

Global Environment Facility

November 5, 2009

IMPLEMENTATION OF THE POZNAN STRATEGIC PROGRAM ON TECHNOLOGY TRANSFER: AN INTERIM REPORT OF THE GEF TO THE SUBSIDIARY

BODY FOR IMPLEMENTATION AT ITS THIRTY-FIRST SESSION

- 1. The Conference of the Parties to the United Nations Framework Convention on Climate Change at its fourteenth session (COP 14) welcomed the Global Environment Facility's (renaming it the Poznan) Strategic Program on Technology Transfer as a step toward scaling up the level of investment in the transfer of environmentally sound technologies to developing countries while recognizing the contribution that this program could make to enhancing technology transfer activities under the Convention.
- 2. Decision 2/CP.14 on development and transfer of technologies requested the GEF to report to the COP at its sixteenth session (COP 16) on the process made in carrying out the activities listed below and to provide interim reports to the Subsidiary Body for Implementation at its thirtieth and thirty-first sessions (SBI 30 and SBI 31):
 - (a) To promptly initiate and expeditiously facilitate the preparation of projects for approval and implementation under the strategic program;
 - (b) To collaborate with the GEF Agencies in order to provide technical support to developing countries in preparing or updating their technology needs assessments; and
 - (c) To consider the long-term implementation of the strategic program.
- 3. Subsequent to the progress report presented by the GEF to SBI 30, the present report provides an update to SBI 31 on GEF progress between May and November 2009 in implementing the Poznan Strategic Program on Technology Transfer, covering the following three areas: (1) technology needs assessments (TNAs), (2) technology transfer pilot projects, and (3) long-term implementation of the strategic program.

Technology Needs Assessments

- 4. Following the approval of the TNA project concept by the LDCF/SCCF Council in April 2009 (which was reported by the GEF to SBI 30), UNEP as the GEF Agency developed a full project document, which was endorsed by the GEF CEO in September 2009. Project implementation by UNEP started in October 2009 and is scheduled for completion within 30 months.
- 5. The TNA project will provide targeted financial and technical support to assist 35 to 45 developing countries in developing and/or updating their TNAs within the framework of Article 4.5 of the UNFCCC. The project will use methodologies in the updated TNA Handbook. The full project document is available at the GEF website: http://www.thegef.org/uploadedFiles/Focal Areas/Climate Change (PDF DOC)/SCCF 1/Global 08-18-09 Technology Needs Assessmt.pdf.
- 6. The outcomes of this new round of TNAs will be robust and concrete, going beyond identifying technology needs narrowly. They will lead to the development of national technology action plans for prioritized technologies and will facilitate identification of good technology transfer projects that can be linked to relevant financing sources. In the meantime, in order to expedite the implementation of the Poznan

Strategic Program in its entirety, the GEF is supporting a technology transfer pilot window (see below) in parallel with the TNA activities.

