions by the Council and the CEO amounted to \$1.22 billion, of which \$1.10 billion was for projects and project preparation activities, \$106.44 million was for fees, and \$13.53 million was for administrative expenses and corporate activities of the LDCF. This represents an overall increase of \$55.44 million or 4.74 percent compared to cumulative net funding decisions as of June 30, 2017.
5. Funding approved by the Council and the CEO is committed by the Trustee and transferred following established procedures for all financial transactions as agreed between the Trustee and the Agencies. The Trustee has committed a net total amount of \$1.02 billion, of which \$913.58 million relates to projects and project preparation activities, \$95.46 million to fees, and \$13.53 million to cover corporate activities and administrative expenses.
6. Cash transfers were made to Agencies on an as-needed basis to meet their projected disbursement requirements. Out of the cumulative commitments of \$1.02 billion, upon request from Agencies, the Trustee has transferred \$691.01 million as of June 30, 2018. As a result, \$331.56 million remains payable to Agencies. Details of funding approvals, commitments and cash transfers can be found in Table A8.2.

#### c. Schedule of Funds Available

7. Funds held in trust without restrictions total \$630.2 million, comprising of cash and investments. Of this amount, \$533.91 million has been set-aside to cover funding decisions by the Council or by the CEO. Consequently, net funds available for approval by the Council or the CEO amounts to \$96.29 million. Details on the funds available for Council or CEO approval as of June 30, 2018 can be found in Table A8.3.

#### d. Investment Income

8. Pending cash transfers to Agencies, cash contributions paid to LDCF Trust Fund are held in trust by the World Bank and maintained in a commingled investment portfolio ("Pool") for all trust funds administered by the World Bank. The assets in the Pool are managed in accordance with the investment strategy established for all of the trust funds

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<sup>91</sup> This status report was provided by the Trustee of the LDCF and the SCCF (the World Bank). The GEF Secretariat did not edit this report.

<sup>92</sup> US Dollar Equivalent

<sup>93</sup> Represents the amounts for which donors have signed contribution agreements with the Trustee.

administered by the World Bank. The LDCF had cumulative investment returns of \$45.57 million eq. as of June 30, 2018.

## **2. Special Climate Change Fund**

### **a. Status of Pledges and Contributions**

9. As of June 30, 2018, pledges had been received from 15 Contributing Participants: Belgium, Canada, Denmark, Finland, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom and the United States. The total amount pledged to date is \$352.31 million eq. and signed contribution agreements for \$352.31 million eq. Of this, payments amounting to \$347.31 million have been received from donors since inception of the Trust Fund. Table A8.4 shows details of the status of pledges, contributions<sup>94</sup> and payments made to the SCCF since its inception; Table A8.5 presents this information broken down by program.
10. During the financial year July 1, 2017 to June 30, 2018, one Contributing Participant Switzerland pledged \$0.54 million eq. to the SCCF Trust Fund and the Trustee has received payments against signed contribution agreements of \$0.54 million eq.

### **b. Summary of Funding Approvals, Trustee Commitments and Cash Transfers**

11. As of June 30, 2018, cumulative net funding decisions taken by the Council and the CEO amounted to \$354.81 million, of which \$316.03 million was for projects and project preparation activities, \$30.72 million was for fees, and \$8.05 million was for administrative expenses and corporate activities of the SCCF. This represents an overall decrease of \$0.13 million or 0.04 percent compared to cumulative net funding decisions as of June 30, 2017. The decrease was mainly due to higher funding cancellations due to project closures compared to approvals.
12. Funding approved by the Council and CEO is committed by the Trustee and transferred following established procedures for all financial transactions as agreed between the Trustee and the Agencies. Out of total funding approvals of \$354.81 million, the Trustee committed \$350.8 million, of which \$312.25 million relates to projects and project preparation activities, \$30.5 million to fees, and \$8.05 million to cover corporate activities and administrative expenses.
13. The Trustee transfers cash to Agencies on an as-needed basis to meet the projected disbursement requirements of the Agencies. As of June 30, 2018, out of total cumulative commitments of \$350.8 million, the Agencies have requested and the Trustee has transferred \$249.23 million. As a result, \$101.57 million remains payable to Agencies, pending their request. Details of funding approvals, commitments and cash transfers can be found in Table A7.6.

