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## Subsidiary Body for Implementation

Forty-second session

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Item 8 of the provisional agenda

**Poznan strategic programme on technology transfer**

### **Report of the Global Environment Facility on the progress made in carrying out the Poznan strategic programme on technology transfer**

#### **Note by the secretariat\***

1. At its thirty-fourth session, the Subsidiary Body for Implementation (SBI) invited the Global Environment Facility (GEF) to provide reports on the progress made in carrying out its activities under the Poznan strategic programme on technology transfer, for consideration at subsequent SBI sessions, for the duration of the programme.<sup>1</sup>
2. SBI 41 noted the areas of collaboration between the regional technology transfer and finance centres supported by the GEF under the Poznan strategic programme and the Climate Technology Centre and Network and invited the GEF to report on this collaboration in its future progress reports.<sup>2</sup>
3. In response, the GEF secretariat submitted a report dated 28 April 2015, which is reproduced in the annex as submitted, without formal editing and with the original pagination.

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\* This document was received from the Global Environment Facility secretariat on 28 April 2015.


<sup>1</sup> FCCC/SBI/2011/7, paragraph 137.

<sup>2</sup> FCCC/SBI/2014/21, paragraph 87.

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Annex



**GLOBAL ENVIRONMENT FACILITY**

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April 28, 2015

IMPLEMENTATION OF THE POZNAN STRATEGIC AND  
LONG-TERM PROGRAMS ON TECHNOLOGY TRANSFER

AND

GEF CONSULTATION WITH THE CLIMATE TECHNOLOGY  
CENTER AND NETWORK

A PROGRESS REPORT OF THE GEF  
TO THE SUBSIDIARY BODY FOR IMPLEMENTATION  
AT ITS FORTY SECOND SESSION



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## Abbreviations and Acronyms

ACP	Asia Climate Partners
ADB	Asian Development Bank
ADP	Ad Hoc Working Group on the Durban Platform for Enhanced Action
AfDB	African Development Bank
AWF	African Water Facility
BUR	Biennial Update Report
CCA	Climate Change Adaptation
CCM	Climate Change Mitigation
CEO	Chief Executive Officer
CO <sub>2</sub>	Carbon Dioxide Equivalent
COP	Conference of the Parties
CTC	Climate Technology Centre
CTCN	Climate Technology Centre and Network
EBRD	European Bank for Reconstruction and Development
EST	Environmentally Sound Technology
ETC	Early Transition Countries
FAO	Food and Agriculture Organization of the United Nations
FIRI	Food Industry Research Institute, Vietnam
FSP	Full-Sized Project
FY	Fiscal Year
GEF	Global Environment Facility
GIS	geographic information system
HCFC	hydro-chlorofluorocarbon
HFO	hydrofluoroolefin
HVAC&R	heating, ventilating, and air conditioning and refrigeration
IDB	Inter-American Development Bank
IFAD	International Fund for Agricultural Development
IPCC	Intergovernmental Panel on Climate Change
KMUTT	King Mongkut's University of Technology Thonburi, Thailand
LAC	Latin America and the Caribbean
LDCF	Least Developed Countries Fund
LFD	light emitting diode
MSP	Medium-Sized Project
NC	National Communication
NCARE	National Center for Agricultural Research and Extension, Jordan
NDE	National Designated Entities
NDRC	National Development and Reform Commission, China
ODS	ozone depleting substances
PE	private equity
PPP	Public-Private Partnership
PMU	Project Management Unit
REDD	Reducing emissions from deforestation and forest degradation
SBI	Subsidiary Body for Implementation
SCCF	Special Climate Change Fund
SCCF-A	Special Climate Change Fund Adaptation Program
SCCF-B	Special Climate Change Fund Program for Technology Transfer
SE4ALL	Sustainable Energy for All
SEMED	Southern and Eastern Mediterranean

TAP	Technology Action Plan
TEC	Technology Executive Committee
TF	Trust Fund
TNA	Technology Needs Assessment
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
VC	venture capital
VHG-SSF	very high gravity simultaneous saccharification and fermentation
WB	World Bank
WIPO	World Intellectual Property Organization

1. The Global Environment Facility (GEF) prepared this progress report for the forty second session of the Subsidiary Body for Implementation (SBI 42) to the United Nations Framework Convention on Climate Change (UNFCCC), as per guidance given:

- (a) At the thirty-second session of the SBI, whereby GEF was invited to provide half-yearly progress reports on the implementation of the activities receiving support under the Poznan strategic programme; and
- (b) At the forty-first session of the SBI, the SBI noted the areas of collaboration between the regional technology transfer and finance centres supported by the GEF under the Poznan strategic programme and the Climate Technology Centre and Network (CTCN) and invited the GEF to report on this collaboration as part of its future progress report.

2. The report covers the period of July 2014 to March 2015. Details of the key relevant guidance from the past UNFCCC Conferences of the Parties (COP) and the SBIs are listed in the following paragraphs.

## **Part I. Relevant UNFCCC guidance**

3. The Conference of the Parties to the UNFCCC at its fourteenth session (COP 14) welcomed the GEF's Strategic Program on Technology Transfer (renaming it the Poznan Strategic Program on Technology Transfer) in COP decision 2/CP.14, as "a step towards scaling up the level of investment in technology transfer in order to help developing countries address their needs for environmentally sound technologies" and recognized "the contribution that this strategic programme could make to enhancing technology transfer activities under the Convention."

4. COP decision 2/CP.14, in Paragraph 2, requested the GEF:

- (a) To promptly initiate and expeditiously facilitate the preparation of projects for approval and implementation under the strategic programme referred to in paragraph 1 in order to help developing countries address their needs for environmentally sound technologies;
- (b) To collaborate with its implementing agencies in order to provide technical support to developing countries in preparing or updating, as appropriate, their technology needs assessments using the updated handbook for conducting technology needs assessments for climate change published by the United Nations Development Programme, to be made available in early 2009 in collaboration with the Expert Group on Technology Transfer, the UNFCCC secretariat and the Climate Technology Initiative;
- (c) To consider the long-term implementation of the strategic programme, including: addressing the gaps identified in current operations of the Global Environment Facility that relate to investment in the transfer of environmentally sound technologies; leveraging private-sector investment; and promoting innovative project development activities;
- (d) To report on the progress made in carrying out the activities referred to in paragraph 2 (a-c) above to the Conference of the Parties at its sixteenth session, in addition to providing interim reports to the Subsidiary Body for Implementation at its thirtieth and thirty-first sessions, with a view to assessing its progress and future direction in order to help inform Parties in their consideration of long-term needs for implementation of the strategic programme.

5. In accordance with decision 2/CP.14, the GEF presented interim reports to SBI 30 and SBI 31 on the progress made in carrying out the Poznan Strategic Program on Technology Transfer. Subsequently, the conclusions of SBI 31 (FCCC/SBI/2009/15, paragraph 67) invited the GEF to provide a report on the progress made on the implementation of this program at SBI 32, including on the long-term aspects of the Poznan Strategic Program. In response to the above conclusions of SBI 31, the GEF presented an interim report to SBI 32.



6. In accordance with decision 2/CP.14, the GEF presented a report to COP 16 on the progress made in carrying out the activities of the Poznan Strategic Program on Technology Transfer.

7. Conclusions from SBI 34 agenda item 12 on the development and transfer of technologies (FCCC/SBI/2011/7, paragraphs 134–137) stated the following:

- (a) The SBI noted the oral report by the GEF and expressed its appreciation to the GEF and its agencies, the United Nations Development Programme and the United Nations Environment Programme on the progress made in carrying out the Poznan strategic programme on technology transfer.
- (b) The SBI welcomed the progress made in providing technical and financial support to assist 36 non-Annex I Parties in developing and updating their technology needs assessments (TNAs). The SBI noted that many non-Annex I Parties expressed their interest to conduct or update their TNAs. The SBI recommended that the COP, at its seventeenth session, invite the GEF to continue to provide financial support to other non-Annex I Parties, as appropriate, to conduct or update their TNAs, noting the availability of the updated handbook *Conducting Technology Needs Assessments for Climate Change*.
- (c) The SBI welcomed the progress made by the GEF in providing support for piloting priority technology projects as part of the Poznan strategic programme. The SBI noted that the pilot project proposals submitted by non-Annex I Parties and supported by the GEF included only one project on technologies for adaptation. The SBI also noted the importance of projects on technologies for adaptation, including on the development and strengthening of local knowledge, and invited the GEF, Parties and relevant organizations in a position to do so to provide financial support for project proposals, including those for pilot projects, of the types supported by the Poznan strategic programme related to technologies for adaptation.
- (d) The SBI recalled the conclusions of its thirty-second session inviting the GEF to provide half-yearly progress reports on the implementation of the activities receiving support under the Poznan strategic programme. It invited the GEF to provide reports on the progress made in carrying out its activities under the Poznan strategic programme, including its long-term implementation, for consideration by the SBI at its thirty-fifth and subsequent sessions, for the duration of the Poznan strategic programme.

8. Conclusions from SBI 35 agenda item 11 on the development and transfer of technologies (FCCC/SBI/2011/17, paragraphs 95–100) stated the following:

- (a) The SBI noted the report of the GEF on the progress made in carrying out the Poznan strategic programme on technology transfer, including its long-term implementation, as invited by the SBI at its thirty-fourth session.
- (b) The SBI acknowledged the support provided by the GEF for the implementation of technology transfer pilot projects and for the conduct of technology needs assessments (TNAs). It further acknowledged the progress made in implementing the long-term programme on technology transfer. Furthermore, it urged the GEF and Parties to expedite the process for the early implementation of projects submitted before 30 September 2009.
- (c) The SBI encouraged non-Annex I Parties to develop and submit project proposals, particularly for technologies for adaptation, to the GEF in line with elements of the long-term programme on technology transfer described in document FCCC/SBI/2011/14, annex, paragraphs 46 and 47. The SBI invited the GEF to raise awareness of the long-term programme on technology transfer.
- (d) The SBI invited the GEF to support the operationalization and activities of the Climate Technology Centre and Network without prejudging any selection of the host.

