



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

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Abbreviations and Acronyms

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
BUR	Biennial Update Report
CAF	Development Bank of Latin America
CBIT	Capacity-building Initiative for Transparency
CBIT TF	Capacity-building Initiative for Transparency Trust Fund
CCA	Climate Change Adaptation
CCM	Climate Change Mitigation
CEIT	Countries with Economy in Transition
CEO	Chief Executive Officer
CGE	Consultative Group of Experts
CI	Conservation International
CMA	Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement
CO ₂ eq	Carbon Dioxide Equivalent
COP	Conference of the Parties
CTCN	Climate Technology Centre and Network
CTNFC	Climate Technology Network and Finance Center
EA	Enabling Activity
EBRD	European Bank for Reconstruction and Development
ECA	Eastern Europe and Central Asia
ECOWAS	Economic Community of Western African States
Eq	Equivalent
ETF	Enhanced Transparency Framework
FAO	Food and Agriculture Organization of the United Nations
FECO	Foreign Economic Cooperation Office of the Ministry of Environmental Protection of China
FINTECC	Finance and Technology Transfer Centre for Climate Change
FOLUR	Food Systems, Land Use and Restoration
FSP	Full-sized Project
FY	Fiscal Year
GCA	Global Commission on Adaptation
GCF	Green Climate Fund
GCIP	Global Cleantech Innovation Program
GDP	Gross Domestic Product
GEF	Global Environment Facility
GEFTF	Global Environment Facility Trust Fund
GHG	Greenhouse Gas
GHGI	Greenhouse Gas Inventory
GSP	Global Support Program
HCFC	Hydro-chlorofluorocarbon
HFC	Hydro-fluorocarbon
IAP	Integrated Approach Pilot
IBRD	International Bank for Reconstruction and Development (World Bank)
ICAT	Initiative for Climate Action Transparency
IDB	Inter-American Development Bank
IEO	GEF Independent Evaluation Office
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
INDC	Intended Nationally Determined Contribution
IP	Impact Program
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature

kt	kilotonne (10 ³ tonnes)
LAC	Latin America and the Caribbean
LCT	Low-carbon Technology
LDC	Least Developed Country
LDCF	Least Developed Countries Fund
LDN	Land Degradation Neutrality
MFA	Multi-focal Area
MRV	Measurement, Reporting and Verification
MSP	Medium-sized Project
MSW	Municipal Solid Waste
Mt	Megatonne (10 ⁶ 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
NDC	Nationally Determined Contribution
NGI	Non-grant Instrument
OECD	Organization for Economic Co-operation and Development
OFP	Operational Focal Point
PATPA	Partnership on Transparency in the Paris Agreement
PPG	Project Preparation Grant
PPP	Public-Private Partnership
SBI	Subsidiary Body for Implementation
SBSTA	Subsidiary Body for Scientific and Technological Advice
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
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
Mt CO ₂ eq	Million Metric Tons of Carbon Dioxide Equivalent
TAP	Technology Action Plans
TEC	Technology Executive Committee
TNA	Technology Needs Assessment
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
WBG	World Bank Group
WFP	World Food Programme
WHO	World Health Organization
WWF	World Wildlife Fund

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 from July 1, 2018 to June 30, 2019, which corresponds to fiscal year (FY) 2019. Part I of this report pertains to the implementation of the guidance from the COP. Part II presents updates on GEF initiatives, including an overview of the roll out of the GEF-7 Impact Programs (IPs), an update on the GEF work on private sector engagement, the latest advances on mainstreaming of gender considerations in the programming of GEF resources, and information about two recent evaluations from the GEF's Independent Evaluation Office (IEO) that are relevant for the GEF's CCM portfolio. Part III highlights the FY 2019 results of the GEF support for CCM, CCA, the Capacity-building Initiative for Transparency (CBIT), and associated technology transfer and capacity-building activities.

GEF-7 Programming Directions

3. The Programming Directions for the GEF-7 period (July 2018 to June 2022) were endorsed at the 54th GEF Council Meeting in June 2018. The GEF-7 Programming Directions build upon focal area investments and IPs, aiming to transform urban, food, and land use systems to deliver lasting benefits across all multilateral environmental agreements that the GEF serves. The resource allocation framework includes \$802 million for CCM, comprising \$511 million of country allocations under the System for Transparent Allocation of Resources (STAR) and \$291 million from STAR set-asides. Annex 1 provides an overview of GEF-7 STAR country allocations.
4. The GEF-7 CCM 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.
5. Eligible focal area investments include de-centralized renewable energy with energy storage, electric drive technologies and electric mobility, accelerating energy efficiency adoption, and cleantech innovation.
6. The GEF-7 IPs aim to support countries to pursue holistic and integrated approaches for greater transformational change in key economic systems, and in line with their national

development priorities. With a focus on addressing major drivers of environmental degradation, three IPs were included in the GEF-7 strategy, covering (i) sustainable cities, (ii) food systems, land use and restoration, and (iii) sustainable forest management (SFM). These three IPs contribute significantly to the CCM focal area while also delivering other global environmental benefits. The *Sustainable Cities Impact Program* (Sustainable Cities IP) focuses on providing support for integrated low-carbon solutions for urban sustainability, such as energy efficiency in buildings, renewable energy development, and solid waste and wastewater management¹. The *Food Systems, Land Use, and Restoration Impact Program* (FOLUR IP) focuses on promoting landscapes approaches for sustainable land management and climate-smart agriculture solutions that reduce greenhouse gas (GHG) emissions by enhancing agricultural productivity. The *Sustainable Forest Management Impact Program* (SFM IP) aims at maintaining and restoring carbon stocks in the Amazon, the Congo Basin, and within dryland forests.

Climate Change Mitigation

7. Since its establishment in 1991, the GEF has been funding projects focusing on CCM in developing countries and countries with economies in transition. As of June 30, 2019, the GEF has funded 972 projects on CCM with more than \$6.2 billion in GEF funding, including Project Preparation Grants (PPGs) and Agency Fees, in over 165 countries. The GEF funding leveraged over \$52.4 billion from a variety of sources, including GEF agencies, national and local governments, multilateral and bilateral agencies, the private sector, and civil society organizations, with an average co-financing ratio of 1 (GEF) to 8.5 (co-financing).²

8. In addition, since its inception the GEF has supported 384 Enabling Activities (EAs), including National Communications (NCs) and Biennial Update Reports (BURs), with \$490.5 million, including PPGs and Agency Fees. These EAs have leveraged \$205.7 million in co-financing.

9. In the reporting period, the GEF allocated \$615.7 million from the GEF Trust Fund (GEFTF) to activities with CCM objectives, including PPGs and Agency Fees. Of this amount, \$143.4 million was drawn from the CCM focal area. These GEFTF resources supported 5 programs, 17 CCM projects, and 14 EAs. These 36 programs and projects are expected to leverage approximately \$4.4 billion in co-financing, resulting in a co-financing ratio of 1 (GEF) to 7.8 (co-financing). They are expected to avoid or sequester over 533.5 million metric tons of carbon dioxide equivalent (Mt CO₂ eq) in total over their lifetime.

10. Through CCM programs and 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). Programs and projects that were approved in this reporting period include the following:

- (a) In energy efficiency, the GEF and its partners have supported four projects with energy efficiency components, with funding totaling \$14.2 million, including PPG and

¹ Resources for the Sustainable Cities IP have not yet been approved by the GEF Council. The status of approval of the FOLUR and SLM IPs is further described below in this report (paragraphs 10(d) to 15 and 70 to 73).

² Throughout this report, co-financing ratios are calculated in accordance with the GEF Updated Co-financing Policy, i.e. including EAs but excluding PPGs and Agency Fees (GEF, 2018, [Updated Co-financing Policy](#), Council Document GEF/C.54/10/Rev.01).

Agency Fees. Co-financing leveraged for these five projects amounted to \$281.6 million. Together, the four projects are expected to mitigate an estimated 13.8 Mt CO₂ eq.

- (b) In the renewable energy sector, the GEF has supported two renewable energy projects, facilitating the transfer of renewable energy technologies, including waste-to-energy and biomass-to-energy generation. The GEF funding for these two projects amounted to \$10.3 million including PPGs and Agency Fees, leveraging \$98.7 million in co-financing. Expected GHG emission reductions amount to 9.0 Mt CO₂ eq.
- (c) In sustainable transport and urban systems, in the reporting period the GEF has supported one program, deploying \$32.7 million in GEF funding, including PPGs and Agency Fees, and leveraging \$433.1 million in co-financing. The total targeted emission reductions are estimated to be 67.6 Mt CO₂ eq. The key objectives of the program are to de-risk investments in electric vehicles through demonstration projects and to support participating countries in developing country- and context-specific policies and incentives for electric mobility. The Program will include a cohort of 17 national child projects, complemented by a global child project.
- (d) In the AFOLU sector, GEF CCM resources have been used to support two of the GEF-7 IPs: the FOLUR IP and the SFM IP. These two IPs include the participation of 40 countries investing \$495.5 million of GEF resources, including PPGs and Agency Fees, and leveraging an estimated additional co-financing of \$3.4 billion. Expected GHG emission reductions in the AFOLU sector through these programs amount to 442.0 Mt CO₂ eq.

11. As highlighted above, significant contributions to GHG emission reductions are expected from the GEF-7 IPs. The IPs are a key part of the GEF-7 Programming Directions and represent an integrated and drivers-based approach to reversing the course of environmental degradation. The IPs bring together Parties to collectively and cooperatively work on common environmental challenges with direct mitigation, ecological, economic, and social consequences at the regional and global scales.

12. In the FOLUR IP, 18 countries are included in the first programmatic tranche and will address environmental degradation caused by unsustainable production of key commodities in a variety of landscapes around the world, generating an expected 209.8 Mt CO₂ eq in emission reductions throughout its lifetime.

13. The GEF-7 SFM IP includes three sub-programs focusing respectively on the Amazon basin, the Congo Basin, and the world's drylands. In the *Amazon Sustainable Landscapes 2 Impact Program*, seven countries that account for 92 percent of the Amazon basin territory will work together with a joint vision to maintain the ecological health and integrity of the Amazon biome. This is expected to generate approximately 29.9 Mt CO₂ eq in emission reductions.

14. The *Congo Basin Sustainable Landscapes Impact Program* aims to catalyze transformational change in conservation and sustainable management of the Congo Basin through landscape approaches that empower local communities and forest-dependent people, and through partnership with the private sector. The implementation of the Congo Basin IP is expected to result in emission reductions in the region of 121.3 Mt CO₂ eq.

15. Finally, the *Dryland Sustainable Landscapes Impact Program* strives to avoid, reduce, and reverse further degradation, desertification, and deforestation of land and ecosystems in drylands through the sustainable management of production landscapes. The Program will transform the management of drylands in selected regions (the Miombo and Mopane ecosystems of southern Africa, the savannas of west Africa, and the temperate grasslands, savannas, and shrublands of Central Asia) establishing the basis for the scaling out of sustainable dryland management to regional and global levels. Expected emission reductions from the Dryland Sustainable Landscapes IP will reach 81.1 Mt CO₂ eq.

16. Through the programming strategy and investments outlined above, the GEF expects to deliver 1.5 billion t CO₂ eq in GHG emission reductions during GEF-7. As of June 30, 2019, the total expected emission reductions from GEF-7 approved projects was 533.5 Mt CO₂ eq. Considering that the total programmed resources during the first year of GEF-7 implementation was 17.9 percent of the GEF-7 CCM allocation (corresponding to \$143.4 million of CCM approvals), it can be inferred that the GEF is on track to deliver on the overall GEF-7 climate mitigation targets.

Capacity-building Initiative on Transparency

17. 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. The GEF Council established the CBIT Trust Fund (CBIT TF) and approved associated programming directions in June 2016. The Council, at its 54th meeting, agreed to extend the CBIT TF to accept remaining contributions and enable programming until October 2018. As of June 30, 2019, fourteen donors had signed their respective contribution agreements, and the Trustee had received the full pledged amount. The total donor contributions to the CBIT TF were \$61.6 million.

18. From late 2016 to October 2018, the GEF Secretariat approved 44 CBIT projects using resources from the CBIT TF. Within two years of its establishment, the CBIT TF successfully programmed all available resources—amounting to \$58.3 million, or 95 percent of the total contributions paid. The amount includes GEF project financing, PPGs, and Agency Fees. A modest amount of resources has been set aside to cover CBIT TF administrative costs until the date of the trust fund's termination on April 30, 2025, which will be 18 months after the final Trustee commitment and cash transfer date of October 31, 2023.

19. The support for the CBIT is an important theme addressed in the CCM Strategy within the GEF-7 Programming Directions. According to the agreed GEF-7 Resource Allocation Framework, \$55.0 million have been notionally allocated to the CBIT.

20. COP 24 welcomed the inclusion of support for the CBIT in GEF-7, which enhances predictability of funding for the Initiative, and requested the GEF to continue to manage the CBIT to fund a diversity of countries and regions, taking into account each country's capacity, in line with priorities of support as contained in its programming.

21. In the reporting period, ten CBIT projects have been approved, including seven national projects in Afghanistan, Armenia, China, Colombia, Equatorial Guinea, India, and Nicaragua, one regional project supporting five eastern and southern African countries, and two global projects that aim to improve knowledge sharing, coordination, and facilitate additional capacity-building.

Of the GEF-7 indicative resources set aside for CBIT from the GEFTF, \$19.8 million (or 36 percent) have been programmed as of June 30, 2019.

Adaptation to Climate Change

22. The GEF provides significant support to climate-vulnerable countries, especially least developed countries (LDCs), for adaptation to climate change. The GEF support for climate change adaptation is provided through the LDCF and the SCCF. In June 2018, the LDCF/SCCF Council approved a new GEF Programming Strategy on Adaptation to Climate Change for the LDCF and SCCF and Operational Improvements for the period 2018-2022.³ The 2018-2022 Adaptation Strategy is 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".⁴ To achieve this goal, the Strategy emphasizes three strategic objectives, namely:

- (a) Reducing vulnerability and increasing 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.

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

24. The LDCF was designed to address the special needs of LDCs under the UNFCCC. From its inception to June 30, 2019, \$1.4 billion has been approved for projects, programs, and EAs, including PPGs and Agency Fees, to meet this mandate, mobilizing an additional \$5.7 billion in co-financing. This includes financing the preparation of 53 National Adaptation Programs of Action (NAPAs), all of which have been completed, and the approval of 223 NAPA implementation and National Adaptation Plan (NAP) process related projects, as well as other elements of the LDC Work Programme.

25. The LDCF received \$71.4 million in new pledges in the reporting period, including a pledge by a sub-national government. As at June 30, 2019, cumulative pledges to the LDCF amounted to \$1.40 billion, of which \$1.37 billion have been received (see Annex 7). As of June 30, 2019, funds available for new LDCF approvals amounted to \$31.4 million.

26. The LDCF has been off to a promising start in GEF-7 to provide timely support to more LDCs. Within 12 months of the new LDCF/SCCF strategy roll-out, 20 LDCs, or 43 percent of the LDCs, have successfully accessed LDCF resources through 17 projects and programs.

27. As outlined in the 2018-2022 Adaptation Strategy, LDCF/SCCF project selection and approval transitioned in GEF-7 to a Work Program model at the start of this reporting period, under which projects selected based on strategic prioritization factors are presented for approval by the LDCF/SCCF Council. The LDCF/SCCF Council has approved two Work Programs in the reporting

³ 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.

⁴ Decision 1/CP.21, paragraph 58.

period. Through these Work Programs, the LDCF supported 17 projects and programs with \$148.3 million, including PPGs and Agency Fees.

28. National adaptation priorities addressed through the 17 projects and programs include climate-smart agriculture and forestry, urban and rural climate resilience enhancement, water resource management, climate-resilient livelihood support, climate-proofing of infrastructure, climate information services and adaptive capacity enhancement of communities through integrated approaches.

29. In terms of impacts and outcomes, contributions of the 17 LDCF projects and programs on the core indicators for the GEF-7 Results Architecture are as follows:

- (a) Number of direct beneficiaries: 6,931,270 persons, of which 3,469,867 are female;
- (b) Area of land under climate-resilient management: 723,009 hectares;
- (c) Number of policies, plans, or development frameworks that mainstream climate resilience: 129 policies and plans; and
- (d) Number of people with enhanced capacity to identify climate risks and/or engage in adaptation measures: 63,670 persons, of which 31,164 are female

30. The GEF has provided \$282.7 million for CCA projects to date, including PPGs and Agency Fees through the SCCF Adaptation Program (SCCF-A), through 67 projects approved for funding, mobilizing over \$2.1 billion in co-financing. The SCCF-B (Program for Technology Transfer) has provided \$60.7 million for 12 projects that support technology transfer including PPGs and Agency Fees, mobilizing \$382.3 million in co-financing.

31. In the reporting period, the GEF Council approved \$1.0 million, including PPGs and Agency Fees, through the SCCF-A to support a highly catalytic project titled *Caribbean Small Island Developing States (SIDS) multi-country soil management initiative for Integrated Landscape Restoration and climate-resilient food systems (CSIDS-SOILCARE)*. It is a GEF multi-trust fund (MTF) project which will mainstream climate resilience in three regional sustainable land management plans and support seven small island developing states (SIDS) to achieve climate resilient land degradation neutrality. No SCCF-B project was approved in the reporting period.

32. As at June 30, 2019, funds available for Council/CEO approval amounted to \$9.0 million and \$5.5 million for the SCCF-A and SCCF-B, respectively.

33. Given the mandate of the LDCF and the SCCF to support the NAP process, total funding from the LDCF towards LDCs' NAP processes amounts to \$74.6 million as at June 30, 2019. 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 (PDR), Niger, Rwanda, Sao Tome and Principe, Senegal, South Sudan and Timor Leste, in addition to targeted technical assistance for tailored one-on-one support that continues to be provided through the LDCF-financed NAP Global Support Program (GSP). 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. In this reporting period, no project was approved to support the NAP processes.

34. Concerted efforts were made to support innovative approaches and concepts by the LDCF and SCCF, in line with the 2018-2022 Adaptation Strategy and utilizing operational improvements. For example, programming of resources with the GEFTF was facilitated as four MTFs, three for LDCF and one for SCCF, to enable integration and synergistic approaches to address multiple global environmental concerns. Also, the two Funds and the GCF collaborated closely to encourage countries to seek practical opportunities for coordinated engagement and to minimize potential overlap.

Technology Transfer

35. 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 (CTCN) and four Regional Climate Technology Transfer and Financing Centers. In the reporting period, under CCM, seven projects and one program with technology transfer objectives were approved with \$64.3 million in GEF funding, including PPGs and Agency Fees, and \$879.5 million in co-financing. For CCA, all 18 projects and programs approved during this reporting period addressed various aspects of adaptation technology transfer. These projects and programs were approved for \$149.3 million from the LDCF (17 projects), and the SCCF (1 project), and \$654.5 million in co-financing.

Enabling Activities

36. Since its inception, the GEF has funded 435 EAs with \$502.7 million from the GEFTF and the LDCF, including PPGs and Agency Fees. Of this amount, 384 EAs have been supported with \$490.5 million in funding (see Table 13 and Table 14) from the GEFTF, in support of NCs, BURs, and Technology Needs Assessments (TNAs). In the reporting period, the GEF financed, through the GEFTF, 14 EAs, amounting to \$23.7 million including Agency Fees for NCs, BURs, and TNAs.

Non-Grant Financing Instruments

37. The GEF has a strong track record supporting private sector investments with a wide array of non-grant instruments including debt, equity, and guarantees. GEF non-grant investments have unlocked early stage financing in renewable energy and energy efficiency and attracted private sector participation in projects designed to deliver climate change benefits. Following the most recent COP guidance on this topic, the GEF is further enhancing its engagement with the private sector on climate technology projects and is further expanding the use of non-grant instruments.

38. The Seventh Replenishment of the GEFTF included a Non-Grant Instrument Program (the GEF-7 NGI Program) which builds on the lessons learned in blended finance during the GEF-6 Non-Grant Instrument Pilot, and expands the non-grant envelope from \$110 million in GEF-6 to \$136 million in GEF-7. In June 2019, the GEF launched a call for proposals to its Partner Agencies, inviting the submission of innovative project concepts and investment opportunities that can use blended finance with a focus on scalability, innovation, and digital and technological solutions that have potential to generate global environmental benefits.⁵

⁵ GEF, 2019, [Call for Proposals GEF-7 Non-Grant Instrument Program](#).

Small Grants Program

39. Since its inception, the Small Grants Program (SGP) has supported more than 23,500 projects implemented by civil society and community-based groups in 131 countries. Among those, 5,189 projects (approximately 23 percent) were community-based CCM projects, totaling over \$153.6 million in GEF funding including PPGs and Agency Fees, and leveraging over \$195.8 million in co-financing.

40. According to the latest SGP annual report, 657 CCM projects were under implementation during the period July 2017 to June 2018, with GEF grants amounting to \$22.2 million and co-financing of \$24.3 million, while 259 projects were completed.

41. In GEF-7, SGP's climate mitigation strategy aims to demonstrate and scale up low carbon, viable technologies and approaches in partnership with private sector and governments that improve community energy access and are in alignment with larger frameworks such as Sustainable Development Goals (SDGs) and Nationally Determined Contributions (NDCs). The focus will be on supporting low-cost, bottom-up energy solutions with potential for carbon emissions reductions through initial catalytic financing using. The purpose is to support the decarbonization efforts and the transition to a low-carbon economy, while laying the groundwork of new infrastructures at community level, addressing energy service needs of rural, urban, and remote communities and entrepreneurs, who cannot get electricity through the central grid and/or cannot get cooking and heating fuels from centralized distribution systems.

42. For the SGP global program (covering currently 110 countries), the GEF approved the first tranche of the GEF SGP global program corresponding to \$64.0 million of GEF financing (or 50 percent of the total approved allocation of \$128 million in GEF-7). Of this amount, approximately \$10.3 million of GEF resources including PPGs and Agency Fees, and \$10.8 million in co-financing will support grants with CCM objectives.

43. In addition, a total of \$12.4 million in GEF financing has been approved for three SGP Upgraded Country Programmes (Brazil, Costa Rica, and India), of which \$3.0 million (or 24.3 percent) will finance grant activities in the area of climate change mitigation.

Gender

44. The GEF's new approach to gender equality reflects the increased recognition by the Parties to the UNFCCC of the importance of involving women and men equally in the development and implementation of national climate policies and projects. The GEF Policy on Gender Equality that came into effect on July 1, 2018, introduces new principles and requirements to address gender equality in the design, implementation, monitoring, and evaluation of GEF programs and projects.⁶

45. To support the implementation of the new Policy, the GEF Gender Implementation Strategy was approved by the GEF Council in June 2018.⁷ The Strategy elaborates on four priority action areas including promoting gender-responsive approaches and results in projects, enhancing capacity of the GEF Secretariat and its partners to address gender equality, increasing GEF's

⁶ GEF, 2017, [Policy on Gender Equality](#), Council Document GEF/C.53/04.

⁷ GEF, 2018, [GEF Gender Implementation Strategy](#), Council Document GEF/C.54/06.

collaboration with partners to generate knowledge on links between gender and the environment, and enhancing GEF's corporate processes for tracking gender equality results.

46. An analysis in May 2019 by the GEF Secretariat of GEF-7 programs and projects suggests that GEF projects are increasingly incorporating gender-responsive approaches.⁸ The analysis further showed that 85 percent of projects explicitly stated that they expect to develop sex disaggregated and gender sensitive indicators, and that 94 percent of projects are expected to contribute to closing gender gaps and promoting gender equality and women's empowerment.

⁸ Review of 47 project concepts, 7 program concepts and 2 Enabling Activities included in GEF-7 Work Programs as of May 2019.

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 25 covers climate change mitigation (CCM), climate change adaptation (CCA), and capacity-building activities from July 1, 2018 to June 30, 2019, which corresponds to fiscal year (FY) 2019. FY 2019 is the first fiscal year of the GEF-7 programming cycle. The GEF-7 replenishment was completed in June 2018 and covers the period from July 2018 to June 2022. This report consists of three parts: (i) GEF's response to the COP 24 and Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA 1) guidance, as well as the conclusions of the Subsidiary Body for Implementation (SBI) 49 and Subsidiary Body for Scientific and Technological Advice (SBSTA) 49; (ii) GEF initiatives; and (iii) GEF achievements in the reporting period.

PART I: GEF'S RESPONSE TO COP GUIDANCE

1. *The Paris Agreement, COP 24 and CMA 1 Decisions, SBI 49 and 48, and SBSTA 49 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. In addition to the Green Climate Fund (GCF) and the GEF, as well as the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF), CMA decided at COP 24 that the Adaptation Fund shall also serve the Paris Agreement, starting January 1, 2019.⁹ The GEF remains 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 three global programs, two regional programs, 17 national projects and 14 Enabling Activities (EAs), totaling \$615.7 million, including Project Preparation Grants (PPGs) and Agency Fees, from the GEF Trust Fund (GEFTF) invested towards climate mitigation (CCM) objectives. In the field of climate change adaptation (CCA), the LDCF and SCCF approved 18 projects/programs with \$149.3 million in total, including PPGs and Agency Fees, to address urgent and immediate needs for CCA support during the reporting period. The Capacity-building Initiative for Transparency (CBIT) continued its operations to program the available resources notionally allocated to the CBIT envelope with the GEF-7 replenishment. During the reporting period, the GEF Secretariat approved two global CBIT projects, including one focusing specifically on the forest sector, one regional program covering eastern and southern African countries, and seven additional national projects.

4. COP 24 provided specific guidance to the GEF, while SBI 49 and SBSTA 49 conclusions also contain matters of relevance for the GEF. Key topics include: appreciation for the seventh replenishment of the GEF (GEF-7); increased integration of climate change priorities into other focal areas and the Impact Programs (IPs); establishment of the private sector advisory group;

⁹ Decision 1/CP.21, paragraph 58.

continuation of capacity-building activities, including those related to the enhanced transparency requirements under the Paris Agreement (CBIT); and the development of improved fiduciary standards, including anti-money-laundering and counter-terrorism finance policies.

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 24 decisions and SBI and SBSTA conclusions.

Table 1: Decisions Adopted by UNFCCC COP 24 and CMA 1, SBI 49 and SBSTA 49 Conclusions, and GEF Responses

UNFCCC COP 24 Decision ¹⁰ / CMA 1 Decision ¹¹ / SBI 49 and SBSTA 49 Conclusions	GEF's Response
COP 24 DECISIONS	
Decision 1/CP.24, Preparations for the implementation of the Paris Agreement and the first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement	
Paragraph 8: <i>Welcomed with appreciation</i> the pledges and announcements of Parties, including pledges to the Green Climate Fund, the Least Developed Countries Fund and the Adaptation Fund, and of international financial institutions, which provide further clarity to and predictability of climate finance flows to 2020.	The GEF appreciates voluntary contributions pledged to the Least Developed Countries Fund and Special Climate Change Fund to support climate adaptation.
Decision 4/CP.24, Report of the Standing Committee on Finance	
Paragraph 14: <i>Requested</i> the Standing Committee on Finance, in preparing on the determination of the needs of developing country Parties related to implementing the Convention and the Paris Agreement, for consideration by the Conference of Parties, starting at its twenty-sixth session (November 2020), and the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, starting at its third session (November 2020), to collaborate, as appropriate, with the operating entities of the Financial Mechanism, the subsidiary and constituted bodies, multilateral and bilateral channels, and observer organizations.	The GEF continues to work closely with the Standing Committee on Finance.
Decision 6/CP.24, Report of the Global Environment Facility to the Conference of the Parties and guidance to the Global Environment Facility	
Paragraph 1: <i>Welcomed</i> the report of the Global Environment Facility to the Conference of the Parties and its addendum, including the responses of the Global Environment Facility to guidance from the Conference of the Parties.	No response needed.
Paragraph 2:	No response needed.

¹⁰ COP 24 decisions are available on the UNFCCC website: <https://unfccc.int/event/cop-24>.

¹¹ CMA 1 Decisions are available on the UNFCCC website: <https://unfccc.int/event/cma-1-3>.

UNFCCC COP 24 Decision ¹⁰ / CMA 1 Decision ¹¹ / SBI 49 and SBSTA 49 Conclusions	GEF's Response
<i>Also welcomed</i> the seventh replenishment of the Global Environment Facility (July 2018 to June 2022).	
Paragraph 3: <i>Recognized with concern</i> the decrease in allocation to the climate change focal area, including the System for Transparent Allocation of Resources, compared with the sixth replenishment.	Through a reinforced focus and enhanced efficiency using synergistic programming, the GEF expects to deliver 1.5 billion metric tons CO ₂ eq in greenhouse gas (GHG) emission reductions in GEF-7. This GHG reduction target is double the GEF-6 corporate 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. The GEF-7 target will be achieved through both focal area investments and Impact Programs (IPs).
Paragraph 4: <i>Urged</i> all Parties that have not made pledges for the seventh replenishment of the Global Environment Facility to do so as soon as possible.	No response needed.
Paragraph 5: <i>Acknowledged</i> the increased integration of climate change priorities into other focal areas and the impact programmes in the seventh replenishment of the Global Environment Facility, as well as the increased focus on innovation and enhanced synergies with other focal areas.	The GEF continues to focus on innovation, synergies, and integration of climate change priorities.
Paragraph 6: <i>Highlighted</i> the importance of enhancing country ownership in the impact programmes of the seventh replenishment of the Global Environment Facility.	<p>The importance of enhancing country ownership is recognized by the GEF. On November 15, 2018, correspondence was sent to all GEF Operational Focal Points (OFPs) inviting Expressions of Interest (EOI) to participate in the GEF-7 IPs. Each EOI required endorsement by the GEF OFP, confirming the country's interest in participating in the IP as well as the amount of System for Transparent Allocation of Resources (STAR) resources the country intended to use for the specific IP.</p> <p>To further enhance transparency and safeguard country ownership, following a decision of the 56th GEF Council, a report on the selection processes of lead Agencies and the recipient countries in the IPs was prepared by the GEF Secretariat and shared with Council.¹²</p>
Paragraph 7: <i>Requested</i> the Global Environment Facility, as appropriate, to ensure that its policies and	The GEF continues to follow its policies and procedures related to the consideration and review of funding proposals in an efficient

¹² GEF, 2019, 56th GEF Council Meeting, [Joint Summary of the Chairs](#), Decision on Agenda Item 13 (2nd decision). Work Program for GEF Trust Fund.

UNFCCC COP 24 Decision ¹⁰ / CMA 1 Decision ¹¹ / SBI 49 and SBSTA 49 Conclusions	GEF's Response
procedures related to the consideration and review of funding proposals are duly followed in an efficient manner.	manner.
Paragraph 8: <i>Looked forward</i> to the projected delivery of greenhouse gas emission reductions in the seventh replenishment period, which is twice the amount planned for the sixth replenishment;	The GEF is monitoring the progress towards achieving the target of delivering 1.5 billion metric tons of CO ₂ eq in GHG emission reductions during GEF-7 and continues to report on the progress made through the GEF Corporate Scorecard presented at each GEF Council.
Paragraph 9: <i>Acknowledged</i> the updated policy on co-financing of the Global Environment Facility, which sets out an ambition for the overall portfolio of the Global Environment Facility to reach an increased ratio of co-financing to its project financing.	The GEF is monitoring the progress in the implementation of the updated policy on co-financing. Information on the level of co-financing leveraged to date is included in Part III of this Report for both CCM and CCA.
Paragraph 10: <i>Recognizes</i> that the Global Environment Facility does not impose minimum thresholds and/or specific types or sources of co-financing or investment mobilized in its review of individual projects and programmes.	No response needed.
Paragraph 11: <i>Welcomes</i> the inclusion of support for the Capacity-building Initiative for Transparency in the seventh replenishment of the Global Environment Facility, which enhances predictability of funding for the Initiative.	The GEF appreciates positive feedback on the CBIT, and will continue to support the countries in the GEF-7 period from the GEFTF as agreed in the replenishment.
Paragraph 12: <i>Requests</i> the Global Environment Facility to continue to manage the Capacity-building Initiative for Transparency to fund a diversity of countries and regions, taking into account each country's capacity, in line with priorities of support as contained in the programming directions of the Capacity-building Initiative for Transparency.	In line with the Paris Agreement and its decision, all developing country Parties have access to the CBIT, upon request. Per the Council-approved CBIT Programming Directions, "the CBIT will seek to fund a diversity of countries and regions, taking into account each country's capacity. Proposals will be prioritized based on demonstrated responsiveness to Paris Agreement transparency requirements under Article 13. Proposals will also be prioritized for those countries that are in most need of capacity-building assistance for transparency-related activities, in particular small island developing States (SIDS) and least developed countries (LDCs)." ¹³ All proposals received from Parties that have ratified/acceded to the Paris Agreement have

¹³ GEF, 2016, [Programming Directions for the Capacity-Building Initiative for Transparency](#), Council Document GEF/C.50/06.

UNFCCC COP 24 Decision ¹⁰ / CMA 1 Decision ¹¹ / SBI 49 and SBSTA 49 Conclusions	GEF's Response
	<p>been reviewed and all have been approved once technically cleared.</p> <p>The CBIT is supporting a diverse set of countries and regions. As of June 30, 2019, the GEF has supported CBIT projects in Africa, Asia, Eastern Europe and Central Asia (ECA), and Latin America and the Caribbean (LAC) as follows:</p> <ul style="list-style-type: none"> • Africa: 16 projects with \$25.4 million • Asia: 10 projects with \$15.1 million • ECA: 7 projects with \$8.9 million • LAC: 14 projects with \$21.5 million • Global: 4 projects with \$7.2 million
<p>Paragraph 13: <i>Invites</i> the Global Environment Facility to enhance the information in its reports to the Conference of the Parties on the outcomes of the collaboration between the Poznan strategic programme on technology transfer's climate technology and finance centres and the Climate Technology Centre and Network.</p>	<p>The GEF continues to provide information to the COP on the outcomes of collaboration between the Poznan strategic programme on technology transfer's climate technology and finance centres and the Climate Technology Center and Network (CTCN) in its annual report to the COP. Relevant information is included in Part III, Section 4 of this report, which focuses on technology transfer.</p>
<p>Paragraph 14: <i>Requests</i> the Global Environment Facility to continue to monitor the geographic and thematic coverage, as well as the effectiveness, efficiency and engagement, of the Global Environment Facility Partnership, and to consider the participation of additional national and regional entities, as appropriate.</p>	<p>The GEF Council has taken note of the GEF-7 policy recommendation requesting the Secretariat continue to monitor the geographic and thematic coverage, as well as the effectiveness, efficiency, and engagement of the GEF Partnership. The GEF Secretariat will report on its findings at the 57th Council meeting in December 2019.¹⁴</p>
<p>Paragraph 15: <i>Welcomes</i> the establishment of the private sector advisory group.</p>	<p>No response needed.</p>
<p>Paragraph 16: <i>Encourages</i> a balanced composition of the private sector advisory group in terms of gender and geographical coverage.</p>	<p>Gender and geographical coverage have been key considerations of the private sector advisory group. The composition of the private sector advisory group is presented in the list below:¹⁵</p> <ol style="list-style-type: none"> 1. Ms. Andrea Alvares, Vice President of Marketing, Innovation and Sustainability, Natura; On behalf of Mr. Guilherme Leal, Co-Founder and Co-Chairman of the Board of Natura Cosmetics, Brazil. Sector: Natural resources, non-timber forest products, other consumer goods.

¹⁴ GEF, 2018, [Strengthening the GEF Partnership](#), Council Document GEF/C.54/08.

¹⁵ GEF, 2018, [Private Sector Advisory Group \(PSAG\) Composition](#), Council Document GEF/C.56/Inf.05.

UNFCCC COP 24 Decision ¹⁰ / CMA 1 Decision ¹¹ / SBI 49 and SBSTA 49 Conclusions	GEF's Response
	<ol style="list-style-type: none"> 2. Mr. Yoshihiro Ikegawa, Managing Corporate Executive Officer of Mitsubishi Chemical Holdings Corporation, Japan; On behalf of the Chairperson, Mr. Yoshimitsu Kobayashi. Sector: Chemicals. 3. Ms. Darian McBain, Global Director of Corporate Affairs and Sustainability, Thai Union Group, Thailand; On behalf of the CEO, Mr. Thiraphong Chansiri. Sector: Fisheries. 4. Mr. Robert Metzke, Global Head of Sustainability of Royal Philips, Netherlands; On behalf of the CEO, Mr. Frans van Houten. Sector: Technology, Electronics, and other consumer goods. 5. Mr. Jeff Turner, Vice President for Corporate Sustainability of Royal DSM, Netherlands; On behalf of the CEO and Chairperson, Mr. Feike Sijbesma. Sector: Food and Nutrition. 6. Ms. Helen Crowley, Head of Sustainable Sourcing and Innovation, Kering, France; On behalf of the CEO, Mr. François-Henri Pinault. Sector: Consumer goods, Jewelry, Natural resources. 7. Mr. Kevin Rabinovitch, Global VP Sustainability, Mars Incorporated, USA; On behalf of the CEO, Mr. Grant Reid. Sector: Agriculture, Food, Natural Resources 8. Mr. Christopher Stewart, Head of Corporate Responsibility and Sustainability of Olam International, Singapore; On behalf of the CEO, Mr. Sunny Verghese. Sector: Agriculture, Food, Natural Resources. 9. Mr. Serge Rajaobelina, CEO of the Livelihoods Fund at Fanamby, Madagascar. Sector: Ecotourism, non-timber forest products, agriculture, natural resources - SME. 10. Mr. Ajay Vir Jakhar, Chairman of Bharat Krishak Samaj, India. Sector: Agriculture, Food and nutrition - SME. 11. Mr. Bey Soo Khiang, Vice-Chairman of Royal Golden Eagle (RGE), Indonesia; On behalf of the Chairman, Mr. Anderson Tanoto. Sector: Agriculture, Food and Nutrition. 12. Mr. Ademola Adesina, CEO of Rensource Energy, Nigeria. Sector: Energy and cities.
<p>Paragraph 17: <i>Welcomes</i> the Global Environment Facility Council's decision to begin the process of developing improved fiduciary standards, including anti-money-laundering and counter-terrorism finance policy and requests the Global Environment Facility to include updates on this work in its report to the Conference of the</p>	<p>During the reporting period, the Council approved minimum requirements for GEF Agencies on Anti-Money Laundering and Combating the Financing of Terrorism (AML-CFT) and requested Agencies to certify that they meet those minimum requirements or present a time-</p>

UNFCCC COP 24 Decision ¹⁰ / CMA 1 Decision ¹¹ / SBI 49 and SBSTA 49 Conclusions	GEF's Response
Parties at its twenty-fifth session (December 2019).	<p>bound action plan to achieve compliance.¹⁶ Following the approval of the minimum standards, GEF Agencies commenced a process of self-certification to ensure a timely roll-out of the new minimum requirements on AML-CFT. In June 2019, the GEF Council reviewed the Status of Agencies' Compliance with Minimum Requirements on AML-CFT.¹⁷</p> <p>Furthermore, during the reporting period, the GEF Secretariat has been carrying out a comprehensive review of the GEF's fiduciary minimum standards for GEF partner Agencies, with a view to presenting an updated policy for Council consideration in December 2019.¹⁸ If approved, an updated policy on minimum fiduciary standards would require a complete, third-party assessment of Agencies' compliance, including on AML-CFT.</p>
<p>Paragraph 18: <i>Requests</i> the Global Environment Facility to review and, if necessary, update or adopt policies for preventing sexual harassment and the abuse of authority with the aim of protecting the staff of the Global Environment Facility secretariat as well as its partner organizations against unwanted sexual advances, preventing inappropriate behaviour and abuse of power and providing guidelines for reporting incidents.</p>	<p>World Bank Group's (WBG) Staff Rules and its Code of Conduct apply to GEF Secretariat staff, who are contractually employees of the WBG. The WBG's Code of Conduct defines sexual harassment as "any unwelcome sexual advance, request for sexual favor, or other verbal, nonverbal, or physical conduct of a sexual nature that interferes with work, is made a condition of employment, or creates an intimidating, hostile, or offensive work environment."¹⁹ The Code sets out that harassment of any kind, including sexual harassment and bullying, is unacceptable. It also sets out that: "The WBG does not expect staff to tolerate sexual harassment from managers, colleagues, or any other WBG stakeholders. Likewise, sexual harassment by staff members toward WBG stakeholders—including clients, partners, vendors, contractors, and conference participants—will not be tolerated."</p>
<p>Paragraph 21: <i>Also requests</i> the Global Environment Facility to include in its annual report to the Conference of the Parties information on the steps that it has taken to implement the guidance provided in this decision.</p>	<p>The present report includes information on the steps taken to implement the guidance received from COP 24.</p>

¹⁶ GEF, 2018, [Minimum Fiduciary Standards for GEF Partner Agencies](#), Council Document GA/PL/02.