### **c. Schedule of Funds Available**

14. Funds held in Trust without restriction comprising cash and investments for both the Adaptation and Transfer of Technology programs total \$117.46 million eq. Of this amount, \$105.57 million has been set-aside to cover funding approved by the Council and endorsed by the CEO. Consequently, net funds available for approval by the Council or the CEO amount to \$11.88 million. Details on the funds available for Council or CEO approval as of June 30, 2018 can be found in Table A8.7, which shows the funding status by program.

### **d. Investment Income**

15. The SCCF shares the same investment management as the LDCF. Its overall investment return was \$19.12 million. from inception.

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<sup>94</sup> Represents the amounts for which donors have signed contribution agreements with the Trustee.

**Table A8.1 LDCF Status of Pledges and Contributions as of June 30, 2018**

Total Pledges Outstanding and Contributions										
Finalized				Pledges Outstanding		Contribution Agreements Finalized				
1	2	3 = 5+7	4 = 6+9+11	5	6	7 = 8+10	Paid (Receipts)		Unpaid	
							8	9	10	11
Contributing Participant	Currency	Total Amount in Currency	USDeq. a/	Amount in Currency	USDeq. b/	Total Contributions in Currency	Amount Paid in Currency	USDeq. c/	Amount Due in Currency	USDeq. b/
Australia	AUD	46,500,000	42,967,350	0	0	46,500,000	46,500,000	42,967,350	0	0
Austria	EUR	1,900,000	2,669,600	0	0	1,900,000	1,900,000	2,669,600	0	0
Belgium	d/ EUR	93,590,000	115,004,355	0	0	93,590,000	93,590,000	115,004,355	0	0
Canada	e/ CAD	66,000,000	54,729,413	0	0	66,000,000	66,000,000	54,729,413	0	0
Czech Republic	EUR	18,000	25,454	0	0	18,000	18,000	25,454	0	0
Denmark	DKK	376,400,000	62,890,346	0	0	376,400,000	324,619,978	54,803,003	51,780,022	8,087,343
Finland	EUR	31,598,282	40,861,437	0	0	31,598,282	31,598,282	40,861,437	0	0
France	EUR	35,850,000	41,349,130	0	0	35,850,000	35,850,000	41,349,130	0	0
Germany	EUR	265,000,000	332,984,351	0	0	265,000,000	240,000,000	303,883,114	25,000,000	29,101,237
Hungary	EUR	1,000,000	1,344,300	0	0	1,000,000	1,000,000	1,344,300	0	0
Iceland	USD	1,083,500	1,083,500	0	0	1,083,500	1,083,500	1,083,500	0	0
Ireland	f/ EUR	11,734,869	13,021,865	2,000,000 g/	2,328,099	9,734,869	9,734,869	10,693,766	0	0
	USD	8,000,000	8,000,000	0	0	8,000,000	8,000,000	8,000,000	0	0
Italy	USD	3,000,000	3,000,000	0	0	3,000,000	3,000,000	3,000,000	0	0
Japan	USD	1,081,650	1,081,650	0	0	1,081,650	1,081,650	1,081,650	0	0
Luxembourg	f/ EUR	1,000,000	1,582,900	0	0	1,000,000	1,000,000	1,582,900	0	0
	USD	4,120,000	4,120,000	0	0	4,120,000	4,120,000	4,120,000	0	0
Netherlands	f/ EUR	55,200,000	73,174,597	0	0	55,200,000	55,199,984	73,174,578	0	0
	USD	2,100,000	2,100,000	0	0	2,100,000	2,100,000	2,100,000	0	0
New Zealand	NZD	8,100,000	5,808,840	0	0	8,100,000	8,100,000	5,808,840	0	0
Norway	f/ NOK	180,000,000	30,160,308	0	0	180,000,000	180,000,000	30,160,308	0	0
	USD	2,000,000	2,000,000	0	0	2,000,000	2,000,000	2,000,000	0	0
Portugal	EUR	50,000	64,065	0	0	50,000	50,000	64,065	0	0
Romania	EUR	150,000	214,005	0	0	150,000	150,000	214,005	0	0
Spain	EUR	1,354,185	1,773,184	0	0	1,354,185	1,354,185	1,773,184	0	0
Sweden	SEK	967,000,000	127,306,074	135,000,000 h/	15,047,651	832,000,000	832,000,000	112,258,423	0	0
Switzerland	CHF	16,050,000	15,832,657	1,605,100 g/	1,615,114	14,444,900	14,444,900	14,217,543	0	0
United Kingdom	GBP	122,000,000	186,839,800	0	0	122,000,000	122,000,000	186,839,800	0	0
United States	USD	158,195,000	158,195,000	0	0	158,195,000	158,195,000	158,195,000	0	0
			<u>1,330,184,181</u>		<u>18,990,864</u>			<u>1,274,004,719</u>		<u>37,188,580</u>