9. In accordance with SBI 34 agenda item 12 conclusions, and their reiteration by SBI 35 agenda item 11, the GEF presented its progress in carrying out activities under the Poznan strategic program and its Long Term Implementation Program to COP 17, SBI 36 and SBI 37.

10. Conclusions of SBI 36 agenda item 12, Development and transfer of technologies (c) Poznan strategic programme on technology transfer (FCCC/SBI/2012/15, paragraphs 195-200), stated that:

- (a) The SBI noted the report by the GEF on the progress made in carrying out the Poznan strategic programme on technology transfer, as invited by SBI 34;
- (b) The SBI noted the support provided by the GEF for the implementation of technology transfer pilot projects under the Poznan strategic programme and the views expressed by Parties on the need to balance support for mitigation and adaptation projects. It invited the GEF to enhance the balance between adaptation and mitigation projects in the long-term implementation of the Poznan strategic programme, including by enhancing its outreach and awareness-raising efforts on funding opportunities for projects related to technologies for adaptation. It recalled its conclusion at SBI 35 encouraging non-Annex I Parties to submit project proposals, particularly for technologies for adaptation, to the GEF in line with the elements of the long-term programme described in document FCCC/SBI/2011/14, annex, paragraphs 46 and 47;
- (c) The SBI invited the GEF and its implementing agencies to expedite the process for the implementation and completion of the remaining technology transfer pilot projects submitted in 2009 for support under the Poznan strategic programme;
- (d) The SBI acknowledged the support provided by the GEF to assist 36 non-Annex I Parties in conducting their TNAs. It recalled decision 11/CP.17, paragraph 2, which invited the GEF, in the context of TNAs, to continue to provide financial support to other non-Annex I Parties, as appropriate, to conduct or update their TNAs;
- (e) The SBI recalled the conclusion at SBI 34 inviting the GEF to provide reports on the progress made in carrying out its activities under the Poznan strategic programme, including its long-term implementation, for consideration by SBI 35 and subsequent sessions. The SBI invited the GEF in its future progress reports to further elaborate on:
  - 1) The activities undertaken by the GEF to enhance its outreach and awareness raising efforts on funding opportunities for projects related to technologies for adaptation in order to address the need for balanced support for projects related to technologies for adaptation;
  - 2) Experiences gained and lessons learned, including success stories and challenges faced in carrying out the activities under the Poznan strategic programme;
  - 3) Progress made by its implementing agencies in the delivery of technology transfer under the Poznan strategic programme;
  - 4) The efforts carried out to support, pursuant to decision 2/CP.17, the operationalization and activities of the CTCN.
- (f) The SBI stressed the need for the further implementation of the element of the Poznan strategic programme included in document FCCC/SBI/2012/9, paragraph 23(a), to be aligned with, and to enable, the operationalization and activities of the Climate Technology Centre (CTC) and its Network, taking into account document FCCC/SBI/2012/15, paragraphs 185 and 187, and decision 2/CP.17, paragraph 140.

11. Conclusions of SBI 37 agenda item 13(c) (FCCC/SBI/2012/33, paragraphs 121–124) stated the following:

- (a) The SBI noted the report of the GEF on the progress made in carrying out the Poznan strategic programme on technology transfer
- (b) The SBI acknowledged the support provided by the GEF to assist 36 Parties not included in Annex I to the Convention (non-Annex I Parties) in conducting their TNAs. It reiterated decision 11/CP.17, paragraph 2, in which the GEF was invited to continue to provide financial support to other non-Annex I Parties, as appropriate, to conduct or update their TNAs. It invited the GEF to report on its support provided to other non-Annex I Parties to conduct or update their TNAs in its report to the Conference of the Parties at its nineteenth session.
- (c) The SBI stressed the need for the further implementation of the element of the Poznan strategic programme on support for climate technology centres and a climate technology network, which should be aligned with, and support, the operationalization and activities of the CTCN, taking into account decision 2/CP.17, paragraph 140.
- (d) The SBI invited the GEF to consult with the CTCN, through its advisory board, on the support the GEF will provide for the work of the CTCN and to report on the findings of those consultations to the COP at its nineteenth session.

12. Under SBI 39 agenda item 13(c), Poznan strategic programme on technology transfer (FCCC/SBI/2013/20, paragraphs 134–138):

- (a) The SBI noted the report of the GEF on the progress made in carrying out the Poznan strategic programme on technology transfer.
- (b) The SBI acknowledged the support provided by the GEF to assist 36 Parties not included in Annex I to the Convention (non-Annex I Parties) in conducting their technology needs assessments and welcomed the financial and technical support that the GEF will provide to 24 non-Annex I Parties for conducting or updating their technology needs assessments.
- (c) The SBI noted the report of the GEF on the findings of its consultations with the CTCN, through its Advisory Board, as requested at SBI 37.
- (d) The SBI invited the GEF to continue to consult with the CTCN, through its Advisory Board and the United Nations Environment Programme as the host of the Climate Technology Centre, on the support that the GEF will provide for the work of the CTCN and to report on the concrete results of the consultations at SBI 40 (June 2014).
- (e) The SBI reiterated the need to align the further implementation of the element of the Poznan strategic programme on support for climate technology centres and a climate technology network with the operationalization and activities of the CTCN, taking into account decision 2/CP.17, paragraph 140.

13. Under SBI 40 agenda item 11(b), Poznan strategic programme on technology transfer (FCCC/SBI/2014/8):

- (a) The SBI invited the GEF to continue to consult with the Advisory Board of the CTCN on the support that the GEF will provide for the implementation of the five-year programme of work of the CTCN and to report on its findings for consideration at SBI 41.
- (b) The SBI recalled its conclusions at SBI 39, namely the need for the GEF to align the further implementation of the element of the Poznan strategic programme on support for climate technology centres and a climate technology network with the operationalization and activities of the CTCN, taking into account decision 2/CP.17, paragraph 140 and to consult with the Advisory Board of the CTCN on this matter and report on its findings for consideration at SBI 41.

- (c) The SBI welcomed the approval by the GEF Council of a new project of the United Nations Environment Program (UNEP) which provides technical and financial support to 27 non-Annex I Parties for conducting or updating their TNAs and technology action plans, as well as the approval of six national projects incorporating TNA support activities.
- (d) The SBI invited the GEF to further support the implementation of the results of TNAs, including technology action plans and project ideas prepared by non-Annex I Parties.

14. Under SBI 41 agenda item 12(b), Poznan strategic programme on technology transfer (FCCC/SBI/2014/21):

- (a) The SBI welcomed the report of the GEF on the progress made in carrying out the Poznan strategic programme on technology transfer.
- (b) The SBI noted the consultations between the GEF and the Advisory Board of the CTCN and the progress made on aligning the implementation of the element of the Poznan strategic programme related to support for climate technology centres and a climate technology network with the operationalization and activities of the CTCN, which were carried out in response to an invitation from SBI 40. It also noted the areas of collaboration between the regional technology transfer and finance centres supported by the GEF under the Poznan strategic programme and the CTCN and invited the GEF to report on this collaboration as part of its future progress reports.

## **Part II. Implementation of the Poznan Strategic and Long-Term Programs on Technology Transfer**

15. The transfer of low-carbon and climate-resilient technologies has been a key cross-cutting theme for the GEF since the establishment of its funds. The GEF-6 climate change mitigation strategy, for the period of July 2014 to June 2018, promotes the timely development, demonstration and financing of low-carbon technologies and mitigation options. The GEF supports the development, adoption, and transfer and implementation of policies, regulations and financial or organization mechanisms that accelerate mitigation technology innovation and uptake.<sup>1</sup> Similarly, the results-based management framework for the Special Climate Change Fund (SCCF) and the Least Developed Countries Fund (LDCF) includes climate-resilient technologies and practices adopted and scaled up as one of ten overarching outcomes of the funds.<sup>2</sup> The entire GEF climate change portfolio can be characterized as supporting technology transfer as defined by the Intergovernmental Panel on Climate Change (IPCC) and by the technology transfer framework adopted by COP 7.<sup>3</sup>

16. 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 GEF Trust Fund and \$15 million from the SCCF Program for Technology Transfer (SCCF-B). This program included three funding windows to support technology transfer under the Poznan Strategic Program, namely: (1) TNAs; (2) piloting priority technology projects linked to TNAs; and (3) dissemination of GEF experience and successfully demonstrated Environmentally Sound Technologies (ESTs).

17. In December 2008, COP 14 welcomed the GEF's Strategic Program on Technology Transfer (renaming it the Poznan Strategic Program on Technology Transfer) as a step toward 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 Long-Term Program on Technology Transfer to COP 16. The GEF submission included the

<sup>1</sup> GEF-6 Programming Directions.

[https://www.thegef.org/gef/sites/thegef.org/files/webpage\\_attached/GEF6\\_programming\\_directions\\_final\\_0.pdf](https://www.thegef.org/gef/sites/thegef.org/files/webpage_attached/GEF6_programming_directions_final_0.pdf)

<sup>2</sup> GEF Programming Strategy on Adaptation to Climate Change for the Least Developed Countries Fund and the Special Climate Change Fund.