¹⁷ GEF, 2019, [Status of Agencies' Compliance with Minimum Requirements on AML-CFT](#), Council Document GEF/C.56/07/Rev.01.

¹⁸ GEF, 2019, [Minimum Fiduciary Standards for GEF Partner Agencies](#), Council Document GEF/C.56/07/Rev.01.

¹⁹ World Bank Group, 2013, [Code of Conduct](#).

UNFCCC COP 24 Decision ¹⁰ / CMA 1 Decision ¹¹ / SBI 49 and SBSTA 49 Conclusions	GEF's Response
Decision 8/CP.24, National adaptation plans	
<p>Paragraph 9: <i>Notes</i> that funding has been made available for developing country Parties under the Green Climate Fund, the Least Developed Countries Fund and the Special Climate Change Fund for the process to formulate and implement national adaptation plans, and that other channels of bilateral, multilateral and domestic support have also contributed significantly to enabling developing countries to advance their work in the process to formulate and implement national adaptation plans.</p>	No response needed.
<p>Paragraph 11: <i>Welcomes</i> the approval by the Least Developed Countries Fund of 11 proposals, as of 30 September 2018, from the least developed countries for funding for the process to formulate and implement national adaptation plans amounting to \$55 million.</p>	The GEF appreciates the positive acknowledgement of the support provided by the LDCF to countries.
Decision 12/CP.24, Review of the Climate Technology Centre and Network	
<p><i>Invited</i> the operating entities of the Financial Mechanism to consider implementing the relevant recommendations referred to in paragraph 1²⁰ above when implementing their further activities relevant to the work of the Climate Technology Centre and Network;</p>	<p>The GEF has been and will continue considering, in collaboration with the CTCN the relevant recommendations within its mandate. For example, the GEF Secretariat personnel met with the CTCN, including at COP 24, SBI 50, and the 17th and 18th Technology Executive Committee (TEC) Meetings in an effort to encourage collaboration between the Poznan Strategic Program (PSP) regional climate technology and finance centres and the CTCN. The CTCN has been encouraged to utilize GEF National Dialogues and Extended Constituency Meetings as entry points to facilitate further coordination with GEF Operational Focal Points to explore potential cooperation in a country-driven manner.</p>
Decision 13/CP.24, Enhancing climate technology development and transfer through the Technology Mechanism	
<p><i>Took note</i> of the collaboration of the Technology Executive Committee and the Climate Technology Centre and Network with the operating entities of the Financial Mechanism, constituted bodies under the Convention and other relevant organizations;</p>	No response needed.
Decision 14/CP.24, Linkages between the Technology Mechanism and the Financial Mechanism of the	

²⁰ Paragraph 1: Notes the management response of the United Nations Environment Programme on the relevant findings and recommendations of the independent review of the effective implementation of the Climate Technology Centre and Network, in response to decision 14/CP.23, paragraph 7.

UNFCCC COP 24 Decision ¹⁰ / CMA 1 Decision ¹¹ / SBI 49 and SBSTA 49 Conclusions	GEF's Response
Convention	
Paragraph 1: <i>Welcomed</i> the information provided by the Technology Executive Committee, the Climate Technology Centre and Network, the Global Environment Facility and the Green Climate Fund on their actions in strengthening the linkages between the Technology Mechanism and the Financial Mechanism in their annual reports to the Conference of the Parties in response to decision 14/CP.22, paragraph 9.	No response needed.
Paragraph 2: <i>Acknowledged</i> the ongoing coordination between the national designated entities for technology development and transfer and the national designated authorities of the Green Climate Fund as well as the Global Environment Facility focal points, and <i>encouraged</i> enhanced coordination in this area.	The GEF appreciates the acknowledgement of the ongoing coordination.
Paragraph 5: <i>Welcomed</i> the support provided for technology development and transfer by the Global Environment Facility and the Green Climate Fund through projects and programmes, including for projects resulting from technology needs assessments.	<p>The GEF continues to support technology development and transfer in GEF-7. Supporting innovation and technology transfer is a strategic objective under the respective strategies of the CCM, as well as the CCA focal areas.</p> <p>Resources from the GEF play a key role in piloting emerging innovative solutions, including technologies, management practices, supportive policies and strategies, and financial tools which foster the development and transfer of technology and innovation. The GEF will continue to support Technology Needs Assessments (TNAs) for LDCs and SIDS through the global set aside under the CCM focal area.</p>
Paragraph 6: <i>Invites</i> developing country Parties to seek support from the Climate Technology Centre and Network to develop and submit technology-related projects, including those resulting from technology needs assessments and from the technical assistance of the Climate Technology Centre and Network, to the operating entities of the Financial Mechanism for implementation, in accordance with their respective policies and processes.	The GEF stands ready to receive country-driven, technology-related project proposals, addressing priorities as identified in the TNAs and CTCN technical assistance.
Paragraph 7: <i>Also invited</i> the Climate Technology Centre and Network to consult with the Green Climate Fund and the Global Environment Facility to identify ways to enhance information-sharing among national designated entities, national designated authorities	This guidance is relevant for the CTCN. The GEF will respond to invitations to consult with the CTCN to discuss the identification of means to enhance information-sharing among national designated authorities and GEF OFPs.

UNFCCC COP 24 Decision ¹⁰ / CMA 1 Decision ¹¹ / SBI 49 and SBSTA 49 Conclusions	GEF's Response
and Global Environment Facility focal points.	
<p>Paragraph 9: Requested the Subsidiary Body for Implementation, at its fifty-third session (November 2020), to take stock of progress in strengthening the linkages between the Technology Mechanism and the Financial Mechanism with a view to recommending a draft decision on this matter, including on the consideration of a conclusion on this matter, for consideration and adoption by the Conference of the Parties at its twenty-sixth session (November 2020).</p>	This guidance is addressed to the SBI.
Decision 15/CP.24, Annual technical progress report of the Paris Committee on Capacity-building	
<p>Paragraph 2: <i>Invited</i> Parties, the operating entities of the Financial Mechanism, the constituted bodies under the Convention, United Nations organizations, observers and other stakeholders to consider the recommendations in the annual technical progress report of the Paris Committee on Capacity-building for 2018 and to take any necessary action, as appropriate and in accordance with their mandates.</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 others, the GEF continues to provide resources for the CBIT, 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.
Decision 16/CP.24, Least developed countries work programme	
<p>Paragraph 4: <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>	No response required.
CMA.1 DECISIONS	
Decision 3/CMA.1, Matters relating to the implementation of the Paris Agreement	
<p>Paragraph 7: <i>Confirmed</i> that the Least Developed Countries Fund and the Special Climate Change Fund shall serve the Paris Agreement;</p>	The GEF is committed to serving the Paris Agreement through the LDCF and the SCCF, in addition to the GEFTF.
Decision 4/CMA.1, Further guidance in relation to the mitigation section of decision 1/CP.21	
<p>Paragraph 1: <i>Reaffirms</i> and <i>underscores</i> that, in accordance with Article 4, paragraph 5, of the Paris Agreement, support shall be provided to developing country Parties for the implementation of Article 4 of the Paris Agreement, including to continue to enhance the capacity of developing country Parties in preparing, communicating and accounting for their nationally determined contributions.</p>	The GEF continues to make resources available for the preparation of NDCs. In addition, through its CBIT support, the GEF is supporting countries to build capacity to meet enhanced transparency requirements as defined in Article 13 of the Paris Agreement, which includes accounting for and enhanced measurement, reporting, and verification (MRV) measures for their NDCs.

UNFCCC COP 24 Decision ¹⁰ / CMA 1 Decision ¹¹ / SBI 49 and SBSTA 49 Conclusions	GEF's Response
<p>Paragraph 2: <i>Encourages</i> the relevant operating entities of the Financial Mechanism and constituted bodies under the Convention serving the Paris Agreement to continue to provide, within their mandates, support for capacity-building as referred to in paragraph 1 above.</p>	
Decision 9/CMA.1, Further guidance in relation to the adaptation communication, including, inter alia, as a component of nationally determined contributions, referred to in Article 7, paragraphs 10 and 11, of the Paris Agreement	
<p>Paragraph 20: <i>Invites</i> the Global Environment Facility, in line with its existing mandate, to consider channeling support to developing country Parties for the preparation and submission of their adaptation communications, as a component of or in conjunction with other communications or documents, including a national adaptation plan, a nationally determined contribution as referred to in Article 4, paragraph 2, of the Paris Agreement, and/or a national communication;</p>	<p>This decision is noted.</p>
<p>Paragraph 21: <i>Encouraged</i> the Green Climate Fund, the Global Environment Facility, the Adaptation Fund, the Climate Technology Centre and Network and the Paris Committee on Capacity-building, in line with their existing mandates and governing instruments, to continue channeling support to developing country Parties for the implementation of their adaptation plans and actions in accordance with the priorities and needs outlined in their adaptation communication;</p>	<p>The GEF, through the LDCF and SCCF, continues to support eligible countries to implement priorities identified in their national adaptation plans and actions.</p>
Decision 11/CMA.1, Matters referred to in paragraphs 41, 42 and 45 of decision 1/CP.21	
<p>Paragraph 25: <i>Took note</i> of the resources available through the operating entities of the Financial Mechanism for strengthening developing country Parties' institutional capacity for programming their priority climate actions and for tracking and reporting climate finance.</p>	<p>No response needed.</p>
<p>Paragraph 28: <i>Invited</i> the operating entities of the Financial Mechanism, in line with their mandates, to seek to ensure that the provision of financial support to developing country Parties is balanced between adaptation and mitigation activities.</p>	<p>The GEF supports adaptation through the LDCF and the SCCF, and mitigation through the GEFTF. Efforts are being made to program available resources effectively.</p>
Decision 18/CMA.1, Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement	
<p>Paragraph 8:</p>	<p>This new guidance is noted, and the GEF has</p>

UNFCCC COP 24 Decision ¹⁰ / CMA 1 Decision ¹¹ / SBI 49 and SBSTA 49 Conclusions	GEF's Response
<i>Urged and requested</i> the Global Environment Facility, as an operating entity of the Financial Mechanism, throughout its replenishment cycles, to support developing country Parties in preparing their first and subsequent biennial transparency reports.	started consultations on how to meet the needs for the biennial transparency reports.
Paragraph 9: <i>Encouraged</i> the Global Environment Facility to consider options for improving the efficiency of the process for providing support for reporting under Article 13 of the Paris Agreement, in particular for addressing the challenges in the application process, including by potentially providing an avenue for Parties to apply for funding for more than one report through the same application in each replenishment period.	Some Parties have utilized the available programming modality to access resources for two Biennial Update Reports (BURs) as one project. The GEF stands ready to assess the feasibility of this request when there is further clarity on the reporting requirement under Article 13.
Paragraph 10: <i>Urged</i> the Global Environment Facility and its implementing and executing agencies and <i>encourages</i> the Global Environment Facility Council to consider options for improving the efficiency of the process for providing support for reporting under Article 13 of the Paris Agreement, including through better streamlining of the processes related to applications, implementation plans and signing of grant agreements.	The GEF is in the process of assessing possible options. This report to the COP also contains information on the timelines of support provided to countries through CBIT projects approved to date, to provide information on the efficiency of process for support provision. ²¹
Paragraph 11: <i>Requested</i> the Global Environment Facility to continue to support the operation of the Capacity-building Initiative for Transparency as a priority reporting-related need.	The GEF continues to support the operation of the CBIT in GEF-7 as a priority reporting-related need through set-aside resources that do not draw on country allocations.
JOINT SBSTA 49 AND SBI 49 CONCLUSIONS²²	
Koronivia joint work on agriculture Paragraph 23: The SBSTA and the SBI also invited the operating entities of the Financial Mechanism, the Adaptation Fund, the Least Developed Countries Fund and the Special Climate Change Fund to contribute to the work of the Koronivia road map and attend the workshops under the Koronivia road map.	The GEF stands ready to contribute to the Koronivia road map and attend the related workshops, according to the needs and invitations from UNFCCC. GEF Secretariat personnel participated in the Koronivia workshops in June 2019 and participated as panelists in two sessions titled "Improved soil carbon, soil health and soil fertility under grassland and cropland as well as integrated systems, including water management" and "Methods and approaches for assessing adaptation, adaptation co-benefits and resilience."

²¹ Please refer to Part III, Section 3.c of this Report.

²² [FCCC/SBSTA/2018/8](https://unfccc.int/eb2018/49/2018/8).

2. Engagement with the UNFCCC

6. The GEF Secretariat took part in the UNFCCC negotiation process, including COP 24 and the Bangkok and Bonn Climate Change Conferences. In addition, the GEF participated in other major UNFCCC-related meetings, such as the Standing Committee on Finance meetings, Least Developed Countries Expert Group meeting, as well as meetings related to the Technology Mechanism, as summarized further in this section.

7. During the reporting period, the GEF participated in COP 24, held December 2-15, 2018, in Katowice, Poland. The GEF report to COP 24, approved by the GEF Council through decision by mail, was submitted to the UNFCCC Secretariat on August 31, 2018.²³ The report summarized support provided to countries through the GEFTF, LDCF, SCCF, as well as the CBIT Trust Fund (CBIT TF). The report contained the guidance to the GEF received from the COP and the GEF responses. An outcome of the GEF-7 replenishment negotiations and a summary of GEF-6 programming were also presented in the GEF report to COP 24.

8. The GEF submitted to the UNFCCC an addendum to the COP report on the status of resources approved by the GEF Secretariat for the preparation of NCs and BURs from Parties not included in Annex I to the Convention on October 12, 2018.

9. The GEF also provided input on work of relevance for the stocktake on pre-2020 ambition and implementation for consideration by COP 24.²⁴

10. At COP 24, the GEF highlighted work to respond to COP 23 guidance and efforts to support the successful implementation of the Paris Agreement, as well as the outcome of the GEF-7 replenishment negotiations and a summary of GEF-6 programming. In particular, the GEF participated in and/or organized several meetings, including the following:

- (a) The GEF gave an intervention on GEF support for mitigation, adaptation, technology transfer, capacity building, and enabling activities to date during the Stocktake on Pre-2020 Implementation and Ambition event, as well as an update on NCs and BURs.
- (b) The GEF CEO participated in the Third High-Level Ministerial Dialogue on Climate Finance, where she spoke of the need for urgent transformation and the successful GEF-7 replenishment.
- (c) Two official GEF side events were organized during the COP: “Transformational Changes Required for a 1.5°C World”; and “Adaptation: Moving from Today’s Lessons to Tomorrow’s Transformation.” The GEF also co-organized several events with CEO engagement, including with the Global Commission on Adaptation (GCA) on “Accelerating Action and Global Support on Adaptation” and with the Global Resilience Partnership on “Taking Nature-based Solutions to Scale for Resilience.”
- (d) The GEF and GCF co-hosted a side event on “Strengthening Collaboration for Supporting Countries in Implementing the Paris Agreement,” co-chaired by the GEF

²³ GEF, 2018, [Report of the GEF to the 24th Session of the COP to the UNFCCC](#).

²⁴ This submission is available at: <https://unfccc.int/topics/pre-2020>.

CEO and the GCF Executive Director ad interim. The GEF CEO and the GEF delegation also participated in the second Annual Dialogue with Climate Finance Delivery Channels, organized by the GCF at the margins of the COP, as summarized in the following section on Complementarity in Climate Finance.

- (e) The GEF delegation participated in contact groups and other sessions 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.
- (f) Furthermore, the GEF Partnership Pavilion hosted a series of events, briefings, launches, and receptions co-organized with many of the GEF's implementing agencies and other partners.
- (g) Events coverage and news articles related to GEF participation in COP 24 are available on the GEF website: <http://www.thegef.org/events/gef-unfccc-cop24>.

11. The GEF Secretariat participated in the following UNFCCC-related meetings and provided updates on the GEF replenishment, programming, responses to COP guidance, thematic programming, and capacity building, among other topics:

- (a) Thirty-Fourth Meeting of the Least Developed Countries Expert Group, August 21-24, 2018;
- (b) Eighteenth UNFCCC Standing Committee on Finance, September 10-12, 2018;
- (c) Twelfth Advisory Board Meeting of the Climate Technology Center and Network (CTCN), October 2-8, 2018;
- (d) Nineteenth UNFCCC Standing Committee on Finance, October 29-31, 2018.
- (e) Twentieth Meeting of the Standing Committee on Finance (virtual participation), March 21-22, 2019, Bonn, Germany;
- (f) Eighteenth Meeting of the Technology Executive Committee, March 25-27, 2019, Copenhagen, Denmark;
- (g) Thirteenth Advisory Board Meeting of the Climate Technology Centre and Network (CTCN), March 27, 2019, Copenhagen, Denmark; and
- (h) Fiftieth session of the Subsidiary Body for Implementation (SBI 50) and Fiftieth session of the Subsidiary Body for Scientific and Technological Advice (SBSTA), June 17-27, 2019, Bonn, Germany.

PART II: GEF INITIATIVES

12. Key initiatives underway to enhance GEF support for CCM and CCA, and for the delivery of global environmental benefits, include the roll out of the GEF-7 IPs, the advances on the GEF-7 agenda on private sector engagement, and the continued engagement with other climate funds to ensure complementarity across sources of climate finance.

13. In addition, the GEF continues to assist countries in moving towards the implementation of the Paris Agreement and COP 24 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 24 decisions, in addition to other GEF initiatives with clear benefits for CCM and CCA that were underway in the reporting period.

1. *GEF-7 Impact Programs*

14. The GEF 2020 Strategy emphasized that achieving objectives of multilateral environmental agreements including the UNFCCC at scale would require focus on tackling the drivers of environmental degradation in an integrated manner. During GEF-6, the GEF launched three Integrated Approach Pilots (IAPs) in the areas of commodity supply chains, food security, and sustainable cities. These pilots provided useful lessons on importance of integrated approach to achieving large-scale global environmental benefits.

15. Building on these lessons, the GEF-7 Programming Directions included opportunities for countries to participate in IPs that collectively address key drivers of environmental degradation in major economic systems at regional and global scales. Three IPs were launched: Food Systems, Land Use, and Restoration (FOLUR); Sustainable Cities; and Sustainable Forest Management (SFM). These IPs offer the potential for the GEF to contribute to systemic and transformational change while achieving global environmental benefits at scale. The details of these programs are provided below²⁵:

16. The *Sustainable Cities Impact Program* aims to promote sustainable and low-carbon urban development in cities by adopting an integrated approach to tackle key drivers of environmental degradation such as urban sprawl, rising consumption and congestion. The program will support city mayors and national governments in their political leadership efforts to adopt sustainable and low-carbon growth of cities. More specifically, it will support integrated land-use planning, infrastructure integration, improved urban governance and access to finance for sustainable and low-carbon infrastructure. The program will strengthen capacity of cities and promote innovative partnerships with private sector and financial institutions.

17. The program will also strengthen the Global Platform on Sustainable Cities created under the GEF-6 IAP to bring cities together in one platform where they can tap into best practices for sustainable urban development, and share their experience with others. In addition to mitigation, the program will also seek to enhance resilience to climate change in cities as part of its integrated

²⁵ Resources for the Sustainable Cities IP have not yet been approved by the GEF Council. The status of approval of the FOLUR and SLM IPs is described below in this report (paragraphs 70 to 73).

approach. The program will contribute significantly to reducing GHG emissions from major cities across the world, and will provide biodiversity and sustainable land management benefits.

18. The *FOLUR Impact Program* seeks to promote transformational shifts in agricultural land use and food systems that are major drivers of environmental degradation around the world. This IP is structured according to four main components: (i) development of integrated landscape management systems; (ii) promotion of sustainable food production practices and responsible commodity value chains; (iii) restoration of natural habitats; and (iv) program coordination, collaboration, and capacity building. This design aims to promote comprehensive land planning, improve governance and align incentives, scale up innovation and practical applications in commodity value chain partnerships, leverage investments through linkage with private and public partners, and promote institutional collaboration in integrated approaches at the country and landscape level.

19. Building on a GEF-6 pilot program, the GEF-7 FOLUR IP will deepen engagement on beef, palm oil, and soy supply chains, and broaden focus to include cocoa and coffee. In addition to promoting deforestation-free agricultural commodity supply chains, the IP will increase sustainability of major food crops (e.g., rice, wheat, maize) to tackle negative externalities, and restore degraded landscapes for sustainable production and ecosystem services. The GEF support will help countries meet the growing demand for increased crop and livestock production, while reducing the risk of further expansion of farmland, erosion of genetic diversity, overexploitation of land and water resources, overuse of chemical fertilizers and pesticides, and inefficient practices that lead to deforestation, biodiversity loss, land degradation, and GHG emissions.

20. The *Sustainable Forests Management Impact Program* focuses on the Amazon, the Congo Basin, and important dryland landscapes around the world that are globally important for biodiversity and carbon storage, and provide livelihoods and subsistence to communities that rely on forests and agriculture for their survival. In these globally important ecosystems, the IP aims to change the future development trajectory from natural resource depletion and biodiversity erosion to one based on natural capital management and productive landscapes. The program will support integrated ecosystem-scale management for maintaining ecological integrity and functioning, while delivering global environmental benefits in these globally important forest biomes and systems.

21. The *Amazon Sustainable Landscapes 2 Impact Program* will help the region move away from a business-as-usual scenario characterized by forest conversion into low productivity cattle ranching and other unsustainable land uses to forest- and freshwater-friendly landscapes.

22. The *Congo Basin Sustainable Landscapes Impact Program* aims to catalyze transformational change in conservation and sustainable management of the Congo Basin through landscape approaches that empower local communities and forest dependent people, and through partnership with the private sector.

23. The *Dryland Sustainable Landscapes Impact Program* strives to avoid, reduce, and reverse further degradation, desertification, and deforestation of land and ecosystems in drylands, through the sustainable management of production landscapes. The Program will transform the management of drylands in selected regions, establishing the basis for upscaling sustainable dryland management to regional and global levels.

24. These three key forest regions are the major ecosystems where an integrated and concerted SFM approach can truly transform the course of development and produce multiple benefits for biodiversity, climate change, and land degradation.

2. *Private Sector Engagement*

25. Since 2008, the GEF has developed a track record of supporting private sector investments with a wide array of non-grant instruments such as debt, equity, and guarantees to attract private sector investment and de-risk investments with potential to generate global environmental benefits. These financial instruments were used in blended finance structures that unlocked early stage financing in climate technology projects and ensured the private sector participation in projects leading to climate change benefits.

26. The UNFCCC guidance to the GEF received during COP 23 in Bonn in 2017 encouraged the GEF to further enhance engagement with the private sector for the development of climate technology projects and to further expand the use of non-grant instruments. The Seventh Replenishment of the GEFTF included a Non-Grant Instrument Program (the GEF-7 NGI Program) which builds on the lessons learned in blended finance with the GEF-6 Non-Grant Instrument Pilot, and expands the non-grant envelope from \$110 million in GEF-6 to \$136 million in GEF-7.

27. In June 2019, the GEF launched a call for proposals to its Partner Agencies, inviting the submission of innovative project concepts and investment opportunities that can use blended finance with a focus on scalability, innovation, and digital and technological solutions that have potential to generate global environmental benefits. The GEF also formalized collaboration with an Ad Hoc Working Group of Financial Experts to assist the GEF Secretariat in the technical and financial review of the project proposals. The GEF expects to have the first batch of projects ready to be presented to the 57th GEF Council Meeting in December 2019.

3. *Complementarity in Climate Finance*

28. Efforts to enhance complementarity with the GCF have continued in the reporting period, in response to COP guidance.

29. The GCF and GEF Secretariats continued joint efforts to roll out the coordinated engagement pilot at the country level, where interested countries would seek to explore planning and programming of GEF and GCF resources to enhance synergies and maximize benefits and impacts.

30. Following the Informal Ministerial Dialogue held in June 2018 during the GEF-6 Assembly, the two Secretariats wrote jointly to countries that expressed interest in participating in the coordinated engagement pilot, requesting them to initiate a bilateral dialogue to explore potential next steps. These countries were: Albania, Chile, Costa Rica, Cote d'Ivoire, El Salvador, Ethiopia, Lao PDR, Mauritius, Micronesia, Namibia, Togo, and Tonga. Additional countries have also expressed interest informally.

31. Preliminary discussions on joint programming were held with a number of countries at the margins of COP 24 in December 2018. These countries are expected to develop their country programming and planning document in 2019, in partnership with the GCF and GEF. Informal discussions with a number of Agencies were also held at the margins of the 56th GEF Council Meeting in June 2019 to exchange ideas about possible modalities. Both Secretariats are working

with countries to identify suitable joint programming possibilities, taking into consideration the different project cycles, agencies, and national focal points for the two funds.

32. A joint GEF-GCF National Dialogue was also held in Lao PDR, on February 12-14, 2019. The two funds presented their policies, project cycle, and approach to programming at the dialogue, attended by 150 people and chaired all three days by the Vice Minister. Several positive institutional coordination measures were agreed, including the establishment of a GEF/GCF Committee to jointly discuss proposals for both funds and country programming needs, the National Adaptation Plan (NAP) GEF/GCF Coordination Mechanism, and other technical level dialogues.

33. The two Secretariats exchanged information on proposals submitted for NAP preparations and implementation, to minimize overlapping support, and to enhance coordination. Projects presented for the December 2018 and June 2019 LDCF/SCCF work program consideration reflect outcomes of such consultations. The section on Climate Change Adaptation below further describes collaboration between the two funds to support adaptation efforts in LDCs.

34. The two Secretariats collaborated on a number of events at COP 24 in December 2018, including the following:

- (a) The GEF and GCF co-hosted a side event on “Strengthening Collaboration for Supporting Countries in Implementing the Paris Agreement” on December 12, 2018. The event offered an opportunity for stakeholders that expressed interest in the pilot initiative to share their views on opportunities and challenges in national efforts for Paris Agreement implementation, and how they can be addressed through enhanced linkages and synergies between the GEF and the GCF. It was co-chaired by the GEF CEO and the GCF Executive Director ad interim.
- (b) The GEF CEO and Chairperson and the delegation participated in the second Annual Dialogue with Climate Finance Delivery Channels, organized by the GCF on December 13, 2018 at the margins of the COP. This event was intended to provide a forum for the exchange of views and for the exploration of new areas of cooperation between providers of climate finance.

35. The GCF Secretariat personnel attended the 55th GEF Council and 25th LDCF/SCCF Council Meetings in December 2018 as an observer.

36. A representative of the GEF Secretariat participated in the First Consultation Meeting for the First Replenishment of the GCF, held in Oslo, Norway, April 4-5, 2019.

37. The GEF CEO and new GCF Executive Director held a bilateral meeting to discuss cooperation at the margins of the 2019 World Bank Spring Meetings in April 2019. The CEO and the Executive Director agreed to further strengthen cooperation at the Secretariat level and through a coordinated engagement pilot.

38. GCF Secretariat personnel were invited to take part in the GEF regional and national consultations. GEF Secretariat personnel also continued to take part in GCF consultations with countries, including the following:

- (a) GCF Structured Dialogue for the Pacific Region, July 30-August 2, 2018.
- (b) GCF Structured Dialogue for the Eastern Europe and Central Asia Region, September 10-12, 2018.

39. Upon request from the GEF Secretariat, the GCF Secretariat personnel reviewed expressions of interest under the FOLUR IP as an external expert of the review committee in March 2019.

4. Gender Equality

40. GEF's new approach to gender equality reflects the increased recognition by the Parties to the UNFCCC of the importance of involving women and men equally in the development and implementation of national climate policies and projects. The GEF Policy on Gender Equality (hereafter Policy) that came into effect on July 1, 2018 introduces new principles and requirements to address gender equality in the design, implementation, monitoring, and evaluation of all GEF financed activities.²⁶

41. To support the implementation of the new Policy, the GEF Gender Implementation Strategy (hereafter Strategy), was approved by the GEF Council in June 2018.²⁷ The Strategy 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.

42. In line with the Strategy, the GEF has, during this reporting period, among other things, promoted the Guidance to Advance Gender Equality and Women's Empowerment in GEF Programs and Projects and the Open Online Course on Gender and Environment developed by the GEF, UNDP, and the GEF Small Grants Programme (SGP) in close collaboration with members of the GEF Gender Partnership, including the International Union for Conservation of Nature (IUCN), UN Women, UN Environment Programme (UNEP), and the Secretariats of the Multilateral Environmental Agreements that the GEF serves, including the UNFCCC Secretariat.^{28,29}

43. In May 2019, the GEF Secretariat conducted an analysis of GEF-7 programs and projects which suggests that the Secretariat's activities, guided by the Strategy, are contributing to the effective operationalization of the Policy. The findings validate that projects are incorporating gender-responsive approaches in the design of GEF projects. The findings also suggest that the launch of the GEF gender tagging system helped to: (i) ensure policy compliance; (ii) prompt considerations on gender early in the project cycle; and (iii) capture expected portfolio results across key dimensions of gender equality.

44. The detailed analysis of GEF-7 project concepts confirm that projects are considering gender and include plans to carry out gender responsive measures as part of their respective project

²⁶ GEF, 2017, [Policy on Gender Equality](#), Council Document SD/PL/02.

²⁷ GEF, 2018, [GEF Gender Implementation Strategy](#), Council Document GEF/C.54/06.

²⁸ GEF, 2018, [Guidance to Advance Gender Equality and Women's Empowerment in GEF Programs and Projects](#), Council Document GEF/C.54/Inf.05.

²⁹ GEF, 2018, [Open Online Course on Gender and Environment](#).

development, implementation and monitoring activities. It further showed that 85 percent of projects explicitly stated that they expect to develop sex disaggregated and gender sensitive indicators; and that 94 percent of projects are tagged to contribute to closing gender gaps and promoting gender equality and women's empowerment. Specifically:

- (a) 80 percent of projects expect to improve the participation and decision-making of women in natural resources governance, including addressing adverse gender norms, women's time constraints, and other socioeconomic and cultural barriers that deny women the same opportunities as men to participate in decision-making related to the management and use of natural resources at local, national, and regional levels.
- (b) 70 percent of projects expect to target socio-economic benefits and services for women, including supporting alternative income generating activities and providing targeted training as well as capacity development and financing for women.
- (c) 40 percent of projects expect to contribute to granting women and men more equal access to and control of natural resources, including explicitly engaging women in land use planning activities, raising awareness of women's rights and improving women's access to productive inputs.

45. In line with the Strategy, GEF programs, including the IPs, have incorporated relevant information, including the number of direct beneficiaries disaggregated by gender, and measures to mainstream gender and address gender gaps, such as:

- (a) Ensuring women's participation and role in natural resources decision-making processes;
- (b) Targeting women as specific beneficiaries and investing in women's skills and capacity; and
- (c) Supporting women's improved access, use, and control of natural resources.

46. Analysis of recent EAs further found that projects supporting the preparation of NCs and BURs to the UNFCCC, for example, are recognizing that these processes can be meaningful entry points for training, awareness-raising and capacity-building to ensure women's equal engagement in and benefits from climate change action. Some projects specifically note that they will be, for example, guided by:

- (a) UNFCCC Gender Action Plan;
- (b) Guidance to advance gender equality in GEF projects and programs; and
- (c) Gender Responsive National Communications Toolkit developed by UNDP.

47. The Secretariat will continue its efforts to support the implementation of the Policy, to assess projects and programs, as well as to monitor and report on portfolio level progress and results. The Secretariat, in collaboration with agencies and the GEF Gender Partnership, will increasingly place its efforts, in the next year, on capacity building, knowledge sharing, learning, and communication.

PART III: GEF ACHIEVEMENTS

1. Climate Change Mitigation

a. Overview of GEF Support for Mitigation

48. Since its establishment in 1991, the GEF has been funding projects with CCM objectives in developing countries and countries with economies in transition (CEIT). As of June 30, 2019, the GEF has funded 972 projects on CCM with more than \$6.2 billion GEF funding, including PPGs and Agency Fees, in over 165 countries. The GEF funding leveraged over \$52.4 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 1 (GEF) to 8.5 (co-financing).³⁰

49. In addition, the GEF has supported 384 EAs, including NCs, BURs and TNAs, with \$490.5 million, including PPGs and Agency Fees from the GEFTF (see Table 13 and Table 14). The GEF's support to EAs is described in Part III, Section 5.

50. Out of 972 projects that were implemented in developing countries and CEIT (Table 2), 26.6 percent were in Africa, 30.2 percent in Asia, 18.5 percent in LAC, and 16.4 percent in ECA. In addition, 80 projects were funded with global or regional scope, accounting for 8.2 percent of the overall CCM portfolio.

51. Seventeen 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.

52. Table 3 presents these 972 projects by GEF phase and categorizes them by areas, including technology transfer, energy efficiency, renewable energy, sustainable transport, and urban systems, AFOLU, SGP, and mixed and others. They also include projects with multiple CCM objectives and multi-focal area (MFA) projects that have direct impact on GHG emission reductions. The total combined share of energy efficiency and renewable energy projects is significant, accounting for approximately 51 percent in terms of total number of projects, and 40 percent in terms of total CCM funding. The AFOLU sector accounts for 19 percent of the total project number and 29 percent of the total CCM funding. The sustainable transport and urban systems projects accounts for 10 percent in terms of total number of projects and 10 percent of the total CCM funding.

53. 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.

³⁰ The co-financing ratio is calculated in accordance with the GEF Updated Co-financing Policy, including EAs but excluding PPGs and Agency Fees (GEF, 2018, [Updated Co-financing Policy](#), Council Document GEF/C.54/10/Rev.01).

**Table 2: GEF Projects on Climate Change Mitigation by Region
(Excluding EAs and CBIT Trust Fund^a projects)**

Region	Projects		GEF amount ^b		Co-financing ^c		Co-financing ratio ^d
	Number	Share	\$ millions	Share	\$ millions	Share	
Africa	259	26.6%	1,309.9	20.9%	9,394.8	18.0%	8.0
Asia	294	30.2%	1,933.7	30.8%	22,240.6	42.6%	12.6
ECA	159	16.4%	773.1	12.3%	6,844.1	13.1%	9.8
LAC	180	18.5%	1,271.2	20.3%	8,590.1	16.5%	7.5
Global	69	7.1%	899.6	14.4%	4,374.6	8.4%	5.2
Regional	11	1.1%	83.1	1.3%	712.4	1.4%	9.4
Total	972	100.0%	6,270.6	100.0%	52,156.7	100.0%	9.1

^a CBIT projects funded by the CBIT TF are not included here. Since GEF-7, they have been funded by the GEF TF. Those are included.

^b These amounts include all focal area contributions to climate change, including Agency Fees and PPGs. The total includes \$1.8 billion from other focal areas and set-asides, including IAPs and non-grant instruments.

^c These numbers include actual and expected co-financing.

^d The co-financing ratio has been calculated based on GEF project grant only.

Table 3: GEF Projects on Climate Change Mitigation by Phase (Excluding EAs and CBIT Trust Fund projects) (In \$ Million)

Phase		Technology Transfer/ Innovative Low-Carbon Technologies ^b	Energy Efficiency	Renewable Energy	Transport /Urban	AFOLU ^c	SGP ^d	Mixed & Others ^e	Grand Total
GEF Pilot (1991-1994)	Number of Projects	2	7	12	2	2	0	3	28
	GEF Amount	10.1	33.3	94.5	9.0	4.0	-	46.7	197.6
	Co-financing	0.1	341.2	1,848.0	2.0	0.1	-	145.9	2,337.2
GEF-1 (1994-1998)	Number of Projects	2	16	16	0	0	0	6	40
	GEF Amount	8.2	134.4	146.9	-	-	-	27.0	316.4
	Co-financing	6.2	447.5	809.7	-	-	-	94.5	1,357.8
GEF-2 (1998-2002)	Number of Projects	6	32	44	6	1	0	6	95
	GEF Amount	102.3	189.9	227.8	30.0	0.9	-	19.1	570.1
	Co-financing	827.8	2,025.4	1,097.8	28.3	1.0	-	182.9	4,163.3
GEF-3 (2002-2006)	Number of Projects	4	29	53	13	0	0	14	113
	GEF Amount	64.6	228.2	248.6	88.8	-	-	76.3	706.5
	Co-financing	309.2	1,310.1	1,462.3	886.1	-	-	348.4	4,316.0
GEF-4 (2006-2010)	Number of Projects	9	83	47	20	25	3	15	202
	GEF Amount	46.3	382.5	117.8	110.9	121.5	65.3	88.6	932.9
	Co-financing	215.2	3,747.4	855.7	2,082.7	870.9	44.5	490.4	8,306.8
GEF-5 (2010-2014)	Number of Projects	37	38	56	26	69	10	17	253
	GEF Amount	221.5	199.1	206.6	124.2	515.9	159.0	105.7	1,532.0
	Co-financing	1,787.9	4,355.7	2,022.5	2,554.1	2,386.8	160.5	1,046.1	14,313.7
GEF-6 (2014-2018)	Number of Projects	12	26	32	32	80	13	24	219
	GEF Amount	32.8	118.1	169.0	249.1	695.1	76.0	83.0	1,423.0
	Co-financing	161.1	1,249.3	2,770.0	3,525.2	4,562.5	105.3	622.3	12,995.8
GEF-7 FY 2019	Number of Projects	0	4	2	1	4	3	8	22
	GEF Amount	-	14.2	10.3	32.7	495.5	12.4	26.8	592.0
	Co-financing	-	281.6	98.7	433.1	3,452.5	26.4	73.9	4,366.2
Total	Number of Projects	72	235	262	100	181	29	93	972
	GEF Amount	485.7	1,299.8	1,221.5	644.7	1,833.0	312.6	473.3	6,270.6
	Co-financing	3,307.4	13,758.2	10,964.8	9,511.6	11,273.7	336.8	3,004.3	52,156.7

^a CBIT projects were funded by the CBIT TF in GEF-6. Since GEF-7, they have been funded by the GEFTF.

^b 'Technology Transfer' (TT) means 'special initiative on technology transfer' up to GEF-4, 'promoting innovative low-carbon technologies (LCTs)' in GEF-5 and 'promoting timely development, demonstration, and financing of LCTs and CCM options' in GEF-6.

^c 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.

^d In addition to 29 GEF SGP projects 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.

^e Mixed projects are projects with multiple CCM objectives. '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. In GEF-7, others include seven CBIT projects.