a/ Represents (1) the actual US dollar value of paid-in cash contributions and (2) June 30, 2018 value of pledges outstanding, contribution amounts pending FX, and unpaid amounts.  
b/ Valued at the exchange rates available on - June 30, 2018  
c/ Represents the (1) actual US dollar value of paid-in cash contributions and (2) June 30, 2018 value of contribution amount pending FX.  
d/ Includes contribution of EUR 6.15 million received from the Walloon Government of Belgium.  
e/ Includes CAD 6 million received from the Government of Quebec.  
f/ Contributions made in more than one currency.  
g/ Balance of pledges from COP21 in 2015.  
h/ Balance of SEK 85 million out of the total SEK185 million pledge made during COP 23 and SEK 50 million announced during the November 2017 Council Meeting.

Table A8.2 LDCF Summary of Allocation, Commitments and Disbursements as of June 30, 2018 (in \$)

Entity	Cumulative Net Amounts			
	Approved Allocations	Commitments	Transfers	Amount Due
	(1)	(2)	(3)	(4) = (2) - (3)
<b>Projects</b>				
ADB	13,900,000	13,650,000	7,730,000	5,920,000
AfDB	111,824,943	101,262,265	57,298,294	43,963,971
FAO	98,202,778	85,438,543	41,758,181	43,680,362
IBRD	71,983,860	71,983,860	58,029,063	13,954,797
IFAD	47,285,284	37,285,284	16,970,289	20,314,995
IUCN	4,587,156	0	0	0
UNDP	594,259,545	489,609,559	370,520,664	119,088,895
UNEP	157,747,640	111,384,551	40,229,555	71,154,996
UNIDO	5,166,710	2,966,710	1,380,815	1,585,895
<i>Sub-total</i>	1,104,957,916	913,580,773	593,916,861	319,663,912
<b>Fees</b>				
ADB	1,112,000	1,092,000	856,800	235,200
AfDB	10,358,815	9,759,223	2,866,576	6,892,647
FAO	9,439,683	8,712,121	8,683,621	28,500
IBRD	6,836,049	6,836,048	6,836,048	0
IFAD	4,605,243	4,035,243	3,094,269	940,974
IUCN	412,844	0	0	0
UNDP	57,987,576	52,112,189	50,673,561	1,438,628
UNEP	15,207,209	12,564,513	12,180,220	384,293
UNIDO	476,550	351,150	159,550	191,600
<i>Sub-total</i>	106,435,969	95,462,487	85,350,645	10,111,842
<b>Corporate Budget <sup>a/</sup></b>				
Secretariat	8,929,410	8,929,410	7,886,613	1,042,797
Evaluation	308,568	308,568	282,568	26,000
STAP	761,405	761,405	380,405	381,000
Trustee	3,530,232	3,530,232	3,193,232	337,000
<i>Sub-total</i>	13,529,614	13,529,614	11,742,817	1,786,797
<b>Total for LDCF</b>	<b>1,224,923,500</b>	<b>1,022,572,874</b>	<b>691,010,323</b>	<b>331,562,551</b>

a/ Includes amounts allocated to cover administrative expenses to manage the LDCF and Corporate activities, including annual audit.