[https://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.LDCF\\_SCCF\\_16.03,%20Programming%20Strategy%20on%20Adaptation%20to%20Climate%20Change%20for%20the%20LDCF%20and%20the%20SCCF,%2005-20-14.pdf](https://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.LDCF_SCCF_16.03,%20Programming%20Strategy%20on%20Adaptation%20to%20Climate%20Change%20for%20the%20LDCF%20and%20the%20SCCF,%2005-20-14.pdf)

<sup>3</sup> Decision 4/CP.7.

following elements to further scale up investment in (ESTs in developing countries in accordance with the GEF climate change strategy, and to enhance technology transfer activities under the Convention<sup>4</sup>:

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

18. The following sub-sections describe progress made in each of the five elements of the Long-Term Program on Technology Transfer.

### A. Support for Climate Technology Centers and a Climate Technology Network

19. The GEF is supporting the CTCN and four regional projects listed in Table 1. These projects receive funding from the GEF Trust Fund (TF) for mitigation as well as from the SCCF-B in support of adaptation. 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.

20. Details on the results of the GEF consultation and collaboration with the CTCN, in response to invitations from SBI 37, SBI 39, SBI 40 and SBI 41, are presented in Part III of this report.

Table 1 GEF Projects for Climate Technology Transfer and Financing Centers and for CTCN

<i>Title</i>	<i>Region</i>	<i>Agency</i>	<i>GEF financing</i>		<i>Co-financing</i>	<i>Status</i>
			<i>GEFTF</i>	<i>SCCF</i>		
Promoting accelerated transfer and scaled up deployment of mitigation technologies through the Climate Technology Centre & Network (CTCN)	Global	UNIDO	1.8	0	7.2	Project Identification Form approved (June 2014)
Pilot Asia-Pacific Climate Technology Network and Finance Center	Asia and Pacific	ADB/UNEP	10.0	2.0	74.7	Under implementation
Pilot African Climate Technology Finance Center and Network	Africa	AfDB	10.0	5.8	89.0	Under implementation
Regional Climate Technology Transfer Center	Europe and Central Asia	EBRD	10.0	2.0	77.0	Under implementation
Climate Technology Transfer Mechanisms and Networks in Latin America and the Caribbean	Latin America and the Caribbean	IDB	10.0	2.0	63.4	Under Implementation

21. At the national level, one project was approved by the GEF Council during the reporting period, aiming at developing climate technology transfer and financing mechanisms. The project<sup>5</sup> in Ukraine by

<sup>4</sup> The GEF notes that 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 Programme (as per paragraph 17 above). Refer to FCCC/CP/2013/3, annex, paragraph 140.

<sup>5</sup> The project title is "Finance and Technology Transfer Centre for Climate Change (FINTECC)".

EBRD was approved in October, 2014. This project aims to develop and demonstrate innovative policy and technical assistance packages and support development of performance-based financing mechanisms to increase investment in climate technologies in Ukraine.

22. Description of the GEF- and SCCF-funded regional and national projects supporting climate technology centers and networks for climate technology transfer and financing are presented in Appendix 1.

## **B. Piloting Priority Technology Projects to Foster Innovation and Investments**

### **b.1. Technology Transfer Pilot Projects within the Poznan Strategic Program**

23. 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. During the call for proposals, only one proposal for adaptation was received. This proposal was funded, along with three other proposals that included adaptation elements. Total GEFTF and SCCF-B funding for the 14 pilot projects amounted initially to \$58 million, and total co-financing for these projects initially came to more than \$195 million.

24. Eleven projects have been endorsed by the GEF Chief Executive Officer (CEO) and are progressing in their implementation. These are in: Cambodia, Chile, China, Colombia, Côte d'Ivoire, Jordan, Kenya, Mexico, Russian Federation, Sri Lanka, Swaziland and Thailand. The funding from the GEFTF and SCCF-B for these projects amounts to \$49.4 million and \$2.4 million, respectively, and the total co-financing amounts to \$223.2 million and \$5.7 million, respectively.

25. 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.

26. The technologies targeted by the endorsed projects address both mitigation and adaptation, 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. For adaptation-related technologies, membrane drip irrigation, flood- and drought-resistant crops with sustainable land management practices, and reduction of wave energy impacts on communities and infrastructure were included.

27. 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 progress made by the Agencies in the delivery of technology transfer. The compiled updates are presented in Appendix 2 and Appendix 3.

### **b.2. Technology Transfer Projects within the Long-Term Implementation of the Poznan Strategic Program**

28. The GEF-6 climate change mitigation strategy continues to support technology development and transfer, which plays a central role in the global response to the challenges of climate change. The GEF-6 climate mitigation strategy has the following three strategic objectives to support developing countries and economies in transition to make transformational shifts towards a low emission development path:

1. Promote innovation, technology transfer, and supportive policies and strategies;
2. Demonstrate mitigation options with systemic impacts; and
3. Foster enabling conditions to mainstream mitigation concerns into sustainable development strategies.

The objectives and expected outcomes are shown in the Table 2.

29. Especially, program 1 and 2 under strategic objective 1 of the GEF-6 climate mitigation strategy are related to technology development and transfer.

Table 2: Climate change mitigation: GEF-6 Strategic objectives and programs

<i>Climate Change Mitigation (CCM) Strategic Objectives</i>	<i>Program</i>
1. Promote innovation, technology transfer, and supportive policies and strategies	<b>Program 1:</b> Promote timely development, demonstration and financing of low-carbon technologies and mitigation options <b>Program 2:</b> Develop and demonstrate innovative policy packages and market initiatives to foster new range of mitigation actions
2. Demonstrate systemic impacts of mitigation options	<b>Program 3:</b> To promote integrated low-emission urban systems <b>Program 4:</b> Promote conservation and enhancement of carbon stocks in forest, and other land use, and support climate smart agriculture
3. Foster Enabling Conditions to Mainstream Mitigation Concerns into Sustainable Development Strategies	<b>Program 5:</b> Integrate findings of Convention obligations enabling activities into national planning processes and mitigation contributions

30. Regarding adaptation, the GEF climate change adaptation program also continues to support technology transfer as a cross-cutting priority, in accordance with country demand in the period from July 1, 2014 to June 30, 2018. Support for the transfer of adaptation technologies will be monitored at the portfolio level under Outcome 1.3 for the LDCF and the SCCF shown in Table 3.

Table 3: Climate change adaptation: objectives and expected outcomes for the LDCF and SCCF

<i>Climate Change Adaptation (CCA) Strategic Objectives</i>	<i>Expected Outcomes</i>
Objective 1; Reduce the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate change	Outcome 1.1; Vulnerability of physical assets and natural systems reduced Outcome 1.2; Livelihoods and sources of income of vulnerable populations diversified Outcome 1.3; Climate-resilient technologies and practices adopted and scaled up
Objective 2; Strengthen institutional and technical capacities for effective climate change adaptation	Outcome 2.1; Increased awareness of climate change impacts, vulnerability and adaptation Outcome 2.2; Improved scientific and technical knowledge base for the identification, prioritization and implementation of adaptation strategies and measures Outcome 2.3; Access to improved climate information and early-warning systems enhanced at regional, national, sub-national and local levels Outcome 2.4; Institutional and technical capacities and human skills strengthened to identify, prioritize, implement, monitor and evaluate adaptation strategies and measures
Objective 3; Integrate climate change adaptation into relevant policies, plans and associated processes	Outcome 3.1; Institutional arrangements to lead, coordinate and support the integration of climate change adaptation into relevant policies, plans and associated processes established and strengthened Outcome 3.2; Policies, plans and associated processes developed and strengthened to identify, prioritize and integrate adaptation strategies and measures Outcome 3.3; Systems and frameworks for the continuous monitoring, reporting and review of adaptation established and strengthened

31. During the reporting period, for climate mitigation, four projects with technology transfer objectives were approved with \$18.9 million of GEF funding and \$262.6 million of co-financing. These include one

project supporting small hydro power development, one project aiming to establish a finance and technology transfer center, one addressing urban mobility, and one project launching energy efficiency financing facility. For climate adaptation, eighteen projects to adopt technology were approved with \$132.8 million from LDCF and SCCF, and \$509.2 million of co-financing. The lists of these projects are presented in Appendix 4.

### **C. Public-Private Partnerships for Technology Transfer**

32. The PPP programs can be a strong tool for promoting technology transfer by supporting businesses in developing countries that are trying to commercialize or scale up ESTs. The GEF supports transformational change in the private sector through a variety of channels, such as innovative concessional financial instruments to mobilize private finance, and demonstration of innovative approaches that has the potential to be scaled up.

33. Drawing on its experience in utilizing debt, equity and guarantee products in the past, the GEF launched in October 2014 a \$110 million non-grant pilot to demonstrate and validate the use of innovative financial mechanisms and business models to combat global environmental degradation across all GEF's areas of work, including climate change, forests/REDD+, and biodiversity. One project aligned with technology transfer has been approved (see Appendix 4).

34. The pilot will play a key role in supporting the GEF's efforts to leverage significant capital from the private sector through the use of innovative and flexible financial instruments. Proposals are especially encouraged if they demonstrate innovative private and public sector application of financial mechanisms, business models, partnerships and approaches for achieving the objectives of GEF-6 focal area strategies that may be broadly adopted and can be scaled up. The GEF intends to commit a first round of funding for projects under the pilot in June 2015, and a second round in November 2015.