^f These numbers include actual and expected co-financing.

b. GEF-7 Programming Directions

54. The Programming Directions for the GEF-7 period (July 2018 to June 2022) were endorsed at the 54th GEF Council Meeting in June 2018. The GEF-7 Programming Directions build upon focal area investments and IPs, aiming to transform urban, food, and land use systems to deliver lasting benefits across all multilateral environmental agreements that the GEF serves. The 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.

55. The GEF-7 CCM 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.

56. Focal area investments include de-centralized renewable energy with energy storage, electric drive technologies and electric mobility, accelerating energy efficiency adoption and cleantech innovation.

57. The Updated Results Architecture for GEF-7 applies to all GEFTF projects and programs, and consists of 11 Core Indicators, and several Sub-Indicators.³¹ The Core Indicators and Sub-Indicators relevant for CCM are referenced below, in Table 4:

Table 4: GEF-7 CCM-relevant Core Indicators and Sub-Indicators

Indicator	Unit
Greenhouse gas emissions mitigated	Mt CO ₂ eq
Carbon sequestered or emissions avoided in the sector of Agriculture, Forestry and Other Land Use	Mt CO ₂ eq
Emissions avoided	Mt CO ₂ eq
Energy saved	MJ
Increase in installed renewable energy capacity per technology	MW
Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	Number of people (sex disaggregated)

c. Achievements in the Reporting Period

58. In the reporting period, the GEF programmed \$615.7 million, including PPGs and Agency Fees, from the GEFTF for activities expected to generate CCM benefits, of which \$143.4 million were drawn from the CCM focal area and the rest from other GEF focal areas and incentive set-asides. These resources supported 5 programs, 17 CCM projects and 14 EAs. These 36 programs and projects are expected to leverage approximately \$4.4 billion in co-financing, resulting in a co-financing ratio of one (GEF) to 7.8 (co-financing).³² Out of the 22 projects and programs excluding

³¹ GEF 2018, [Updated Results Architecture for GEF-7](#), C.54/11/Rev.02.

³² The co-financing ratio is calculated in accordance with the 2018 GEF Updated Co-financing Policy.

14 EAs (EAs are covered in Part III, Section 5 of this report), 4 were medium-sized projects (MSPs) and 18 were full-sized projects (FSPs). These 22 projects received \$592.0 million in GEFTF resources. Annex 2 lists the CCM projects, programs and EAs approved under the GEFTF in the reporting period.

59. The 22 projects and programs with mitigation potential approved in the reporting period are expected to avoid or sequester 533.5 million metric tons of carbon dioxide equivalent (Mt CO₂ eq) in total over their lifetime. They are distributed across 15 countries in 4 regions and include regional and global projects. Five projects are in Africa, 5 are in Asia and the Pacific, 5 are in LAC and 4 are in ECA, while 3 are global. Regional distribution of GEF mitigation-relevant investments is \$81.2 million (14 percent) for the African region, \$16.2 million (3 percent) for Asia and the Pacific, \$110.2 million (19 percent) for LAC, \$14.7 million for ECA (2 percent) and \$369.7 million (62 percent) for global projects.

60. Of the 22 CCM projects and programs, 8 projects (36 percent) are categorized as MFA projects, meaning project components and funding support are aligned with other GEF strategic objectives, such as land degradation, biodiversity, and chemicals and waste. Table 5 shows the distribution of funding for stand-alone and MFA projects.

61. Of the 22 CCM projects and programs, four focus on energy efficiency; two on renewable energy; one on sustainable transport and urban systems; four on AFOLU; and eight have mixed or other objectives (including CBIT projects funded by the GEFTF). In addition, there are three SGP projects.

62. Table 6 summarizes estimated emission reductions per type of projects and programs.

63. The 22 projects and programs (including four multi-Agency programs) are implemented by 13 GEF Agencies. The UNDP has the largest share in terms of number of projects (9, or 41 percent), followed by the UNEP (3, or 14 percent), the Food and Agriculture Organization of the United Nations (FAO) (2, or 9 percent), and Conservation International (CI), the European Bank for Reconstruction and Development (EBRD), Foreign Economic Cooperation Office (FECO) and the World Bank (1, or 4 percent each). The World Wide Fund for Nature (WWF), IUCN, the International Fund for Agricultural Development (IFAD) and UNIDO are participating in two or more of the multi-Agency programs. In this reporting period, the multi-Agency projects and programs have the largest share (84 percent) of programming.

64. In addition to financing the implementation of projects, the GEF assists eligible countries at their request with the preparation of projects, through PPGs. In the reporting period, the GEF provided a total of \$1.3 million in PPGs from the GEFTF for the preparation of 16 projects out of the 22 total projects and programs approved.

65. Finally, over the reporting period, 25 projects received CEO approval or endorsement after the successful submission of their full project proposals. These GEF-6 projects include 15 FSPs and 10 MSPs, of which 14 are CCM projects and 11 are MFAs.

Table 5: 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^a</i>	<i>Others^b</i>	<i>Total</i>
GEF – 4 (2006-2010)	176	26	202	783.6	149.4	-	933.0
GEF – 5 (2010-2014)	167	86	253	1,041.1	466.9	23.9	1,531.9
GEF – 6 (2014-2018)	109	110	219	716.4	706.6	-	1,423.0
GEF - 7 ^c (2018-2022)	14	8	22	119.7	472.2	-	592.0
Total	466	230	696	2,660.8	1,795.1	23.9	4,479.8

^aIncludes funding from SFM, IAP set-aside, IP set-aside, non-grant instruments set-aside, in addition to other focal areas.

^bLDCF/SCCF funding.

^cAs of June 30, 2019.

Table 6: Expected Results from Projects and Programs Approved in the Reporting Period

<i>Type of projects and programs</i>	<i>Total GHG emission reductions (Mt CO₂ eq)</i>	<i>Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment</i>		
		<i>Female</i>	<i>Male</i>	<i>Total</i>
<i>Technology Transfer/Innovative LCTs</i>	-	-	-	-
<i>Energy Efficiency</i>	13.8	30,735	55,845	86,580
<i>Renewable Energy</i>	9.0	250	250	500
<i>Urban/Transport</i>	67.6	158,288	159,942	318,230
<i>AFOLU</i>	442.0	3,276,339	3,247,005	6,523,344
<i>Mixed/others</i>	1.1	6,615	7,275	13,890
Total	533.5	3,486,007	3,247,005	6,523,344

d. GEF Support for Key Mitigation Sectors

66. The thematic scope of the GEF portfolio of CCM projects has significantly changed in GEF-7 compared to the previous replenishment cycles. In particular, the development of CCM projects has moved towards more integrated projects with multisectoral approaches aimed at generating the transformation of key economic systems. 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

67. In the reporting period, four projects with energy efficiency components were approved with funding amounting to \$14.2 million. These four projects leveraged co-financing of \$281.6 million and targeted to mitigate 13.8 Mt CO₂ eq. These projects are aligned with a key entry point, “Accelerating energy efficiency adoption,” under Objective 1 of the GEF-7 Climate Change Programming Directions. For example, the GEF/UNEP project, *Accelerating Construction of Energy Efficient Green Housing Units*, will invest in setting up a financing mechanism to provide incentives for the development energy efficient housing units linked to a newly established labelling scheme in Thailand. This project will achieve 0.4 Mt CO₂ eq of direct GHG emission reduction from home construction between 2022 and 2024 and will influence the national housing markets, expecting 2.1 Mt CO₂ eq of indirect GHG emission reduction in 2020-2030. The GEF’s \$3.1 million grant is leveraging \$31.3 million in co-financing.

d.2. Renewable Energy

68. The GEF supported two renewable energy projects in the reporting period, facilitating the transfer of solid waste- and biomass-to-power generation technologies. The GEF funding to these two projects amounted to \$10.3 million, leveraging \$98.7 million in co-financing. Expected GHG emission reductions amount to 9.0 Mt CO₂ eq. These renewable energy projects are aligned with a key entry point, “De-centralized renewable power with energy storage” under Objective 1 of the GEF-7 CCM Strategy. They are expected to entail significant positive impacts on other environmental and developmental issues in developing countries beyond emission reductions. One project example is *Sustainable Bioenergy Value Chain Innovations* in Ukraine. The objective of the project is to promote investment in innovative bioenergy technologies and practices associated with the use of agricultural residues and wastes in the country. The \$4.8 million grant by the GEF will mobilize a loan of \$51.0 million as investment capital from the EBRD, the implementing agency for this project, to support the deployment of biomass to power generation technologies in Ukraine. The project will directly mitigate at least 1.5 Mt CO₂ eq.

d.3. Sustainable Transport and Urban Systems

69. The GEF supported one program in the reporting period, titled *Global Programme to Support Countries with the Shift to Electric Mobility*, with GEF funding of \$32.7 million, including PPGs and Agency Fees, and \$433.1 million in co-financing. The total targeted emission reductions are estimated to be 67.6 Mt CO₂ eq. This program is aligned with a key entry point, “Electric drive technologies and electric mobility,” under Objective 1 of the GEF-7 CCM Strategy. The key objectives of the program are to de-risk investments in electric vehicles through demonstration projects and to support participating countries in developing country and context-specific policies and incentives for electric mobility. The Program will include a cohort of 17 national child projects (Antigua and Barbuda, Armenia, Burundi, Chile, Costa Rica, India, Cote d’Ivoire, Jamaica, Madagascar, Maldives, Peru, Saint Lucia, Seychelles, Sierra Leone, Togo, Ukraine, and Uzbekistan), complemented by a global child project. All child projects under this program will involve local governments and administrations as potential stakeholders and project partners.

d.4. AFOLU

70. The GEF-7 Programming Directions channel CCM resources to the AFOLU sector through the FOLUR IP and the SFM IP. The 56th GEF Council Meeting held in June 2019 approved these IPs, which are also described in the earlier section on GEF Impact Programs.

71. The FOLUR IP is supported with GEF funding amounting to \$232.5 million, of which GEF project financing is \$213.3 million including \$16.1 million from CCM allocation. This IP currently includes 18 countries: Burundi, China, Colombia, Cote d'Ivoire, Ethiopia, Ghana, Guatemala, Indonesia, Kazakhstan, Liberia, Malaysia, Mexico, Papua New Guinea, Peru, Tanzania, Thailand, Ukraine, and Viet Nam. As the total resource for this IP is \$430 million, a second call for and selection of country concepts will be carried out during the second half of 2019.

72. The SFM IP is composed of the following three programs:

- (a) *Amazon Sustainable Landscapes 2 IP* (GEF funding of \$96.3 million, of which project financing is \$88.3 million including \$4.5 million from CCM allocation). Seven countries are participating: Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru and Suriname.
- (b) *Congo Basin Sustainable Landscapes IP* (GEF funding of \$62.3 million, of which project financing is \$57.2 million including \$3.8 million from CCM allocation). Six countries are participating: Cameroon, Central African Republic, Congo, the Democratic Republic of the Congo, Equatorial Guinea, and Gabon.
- (c) *Dryland Sustainable Landscapes IP* (GEF funding of \$104.5 million, of which project financing is \$95.8 million including \$9.2 million from CCM allocation). Eleven countries are participating: Angola, Botswana, Burkina Faso, Kazakhstan, Kenya, Malawi, Mongolia, Mozambique, Namibia, Tanzania, and Zimbabwe.

73. The integrated approach promoted by the FOLUR and SFM IPs is expected to generate significant mitigation benefits for the CCM investments. With participation from 40 countries and a total investment of \$495.5 million including PPGs and Agency Fees (of which \$454.6 million is project financing) approved over the reporting period, which leverages an estimated additional co-financing of \$3,452.5 million, the two IPs are expected to mitigate or avoid a total of 442.0 Mt CO₂ eq. To achieve this, participating countries used \$36.7 million total, including PPGs and Agency Fees, from their national CCM STAR allocations.

d.5. Mixed and Others

74. In the reporting period, the GEF supported one project that was categorized as mixed. The GEF/UNDP *Green Sharm El Sheikh* project is an MFA project which aims to turn Sharm El Sheikh into a model, integrated and ecologically sustainable, tourism city by reviving and upgrading the *Green Sharm Initiative* announced in 2010. This project will promote low-carbon technologies (e.g., energy efficiency, solar energy, more efficient use of desalinated water), improved solid waste management, and further-enhanced protection of the surrounding marine biodiversity. This project will achieve 1.1 Mt CO₂ eq. The \$6.2 million GEF grant is leveraging \$66.1 million in co-financing. Seven CBIT projects approved in the reporting period with CCM set-aside funding were categorized as others. These are described in Annex 2, while the CBIT is further discussed in Part III, Section 3.

e. *Small Grants Program for Climate Change Mitigation*

75. Since its launch in 1992, the GEF SGP, implemented by UNDP, has been actively supporting community-based actions that lead to global environmental benefits and sustainable development. In GEF-6, the GEF approved 15 FSPs with climate change components for the SGP, amounting to \$76.0 million in GEF resources and leveraging \$108.6 million in co-financing. Among the 15 FSPs, 11 were upgraded SGP country programs and four were global programs covering an additional 110 countries.

76. During the reporting period, the GEF approved four FSPs with climate change components under the SGP for implementation in GEF-7, as follows: one SGP Global Project with \$10.3 million programmed for the climate change component, which is expected to leverage \$10.8 million in co-financing; and three upgraded SGP country programs (Brazil, Costa Rica, and India) with climate change components amounting to approximately \$3.0 million in GEF resources, including PPGs and Agency Fees, and which are expected to leverage co-financing of \$7.1 million.

77. 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 projects that address global environmental and sustainable development issues. Since its inception, the GEF SGP supported a cumulative total of more than 23,500 projects implemented by civil society groups in 131 countries, across all GEF focal areas. In the CCM focal area, the GEF has cumulatively supported 5,189 community-based CCM projects (about 23 percent of the overall SGP portfolio) totaling over \$153.6 million, and leveraged over \$195.8 million in co-financing.

78. According to the latest FY 2017 SGP annual report (July 2017 to June 2018), 657 CCM projects were under implementation with GEF grants amounting to \$22.2 million, with co-financing of \$24.3 million.³³ Additionally, 259 projects were completed, with the majority of the portfolio focused on applying low-carbon technologies (67 percent), with renewable energy projects comprising 35 percent and energy efficiency solutions 32 percent. Projects on the conservation and enhancement of carbon stocks accounted for 31 percent. Thirty-one percent of reporting country programs (36 countries) addressed community-level barriers to deployment of CCM technologies. SGP projects also influenced 189,254 hectares of forests and non-forest lands through restoration and enhancement of carbon stocks. Eighty typologies of community-oriented and locally adapted energy access solutions were demonstrated, scaled up and replicated, and 2,412 communities achieved energy access with locally adapted community solutions. In total, 30,729 households benefitted from energy access co-benefits, including increased income, health and improved environmental services.

79. In GEF-7, SGP's climate mitigation strategy aims to demonstrate and scale up low-carbon, viable technologies and approaches in partnership with private sector and governments that improve community energy access, in alignment with larger frameworks such as SDGs and NDCs. The focus of the SGP portfolio of grants will be on supporting low-cost, bottom-up energy solutions with potential for carbon emissions reductions through initial catalytic financing aimed at generating co-benefits, such as increasing climate resilience, reducing poverty, enhancing gender equality, and achieving relevant SDGs. Such solutions will continue to form an important part of SGP's contribution to decarbonization and transition to a low-carbon economy, while laying the

³³ GEF, UNDP, *The GEF Small Grants Programme Results Report 2017-2018*.

groundwork of new infrastructure at community level, addressing energy service needs of urban, rural, and remote communities and entrepreneurs, who cannot be served by the central electrical grid or centralized distribution systems for cooking and heating fuels. SGP will track installed renewable energy capacity, in line with the GEF corporate results framework and will continue documenting community innovations and tracking typologies of new community technologies, particularly those emerging from South-South exchanges at the community level.

80. In India, for example, SGP grants will support improved access to and establishment of technologies for clean energy through integrated renewable energy and energy efficiency solutions focusing on renewable energy technologies for productive uses, such as solar cookers, dryers, pumps, lighting systems, etc. In addition, grants will support low-emission, energy-efficient waste management technologies, as well as the broader adoption of successful technology applications that were developed and demonstrated in previous SGP-supported projects.

f. Evaluations and Lessons Learned

81. The GEF's Independent Evaluation Office (IEO) conducted two evaluations over the reporting period that offered insights and presented lessons learned that are relevant for the CCM focal area.

Global Cleantech Innovation Programme

82. The first IEO evaluation looked at the GEF's *Global Cleantech Innovation Programme (GCIP)*, a major program focusing on developing entrepreneurship ecosystems in developing countries implemented by UNIDO.³⁴ The GCIP, which was developed as nine separate national-level projects, supported the development of national entrepreneurship environments in the participating countries, fostering formalization and access to finance for startups, and contributing to the generation of employment in the cleantech sector.³⁵ The total GEF grant was \$11.3 million for the nine countries, with co-financing ranging from two to eight times the GEF grant level in the beneficiary countries.

83. Six of the countries had completed implementation at the time of evaluation (Armenia, India, Malaysia, Pakistan, South Africa, and Turkey) but information from GCIP projects underway in Thailand, Morocco, and Ukraine was also considered in the evaluation. The evaluation found that this program is a good example of how the GEF can engage with the private sector and support small and medium-sized enterprises (SME) in the development of clean technologies and solutions that can deliver global environmental benefits. In 2017, the majority of startups were active in the field of energy efficiency (26 percent), followed by renewable energy (23 percent), waste-to-energy (20 percent), water efficiency (20 percent), and through more recently-added categories of green building (10 percent), transportation (1 percent), and advanced materials (1 percent).

84. The IEO concluded that the GCIP has proven to be highly relevant for developing countries to realize the potential economic and environmental opportunities associated with a healthy

³⁴ GEF Independent Evaluation Office, 2018, [Semi-Annual Evaluation Report of the Independent Evaluation Office](#), Council Document GEF/ME/C.55/01.

³⁵ South Africa approved the first GCIP national project in 2011. Armenia, India, Malaysia, Pakistan, and Turkey approved their national GEF GCIP projects in 2013, Thailand in 2014, Morocco in 2016, and Ukraine in 2018.

cleantech innovation ecosystem. Over the medium to long term, these results are expected to have a multiplier effect in supporting the GEF's mission of delivering global environmental benefits at scale.

GEF IEO's Annual Performance Report 2019: Focus on the GEF's Sustainable Transport Portfolio

85. Over the reporting period, the GEF IEO also completed the Annual Performance Report 2019, which had a special focus on the GEF's sustainable transport portfolio.³⁶ The focus on sustainable transport was particularly relevant and timely considering that the GEF-7 Programming Directions for CCM give significant importance to this sector through the specific objective of promoting the uptake of electric mobility.

86. The evaluation found that the GEF's sustainable transport portfolio has evolved to meet the needs of GEF recipient countries and that it was effective in supporting the accelerated adoption and enhanced the viability of low-carbon approaches in the transportation sector. The study highlighted that projects and programs in this sector had leveraged relatively higher co-financing ratios compared to the overall GEF portfolio.

87. The report also found that GEF support has been instrumental in facilitating the transformation of markets for sustainable transportation modalities, such as electric/hybrid and fuel-cell based mobility technologies in China, Malaysia, and South Africa, as well as bus-rapid-transport systems in several major cities, such as Mexico City and Dar es Salaam. Finally, the report concluded that GEF resources have facilitated dissemination activities combined with demonstrations and pilots that have been effective in promoting replication in other cities. The GEF Secretariat has drawn on these lessons and will continue to do so to inform the design of the programs and projects that will promote electric mobility in GEF-7.

2. Climate Change Adaptation

a. Background on GEF Support for Adaptation

88. As an operating entity of the Financial Mechanism of the UNFCCC, the GEF has played a pioneering role in supporting adaptation. It was entrusted with the management of two funds prioritizing adaptation, 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 Programme. The SCCF was established to finance activities, programs, and measures relating to climate change that are complementing those funded by the CCM focal area of the GEFTF, and through bilateral and multilateral sources. While the SCCF has four financing windows, climate adaptation was prioritized, in accordance with COP guidance (decision 5/CP.9).³⁷

³⁶ GEF Independent Evaluation Office, 2019, [Annual Performance Report](#), Council Document GEF/ME/C.56/Inf.01.

³⁷ 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: (i) adaptation to climate change; (ii) technology transfer; (iii) energy, transport, industry, agriculture, forestry and waste management; and (iv) economic diversification. COP 9 decided in Decision 5/CP.9 that "Adaptation activities to address the adverse impacts of climate change shall have top priority for funding" and "Technology transfer and its associated capacity-building activities shall

89. 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.³⁸ Twenty-six innovative pilot projects were approved under the SPA and initial lessons from the portfolio were captured in a 2010 evaluation.³⁹ As SPA resources have been fully allocated, the GEF now finances CCA solely through the LDCF and SCCF.

90. All of the GEF's CCA projects and programs adhere to the guiding principles of country-drivenness, replicability, sustainability, and stakeholder participation, and strive to improve gender equality and mainstreaming. 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 information and guidance provided in NCs, national adaptation programs of action (NAPAs) and NDCs, as well as other relevant assessments and action plans.

91. 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 (d) below.

92. The GEF continues to work with the Least Developed Countries Expert Group (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.

93. 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 2018.⁴⁰ In accordance with the guidance provided by the COP, the Strategy has three strategic objectives that will guide programming under the LDCF and SCCF:

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

The Programming Strategy has four associated Core Indicators, which are presented in

Table 7:

also be essential areas to receive funding...".

³⁸ GEF, 2005, [*Operational Guidelines for the Strategic Priority "Piloting an Operational Approach to Adaptation" \(SPA\)*](#), Council Document GEF/C.27/Inf.10.

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

⁴⁰ 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.

Table 7: Core Indicators for the LDCF and the SCCF (2018-2022)

Climate Change Adaptation Strategy Objective	Corresponding Core indicators	Sex disaggregated?
Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation	Number of direct beneficiaries	Yes
	Area of land under climate-resilient management (ha)	N/A
Mainstream climate change adaptation and resilience for systemic impact	Number of policies, plans, or development frameworks that mainstream climate resilience	N/A
Foster enabling conditions for effective and integrated climate change adaptation	Number of people with enhanced capacity to identify climate risk and/or engage in adaptation measures	Yes

94. A draft results framework for the Strategy, with indicators for expected outcomes and outputs, was shared with the LDCF/SCCF Council in November 2018 and is currently being finalized.⁴¹

b. Least Developed Countries Fund

Achievements since inception

95. The LDCF was designed to address the special needs of LDCs under the UNFCCC. From its inception to June 30, 2019, \$1,401.9 million has been approved for projects, programs, and EAs to meet this mandate, mobilizing an additional \$5.84 billion in co-financing. This includes financing the preparation of 51 NAPAs, all of which have been completed, and the approval of 223 NAPA implementation and NAP process, and other elements of the LDC Work Programme.⁴² In addition, two global support projects on NAPAs were also financed. Africa received most of the LDCF financing, in line with the geographical distribution of LDCs (Table 8).

96. The LDCF received approximately \$71.4 million in new pledges in the reporting period, including by a sub-national government.⁴³ As at June 30, 2019, cumulative pledges to the LDCF amounted to \$1.40 billion, of which \$1.37 billion have been received (see Annex 7).

⁴¹ GEF, 2018, [Updated Results Architecture for Adaptation to Climate Change Under the Least Developed Countries Fund and the Special Climate Change Fund \(2018-2022\)](#), Council Document GEF/LDCF.SCCF.25/Inf.05.

⁴² Approval is granted by the LDCF/SCCF Council or the GEF CEO under delegated authority.

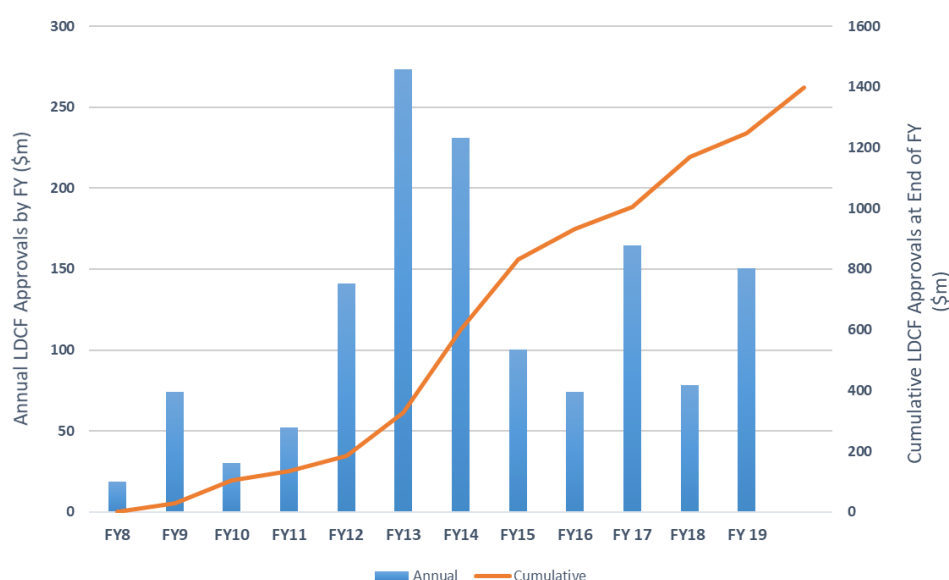
⁴³ Includes contributions from Denmark, Finland, France, Ireland, the Netherlands, Switzerland, and the Walloon Region of Belgium.

Table 8: Regional Distribution of NAPA Implementation Projects Supported by the LDCF as of June 30, 2019

<i>Region</i>	<i>Number of projects</i>	<i>LDCF amount (\$ million)*</i>	<i>Co-financing (\$ million)</i>
Africa	153	912.7	3921.4
Asia	62	384.5	1796.5
LAC	5	23.3	84.6
Global	3	13.7	37.3
Total	223	1334.1	5839.8

*includes GEF project financing, Agency Fees and PPGs

Figure 1: Annual and Cumulative Funding Approvals under the LDCF as of June 30, 2019



97. The LDCF has to date 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, Cabo Verde, Cambodia, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Guinea, Guinea Bissau, Haiti, Kiribati, Lao PDR, 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. No new NAPAs were supported in this reporting period.

LDCF achievements in the reporting period

98. The LDCF was off to a promising start in GEF-7 to provide timely support to more LDCs. Within 12 months of the new LDCF/SCCF strategy roll-out, 20 LDCs, or 43 percent of the LDCs, have successfully accessed LDCF resources. Such early success is due to the proactive engagement of countries and Agencies, and importantly with timely donor support with voluntary

contributions to the LDCF. Efforts are made to maintain and build on this momentum, with continued engagement of donors and partners.

99. In the reporting period, LDCF resources amounting to approximately \$148.3 million were approved by the LDCF/SCCF Council for 17 projects and programs, as shown in Figure 1. This amount includes GEF financing, Agency Fees, and PPGs. These projects and programs support urgent and immediate adaptation priorities of LDCs, and are aligned with the new GEF Strategy for Adaptation. Twelve of these 17 projects and programs were in Africa and five in Asia (Table 9). These activities are expected to mobilize over \$650 million in indicative co-financing from the governments of the recipient countries, GEF agencies, other multilateral and bilateral agencies and others.

100. The 17 projects and programs approved during the reporting period will support implementation of adaptation priorities in 20 countries.

101. In terms of results and impacts from the LDCF support approved during the reporting period, contributions of the 17 LDCF projects and programs on the core indicators presented in Table 7 are as follows:

- (a) Number of direct beneficiaries: 6,931,270 persons, of which 3,469,867 are female;
- (b) Area of land under climate-resilient management: 723,009 hectares;
- (c) Number of policies, plans, or development frameworks that mainstream climate resilience: 129 policies and plans; and
- (d) Number of people with enhanced capacity to identify climate risks and/or engage in adaptation measures: 63,670 persons, of which 31,164 are female.

102. The projects will support Angola, Bangladesh, Cambodia, Chad, Ethiopia, The Gambia, Guinea-Bissau, Lao PDR, Mauritania, Mozambique, Rwanda, Sudan, Timor Leste, Togo, Uganda, and Zambia. One regional SIDS project covering Kiribati, Solomon Islands, Tuvalu, and Vanuatu was also supported. The projects encompass a range of adaptation priorities including climate-smart agriculture and forestry, building urban, rural, and coastal community climate resilience, improving water resource management, supporting climate-resilient livelihoods, climate-proofing rural and urban infrastructure, strengthening climate information services and enhancing adaptive capacity of communities through integrated approaches.

103. As of April 30, 2019, 237 LDCF projects have been endorsed or approved by the GEF CEO and were in some stage of implementation or already completed. Of these 237 projects, 217 provided an estimate of the number of direct beneficiaries. These projects aim to directly reduce the vulnerability of close to 21.5 million people.

104. The FY 2018 Annual Monitoring Review of the LDCF and the SCCF provides information on 87 active projects under the LDCF.⁴⁴ Seventy-five of the 87 LDCF projects under implementation, or 87 percent, were rated moderately satisfactory or higher in terms of their progress towards development objectives. As of June 30, 2018, the 87 projects contained in the active LDCF portfolio have already reached more than 11.2 million direct beneficiaries and trained some

⁴⁴ GEF, 2019, [*Annual Monitoring Review of the Least Developed Countries Fund and the Special Climate Change Fund*](#), Council Document GEF/LDCF.SCCF.26/04.

46,000 people in various aspects of CCA. Through these 87 projects, an estimated 300,000 hectares of land have also been brought under more resilient management. Moreover, 137 regional, national and sector-wide policies, plans or processes in 24 LDCs have been strengthened or developed to better address climate change risks and adaptation, while 29 projects have enhanced climate information services in 24 countries.

National consultations

105. As outlined in the 2018-2022 Adaptation Strategy, LDCF project selection and approval transitioned in GEF-7 to a Work Program model at the start of GEF-7, under which projects selected based on strategic prioritization factors are presented for approval by the LDCF/SCCF Council. The LDCF/SCCF Council has approved two Work Programs in the reporting period.

106. With the introduction of a new funding cycle for GEF-7, the 2018-2022 Strategy recognized the need to address the pipeline of technically cleared projects from GEF-6. At the end of GEF-6, there were 21 projects from 17 countries in the LDCF pipeline requesting a total of \$156 million from the LDCF.

107. During the reporting period, consultations were held with most of these countries to enable countries to develop a plan for LDCF support, in light of the new opportunities presented in the 2018-2022 Adaptation Strategy. The consultations offered countries opportunities to: (i) Seek more synergistic and harmonized programming with the GEFTF or other sources; and (ii) Re-evaluate whether and how their existing pipeline proposal(s) remain viable in terms of alignment with the national plan for GEF-7. Countries were then invited to develop or revisit and submit or re-submit proposals according to their respective national plans, which may or may not include updated proposals from the GEF-6 pipeline.

108. Based on the outcomes of these consultations, four countries confirmed or updated their proposals, which were approved in the first LDCF Work Program in December 2018. Ten additional countries have re-articulated or re-submitted projects from the GEF-6 pipeline in the first half of 2019. Of these, projects from seven countries that were technically cleared by the deadline were approved by the LDCF/SCCF Council in June 2019. Two others are undergoing revision, and one project was technically cleared after the June 2019 Work Program deadline. The Secretariat will continue to work with countries on the remaining pipeline projects to ensure that the LDCF support is provided to address current national adaptation priorities in line with the 2018-2022 Strategy.

Table 9: Regional Distribution of Adaptation Projects and Programs Approved under LDCF during the Reporting Period

<i>Region</i>	<i>Number of projects/programs</i>	<i>LDCF amount (\$ million)*</i>	<i>Co-financing (\$ million)</i>
Africa	12	103.8	399.0
Asia	5	44.6	252.5
Total	17	148.3	651.5

*includes GEF project financing, Agency Fees and PPG

c. Special Climate Change Fund

Achievements since inception

109. 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 CCM focal area of the GEFTF and through other bilateral and multilateral sources. While the SCCF has four financing windows, climate change adaptation was given top priority in accordance with the UNFCCC guidance (decision 5/CP.9). As of June 30, 2019, the GEF, through the SCCF-A (CCA window), has provided \$282.7 million for adaptation projects. Sixty-seven projects were approved for funding, mobilizing over \$2.1 billion in co-financing (see Table 10). The SCCF-B (technology transfer window) has provided \$60.7 million for 12 projects that support technology transfer, mobilizing \$382.3 million in co-financing (see Table 11).

110. As at June 30, 2019, \$356.1 million have been pledged to the SCCF, of which \$347.8 million were received. The demand for SCCF resources continues to be far higher than the resource availability. As at June 30, 2019, funds available for Council/CEO approval amounted to \$9.0 million and \$5.5 million for the SCCF-A and SCCF-B, respectively (see Annex 7).

Table 10: Regional Distribution of Adaptation Projects under SCCF-A as of June 30, 2019

<i>Region</i>	<i>Number of projects</i>	<i>SCCF-A financing* (\$ million)</i>	<i>Co- financing (\$ million)</i>
Africa	21	79.8	777.3
Asia	16	74.1	727.7
ECA	11	45.8	265.6
LAC	15	71.0	291.1
Global	4	12.8	63.3
Total	67	282.7	2,125.0

*includes all MSPs and FSPs approved under the SCCF-A.

Table 11: Regional Distribution of Adaptation Projects under SCCF-B as of June 30, 2019

<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
Total	12	60.7	382.3

111. 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.⁴⁵ As of April 30, 2019, 76 SCCF projects have been endorsed or approved by the GEF CEO and were in some stage of implementation or ready to enter implementation. Of these 76 projects, 52 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

112. This reporting period has seen the approval of one regional MTF project that supports integrated landscape restoration and climate-resilient food systems in seven Caribbean SIDS: Antigua and Barbuda, Belize, Grenada, Guyana, Haiti, Jamaica, and Saint Lucia. The SCCF resources of \$1.0 million will support adaptation mainstreaming in regional sustainable land management (SLM) policies and plans, regional scale climate modeling of relevance to SLM, climate-resilient technologies and practices for SLM, and regional capacity-building for climate-resilient SLM. It will also enable regional institutions working on adaptation SLM to work more closely together.

113. The project's combined (SCCF and GEFTF) expected benefits include improved management of 80,000 hectares of land, direct benefits to at least 5,000 people, 1,000 people trained on climate risks and adaptation options, and adaptation considerations mainstreamed in three regional SLM plans, in addition to 5.8 Mt CO₂ eq mitigated over the project lifetime.

114. The FY 2018 Annual Monitoring Review of the LDCF and the SCCF⁴⁶ states that 94 percent of SCCF projects that were under implementation and have reported on their performance, were rated moderately satisfactory or higher in terms of their progress towards development objectives. As of June 30, 2018, cumulative on-the-ground results achieved under the SCCF portfolio comprised 5.7 million direct beneficiaries, 5.8 million hectares of land under better management to withstand the effects of climate change, and 54,400 people who were trained in various aspects of climate change adaptation. Moreover, 150 regional, national and sector-wide policies, plans, and processes have been strengthened or developed to better integrate and address climate change risks, and 16 projects have enhanced climate information services in vulnerable developing countries.

d. Support for NAP Process

115. The LDCF and the SCCF provide support to the NAP process in response to COP guidance.⁴⁷ GEF's support for NAPs in the GEF-7 period focuses on the implementation of NAP priorities, as well as additional analysis that may be needed to better align GEF proposals with the NAP framework. In the reporting period, no additional NAP preparation projects were approved by the LDCF/SCCF Council. The project *IKAN Adapt: Strengthening the Adaptive Capacity, Resilience and Biodiversity Conservation Ability of Fisheries and Aquaculture-Dependent Livelihoods in Timor Leste*, with LDCF funding of \$3.0 million, including PPG and Agency Fees, was approved by the June 2019 Council and is expected to support, among other things, the inclusion of fisheries and aquaculture-specific climate risks and opportunities within the Timor Leste NAP process. The GEF

⁴⁵ GEF, 2019, [Progress Report on the Least Developed Countries Fund and the Special Climate Change Fund](#), Council Document GEF/LDCF.SCCF.26/03.

⁴⁶ GEF 2018, [Annual Monitoring Review of the LDCF and SCCF](#), Council Document GEF/LDCF.SCCF.26/04

⁴⁷ Decision 12/CP.18, paragraph 1.

Secretariat continued to exchange information with the GCF on proposals submitted under the LDCF/SCCF that aim to advance the NAP process, to minimize overlapping support and to enhance coordination between the operating entities of the Financial Mechanism.

116. The total funding from the LDCF towards the LDCs' NAP processes amounts to \$74.6 million as of June 30, 2019.⁴⁸ This support includes several projects that explicitly seek to advance NAP processes in Bangladesh, Chad, Democratic Republic of the Congo, Lao PDR, Niger, Rwanda, Sao Tome and Principe, Senegal, South Sudan, and Timor Leste, in addition to targeted technical assistance for tailored one-on-one support that continues to be provided through the LDCF-financed NAP Global Support Program (GSP). 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.

117. Notably, several projects utilized a hybrid approach, combining support for the NAP process with activities that support concrete adaptation investments for NAPA implementation. Such requests may, for instance, comprise investments in hydro-meteorological infrastructure, which provides climate and weather data for use by decision-makers when integrating climate change adaptation considerations into policies and plans, including for NAPs. Such projects typically include separate components that are solely devoted to the NAP process. In its support of NAP processes, the GEF responds to the needs and priorities of recipient countries, while providing the flexibility to combine NAP and NAPA activities in one project, thereby enhancing efficiency and simplifying access to finance. This also responds to COP guidance requesting the GEF to simplify access modalities.

e. Innovative Approaches

118. During the reporting period, concerted efforts were made to support innovative approaches and concepts by the LDCF and SCCF. For example, programming of resources as MTFs was facilitated, as MTFs are unique to the GEF to enable integration and synergistic approaches to address multiple global environmental concerns. Among the 17 projects and programs supported by the LDCF and one by the SCCF during this reporting period, four were MTFs. The GEF Secretariat will continue its efforts to facilitate MTF programming as appropriate, taking into consideration national needs, opportunities for larger, systemic impact, and programming priorities.

119. The LDCF and SCCF also continued to encourage countries to seek opportunities for coordination with the GCF. Following a joint national workshop and consultations in Lao PDR in early 2019, a proposal on climate smart agriculture was submitted to and approved by Council in June 2019, informed by the readiness support provided by the GCF and contributing to the requested GCF investments that target a landscape approach to bring interventions to scale. Other proposals, such as multi-country initiative from the Pacific SIDS, and an initiative from Bangladesh will coordinate closely with GCF initiatives. Regular consultations and engagement with the GCF and GEF Secretariats are encouraged to identify lessons learned and to help inform subsequent coordinated engagements. The two Secretariats also continued to share information on the provision of NAP support to enhance coordination and to minimize possible overlap in support.

⁴⁸ This amount comprises projects that are explicitly dedicated, as the sole project objective or through dedicated components, to enhancing a country's NAP process.

120. Preparatory steps continued during this reporting period for the Challenge Program for Adaptation towards the launch of the call for proposals. This initiative recognizes the role of private sector in catalyzing adaptation solutions, and seeks to promote innovation in adaptation technologies and techniques to build sustainable innovation ecosystems for micro-, small-, and medium-sized enterprises, thereby creating private sector opportunities to reduce climate change vulnerabilities. An Information Document was presented to the LDCF/SCCF Council in December 2018.⁴⁹

121. Efforts were also made to leverage, and learn from, global initiatives on climate adaptation. The launch of the GCA, the coalition of Finance Ministers for adaptation action, and preparations for the UN Secretary General's Climate Summit have generated a positive momentum for adaptation at the global level. They are also helping to articulate more impactful entry points for adaptation, energizing the adaptation discourse with engagement of developing countries, particularly LDCs and SIDS, and building new, innovative partnerships. The GEF and its partners engaged with these global initiatives to contribute to their objectives that are mutually beneficial with those of the LDCF/SCCF, as well as to benefit from the global knowledge generation and exchange for effective climate action.