Table A8.3 LDCF for Climate Change Schedule of Funds Available updated as of June 30, 2018

**Trust Fund for Least Developed Countries Fund for Climate Change  
Schedule of Funds Available as of  
June 30, 2018**

		<u>(in USDeq.)</u>
<b><u>1. Funds held in Trust</u></b>		<b>630,203,947</b> <i>a/</i>
Cash and investments	630,203,947	
Promissory notes	0	
<b><u>2. Restricted Funds</u></b>		<b>0</b>
Reserve to cover foreign exchange rate fluctuations	0	
<b>3. Funds held in Trust with no restrictions ( 3 = 1 - 2 )</b>		<b>630,203,947</b>
<b><u>4. Approved Amounts pending disbursement</u></b>		<b>533,913,176</b>
Amounts Trustee Committed	331,872,734	
Amounts pending Council/CEO approval and/or CEO endorsement	201,768,464	
Umbrella Set-aside	271,979	
<b>5. Funds Available for Council/CEO approval and/or CEO endorsement ( 5 = 3 - 4 )</b>		<b><u><u>96,290,771</u></u></b>

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*a/* Unencashed promissory notes and amounts pending FX are valued at exchange rate as of June 30, 2018.

Table A8.4 SCCF Status of Pledges and Contributions as of June 30, 2018

1	Total Pledges Outstanding and Contributions Finalized a/			Pledges Outstanding		Contribution Agreements Finalized					
	2	3 = 5+7		4 = 6+9+11	5	6	Paid (Receipts)			Unpaid	
		7 = 8+10	8				9	10	11		
Contributing Participant	Currency	Total Amount in Currency	USDeq. b/	Amount in Currency	USDeq. c/	Total Contribution in Currency	Amount Paid in Currency	USDeq. d/	Amount Due in Currency	USDeq. c/	
Belgium	EUR	31,000,000	41,213,100	0	0	31,000,000	31,000,000	41,213,100	0	0	
Canada	CAD	13,500,000	12,894,703	0	0	13,500,000	13,500,000	12,894,703	0	0	
Denmark	DKK	50,000,000	9,041,885	0	0	50,000,000	50,000,000	9,041,885	0	0	
Finland	e/ EUR	13,870,000	17,945,939	0	0	13,870,000	13,870,000	17,945,939	0	0	
	USD	367,592	367,592	0	0	367,592	367,592	367,592	0	0	
Germany	EUR	90,017,000	120,454,867	0	0	90,017,000	90,017,000	120,454,867	0	0	
Ireland	USD	2,125,000	2,125,000	0	0	2,125,000	2,125,000	2,125,000	0	0	
Italy	USD	10,000,000	10,000,000	0	0	10,000,000	5,000,000	5,000,000	5,000,000 f/	5,000,000	
Netherlands	EUR	2,400,000	3,128,880	0	0	2,400,000	2,400,000	3,128,880	0	0	
Norway	NOK	198,000,000	34,592,632	0	0	198,000,000	198,000,000	34,592,632	0	0	
Portugal	EUR	1,070,000	1,299,099	0	0	1,070,000	1,070,000	1,299,099	0	0	
Spain	EUR	9,000,000	12,349,100	0	0	9,000,000	9,000,000	12,349,100	0	0	
Sweden	SEK	40,000,000	6,120,153	0	0	40,000,000	40,000,000	6,120,153	0	0	
Switzerland	e/ CHF	12,100,000	11,769,953	0	0	12,100,000	12,100,000	11,769,953	0	0	
	USD	400,000	399,973	0	0	400,000	400,000	399,973	0	0	
United Kingdom	GBP	10,000,000	18,603,167	0	0	10,000,000	10,000,000	18,603,167	0	0	
United States	USD	50,000,000	50,000,000	0	0	50,000,000	50,000,000	50,000,000	0	0	
			<u>352,306,043</u>		<u>0</u>			<u>347,306,043</u>		<u>5,000,000</u>	

a/ Pledged contributions are made towards the Program for Adaptation and for the Transfer of Technology.

b/ Represents (1) the actual US dollar value of paid-in cash contributions and (2) June 30, 2018 value of outstanding pledges and unpaid amounts.

c/ Valued at the exchange rates available on - June 30, 2018

d/ Represents the actual US dollar value of paid-in cash contributions.

e/ Contributions made in more than one currency.

f/ Represents past due contribution.