### **D. Technology Needs Assessments**

#### **d.1. Technology Needs Assessment support within the Poznan Strategic Program**

35. The first TNA project (TNA Phase 1) 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.

36. The first TNA project concept, under the Poznan Strategic Program, was approved by the LDCF/SCCF Council in April 2009 and endorsed by the GEF CEO in September 2009. Project implementation by UNEP started in October 2009 and was completed in April 2013. Total SCCF-B funding for this project is \$9 million.

37. TNA Phase I supported 36 countries between 2009 and 2013. TNA reports were submitted by 11 countries in Africa and Middle East, 13 countries in Asia and Eastern Europe, and 8 in Latin America and Caribbean. These countries were:

- (a) Africa & Middle East  
Cote d'Ivoire, Ghana, Kenya, Lebanon, Mali, Mauritius, Morocco, Rwanda, Senegal, Sudan, Zambia, Ethiopia
- (b) Asia & CIS  
Azerbaijan, Bangladesh, Bhutan, Cambodia, Georgia, Indonesia, Kazakhstan, Laos, Moldova, Mongolia, Nepal, Sri Lanka, Thailand, Vietnam
- (c) Latin America & Caribbean  
Argentina, Bolivia, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Peru



## **d.2. Technology Needs Assessment support within the Long-Term Implementation of the Poznan Strategic Program**

38. Progress achieved under the Poznan Strategic Program, particularly in the development of pilot projects and TNAs, has highlighted the need to go beyond current practices to catalyze investments in technology transfer. The second TNA project concept 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 UNEP started in November 2014. Two additional countries that participated in TNA Phase I (namely Kazakhstan and Lao PDR) will be supported in concluding their TAP reports. The Phase II countries are:

- (a) Africa & Middle East:  
Burkina Faso, Burundi, Egypt, Gambia, Jordan, Madagascar, Mauritania, Mozambique, Seychelles, Swaziland, Tanzania, Togo, Tunisia
- (b) Asia & CIS:  
Armenia, Malaysia, Philippines, Uzbekistan, Turkmenistan, Pakistan, Kazakhstan, Lao PDR
- (c) Latin America & Caribbean:  
Belize, Bolivia, Grenada, Guyana, Honduras, Panamá, Uruguay

39. The project team has started conducting the country inception missions and working on the development of some new or improved guidebooks/methodologies. The project team is planning to organize an Internal Capacity Building Workshop for the project team and regional support centres in March 2015, and in the second quarter of FY2015, it will roll-out the first series of regional TNA capacity building workshops for the national TNA teams in Asia, Africa and Latin America. In collaboration with the UNFCCC Secretariat and the CTCN, the project team is planning a first Global Launching/Experience Sharing Workshop in May 2015 at which representatives from all countries participating in the TNA Phase II will learn from the experience shared by some representatives from countries that successfully carried out TNAs in the past.

40. In addition, during the reporting period, the GEF Council approved two national projects incorporating TNA support activities in projects otherwise focused on the preparation of National Communications (NCs) and Biennial Update Reports (BURs):

- (a) One project in Papua New Guinea by UNEP includes the preparation of a TNA;
- (b) One project in Botswana by UNDP include the updating of existing TNA.

Under the GEF-6 Strategy, support for TNAs will be made eligible through the CCM focal area set-aside for small island developing states and least developed countries. Support to other countries' TNAs may be possible using GEF-6 national allocations.

## **E. GEF as a Catalytic Supporting Institution for Technology Transfer**

41. The GEF Secretariat participated in key international discussions supporting the development of technology transfer initiatives and raised awareness of the Long-Term Program during the reporting period. Examples include:

- (a) 'Thematic dialogue on Climate Technology Financing', during the ninth meeting of the Technology Executive Committee held in Bonn, Germany, on August 18-21, 2014;
- (b) The fourth meeting of the CTCN Advisory Board, held in Copenhagen, Denmark, on October 8-10, 2014 (as an observer);
- (c) 'Dedicated meeting on ways and means to advance the technical examination process in 2015', during ADP 2.8 in Geneva, Switzerland, on February 8-13, 2015;
- (d) The Tenth meeting of the Technology Executive Committee (TEC), held in Bonn, Germany, on March 9-12, 2015.

42. The GEF website is updated periodically with specific information on technology transfer.<sup>6</sup>

### **Part III. GEF consultation with the regional technology transfer and finance centres and the Climate Technology Centre and Network**

43. In response to invitations from SBI 37, SBI 39, SBI 40 and SBI 41, during the reporting period, the GEF Secretariat, the CTCN and the GEF Agencies consulted on numerous occasions. These consultations focused on: (i) development of a full project proposal by the CTCN and (ii) modalities enabling collaboration between the regional technology transfer and finance centres and the CTCN.

44. Regarding the first point, the GEF Secretariat and the CTCN discussed this matter during the CTCN Advisory Board in October and COP 20 in December, 2014. The CTCN is currently preparing the full project document taking into account suggestions from the GEF Secretariat. The project document will include details of 5 to 6 projects supported by the CTCN. These projects will serve as pilots for future CTCN-related outputs that could be further developed as GEF-6 country-driven projects with concrete mitigation benefits. They will also help the CTCN to design and test a framework through which it will work with financing institutions to help developing countries design requests that comply with the requirements of financing institutions and therefore be conducive to financial support and implementation.

45. Regarding the second point, the GEF, the regional development banks, and the CTCN have discussed the need to strengthen their efforts to ensure coherence and synergies with the aim of accelerating the development and transfer of climate technologies. They recognize that improving coordination and taking better advantage of their complementarities, in accordance with the respective mandates of the individual institutions, would increase the impact of the initiatives on climate technology transfer. Some initiatives have been started: for example, the regional centres have worked with the CTCN partner institutions, and the regional development banks supporting the regional centres have engaged in some of the CTCN requests. The Pilot Asia-Pacific Climate Technology Network and Finance Center (CTNFC) by ADB and UNEP, as mentioned in Section A above, has supported National Designated Entities (NDEs) and its country readiness for the CTCN and the operationalization of the CTCN in Asia-Pacific. It has focused on supporting countries in developing request for technical assistance to the CTNFC and the CTCN, and held training workshops for countries and relevant national and regional climate technology centers. It plans to hold additional networking meetings for countries and institutions to promote and generate national and regional technical assistance requests to the CTNFC and the CTCN.

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<sup>6</sup> This information can be accessed from: [http://www.thegef.org/gef/technology\\_transfer](http://www.thegef.org/gef/technology_transfer)

## **Appendix 1. Technology Transfer Projects Support in line with the Long-Term Program on Technology Transfer**

1. This appendix summarizes the status of preparation and implementation of GEF supported initiatives under the first item of the Long-Term Program on Technology Transfer: Support for Climate Technology Centers and a Climate Technology Network. The appendix presents the progress made by the GEF Agencies in the delivery of the associated projects and summarizes experiences gained and lessons learned so far.
2. In December 2008, COP 14 welcomed the GEF's Strategic Program on Technology Transfer (renaming it the Poznan Strategic Program on Technology Transfer) as a step toward 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 Long-Term Program on Technology Transfer to COP 16. The GEF submission included the following elements to further scale up investment in ESTs in developing countries in accordance with the GEF climate change strategy, and to enhance technology transfer activities under the Convention:
  - (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) Support for TNAs; and
  - (e) GEF as a Catalytic Supporting Institution for Technology Transfer.
3. The GEF funded regional and national projects supporting climate technology centers, networks for climate technology transfer and financing are in early phases of implementation. Information on their implementation status and experience, provided by the GEF Agencies concerned, is summarized below.
4. ***Promoting Accelerated Transfer and Scaled-up Deployment of Mitigation Technologies through the CTCN (UNIDO)***. The project concept proposal was approved by the GEF CEO in June 2014.
5. UNIDO has been preparing the full project proposal for the GEF CEO approval before June 2015. This project is expected to serve as a pilot to highlight possible options for future CTCN-related outputs to be further developed as GEF-6 projects with concrete mitigation benefits, using GEF country allocations, in a country-driven manner.
6. The project is also expected to help the CTCN design and test a framework through which it will work with financing institutions to help developing countries design requests that would comply with the requirements of financing institutions and therefore be conducive to financial support and concrete implementation. To lay the ground of this collaboration, the CTCN co-organized with the GEF Secretariat a workshop on October 7, 2014 to bring together the CTCN Advisory Board chair, the TEC chair and vice chair, and the representatives from the regional development banks and the World Bank, with the objective of facilitating joint efforts and potential cooperation among development agencies and the Technology Mechanism to accelerate Climate Technology Transfer.
7. Out of a larger portfolio of country requests to be received by the CTCN, the baseline project is limited to a subset of seven requests for technical assistance (partly involving investment in climate technologies) that are representative of the CTCN's overall portfolio. Global environmental benefits are expected to occur due to the investments materialized during the project's time horizon and as a result of transformational change in the 10-year period thereafter.