3. Capacity-Building Initiative for Transparency

a. CBIT Trust Fund Capitalization

122. The establishment of the CBIT TF was finalized in September 2016. At COP 22, 12 donors issued a joint statement pledging and expressing their intention to support the CBIT TF with over \$50 million. The CBIT TF received the first donor contributions prior to COP 22 and the GEF Secretariat approved the first set of projects under the CBIT.

123. Originally, the CBIT TF was set to accept contributions until June 30, 2018, at the end of the GEF-6 period. The Council, at its 54th meeting in June 2018, decided to extend the CBIT TF contribution date and project approval date to October 31, 2018, to accommodate additional voluntary financial contributions to be made.⁵⁰

124. As of June 30, 2019, the Trustee had received a total amount of \$61.6 million from 14 donors: Australia, Belgium, Canada, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States. This figure represents the full pledged amount by all participating donors per their respective contribution agreements to the CBIT TF. More information is provided in Annexes 4 and 8.

125. From late 2016 to October 2018, the GEF Secretariat approved 44 CBIT projects using resources from the CBIT TF. Within two years of its establishment, the CBIT TF successfully programmed all available resources—amounting to \$58.3 million, or 95 percent of the total contributions paid. The amount includes GEF project financing, PPGs, and Agency Fees.

⁴⁹ GEF, 2018, [Update on the Challenge Program for Adaptation Innovation under the SCCF and the LDCF](#), Council Document GEF/LDCF.SCCF.25/Inf.04.

⁵⁰ GEF, 2018, [Joint Summary of the Chairs](#), 54th GEF Council.

126. A modest amount of resources has been set aside to cover CBIT TF administrative costs until the date of the trust fund's termination on April 30, 2025, which will be 18 months after the final Trustee commitment and cash transfer date of October 31, 2023.

b. CBIT Support under GEF-7

127. The adopted GEF-7 Programming Directions include specific provisions for CBIT support through the CCM 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 GEF TF under regular replenishment. According to the agreed GEF-7 Resource Allocation Framework, \$55 million have been notionally allocated to the CBIT.⁵¹

c. CBIT Operationalization

128. The GEF Secretariat approved two global CBIT projects in the reporting period, one regional project supporting five member states of the Common Market for Eastern and Southern Africa (COMESA) and seven national projects in Afghanistan, Armenia, China, Colombia, Equatorial Guinea, India, and Nicaragua. (See Annexes 2 and 4).

129. The total CBIT project portfolio as of June 30, 2019 includes 46 country projects in Africa, Asia, ECA, and LAC that are addressing priority needs to meet enhanced transparency requirements from the Paris Agreement. There is also one regional/multi-country project supporting five eastern and southern African countries. Through these projects, 15 LDCs and seven SIDS, of which one is also an LDC, are being supported in their efforts to enhance transparency.⁵²

130. The portfolio also includes four global projects that aim to improve knowledge sharing, coordination, and facilitate additional capacity-building.

131. 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 10 working days, meeting current corporate standards, while the overall time for project proposal approval was on average 62 working days. In addition, all projects to date have met the 12-month standard to submit full project proposals for MSP approval.

132. Overall, the CBIT, through the CBIT TF and the GEFTF, is supporting a regionally balanced portfolio totaling \$78.2 million in resources. The Africa region had the most CBIT projects approved (16 projects, \$25.4 million), followed by LAC (14 projects, \$21.5 million), Asia (10 projects, \$15.1 million), and ECA (7 projects, \$8.9 million). Four CBIT projects with a global scope have been approved (\$7.2 million) in total.

⁵¹ GEF, 2018, [Summary of the Negotiations of the Seventh Replenishment of the GEF Trust Fund](#), Council Document GEF/C.54/19/Rev.02.

⁵² LDCs include Afghanistan, Bangladesh, Burkina Faso, Cambodia, Comoros, Eritrea, Ethiopia, Lao PDR, Liberia, Madagascar, Rwanda, Sierra Leone, Togo, Uganda, and Zambia. SIDS include Antigua and Barbuda, Comoros, Cuba, Dominican Republic, Jamaica, Papua New Guinea, and Seychelles.

133. As of June 30, 2019, 51 out of 154 non-Annex I Parties or 33 percent, have received CBIT support. The share of non-Annex I Parties receiving CBIT support has increased from 25 percent as of June 2018. Based on 2014 data, 51 non-Annex I Parties, including China and India, that availed financial support under the CBIT, account for approximately 59 percent of total GHG emissions from non-Annex I Parties, or 18,702 Mt CO₂ eq.⁵³ The 59 percent share of GHG emissions from non-Annex I Parties receiving CBIT support is a significant increase from the figure of 11 percent as of June 2018.

134. The CBIT projects have so far been supported by six out of the 18 GEF Agencies, providing countries with a larger choice of Agency partners compared with projects for NCs and BURs. The UNEP has the largest share with 17 projects, followed by the UNDP with 12 projects, the FAO with 11, the CI with six, the Inter-American Development Bank (IDB) with two projects, two projects jointly implemented by UNDP and UNEP and one project implemented by FECO. Notably, the IDB is the first multilateral development bank to be involved with the CBIT.

135. 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.

136. 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 47 country projects approved to date were grouped into the following 11 types of activities:

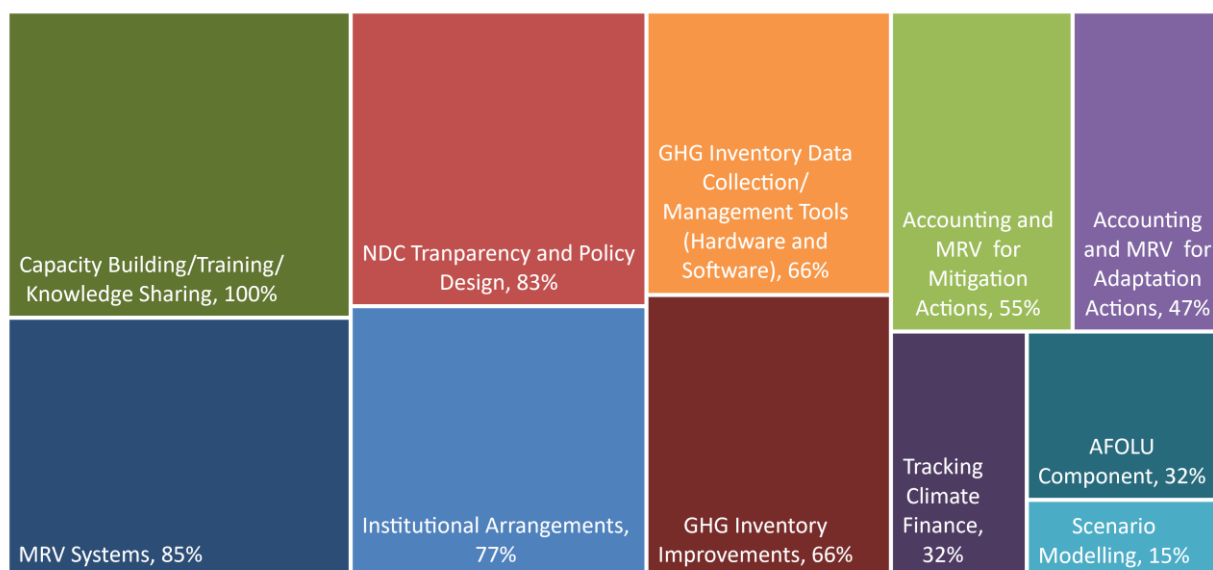
- (a) Enhancement and/or establishment of new institutional arrangements;
- (b) Use of NDC transparency activities to inform policy design;
- (c) Accounting and MRV methodologies for mitigation actions;
- (d) Accounting and MRV methodologies for adaptation actions;
- (e) Economic and GHG emissions scenario 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.

137. Figure 2 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

⁵³ World Resources Institute, CAIT Climate Data Explorer, 2017. Available online at: <http://cait.wri.org>

of activity across the portfolio and are not correlated to the amount of resources designated for specific activities.

Figure 2: Type of Transparency Activities Supported in CBIT Projects as of June 30, 2019



138. Compared to June 2018, when this analysis was carried out for the first time, the distribution of types of activities has not changed significantly. In general, a majority of projects emphasize capacity building, knowledge sharing, and training activities, as well as activities to strengthen institutional arrangements, MRV systems, and NDC transparency and policy design. In contrast, only a few countries have included scenario modelling of economic and/or GHG emissions trends in their project concepts, and less than a third of CBIT projects included a project component dedicated towards the tracking and transparent reporting of support needed and received.

139. Adaptation is a major focus of many developing countries' NDCs, and 47 percent of CBIT proposals have included a component specific to the establishment or improvement of MRV for adaptation activities. Among CBIT projects, 32 percent have included a specific component for enhancing measurement and transparency of GHG emissions from the AFOLU sector, reflecting the relative importance of emissions from the AFOLU sector in the countries supported to date and the inherent challenges in the sector to quantify and report emissions and removals due to limited data and technical capacities for the quantification and projections of AFOLU-related emissions, as compared to other sectors.

140. Twelve projects have received CEO approval after the successful submission of their full project proposals since the last reporting period: Cambodia, Cote d'Ivoire, Ghana, Liberia, Madagascar, Mongolia, North Macedonia, Papua New Guinea, Peru, Serbia, South Africa and the global project towards enhanced transparency in the AFOLU sector.

141. Additional information on the status of CBIT projects under implementation, including baseline and target qualitative assessment of CBIT indicators and early observations and findings

can be found in the latest Progress Report on the CBIT, prepared for the 56th GEF Council Meeting.⁵⁴

d. CBIT Coordination and Engagement

142. 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.

143. 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.

144. The CBIT Global Coordination Platform has been operating since April 2018.⁵⁵ It aims to bring together practitioners from countries and agencies in order to enable coordination of transparency actions and ideas, 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.

145. The Global Coordination Platform currently contains CBIT project profiles for each country with an approved project, interviews with country implementation experts, links to GHG methodological guidance and upcoming learning events, and houses presentation and other meeting materials from CBIT workshops and other fora.

146. At COP 24, the GEF participated in formal and informal negotiations around the transparency agenda, engaged in bilateral discussions with current and prospective CBIT countries, and reported on the progress of the CBIT. The GEF Secretariat was invited to participate in several COP 24 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, including:

- (a) How to maximize the leverage out of the design of the NDC and implementation of the transparency framework (Key elements for meaningful capacity building program, Institute for Global Environmental Strategies (IGES) at Japan Pavilion, December 5, 2018).
- (b) Enhancing the preparedness of developing countries to implement the Enhanced Transparency Framework (UNFCCC, December 11, 2018).
- (c) CBIT Update: Early Findings and Outlook (GEF Partnership Pavilion, December 13, 2018).

⁵⁴ GEF, 2019, [Progress Report on Capacity-building Initiative for Transparency](#), Council Document GEF/C.56/Inf.06.

⁵⁵ <https://www.cbitplatform.org/>

147. Beyond COP 24 engagement, awareness raising, and outreach activities have continued through various channels, including the following:

- (a) The CBIT web page continues to be regularly updated, including links to approved project documents.⁵⁶
- (b) A GEF Secretariat representative attended the ICAT Advisory Committee Meeting and Strategy Workshop on February 6-7, 2019, where outcomes of the COP 24 with regards to the enhanced transparency framework and updates on the CBIT operationalization were considered in discussions on the proposed ICAT strategy and work program for the next three years.
- (c) The GEF has sent virtual presentation videos and information materials to be shared at regional events including: “Enhanced Transparency Framework after Katowice – support initiatives and country perspectives” organized by UNFCCC, PATPA and UNEP-DTU at the Africa Climate Week on March 22, 2018; and the PATPA Asia Regional Workshop held in Jakarta, Indonesia on April 24-26, 2019.
- (d) On May 21, 2019, a CBIT Coordination Meeting was held in Rome, Italy and featured the participation of GEF agency representatives, donor countries, 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 and monitoring effectiveness of support.
- (e) On May 22-23, 2019, the CBIT's Third Annual Technical Workshop took place in Rome, Italy, and included the participation of 36 developing countries with CBIT projects. 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 the implementation of sound climate institutional arrangements, building sustainable domestic MRV systems for tracking countries' NDCs, climate change mitigation scenarios, and monitoring and tracking climate finance. 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.
- (f) On June 22, 2019, the GEF participated as one of the panelists in the first pilot informal forum on the enhanced transparency framework convened by the Consultative Group of Experts (CGE) during the June 2019 Climate Change Conference in Bonn, Germany.
- (g) On June 24, 2019, a representative from the GEF Secretariat participated in a side event on the margins of the June 2019 Climate Change Conference organized by the UNFCCC Secretariat. The panel discussion showcased the support (financial, technical, and capacity-building) provided to developing countries for participation

⁵⁶ <https://www.thegef.org/topics/capacity-building-initiative-transparency-cbit>

in the existing MRV arrangements under the Convention and the enhanced transparency framework under the Paris Agreement.

148. Opportunities for consultations among partners play an increasingly important role as implementation experiences and lessons learned become available. The GEF Secretariat is committed to discuss ongoing and planned activities and share experiences with partners, particularly to enhance coordination of activities at the country and regional level.

e. CBIT Outlook

149. The GEF Secretariat will continue to review and approve new CBIT project proposals in alignment with the programming directions and COP guidance, utilizing available set-aside resources. As of June 30, 2019, \$19.8 million (or 36 percent) of the \$55 million indicative resources set aside for CBIT from the GEFTF have been programmed.

150. Furthermore, 23 project proposals were submitted for CEO approval by the end of the 2019 fiscal year. All of these projects are supported with the CBIT TF resources. The GEF Secretariat expects to carry out the review and approval work of these projects in the 2020 fiscal year, and facilitate their early implementation. As these projects will enter the implementation period upon CEO approval, the number of countries with active capacity support for enhanced transparency is expected to increase significantly in the next fiscal year.

151. Finally, the GEF Secretariat will be undertaking additional work to respond to new guidance from CMA 1 on transparency reporting, such as initiating discussions on the provision of support for the first and subsequent biennial transparency reports, and analyzing possible options for improving the efficiency of support provision for reporting under Article 13 of the Paris Agreement. Close consultations with the UNFCCC Secretariat and Parties are envisaged as negotiations on transparency and reporting requirements advance.

4. *Technology Transfer*

152. The transfer of low-carbon and climate-resilient technologies has been a key cross-cutting theme for the GEF since its establishment. The GEF-7 Climate Change Focal Area Strategy aims to continue 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.

153. Similarly, the results framework for the LDCF and the SCCF in the 2018-2022 Adaptation Strategy 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. Therefore, 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 7.⁵⁷

⁵⁷ Decision 4/CP.7.

154. In the reporting period, for CCM, eight projects with technology transfer objectives were approved with \$64.3 million in GEF funding, including PPGs and Agency Fees and \$879.5 million in co-financing.⁵⁸ For CCA, 18 projects to promote technologies for adaptation were approved with \$149.3 million from the LDCF and the SCCF, and \$654.5 million of co-financing. Detailed project descriptions are provided in Annex 2 and Annex 3.

155. 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-B.⁵⁹ This program included three funding windows to support technology transfer: (i) TNAs; (ii) piloting priority technology projects linked to TNAs; and (iii) dissemination of GEF experience and successfully demonstrated environmentally sound technologies (ESTs).

156. In December 2008, COP 14 welcomed the GEF's Strategic Program on Technology Transfer (renaming it the Poznan Strategic Program on Technology Transfer or the PSP) 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 16.⁶⁰ 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:⁶¹

- (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.

157. The following sub-sections describe the progress made on the Poznan Strategic Program on Technology Transfer (PSP) according to the three areas recommended by the evaluation of the Poznan Strategic Program by the TEC submitted to SBI 43.⁶² The sub-sections also include challenges and lessons learned in the implementation of the projects.

⁵⁸ 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.

⁵⁹ 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.

⁶⁰ 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.

⁶¹ 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.

⁶² 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

158. The GEF has supported four regional projects and the CTCN through one global project, listed in Table 12. Of these, one has closed and four are still under implementation. The detailed activities of these projects are described in Annex 5. 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 12: 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	Closed
Pilot African Climate Technology Finance Center and Network	Africa	AfDB	10.0	5.8	89.0	Under implementation - Extended
Finance and Technology Transfer Center for Climate Change	ECA	EBRD	10.0	2.0	77.0	Under implementation - Extended
Climate Technology Transfer Mechanisms and Networks in LAC	LAC	IDB	10.0	2.0	63.4	Under Implementation - Extended

159. In addition, in the reporting period, global and regional CCM projects with technology transfer objectives were approved by the GEF. They include a global program aiming to support a shift to electric mobility in 17 countries, promoting the decarbonization of the transport sector. In line with the *Paris Declaration on Electro-mobility and Climate Change*, which calls for 100 million electric cars and 400 million electric two and three wheelers by 2030, the project will support the rapid introduction of electric mobility policies and infrastructures in the initial set of participating countries. It will implement activities at the global, regional, and country levels, serving as the first-ever global electric mobility program in low and middle income countries focusing on the transfer of electric drive technologies and solutions.

160. In response to invitations from SBI 37, SBI 39, SBI 40, SBI 41, SBI 42, SBI 45, SBI 46, SBI 47, SBI 48, SBI 49, and SBI 50, 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. The GEF circulates an annual survey to all GEF implementation agencies of PSP projects in an effort to support enhanced information sharing between the regional centers and the CTCN. The information provided by agencies is available in

Annex 5. Constructive dialogue has been established with the respective GEF agencies to seek synergies and avoid duplication. For example, the GEF attended the 12th CTCN Advisory Board Meeting, during which the GEF presented on its support for technology transfer and provided updates on the PSP. The GEF Secretariat personnel also met with the CTCN, including at COP 24, SBI 50, and the 17th and 18th TEC Meetings in an effort to encourage collaboration between the PSP's regional climate technology and finance centres and the CTCN. The CTCN has been encouraged to utilize GEF National Dialogues and Extended Constituency Meetings as entry points to facilitate further coordination with GEF Operational Focal Points to explore potential cooperation in a country-driven manner.

161. *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 National Designated Entities (NDEs) to the CTCN; therefore, while the project supported partner countries in identifying potential technical assistance activities for its services, it also did so for any prospective requests for submission to the CTCN. UNEP uploaded outputs and reports onto the CTCN Knowledge Partners web page. The project also looked 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 coordinated 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.

162. *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.

163. *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 continues to be strengthened. Coordination meeting have not happened in 2018, but the EBRD is seeking to set at least one coordination meeting in 2019.

164. *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. More information is in Annex 5.

165. 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) Seventeenth meeting of the TEC on September 25-27, 2018 in Bonn, Germany (remote participation);
- (b) Twelfth Meeting of the CTCN Advisory Board on October 3-5, 2018 in Vienna, Austria; and

(c) Eighteenth meeting of the TEC on 25-27 March 2019 in Copenhagen, Denmark.

166. In the reporting period, the CTCN communicated to the GEF that it continued to foster and encourage better engagement of the 134 non-Annex I NDEs with focal points of the UNFCCC's Financial Mechanism, which was done by connecting specific sessions during the annual regional fora of NDEs, presenting summaries of CTCN and NDE-relevant COP decisions, soliciting feedback from NDEs, and recommending ways to enhance collaboration at the national level. The objective of these discussions was to raise awareness and improve dialogue with the aim of developing proposals for eventual submission to the Financial and Technology Mechanisms that advance country priorities. The CTCN communicated that it did not have evidence that collaboration between NDEs and OFPs was strengthened during the reporting period, and that, as the CTCN does not have resources to significantly scale up national-level linkages or build the necessary relationships and awareness of respective processes, the situation is unlikely to change in the future.⁶³

b. National Climate Technology Activities

167. 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 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.⁶⁴

168. Five projects are still under implementation in Chile, Colombia/Kenya/Eswatini, Côte d'Ivoire, Mexico, and Sri Lanka. Six projects have closed upon completion: Cambodia, China, Jordan, Russian Federation, Senegal, 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.

169. 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.

170. 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 sustainable land management practices were included as CCA-related technologies.

171. 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 11 projects have implemented their activities, including demonstration, policy and standards

⁶³ The official correspondence from CTCN was received on July, 19, 2019.

⁶⁴ 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.

development and capacity-building. They have identified and trained local companies and technicians to adopt innovative technologies.

172. 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 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.⁶⁵ The mid-term reports of all these projects were shared by the GEF as they were received, with only one project having an outstanding mid-term review that has not yet been submitted to the GEF due to project delays. 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 6.

c. Technology Needs Assessments

173. The GEF provides financial support for developing countries to undertake TNAs. Since 2001, more than more than 90 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 \$9.0 million.

174. The Global TNA project, 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 Technology Action Plans (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.

175. Phase I supported 36 countries between 2009 and 2013. These countries were:

- (a) Africa and the Middle East: Cote 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 PDR, 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.

176. 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 PDR) have been supported in concluding their TAP reports. The Phase II countries are:

⁶⁵ Note that not all reports are made publicly available.

- (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 PDR, Malaysia, Pakistan, Philippines, Uzbekistan, Turkmenistan;
- (c) LAC: Belize, Bolivia, Grenada, Guyana, Honduras, Panama, Uruguay.

177. The project comprises two components: (i) 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 (ii) preparation of TNAs and TAPs through improved training and material. The TNA project Phase II was closed in September 2018. The mid-term evaluation was shared with the GEF in October 2017, and it is expected that the terminal evaluation will be delivered by December 2019.

178. 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 \$0.3 million 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.

179. Based on the experience from two previous projects, this project will be improved by: (i) implementing national training for a wider team of stakeholders in the country in order to strengthen their capacities; (ii) peer-to-peer inter-country workshops; and (iii) 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.

180. Progress made during during the reporting period on the TNA Phase III project, as reported by UNEP:

- (a) Participating countries have nominated their TNA coordinator, and the countries have had project inception missions and national trainings;
- (b) Countries have identified their priority sectors for the TNA, and have set up their TNA institutional arrangements in their respective countries.
- (c) A global kick-off workshop was held in October 2018, and regional training workshops in all regions have been conducted in 2019.
- (d) All participating countries are actively using their TNA work as a means to identify and implement NDC actions, but also to create synergies with other planning processes such as NAPs. In addition, countries view their TNAs as a way of developing

and informing their project pipeline, including for their GCF project portfolio, learning from other countries, which have done so already through their completed TNAs.

- (e) The project team works closely with the UNFCCC secretariat and is engaged in the TEC TNA taskforce. Through this collaboration, the project benefits from many opportunities to disseminate the TNA results, including through COP and other UNFCCC-related events.

181. In the reporting period, the fourth TNA project (TNA phase IV) to support 15 LDCs and SIDS was approved by the GEF Council in June 2019. Total GEF financing for this project is \$4.4 million from the CCM set-aside. The project consists of two components: (i) TNA and development of TAPs; and (ii) evaluations. The participating countries are as follows:

- (a) Africa and the Middle East: Comoros, Ethiopia, Guinea-Bissau, Somalia, South Sudan, and Yemen.
- (b) Asia and the Pacific: Kiribati, Maldives, Niue, Papua New Guinea, Solomon Islands, Timor Leste, Tonga, and Tuvalu.
- (c) LAC: St. Kitts and Nevis.

182. As in Phase III, the project will continue to build upon lessons and experiences captured from the three previous TNA projects, again focusing on: (i) Implementing national trainings; (ii) Peer-to-peer exchange and learning; and (iii) National events and roundtables.

183. Under the GEF-7 Programming Directions, support to other countries' TNAs is possible using national allocations. LDCs and SIDS continue to be eligible to draw on the global CCM set-aside.

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 435 EAs with \$502.7 million from the GEFTF and the LDCF. Of this amount, 384 EAs have been supported with \$490.5 million in funding (see Table 13 and Table 14) from the GEFTF, in support of NCs, BURs, and TNAs.

Table 13: GEF Trust Fund Enabling Activities Projects by Region (GEF Pilot Phase to end of reporting period)

<i>Region</i>	<i>Number of projects</i>	<i>GEF amount (\$ million)</i>	<i>Co-financing (\$ million)</i>
Africa	111	41.9	20.9
Asia	80	76.3	60.6
ECA	59	25.9	6.8
LAC	102	89.1	72.3
Global	32	257.2	45.0
Total	384	490.5	205.7

Table 14: 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
GEF-7 (2018-2022)	14	23.7	5.5
Total	384	490.5	205.7

186. In the reporting period, the GEF financed, through the GEFTF, 14 EAs, in the amount of \$23.7 million. Annex 2 lists projects and programs for CCM and EAs approved under the GEFTF in the reporting period.

187. As of June 30, 2019, a total of 182 BURs have been approved for GEF funding in 129 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 utilize 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, 23 non-Annex I Parties submitted their NCs, and 22 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 Nationally Determined Contributions

193. The Global Support Program (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 NDCs. 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 Consultative Group of Experts (CGE). The UNFCCC Secretariat collaborates with the GSP.

194. The five-year program started in late 2015 and has so far provided support to more than 120 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, many of which were conducted in partnership with the UNFCCC secretariat, GIZ, FAO and others, included: voluntary reviews of national GHG inventory management systems and national GHG inventories of ten countries; quality review and support provided to 14 countries on NC and BUR reports and components; joint training workshops with GIZ and FAO on tracking progress on adaptation, enhancing GHG inventories with a focus on the waste and AFOLU sectors, and strengthening MRV capacities; provision of virtual courses on the use of the 2006 IPCC guidelines on GHG inventories and webinars on MRV systems and databases; elaboration of technical guidance documents on national GHG inventory development for SIDS and LDCs and institutional capacities for NDC implementation; in-country technical support on NDCs to three countries; support to the CGE's implementation plan and translation of CGE material on GHG inventories into Portuguese; continued support to South-South networks through regional capacity-building workshops for the Asia, Pacific Islands and Balkan region, Eurasian countries, English-speaking Caribbean countries, Western Balkan countries and Lebanon, North, Central, and Eastern Africa region, a Lusophone cluster, and the Latin American region.

196. The program recently went through a mid-term review (MTR), which was finalized in September 2018, to assess progress towards the achievement of the project objectives and outcomes. The MTR assessed the overall progress toward project intended results and project implementation and adaptive management as satisfactory, while specific project outcomes were rated as moderately satisfactory to highly satisfactory. The rating outcomes are presented in Table 15 below.

Table 15: Mid-Term Review Outcomes for the Global Support Program for National Communications, Biennial Update Reports and Nationally Determined Contributions

Project area	Theme	MTR rating
Progress toward project intended results		Satisfactory
Outcome 1.1	Sustainable national institutional arrangements	Moderately satisfactory
Outcome 1.2	NC and BUR data and analyses available and used by a greater number for planning purposes	Moderately satisfactory
Outcome 2.1	National teams are better able to apply UNFCCC reporting guidelines for the preparation of NCs and BURs and communicate NDCs	Satisfactory
Outcome 3.1	National and/or regional climate change information networking enhanced	Highly satisfactory
Project implementation and adaptive Management		Satisfactory
Project sustainability		Moderately likely

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 2018, the GEFTF, LDCF, and SCCF portfolios supported 76 (72 CCM and 4 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 2018 amounted to approximately \$96.6 million. Of these activities, 36 projects provided support to 43 SIDS and LDCs with capacity-building activities amounting to \$51.7 million. These activities were communicated to the UNFCCC through its capacity-building portal in August 2019.

200. These projects cut across ten UNFCCC-defined priority areas for capacity-building (a, b, c, e, g, h, i, j, k and n). The majority of CCM projects address enhancement of enabling environments, institutional capacity-building, greenhouse gas inventories, emission database management, and systems for collecting, managing and utilizing activity data and emission factors, and enhancement and transfer of technologies, among others. As for CCA projects, efforts include institutional development and strengthening, research, and systemic observation through climate information systems, and capacity building for implementation of adaptation measures.

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 2018, the GEF provided a minimum of \$7.4 million towards education, training, and public awareness through its regular CCM and CCA programming. In addition, many NC projects contain components that provide support for education, training, and public awareness.

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-7.⁶⁶

Table A1.1: Initial GEF-7 STAR Country Allocations (\$ million)⁶⁷

<i>Country</i>	<i>Climate change</i>	<i>Biodiversity</i>	<i>Land degradation</i>	<i>Total</i>	<i>Fully flexible</i>	<i>Marginal adjustment⁶⁸</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

⁶⁶ GEF, 2018, [Initial GEF-7 STAR Country Allocations](#), Council Document GEF/C.55/Inf.03.

⁶⁷ The figures presented here are rounded to two decimal places. On the GEF Portal, these figures are presented as their actual initial amounts.

⁶⁸ 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 adjustment⁶⁸</i>
Cabo 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 adjustment⁶⁸</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 PDR	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 adjustment⁶⁸</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 adjustment⁶⁸</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 (North 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 2019 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, 2018 to June 30, 2019).

1. List of FY 2019 Climate Change Mitigation Projects and Programs

Table A2.1: FY 2019 Climate Change Mitigation Projects and Programs

GEF ID	Country	Agency	Title	Type ^a	Total GEF (\$ million)	Co-financing (\$ million)	Total (\$ million)
Stand-alone projects and programs							
10080	Algeria	UNDP	AIM-WELL: Algeria Integrated Management of Waste Energy at the Local Level	RE	5.0	47.7	52.7
10087	Chile	UNEP	Accelerating investment in efficient and renewable district energy systems in Chile	EE	2.4	16.3	18.7
10090	Turkey	UNDP	Promoting Low Cost Energy Efficient Wooden Buildings in Turkey	EE	4.3	34.0	38.3
10093	Regional	CI	Regional capacity building of COMESA member states in Eastern and Southern Africa for enhanced transparency in Climate Change Monitoring, Reporting and Verification as defined in the Paris Agreement.	Mixed	5.9	1.6	7.4
10110	Ukraine	EBRD	Sustainable Bioenergy Value Chain Innovations	RE	5.3	51.0	56.3
10114	Global	UNEP	Global Programme to Support Countries with the Shift to Electric Mobility.	TU	32.7	433.1	465.8
10120	Equatorial Guinea	FAO	Enhancing Equatorial Guinea's institutional and technical capacity in the agriculture, forestry and other land-use sector for enhanced transparency under the Paris Agreement	Mixed	1.0	0.7	1.7
10121	Colombia	UNDP	Colombia's 2030 MRV Strategic Vision	Mixed	4.2	1.0	5.2
10138	Armenia	UNDP	Building Armenia's national transparency framework under Paris Agreement	Mixed	1.1	0.6	1.7
10152	Belarus	World Bank	Sustainable Energy Scale-Up	EE	4.0	200.0	204.0
10155	Afghanistan	FAO	Strengthening capacity in the agriculture, land-use and other sectors for monitoring and reporting on Afghanistan's mitigation and adaptation targets	Mixed	1.5	1.5	3.0
10189	Thailand	UNEP	Accelerating construction of energy efficient green housing units in Thailand	EE	3.6	31.3	34.8
10194	India	UNDP	Capacity-building for establishing an Integrated and Enhanced Transparency Framework for Climate actions and support measures	Mixed	4.3	1.0	5.3
10227	China	FECO	China Capacity Building for Enhanced Transparency Phase I	Mixed	1.9	1.4	3.3
Stand-alone projects and programs Subtotal					77.1	821.2	898.3
Multi-focal area projects and programs							
10117	Egypt	UNDP	Green Sharm El Sheikh	Mixed	7.0	66.1	73.1
10122	Brazil	UNDP	Seventh Operational Phase of the GEF Small Grants Programme in Brazil	SGP	5.0	9.9	14.9
10124	Costa Rica	UNDP	Seventh Operational Phase of the GEF Small Grants Programme in Costa Rica	SGP	2.4	5.5	7.8
10125	India	UNDP	Seventh Operational Phase of the GEF Small Grants Programme in India	SGP	5.0	11.0	16.0
		World Bank, CI, CAF, WWF-US, FAO, IFAD,		AFOLU	96.3	509.5	605.8
10198	Regional	UNIDO, UNDP	Amazon Sustainable Landscapes Program - Phase II				

<i>GEF ID</i>	<i>Country</i>	<i>Agency</i>	<i>Title</i>	<i>Type^a</i>	<i>Total GEF (\$ million)</i>	<i>Co-financing (\$ million)</i>	<i>Total (\$ million)</i>
10201	Global	World Bank, UNDP, CI, WWF- US, UNEP, FAO, IFAD, UNIDO, IUCN	<i>Food Systems, Land Use and Restoration (FOLUR) Impact Program</i>	AFOLU	232.5	1,746.5	1,978.9
10206	Global	FAO, World Bank, IUCN, WWF-US	<i>Sustainable Forest Management Impact Program on Dryland Sustainable Landscapes</i>	AFOLU	104.5	809.1	913.6
10208	Regional	UNEP, IUCN, WWF-US, World Bank, UNDP	<i>The Congo Basin Sustainable Landscapes Impact Program (CBSL IP)</i>	AFOLU	62.3	387.4	449.7
Multi-focal area projects and programs Subtotal					514.9	3,545.0	4,059.9

a AFOLU: agriculture, forestry and other land uses, EE: energy efficiency, Mixed: includes mixed objectives and CBIT projects, RE: renewable energy, SGP: small-grants program, TU: sustainable transport and urban systems, TT: demonstration, deployment, and transfer of innovative LCTs.

2. List of FY 2019 Enabling Activity Projects and Programs

Table A2.2: FY 2019 Enabling Activity Projects and Programs

<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>
10066	Uruguay	UNDP	<i>Uruguay's Third Biennial Update Report (BUR3)</i>	0.4	0.1	0.4
10068	Jordan	UNDP	<i>Fourth National Communication and Second Biennial Update Report under the UNFCCC</i>	0.9	0.1	1.0
10127	Nigeria	UNDP	<i>Nigeria's Second Biennial Update Report (BUR2)</i>	0.4	0.1	0.4
10131	Thailand	UNDP	<i>Thailand's Fourth National Communication and Third Biennial Update Report (NC4-BUR3) to the UNFCCC</i>	0.9	0.7	1.6
10137	Ecuador	UNDP	<i>Fourth National Communication (4NC) and Second Biennial Update Report (2BUR)</i>	0.9	0.1	1.0
10140	Kazakhstan	UNDP	<i>Development of Kazakhstan's Eighth National Communication and preparation of two (Fourth and Fifth) Biennial Reports to the UNFCCC</i>	0.9	0.9	1.8
10145	Armenia	UNDP	<i>Armenia's Third Biennial Update Report to the UNFCCC</i>	0.4	0.1	0.4
10146	Panama	UNDP	<i>Development of Fourth National Communication and Second Biennial Update Report under the UNFCCC</i>	0.9	0.1	1.0
10167	Global	UNEP	<i>Umbrella Programme for Preparation of National Communications (NCs) and Biennial Update Reports (BURs) to the UN Framework Convention on Climate Change (UNFCCC)</i>	10.8	1.0	11.8
10171	Global	UNEP	<i>Technology Needs Assessments (TNA) Phase IV</i>	4.4	1.4	5.8
10223	Montenegro	UNDP	<i>Development of Montenegro's Third Biennial Update Report (TBUR) to the UNFCCC</i>	0.4	0.1	0.4
10224	Namibia	UNDP	<i>Namibia's Fourth Biennial Update Report (BUR4) to the United Nations Framework Convention on Climate Change (UNFCCC)</i>	0.4	0.1	0.4
10225	Paraguay	UNDP	<i>Fourth National Communication and Third Biennial Update Report on Climate Change under UNFCCC</i>	0.9	0.3	1.2
10226	Cabo Verde	UNDP	<i>Fourth National Communication and First Biennial Update Report for the Republic of Cabo Verde under the UNFCCC</i>	0.9	0.7	1.6
Enabling activities Subtotal				23.7	5.5	29.2

3. Summaries of Climate Change Mitigation Stand-alone Projects and Programs Approved in FY 2019

Algeria: *AIM-WELL: Algeria Integrated Management of Waste Energy at the Local Level* (GEFID: 10080, UNDP, GEFTF: \$5.0 million, Total Cost: 52.7 million). The project will promote an integrated and comprehensive solid waste management by fostering technology deployment, dissemination, and transfer in collaboration with the private sector. The population of Algeria's major cities has grown rapidly over the past decades. Local authorities have struggled to provide satisfactory services, particularly in waste management. In 2013, about 45 percent of urban wastes (6.1 million metric tons) were recyclable, but not recycled or reused. The market value of recyclable wastes was estimated at \$213 million per annum. Today, only 6 percent of the recyclable wastes are reused and recycled. In its Second National Communication to the UNFCCC (2010), the government of Algeria indicated that the waste sector accounted for 10 percent of Algeria's GHG emissions and that using urban waste for power generation would become one of the major means of clean energy development and GHG emission reductions. This GEF project will help identify the barriers and address root causes of unsustainability of waste management in the country and enlarge the share of reuse and recycle of waste. The project estimates to mitigate 3.0 Mt CO₂ eq emissions over the project lifecycle.

Chile: *Accelerating Investment in Efficient and Renewable District Energy Systems in Chile* (GEFID: 10087, UNEP, GEFTF: 2.4 million, Total Cost: 18.7 million). The project will support the decarbonization of the heating sector in Chile by fostering the deployment of district energy systems. In cities in central and southern Chile, around 70 percent of total energy consumption is used for heating, usually through inefficient and polluting woodstoves and gas boilers. In comparison, district energy can be up to 50 percent more efficient and reduce emissions by 90 percent. This project builds on the GEF-6 Global District Energy Accelerator, which has created momentum and identified a pipeline of potential demonstration projects. It will unlock investment to build the first round of projects in partnership with local governments and kick-start the district energy market in Chile, supported by a national coordination structure and enabling regulatory framework, including financial incentives. The project is aligned with ongoing policy actions such as the Energy Policy 2050, National Energy Route 2018-2022 and Chile's NDC, which commits to a reduction in GHG emissions per GDP unit by 30 percent below their 2007 levels by 2030. The project estimates to mitigate 2.4 Mt CO₂ eq emissions.

Turkey: *Promoting Low Cost Energy Efficient Wooden Buildings in Turkey* (GEFID: 10090, UNDP, GEFTF: \$4.3 million, Total Cost: \$38.3 million). The project will catalyze and replicate the use of innovative wood-based technologies as low-carbon construction materials to reduce the embedded carbon content of construction materials. Under the Paris Agreement, the government of Turkey has set an NDC target of reducing GHG emissions by up to 21 percent compared to business as usual by 2030. The government aims to realize its target by increasing the share of renewables and by promoting energy efficiency. In Turkey, the building sector is the second largest, after the energy sector, in terms of both energy consumption and GHG emissions (approximately 32 percent of all total national energy related GHG emissions). The development of wooden houses is one of the effective approaches to reducing GHG emissions from buildings. In 2014, there were 151,016,151 m² of new buildings constructed in Turkey and only 289,681 m² (0.19 percent) used wooden frames and wooden materials. GHG mitigations from this construction in the baseline was estimated as 83,428 tCO₂e in 2014 due to the fact that 0.19 percent of all new buildings in Turkey were constructed from wood. By 2026 additional 1 percent of all new buildings in Turkey are targeted to be constructed from wood (approximately 1.51 million m²). This proposed project is expected to reduce 0.4 Mt CO₂ eq per annum.