Table A8.5 SCCF Status of Contributions by Program as of June 30, 2018

<b>Contribution Agreements Finalized</b>						
<u>Contributing Participant</u>	<u>Currency</u>	<u>Total Contributions</u>	<u>Amount Paid in Currency</u>	<u>USDeq. a/</u>	<u>Amount Due in Currency</u>	<u>USDeq. b/</u>
<b>I. Program for Adaptation</b>						
Canada	CAD	11.00	11.00	10.34	-	-
Denmark	DKK	40.00	40.00	7.23	-	-
Finland	c/ USD	0.37	0.37	0.37	-	-
	EUR	13.52	13.52	17.52	-	-
Germany	EUR	90.02	90.02	120.45	-	-
Ireland	USD	1.28	1.28	1.28	-	-
Italy	USD	5.00	0.00	0.00	5.00 d/	5.00
Netherlands	EUR	2.40	2.40	3.13	-	-
Norway	NOK	181.50	181.50	31.59	-	-
Portugal	EUR	1.07	1.07	1.30	-	-
Spain	EUR	8.00	8.00	11.05	-	-
Sweden	SEK	37.00	37.00	5.69	-	-
Switzerland	c/ CHF	7.75	7.75	7.56	-	-
	USD	0.40	0.40	0.40	-	-
United Kingdom	GBP	10.00	10.00	18.60	-	-
United States	USD	50.00	50.00	50.00	-	-
				<b>286.52</b>		<b>5.00</b>
<b>II. Program for Technology Transfer</b>						
Belgium	EUR	31.00	31.00	41.21	-	-
Canada	CAD	2.50	2.50	2.55	-	-
Denmark	DKK	10.00	10.00	1.81	-	-
Finland	EUR	0.35	0.35	0.42	-	-
Ireland	USD	0.85	0.85	0.85	-	-
Italy	USD	5.00	5.00	5.00	-	-
Norway	NOK	16.50	16.50	3.00	-	-
Spain	EUR	1.00	1.00	1.30	-	-
Sweden	SEK	3.00	3.00	0.43	-	-
Switzerland	CHF	4.10	4.35	4.21	-	-
				<b>60.79</b>		<b>-</b>
<b>TOTAL</b>				<b>347.31</b>		<b>5.00</b>

a/ Represents the actual US dollar value of paid-in cash contributions.

b/ Valued at the exchange rates available on June 30, 2018.

c/ Contributions made in more than one currency.

d/ This amount is past due.

**Table A8.6 SCCF Summary of Allocations, Commitments and Disbursements as of June 30, 2018 (in \$)**

Entity	Cumulative Net Amounts			
	Approved	Commitments	Transfers	Amount Due
	Allocations			
(1)	(2)	(3)	(4) = (2) - (3)	
<b>Projects</b>				
ADB	10,309,700	10,309,700	5,990,066	4,319,634
AfDB	12,084,778	12,084,778	5,475,000	6,609,778
CAF	8,456,621	8,456,621	1,691,324	6,765,297
CI	1,075,000	1,075,000	518,191	556,809
EBRD	16,137,943	16,137,943	9,745,249	6,392,694
FAO	21,004,289	21,004,289	9,589,735	11,414,554
IADB	6,032,250	6,032,250	3,306,500	2,725,750
IBRD	86,907,220	84,129,442	63,168,084	20,961,358
IFAD	38,160,838	38,160,838	19,192,983	18,967,855
UNDP	81,378,117	81,378,117	75,569,503	5,808,614
UNEP	31,084,818	30,084,818	20,031,818	10,053,000
UNIDO	3,400,000	3,400,000	783,951	2,616,049
<i>Sub-total</i>	316,031,573	312,253,795	215,062,404	97,191,392
<b>Fees</b>				
ADB	1,031,724	1,031,724	597,934	433,790
AfDB	1,134,137	1,134,137	0	1,134,137
CAF	482,027	482,027	482,027	0
CI	96,750	96,750	96,750	0
EBRD	1,581,831	1,581,831	1,209,847	371,984
FAO	1,766,015	1,766,015	1,766,015	0
IADB	603,225	603,225	603,225	0
IBRD	8,978,316	8,844,983	8,844,983	0
IFAD	3,747,286	3,747,286	2,554,346	1,192,940
UNDP	7,953,252	7,953,252	7,953,252	0
UNEP	3,022,842	2,927,842	2,927,842	0
UNIDO	323,000	323,000	86,709	236,291
<i>Sub-total</i>	30,720,405	30,492,072	27,122,930	3,369,142
<b>Corporate Budget <sup>a/</sup></b>				
Secretariat	4,650,792	4,650,792	4,169,216	481,576
Evaluation	430,426	430,426	404,426	26,000
STAP	749,380	749,380	368,380	381,000
Trustee	2,224,175	2,224,175	2,106,175	118,000
<i>Sub-total</i>	8,054,773	8,054,773	7,048,197	1,006,576
<b>Total for SCCF</b>	<b>354,806,751</b>	<b>350,800,640</b>	<b>249,233,531</b>	<b>101,567,110</b>

a/ Includes amounts allocated to cover administrative expenses to manage the SCCF and Corporate activities, including annual audit.