8. During the project preparation substantial work has been done to nurture the portfolio of CTCN requests entailing the appropriate attributes. A tentative selection has been done and includes interventions of F-refrigerants substitution (Chile), waste treatment (Colombia), energy-efficient lighting (Dominican Republic), agricultural productive use (Mali), energy efficiency in industry (Senegal), geothermal energy policy (Uganda), bio-waste minimization and valorization (Vietnam).
9. ***Pilot Asia-Pacific Climate Technology Network and Finance Center (CTNFC) (ADB and UNEP)***. The project was endorsed by the GEF CEO in May 2012, and has started implementation. This is a joint initiative of the UNEP and ADB, recognizing the importance of technology transfer in the global response to climate change. The project objective is to pilot a regional approach to facilitating deployment of climate technologies (mitigation and adaptation) that combines capacity development, enhancement of enabling environments for market transformation, financial investments and investment facilitation. It is also designed as a regional pilot for the CTCN complemented by a link to finance through the partnership with the ADB. Its second steering committee meeting (with ADB, UNEP, and the GEF) was held in November 2013, and its third Steering Committee is expected to be held in the second Quarter of 2015.
10. As of February 2015, the project has reported the following progress:
  - (a) The project supports the engagement of venture capital (VC) and private equity (PE) funds in climate technologies through creation of opportunities for increased investments and an enabling environment. Three capacity development programs for clean technology entrepreneurs have been supported – two in India in partnership with Infuse Ventures, and a third in collaboration with World Bank’s Climate Innovation Center in Viet Nam – to help create a pipeline of climate technology businesses that will attract investments by VC and PE funds. The project is also supporting the Asia Climate Partners (ACP), a joint PE venture through ADB’s Private Sector Operations. ACP seeks to invest in a variety of climate technology transactions in the Asia-Pacific region.
  - (b) The project launched IPEX Cleantech Asia, the first cleantech intellectual property transfer marketplace in Asia, during COP 20 in Lima, Peru. The marketplace will operate as a match-making platform that brings together selected low carbon technology holders with those seeking to acquire these technologies. Through partnerships with the World Intellectual Property Organization (WIPO) including WIPO Green, and other low carbon initiatives in North America and Europe, the project is building a network to support the operation of the marketplace.
  - (c) Technical support and advisory service have been extended for four mitigation and four adaptation projects in ADB’s investment pipeline. Currently the project is in discussions to provide technical support and advisory service to four additional mitigation projects in ADB’s investment pipeline: (i) urban services and ger areas development investment program in Mongolia, (ii) waste-to-energy in Xiangjiang river basin project in China, (iii) promoting energy efficiency in the Pacific (phase 2), and (iv) sustainable urban transport investment program (tranche 3) in Georgia.
11. The project facilitate a network of national and regional technology centers, networks, organizations, and initiatives, and support or strengthen national and regional technology transfer centers and centers of excellence. The majority of focal points designated by the countries are their National Designated Entities (NDEs) or representatives from their NDE, and the activities agreed with the partner countries mainly support ‘country readiness’ for the CTCN (i.e. strong focus on support to NDEs) and the operationalization of the CTCN in Asia-Pacific (i.e. strong engagement of climate technology centres/institutions from the region, and pilot technical assistance activities in response to country requests).
12. In 2014, the activities focused on supporting countries in developing requests for technical assistance to the CTNFC (and the CTCN) for the implementation of key priorities identified their TNAs/TAPs. Regional networking was facilitated through meetings and training workshops for countries and relevant national and regional climate technology centers to exchange institutional and technological know-how. The training workshops also supported the strengthening of capacities of identified climate technology centers and led to direct technical assistance for the promotion of green productivity within industry.

Various studies were commissioned to develop national and regional standards and regulations in priority climate technologies in order to support the national capacity for such policies. Moreover, technical assistance activities were initiated in a few countries to support policies, programs, and projects that promote the transfer and dissemination of ESTs.

13. The outlook for 2015 includes additional networking meetings for countries and institutions to share knowledge and also to promote collaboration in the generation of national and regional technical assistance requests to the CTNFC and the CTCN. Specialized workshops will be organized with partner institutions and countries with a focus on regional prioritized climate technologies and/or enabling policies and mechanisms. UNEP and ADB are discussing potential areas and project ideas for joint technical assistance activities and ADB investment in partner countries. The future activities will accelerate the capacity of technical assistance provided to countries and encourage regional and national cooperation.
14. ***Regional Climate Technology Transfer Center (EBRD)***. The project has been endorsed by the GEF CEO in July 2013 and has started implementation. This project aims to accelerate investments in climate change mitigation and adaptation 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 is expanding the EBRD Sustainable Energy Business Model to the area of climate technology transfer, combining technical assistance (for policy makers and projects) with financial support to kick-start the market for climate technology investments in the ETCs and SEMED countries.
15. The key focus of the technical assistance is on: (i) developing market assessment and monitoring techniques being delivered in partnership with the International Energy Agency and Food and Agriculture Organization of the United Nations; (ii) project assessment techniques for climate change mitigation and adaptation technologies (including climate resilience); (iii) creation and/or support of networks; (iv) assistance to individual investment projects incorporating advanced climate technologies; and (v) establishment of regional technology transfer networks for knowledge sharing. It is expected that up to twenty five projects in ETCs and up to fifteen projects in SEMED countries will be supported between 2014 and 2016.
16. As part of the project activities the EBRD has also undertaken training of local consultants in Armenia, with the plan to further roll out the trainings during the 2015 to Moldova. The cooperation with the IEA and FAO on the development of market monitoring and assessment techniques is well under way and the first expert session on climate technology policies was held in Paris in September 2014, and will be followed with a regional conference in Istanbul, planned for June/September 2015.
17. As of March 5, 2015, the project has committed a total support of \$1.53 million to nine projects approved, with the support to be disbursed upon installation and verification of climate technologies. These approved projects are promoting mainly technologies in the built environment and small and medium enterprises such as light emitting diode (LED) lighting, building integrated solar-thermal, trigeneration, and energy management systems. The total climate change mitigation impact of the projects once implemented will be 112,000 ton CO<sub>2</sub> reduction over 10 years. \$5.2 million out of the total climate change mitigation investments went towards deployment of best available climate technologies with very low market penetration, underdeveloped supply chains and high replication potential.
18. ***Climate Technology Transfer Mechanisms and Networks in Latin America and the Caribbean (IDB)***. The project was endorsed by the GEF CEO in September 2014. IDB is signing the legal agreements with the executing agencies: Instituto Nacional de Ecología y Cambio Climático, Mexico, Fundación Bariloche, Argentina, World Resources Institute/Embarq, U.S.A., Centro Agronómico Tropical de Investigación y Enseñanza, Costa Rica and IDB and the Secretariat for the Regional Fund for Agricultural Technology.
19. The project aims to promote the development and transfer of environmentally sustainable technologies in

Latin America and the Caribbean (LAC), in order to contribute to the ultimate goal of reducing greenhouse gas emissions and reducing the vulnerability to climate change in specific sectors in LAC. The project's strategy is to build the national capacities to identify, assess, develop and transfer ESTs, focusing on: (i) the promotion of and support to regional collaborative efforts; (ii) the support to planning and policy-making processes at national and sectoral levels; (iii) the demonstration of policies and enabling mechanisms; and, (iv) the mobilization of private and public financial and human resources.

20. The IDB is collaborating with UNEP with a view to ensuring that the efforts under the project will also contribute to the region's capabilities to engage with and participate in the Technology Mechanism under the UNFCCC. The IDB and UNEP have identified collaborations around the objectives on regional capacity building, as well as enhanced interaction with regional organizations that are also members of the UNEP-led consortium hosting the CTCN.
21. ***Pilot African Climate Technology Finance Center and Network (AfDB)***. The project has been endorsed by the GEF CEO in April 2014 and is under implementation.
22. The project supports the deployment of technologies for both climate change mitigation and adaptation in Sub-Saharan Africa by: (i) catalyzing public and private finance for low-carbon technologies and climate resilient development projects; and (ii) assisting with integrating technology transfer considerations into developing countries' policies and investment programs and strengthening design and enforcement capacities of public institutions. Mitigation activities focus exclusively on the energy sector and are more specifically aligned with the Sustainable Energy for All (SE4ALL) initiative, whereas the adaptation activities focus exclusively on the water sector. The project intends to mobilize additional financing notably from AfDB managed instruments, such as the Sustainable Energy Fund for Africa (SEFA) or the African Water Facility (AWF).
23. The implementation of the project started with a first set of mitigation activities following requests received from the Governments of Kenya, Rwanda and Tanzania for assistance with the development of a SE4ALL Action Agenda outlining how the country envisages to achieve the energy access, renewable energy and energy efficiency objectives by 2030 and a SE4ALL Investment Prospectus identifying clean energy projects. The implementation of these activities are advancing and are expected to be completed by the second and their quarter of 2015. In addition, at the request of the Government of Ghana the Center is providing support to the economic and financial evaluation of mini-grid systems and solar home systems.
24. A second set of mitigation activities, also linked to the development of SE4ALL Action Agenda and Investment Prospectus(es) are under preparation, in support of the Democratic Republic of Congo, Angola, Malawi, Zimbabwe and Zambia, following receipt of Government requests. The recruitment of consulting firms to perform the technical assistance is underway for four out of the five countries and activities are scheduled to begin in the second quarter of 2015.
25. The project is also in the process of finalizing a framework contract facility with several consulting firms/consortia to assist Sub Saharan African countries with policy, institutional and organizational reforms for both the adaptation and mitigation components of the Center. The framework contract facility once in place will allow the Bank to respond quickly to specific requests for technical assistance including on upstream/early stage activities that will generate opportunities for crowding-in complementary financing from the Bank's own instruments such as SEFA or AWF. The Centre is also identifying in collaboration with the Bank's Department of Water and Sanitation a first set of adaptation activities to be supported by the center linked to the Bank's lending operations.
26. On the networking and communication component, the project is finalizing the contracting of a communication consultant and a firm to design its website and communication and networking tools, both contracts are foreseen to be signed in March 2015, marking the operationalization of the first component of the project.