Regional (Botswana, Comoros, Eritrea, Seychelles and Zambia): *Regional capacity building of COMESA member states in Eastern and Southern Africa for enhanced transparency in Climate Change Monitoring, Reporting, and Verification as defined in the Paris Agreement* (GEFID: 10093, CI, GEFTF: \$5.9 million, Total Cost: \$1.6 million). This project is the first multi-country CBIT project and aims to strengthen the capacity of COMESA member States, including Seychelles, Botswana, Comoros, Eritrea and Zambia to comply with transparency requirements of the Paris Agreement through establishment of an Eastern and Southern Africa Regional CBIT transparency framework for MRV of climate actions, report on NDCs and knowledge dissemination. The project addresses known barriers at the national level in each of the participating countries when it comes to MRV of GHG emissions, while including also a regional component for regional peer exchange programs and cross-learning. The project draws on best available international practice, such as by the Greenhouse Gas Management Institute (GHGMI), while focusing on developing and strengthening national-level capacity for country-driven and country-owned MRV capacity. For example, the project will develop country-specific indicators for tracking NDC implementation, and establish and operationalize national greenhouse gas inventories and online MRV systems. The project will also utilize a training-of-trainers approach, delivered through

academic institutions, thereby establishing long-term, in-house capacity in participating countries. Training provided through the project will for the most part also be open to benefit other COMESA countries, even if they are not formally part of the project. Finally, the project links with the CBIT Global Coordination Platform and will share lessons learned through it.

Ukraine: Sustainable Bioenergy Value Chain Innovations (GEFID: 10110, EBRD, GEFTF: \$5.3 million, Total Cost: 56.3 million). The project will promote investment in innovative bioenergy technologies and practices associated with the use of agricultural residues and wastes in Ukraine. In its Nationally Determined Contributions (NDCs) to the UNFCCC, the government of Ukraine sets an overall target of keeping its country-wide CO₂ emissions below 60 percent of the 1990 level by 2030. Complying with the NDCs, the Cabinet of Ministers of Ukraine approved the Strategy of the Low-Carbon Development of Ukraine up to 2050 on 18 July 2018. With that, decarbonization of the economy became one of the priority areas of the country. Recognizing the importance of use and further development of renewable energy resources, the government of Ukraine prioritizes wider use of biomass for energy, including acceleration of technological innovations in biomass conversion and integration of wider feedstock streams into energy production. The project will focus uniquely on developing sustainable bioenergy value chains by supporting interventions for the private sector, particularly SMEs to invest in bio-energy. With a loan of \$51 million from the EBRD to the national government, the project will lead to installation of a bio-energy power generation plant, which will mitigate 1.5 million Mt tCO₂ eq during its lifetime operation.

Global: Global Programme to Support Countries with the Shift to Electric Mobility (GEFID: 10114, UNEP-ADB-UNDP, GEFTF: \$32.7, Total Cost: \$465.8 million). This program will support countries in their decarbonization efforts of the transport sector, which is currently responsible for about one-quarter of the world's energy-related CO₂ emissions and is a leading contributor to black carbon and local pollution emissions. The International Energy Agency (IEA) estimates that the global vehicle fleet will double by 2050, with the growth taking place mostly in low- and middle-income countries. A global transition to low- and zero-emissions mobility is therefore essential to meet international climate commitments, including the Paris Climate Agreement. The key objectives of the program are to de-risk investments in electric vehicles through demonstration projects and to support participating countries in developing country and context-specific policies and incentives for electric mobility. The Program will include a cohort of 17 national child projects (Antigua and Barbuda, Armenia, Burundi, Chile, Costa Rica, India, Ivory Coast, Jamaica, Madagascar, Maldives, Peru, Saint Lucia, Seychelles, Sierra Leone, Togo, Ukraine, and Uzbekistan), complemented by a global child project. A key execution partner of the Program will be the IEA, which is the world's leading energy analysis agency. The GEF-7 Electric Mobility Program, which will also closely link with the European Commission Solutions Plus Program, an initiative that aims at developing integrated urban electric mobility solutions in 15 major cities worldwide, is structured around four complementary components: (i) global thematic working groups (light vehicles, heavy vehicles, charging infrastructure and grid integration, batteries); (ii) support and investment platforms, to be established in Africa (by UNEP), Asia (by ADB), and LAC (by Centro Mario Molina in Chile); (iii) country project implementation (national child projects), participating countries will deploy GEF STAR resources to finance tailored support in one or more areas, including development of enabling policy environments, development of pilot initiatives, and development of business model and financing schemes for further scale up; and (iv) tracking progress and facilitating replication, which will include monitoring, reporting, and verification frameworks against which the outcomes of the program will be measured, during implementation and afterwards. The Program will contribute to reducing GHG emission on the order of 67 Mt CO₂ eq (33 Mt CO₂ eq direct, 34 Mt CO₂ indirect) in this first group of 17 countries.

Equatorial Guinea: Enhancing Equatorial Guinea's institutional and technical capacity in the agriculture, forestry, and other land-use sector for enhanced transparency under the Paris Agreement (GEFID: 10120, FAO, GEFTF: \$1.0 million, Total Cost: \$1.7 million). Equatorial Guinea lies within the Congo Basin, which contains the world's second largest tropical forest. In line with its Paris Agreement commitments, the country wishes to proceed with the implementation of its Nationally Determined Contribution (NDC) and increase transparency of its reporting as per the Enhanced Transparency Framework (ETF). The country has submitted its NDC with a strong focus on the Agriculture, Forestry, and Other Land Use (AFOLU) sector, as well as the energy sector. This project will strengthen institutional and technical capacities in the AFOLU sector to respond to the enhanced transparency requirements of the Paris Agreement. The project will establish coordination mechanism and institutional arrangements to integrate and plan transparency-related activities in the AFOLU sector, train government representatives on MRV and forest reference emission levels, develop a land classification system and a land use/cover map, develop a report containing country-specific emission factors for different land classes in order to support estimates of carbon stocks, and organize a south-south cooperation and exchange meeting on ETF experiences, the 2006 IPCC Guidelines, and national GHG inventories and projections of emissions/removals for the AFOLU sector.

Colombia: *Colombia's 2030 MRV Strategic Vision* (GEFID: 10121, UNDP, GEFTF: \$4.2 million, Total Cost: \$1.0 million). This CBIT project will strengthen Colombia's capacity for robust monitoring, estimation, reporting, accounting, and verification of GHG emissions and removals. The project will support the efforts of the Institute of Hydrology, Meteorology, and Environmental Studies to develop an integrated MRV system building on Colombia's national GHG inventory system. It seeks to increase data completeness and availability in key categories of emissions and removals, and to develop the institutional arrangements, technical foundations and tools for systematic, robust national MRV system that can meet the transparency requirements of the Paris Agreement. The project will focus on the agriculture, forestry and other land use and energy sectors, which comprise around 90 percent of Colombia's absolute emissions. At the national level, the project will help track reduction emissions targets as defined in Colombia's NDC and provide high quality data to stakeholders in the country to guide mitigation policies and initiatives. This project will coordinate with other relevant initiatives in the country, including support from USAID and GIZ, as well as with the CBIT Global Coordination Platform.

Armenia: *Building Armenia's national transparency framework under Paris Agreement* (GEFID: 10138, UNDP, GEFTF: \$1.1 million, Total Cost: \$1.7 million). The objective of this CBIT project is to build institutional and technical capacities to meet enhanced transparency requirements as defined in Article 13 of the Paris Agreement. Armenia's NDC identifies transparency as a key component of its contribution, and states that transparency of mitigation and adaptation actions will be ensured through introduction of a national and international MRV of GHG mitigation system, and an open and accessible information system with a participatory process. However, Armenia lacks the formal institutional arrangements and corresponding technical capacity in key sectors to comply with enhanced transparency requirements. It also lacks proper MRV infrastructure for assessing and reporting on mitigation and adaptation actions and policies and on support received. The current formal arrangements for the maintenance of its GHG inventory are limited. There is a need to embed MRV activities into the pending new version of the Air Protection Law. In terms of gender issues, there is a lack of information on gender-differentiated benefits in key sectors, and lack of information on the gender differentiation of benefits from specific interventions. To comply with the Paris Agreement, Armenia must establish a functional transparency framework and gain the capacity to conduct transparency activities on an ongoing basis.

Belarus: *Sustainable Energy Scale-Up* (GEFID 10152, World Bank, GEFTF: \$4.0 million, Total Cost: \$204.0 million). The project will improve energy efficiency in space heating for multi-apartment buildings and scale up biomass fuel utilization in selected urban localities in the Republic of Belarus. Belarus has one of the lowest energy efficiency ratings in Europe, and makes minimum use of renewable energy resources. In its NDCs to the UNFCCC, Belarus has identified two key areas to achieve its commitments to the Paris Agreement: improving energy efficiency and scaling up renewable energy use. The project will (i) catalyze investments in indigenous wood-based renewable fuels for space heating, (ii) enable the broad-based outreach and capacity building efforts necessary for the success of the national thermal renovation program, and (iii) incentivize households to participate in the demonstration of energy efficiency improvement. The GEF grant will mobilize a loan of \$200 million from the World Bank and the European Investment Bank for investments in renewable energy and energy efficiency. The project aims to mitigate 8.4 Mt CO₂ eq over its lifetime.

Afghanistan: *Strengthening capacity in the agriculture, land-use and other sectors for monitoring and reporting on Afghanistan's mitigation and adaptation targets* (GEFID: 10155, FAO, GEFTF: \$1.5 million, Total Cost: \$3.0 million). Afghanistan is an LDC country in the Asian region and ratified Paris Agreement in 2017. Its NDC states to reduce 13.6 percent of the national GHG emissions by 2030 compared to business-as-usual scenario if it receives external support. Agriculture, the nation's largest GHG emitting sector, should be highlighted for international support for the enhanced transparency framework. This CBIT project will implement capacity building activities for Afghanistan's enhanced transparency reports under the Paris Agreement by enhancing institutional coordination among all relevant ministries and stakeholders with a focus on the AFOLU sector, strengthening capacity for monitoring and reporting on mitigation targets in the AFOLU and other sectors, and strengthening capacity for monitoring and reporting on adaptation in the AFOLU and other sectors.

Thailand: *Accelerating Construction of Energy Efficient Green Housing Units in Thailand* (GEFID: 10189, UNEP, GEFTF: \$3.6 million, Total Cost: \$34.8 million). The project will promote design and construction of energy efficient green housing units by supporting the National Housing Authority (NHA) in designing and piloting green homes, establishing a green energy-efficiency labelling scheme and associated financing mechanisms to create a market for green energy efficient low-rise residential homes. Thailand's energy efficiency measures in the building sector have been promoted

for multistory buildings, on the other hand, neither regulatory nor incentive measures have been developed for low-rise buildings, although this housing sector consumes 24 percent of the national electricity and its demand is growing. This project will invest in setup of the financing mechanism to provide incentives to home buyers for purchasers/developers to develop energy efficient housing units linked to the labelling scheme. The incentive schemes will be tested in the home-loan-providing banks in the project and then replicated in other commercial banks. This project will also work on developing an incentive mechanism for the private sector construction firms. The project estimates that it will mitigate 0.43 Mt CO₂ eq of direct GHG emission from home construction between 2022-2024 and will influence the national housing markets, expecting 2.1 Mt CO₂ eq of indirect GHG emission reduction in 2020-2030.

India: Capacity-building for establishing an Integrated and Enhanced Transparency Framework for Climate actions and support measures (GEFID: 10194, UNDP, GEFTF: \$4.3 million, Total Cost: \$5.3 million). This CBIT project will enable India's domestic policy planners to establish the enhanced transparency framework under the Paris Agreement by creating an enabling environment through support for their mandate (to plan, coordinate, implement, monitor, and evaluate policies, strategies, and programs) as well as the web-based National Institutional Coordination System (NICS); strengthening institutional capacity for MRV of climate information; and instituting the National Climate Registry (NCR) to share relevant information in a transparent manner, which enables direct interface between public, civil society, and policy planners. India's GHG emissions occupies a large share (10 percent) of the total GHG emissions in 151 Non-Annex 1 Parties to the UNFCCC; therefore its effort to enhance its national transparency system will have a great impact on the establishment of the enhanced transparency framework under the Paris Agreement. The proposed project incorporates innovative features utilizing information technology such as NICS and NCR and other activities which will be beneficial to other countries through knowledge management under the GEF global coordination platform.

China: China Capacity Building for Enhanced Transparency Phase I (GEFID: 10227, FECO, GEFTF: \$1.9 million, Total Cost: \$3.3 million). The objective of this CBIT project is to strengthen China's institutional and technical capacities on transparency at national, local, and enterprise levels to better support the implementation of the national low-carbon development objectives and the high-level implementation of the Paris Agreement. China's GHG emissions occupy the largest share (37 percent) of the total GHG emissions in 151 Non-Annex 1 Parties to the UNFCCC; therefore its effort to enhance national transparency system will have significant impacts on the establishment of the enhanced transparency framework under the Paris Agreement. China has invested in the development of transparency mechanisms and systems. However, China's capacity building is a prolonged task, as its large population and enormous emissions complicate statistical data and information collection, requiring engagement of multiple stakeholders. This CBIT project contributes to three aspects of the challenge; i) help China to fulfill the commitment under the Paris Agreement, ii) drive all-round capacity building at national, local, and enterprise levels and iii) learn from and communicate with international experiences. Further capacity building on GHG inventory preparation and development on country-specific emission factors will improve the frequency, completeness, and accuracy of the inventory reports, which helps to better identify mitigation potentials. The project will help China prioritize actions by assessing the effect of different mitigation measures, so as to better support the policy making process. Also, publishing information about GHG inventories and progress towards NDC's transparency in China will facilitate the dissemination of mitigation actions and effects to the international community and bolster understanding and mutual trust of the various Parties.

4. Summaries of Climate Change Mitigation Multi-Focal Area Projects and Programs Approved in FY 2019

Egypt: Green Sharm El Sheikh (GEFID: 10117, UNDP, GEFTF: \$7.0 million, Total Cost: \$73.1 million). The objective of the project is to turn Sharm El Sheikh into a model sustainable tourism city through the adoption of further low-carbon technologies, good waste management practices, and enhanced protection of its natural capital basis by reviving, updating, and upgrading the Green Sharm Initiative announced in 2010, and begin its implementation in earnest, accompanied by suitable and strong regulations and enforcement. The project will promote adoption of low-carbon technologies (energy efficiency, solar energy, more efficient use of desalinated water), improved solid waste management, and a further-enhanced protection of the surrounding marine biodiversity, better regulation of harmful tourism practices and fisheries, and enhanced management effectiveness in three nearby marine protected areas (Ras Mohamed, Nabq, Abu Galum). The project estimates to mitigate 1.1 Mt CO₂ eq emissions in targeted urban zones thorough innovations and public and private partnership.

Brazil: *Seventh Operational Phase of the GEF Small Grants Programme in Brazil* (GEFID: 101222, UNDP, GEFTF: \$5.0 million, Total Cost: \$14.9 million). The SGP project will enable communities and organizations in the Cerrado and Caatinga biomes of Brazil to take collective action to enhance socio-ecological resilience of their production landscapes through a participatory landscape planning and management approach that supports multi-functional land-use systems. The grants will support activities such as promotion of non-timber forest products, agroecology, agroforestry, landscape restoration, and mitigation of climate change, among others. Beside small grants, the project will also work in the broader context of providing training, capacity building, and advocacy for individuals and organizations to improve value chains, influence public policies and advocate for rights to land and territory. The project will seek to mitigate GHGs by promoting activities on conservation and enhancement of carbon stocks in agriculture, natural vegetation, and other land use through reforestation, agroforestry, revegetation, and rehabilitation of degraded soils, increasing plant cover, and maintaining or increasing soil organic matter content. The project estimates to mitigate 0.05 Mt CO₂ eq of direct GHG emissions and 0.10 Mt CO₂ eq of indirect GHG emissions.

Costa Rica: *Seventh Operational Phase of the GEF Small Grants Programme in Costa Rica* (GEFID: 10124, UNDP, GEFTF: \$2.4 million, Total Cost: \$7.8 million). The SGP project will enable communities and organizations in the Jesus Maria, Barranca, and lower Grande de Tarcoles river basins, as well as the Paso Las Lapas Biological Corridor of Costa Rica to take collective action, through a participatory landscape planning and management approach, to enhance socio-ecological resilience. The project will support specific community-based actions in each landscape by financing small-scale projects which include restoration of degraded soils and reforestation of habitats to improve connectivity; transformation of farming systems to more sustainable production practices; strengthening of community voluntary environmental inspection groups; efforts to prevent and manage wildfires through the formation, training, and equipping of voluntary fire brigades and Payment for Environmental Services schemes, among others. The project will seek to mitigate GHG emissions by promoting activities on conservation and enhancement of carbon stocks in agriculture, forests and other land uses, energy efficient technologies related to housing and lighting. The project estimates to mitigate 0.002 Mt CO₂ eq of direct GHG emissions.

India: *Seventh Operational Phase of the GEF Small Grants Programme in India* (GEFID: 10125, UNDP, GEFTF: \$5.0 million, \$16.0 million). The SPG project will enable communities and organizations in the most vulnerable and least developed areas of India to take collective action through a participatory landscape planning and management approach. The focus will be on the most vulnerable and least developed districts of the three broad landscapes: (i) highlands of the North-East, (ii) drylands of the central region and (iii) coastal regions. Specific landscapes, i.e. one in each region, will be further selected for focused intervention, based on criteria that will include existence of biodiversity of global importance, trends and patterns regarding threats and degrees of threat, appropriate policy frameworks at local and state levels, and other factors. The project will seek to mitigate GHG emissions by promoting activities on energy efficient technologies (housing and lighting), renewable energy (alternatives to fuelwood, waste, coal). The project estimates that it will mitigate 0.05 Mt CO₂ eq of direct GHG emissions and 0.09 Mt CO₂ eq of indirect GHG emissions.

Regional (LAC, Brazil, Bolivia, Colombia, Ecuador, Guyana, Peru and Suriname): *Amazon Sustainable Landscapes Impact Program (ASL2)* (GEFID: 10198, World Bank, CI, FAO, IFAD, UNDP, UNIDO, CAF, WWF, GEFTF: \$96.3 million, Total Cost: \$605.8 million). The ASL2 Program will seek to build upon the ongoing efforts under ASL1, greatly expanding the basin coverage from 75 percent in ASL1 to approximately 92 percent in ASL2. The IP will invest in several instruments to develop a forest- and freshwater-based economy and consequently reduce deforestation in areas where the conservation of Amazonian ecosystems is of paramount importance for the health of terrestrial and freshwater ecosystems and associated ecosystem services, including climate change regulation. The program demonstrates mitigation options with systemic impacts as it strongly supports reducing GHG emissions through avoided deforestation and by enhancing above and below ground carbon stocks; promotes the continuation of the water and wind pattern cycles that the Amazon strongly influences; and is in line with the NDCs of the Amazonian countries, several having included forest and land-based emissions in their national GHG emissions. The project estimates to mitigate 29.9 Mt CO₂ eq of direct GHG emissions.

Global (China, Cote d'Ivoire, Ethiopia, Indonesia, Malaysia, Peru, Ukraine, Viet Nam, Kazakhstan, Liberia, Burundi, Colombia, Ghana, Guatemala, Mexico, PNG, Tanzania, Thailand): *The Food Systems, Land Use, and Restoration Impact Program (FOLUR)* (GEFID: 10201, World Bank, UNDP, CI, WWF, UNEP, FAO, IFAD, UNIDO, IUCN, GEFTF: \$232.5 million,

\$1,978.9 million). The FOLUR IP seeks to promote transformational shift in agricultural land use and food systems that are major drivers of environmental degradation around the world. The FOLUR IP will benefit participating countries by helping them reconcile competing social, economic, and environmental objectives of land management, and move away from unsustainable sectoral approaches. The program aims to promote comprehensive land-use planning, improve governance and align incentives, scale up innovation and practical applications in commodity value chain partnerships, leverage investments through linkage with private and public partners, and promote institutional collaboration in integrated approaches at country and landscape level. To achieve its goals, the program design targets large production landscapes that have the potential to deliver global environmental benefits at scale and be sustained after the program finishes. The program seeks to cover globally important geographies for both commercial agricultural commodities (e.g., soybeans, coffee, cocoa, palm oil and livestock) and food staples (e.g., rice, wheat and maize). The program estimates to mitigate 209.8 Mt CO₂ eq of direct GHG emissions.

Global (Angola, Botswana, Kenya, Malawi, Mozambique, Namibia, Tanzania, Zimbabwe, Burkina Faso, Kazakhstan and Mongolia): *Sustainable Forest Management Impact Program on Dryland Sustainable Landscapes (DSL)* (FAO-WB-IUCN-WWF, GEFID: 10206, GEFTF: \$104.5 million, Total Cost: \$913.6 million). The objective of the DSL Program is to avoid, reduce, and reverse further degradation, desertification, and deforestation of land and ecosystems in drylands, through the sustainable management of production landscapes. The IP will transform the management of drylands in selected regions and countries, establishing the basis for the scaling out of sustainable dryland management to regional and global levels. This will be of major significance, given that drylands extend over more than 40 percent of the Earth's landmass, are affected by some of the world's most pressing environmental and development challenges and have been historically neglected in terms of coordinated investments. The program will focus specifically on three dryland regions: the Miombo and Mopane ecosystems of southern Africa; the savannas of west Africa; and the temperate grasslands, savannas and shrublands of Central Asia. Each of the country child projects will include the key strategies; strengthening systems and capacities for land use planning to achieve land degradation neutrality (LDN); strengthening community-based governance mechanisms; promoting sustainable agriculture and livestock management. The program will mitigate 81 Mt CO₂ eq of direct GHG emissions.

Regional (Africa, Cameroon, Central African Republic, Congo, Congo DR, Equatorial Guinea, Gabon): *Congo Basin Sustainable Landscapes Impact Program (CBSL)* (UNEP, World Bank, WWF, IUCN, UNDP, GEFID: 10208, GEFTF: \$62.3 million, Total Cost: \$449.7 million). The objective of the CBSL IP is to catalyze transformational change in conservation and sustainable management of the Congo Basin through landscape approaches that empower local communities and forest dependent people, and through partnership with the private sector. Actions will address immediate problems related to biodiversity loss and lack of tenure and land rights for forest dependent people, but also aim to prepare the region for dealing with increasing threats in the near future, as the development of infrastructure and large-scale agribusiness plantations with the risks of irreversible damage to the integrity and functioning of the Congo Basin Forest ecosystem. An alternative development pathway for the basin that relies on local planning and governance systems, sustainable non-timber forest product value-chains with local stakeholders and the private sector, as well as the valuation of ecosystem services such as carbon sequestration and freshwater provisioning, needs to be part of the response to conserve large patches of intact forests, globally important biodiversity, regional climate, and to reduce GHG emission from forest and peatland degradation/destruction. The program will mitigate 121 Mt CO₂ eq of direct GHG emissions.

5. Summaries of Enabling Activity Projects Approved in FY 2019

Uruguay: *Uruguay's Third Biennial Update Report (BUR3)* (GEFID: 10066, UNDP, GEFTF: \$0.3 million, Total Cost: \$0.4 million). The objective of the project is to assist Uruguay in the preparation and submission of its third Biennial Update Report to the UNFCCC. The project will be implemented with the consideration of the feedback and recommendations received from the ICA process for the BUR2 and in coordination with the ongoing work for the fifth National Communication. This project will provide Uruguay with the continuity of the team of technical experts involved in the elaboration of these reports. The expected submission date is December 2019. The main expected results of the project are to: update the technology, financial, and capacity needs and support received; prepare the National GHGs inventory of emissions by sources and their respective report for the year 2017 and the quantitative analysis of emissions uncertainties for 2016 GHG inventory, which was not planned in the NC5 project; describe mitigation measures, methodologies, assumptions, indicators; describe the domestic MRV system under implementation.

Jordan: *Fourth National Communication and Second Biennial Update Report under the UNFCCC* (GEFID: 10068, UNDP, GEFTF: \$0.9 million, Total Cost: \$1.0 million). The objective of the project is to assist Jordan in preparation of its fourth National Communication and second Biennial Update Report. The FNC and BUR2 project will build on findings and recommendations from previous NC and BUR work, including findings and recommendations resulting from the Technical Analysis under the ICA process of Jordan's First BUR which took place in 2018. Jordan plans to submit its BUR 2 in December 2019 and the FNC in December 2021 to the UNFCCC. For the long-term, this project is designed to assist Jordan in its efforts to integrate climate change consideration into national and development policies and to continue to build on the institutional and technical capacity strengthening process in the areas of climate change and national communications reporting. The project will also help identify and develop national projects related to GHG mitigation, which may be eligible for funding or co-funding, by international, multilateral, or bilateral donor organizations.

Nigeria: *Nigeria's Second Biennial Update Report (BUR2)* (GEFID: 10127, UNDP, GEFTF: \$0.4 million, Total Cost: \$4 million). The objective of the project is to assist Nigeria in the preparation and submission of its second Biennial Update Report to the UNFCCC. The project will build on the findings from the International Consultation and Analysis process for its first BUR. The main expected results of the project are: national inventory of GHGs for the year 2017; mitigation actions and their effects and information on domestic MRV; national circumstances and institutional arrangements; constraints, gaps and related financial, technical and capacity needs; support received for preparation and submission of BUR; and other information considered relevant to the Convention. The second BUR is expected to be submitted in December 2019.

Thailand: *Thailand's Fourth National Communication and Third Biennial Update Report (NC4-BUR3) to the UNFCCC* (GEFID: 10131, UNDP, GEFTF: \$0.9 million, Total Cost: 1.6 million). The objective of the project is to assist Thailand in the preparation of its fourth National Communication and third Biennial Update Report for the fulfilment of the obligations under the UNFCCC. Thailand will finalize the third BUR and fourth NC to submit to the UNFCCC in December 2020 and December 2022, respectively. This project is comprised of the following components: information on the national circumstances and other information will be updated; national GHG inventory report will be updated for 2014-2018 by applying the 2006 IPCC guidelines; climate change mitigation actions in Thailand will be analyzed and the domestic MRV process will be operationalized; and vulnerability and adaptation assessment approaches will be improved.

Ecuador: *Fourth National Communication (4NC) and Second Biennial Update Report (2BUR)* (GEFID: 10137, UNDP, GEFTF: \$0.9 million, Total Cost: \$1.0 million). The objective of the project is to assist Ecuador in the development of its fourth National Communication and the second Biennial Update Report for the fulfilment of the obligations under the UNFCCC. The Second BUR is expected to be finalized and submitted to the UNFCCC in the third quarter of 2019 and the fourth NC in the third quarter of 2021. Thus, this project aims to build upon previous efforts and capacities developed with a focus on improving the GHG inventory and other areas identified through the International Consultation Analysis process. The expected outcomes include: information on national circumstances and other information useful for the development of NCs and BURs on an ongoing basis; national circumstances and other information; national inventories of GHGs and mitigation actions; adaptation and vulnerability and climate risk assessments; and domestic MRV.

Kazakhstan: *Development of Kazakhstan's Eighth National Communication and preparation of two (Fourth and Fifth) Biennial Reports to the UNFCCC* (GEFID: 10140, UNDP, GEFTF: \$0.9 million, Total Cost: \$1.8 million). The objective of the project is to assist Kazakhstan in the preparation and submission of its eight National Communication (NC8) as well as fourth and fifth Biennial Report (BR4 and BR5) for the fulfilment of the obligations under the UNFCCC. Kazakhstan is a non-Annex I Party (developing country Party) to the UNFCCC. In accordance with Article 4. 2 (g) of the UNFCCC, Kazakhstan notified the Depositary that it intends to be bound by Article 4. 3 (a) and (b), which provide obligations of developed country Parties on national policies and measures on climate change mitigation including those of Annex I Parties under the Kyoto Protocol. Based on this notification, Kazakhstan so far has submitted seven NCs and three BRs to the UNFCCC. With this project, Kazakhstan plans to submit the BR4 by December 2019, the BR5 by December 2021, and NC8 by December 2021, respectively. The activities on the BR4 and NC8/BR5 that cover GHG inventories, policies, measures and projections are designed jointly under this project with the aim to ensure cost-effectiveness, continuity and consistency of the information reported. This project has the following four components: strengthening the coordination of the national inventory of GHG emissions in accordance with international requirements of the IPCC; assisting in the development of chapters on national circumstances and mitigation policy and measures as a basis for decision-making on climate policy; and assistance in the development of a vulnerability assessment and adaptation

measures to strengthen the prioritization and development planning of Kazakhstan in accordance with climatic conditions (for NC8).

Armenia: Armenia's Third Biennial Update Report to the UNFCCC (GEFID: 10145, UNDP, GEFTF: \$0.4 million, Total Cost: \$0.4 million). The objective of this project is to help Armenia prepare its third Biennial Update Report under the UNFCCC for submission by November 2020. The goal of the project is to assist Armenia to further improve the reporting process and quality of information presented from the BUR 2, including establishing appropriate institutional arrangements to collect, compile and validate activity data for preparing national GHG inventories according to the IPCC 2006 Guidelines, filling in activity data gaps in the energy sector, improving GHG emission estimates for the waste sector, improving GHG inventory key category analysis through trend assessments, and enhancing mitigation analysis and identification of quantitative goals of mitigation actions in non-energy sectors. The expected outcomes include: information on national circumstances; institutional arrangements; constraints and gaps and related financial, technical and capacity needs; development of a national Inventory of anthropogenic emissions by sources and removals by sinks of all GHG not controlled by the Montreal Protocol, updated for 2017 using 2006 IPCC guidelines; mitigation actions and their effects; and information on domestic MRV.

Panama: Development of Fourth National Communication and Second Biennial Update Report under the UNFCCC (GEFID: 10146, UNDP, GEFTF: \$0.9 million, \$1.0 million). The objective of this project is to assist Panama in preparing the fourth National Communication (4NC) and second Biennial Update Report (BUR2) in compliance with obligations under the UNFCCC. BUR2 will be submitted to the UNFCCC by December 2020 and the 4NC by December 2022. Under this project, a consistent time series for the period 1990-2020 will be developed using 2006 IPCC Guidelines. This project will be aligned and coordinated with the work under the CBIT project, implemented by UNEP.

Global: Umbrella Programme for Preparation of National Communications (NCs) and Biennial Update Reports (BURs) to the UN Framework Convention on Climate Change (UNFCCC) (GEFID: 10167, UNEP, GEFTF: \$10.8 million, Total Cost: \$11.8 million). The objective of this project is to support 18 governments to prepare and submit National Communications (NCs) and Biennial Reports (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 National Communications (SNC), Third National Communications (TNC), NC4, NC5 and/or BUR1, BUR2 or BUR3 preparation. Twelve countries are requesting support for NC preparation; three countries are requesting support for BUR preparation; and three countries are requesting to combine NC and BUR preparation. The project has three components: preparation of project implementation plans for NCs and BURs; preparation of NCs and BURs; national stakeholders' involvement and institutional arrangements for preparation of subsequent BURs and NCs. It will support assessments of national GHG inventories, GHG mitigation, and vulnerability and adaptation to climate impacts. Further, 15 of the 18 countries the program is supporting are LDCs and SIDs, which will receive enhanced administrative and technical support.

Global: Technology Needs Assessments (TNA) Phase IV (GEFID: 10171, UNEP, GEFTF: \$4.4 million, Total Cost: \$5.8 million). This project is the fourth phase of the global TNA project and supports an additional 15 LDCs and SIDs to build national capacities and supports the institutionalization and implementation of the TNA process. Although technologies have been identified as a key factor of success to reach climate change related targets, the information contained in NDCs and existing documents are not sufficient to plan and implement technology projects that will enable the countries to reach their targets. The TNA—as a national participatory process providing in-depth analysis of technology options and actions—offers key information for decision-makers and planners to implement nationally prioritized climate technology actions. As the continuation of the three previous phases of TNAs, this project benefits from lessons learned and best practices from previous experience. The countries included explicitly mention in their policy documents the need for external support to conduct technology transfer in a consistent manner. The fourth phase of the TNA project will include national trainings for a wider team of stakeholders in each country; peer-to-peer exchange and learning through inter-country workshops; and national events and roundtables to present TNA/TAP products to potential donors, development partners and investors. Finally, it is noteworthy that among these 15 countries, some have undergone a so-called “first generation” TNA (prepared before 2008). However, at that time no barrier analyses, identification of enabling frameworks for technology transfer nor Technology Action Plans (TAP) had been performed; these activities will be completed as part of the TNA Phase IV project.

Montenegro: Development of Montenegro's Third Biennial Update Report (TBUR) to the UNFCCC (GEFID: 10223, UNDP, GEFTF: \$0.4 million, Total Cost: \$0.4 million). The objective of the project is to enable Montenegro to

coordinate the preparation process and submit Montenegro's Third Biennial Update Report (BUR3) to the UNFCCC. Montenegro is one of 26 Non-Annex I Parties that has submitted two BURs to date. The project will generate the following outcomes: information on national circumstances and institutional arrangements relevant to the preparation of the revised and updated BUR3; level of support received to enable the preparation of the BUR3 described; the technology, financial, and capacity needs for mitigation and recommendations with government priorities updated; GHG inventory updated up to 2019 year and improvement of GHG inventory system; assessment of sectors and interventions contributing to GHG emission reduction at the national level conducted; and the process of establishment of domestic MRV system supported.

Namibia: *Namibia's Fourth Biennial Update Report (BUR4) to the United Nations Framework Convention on Climate Change (UNFCCC) (GEFID: 10224, UNDP, GEFTF: \$0.4 million, Total Cost: \$0.4 million)*. The objective of this project is to assist Namibia in the preparation and submission of its Fourth Biennial Update Report to the UNFCCC. Thus far, Namibia has prepared and submitted three National Communications (NCs) and three BURs to the UNFCCC. Namibia is currently preparing its fourth NC, which is due for submission in December 2019. The project will build on the previously prepared NCs and BURs and aim to address lesson learnt and capacity-building needs identified by the technical analysis carried out through the International Consultation and Analysis process, and the Quality Assessment exercise held by UNFCCC and the UNDP-UNEP Global Support Program, mainly: enhance institutional arrangements and institutional capacities to fully take over preparation of NCs and BURs; further develop the domestic MRV system to track and report on implementation of the Convention as required by the UNFCCC Guidelines; attempt to expand coverage of GHG inventory to include incineration, Ozone Depleting Substances, refrigeration, and industrial wastewater; improve the energy balance of the country to increase specificity of fuel allocation; improve the Quality Assurance/Quality Control process to further enhance the quality of the inventory; and confirm the approach adopted for the land sector through new maps for determining land use changes. The fourth BUR will be submitted to UNFCCC by December 2020.

Paraguay: *Fourth National Communication and Third Biennial Update Report on Climate Change under UNFCCC (GEFID: 10225, UNDP, GEFTF: \$0.9 million, Total Cost: \$1.2 million)*. The objective of this project is to assist Paraguay in the preparation and submission of its fourth National Communication (NC4) and its third Biennial Update Report (BUR 3) to the UNFCCC. Paraguay aims to submit its BUR3 on August 2021 and its NC4 on August 2022. Paraguay's BUR2 of was developed based on the results and products of the first BUR, as well as the outcome of the international consultation and analysis process. In recent years, efforts have been made on climate change with support at national and international level. However, limitations and gaps are still present, which will continue to be addressed, in continuation with the work started during the implementation of the BUR2 and the NC3.

Cabo Verde: *Fourth National Communication and First Biennial Update Report for the Republic of Cabo Verde under the UNFCCC (GEFID: 10226, UNDP, GEFTF: \$0.9 million, Total Cost: \$1.6 million)*. The objective of this project is to assist Cabo Verde in the preparation and submission of its first Biennial Update Report (FBUR) and its fourth National Communication (NC4) to the UNFCCC. Thus far, Cabo Verde has prepared and submitted three NCs, but had yet to prepare a BUR. The continuous preparation of National Communications and initiation of the biennial update reports to the UNFCCC aims to strengthen information base, and the analytical and technical capacity of the key national institutions to integrate climate change priorities into national development strategies and relevant sectorial policies. The project will build on the findings of the NC3, where the greatest challenge encountered in compiling inventories was the data collection for different sectors.

Cabo Verde: *Fourth National Communication and first Biennial Update Report for the Republic of Cabo Verde under the UNFCCC (GEFID: 10226, UNDP, GEFTF: \$0.9 million, Total Cost: \$1.6 million)*. The objective of this project is to assist Cabo Verde in the preparation and submission of its first Biennial Update Report (BUR1) and its fourth National Communication (NC4) to the UNFCCC. Thus far, Cabo Verde has prepared and submitted three NCs, but had yet to prepare a BUR. The continuous preparation of national communications and initiation of the Biennial Update Reports to the UNFCCC aims to strengthen information base, and the analytical and technical capacity of the key national institutions to integrate climate change priorities into national development strategies and relevant sectorial policies. The project will build on the findings of the third National Communication, where the greatest challenge encountered in compiling inventories was the data collection for different sectors.

ANNEX 3: LIST OF FY 2019 PROJECTS AND PROGRAMS UNDER THE LDCF AND THE SCCF

This Annex provides lists and summaries of projects and programs on CCA approved under the LDCF and the SCCF in the reporting period (July 1, 2018 to June 30, 2019).

1. List of LDCF Projects and Programs Approved in FY 2019

Table A3.1: FY 2019 LDCF Projects

<i>GEF ID</i>	<i>Country</i>	<i>Title</i>	<i>Agency</i>	<i>LDCF amount (\$ million)</i>	<i>Fees (\$ million)</i>	<i>Co-financing (\$ million)</i>
10089	Chad	<i>Strengthening Rural and Urban Resilience to Climate Change and Variability by the Provision of Water Supply and Sanitation in Chad</i>	AfDB	8.7	0.8	13.6
10105	Guinea-Bissau	<i>Strengthening Climate Information and Early Warning Systems for Climate Resilient Development and Adaptation to Climate Change in Guinea Bissau</i>	UNDP	6.0	0.6	32.0
10103	Mauritania	<i>Climate Change Adaptation and Livelihoods in Three Arid Regions of Mauritania</i>	UNEP	4.4	0.4	16.3
10100	Mozambique	<i>Scaling up Local Adaptation and Climate-risk Informed Planning for Resilient Livelihoods</i>	UNDP	8.9	0.9	43.0
10096	Rwanda	<i>Ecosystems/Landscape Approach to Climate Proof the Rural Settlement Program of Rwanda</i>	UNDP	8.4	0.8	22.4
10083	Sudan	<i>Sustainable Natural Resources Management Project</i>	WB	4.6	0.4	12.7
10200	Angola	<i>Global Wildlife Program†</i>	WB, UNDP, UNEP, WWF-US	9.2	0.8	10.6
10181	Timor Leste	<i>IKAN Adapt: Strengthening the adaptive capacity, resilience and biodiversity conservation ability of fisheries and aquaculture dependent livelihoods in Timor-Leste</i>	FAO	2.6	0.3	5.4
10207	Bangladesh	<i>Building climate resilient livelihoods in vulnerable landscapes in Bangladesh (BCRL)†</i>	FAO	9.2	0.9	10.6
10203	Uganda	<i>Strengthening the Adaptive Capacity and Resilience of Communities in Uganda's watersheds†</i>	AfDB	8.9	0.9	90.0
10187	Lao PDR	<i>Climate Smart Agriculture alternatives for upland production systems in Lao PDR</i>	FAO	3.5	0.3	17.7

10174	Ethiopia	<i>Enhancing Adaptive Capacity of communities by upscaling best practices and adopting an integrated approach in Ethiopia</i>	UNDP	8.9	0.9	72.2
10199	Gambia	<i>Improving Water Availability in The Gambia's Rural and Peri-Urban Communities for Domestic and Agricultural Use</i>	AfDB	8.9	0.9	10.4
10186	Zambia	<i>Climate Change Adaptation in Forest and Agricultural Mosaic Landscapes</i>	FAO	7.0	0.7	29.5
10165	Togo	<i>Strengthening resilience to climate change of coastal communities in Togo</i>	FAO	8.9	0.9	46.4
10177	Cambodia	<i>Promoting Climate-Resilient Livelihoods in Rice-Based Communities in the Tonle Sap Region</i>	FAO	8.9	0.9	62.3
10173	Regional, Kiribati, Solomon Islands, Tuvalu, Vanuatu	<i>Climate Resilient Urban Development in the Pacific</i>	ADB	16.1	1.4	145.7
LDCF projects Subtotal				133.1	12.8	651.5

†: This is a multi-trust fund project/program. Only the LCDF component is included.