Table A8.7 SCCF Schedule of Funds Available updated as of June 30, 2018

(in USDeq.)

		(in USDeq.)
<b><u>Program for Adaptation</u></b>		
<b><u>1. Funds held in Trust</u></b>		<b>86,130,798</b> <i>a/</i>
Cash and investments	86,130,798	
Promissory notes	0	
<b><u>2. Restricted Funds</u></b>		<b>0</b>
Reserve to cover foreign exchange rate fluctuations	0	
<b>3. Funds held in Trust with no restrictions ( 3 = 1 - 2 )</b>		<b>86,130,798</b>
<b><u>4. Approved Amounts pending disbursement</u></b>		<b>77,721,359</b>
Amounts Trustee Committed	73,715,247	
Amounts pending Council/CEO approval and/or CEO endorsement	1,095,001	
Umbrella Set-aside	2,911,111 <i>b/</i>	
<b>5. Funds Available for Council/CEO approval and/or CEO endorsement ( 5 = 3 - 4 )</b>		<b>8,409,440</b>
<b><u>Program for Transfer of Technology</u></b>		
<b><u>6. Funds held in Trust</u></b>		<b>31,325,322</b> <i>a/</i>
Cash and investments	31,325,322	
Promissory notes	0	
<b><u>7. Restricted Funds</u></b>		<b>0</b>
Reserve to cover foreign exchange rate fluctuations	0	
<b>8. Funds held in Trust with no restrictions ( 8 = 6 - 7 )</b>		<b>31,325,322</b>
<b><u>9. Approved Amounts pending disbursement</u></b>		<b>27,851,863</b>
Amounts Trustee Committed	27,851,863	
Amounts pending Council/CEO approval and/or CEO endorsement	-	
<b>10. Funds Available for Council/CEO approval and/or CEO endorsement ( 10 = 8 - 9 )</b>		<b>3,473,459</b>
<hr/>		
<b>Total SCCF Funds Available for Council/CEO approval and/or CEO endorsement ( 5 + 10 )</b>		<b><u>11,882,899</u></b>
<p><i>a/</i> Unencashed promissory notes and amounts pending FX are valued at exchange rate as of June 30, 2018.</p> <p><i>b/</i> The umbrella program commitment for "U4620-MENA - Desert Ecosystems and Livelihoods Program MENA-DELP". The funding approved for the project under this umbrella has been cancelled, but the program is still active.</p>		

**ANNEX 9: STATUS REPORT ON THE CBIT TRUST FUND FOR FY 2018<sup>95</sup>**

**Table A9.1 CBIT TF Schedule of Funds Available updated as of June 30, 2018**

<b>Trust Fund for Capacity Building Initiative for Transparency</b>		<u>(in USDeq.)</u>
<b>Schedule of Funds Available as of</b>		
<b>June 30, 2018</b>		
<b><u>1. Funds held in Trust</u></b>		<b>53,681,766 a/</b>
Cash and investments	42,671,242	
Promissory notes	11,010,524	
<b><u>2. Restricted Funds</u></b>		<b>0</b>
Reserve to cover foreign exchange rate fluctuations	0	
<b>3. Funds held in Trust with no restrictions ( 3 = 1 - 2 )</b>		<b>53,681,766</b>
<b><u>4. Approved Amounts pending disbursement</u></b>		<b>51,433,911</b>
Amounts Trustee Committed	7,866,281	
Amounts pending Council/CEO approval and/or CEO endorsement	43,567,630	
Umbrella Set-aside	0	
<b>5. Funds Available for Council/CEO approval and/or CEO endorsement ( 5 = 3 - 4 )</b>		<b><u>2,247,855</u></b>

a/ Unencashed promissory notes and amounts pending FX are valued at exchange rate as of June 30, 2018.

<sup>95</sup> This status report was provided by the Trustee of the CBIT Trust Fund (the World Bank). The GEF Secretariat did not edit this report.