27. ***Enhancing Capacity, Knowledge and Technology Support to Build Climate Resilience of Vulnerable Developing Countries (UNEP)***. The project was endorsed in January 2013, and it is under implementation.
28. The project aims at reducing risks from increased desertification, floods and erosion, and sea level rise to the target communities in the identified project sites in Mauritania, Nepal and Seychelles respectively. The best practices from on-the-ground interventions supported through the SCCF grant are disseminated through the regional networks that are a part of the proposed project. The project also contributes towards developing evidence based indicators for ecosystem-based approaches to adaptation (EBA). The project is based in China with China's National Development and Reform Commission (NDRC) as the main executing partner, and leveraging a number of existing programs such as the South-South Cooperation, Africa Adaptation Network, the Global Adaptation to Climate Change Network and Asia-Pacific Adaptation Network.
29. Following the launch and inception phase of the project:
- (a) An inter-regional training workshop on Accessing Climate Change Adaptation Finance and Mainstreaming Ecosystem-Based Approach to Adaptation was jointly organized by UNEP-IEMP and APAN, in conjunction with the Asia-Pacific Climate Change Adaptation Forum 2014 and took place in Kuala Lumpur, Malaysia from 30 September 2014 to 3 October 2014. The joint organization of the workshop alongside of the Forum provided workshop participants with high quality learning and knowledge exchange opportunities with a number of policy-makers, practitioners and regional networks from the Asia-Pacific region.
  - (b) A high-level panel session on Ecosystem-based Adaptation and Mitigation was organized at the South-South Cooperation on Climate Change Forum in Lima during COP 20 on 8 December 2014. This Forum was co-sponsored by NDRC and UNEP.
  - (c) Draft EbA protocols have been developed for the three pilot countries. These draft protocol give a broad picture of EBA interventions in the different countries, including policy, natural systems, social economics, and M&E etc. Once validated by the country teams, the protocol will then be used to guide implementation.
30. ***Finance and Technology Transfer Centre for Climate Change (FINTECC) (EBRD)***. This project was approved in October, 2014, and is undergoing the preparation of detailed project proposal. This project aims to develop and demonstrate innovative policy and technical assistance packages and support development of performance-based financing mechanisms to increase investment in climate technologies in Ukraine. The Project will aim to contribute to achieving an energy efficient economy and increased energy security in Ukraine, while improving its energy self-sufficiency, in line with Ukraine 2030 Strategy.
31. The Project will benefit from and liaise with the regional framework developed through “*Regional Climate Technology Transfer Centre*” by EBRD, which is designed to support the climate technology market with a variety of instruments. The extension of the regional project into Ukraine will build on the findings of regional center’s experience in Early Transition countries and the Southern and Eastern Mediterranean countries with individual activities and products tailored to the conditions and needs of the Ukraine.

## Appendix 2. Implementation of the Poznan Strategic Program on Technology Transfer

1. This appendix summarizes the status of preparations and implementation under the Technology Transfer Pilot Projects supported within the framework of the Poznan Strategic Program on Technology Transfer. The appendix presents the progress made by the GEF Implementing Agencies in the delivery of pilot projects and summarizes experiences gained and lessons learned so far, as requested in SBI 36 agenda item 12 conclusions (see Part II of this document for overall reporting on the progress of the Poznan Strategic Program on Technology Transfer).
2. As indicated in paragraph 23 in this document, the call for proposals for technology transfer pilot projects under window two of the Poznan Strategic Program issued in March 2009 by the GEF CEO led to the selection of 14 proposals of pilot projects for funding, including 13 Full-Sized Projects (FSPs) and one Medium-Sized Project (MSP). Only one proposal for adaptation was received for a project in Jordan; this proposal was funded, along with three other proposals that included adaptation elements. The total funding from the GEF Trust Fund and SCCF-B for the 14 pilot projects amounted to initially \$58 million, and total co-financing for these projects initially came to more than \$195 million.
3. As of March 2015, GEF Agencies charged with implementing these 14 pilot projects have reported progress in project preparation and implementation:
  - (a) Eleven projects have been endorsed by the GEF CEO and are progressing in their implementation. These projects are taking place in Cambodia, Chile, China, Colombia, Cote d'Ivoire, Jordan, Kenya, Mexico, Russia, Sri Lanka, Swaziland and Thailand. The funding from the GEF Trust Fund and SCCF-B for these project amounts respectively to \$49.4 million and \$2.4 million, and the total co-financing amounts respectively to \$223.2 million and \$5.5 million.
  - (b) 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.
4. Information, provided by the GEF Agencies concerned, on the implementation status and experience of the eleven CEO-endorsed projects during the reporting period is summarized below:
  - (a) ***Cambodia: Climate Change related Technology Transfer for Cambodia: Using Agricultural Residue Biomass for Sustainable Energy Solutions (UNIDO)***. The project is under implementation following GEF CEO Endorsement in May 2012.

During the reporting period, technology developers, suppliers and users have been identified, in addition to the identification of technologies (more than 12 types). Over 40 technology suppliers principally from China, India and Thailand, Malaysia and Japan have been contacted and/or visited and over 40 detailed technical and financial offers of the biomass technology have been received and evaluated by project management unit and users. Till date 28 visits of technology suppliers to Cambodia have been arranged to facilitate technology tie ups with local partners and negotiations with potential clients.

Originally 3 companies committed to the project (with co-financing letter). However, the original sectors (rice and rubber) and units could not implement the identified technologies. It was concluded in the last quarter of 2014 that it was not technologically and economically viable to implement captive power/co-generation. The principle reason for non-implementation and concerns, shared with the Project Steering Committee in February 2015, included notably intermittent nature of actual energy needs, insufficient availability of local biomass, lack of conducive environment (e.g. feed-in tariff), as well as significant changes affecting baseline assumptions including energy pricing.

In light of this, it was suggested to expand to other sectors (breweries/beverage and distilleries,



composite garment units having wet processing section, food processing, sugar units) where needs for thermal energy and electricity could justify an investment in own power generation. Some units in these sectors have already been contacted and visited, and technology suppliers are in the process of either submitting offers or finalizing/negotiating with the enterprises. It was also suggested to consider additional technological options, such as high efficiency gasifiers, wood-fired dryers, absorption chillers, and fuel substitution in industrial kilns.

Aside from this, activities on awareness raising and capacity building have progressed according to schedule. For instance, a cadre of more than 20 national experts from relevant promotional institutions and departments have been trained in technical and financial evaluation (detailed economic analysis). Training on biomass based co-generation was also conducted with leading technology developers.

- (b) ***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 in March 2014. The Project Execution Unit has been set up so far.

The Project will include: (i) the development of standards and monitoring protocols for solar panels and solar systems; (ii) training for public and private stakeholders on Concentrated Solar Power and Photovoltaic Systems, and (iii) public awareness campaign to promote solar technology projects for both solar water heating and power generation.

Currently IDB is proceeding to finalize the Amendment Agreement of this operation. This allows the request of a disbursement of US\$ 640,000 to purchase and install the planned solar photovoltaic systems, implement monitoring systems, and additionally have expert consultancy to support the design of a line funding mechanism.

- (c) ***China: Green Truck Demonstration Project (WB)***. Following its endorsement by the GEF CEO in March 2011, the project was launched in October 2011.

Through Phase I of Green Truck Technology Demonstration, three technologies were proved to have very marginal or no fuel-saving effects and will be eliminated from Phase II demonstration. Meanwhile, one new technology—light-weighted aluminum allot trailers—demonstrated considerable fuel-saving benefits and market popularity. This technology is now part of Phase II demonstration.

Monetary costs for some of Phase I technologies are relatively low, while transaction costs are relatively high (e.g. installation, tuning, and depreciation of regular tires). This creates reluctance for the pilot companies to apply demonstrated technology products, and lowers the attractiveness of corresponding subsidies and awards. As business expands, most trucking companies express strong interest in subsidies for new truck procurement, as it involves large capital expenditures for trucking companies. In Phase II demonstration the implementation agency will carefully assess and accommodate those needs from pilot companies, to scale up the demonstration effects.

With China's logistics sector booming, many large trucking companies are expanding their fleets. Capital needs for this expansion is mounting, which brings opportunities not only for scale-up of the green freight technologies and practices, but also for tapping private sector resources for leverage.

Some innovations of the Green Freight Demonstration are being adopted in Brazil. Clean Air Asia, one of the Bank's partners in green freight in China, has started a pan-Asian green freight program with support from donors and the private sector. To further enhance the project influence, the project team has participated in the China (Shenzhen) International Logistics and Transportation Fair on October 14 to 16, 2014.

- (d) ***Colombia, Kenya, Swaziland; SolarChill: Commercialization and Transfer (UNEP)***. This project

was initially approved with the World Bank as the Implementing Agency. However, the World Bank withdrew in 2010 from the project. The project was then re-submitted by UNEP with the addition of Swaziland. The project has been endorsed by the GEF CEO in February 2014 and is expected start implementation soon. The project is awaiting the co-financing commitment from the Ministry of Environment for Germany, following their decision to review their policy on co-financing as a whole before committing their co-financing to this project. The project will start once this matter has been resolved, and a legal agreement can be signed between the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and UNEP to execute the project.

- (e) ***Cote d'Ivoire: Construction of 1000 Ton per day Municipal Solid Wastes Composting Unit in Akouedo Abidjan (AfDB)***. This project has been endorsed by the GEF CEO in October 2013 and is expected to start implementation soon. The project preparation faced significant challenges, as it coincided with the period of instability in the country, with changes in the political environment as well as in government priorities. The project implementation has been delayed in order to integrate it into a larger sustainable city planning project that could serve as a basis for GEF-6.

The project baseline is under preparation and expected to be approved by AfDB Board by June 2015. The project implementation will start at the same time with the baseline project, expected by October 2015.