2. List of SCCF-A Project Approved in FY 2019⁶⁹

Table A3.2: FY 2019 SCCF-A Projects

<i>GEF ID</i>	<i>Country</i>	<i>Title</i>	<i>Agency</i>	<i>SCCF amount (\$ million)</i>	<i>Fees (\$ million)</i>	<i>Co-financing (\$ million)</i>
10195	Regional, Antigua And Barbuda, Belize, Grenada, Guyana, Haiti, Jamaica, St. Lucia	CSIDS-SOILCARE Phase1: Caribbean Small Island Developing States (SIDS) multi-country soil management initiative for Integrated Landscape Restoration and climate-resilient food systems†	FAO	0.9	0.1	3.0
SCCF projects Subtotal				0.9	0.1	3.0

†: This is a multi-trust fund project. Only the SCCF component is included.

⁶⁹ No SCCF-B project or program was approved in the reporting period.

3. Summaries of LDCF Projects and Programs Approved in FY 2019

Angola: Strengthening Climate Resilience and Biodiversity Management in Angola's Conservation Areas (GEFID 10200, The World Bank, LDCF: \$10.0 million, Total Cost: \$20.5 million) This MTF project, which is part of the Global Wildlife Program, will improve the management of targeted Transfrontier Conservation Areas (TFCAs) and strengthen the resilience of local communities and ecosystems to climate change. The project aims to train communities and implement climate-resilient and conservation-compatible activities that reduce vulnerability of populations by diversifying livelihoods through nature-based tourism. The project will also strengthen local entrepreneurial skills and create economically and environmentally viable business opportunities. Drawing on indicative co-financing of \$25.8 million from the government, civil society, and an IBRD loan, this project is expected to yield significant adaptation benefits, including: 60,000 direct beneficiaries (50 percent female); 35,000 hectares of land under climate-resilient management; and four policies/plans that will mainstream climate resilience. The LDCF share of this MTF is \$10 million for adaptation activities to take place in Angola.

Bangladesh: Building climate resilient livelihoods in vulnerable landscapes in Bangladesh (GEFID 10207, FAO, LDCF: \$10.0 million, Total Cost: \$31.4 million) This project will improve the resilience of community livelihoods to climate change through diffusion and scale-up of adaptation technologies. Bangladesh is an LDC with a low-lying deltaic coastline and is highly vulnerable to adverse impacts of climate change such as sea level rise and saltwater intrusion, coastal storms and storm surges, intense rainfall and inland flooding, and drought. The proposed project will boost climate resilience by supporting cross-sectoral collaboration to enable effective mainstreaming, gender-responsive adaptation plans, value chain adaptation plans, and public-private partnership agreements. It will also implement delivery of user-friendly agriculture-relevant climate forecasts in four different geographies, pilot an innovation incubator as well as innovative financing instruments, and develop adaptation practices and technologies for various stages of the agricultural value chain. It will provide direct adaptation benefits to 120,000 people, train 260 staff from inter-ministerial agencies about climate change risks and adaptation options, support the climate resilient management of 16,000 hectares of land, and mainstream adaptation in four development policies and plans.

Cambodia: Promoting Climate-Resilient Livelihoods in Rice-Based Communities in the Tonle Sap Region (GEFID 10177, FAO, LDCF: \$10.0 million, Total Cost: \$72.3 million) The project will improve the climate resilience of rice-growing communities through an ecosystem-based, market-driven approach. Cambodia is highly dependent on rice cropping, largely driven by smallholders, who are constrained by rainfall availability and affordable rice varieties. Thus, yields tend to be low, and highly vulnerable to drought and flood. Climate projections for Cambodia indicate that, in addition to higher climatic variability, more drought-like conditions are expected in the dry season. The proposed project will boost climate resilience in six provinces through four components that will focus on actions such as: institutional improvements to enable integrated water management and agro-met services; improvements in rice production systems such as on-farm diversification, rice-fish systems, and improved access to credit for farmers; and improving the climate resilience of selected value chains to enable better crop storage, processing, and transport. The project will provide direct adaptation benefits to 170,200 people, train 25,900 people about climate risks and adaptation options, increase the climate resilient management of 67,309 hectares of land, and seek to mainstream adaptation in relevant national and provincial development policies and plans.

Ethiopia: Enhancing Adaptive Capacity of Communities by upscaling best practices and adopting an integrated approach in Ethiopia (GEFID: 10174, UNDP, LDCF: \$10.0 million, Total Cost: \$72.2 million) This project aims to promote the design and implementation of adaptation interventions to address the climate vulnerabilities of local communities at scale across Ethiopia. It is well aligned with the GEF-7's LDCF programming strategy and Ethiopia's National Adaptation Plan and Climate Resilient Green Economy strategy. It will help achieve CCA objective 1 on innovation and technology transfer and CCA Objective 2 on climate mainstreaming for systemic impact. The project will build on past LDCF investments in the country and adopt integration approaches for landscape level adaptation planning; apply innovative and proven technology and business solutions for resilient agriculture and alternative livelihoods; and engage national and local institutions, local entrepreneurs, private sector, and global institutions systematically for climate mainstreaming. The project will directly benefit 225,000 vulnerable people including 125,000 women (56 percent) in 18 highly vulnerable rural Woredas and two peri-urban areas. The \$10 million LDCF support will mobilize nearly \$72 million of funds including from the GCF and the Adaptation Fund, with the potential to demonstrate synergies between global climate adaptation funds. It will engage a wide range of global and national stakeholders to acquire, create and disseminate knowledge for effective local action at scale in the country. The project was in the GEF

6 pipeline and has been revised by UNDP to align with GEF-7 strategy and national priorities through rigorous stakeholder consultations including one during the GEF Country National Dialogue.

Gambia: Improving Water Availability in The Gambia's Rural and Peri-Urban Communities for Domestic and Agricultural Use (GEFID 10199, AfDB, LDCF: \$10.0 million, Total Cost: \$20.4 million) This project will build resilience to climate change and variability by enhancing water supply for domestic and agricultural use, and ultimately improving livelihoods in rural and peri-urban areas of The Gambia. The project aims to provide climate-resilient water supply infrastructure, enhance institutional capacity for adaptation and hydro-meteorological monitoring, and promote community land and water-based adaptation. Drawing on indicative co-financing of \$10.4 million mostly from the GEF Agency, this project is expected to yield significant adaptation benefits, including: 500,000 direct beneficiaries (50 percent female); 200 hectares of land under climate-resilient management; and 500 people trained. This project was part of the technically cleared pipeline of the LDCF at the end of the GEF-6 period and has been confirmed as a continued priority of the government.

Kiribati, Solomon Islands, Tuvalu, and Vanuatu: Climate-resilient Urban Development in the Pacific (GEFID 10173, ADB, LDCF: \$17.5 million, Total Cost: \$163.2 million) This project will address climate change risks to urban services, particularly water and sanitation, in the urban centers of four Pacific LDC SIDS: South Tarawa (Kiribati), Honiara (Solomon Islands), Funafuti (Tuvalu), and Port Villa (Vanuatu). Pacific SIDS are among the world's most vulnerable countries to adverse impacts of climate change. Urban areas tend to be on the coast and thus particularly exposed to climatic hazards, with population growth hindering traditional coping mechanisms and contributing new stresses—socio-economic and environmental—that increase vulnerability. The program will focus on institutional and investment activities that will deliver direct adaptation benefits to 250,010 people, train 400 people on climate risks and adaptation options, and support adaptation mainstreaming in three development policies and plans. Institutional measures will focus on enhancing the capacity to understand and plan for climate change in the water and sanitation sector, including modifications to standards and norms; improved awareness of climate change in the health and hygiene sectors; and incentives to include climate change and disaster risk management considerations in the urban sector. Investment measures will focus on activities such as: climate-resilient water supply to schools; water access; watershed management measures; enhanced resilience of waste management systems; flood protection works; and small-scale emergency shelters. The child projects will demonstrate synergistic coordination with GCF-financed and other baseline activities.

Lao, PDR: Climate smart agriculture alternatives for upland production systems in Lao PDR (GEFID 10187, FAO, LDCF: \$4.0 million, Total Cost: \$21.7 million) This project will enhance the resilience of vulnerable upland communities to climate change impacts through climate smart agriculture. Lao PDR has been ranked as one of the most vulnerable countries to climate change in southeast Asia due to its exposure to climatic hazards, sensitivity to climate, and low adaptive capacity. Three-fourths of its population live in rural areas, of which 80 percent is dependent on agriculture for livelihood and subsistence. This project will focus on boosting climate resilience in two provinces of the northern uplands, Luang Prabang and Houaphan, both of which experience frequent and intense droughts, floods and cold spells. Communities in these areas tend to engage in unsustainable farming practices and are switching to monocropping and annual crops such as maize that provide little opportunity for nutrient replenishment in the soil. The proposed project seeks to sustainably increase agricultural productivity and incomes through policy and financial frameworks that will promote the uptake of climate-smart agriculture (CSA) in the uplands; assist communities with technology transfer to strengthen the resilience of value chains for rice, coffee, banana, maize, livestock products and poultry, and feed; and to provide communities with incentives to adopt climate-smart practices, such as improving access to index-linked risk insurance and microfinance. It will also improve decision-support at the community and planning levels through adaptation planning tools and data and information management systems. The project will deliver climate resilience benefits to 100,000 people, train 10,000 people on climate risks and adaptation options, and increase the climate resilient management of 50,000 hectares of land. It will also mainstream adaptation considerations in development policies and plans.

Timor Leste: IKAN Adapt: Strengthening the adaptive capacity, resilience and biodiversity conservation ability of fisheries and aquaculture-dependent livelihoods (GEFID 10181, FAO, LDCF: \$3.0 million, Total Cost: \$8.4 million) This MTF project aims to address critical adaptation needs of fishery and aquaculture-dependent communities, while delivering biodiversity conservation benefits for marine species. Changes in climate are affecting fish migratory patterns, exposure to disease, and ocean currents, and contributing to saltwater intrusion in aquaculture ponds. At the same time, unsustainable and illegal fishing practices threaten Timor Leste's coastal and marine ecosystems, as well as productive capacity of fisheries. The project will support the systematic consideration of both climate change

adaptation and biodiversity conservation at the institutional and policy levels; community-level strategies, technologies, and practices to improve climate resilience of fishing communities and management of marine biodiversity; and strengthen monitoring and information systems. Focusing on climate-sensitive areas and biodiversity hotspots, it will directly benefit 36,560 people, mainstream adaptation in 10 development policies and plans, and train 800 people about climate change risks and adaptation measures. At the same time, it will place 1,000 hectares of marine habitat under practices to improve biodiversity and incorporate biodiversity conservation practices on 10 hectares of land. It is an MTF, requesting resources from the LDCF and biodiversity STAR from GEFTF. This project has been re-designed from a GEF-6 pipelined project.

Togo: Strengthening Resilience to Climate Change of Coastal Communities in Togo (GEFID 10165, FAO, LDCF: \$10.0 million, Total Cost: \$56.4 million) This project will strengthen the resilience of coastal communities and ecosystems in the Maritime region of Togo to the impacts of climate change. The proposed initiative aims to address climate change adaptation through an integrated approach targeting the agriculture sector as a whole. The proposed approach combines policy and capacity building activities with piloting concrete adaptation actions to restore degraded coastal ecosystems, support the adaption of diversified livelihoods of coastal communities, and support the adoption of best practice and innovative technologies to enhance production systems. Togo's coastline is identified in its NAPA as the ecosystem that is the most vulnerable to climate change and variability, particularly within the context of rising sea levels and coastal erosion. Currently, the coastline covers more than 11 percent of the country's land area and is home to 42 percent of the population, despite estimated coastline retreat of 5-12 meters per year, which is exacerbated by demographic pressure and anthropogenic activity, threatening economic gains as well as the critical goods and services provided by coastal resources. The proposed alternative will address climate change adaptation through an integrated approach to the fisheries, forestry, livestock, and agriculture sectors in Togo for the first time. The project will support critical and catalytic actions that will greatly increase the adaptive capacity and resilience of coastal and adjacent communities to a changing climate, by providing training and equipment to 12,000 people on more sustainable fishing, agriculture, and agro-forestry techniques and practices on new and diversified income-generating opportunities related to sustainable aquaculture, agro-forestry, and eco-tourism. This project was part of the GEF-6 pipeline, and has been updated to align with Togo's national priorities for LDCF support.

Uganda: Strengthening the adaptive capacity and resilience of communities in Uganda's watersheds (GEFID 10203, AfDB, LDCF: \$10.0 million, Total Cost: \$100.0 million) This project is well-aligned with the GEF-7's LDCF programming strategy and Uganda's National Adaptation Program of Action (NAPA) and National Development Plan. It aims to strengthen resilience of 436,000 vulnerable people to the impacts of climate change through adaptation technology transfer (CCA Objective 1) and climate mainstreaming (CCA Objective 2). The project will support integrated adaptation planning at watershed level, strengthen resilience of critical rural infrastructure, including river banks and wetlands, to support sustainable agriculture and alternative livelihoods; and enhance access to reliable climate and weather information for climate change integration in development programs. The \$10 million LDCF project will mobilize \$80 million of AfDB investment, which aims to strengthen agriculture sector in Uganda. The LDCF will be a complementary and catalytic fund to enhance effectiveness of the AfDB investment and utilize its scale to make the agriculture value chain and watersheds resilient to climate change. The project has a distinct focus on gender and will engage the private sector in strengthening market linkages for agriculture and alternative livelihoods in the region. The overall risk associated with the project delivery is assessed as low due to strong buy-in from the Ugandan government, an effective implementation arrangement and an integrated project design. The project was in the GEF-6 pipeline. Following the guidelines of the LDCF-SCCF Council, the project was prioritized by Uganda's government and subsequently revised to align with GEF-7 strategy and national priorities through consultations with the GEF Secretariat and other stakeholders.

Zambia: Climate Change Adaptation in Forest and Agricultural Mosaic Landscapes (GEFID 10186, FAO, LDCF: \$7.9 million, Total Cost: \$37.4 million) This project will increase the resilience of productive landscapes and rural communities in Zambia through innovations and technology transfer for climate change adaptation. The project, which was one of two projects in the technically cleared LDCF pipeline, has been prioritized by the government for GEF-7, as it aims to improve community managed forests and agricultural landscapes, to enhance resilience to climate change, promote resilient forestry value chains, including for charcoal and Non-Timber Forest Products, and promote diversified livelihood strategies based on the sustainable management and use of agro-biodiversity. Drawing on indicative co-financing of \$29.5 million from the government and development partners, this project is expected to yield significant adaptation benefits, including: 144,000 direct beneficiaries (50 percent female); 400,000 hectares of land under climate-resilient management; 50 policies/plans that will mainstream climate resilience; and 1,600 people trained (50 percent female). Through its monitoring and evaluation component, the project will also link with the

Drylands Impact Program, by supporting participation in regional and global knowledge management events and on-the-ground south-south exchanges with the Drylands Impact Program child projects.

Chad: Strengthening Rural and Urban Resilience to Climate Change and Variability by the Provision of Water Supply and Sanitation in Chad (GEFID 10089, AfDB, LDCF: \$9.7 million, Total Cost: \$23.4 million) This project seeks to strengthen rural and urban resilience to climate change and variability by the provision of water supply and sanitation in Chad. The project's strategy is to reduce vulnerability, increase adaptive capacity, and to enhance transfer of adaptation technology. The project is structured around four components: (i) mainstream climate adaptation into the updated water and sanitation masterplan; (ii) improve access to climate-resilient water supply and sanitation; (iii) strengthen climate information and early warning systems; and (iv) improve knowledge management and monitoring and evaluation. The LDCF resources will cover additional costs of increasing the resilience of the communities in the project area from climate variability and risks through: hard infrastructure, through incorporating climate change into the national water supply and sanitation masterplan, and using the local water, sanitation and hygiene (WASH) committees to disseminate awareness of climate change and how to use water efficiently and plan for improved ground water management through strengthening the weather and ground water based monitoring, information, and early warning systems. Mapping of the groundwater resources and installation of ground water monitoring stations will enable certainty in siting of groundwater wells which would not dry out during extreme dry weather events. The use of remote sensing for monitoring groundwater abstraction and use is innovative for Chad and the technique can provide objective measurements at potentially large scales, with quasi-continuous cover at low costs, and has high replication potential. The project will directly benefit an estimated 4.7 million people and place 1,100 hectares of land under more climate resilient management.

Guinea-Bissau: Strengthening Climate Information and Early Warning Systems for Climate Resilient Development and Adaptation to Climate Change in Guinea-Bissau (GEFID 10105, UNDP, LDCF: \$6.7 million, Total Cost: \$38.7 million) This project aims to strengthen the climate monitoring capabilities, early warning systems, and information for responding to climate shocks and planning adaptation to climate change in Guinea-Bissau. The project is structured around three components: (i) transfer of technologies and building operational human capacity for strengthening climate and environmental monitoring capacity; (ii) climate information integrated into development plans and initiatives, early warning systems and local communities' decision makings pertaining to their livelihood options; and (iii) knowledge management and scaling-up strategy. The project will deliver strengthened climate monitoring capabilities, early warning systems, and information base for responding to climate shocks and planning adaptation to climate change in Guinea-Bissau, benefitting an estimated 12,000 people directly, and training a targeted 500 individuals on climate risk and adaptation measures.

Mauritania: Climate Change Adaptation and Livelihoods in Three Arid Regions of Mauritania (GEFID 10103, UNEP, LDCF: \$5.0 million, Total Cost: \$21.3 million) This project aims to increase the adaptive capacity of rural communities in the wilayas (regions) of Adrar, Inchiri, and Trarza. The project will deliver the following adaptation benefits: i) increasing the resilience of arid ecosystems to buffer against climate-induced droughts; ii) reducing soil erosion; iii) improving water supply by promoting groundwater recharge and water conservation; iv) providing non-forest timber products and alternative livelihoods; and vii) improving food security through the introduction of water-efficient farming techniques; directly benefitting 3,500 people and placing 1,300 hectares of land under climate resilient management. The project aims to achieve this through the implementation of three components: (i) institutional capacity development for planning and implementing climate change adaptation in arid ecosystems of Mauritania; (ii) resilience to climate change in the three target wilayas; and knowledge on climate change and ecosystem-based adaptation (EbA) in arid ecosystems. The EbA approach is innovative in the Sahelian and Saharan ecosystem context, as it provides favorable cost-benefit ratios compared with hard infrastructure approaches and not only reduces climate vulnerability, but also provides a range of co-benefits, including carbon sequestration.

Mozambique: Scaling Up Local Adaptation and Climate-Risk Informed Planning for Resilient Livelihoods (GEFID 10100, UNDP, LDCF: \$10.0 million, Total Cost: \$53.0 million) This project seeks to support rural agro-pastoral communities and sub-national governments in Mozambique to plan for and adapt to climate change. The project will (i) implement on-the-ground adaptation measures that have been identified in Local Adaptation Plans (LAPs) to directly benefit at least 7,000 people; and (ii) strengthen institutional and community capacity for resilience planning and budgeting, mainstreaming climate resilience into at least ten sub-national and sectoral plans. Specific measures to be financed include small-scale water harvesting and irrigation systems, water conservation measures and small infrastructure, crop diversification and seed dissemination to farmers, as well as, enhancing market access of rural communities by improving marketing infrastructure including post-harvest storage, packaging and processing and sales facilities. This

will be accompanied by evidence-based scaling of micro-finance. In addition, the second component will support the development of at least five new LAPs and three provincial adaptation plans, and generate and disseminate lessons learned on best practice that will enable further upscaling and replication beyond the project's reach.

Rwanda: Ecosystems/Landscape Approach to Climate Proof the Rural Settlement Program of Rwanda (GEFID 10096, UNDP, LDCF: \$9.4 million, Total Cost: \$31.7 million) This project seeks to climate-proof Rwanda's rural settlement program, focusing on the districts of Gakenke and Kirehe. The project has both soft policy measures such as revising human settlement policy, rules, regulations, and planning frameworks to mainstream climate risk into the rural settlement program; and on-the-ground adaptation investments including rehabilitating at least 500 hectares of degraded land, upgrading housing and infrastructure for at least 500 households to more climate smart versions in four villages, and providing rainwater harvesting structures. By mainstreaming climate change into the rural settlement program, the proposed project will safeguard development gains. A blend of on-the-ground investment with policy measures, building on the government's rural settlement program, is expected to enable the project to deliver sustainable benefits that are replicable and scalable.

Sudan: Sustainable Natural Resource Management Project-Additional Financing (GEFID 10083, The World Bank, LDCF: \$5.0 million, Total Cost: \$17.7 million) This is an LDCF and GEF MTF project, which proposes to blend the objectives of sustainable natural resource management with enhanced resilience of climate vulnerable communities in two provinces of Sudan. The total grant amount for this project is \$6.5 million, shared between the LDCF (\$5.0 million) and the GEF TF (\$1.5 million) under the Land Degradation focal area. The project proposes to implement innovative climate resilient technologies and engagement of women cooperatives and private sector in testing and scaling up adaptation and landscape management approaches. The project also builds on the previous project in Sudan focusing on land degradation and by scaling up the project in two additional provinces. By bringing a focus on adaptation it will address the immediate priorities of Government of Sudan and ensure a high value for GEF's past investments. The proposal is well-aligned with Sudan's Nationally Determined Contribution and NAP and has been endorsed by the Sudanese government through a stakeholder consultation process.

4. Summary of the SCCF Project Approved in FY 2019

Regional: CSIDS-SOILCARE Phase1: Caribbean Small Island Developing States (SIDS) Multi-country soil management initiative for Integrated Landscape Restoration and climate-resilient food systems (GEFID 10195, FAO, SCCF: \$1.0 million, Total Cost: \$14.1 million). This MTF project will, in its first phase, enable seven Caribbean SIDS to achieve climate-resilient land degradation neutrality (LDN): Antigua and Barbuda, Belize, Grenada, Guyana, Haiti, Jamaica, and Saint Lucia. The SIDS are ecologically fragile and vulnerable to adverse impacts of climate change as well as unsustainable agriculture and forestry practices that are leading to land degradation. This project will review and update regional and national policy, legal, institutional, and knowledge frameworks and establish regional financing mechanisms for effective LDN implementation; support country level land rehabilitation, sustainable land management (SLM), sustainable soil management and climate smart agriculture interventions; and enhance food production systems through innovations in agriculture and livestock production systems. The SCCF resources will be used to mainstream climate change adaptation in regional SLM policies and plans, support regional scale climate modeling of relevance to SLM, identify climate-resilient SLM technologies and practices, and support regional capacity-building and knowledge management activities for climate-resilient SLM. It will also enable regional institutions working on adaptation and SLM to work more closely together. The project is expected to impact 80,000 hectares of land, directly benefit least 5000 people, train 1,000 people regionally on climate risks and adaptation options, mainstream adaptation in three regional SLM plans, and deliver climate co-benefits of mitigating the equivalent of 35.4M tCO₂e over the project lifetime.

ANNEX 4: LIST AND SUMMARIES OF PROJECTS UNDER THE CBIT TRUST FUND IN FY 2019

1. List of Projects Approved under the CBIT Trust Fund in FY 2019

Table A4.1: FY 2019 Projects under the CBIT Trust Fund

GEF ID	Country	Agency	Title	GEF amount (\$)	Co-financing (\$)	Total (\$)
10071	Global	FAO	<i>Building global capacity to increase transparency in the forest sector (CBIT-Forest)</i>	1,901,270	4,760,000	6,661,270
10118	Nicaragua	FAO	<i>Strengthen institutional and technical capacities in the agricultural and forestry sectors of Nicaragua to respond to the requirements of the enhanced transparency framework under the Paris Agreement</i>	1,000,000	5,491,524	6,491,524
10128	Global	UNEP/UNDP	<i>Global Capacity Building Initiative for Transparency (CBIT) Platform Phase II: Unified Support Platform and Program for Article 13 of the Paris Agreement)</i>	2,244,750	400,000	2,644,750
Total				5,146,020	10,651,524	15,797,544

2. Summaries of Projects Approved under the CBIT Trust Fund in FY 2019

This Annex summarizes projects and programs approved under the CBIT TF in the reporting period (July 1, 2018 to June 30, 2019).

The project concepts that have been approved since July 1, 2018 under the CBIT TF include two global projects and one country proposal from Nicaragua. These projects amount to \$5.1 million in resources from the CBIT TF. Individual projects are summarized in this section.

Global: Building global capacity to increase transparency in the forest sector (CBIT-Forest) (GEFID: 10071; FAO; CBIT TF: \$1.9 million; Total Cost: \$6.7 million). The CBIT-Forest global project aims to strengthen the institutional and technical capacities of developing countries to address transparency needs in the sector. The project seeks to support a coordinated global and national forest-related data collection, analysis, and dissemination process, to meet the enhanced transparency requirements of the Paris Agreement and contribute towards country efforts to track progress made in implementing and achieving NDCs. To ensure the widest impact possible, the project will target an existing global network of National Correspondents for the Global Forest Resources Assessment 2020 (FRA 2020) from at least 170 countries and territories. In addition, the CBIT Global Coordination Platform will be used as a key knowledge delivery mechanism, furthering the reach and sustainability of the project's objective to build global transparency capacity in the forest sector.

Nicaragua: Strengthen institutional and technical capacities in the agricultural and forestry sectors of Nicaragua to respond to the requirements of the enhanced transparency framework under the Paris Agreement (GEFID:10118; FAO; CBIT TF: \$1.0 million; Total Cost: \$6.5 million). Nicaragua's CBIT project seeks to strengthen the technical and institutional transparency capacities in the AFOLU sector, which was responsible for 68 percent of the country's GHG emissions in 2010 (the most recent year of reported data). Specifically, the project will improve Nicaragua's institutional arrangements, which will help foster the design, implementation, monitoring and reporting on enhanced emissions factors, in addition to improving adaptation and mitigation plans with higher-tier data. Newly designed methodologies and tools will help consolidate the country's national technical capacity thereby enabling it to generate reliable, accessible, and timely information for the MRV of mitigation and adaptation actions as defined in the NDC of Nicaragua, and consistent with the country's national development priorities.

Global: Global Capacity Building Initiative for Transparency (CBIT) Platform Phase II: Unified Support Platform and Program for Article 13 of the Paris Agreement (GEFID: 10128; UNEP/UNDP; CBIT TF: \$2.2 million; Total Cost: \$2.6 million). This joint global project aims to ensure that CBIT countries are supported by a unified and sustainable platform. More specifically, the project will focus on combining the efforts of the GEF-funded, UNDP/UNEP Global Support Program and the CBIT Global Coordination Platform to become a "one-stop shop" for information related to MRV and transparency under the Convention and the Paris Agreement. The project will merge the existing web platforms related to each global initiative and maintain the core services provided under those platforms, while expanding the resources and learning materials available through the development of new guidance publications and training modules.

ANNEX 5: 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.

The information in this annex is based on data provided by GEF Agencies in response to a survey that was circulated and carried out by the GEF in April 2019.

- (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: (i) technical assistance for climate technology in response to requests to the CTCN; (ii) partnerships to accelerate the investment and transfer of climate technology; and (iii) networks and capacity-building for climate technology.

Activities in all countries receiving GEF-funded CTCN technical assistance (Mali, Uganda, Viet Nam, Dominican Republic, Chile, ECOWAS, Zimbabwe, Paraguay, and The Gambia) have progressed well. The interventions in Mali (renewable energy use for food processing) and Uganda (geothermal energy) were completed in 2016, Viet Nam (bio-waste valorization) in 2017 and the Dominican Republic (energy-efficient lighting) in March 2018.

Progress on Delivery of Technology Transfer

Since July 2018, the following technical assistances have reached completion:

- Chile: Replacement F-refrigerants (2018)
- ECOWAS: Mainstreaming gender for a climate-resilient energy system (2018)
- Zimbabwe: Industrial energy and water efficiency (2018)
- Paraguay: Environmental flows and river basin management (2019)

The activities in The Gambia (organic waste for energy) are at an advanced stage and are expected to reach completion by May 2019.

A new request has recently been added on promoting circular economy through a multi-country technical assistance. Participating countries are: Brazil, Chile, Mexico, and Uruguay. Implementation began in May 2019.

In Chile, in addition to what was reported in the previous period, four designs for the conversion into the CO₂ technology (alternative refrigerant with a lower GWP) and energy optimization of refrigeration systems in three representative companies of the fruits and vegetables processing sector were produced, as well as a report on the replicability of this technology in other countries in the region.

In Paraguay, a river basin-scaled tool to define environmental flows was developed, guidelines for the development of an Integrated Water Resource Management (IWRM) Plan for the Tebicuary river basin were created, and 16 local technicians were trained in the use of the hydraulic model HEC-RAS and its application to flood management.

In Zimbabwe, 12 government agencies, 17 industries and 13 local consultants received training on energy and water efficiency with focus on ISO 50001; 14 government officials, 10 industry personnel and 3 local consultants received a hands-on training during field visits on conducting detailed energy and water audit, 10 companies were analyzed and given opportunities to utilize renewable energy, and a manual on energy and water management for industry sector in the country was produced.

Success Stories and challenge

The success of CTCN's technical assistance has been proven by the high-level satisfaction from the beneficiaries, provision of follow-up assistance and support, as well as the fact that the demand is largely exceeding the supply. Due to its demand-driven nature, CTCN has been well positioned to gauge the needs and priorities of the beneficiaries.

The technical assistance on mainstreaming gender for a climate-resilient energy system in West Africa (ECOWAS) was a successful case that included 13 countries (Benin, Burkina Faso, Cabo Verde, The Gambia, Ghana, Guinea, Guinea Bissau, Ivory Coast, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo). A training workshop for ECREEE's, Gender Focal Units within the Ministries, and a train-the-trainers workshop were organized with high levels of participation.

In terms of challenges, CTCN 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 type of services that the CTCN delivers as indicated by the increasing number of requests for technical assistance. That said, not all requests necessarily relate to the actual deployment of climate technologies. Some of the lessons learned have been summarized below:

- 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 complement to other mechanisms and initiatives;
- In particular, CTCN can contribute to an early-stage support of climate technology deployment;
- CTCN has a wide range of ready-to-use resources and network of international expertise and technologies;
- There are multiple opportunities for scaling up and replication;
- CTCN – due to its demand-driven nature – is well positioned to gauge the needs and priorities.

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 implementing agencies to seek synergies and avoid overlaps.

Outreach, Public Awareness and Knowledge-sharing Opportunities

The 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 CTCN. The fourth Steering Committee meeting took place at the sidelines of the 12th CTCN Advisory Board meeting in Vienna in October 2018.

Project achievements are published on the CTCN website, and are also included in the CTCN newsletter and presented in events such as the bi-annual CTCN Advisory Board meetings (12th and 13th sessions), as well as relevant COP events. Potential project ideas will be presented at investor forums in respective regions.

CTCN also contributed to a training programme on “Sustainable Energy Solutions” in Groningen, The Netherlands, between 8-12 April 2019. Some National Designated Entities were invited to attend the training.

A formal mid-term review 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 offers sufficient opportunity for feedback and reflection. The independent evaluation of the CTCN that was presented at COP 24 in December 2018 provided recommendations that will be taken into consideration by UNIDO.

The new technical request on circular economy began implementation in May 2019. The terminal evaluation process will commence once the implementation of all activities ends.

- (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 closed in March 2019, after an extension from the original closure

date of December 2018. 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: (i) facilitating a network of national and regional centers, networks, organizations, and initiatives; (ii) building/strengthening national and regional technology transfer centers and centers of excellence; (iii) design, development and implementation of country-driven EST transfer policies, programs, demonstration projects, and scale-up strategies; (iv) integrating climate technology financing needs into national development strategies, plans, and investment priorities; (v) catalyzing investments in EST deployment; and (vi) establishing a marketplace of owners and users of LCTs to facilitate their transfer. UNEP is leading interventions to enhance the enabling conditions for climate technology transfer and deployment (i-iii), and the ADB is leading the financial investment and investment facilitation interventions (iv-vi).

The first phase of the UNEP project component supported capacity building of institutions for assessing 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. Countries are working towards developing NDC implementation plans, as well as institutional arrangements for implementation and tracking progress. Coordination among climate change focal points and interactions with stakeholders is still being built upon.

Status Update

During the reporting period, the ADB continued to support activities to catalyze increased investments in climate technologies by venture capital and private equity funds. The project continued to: (i) assist climate technology-focused venture capital and private equity funds and investors; (ii) 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 of the project to March 2019 provided UNEP with the time to complete 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.

From July to December 2018, ADB continued to support activities aimed at catalyzing increased investments in climate technologies. The project continued to assist climate technology-focused venture capital and private equity funds, as well as accelerators and incubators, to facilitate more investments and develop more investable climate technology entrepreneurs. The project continued to support knowledge sharing activities and business development opportunities among climate technology startups and mature market players. The project supported ADB developing member countries in building their capacities in analyzing options and implementing policies to increase the use of clean energy technologies that satisfy energy needs and bolster energy security.

During this reporting period (until project closure), UNEP focused on achieving Component 3 of the project to support countries in identifying and developing enabling environments, as well as financial mechanisms, for facilitating investment in priority climate technologies. In mid- to late-2018, the project initiated several technical assistance (TA) activities in the region which supported countries in catalyzing national level scale up strategies for technology transfer. These scale-up strategies are aligned with country priorities which have previously been identified and, more recently, with their NDC priorities.

The TA provided strengthened sector-specific technology transfer networks and increased capacity building

efforts. The technical completion of the project was extended by three months to March 31, 2019 to allow for satisfactory completion of some of these TA activities.

Delivery of technology transfer

During the period of July 2018 to December 2018, the ADB project component supported the following forums, workshops, and programs:

- 2018 Asia-Pacific Forum on Low-Carbon Technology, 24-26 October 2018, Changsha City, Hunan, PRC
- 2018 TusStar-ADB's Cleantech Startup Competition in PRC
- New Energy Leaders 2018 Program (Hunan Batch)
- Asian Cleantech Startup Workshop, 23 October 2018, Hunan, PRC
- Workshop on Solar Photovoltaic Pumping Technology for Irrigation and Clean Water Supply, 30 August 2018, Kunming, Yunnan Province, PRC
- 40 Years of Reform and Opening-up of Experience on Energy Development and Expert Roundtable on Energy Transition in PRC and its Global Implications, 1 September 2018, Xi'an, PRC
- First High-Level Seminar on Carbon Market, Green Finance, and Clean Technologies for Low Carbon Urban Development, 20-22 November 2018, Shanghai, PRC
- Energy Green Transition and High-Quality Growth Roundtable, 16 December 2018, Beijing, PRC
- Consultation Workshop to Improve the operation of the Hunan International Low Carbon Technology Exchange Center (LCTEC) 17-18 December 2018, Changsha City, Hunan, PRC,
- Seminar on Waste Management and Clean Energy Innovations, 19 December 2018, Beijing, PRC,

In line with the 2018 Asia-Pacific Forum on Low Carbon Technology, business-matching sessions with low-carbon technology enablers and providers were held. A booklet containing information on the products and services provided by participating low-carbon technology providers and enablers was produced.

In April 2018, the ADB project component supported a series of regional workshops in Chennai, Pune, Delhi, and Kolkata, and a national workshop in Delhi, India. The workshops were organized by National Institution for Transforming India (NITI) Aayog, the International Energy Agency, and ADB. The workshops focused on technological, economic and regulatory issues related to renewable energy integration and grid stabilization in India. A report on this series of workshops was released by NITI Aayog in July 2018.

The technical completion date of the UNEP project component was extended by three months from 31 December 2018 to 31 March 2019 to allow for satisfactory completion of work that was initiated up to 15 November 2018. These final activities of the project included seven national TAs supporting:

- Mongolia: the development and initiation of the now approved GCF Readiness Proposal related to district energy systems (approved February 2018).
- Maldives: the development of a full funding proposal for increasing renewable energy share to 30 percent of total capacity.
- Cambodia: the development of a national LED dissemination programme
- Lao PDR: organizing stakeholder consultations for developing a GCF Readiness Proposal on EE appliances (submitted October 2018).
- Malaysia: undertaking a policy gap assessment and feasibility studies for investments projects to promote District Energy Systems.
- Sri Lanka: undertaking gap assessment in enabling framework for promoting e-vehicles and develop a concept for GCF.
- Pakistan: a baseline assessment of the brick kiln sector and capacity building of brick kiln workers to adopt energy efficient technologies.

Success Stories

ADB's support for knowledge sharing, business matching activities, and technology promotion platforms has created a pipeline of investable projects, prompted business interactions, created solid interest in the deployment

of low-carbon technologies in DMCs, and introduced new ways to catalyze innovation. Climate technology startups from the accelerator programs it has supported raised additional funding. Through the years that it has organized forums, ADB has witnessed greater participation in the low-carbon technology forums, competitions, and programs it supported.

Lessons Learned and Captured

Through programs like the New Energy Leaders Program and the ADB TusStar Cleantech Competition, ADB was able to interact closely with climate technology startups and entrepreneurs, and receive first hand feedback that validated the importance developing innovative and practical business models to accelerate diffusion of climate technologies in ADB's developing member countries. Discussions with the entrepreneurs emphasized the (i) need for better access to financing; (ii) greater involvement of entrepreneurs in the policy-making dialogue; (iii) greater collaboration and sharing of learnings between entrepreneurs across Asia; (iv) more support for entrepreneurs to access key stakeholders including large customers, governments, and organizations like ADB; (v) support for piloting of new technologies; as well as (vi) development and sharing of targeted knowledge products.

A continuous challenge for the UNEP components has been the ability to assess if, or when, TA support will be translated into action—policies, larger programmes, demonstration projects, or for additional investment to happen. Maintaining strong ties with project focal points and stakeholders is crucial for exploring options for scaling up the TAs through collaboration with ADB, CTCN, and the GCF.

Additionally, relationships built with project focal points/CTCN NDEs and regional technical institutions, through the TAs, 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. The selection of competent and experienced technical organizations, with good reputations, for carrying out TA is essential to ensuring high quality outputs, which are more likely to result in follow up actions related to policy, larger programmes, or demonstration projects.

Challenges behind the above success stories include those related to expanding the reach and vetting participants to the programs and activities, managing and/or keeping up with participant and other stakeholder expectations, and providing the appropriate follow-up support to sustain the outcomes of the activities.

As mentioned previously, challenges faced by the UNEP continue around limited and unclear demands for targeted technical assistance by countries, limited human and technical capacity of national institutions to provide support for undertaking TAs, 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 TA support are submitted to Copenhagen. As such, the most recent activities of the project focused on identified NDC priorities of countries to design and develop programmes to facilitate technology adoption and use for NDC implementation, including the financial mechanisms required to promote the use of technology.

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

Outreach, Public Awareness and Knowledge-sharing Opportunities

- A publication on financial mechanisms for supporting the purchase of energy efficient appliances and retrofitting existing household appliances;
- A report assessing current and planned energy supply technologies and outlining alternative technology and fuel options to address the shift to non-fossil fuel-based energy systems in South and South-East Asia; and
- A fifth e-newsletter on Sustainable Cities.

The terminal evaluation is expected to be delivered in the first quarter of 2020.

- (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 Sustainable Energy for All (SEforALL) initiative, whereas the CCA activities focus exclusively on the water sector. The project intends to mobilize additional financing, notably from the AfDB-managed instruments, such as the Sustainable Energy Fund for Africa or the African Water Facility. The project components include: (i) enhancing networking and knowledge dissemination with respect to climate technology transfer and finance; (ii) 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 (iii) 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 research projects cover the following three thematic areas: (i) integration of intermittent renewable energy technologies in on-grid and off-grid markets; (ii) market-based approaches on the diffusion of clean cooking solutions; and (iii) 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.

Status Update

Under component 1, all projects which sought to enhance networking and knowledge started implementation in January 2017, and all (but one) completed their activities by December 2018. All research projects submitted one or several policy briefs on their findings as well as a draft research article to be submitted to a scientific journal. The research projects, as well as their results, are on the ACTFCN website in a dedicated section, developed specifically for this purpose. the ACTFCN continued to post news and updates on the ACTFCN and SE4All Africa Hub Website in the spirit of knowledge dissemination and networking.

For component 2, on the mitigation side, a number of technical assistance projects (Zimbabwe Oxygen Rooftop Solar, Kenya Mutunguru Hydro Power Plant, DRC North Kivu Hydro Power Plant, and the Lesotho NEO I Solar PV) under Component 2 were finalized by mid-2019. On the adaptation side, the scaling-up of adaptation technology transfer in Mauritania (95 percent completed), in Malawi (50 percent completed) and the mainstreaming of climate change adaptation technologies in Zambia (25 percent completed), all in the water sector, have progressed.

For component 3, five technical assistance contracts addressing mitigation under the SEforALL Africa hub were fulfilled by mid-2019. On the Adaptation side, two projects have started and three other projects are technically ready to start and will commence the consultant recruitment process shortly.

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.⁷⁰

The CSIR, together with the University of Malawi and the University of Botswana, are working on developing algae-based tertiary water treatment technology that utilizes a specific consortium of algal species to reduce nutrients and create conditions suitable for effective solar disinfection of pathogens and bacteria in Rural

⁷⁰<http://www.dst.gov.za/index.php/media-room/latest-news/2470-algae-proves-a-hit-in-the-treatment-of-wastewater>

Wastewater Treatment plants in the Southern African Development Community countries. This green technology will enable sustainable water usage. Treated wastewater could be re-used for irrigation. Given its success, the CSIR submitted a request for continued support for the project, which has been granted. An additional \$310,553 will be made available to CSIR to continue their research. Reference to the research article: Paul J. Oberholster, Po-Hsun Cheng, B. Genthe, M. Steyn (2018): “*The environmental feasibility of low-cost algae-based sewage treatment as a 1 climate change adaption measure in rural areas of SADC countries*”; *Journal of Applied Phycology*, Springer Netherlands; Link: <https://link.springer.com/article/10.1007%2Fs10811-018-1554-7>

Lessons Learned/Captured

- Building-up national institutions and enabling environments is critical to ensure sustainability. Component 2 in particular focuses on the reforms of the policy strategy, regulatory, institutional and organizational environment of the energy and water sectors, which should underpin the successful development and implementation of programs and projects by the public and private sectors;
- Transferring Technologies: Technology transfer and reception activities must be anchored in a national strategy. Technology transfer and reception activities should also reflect key principles: they should address critical country needs, should be built upon existing institutional competencies and should have long-term sustainability;
- Stakeholder Participation: Consultation and participation of the existing institutions and key stakeholders are also critical to ensure ownership and sustainability, efficient implementation and cost management. Outcomes from stakeholders’ participation have been taken into account in the design of the project components and implementation mechanisms. Component 1 in particular provides a platform for stakeholder exchange.
- Management of framework contracts proved to be challenging. Consulting firms experienced delays in the implementation of the activities as initially planned in their respective contracts. Most of them requested a no-cost extension to have enough time to fulfil all commitments under the original agreement signed with the GEF implementing agency (in this case, the AfDB).

Outreach, Public Awareness and Knowledge-sharing Opportunities

Please see <https://www.african-ctc.net/> and www.se4all-africa.org.

The project submitted the MTR report to the GEF, which was referred to in GEF’s report to COP 23.⁷¹ The project was extended for a second time to June 2019 and the terminal evaluation is expected to be delivered by the end of 2019. Because the project is in its final stages, some information, including coordination with the CTCN, is limited.

- (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: (i) regional technology transfer networks; (ii) technology transfer technical assistance; and (iii) financing pilots.

Status Update

During the reporting period, seven new projects have been signed (five in the ETC region and two in the SEMED region) and six grants have been disbursed (four in ETC region and two in SEMED region).

- To date \$1.64 million have been disbursed, while a total of \$3.45 million has been committed in the ETC region. This results in a headroom of \$2.67 million out of an initial allocation of \$7.85 million.

⁷¹ [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)

- To date EUR 0.46 million have been disbursed, while a total of EUR 0.22 million has been committed in the SEMED region. This results in a headroom of EUR 4.38 million out of an initial allocation of EUR 5.00 million.
- During the reporting period, seven new projects have been signed, with clients in the manufacturing and services, retail and property sector. Some of the FINTECC technologies to be implemented in these projects are refrigerators with low GWP refrigerants, trigeneration plant, by-pass dust recovery in the cement sector, production of twine from recycled plastics, advanced thermal insulation and energy efficient windows for buildings. The projects will result in CO2 savings of 7,000 tons/year.
- There are currently 10-15 additional projects in the FINTECC pipeline under assessment.
- A study by FAO in Kyrgyzstan and Kazakhstan has been finalized and two results dissemination events in the region were organized—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 emphasizing climate resilience technologies.
- Over this period, five projects in the Early Transition Countries (ETC) region have been signed and six grants have been disbursed (four in ETC region and two in SEMED region).
- Extended knowledge management activities have been undertaken: detailed case studies and a side event at COP 24 has been organized, where EBRD presented the challenges faced in climate technology transfer.
- Two joint seminars (in Kyrgyzstan and Kazakhstan) have been organized together with the FAO to discuss key findings of the study for assessing the mitigation potential of climate technologies in the agriculture sector.

Success stories

There have been some excellent FINTECC projects developed within the period, in particular projects financed by the EBRD Risk Sharing Facility where the EBRD partners with local banks in addressing the need for financing of local small and medium-sized enterprises. 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.

On the marketing of the FINTECC programme, the EBRD continued working on implementing the FINTECC communication strategy. During the time period, a few more detailed case studies have been prepared and published on the FINTECC website and during the course of the programme, a case study will be developed for each project. The case studies support the knowledge transfer and network building activities. A dedicated event at COP24 has been organized on the topic of climate technologies transfer and innovation.

Challenges and lessons learned

Some remaining challenges associated with the programme implementation are related to the early mover objectives which 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 which will provide a showcase for other sector players to adopt similar practices and follow the example. 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 mid-2020.

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

The collaboration with CTCN since the beginning of the FINTECC programme has been maintained and continuous to strengthen. Coordination meeting have not happened in 2018, but the EBRD is seeking to set at least one coordination meeting before the end of 2019.

Outreach, Public Awareness and Knowledge-sharing Opportunities

Extensive communications activities have been undertaken by developing detailed case studies for FINTECC projects, which have been published on the dedicated [FINTECC website](#). These case studies provide detailed

information on the specific projects and provide examples to potential future beneficiaries on the FINTECC process and impact.

Other opportunities include:

- Through the FINTECC website, increased visibility continues to be given to climate technologies and the FINTECC financed projects.
- Case studies have been developed for each project supported under FINTECC, which will provide information about how 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 expected at COP25 on technology transfer.

The mid-term evaluation was shared with the GEF in 2017. The terminal evaluation report is expected to be delivered in June 2020.

- (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 is under implementation. 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: (i) development of national policy and institutional capacities; (ii) strengthening of technology networks and centers; (iii) pilot technology transfer mechanisms; and (iv) leveraging private and public investments.

Status Update

The project was extended until the end of 2019. Executing agencies continued to respond to country originated requests and supporting the identification and prioritization of sector-specific Environmentally Sound Technologies (EST), as well as disseminating the preliminary results obtained. The focus during the current report period has shifted towards implementation of pilot projects throughout the region.

The project has so far executed 84 percent of the total budget. As it is now the middle of the third year of implementation, most agencies have entered the final phase. Three agencies have requested an extension, and as such, activities and disbursements will continue throughout the second half of 2019.

Delivery of technology transfer

Progress has been made in the delivery of the following specific outputs and activities:

- Databases of EST experts and institutions continue to be updated.
- Regional dialogues on integration of EST considerations in the national innovation systems and in climate change planning, were completed (one validation and two dissemination workshops took place).
- Guatemala's Science and Technology National Secretariat volunteered to lead the creation of a network and strategic alliance in LAC, to continue sharing experiences, good practices and information, as well as to enforce technology transfer in the region.
- Two main documents, "Policy Recommendations for the Introduction of EST in the Innovation National Systems", and "Guide on Climate Change Planning & EST", have been completed and are under editorial revision. Webinars in English and Spanish will be delivered to disseminate these studies.
- Comparative assessments of regulatory and commercial framework, one for industrial cogeneration for six countries (Brazil, Colombia, Guatemala, Mexico, Nicaragua, and Uruguay), and another one for solar roofs in Brazil, Chile, and Mexico, have been completed.
- Case studies on innovative and successful business models that enable the adoption of efficient public lighting technologies in LAC cities (Buenos Aires, Bucaramanga, Fortaleza, Ciudad de México, Santiago, and Sonsonate); and on quality standards, verification procedures and consumer information tools for solar water heaters in Barbados, Brazil, Chile, Colombia, Mexico, and Uruguay, were completed.

- The project “Sustainable Behavior Standards of Buildings in the Galapagos Archipelago,” was completed.
- The design for the implementation of solar photovoltaic power generation systems for 12 buildings in Guadalajara, Mexico (Jalisco Carbon Management Plan), was completed.
- The project is currently assisting Guatemala, recommending possible fiscal policy adjustments to promote renewable-source distributed generation.
- A consultant was hired to evaluate the thermal use potential of residual forest biomass in the Huetar Norte Region of Costa Rica.
- Inputs to design of a regularization program to connect socio-economic vulnerable households to the electricity grid in Uruguay, are under preparation.
- The project will assist Chile’s Ministry of Energy with a study on low-carbon development for the Chilean cement and steel industry.
- In Argentina, the project will support the public utility of the province of Mendoza, with a comparative analysis of integral energy solutions for the Andes Mendocinos; and the Universidad de Buenos Aires, by structuring an energy management system for representative buildings in its campus.
- Results of the studies on public lighting and cogeneration, and of the comparative assessments of regulatory and commercial framework for solar roofs, were presented in webinars (supported by sector networks with which the project has been collaborating). Also, general preliminary results were disseminated and discussed in side event at the "Energy Week" in Montevideo, Uruguay (December 2018), as well as in other meetings organized by the Ecuadorian Association of Energy Efficiency and Renewable Energy and the Universidad de la Sabana in Chía, Colombia (November 2018).
- Based on a business model proposed by the project, the Belo Horizonte transit agency started the tender process to acquire electrical buses for the public transportation system. The national development bank (BNDES) agreed to give special interest rate for vehicle purchase.
- The project helped the Mexican federal government to develop the national electric vehicle strategy, which was part of the exiting government handover to the new governments’ national development strategy.
- Two workshops were held to support Santiago de Chile’s transit agency. The first one, to create a roadmap for the delivery of the transit system tender process on time, which aims to include approximately 300 electric buses into the system (August 2018); the second one, to help the transit agency prevent the possible incidents in the first day of operation of the new system with the electric vehicles (January 2019).
- The project is supporting Bogota’s mobility secretariat to implement its Technological Progress Plan. Two workshops were held in the city. The first one, to create a roadmap for the implementation of the first 100 electric buses in Bogota’s bus rapid transit system (Transmilenio; October 2018), and the second one, to provide Transmilenio with technical knowledge to assess the energy and infrastructure needs for the deployment of such buses.
- The expert mapping on forest monitoring has facilitated the creation of two networks: a pilot network of experts, in collaboration with the Virtual Excellence Center for Forest Monitoring in Mexico; and another network on the harmonization of national forest inventories, together with the Brazilian Forest Service and the United Nations Food and Agriculture Organization (FAO).
- Four reports on national experiences on forest monitoring (Brazil, Guatemala, Mexico, and regional overview) were revised and edited, and are ready to be published.
- The project continues to successfully implement the work plans on EST development and transfer for forest monitoring to support Brazil, Costa Rica, Suriname and México. One more work plan for Dominican Republic was created and activities are under execution.
- The Mexican National Forest Commission (CONAFOR) now has access to the cover maps generated by the MAD-Mex (Automatic Wall-to-Wall Land Cover Monitoring) software, as well as to the software itself, already a calibrated for coverage map development. The project will continue supporting Mexico until September 2019, on the development of a user interface, to generate queries and reports of the different components that integrate the National Forest Monitoring System of Mexico.
- The capability of the Costa Rican Coverage and Land Use Ecosystems Monitoring System (SIMOCUTE) has been expanded, through the creation of a methodology to link forest inventories with ecosystem health, the adoption of new technologies in forestry information systems and monitoring, and the strengthening of the financial sustainability of the system itself.

- In Brazil, the project supported the adoption of technologies to monitor forest products by developing an application for mobile devices to collect field data, as well as an online module to disseminate the results of the monitoring activities of the National System for Origin of Forest Products Control (SINAFLO).
- The project is currently supporting the adoption of technologies for mapping and monitoring agroforestry systems at the national level linked to climate change policies in Dominican Republic, as well as national capacity strengthening activities to collect and use the information produced by Suriname's National Forest Monitoring System.
- In February 2019, representatives of eight countries from LAC gathered in Costa Rica to share their experiences in forest monitoring technologies and climate change mitigation, and participants explored and define future opportunities to strengthen forest monitoring systems in the region.
- A \$150 million results-based loan for sustainable agro-forestry development in the Dominican Republic, approved by IDB during 2018, has been confirmed by the Dominican Congress and is under implementation.
- The project provided technical assistance to Haiti's Ministry of Agriculture, Natural Resources and Rural Development, in the design and implementation of the Agricultural and Agroforestry Technological Innovation Program. The results of the study provided recommendations that helped outline the \$55 million loan granted to Haiti by the IDB (\$21.9 million co-financing), which aims to increase agricultural income and food security for smallholder farmers in selected areas of the country.
- A roadmap to enhance and scale up the production and processing of the improved Lupinus species in Bolivia, Chile and Ecuador, has been completed.
- Strategies for pest control and to improve efficiency of robusta coffee management to address climate change, in Panama and Honduras, have been redefined.
- The study on rice-farming agricultural practices to improve water use efficiency is progressing. Although the System of Rice Intensification technology, in its different modalities, shows an important potential in the region, it still requires validation in different agro-ecological and socioeconomic environments, before scaling it up.
- A technical memoir from the III Symposium on Adaptation to Climate Change has been published.
- The project continues to support the multiple platforms created to disseminate agriculture and livestock technologies and innovations in the region.
- Preliminary results of the project related to sustainable agriculture were disseminated and discussed in the following events: International Forum AgTech San Pedro Sula, Honduras (March 2019); Lupinus International Conference, Cochabamba, Bolivia (March 2019), and the annual Symposium on Adaptation to Climate Change, Dominican Republic (June 2019).

Delivery of technology transfer

Progress has been made in the delivery of the following specific outputs and activities:

- The first federal plan for electric mobility in Mexico, which should be the base for electric mobility policies that will be created, has been facilitated by the project.
- A new business model for Santiago de Chile's transit system has been created. This model aims to create an appealing environment for private sector investment in electric buses.
- Costa Rica can now use a platform to share public information regarding the state of forest cover, ecosystems, and ecosystem services, that can also serve to monitor environmental policies.
- Mexico now has access to state of deforestation maps generated with the calibrated MAD-Mex software.
- Brazil will be able to better monitor timber production and commercialization thanks to the online e-learning platform, the implementation of a mobile application and an online portal to disseminate public information for SINAFLO.
- Representatives of the private sector in Bolivia have adopted the Lupinus roadmap to develop a business strategy to commercialize improved Lupinus sub-products. The experience might soon be replicated in Perú, since recently key stakeholders of this country's agriculture sector have expressed similar interest

Success stories

The project “Sustainable Behavior Standards of Buildings in the Galapagos Archipelago” was successfully implemented, largely due to three main factors:

- Legitimate need for the assistance and willingness to continue the work by national and local authorities;
- Technical assistance aligned with national policies and sector regulation; and
- Competent consultant team with previous experience working with the beneficiary community.

The inputs which define the sustainability standards for the Galápagos buildings were generated through co-creation workshops, with strong participation from the national and local authorities, representatives of different associations and the community in general. This ensured that the proposal would accurately reflect the needs of the inhabitants of the Archipelago and would be widely accepted. The initiative has had a positive impact on two specific fronts. The results are currently being used as input to update the Ecuadorian Construction Standard (not only for Galapagos, but also for the coastal area of Ecuador). It has also served as a starting point to request EUROCLIMA resources to make a "living lab" of sustainable housing in the Galapagos Archipelago. The application has been selected for the call's second phase, where the sustainability standards designed under the project will be used to build the pilot.

The private sector was successfully involved in the brainstorming phase of the technical assistance provided to Santiago de Chile's transit agency with the new business model implementation on a coming tender process for electric buses. The dynamic created a safe space for them to show their views and their participation made it possible to transform this into an appealing business model that was later adopted by the government. Also, besides the technical advice offered during the design phase, the constant support during the implementation process to a committed Chilean Transport Minister and her team, was the key to unlock the success.

Technology transfer activities carried out in Brazil and Suriname resulted in a special collaboration arrangement between the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) and Suriname's Foundation of Forest Management and Production Control (SBB). Supported by the project, SBB personnel visited Brasilia, to exchange experiences with IBAMA, given that SINAFLOR is a similar system to what SBB wants to develop.

An initiative initially seeking reduction of vulnerability and productivity increase for family farmers in Bolivia, Chile and Ecuador, by improving species of a neglected Andean crop *Lupinus*, ended up having a greater impact. Joint efforts by the research community and the national private sector, helped strengthen the *Lupinus* value chain (consolidating both chain components, for animal and human consumption), while farmers witnessed a significant increase in their soil organic content and soil nitrogen. The International *Lupinus* Conference (March 2019), in which more than 100 people from 16 different countries' participants, was hosted in Bolivia due to the visibility of the project. The production increase and commercialization has benefited the highly vulnerable native population in the three countries, who have successfully partnered with the private sector to meet the increasing demand for the *Lupinus*-based products. Finally, the Peruvian agricultural community has also expressed interest in implementing the roadmap that was designed.

Challenges and Lessons Learned/Captured

- Although the initial objective of the outreach and network building activity was to disseminate information about the project, the real value has come from presenting intermediate results from some of the projects. This has extended the reach of the project and created new opportunities.
- Activities often took more time than what was initially planned. One of the big challenges has been to balance the research and implementation components across different projects.
- Workshops and dissemination events have resulted in the creation of informal networks, through which actors have continued discussions and shared studies, information and best practices.
- Working with different government institutions was challenging, due to differing timelines and priorities. However, close collaboration with government entities has proven to be a good practice, strengthening relationships between executing agencies and different stakeholders within and across countries. Executing agencies have reported that the technically and operationally flexible approach implemented by the IDB and the GEF has been essential to ensure the success in the cultivation of these type of relationships, as well as to execute resources efficiently.

- Improved integration with representatives of the private sector, as well as communication and dissemination campaigns targeting these actors, are necessary and strategic to increase effectiveness of sector initiatives.
- A constant challenge for the project was the continued alignment of its activities with countries' national, sector, and climate change priorities; as well as coordinating the work with other international agencies in areas of mutual interest.
- In general, countries and cities that have clear policy guidelines, strong institutions and established regulatory frameworks, are the ones that take the most advantage of international technical assistance, using it as a real instrument to make a low carbon energy transition.
- Roadmaps designed for technology adoption often end up focusing on capacity building to ensure effective implementation.
- Designing technology business models in a way that can serve as an example is a cost-effective way to encourage scaling up and replication.
- Background international research has been key in achieving a successful design and implementation of roadmaps. Reporting and analyzing the barriers that cities and countries face on their transition to new technologies was very useful, as also was understanding the steps taken in other cases to remove such barriers.
- Rather than creating the best document or giving the perfect advice, supporting governments in the implementation process is the most important factor, as the execution phase is where technical teams face the most challenges.
- In many cases, the successful preparation and implementation of EST transfer in LAC countries required the support of external experts working as lobby specialists, that were able to effectively translate the need for the EST to different actors, as well as promote and facilitate projects.
- Efforts to increase the reach of the project continue to be made; however, allocation of resources and technical assistance depend on the countries' requests, as well as their commitment and intention to continue implementing the recommendations and plans derived from such assistance.
- The involvement of Caribbean countries in the expert dialogues on EST and climate change has been limited, particularly in the case of policy in the context of National Systems for Technology and Innovation, given how different the current technology transfer and innovation situation and conditions are in comparison to the rest of the LAC region.

The project's mid-term evaluation was completed in November 2018 and shared with the GEF and the terminal evaluation is expected to be finalized in the second half of 2019.

Outreach, Public Awareness and Knowledge-sharing Opportunities

The project has supported the creation of a platform to serve as a network bringing together key stakeholders from the 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).

A Climate Technology Transfer blog is currently being developed by the IDB. It will function as a repository of project results and will be used as a tool to disseminate project-related events and information. Executing agencies continue to participate in different events throughout the region.

Cooperation between the CTCN and Regional Activities

The IDB and the CTCN are continuously exchanging information about the cases supported in Latin America and the Caribbean (LAC), both in terms of technology transfer, as well as financial mechanisms to support such initiatives. This, through the Project Coordination, as well as through two of the Project executing agencies -the Tropical Agricultural Research and Higher Education Center (CATIE) and the Bariloche Foundation- which are, at the same time, CTCN's Knowledge/Consortium Partners (fostering collaboration and access to information and knowledge in order to accelerate climate technology transfer in the LAC region).

The IDB and the CTCN are currently exploring a concrete cooperation model, based on the lessons learned from the Project execution and the CTCN's interaction with other Multilateral Development Banks. In particular, the purpose would be to: 1) Evaluate and demonstrate technology transfer practices; 2) Jointly participate in technical assistance financing components; 3) Link technical assistance activities with investments, as well as to sequence interventions; and 4) Find a joint mechanism to approach and incorporate key actors in the LAC countries (i.e. Finance ministries; science, technology and innovation systems, etc.).

As part of this process, the Project Coordination and CTCN Regional Management are currently selecting a project that could serve to pilot the model. Among the candidates, there is a particular interest in supporting one in a Caribbean country.

ANNEX 6: 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).

The information in this annex is based on data provided by relevant GEF Agencies in response to a survey that was circulated and carried out by the GEF in April 2019.

Table A6.1: Implementation Progress of Technology Transfer Pilot Projects under the Poznan Strategic Program (as of May 30, 2019)

GEF ID	Country	Agency	Title	GEF Poznan Program funding (\$ million) ^a	Total GEF funding (\$ million) ^a	Co-financing (\$ million)	Status of project
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 ^c	The project was endorsed by the GEF CEO in August 2010 and closed in 2016.
4032	Cook Islands, Turkey	UNIDO	<i>Realizing Hydrogen Energy Installations on Small Island through Technology Cooperation</i>	3.0	3.0	3.5 ^b	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 ^c	The project was endorsed by the GEF CEO in August 2011 and closed in June 2018.
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 ^c	The project was endorsed by the GEF CEO in March 2012 and closed in December 2018.
4040	Brazil	UNDP	<i>Renewable CO₂ Capture and Storage from Sugar Fermentation Industry in Sao Paulo State</i>	3.0	3.0	7.7 ^b	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 ^c	The project was endorsed by the GEF CEO in May 2012 and closed in December 2018.

GEF ID	Country	Agency	Title	GEF Poznan Program	Total GEF funding (\$ million) ^a	Co-financing (\$ million)	Status of project
				funding (\$ million) ^a			
4055	Senegal	UNDP	<i>Typha-based Thermal Insulation Material Production in Senegal</i>	2.3	2.3	5.6 ^c	The project was endorsed by the GEF CEO in August 2012 and closed in May 2019.
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 ^b	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 ^c	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 ^c	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 ^c	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 ^c	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 ^c	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 ^b	This project was endorsed by the GEF CEO in February 2014 and is under implementation.
Total				36.9	58.6	241.4	
Total (cancelled projects excluded)				30.1	51.6	228.8	

^a Includes PPGs and Agency Fees.

^b Co-financing amount at the GEF Council approval.

^c 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 11 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 and was closed in 2016. The project includes the following components: (i) building institutional capacity; (ii) HFC and HCFC life cycle performance analysis; (iii) phase-out of HCFC consumption in the key consuming sectors of foam and refrigeration; (iv) development of ozone depleting substance (ODS) destruction facility and supporting recovery network; (v) stimulating market growth for energy-efficient refrigeration and air conditioning equipment; (vi) technology transfer; and (vii) integrated strategy for HCFC production closure.

Since this project was completed in 2016, no activities have been implemented between July 2018 and June 2019. The Terminal Evaluation process began in November 2018 and still ongoing. The mid-term evaluation report was referred to in the GEF report to COP 22.

- (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 closed in June 2018. The project was 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: (i) pilot DRHS technology for efficient water use; and (ii) 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 closed, 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 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 provided the MTR⁷² to the GEF, which subsequently shared it with the UNFCCC Secretariat, and the terminal evaluation was expected to begin May 2018, but has not yet been completed.

- (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 project was endorsed by the GEF CEO in 2012 and closed in December 2018. The key objective of the project is to foster technical innovation and South-South technology transfer from Thailand to neighboring countries, notably Lao PDR, 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: (i) institutional capacity-strengthening for very high-gravity – simultaneous saccharification and fermentation (VHG-SSF) technology dissemination; (ii) South-South technology transfer: capacity-building and policy dialogue with participants from the Lao PDR, Myanmar, and Viet Nam; and (iii) demonstration and commercialization of the technology and private sector development. The GEF agency is King Mongkut's University of Technology Thonburi (KMUTT).

⁷² 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>.

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 successfully completed, 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.

Status Update

The project closed in December 2018, so there are no update since its closure. The agency has deemed overall implementation progress as highly satisfactory, although the terminal evaluation is still in the process of being completed.

Under component 1, Ethanol information hub for south-south technology transfer has disseminated information, e.g. through their website and Facebook. In Q2 2018 a report describing the south-south technology transfer model was finalized by KMUTT and disseminated during the project closing event in December 2018.

Under component 2, regional awareness was created for the new technology package. The ASEAN Sustainable Energy Week took place from 7-9 June 2017 in Bangkok to promote bio-ethanol technology and to demonstrate the integration of the VHG-SSF process in the existing ethanol plant of Sapthip Co., Ltd. Under Component 2, a number of participants from Lao PDR, Myanmar and Viet Nam participated in several trainings organized by KMUTT. Thanks to the awareness raising campaign from UNIDO, the Ministry of Industry and Trade (MOIT) Viet Nam has introduced blending of E5 (Ethanol 5 percent mixed with gasoline) for all 54 provinces in Viet Nam as of 1st January 2018. Another workshop to share lessons from Thailand on policy and pricing structure for bioethanol promotion was conducted in December 2018 in Lao PDR. Moreover, a policy forum seminar took place in Hanoi, Viet Nam in December 2018 with policy makers from Thailand, Lao PDR, Viet Nam who also did a site visits to the pilot ethanol plant in Hanoi, Viet Nam at the Food Industries Research Institute (FIRI).

Implementation progress for component 3, progress of establishment of demo plants:

- In Thailand, KMUTT is working with the ethanol production company Sapthip Co., Ltd., for the adaptation of new technology through a pilot plant for ethanol production with a capacity of 200 l/d. The blueprint (engineering design) of incorporating the new technology into the existing production line was developed; and a test run of the adoption of the HG/VHG-SSF process has been successfully completed.
- In Viet Nam, the pilot plant of ethanol production from cassava using KMUTT technology with capacity of 50 lpd at FIRI has been fully constructed; plant test run was in May 2018 and the system was fully commissioned in July 2018. The pilot plant is now used for training purposes by FIRI. A technical committee was set up and official consultations on the training center were organized for total number of 147 participants from relevant stakeholders in Viet Nam. Furthermore, toolkits and manual were adjusted and translated to Vietnamese language and the website <http://firi.vn/bioethanol-project> to promote the training center at FIRI was developed.
- FIRI organized a policy forum on bioethanol development in Viet Nam in February 2019 and invited relevant stakeholders from Viet Nam, Thailand, Lao PDR, etc.
- Lao PDR: The Institute of Renewable Energy and Promotion (IREP) under the Ministry of Energy and Mine, Lao PDR together with the private sector company Khongsedone Ltd has indicated interest to implement the KMUTT technology in Lao PDR. With support from KMUTT this public private partnership (PPP) installed their first pilot bio-ethanol plant with a capacity of 10,000 l/day in Salavan Province, Lao PDR.
- Across countries:
 - To improve financing opportunities for the private sector, the project has contracted the Thailand Development Research Institute (TDRI) to document Thailand's experience on oil tax revenue recycling and subsidization of gasohol price. TDRI is also conducting training programmes on economic policy best practice to promote bioethanol for policy makers in LMV countries.

- Generic feasibility studies, Financial Model and Information Memorandum for integrating KMUTT technology to an existing ethanol plant, as well as green field ethanol project have been developed for 10,000 liter per day and 200,000 liter per day.
- The project has also developed a guide for investors that are interested in implementing the KMUTT technology.

The last project steering committee meeting and official project closure took place on 14 December 2018. Terminal Evaluation has been drafted by an independent evaluator and is being circulated to project stakeholders for their comments. It will be shared with the GEF when it is finalized.

Delivery of Technology Transfer

Progress towards the reduction of GHG emissions through the investment and commercialization of ethanol production from Cassava (biofuel technology) has been made. The achieved outputs during the period are:

- KMUTT has been working with the ethanol producer in Thailand, Sapthip. Co., Ltd., for an adaptation of the new technology. Test run of the adoption of HG/VHG-SSF process into existing bioethanol production facility at trial ethanol production capacity of 200 liters per day was successful. The result of the demonstration at Sapthip Company showed that the plant capacity increased by 25 percent and water reduction by at least 12 percent. Apart from Sapthip Company, KMUTT contact other ethanol plants, including a Mitrephol ethanol plant for integrating the new technology to an existing ethanol plant but the factory could not stop its production process during the project time, hence no adaptation could be made.
- Khongsedone Ltd from Lao PDR has committed to adopt KMUTT technology for the first pilot bio-ethanol plant from cassava with production capacity of 10,000 liters per day in Lao PDR. The project has provided technical assistance and expert advisory service in the establishment of the pilot commercial ethanol plant in Salavan Province, Lao PDR. This activity was created under Public Private Partnership scheme.
- The demonstration plant with ethanol production capacity of 50 liters per day at FIRI, Viet Nam is successfully in operation. The actual plant was designed with capacity of 120 liters per day, which allows for upscaling of the demonstration plant if FIRI can source sufficient feedstock.
- The generic feasibility studies, financial model, and Information Memorandum for integrating KMUTT technology to an existing ethanol plant, as well as green field ethanol project have been developed for 10,000 liters per day and 200,000 liters per day. The investment guideline of ethanol production from cassava is currently being finalized to support interested project developers and investors in CLMV countries.
- South-South Technology transfer lesson learnt report was developed by KMUTT.
- A video has been developed showcasing the project activities:
 - <https://youtu.be/KKiW-Wz-Ygc>
 - <https://youtu.be/mJZAixWA0T0>
 - <https://youtu.be/LKq4U0YK9dQ>
- FIRI organized a policy forum on bioethanol development in Viet Nam in February 2019 and invited relevant stakeholders from Viet Nam, Thailand, Lao PDR, etc.
- COP24 Side Event has been organized on technology transfer and clean cooking (<https://www.unido.org/news/unido-gef-and-thailand-foster-clean-alternative-fuels-and-technologies-clean-cooking>)

Success Stories

- Official request has been made from Lao PDR to further work on ethanol biofuel standards for the country based on knowledge shared through this project.
- Several introductory and intensive training workshops were organized. Since 2018 a total of 313 number of participants from Cambodia, Laos, Myanmar, and Viet Nam (CLMV) and other ASEAN countries trained in both workshops achieved the project's target.
- Khongsedone Ltd. from Lao PDR has committed to adopt KMUTT technology for the first pilot bio-ethanol plant from cassava with production capacity of 10,000 liters per day in Lao PDR.
- The demonstration plant with ethanol production capacity of 50 liters per day at FIRI, Viet Nam is in operation. The actual plant was designed with capacity of 120 liters per day, which allows for upscaling of the demonstration plant if FIRI can source sufficient feedstock.
- A report on Thailand's experience of oil tax revenue recycling and subsidization of gasoline price for supporting policy makers was developed.

- Thanks to the UNIDO awareness raising campaign initiated in 2016, the Ministry of Industry and Trade (MOIT) Viet Nam has introduced blending of E5 (Ethanol 5 percent mixed with gasoline) for all 54 provinces in Viet Nam starting from 1 January 2018. The action plan to introduce policy for ethanol production in Lao PDR has been developed and completed in both English and Thai versions.

Challenges and Lessons Learned/Captured

Experiences gained and lessons learned include the following key success factors which were enablers for successful investments into bioethanol technology:

- In the ASEAN region, the shared culture was a significant advantage in facilitating technology transfer.
- When technology transfer is viewed, rightly, as a dynamic process, then there is need to ensure the transfer is sustained, with on-going technical assistance, research, networking, coordination and funding.
- Policy plays a crucial factor in pushing for implementation of new technology and projects. Therefore, it is key to remove all uncertainty of policy support for bioethanol production.
- In order for the project to be successful in long term basis, it is crucial to introduce market driven strategies and economic value chain and to avoid dependence on subsidy programs by the public sector.
- In order for the project to be taken up commercially, it is important to show the economic viability of the technology and support valid business models; in order for this to be effective, the private sector has to be involved closely, e.g. through stakeholder consultations.
- In view that this project involves transfer of technology between CLMV countries, regular communication among the countries is important. The facilitator has a crucial role to ensure effective communication and that objectives are clarified, followed-up, and implemented.
- Capacity building and involvement of financial institutions is important to obtain suitable financing packages that can support commercialization of south-south technology transfer, in this case the technology from KMUTT for production of ethanol from Cassava.
- A review of the various parts of the value chain for production of bioethanol from cassava revealed that technology transfer involves not just that related to the plant and processes for the manufacture of ethanol, but the efficient production of bioethanol from cassava involves application of technology at all stages, from cultivation to ethanol production, as well as the policy environment, partnerships and networking. For this reason, the model for technology transfer needs to cover the whole value chain.
- KMUTT had intensified the following key issues for a successful implementation of bioethanol projects in CLMV countries in their lessons learnt report:
 - Stakeholders learning about the technology and gaining skills to apply it;
 - Equipment procurement and maintenance;
 - Establishing an enabling policy environment;
 - Technical support;
 - Research support;
 - Sustainable partnerships;
 - Building strong networks, especially linking the private sector to research institutions;
 - Funding support.

The project has also faced some challenges:

- Due to restructuring at the Ministry of Industry and Trade (MOIT), activities in Viet Nam have been delayed. For instance, development of the policy intervention and pricing tool was initially under responsibility of MOIT. However, MOIT decided to pass this activity to FIRI to implement on behalf of MOIT due to limited resources at MOIT. FIRI is implementing with supervision of MOIT.
- Showcasing the successful technical feasibility on industrial scale and financial feasibility of VHGS-SF technology is important for replication of the technology. Both for integrating the VHGS-SF process in existing ethanol plants, as well as for establishing new plants, investors, banks, and policy makers require confidence in the technology. However, it is very difficult to find companies that are willing in investing in the new technology for bio-ethanol production for several reasons:
 - Since it is a new technology, investors see a high operational risk as they lack confidence in the technology;
 - Equipment cost of adjusting to KMUTT technology;
 - Lack of strong policy and price incentives in LMV countries especially in Lao PDR;
 - Low oil prices in the global market have a significant impact on the bio-fuel industry as the ethanol cost is higher than the fossil fuel;
 - Over supply of ethanol in Thailand.

- Sustainability challenges: Maintaining the website, as well as information hub need resources and efforts from KMUTT team member and other stakeholders. The manuals and toolkits need to be updated on a regular basis according to the technology development and new trends. Trainings need to be continued based on updated training material. This needs to be addressed by KMUTT and FIRI as knowledge hubs for ethanol.

Outreach, Public Awareness and Knowledge-sharing Opportunities

- UNIDO Website (cover story being produced to showcase the success of the project and disseminate lessons learnt);
- CTCN website;
- Social media (Facebook: ASEAN Centre for Cassava R&D);
- Counterpart's website (www.aseancassava.info);
- Newsletter;
- Events:
 - Project closing event took place in December 2018 in Bangkok
 - COP24 side event has been organized on technology transfer and clean cooking (<https://www.unido.org/news/unido-gef-and-thailand-foster-clean-alternative-fuels-and-technologies-clean-cooking>)

Project publications:

- Report on Tax revenue recycling and subsidization
- [Press Release](#) on "UNIDO promotes cassava bioethanol technology transfer at a Ho Chi Minh City expo"
- Press Release on "FIRI publishing pilot plant and training centre in Hanoi, Viet Nam "
- South-South Technology transfer lesson learnt report was developed by KMUTT
- Project developed generic feasibility studies, financial model, and sample bankable proposals for 10,000 liter per day and 200,000 liter per day as well as a guidebook for investors addressing both the adjustment of existing and construction of new bioethanol plants. The investment guideline for ethanol production from cassava is currently being finalized to support interested project developers and investors in CLMV countries.

TV news in Viet Nam have reported on the success story of transfer technology from Thailand to Viet Nam, including interview with private sector representative in Viet Nam interested in adapting Thai technology to their existing ethanol factory. (<https://goo.gl/fB2XcW>)

The mid-term evaluation report was referred to in the GEF report to COP 22 and the terminal evaluation is still being finalized.

- (d) Cambodia: *Climate Change-related Technology Transfer for Cambodia: Using Agricultural Residue Biomass for Sustainable Energy Solutions (UNIDO)*. The project was CEO endorsed in May 2012 and was closed in December 2018. The project includes the following components: (i) technology transfer and implementation of three pilot plants; (ii) capacity-building and development of tools for technology adaptation and transfer; (iii) strengthening of institutional framework for technology transfer; (iv) 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.