- (f) ***Jordan: DHRS Irrigation Technology Pilot Project to Face Climate Change Impact (IFAD)***. This adaptation project seeks to reduce the vulnerability of irrigated agriculture to climate change by testing innovative and efficient water-use technologies. The project was endorsed by the GEF CEO in May 2011 and has been re-designed, as initial field trials carried out during the project inception showed that the proposed technologies did not perform as expected under the local conditions. After the minor-amendment of the planned technologies, the project became effective in January 2014.

The project is currently finalizing the procurement plans that will secure all needed materials and equipment to start the new practices in the pilot farms. Additionally, the Ministry of Agriculture (the National Center for Agricultural Research and Extension (NCARE)) is providing for the complete mapping of the target sites in order to have a precise and shared baseline to better understand the development of the project. All maps are prepared using the latest geographic information system (GIS) software and will constitute as well an important knowledge sharing tool and will be disseminated in geographical browsers.

The project is ready to implement 7 new technologies in Jordan after a detailed work of peer reviewing within NCARE and other actors active in the sector of efficient irrigation development in the area. Project staff worked on collecting all available data and information to avoid duplication and to capitalize on lessons learned and best practices.

- (g) ***Mexico: Promotion and Development of Local Wind Technologies in Mexico (IDB)***. The project was approved by IDB in May 2012, following the GEF CEO endorsement in December 2011. The project implementation started in August 2012. The general objective of the project is to enable the local development of wind turbines for distributed generation and contribute to enhance Mexico's local capacities in wind energy technology.

During the last quarter of 2014, second disbursement was approved and delivered to the Executing Agency reaching a disbursement of 4.28%. The official website of the project was launched in November 2014 (<http://www.iie.org.mx/detelm/index.php>). Publication of an international expression of interest in the United Nations Development Business website was carried out to the contract of one expert for the design and construction of wind turbines blades. This consultancy has been necessary because after a national market research it was shown that there is no research institutes nor engineering firms in Mexico for design and construction of wind turbine blades for medium and high capacity. However, there is a delay in the contract of this consultancy due to internal processes of the Executing Agency.

In January 2015, the long list of the Steering Committee of the project was confirmed. This Steering Committee is comprised by the Ministry of Energy, Ministry of Finance, Ministry of Economy, National Science and Technology Council, National Association of Electrical Manufacturer, IDB and Electric research Institute. Up today, the agenda of the Steering Committee meetings is to be determined. Major delays of the project are due to internal procurement process of the Executing Agency.

- (h) ***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 has started its implementation in March 2011.

The Russian Government's Decree No. 1229 on changes in reporting forms for produced, used, stored, recuperated, reclaimed, recirculated, and destroyed ozone depleting substances (ODS) dated November 20, 2014 was adopted. In addition, the Direction No. 2327-p stipulating allowable ODS production and consumption volumes for 2015 for the Russian Federation dated November 20, 2014 was also signed. In preparing abovementioned draft regulatory legal acts, proposals of UNIDO-Business working group and the Project Management Unit (PMU) were taken into account. PMU prepares draft annual reports on key ODS uses in the Russian Federation, except for laboratory and analytical uses, as well as on ODS production, consumption, export and import for the Ministry of Natural Resources and Environment.

The supply, installation, and commissioning of the process equipment for one factory (OAO PO Sergo Plant (Zelenodolsk, Republic of Tatarstan)) were completed. The scope of the supply included production lines for ozone-safe medical equipment and domestic refrigerating appliances. For one producer of domestic refrigerating appliances (OOO SEPO-ZEM (Saratov)), a certification referring equipment, goods, works, and services to technical aid was obtained, and the supply of process equipment was completed. Both factories converted to non-ODS and low global warming potential technologies.

Activities on creation of certification courses for heating, ventilating, and air conditioning and refrigeration (HVAC&R) equipment installation, repair, and maintenance technicians were completed. Those courses will favor creation of professional and educational standards in the Russian Federation, and functioning of the technicians' certification system, which both are necessary for organization of ODS accounting, ODS leakage from operating equipment, and ODS disposal in an environmentally sound manner.

In October 2014, a meeting of the initiative group of representatives of UNIDO and largest associations and self-regulating organizations in the HVAC&R sector was organized. It was dedicated to development of professional standard "Refrigerating, heat pump, and air-conditioning equipment technician." In November–December 2014, free online course "Regulation, and technological aspects, of cutting ODS consumption in the Russian Federation" was organized. As part of the course more than 130 specialists were instructed, and 30 specialists were trained to use distance training technologies and specialized software in the refrigeration sector.

The project supported website dedicated to the ozone issues ([www.ozoneprogram.ru](http://www.ozoneprogram.ru)) is updated on a regular basis.

- (i) ***Senegal: Typha-based Thermal Insulation Material Production in Senegal (United Nations Development Program - UNDP)***. The project was endorsed by the GEF CEO in August 2012. It started implementation in November 2013.

The project started implementation in November 2013. To date, various products have been developed from typha-cement and typha-earth, including insulation boards consisting of 100% typha leaves, plasterboard, panels, bricks, and shotcrete.

Market studies, including feasibility studies are underway for semi-industrial production lines. In addition, technology transfer has started for typha-earth through training of local artisans, PhD students, architects and local entrepreneurs to produce materials.

The project has succeeded in bringing together national institutions, notably the Ministry of Environment, Ministry of Energy, Ministry of Urban Development, Energy Efficiency Agency, Ministry of Education and Professional training to work together. The Ministry of Urban Development has requested the project to integrate energy efficiency principles into the building code. The project has just signed a Memorandum of Understanding with l'Agence de l'Economie et de la Maitrise d'Energie (AEME) to implement jointly certain activities such as energy audits of some public buildings and outreach and communications on energy efficiency.

The project is striving for the establishment of a typha value chain from production of raw material to implementation in the building. A working group is being set up and will include all departments mentioned above to discuss all technical and policy issues and support the project management unit.

- (j) ***Sri Lanka: Bamboo Processing for Sri Lanka (UNIDO)***. The project was endorsed by the GEF CEO in April 2012. The launching of the project took place in September 2012.

Within the reporting period, the Sri Lanka National Bamboo Association was established; a mechanism with an instrumental role to the implementation of the project activities and the sustainability of the outputs. The National Bamboo Association includes representatives and members from the entire bamboo value chain in Sri Lanka. Land owners, farmers, industry members are among the representatives to the association.

The Sri Lanka National Bamboo Association will be the custodian of the Revolving Fund that was established within the aforementioned reporting period. The revolving fund aims to best utilize the available funds for growing and processing bamboo in Sri Lanka by moving away from the traditional grant providing approach and by introducing very low interest loans that when repaid the funds will be reused for expanding the implementation to additional communities within Sri Lanka. Currently \$300,000 has been allocated to the revolving fund and another \$300,000 are planned to be added in 2015. The Sri Lanka National Bamboo Association has the key role in administering the revolving fund and ensuring that the distribution of funds is appropriately conducted according to thematic and geographic criteria and that all operations are taking place in a transparent manner in full compliance with UNIDO's and GEF's rules and regulations.

Moreover the preparatory work for expanding the tissue culture laboratory at the University of Jayawardapara has been concluded. The purpose of the expansion is to ensure that all necessary technical means are in place for the systematic, reliable and consistent production of bamboo plants to be used in the local participating communities.

- (k) ***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 March 2012. Due to political uncertainty and turmoil in Thailand, the project started implementation in November 2013.

The project established ethanol information hub in Thailand for disseminate and support the south-south technology transfer through the web-based portals. The website-[www.aseancassava.info](http://www.aseancassava.info) was launched by King Mongkut's University of Technology Thonburi (KMUTT) in 2014, functions as one of the tools to promote Thailand to be a regional center for South-South bio-ethanol Technology Transfer. The website updates and maintains information and data on cassava production, know-how and very high gravity simultaneous saccharification and fermentation (VHG-SSF) technology on a regular basis.

The demonstration plant in Thailand was designed and the procurement for the construction is

prepared with ethanol production capacity of 200 liters per day. The demo plant is expected to start its operation in September 2015.

The KMUTT researchers started to prepare and continue improving upon detailed training modules for a series of capacity building scheme covering from agricultural practice, raw material handling, feedstock preparation, and improved fermentation technology. A series of trainings will be conducted in Thailand targeting different groups of audience covering farmers, technician and entrepreneur from Lao PDR, Myanmar and Vietnam. The target country is now expanded to include Cambodia according to the decision made by the project steering committee held in January 2015. The first training is expected to be conducted in May 2015. KMUTT researchers will improve on the manuals with feedbacks to be received from the first session.

Between June and September 2014, the project commissioned the report on “Assessment of capacities of financial institutions in Lao PDR and Myanmar-to provide loans to new renewable technologies for the large scale production of Ethanol from Cassava”. As a result, the assessment suggested that the project should implement mentoring and coaching for targeted and invested investors rather than organizing a capacity training programme for banking sector in both countries as originally planned. By this way, the project could make the most effective use of the limited funds it has.

The project organized the focused group meeting for investors in August 2014 as a part of technical assistance and expert advisory service to investors from Myanmar and Lao PDR in commercialization of bioethanol production technology. The focused group meeting resulted in ongoing discussion for the project to help two Laotian investors established bioethanol plants in Lao PDR with collective capacity of 200,000 liters per day. The project expects to receive a letter from Institute for Renewable Energy Promotion under Ministry of Energy and Mines, Lao PDR requesting for technical assistance in this issue within first half of 2015.

In Viet Nam, the project developed the E5 (gasoline mixed with 5% ethanol) promotion campaign. In December 2014, the Ministry of Industry and Trade, Vietnam started to recruit Thai expert to help them to promote E5 gasohol in Viet Nam. The awareness raising campaign including regional events will take place in 3 cities during the first quarter of 2015. In January 2015, the project also started working with the Food Industry Research Institute (FIRI), Vietnam to incubate the Vietnamese researcher in the new ethanol production technology. A technical training center at FIRI will be established in 2015 to disseminate and provide trainings and the new technology package to Vietnamese.

### Appendix 3. Implementation Progress of Technology Transfer Pilot Projects Under the Poznan Strategic Program (as of March 31, 2015)

<i>GEF ID</i>	<i>Country</i>	<i>Agency</i>	<i>Title</i>	<i>GEF Poznan Program Funding (\$ millions)<sup>a</sup></i>	<i>Total GEF Funding (\$ millions )<sup>a</sup></i>	<i>Co-financing (\$ millions)</i>	<i>Status of Project</i>
4040	Brazil	UNDP	Renewable CO <sub>2</sub> Capture and Storage from Sugar Fermentation Industry in Sao Paulo State	3.0	3.0	7.7 <sup>b</sup>	The project was cancelled in February 2012 upon request from the Agency. The project preparation identified investment costs far higher than initially expected, exceeding the available financing.
4042	Cambodia	UNIDO	Climate Change Related Technology Transfer for Cambodia: Using Agricultural Residue Biomass for Sustainable Energy Solutions	1.9	1.9	4.6 <sup>c</sup>	The project was endorsed by the GEF CEO in May 2012. The project is under implementation.
4136	Chile	IDB	Promotion and Development of Local Solar Technologies in Chile	3.0	3.0	31.8 <sup>c</sup>	The project was endorsed by the GEF CEO in June 2012. The project is under implementation.
4129	China	WB	Green Truck Demonstration Project	3.0	4.9	9.8 <sup>c</sup>	The project was endorsed by the GEF CEO in March 2011. The project is under implementation.
4682	Colombia, Kenya, Swaziland	UNEP	SolarChill: Commercialization and Transfer	2.8	3.0	8.0 <sup>c</sup>	The project has been endorsed by the GEF CEO in February 2014. Project implementation is underway.
4071	Cote d'Ivoire	AfDB	Construction of 1000 Ton-per-day Municipal Solid Waste Composting Unit in Akouedo Abidjan	3.0	3.0	36.9 <sup>c</sup>	This project has been endorsed by the GEF CEO in October 2013. Project implementation is underway.
4060	Jamaica	UNDP	Introduction of Renewable Wave Energy Technologies for the Generation of Electric Power in Small Coastal Communities	0.8	0.8	1.4 <sup>b</sup>	The project was cancelled in October 2011 upon request from the Agency.

<i>GEF ID</i>	<i>Country</i>	<i>Agency</i>	<i>Title</i>	<i>GEF Poznan Program Funding (\$ millions)<sup>a</sup></i>	<i>Total GEF Funding (\$ millions)<sup>a</sup></i>	<i>Co-financing (\$ millions)</i>	<i>Status of Project</i>
4036	Jordan	IFAD	DHRS Irrigation Technology Pilot Project to Face Climate Change Impact	2.4	2.4	5.5 <sup>c</sup>	The project was endorsed by the GEF CEO in August 2011. Project implementation is underway.
4132	Mexico	IDB	Promotion and Development of Local Wind Technologies in Mexico	3.0	5.5	33.7 <sup>c</sup>	Project was endorsed by the GEF CEO in December 2011. The project is under implementation.
3541	Russia Federation	UNIDO	Phase-out of HCFCs and Promotion of HFC-free Energy Efficient Refrigeration and Air-Conditioning Systems in the Russian Federation through Technology Transfer	3.0	20.0	40.0 <sup>c</sup>	The project was endorsed by the GEF CEO in August 2010. The project is under implementation.
4055	Senegal	UNDP	Typha-based Thermal Insulation Material Production in Senegal	2.3	2.3	5.6 <sup>c</sup>	The project was endorsed by the GEF CEO in August 2012. The project is under implementation.
4114	Sri Lanka	UNIDO	Bamboo Processing for Sri Lanka	2.7	2.7	21.3 <sup>c</sup>	The project was endorsed by the GEF CEO in April 2012. The project is under implementation.
4037	Thailand	UNIDO	Overcoming Policy, Market and Technological Barriers to Support Technological Innovation and South-South Technology Transfer: The Pilot Case of Ethanol Production from Cassava	3.0	3.0	31.6 <sup>c</sup>	The project was endorsed by the GEF CEO in March 2012. The project is under implementation.
4032	Turkey, Cook Islands	UNIDO	Realizing Hydrogen Energy Installations on Small Island through Technology Cooperation	3.0	3.0	3.5 <sup>b</sup>	The project was cancelled in March 2012 upon request from the Agency following changes in the concerned governments' priorities.
<b>TOTAL</b>				<b>36.9</b>	<b>58.6</b>	<b>241.4</b>	
<b>Total (cancelled projects excluded)</b>				<b>30.1</b>	<b>51.6</b>	<b>228.8</b>	

<sup>a</sup> Includes Agency fees and project preparation grants

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

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

## Appendix 4. Climate change technology transfer projects supported in line with the Long-Term Program on Technology Transfer

This Annex lists the Piloting Priority Technology Projects approved by the GEF during the reporting period (July 2014 to March 2015) to Foster Innovation and Investments.

Table 4

### Climate change mitigation technology transfer projects supported in line with the Long-Term Program on Technology Transfer during the reporting period (July 2014 to March 2015)

<i>Country</i>	<i>Agency</i>	<i>Title</i>	<i>GEF Amount (\$ millions)</i>	<i>Co- financing (\$ millions)</i>	<i>Total (\$ millions)</i>
Benin	AfDB	Improving Mobility in Parakou	1.8	107.2	109.0
China	UNIDO	Upgrading of China SHP Capacity Project	8.9	60.0	68.9
Global	World Bank	The International Lighting Efficiency Facility (iLEF)	1.2	50.3	51.5
Ukraine	EBRD	Finance and Technology Transfer Centre for Climate Change (FINTECC)	7.0	45.1	52.1
<b>Total</b>			<b>18.9</b>	<b>262.6</b>	<b>281.5</b>

Note: The above projects contribute to objective 1 of the GEF-6 climate change mitigation strategy on Table 2 in the main report.

Table 5

### Climate change adaptation technology transfer projects supported in line with the Long-Term Program on Technology Transfer during the reporting period (July 2014 to March 2015)

<i>Country</i>	<i>Agency</i>	<i>Title</i>	<i>LDCF/SCCF Amount (\$ millions)</i>	<i>Co- financing (\$ millions)</i>	<i>Total (\$ millions)</i>
Angola	FAO	Integrating Climate Resilience into Agricultural and Agropastoral Production Systems through Soil Fertility Management in Key Productive and Vulnerable Areas Using the Farmers Field School Approach	7.5	25.3	32.8
Chile	FAO	Strengthening the Adaptive Capacity to Climate Change in the Fisheries and Aquaculture Sector	2.9	15.6	18.5
Comoros	UNEP	Building Climate Resilience through Rehabilitated Watersheds, Forests and Adaptive Livelihoods	5.7	12.6	18.3
Costa Rica	UNDP	Strengthening Capacities of Rural Aqueduct Associations' (ASADAS) to Address Climate Change Risks in Water Stressed Communities of Northern Costa Rica	5.6	26.8	32.4
Egypt	IFAD	Integrated Management and Innovation in Rural Settlements	8.6	40.0	48.6
Eritrea	UNDP	Mainstreaming Climate Risk Considerations in Food Security and IWRM in Tsilima Plain	10.0	27.5	37.5
Gambia	FAO	Adapting Agriculture to Climate Change in the Gambia	7.1	21.8	28.9
Global	UNDP, UNEP	Expanding the Ongoing Support to Least Developed Countries (LDC) with Country-driven Processes to Advance National Adaptation Plans (NAPs)	7.0	8.4	15.4
Mali	UNDP	Flood Hazard and Climate Risk Management to Secure Lives and Assets in Mali	9.9	27.0	36.9



Morocco	EBRD	Enhancing the climate resilience of the Moroccan ports sector	7.0	48.9	55.9
Myanmar	FAO	FishAdapt: Strengthening the Adaptive Capacity and Resilience of Fisheries and Aquaculture-dependent Livelihoods in Myanmar	6.7	12.4	19.1
Regional (Somalia, Sudan)	AfDB	Rural livelihoods' adaptation to climate change in the Horn of Africa -Phase II (RLACC II)	18.4	30.0	48.4
Regional (Bhutan, Cambodia, Lao PDR, Myanmar)	UNEP	Building Climate Resilience of Urban Systems through Ecosystem-based Adaptation (EbA) in the Asia-Pacific region	6.7	8.7	15.4
Sudan	UNEP	Enhancing the resilience of communities living in climate change vulnerable areas of Sudan using Ecosystem Based approaches to Adaptation (EbA)	4.8	11.1	15.9
Tanzania	UNEP	Ecosystem-Based Adaptation for Rural Resilience	8.4	21.6	30.0
Timor Leste	UNDP	Building Shoreline Resilience of Timor Leste to Protect Local Communities and' their Livelihoods	7.8	27.5	35.3
Turkmenistan	UNDP	Supporting Climate Resilient Livelihoods in Agricultural Communities in Drought-prone Areas	3.5	20.0	23.5
Viet Nam	ADB	Promoting Climate Resilience in Viet Nam Cities	5.2	124.0	129.2
<b>Total</b>			<b>132.8</b>	<b>509.2</b>	<b>642.0</b>

Note; The above projects contribute to objective 1 of the LDCF/SCCF strategy on Table 3 in the main report.