Status Update

- A technical working group has been established to advise the project with regards to technical issues and overcome related risks and barriers.
- Based on the PSC decision that took place in December 2016, a comprehensive scoping of factories took place having in mind the following criteria for the manufacturing enterprises operating in Cambodia:

continuous high demand for electricity, thermal energy (steam/hot water) and/or cooling, operation in two-three shifts a day and six to seven days a week (approx. 8,000 operation hours per year) and availability of biomass waste. Eight companies have been identified as potential partners and requested to provide Letter of Interest (LoI) but only 5 provided the letter. Comprehensive Feasibility Studies (FS) have been conducted by an international expert in those five companies and only three companies showed economic and technical feasibility. The result of the FS has been presented to the managers of the three companies. One company (Amru) decided to implement the project, the other two companies (Bayon Heritage and Medai GB Enterprise) decided to withdraw from the project due to lack of financial resources.

- Two new potential companies (Misota Food and Indochina Rice mill) have been identified after the withdrawal from Medai GB Enterprise and Bayon Heritage and FS had been conducted. Indochina Rice mill is very interested in the technology and is waiting for decision from the board to implement the project. Misota Food decided not to implement the project due to lack of financial resources.
- The company that has decided to implement the project has signed the contract with UNIDO and is now in the tendering process for selecting an equipment supplier. The contract between company and supplier was expected to be closed mid-December 2018. However, Amru has not yet identified an EPC contractor that accepts to implement the project in Cambodia. Currently, another [call for proposals](#) has been launched through CTCN network to reach out to potential suppliers.
- Last PSC meeting and official project closure took place on 11 December 2018.
- Terminal Evaluation has been drafted by an independent evaluator and will be circulated to project stakeholders for their comments.
- The results from the policy gap analysis, recommendations and workshop results have been submitted to relevant ministries.
- Project was operationally closed by UNIDO in December 2018, and the terminal evaluation is still being completed.

Delivery of Technology Transfer

- Conducted Feasibility Studies in seven potential companies for the possibility to adopt Co-gen technologies sharing knowledge on possible technologies and improvement options. One company, Amru Rice (Cambodia) Ltd, has decided to implement the project and has signed contract with UNIDO. They are now in the tendering process to select an equipment supplier.
- Several trainings on biomass technologies and biomass project development have been conducted to build the technical capacity of the local stakeholders coming from relevant ministries, academic institutions, potential companies, consulting firms (in the energy field) and local banks.
- Close cooperation with project stakeholder (NPCC/MIH) has been made, for instance, to nominate local technical persons consisting of officers from NPCC and resource person from technical institute (ITC) to be involved in and support project activities. The local technical persons worked closely with the international expert during the trainings and field mission and have also been involved in development of the feasibility studies.
- Practical Training Guide for the Implementation of biomass-based RE projects entitled "Practical training handbook for development of Biomass Cogeneration power plants" has been developed based on training material from the Intensive capacity building programmes conducted by a biomass expert during the project period. The training was focused, for instance, on: biomass-based technologies, project development, financial engineering for technology transfer of biomass-fueled energy generation, technology evaluation (evaluation of tender proposals).

Challenges/Lessons Learned and Captured

The main challenges are:

- Changes of baseline data (Fuel price, grid electricity price, stability of national grid etc.);
- Limited number of factories operating at 20-24hrs per day (or more than 8,000 hours/year) and need both electricity and thermal energy;
- Company's confidence in the technology;
- Financial resources of the factory to invest;
- Relatively high investment cost for biomass technology;
- Lack of financial mechanism to support clean energy project;
- Time constraints (selection of supplier, procurement process, installation, erection, commissioning and performance testing) take long time while the project will be closed by the end of Dec 2018;

- Lack of technical capacity and knowledge in factories in Cambodia.

While potential factories have been identified to implement pilot systems, the project still faces challenges to reach its overall Global Environmental Objectives / Development Objectives. This is due to several factors:

- Biomass CHP technology is at the moment not financially viable for many companies due to:
 - Limited number of factories in Cambodia are operating at 20-24hrs per day (or more than 8,000 hours/year) and need both electricity and thermal energy;
 - Insufficient or no biomass residues to be reused as energy;
 - Some identified companies already use biomass (partially) in their process, and hence emission reduction potential is limited;
 - Some companies are interested but do not have the required financial resources since biomass technology has relatively high investment.
- One identified company (Bayon) could not invest since their business model has changed; they had planned to install a new factory using new biomass based technology, however, the location where they planned to install the new factory has been incorporated into the city area of Phnom Penh. Therefore, emission limits apply and they are not allowed to install the planned rice mill there. They are now identifying alternative locations for their company to expand but are not ready to invest into biomass technology at this point.
- CHP technology is still new to Cambodia, has high investment cost, requires complex design/engineering, and therefore a long time for procurement, installation, and commissioning (estimated at 1 - 1.5 years). That is why investors are hesitant.
- Company's confidence in the technology is insufficient
- Lack of financial mechanism to support clean energy project: There are no supportive policies like Power Purchase Agreements, Feed-in Tariffs, net metering, or energy wheeling policies to promote clean and renewable energy. Moreover, there is still lack of access to financial products tailored to clean energy projects, e.g. soft loan (loan with low interest rate and without collaterals).

Outreach, Public Awareness and Knowledge-sharing Opportunities

- Website for project counterpart (NPCC) has been developed for the purpose of storing project information, data and training materials for technology transfer knowledge dissemination. The National Productivity Center shall promote technology transfer and also ensure that training material, information, and links with relevant websites are populated. (website: www.npcc-mih.org)
- A policy gap analysis and a consultative policy Workshop was conducted in August 2018 to discuss with stakeholders the gaps of the existing policies for promoting Renewable Energy technology in Cambodia. The results from the policy gap analysis, recommendations, and workshop results have been submitted to relevant ministries.
- The project is featured on the web sites for the UNIDO Program for Country Partnership (PCP), CTCN website, social media, counterpart's website (www.npcc-mih.org), newsletters, and events, project publications.

The [mid-term evaluation](#) was shared with the GEF and referred to in its report to COP 22. The agency is currently in the process of finalizing the terminal evaluation.

- (e) Senegal: *Typha-based Thermal Insulation Material Production in Senegal (UNDP)*. The project was endorsed by the GEF CEO in August 2012 and closed in May 2019. The project includes the following components: (i) sustainable typha management; (ii) transfer of Typha raw material processing technology; (iii) development of local production; (iv) transfer of bio-climatic and energy efficient building technology; (v) Typha-based building materials application demonstration; and (vi) 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. The project is now finalizing the last activities towards financial closure expected in the second half of 2019.

Delivery of technology transfer

The project, which was supposed to close in 2017, has been granted extension as per the Mid-Term Review. Since July 2018, the project helped in improving the skills of construction workers to acquire and master the new techniques in handling the Typha-based material. The project worked as well with training centers, construction schools and universities to provide highly qualified trainings. The project also conducted its Terminal Evaluation, conducted by an independent third party who rated the overall project achievements as “S - Satisfactory”.

Success Stories

The project, which responds to the scarcity of resources and raw materials for the industrial production of building materials, contributed in building energy efficiency and comfort improvement, while also contributing to the socio-economic development of the building sector by creating green jobs. The confirmed 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).

The success of this technology transfer is illustrated by:

- The scaling up of the material productions in order to move from test in laboratories to usage in real buildings. Few buildings are now built using the Typha-based material.
- The remarkable improve in indoor comfort of the new building that used Typha-based insulation materials. Farmers and agricultural SMEs located in very hot areas are able to store their products (mainly onions) with any additional cooling system (e.g. with any additional energy consumption). Schools and health centers also benefit in improved indoor comfort in a very hot environment (temperature in this area of North Senegal can reach 40°C).

Challenges and Lessons Learned/Captured

The challenges encountered in carrying out the activities are:

- the difficulty in finding qualified construction workers that can handle the Typha-based material;
- the difficulty in finding out companies that agree or are convinced in using these types of products in their constructions.
- The difficulty in mastering the process and complying with deadlines while producing the Typha-based material at large scale.

The experiences gained during this period lies mainly on the production scale of the Typha-based insulation materials that have been developed by local companies. Construction workers were able to assess, appreciate and compare the developed materials vis-a-vis classic materials in terms of (i) resistance; (ii) impact on the indoor environment of buildings; (iii) level of complexity in handling the new raw material; (iv) technical constraints; (v) and the needs in adapting/revising some procedures.

The lessons learned during this period are numerous.

- Usage of the new Typha-based insulation material requires updating or adapting the existing methodologies;
- Handling may be complex or challenging for construction workers who have not been trained;
- The training of construction workers is essential to obtain quality results;
- The local market lacks skilled workers in the building sector in Senegal;
- There is a huge opportunity in creating new type of jobs (labeled Green jobs) by introducing these new raw materials;
- The impact of the Typha-based insulation material on the indoor comfort of building is immediate (gain in term of regulated thermal, hygrometric and acoustic characteristics).

Outreach, Public Awareness and Knowledge-sharing Opportunities

It is expected that this project will be featured in a new UNDP-GEF publication or report. The realization of demonstration projects, the results of the measurements at the demonstration buildings, and site visits by building sector professionals to the building sites can provide additional opportunities for outreach and communications. Additionally, the project website <http://www.pneebtypha.org/> contains useful information about the project activities as well as resource materials.

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>.

The terminal evaluation is currently being finalized.

- (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: (i) sustainable integrated MSW management framework for Abidjan; (ii) improvement of the door-to-door MSW collection system and installation of a sustainable information system; (iii) construction of a turnkey project for the MSW treatment and industrial composting unit; and (iv) 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.

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. No updated implementation status reports were received for this project during the reporting period.

- (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: (i) policy framework; (ii) bamboo tissue production; (iii) plantation establishment; (iv) plantation operation; and (v) bamboo processing equipment.

Status Update

Because of the project's strong focus on policy framework assessments, a working group was formed under the guidance of the Prime Minister's office. As a result, forest management plans included bamboo in its list of permitted species, which provides legal basis on private land to plant, cut, and transport bamboo as deforestation-free source. Bamboo planting material is available in the country upon order, but land availability for the plantation turns out to be a major constraint. Nevertheless, in cooperation with the Ministry of Power and

Renewable Energy, the project is looking for opportunities to plant bamboo for dendro-power and thermal energy project, in particular, with tea factory owners.

On bamboo processing technology transfer, the Industrial Development Board is supported to establish a training center on industrial bamboo processing skills that should be able to create the skill transfer necessary to start an industry in the country. Furthermore, private operators are supported to establish some processing units, but it remains on a limited scale, following the current limited market. Therefore the project re-focused on transfer of technical skills and creating a market for bamboo handcraft products.

Progress on Delivery of Technology Transfer

With the aim of obtaining sufficient supply of bamboo planting material and plantation, the project, in collaboration with the Ministry of Agriculture, has facilitated the import of seeds from China and their distribution to a national farm for further propagation. A partner university has finalized the trial plantations of nine bamboo species. Further efforts were undertaken to raise awareness on bamboo and facilitate the supply of planting material for potential growers. A mapping of existing bamboo and available land for planting was conducted in Matara in southern Sri Lanka and the project looked for partnership with public land, but results remain lower than expected because of land scarcity.

On the bamboo processing technology transfer, the project conducted two trainings of trainers on preservation techniques that are now carried on by the training center of the IDB and by a rural cooperative in the Matara District. An assessment of the handicraft sector demonstrated that basic technical skills on bamboo are weak in Sri Lanka and will need to be strengthened in order to be able to produce new items that could fulfill the market. At the industrial level the project established business plans in order to develop processing in the following sectors: construction, the processing of board, handicrafts, and the food sector. Machinery for a processing unit of bamboo boxes was ordered.

Success Stories

Numerous people participated in the training on bamboo poles preservation and the course was repeated on a public initiative without the project support. A market for bamboo construction in the tourism sector could potentially raise and the rural cooperative of Gamidiriya, in the south of the island, is currently preserving poles and creating a stock in order to supply the potential demand from the construction sector.

Lessons Learned and Captured

Because bamboo processing does not exist in Sri Lanka and because the market for such product is not created yet, the financial viability of bamboo processing unit is difficult to assess and partners are then reluctant to engage financially. Co-funding is therefore difficult to obtain. Partners are interested but fail to sign agreements when implementation time rises.

Outreach, Public Awareness and Knowledge-sharing Opportunities

The project website and the Facebook page are regularly updated and promoted to the public in all possible occasions. A new website was created for the promotion of the bamboo preserved poles in the Matara region.

UNIDO has provided a link to the MTR of this project to the GEF,⁷³ and the terminal evaluation is expected to be delivered in May 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 and reached completion in December 2015. The project components included: (i) green truck technology demonstration; (ii) green freight logistics demonstration; (iii) capacity-building; and (iv) project implementation support.

The project submitted the implementation completion and result report to the GEF.⁷⁴ The report concludes that

⁷³ UNIDO, 2016, [Mid-Term Evaluation Review of the UNIDO Bamboo For Sri Lanka Project](#), UNIDO Report.

⁷⁴ World Bank, 2016, [Implementation Completion and Results Report](#), World Bank Report.

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 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 CO₂ eq during the pilot period and 8,662 t CO₂ 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 4-5 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 13th Five-Year Plan.

The report provided lessons learned on the results framework, Government leadership, and design of a demonstration project. Firstly, the 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 adaptable 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: (i) design and specification of the wind turbine components of the Mexican Wind Machine (MEM) project; (ii) procurement, manufacturing and assembly of the components of the MEM Project; (iii) erection, start up and operational testing of the wind turbine of the MEM Project; and (iv) capacity-building and institutional strengthening to promote wind power market through distributed generation by small power producers.

Status Update

IDB is working jointly with the executing agency in the execution of the action plan 2018-2019. The disbursements continue to advance, moving from 20 percent to 47.24 percent. The three main procurement processes were successfully awarded and are in execution. For 2019, the action plan involves progress of contract awarded and the completion and execution of the procurement process for the construction of the foundation of the wind turbine. The project will require an extension for one more year. The latter is currently under preparation by the executing agency and the beneficiary. Following the implementation of the action plan in progress, the project is expected to be fully disbursed by June 2020.

Delivery of technology transfer

COMPONENT	ACTIVITY	% ACHIEVED
Component 2: procurement, manufacturing & assemble of the wind turbine components.	Procurement of the commercial components required to integrate all the subsystems of the wind turbine. <ol style="list-style-type: none">1. Hiring the manufacturing of wind turbine blades.2. Hiring the supervision of the contract for the manufacturing of the wind turbine blades3. Hiring the manufacturing of the wind tower4. Hiring the construction of the foundation of the Wind turbine	<ol style="list-style-type: none">1. Contract signed with TEMACO Co., and execution (30%)2. Contract signed with CENER. Execution 30%3. Contract signed with TRINITY. Execution 100%4. Construction of the foundation. Contractual process initiated (40% progress)
Component 4: Capacity building and institutional strengthening to promote the wind energy market by means of distributed generation.	Persons trained in the construction, installation, operation and maintenance of the wind turbine class I-A.	Training was completed in 2018.

Success Stories

One successful story in the project can be illustrated by the experience gained during this period related to the fabrication and assembling of the tower. The latter was done by local engineers and the design and manufacturing process of its components was carried out by a local company, TRINITY.

Another example of a successful story related to the execution of the project can be illustrated by the creation of a detailed execution plan that includes timely delivery dates that allowed for the follow-up of activities to be carried out in a coordinated manner between all the Parties involved in the project.

Challenges and lessons learned/captured

One important lesson learned during the period of reference was the decision to establish the CERTE as the location for the construction of the blades and not in the lands that were donated by the Government of the state of Oaxaca. The reason for this is that these lands lack the necessary permits required for such activity.

The project has also represented a challenge for companies such as TEMACO in that it is very good at managing some construction materials for the blades but have never constructed a blade before. This has represented a knowledge and technology transfer experience for the company. It had to learn new processes for managing materials such as fiberglass and had to train technicians in the process.

Another example of experience gained during this period is related to the fabrication and assembling of the tower. The latter was done by local engineers and the design and manufacturing process of its components was carried out by a local company, TRINITY.

Additionally, some of the core components of the wind turbine such as the cube and the base for the power generator are being assembled by the executing agency of the project, INEEL. This has allowed for the creation of local capacity.

Outreach, Public Awareness and Knowledge-sharing Opportunities

The IDB, jointly with the executing agency is still working jointly to achieve this objective, which will allow for proper disclosure of the operation. A video to showcase the highlights of the project and its impacts is under preparation and it is expected that the final version will be available at the end of 2019.

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 2020.

- (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: (i) technology transfer and capacity-building for solar technology; (ii) development of demonstrative projects using solar power; and (iii) design of incentives and financial mechanisms to promote solar power.

Status update

Several activities were performed during this period, which are related to reduction of GHG through the adoption of solar energy systems such as installation of Photovoltaic panels (PV), Concentrating Solar Power (CSP) and Concentrating Solar Thermal (CST) technologies; such as the law frameworks and installation of solar PV systems through the "Public Solar Roof Program."

The Executing Agency requested an extension of one year for the execution period of the project as well as the approval of the Procurement Plan which update all the remaining activities (bidding processes) to be developed from the second quarter of 2019 to the second quarter of 2020.

Delivery of technology transfer

Through the framework of the Law 20.571, Distributed Generation with PV technology has been promoted with affordable prices and reasonable standards; on the other hand, through Law 20.897 (that reforms Law 20.365) which was approved May 2, 2016, more than 100,000 households with PV and CST systems were installed.

Through the Public Solar Roof Program (PSTP by its acronym in Spanish), 340 kWp of PV systems were installed in public facilities as: Teletón Calama, 40 kWp; Teletón Santiago, 70 kWp; Teletón Copiapó, 40 kWp; Teletón Arica, Iquique, and Maule, 70 kWp; Escuela Gabriela Mistral de Tocopilla, 60 kWp; and Liceo de lo Prado, 60 kWp.

The consultancy of the "Diagnostic and impact of the PVs in the agroindustry by application of distributed generation law" was concluded showing the diagnostic of irrigation projects with subsidy and to evaluate the opportunities for interconnecting with the Law 20.571.

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=9
- <https://www.teleton.cl/noticias/ministerio-de-energia-reviso-el-funcionamiento-de-la-planta-solar-instalada-en-el-instituto-teleton-copiapo/>
- <https://www.teleton.cl/noticias/ministro-de-energia-inaugura-nuevos-techos-solares-en-el-instituto-teleton-del-maule/>

The MTR report was submitted to the GEF.⁷⁵ The terminal evaluation is expected to be delivered by December 2019.

- (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 from the project in 2010. The project

⁷⁵ IADB, [Mid-Term Evaluation of the Technical Cooperation, Promotion and Development of Local Solar Technologies in Chile](#), IADB Project Report.

was then re-submitted by the UNEP with the addition of Eswatini. 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.

Status update

The SolarChill Project is being implemented in the three recipient countries (Kenya, Eswatini, and Colombia). There has been cooperation and facilitation from the respective governments particularly the Ministries of Health and Environment. Overall the project has been well received and the governments have found the project activities to be relevant with commitments of continued support for promoting the SolarChill Fridges. The Colombian Government is collaborating with the Project and maintained 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 was not able to fulfill the financial commitments made in 2011. Particularly granting the customs duty exemption for the imported technologies did not happen despite several long period of requests from the project partners. The Eswatini 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.

The medical refrigerators (SolarChill A) have been installed in all the three countries and field monitoring data is being analyzed. Commercial units (SolarChill B) are ordered and will be shipped by end of April to all the three countries.

During the reporting period, different SolarChill refrigerators—Solar Direct Drive (SDD) refrigerator without batteries, uses thermal storage—have been designed, built and tested (some models are still under test) in the Palfridge refrigerator factory in Eswatini. This includes two vaccine refrigerators models, which have to pass the strict requirements from WHO in order to securely store the vaccines in remote areas without electricity. One of the models is under test, as the last improvements to the original models have been done recently.

Furthermore, Palfridge has worked on three refrigerators models for fresh food storage (SolarChill B). They are ready for manufacturing these models. Actually, the procurements for one of these models has already started and 15 units will be sent to field in Kenya and Eswatini in the next weeks, and the company expects to commercialize more units in the near future.

Delivery of Technology Transfer

In Eswatini, Palfridge Company (the Fridge Factory), in collaboration with the SolarChill Project, has been already able to produce both SolarChill A and B fridges. They already have internally tested SolarChill A and B. Internal testing indicated that it can be further improved and with the help of HEAT and University of Dresden the design and reliability of SolarChill was further improved. SolarChill B has been produced and working satisfactorily. The company will supply 15 SolarChill B units to the project for field testing in 2019. It is almost certain that serial production of the prototype and a WHO/ PQS pre-qualification, together with Palfridge by June 2019. It is expected that by June/July the first series of 20 SolarChill medical units will be manufactured and ready for field testing. The production of the units is co-funded through the IKI SolarChill project with implementation support by GIZ.

With the support of the SolarChill project, the Palfridge has adopted and improved the design of SolarChill appliance which where the earlier development. This part was also promoted through the SolarChill project (German IKI project).

During these months of technology transfer, Palfridge has been supported on technical issues for the different models of SolarChill refrigerators, advice on the design and providing theoretical calculation to anticipate the results at the laboratory. There has been significant effort to fulfill all the strict requirements from WHO, from both, performance and product point of view. To pass the WHO requirements in the vaccine refrigerator is important, so immediate procurement from the UNICEF Supply Division can take place and countries will be assured of a level of quality set by UN authorities.

Success Stories

The key challenges in the implementation countries are the 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 local operators.

In all three countries technical personal for the medical units received a theoretical and practical training on the different SolarChill appliances which were imported. The inspection of the units and the implemented training provided helpful information on the future development of user-friendly SDD refrigerators. The participants of the training gained essential information on the technological characteristics of the distinct brands of the units.

Challenges and lessons learned

The major challenge was to build a SolarChill refrigerator aiming at one of the lowest prices in the market and still fulfill the strict WHO requirements for a vaccine refrigerator (SolarChill A) and DTI for the fresh food refrigerator (SolarChill B). This combination required several design changes and prototype constructions until the desired output was reached. The fresh food refrigerator designed by Palfridge (SolarChill B) with 86 liters storage volume (LC86) is the winner of the Global LEAP award 2018.

It became evident that there is wide acceptance of SolarChill DD technology but the price of such a freeze is the biggest roadblock to make it popular, whether it is for medical purpose or commercial/home appliances. The timeline anticipated to be completed for various task was too short, as the government often chose to install in very remote locations where commutation was difficult. Also the expenses anticipated in 2011 proved to be grossly inadequate for both procurement and installation of the refrigerators.

Before 2018, a SolarChill refrigerator prototype was built in a research center in Germany. This prototype was meant to serve as a guide for the Palfridge factory. Many parts of the prototype were difficult to build in the factory in Eswatini, also there were expensive components that it would not fit on the type of refrigerator market of the company.

Therefore, whenever possible, the characteristics of the company, the environment where the technology is going to be transferred, and the target market of the product must be taken into account from the beginning of the design process in order to avoid waste of time and resources.

Important learnings were transferred that through the proper installation and the thorough inspection of the units the operation of the units, storing vaccines, according to WHO PQS requirements, can be met.

It is expected, that based on the successful installation of the SolarChill units, the governments in the partner countries, in close co-operation with the SolarChill project, support the wider deployment and market uptake of solar refrigerators for medical and commercial applications.

Importing equipment is a key barrier. Getting all legally available documents for custom clearance is a lengthy process in the countries, as all relevant ministries need to be involved. In Kenya, previously committed custom exceptions were not provided.

Outreach, Public Awareness and Knowledge-sharing Opportunities

It is expected that the project will use all opportunities to participate in various events, conferences (Clean Energy and Health Conference – Nairobi, 2019). There will be the possibility to perform a side-event at the Meeting of the Parties to the Montreal protocol, November 2019 in Italy. The project also believes that since the technology transfer is a key objective, the participation should go beyond the three countries and explore all related events to be present and show case. The website (www.solarchill.org) already provides organized information and training materials for solar direct-driven SolarChill refrigerators. The SolarChill website was updated with English, Spanish and French content. The complete appearance was changed to fit modern and appealing needs of the users. Academic papers by DTI and University of Dresden can add to the credibility of the project.

The mid-term evaluation was shared with the GEF Secretariat in October 2018⁷⁶ and the terminal evaluation is expected to be delivered by December 2019.

⁷⁶The mid-term evaluation can be found here: <https://www.solarchill.org/english/resources/>

ANNEX 7: STATUS REPORTS ON THE LDCF AND THE SCCF FOR FY 2019⁷⁷

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 TF 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, 2019, 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 \$1.40 billion eq.⁷⁸ and signed contribution agreements for \$1.39 billion eq. Of this, payments amounting to \$1.37 billion have been received from donors since inception of the Trust Fund. Table A.7.1 shows details of the status of pledges, contributions⁷⁹ and payments made to the LDCF since inception.
3. During the fiscal year July 1, 2018 to June 30, 2019, the LDCF Trust Fund received pledges amounting to approximately \$71.39 million eq. This includes pledges from Denmark, Finland, France, Ireland, the Netherlands, and Switzerland, and the Walloon Region of Belgium. The Trustee has received \$89.93 million eq. against signed contribution agreements during this period.

b. Summary of Funding Approvals, Trustee Commitments and Cash Transfers

4. As of June 30, 2019, cumulative net funding decisions by the Council and the CEO amounted to \$1.40 billion, of which \$1.26 billion was for projects and project preparation activities, \$121.7 million was for fees, and \$15.17 million was for administrative expenses and corporate activities of the LDCF.
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 \$1.1 billion, of which \$977.67 million relates to projects and project preparation activities, \$103.79 million to fees, and \$15.17 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 \$1.09 billion, upon request from Agencies, the Trustee has transferred \$805.07 million as of June 30, 2019. As a result, \$291.56 million remains payable to Agencies. Details of funding approvals, commitments and cash transfers can be found Table A.7.2.

c. Schedule of Funds Available

7. Funds held in trust without restrictions total \$627.45 million, comprising of cash and investments. Of this amount, \$596.07 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 \$31.37 million. Details on the funds available for Council or CEO approval as of June 30, 2019 can be found in Table A.7.3.

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

⁷⁷ 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.

⁷⁸ US Dollar Equivalent

⁷⁹ Represents the amounts for which donors have signed contribution agreements with the Trustee.

administered by the World Bank. The LDCF had cumulative investment returns from funds held in trust of \$66.72 million eq. as of June 30, 2019.

2. Special Climate Change Fund

a. Status of Pledges and Contributions

9. As of June 30, 2019, 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 \$356.13 million eq. and signed contribution agreements for \$352.81 million eq. Of this, payments amounting to \$347.81 million have been received from donors since inception of the Trust Fund. Table A.7.4 shows details of the status of pledges, contributions⁸⁰ and payments made to the SCCF since its inception; Table A.7.5 presents the contributions and payments information broken down by program.
10. During the fiscal year July 1, 2018 to June 30, 2019, one Contributing Participant Switzerland pledged \$3.3 million eq. to the SCCF Trust Fund. The Trustee has received payments against signed contribution agreements of \$0.5 million eq. during the same period.

b. Summary of Funding Approvals, Trustee Commitments and Cash Transfers

11. As of June 30, 2019, cumulative net funding decisions taken by the Council and the CEO amounted to \$355.61 million, of which \$316.01 million was for projects and project preparation activities, \$30.81 million was for fees, and \$8.8 million was for administrative expenses and corporate activities of the SCCF.
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 \$355.61 million, the Trustee committed \$351.75 million, of which \$312.34 million relates to projects and project preparation activities, \$30.61 million to fees, and \$8.8 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, 2019, out of total cumulative commitments of \$351.75 million, the Agencies have requested and the Trustee has transferred \$290.6 million. As a result, \$61.15 million remains payable to Agencies, pending their request. Details of funding approvals, commitments and cash transfers can be found in Table A.7.6.

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 \$79.48 million eq. Of this amount, \$65.01 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 \$14.47 million. Details on the funds available for Council or CEO approval as of June 30, 2019 can be found in Table A.7.7, 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 \$21.85 million from inception.

⁸⁰ Represents the amounts for which donors have signed contribution agreements with the Trustee.

Table A.7.1: LDCF Status of Pledges and Contributions as of June 30, 2019

Total Pledges Outstanding and Contributions				Pledges Outstanding		Contribution Agreements Finalized				
Finalized						Paid (Receipts)		Unpaid		
1	2	3 = 5 + 7	4 = 6 + 9 + 11	5	6	7 = 8 + 10	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	96,490,000	118,248,875	0	0	96,490,000	96,490,000	118,248,875	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	526,400,000	85,503,361	0	0	526,400,000	376,400,000	62,629,487	150,000,000	22,873,873
Finland	EUR	33,598,282	43,152,637	0	0	33,598,282	33,598,282	43,152,637	0	0
France	EUR	55,850,000	63,954,642	0	0	55,850,000	55,850,000	63,954,642	0	0
Germany	EUR	265,000,000	332,398,114	0	0	265,000,000	265,000,000	332,398,114	0	0
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	12,734,869	15,271,572	3,000,000 g/	3,414,912	9,734,869	9,734,869	11,856,661	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	11,200,000	11,200,000	0	0	11,200,000	11,200,000	11,200,000	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	126,978,737	0	0	967,000,000	967,000,000	126,978,737	0	0
Switzerland	f/ CHF	16,050,000	15,843,949	0	0	16,050,000	16,050,000	15,843,949	0	0
	USD	9,937,500	9,937,500	9,937,500 h/	9,937,500	0	0	0	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
			1,401,323,354		13,352,412			1,365,097,050		22,873,873

a/ Represents (1) the actual US dollar value of paid-in cash contributions and (2) June 30, 2019 value of pledges outstanding, contribution amounts pending FX, and unpaid amounts.

b/ Valued at the exchange rates available on - June 30, 2019

c/ Represents the (1) actual US dollar value of paid-in cash contributions and (2) June 30, 2019 value of contribution amount pending FX.

d/ Includes contribution of EUR 9.05 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 EUR 2 million from COP21 in 2015 and an additional pledge of EUR 1 million from COP24 in December 2018.

h/ Switzerland's pledge during the 25th Council meeting in December 2018. Subject to parliamentary approval.

Table A.7.2: LDCF Summary of Allocation, Commitments and Disbursements as of June 30, 2019 (in \$)

Entity	Cumulative Net Amounts			
	Approved Allocations	Commitments	Transfers	Amount Due
	(1)	(2)	(3)	(4) = (2) - (3)
Projects				
ADB	29,955,046	13,650,000	9,700,000	3,950,000
AfDB	138,824,481	112,224,943	57,298,294	54,926,649
FAO	147,612,726	99,242,159	54,508,181	44,733,978
IBRD	91,724,382	71,983,860	68,029,063	3,954,797
IFAD	44,559,934	34,559,934	27,050,289	7,509,645
IUCN	4,587,156	4,587,156	0	0
UNDP	639,735,320	510,119,896	428,520,664	81,599,232
UNEP	162,114,099	128,334,800	54,229,555	74,105,245
UNIDO	5,166,710	2,966,710	2,404,602	562,108
<i>Sub-total</i>	1,264,279,854	977,669,459	701,740,648	275,928,811
Fees				
ADB	2,556,954	1,380,991	856,800	524,191
AfDB	12,885,772	11,059,243	3,448,900	7,610,343
FAO	14,133,688	10,617,141	9,031,356	1,585,785
IBRD	8,665,527	7,402,702	6,836,048	566,654
IFAD	4,605,243	4,035,243	3,094,269	940,974
IUCN	412,844	412,844	0	0
UNDP	62,322,349	54,818,216	54,448,347	369,869
UNEP	15,640,999	13,715,579	12,180,220	1,535,359
UNIDO	476,550	351,150	279,451	71,699
<i>Sub-total</i>	121,699,926	103,793,109	90,175,391	13,617,718
Corporate Budget ^{a/}				
Secretariat	9,976,440	9,976,440	8,929,410	1,047,030
Evaluation	377,568	377,568	308,568	69,000
STAP	889,405	889,405	380,405	509,000
Trustee	3,922,232	3,922,232	3,537,232	385,000
<i>Sub-total</i>	15,165,644	15,165,644	13,155,614	2,010,030
Total for LDCF	1,401,145,425	1,096,628,212	805,071,653	291,556,559

a/ Includes amounts allocated to cover administrative expenses to manage the LDCF and Corporate activities, including annual audit.

Table A.7.3: LDCF for Climate Change Schedule of Funds Available updated as of June 30, 2019

Trust Fund for Least Developed Countries Fund for Climate Change Schedule of Funds Available as of June 30, 2019			(in USDeq.)
<u>1. Funds held in Trust</u>			627,446,905 a/
Cash and investments	627,446,905		
Promissory notes	0		
<u>2. Restricted Funds</u>			0
Reserve to cover foreign exchange rate fluctuations	0		
3. Funds held in Trust with no restrictions (3 = 1 - 2)			627,446,905
<u>4. Approved Amounts pending disbursement</u>			596,073,771
Amounts Trustee Committed	291,556,559		
Amounts pending Council/CEO approval and/or CEO endorsement	304,245,234		
Umbrella Set-aside	271,979		
5. Funds Available for Council/CEO approval and/or CEO endorsement (5 = 3 - 4)			<u>31,373,134</u>
a/ Amounts pending FX are valued at exchange rate as of June 30, 2019.			

Table A.7.4: SCCF Status of Pledges and Contributions as of June 30, 2019

Total Pledges Outstanding and Contributions Finalized a/				Pledges Outstanding		Contribution Agreements Finalized							
1	2	3 = 5 + 7		4 = 6 + 9 + 11		5	6	7 = 8 + 10		9	10		11
		Total Amount		Amount				Paid (Receipts)			Unpaid		
Contributing Participant	Currency	in Currency	USDeq. b/	in Currency	USDeq. c/	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	12,600,000	12,276,590	0	0	12,600,000	12,600,000	12,276,590	0	0			
	USD	3,712,500	3,712,473	3,312,500 g/	3,312,500	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>356,125,180</u>		<u>3,312,500</u>		<u>347,812,680</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, 2019 value of outstanding pledges and unpaid amounts.

c/ Valued at the exchange rates available on - June 30, 2019

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.

g/ Switzerland's pledge during the 25th Council meeting in December 2018. Subject to parliamentary approval.

Table A.7.5: SCCF Status of Contributions by Program as of June 30, 2019

Contribution Agreements Finalized						
Contributing Participant	Currency	Total Contributions	Amount Paid in Currency	USDeq. a/	Amount Due in Currency	USDeq. b/
I. Program for Adaptation						
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	8.00	8.00	7.81	-	-
	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	-	-
				286.77	5.00	
II. Program for Technology Transfer						
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	4.60	4.47	-	-
				61.04	-	
TOTAL				347.81	5.00	

a/ Represents the actual US dollar value of paid-in cash contributions.

b/ Valued at the exchange rates available on June 30, 2019.

c/ Contributions made in more than one currency.

d/ This amount is past due.

Table A.7.6: SCCF Summary of Allocations, Commitments and Disbursements as of June 30, 2019 (in \$)

Entity	Cumulative Net Amounts			
	Approved Allocations	Commitments	Transfers	Amount Due
	(1)	(2)	(3)	(4) = (2) - (3)
Projects				
ADB	10,309,180	10,309,180	5,990,066	4,319,114
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	1,075,000	0
EBRD	16,137,943	16,137,943	9,745,249	6,392,694
FAO	21,917,531	21,034,289	14,464,735	6,569,554
IADB	6,032,250	6,032,250	6,032,250	0
IBRD	86,907,220	84,129,442	73,168,084	10,961,358
IFAD	38,160,838	38,160,838	33,192,983	4,967,855
UNDP	81,297,176	81,297,176	79,919,503	1,377,673
UNEP	30,226,549	30,226,549	23,031,818	7,194,731
UNIDO	3,400,000	3,400,000	1,910,009	1,489,991
<i>Sub-total</i>	316,005,085	312,344,065	255,696,021	56,648,044
Fees				
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	1,852,773	1,785,647	1,766,015	19,632
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	3,022,842	2,927,842	95,000
UNIDO	323,000	323,000	196,597	126,403
<i>Sub-total</i>	30,807,163	30,606,704	27,232,818	3,373,886
Corporate Budget ^{a/}				
Secretariat	5,131,432	5,131,432	4,650,792	480,640
Evaluation	454,426	454,426	430,426	24,000
STAP	877,380	877,380	368,380	509,000
Trustee	2,332,575	2,332,575	2,220,575	112,000
<i>Sub-total</i>	8,795,813	8,795,813	7,670,173	1,125,640
Total for SCCF	355,608,061	351,746,582	290,599,012	61,147,570

a/ Includes amounts allocated to cover administrative expenses to manage the SCCF and Corporate activities, including annual audit.

Table A.7.7: SCCF Schedule of Funds Available updated as of June 30, 2019

(in USDeq.)		
<u>Program for Adaptation</u>		
<u>1. Funds held in Trust</u>		48,916,155 a/
Cash and investments	48,916,155	
Promissory notes	0	
<u>2. Restricted Funds</u>		0
Reserve to cover foreign exchange rate fluctuations	0	
3. Funds held in Trust with no restrictions (3 = 1 - 2)		48,916,155
<u>4. Approved Amounts pending disbursement</u>		39,901,403
Amounts Trustee Committed	36,039,923	
Amounts pending Council/CEO approval and/or CEO endorsement	950,369	
Umbrella Set-aside	2,911,111 b/	
5. Funds Available for Council/CEO approval and/or CEO endorsement (5 = 3 - 4)		9,014,753
<u>Program for Transfer of Technology</u>		
<u>6. Funds held in Trust</u>		30,564,445 a/
Cash and investments	30,564,445	
Promissory notes	0	
<u>7. Restricted Funds</u>		0
Reserve to cover foreign exchange rate fluctuations	0	
8. Funds held in Trust with no restrictions (8 = 6 - 7)		30,564,445
<u>9. Approved Amounts pending disbursement</u>		25,107,648
Amounts Trustee Committed	25,107,648	
Amounts pending Council/CEO approval and/or CEO endorsement	-	
10. Funds Available for Council/CEO approval and/or CEO endorsement (10 = 8 - 9)		5,456,798
Total SCCF Funds Available for Council/CEO approval and/or CEO endorsement (5 + 10)		14,471,550
a/ Amounts pending FX are valued at exchange rate as of June 30, 2019.		
b/ 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.		

ANNEX 8: STATUS REPORT ON THE CBIT TRUST FUND FOR FY 2019⁸¹

Table A.8.1: CBIT TF Schedule of Funds Available updated as of June 30, 2019

Trust Fund for Capacity Building Initiative for Transparency Schedule of Funds Available as of June 30, 2019		
		(in US\$eq.)
<u>1. Funds held in Trust</u>		52,996,627 <i>a/</i>
Cash and investments	52,996,627	
<u>2. Approved Amounts pending disbursement</u>		49,399,245
Amounts Trustee Committed	17,677,350	
Amounts pending Council/CEO approval and/or CEO endorsement	31,721,895	
<u>3. Admin Budget Estimated from FY21-25</u> <i>b/</i>		977,473
4. Funds Available for Council/CEO approval and/or CEO endorsement (6 = 3 - 4 - 5)		2,619,909
<i>a/</i> Valued on the basis of exchange rates of June 30, 2019.		
<i>b/</i> Estimates as provided by the GEF Secretariat.		

⁸¹ This status report was provided by the Trustee of the CBIT TF (the World Bank). The GEF Secretariat did not edit this report.