Technology Transfer Pilot Projects

- 7. In response to the Call for Proposals for technology transfer pilot projects issued in March 2009 by the GEF CEO and closing in September 2009, a total of 39 proposals were submitted to the GEF Secretariat. These proposals requested a total of \$102 million of GEF funding, including \$81 million from the technology transfer window. These requests far exceeded the amount of GEF funding available for technology transfer pilot projects.
- 8. Based on the selection criteria in the Call for Proposals, 14 proposals of technology transfer pilot projects were prioritized for funding, including one medium-sized project (\$1 million or under) and 13 full-sized projects (above \$1 million). Total GEF resources requested for these 14 projects amount to \$36.8 million from the GEF technology transfer window under the Poznan Strategic Program, with additional \$21.2 million requested from the GEF Trust Fund. Total GEF funding for the 14 pilot projects amounts to \$58 million, and total co-financing for these projects comes to more than \$195 million.
- 9. The technologies targeted by the proposed projects for development and transfer are diverse and innovative. They include technologies on renewable energy (solar, biomass, wind, hydrogen storage of renewable energy, and wave), energy efficiency (insulation materials and efficient and HFC-free appliances), transport ("green" trucks), composting, carbon capture and storage from sugar fermentation, and membrane drip irrigation (for adaptation). The proposals come from 16 countries in Africa, East Asia and the Pacific, South Asia, Latin America and the Caribbean, and Europe and Central Asia. The full list of selected projects is given in Annex 1 attached to this report. The project proposals are available at the GEF website: http://thegef.org/interior_right.aspx?id=17146.
- 10. Five examples of the technology transfer pilot projects to be financed by the GEF are highlighted below.
 - (1) Brazil: Renewable CO₂ Capture and Storage (CCS) from Sugar Fermentation Industry in Sao Paulo State. This project will support the demonstration of CCS of CO₂ emitted from sugar fermentation at a sugar/ethanol mill. The technology can make a significant contribution to the GHG balance of ethanol-based fuels and has the potential of capturing 23 million tons of CO₂ a year in Brazil.
 - (2) Mexico: Development of Local Wind Technologies. The project aims to expand Mexico's wind generation capacity by enabling local development and implementation of wind technologies. The project will structure a value chain for the production of goods and services at the national level; consolidate the

technical capabilities for the design, manufacturing, testing, and certification; establish industrial capabilities for the production of wind turbines; and promote wind power application through distributed generation by small power producers. The project will contribute to avoidance of 1 to 2 million tons of CO_2 over the next 10 years.

- (3) Cook Islands and Turkey: Installing Hydrogen Energy on Small Islands through Technology Cooperation. This demonstration project will support the erection and operation of two renewables-to-hydrogen energy installations on Cook Islands as well as one island in Turkey. Technologies and knowhow will be transferred from wind-hydrogen installations in Norway and Greece. The project will disseminate the technologies and implementation experience to other small islands, where grid integration of renewable energy and storage of excess energy is crucial.
- **(4) Cambodia: South-South Transfer of Sustainable Biomass Energy Technologies.** This project will carry out a South-South technology transfer to replace fossil-fuel use for power generation and industrial applications. The project will finance the installation of two 3-5 MW pilot plants using rice husks and crude palm oil waste, and will disseminate the technologies and knowhow to potentially 500 establishments in Cambodia. The technologies to be employed will come from the neighboring countries such as India, China, Malaysia, and Thailand.
- (5) China: Green Truck Demonstration. The project aims to demonstrate "green truck" technologies in Guangdong Province. The technologies and practices, which have been tested by a pilot project and verified by the U.S. Environmental Protection Agency and the European Union, include improved aerodynamics, improved tire systems, enhanced truck maintenance, driver training on fuel efficiency, and improved logistics management. Most of the suppliers of these technologies are foreign, and very few of them have started production in China. On average, these technologies are expected to lead to 20 percent reduction in fuel usage in existing and new trucks. Through this project, a total of 2.5 million tons of CO₂ will be reduced over the next eight years.

Long-Term Implementation of the Strategic Program

11. In keeping with the COP 14 decision that requested the GEF to consider the long-term implementation of the strategic program on technology transfer, the GEF has identified technology transfer as a long-term priority in the climate change focal area. Linking to the replenishment of the GEF Trust Fund, the GEF Secretariat is currently finalizing a climate change strategy for the fifth replenishment of the GEF from 2010 to 2014, in consultation with the Technical Advisory Group, GEF STAP, GEF Agencies, and other stakeholders.

12. Drawing on the experience of implementing the Poznan Strategic Program on Technology Transfer and on the success of the Call for Proposals for technology transfer pilot projects, the draft climate change strategy for GEF-5 has featured prominently support for technology transfer at various stages of the technology development cycle, from demonstration of innovative, emerging low-carbon technologies to diffusion of commercially proven, environmentally sound technologies and practices. Furthermore, the GEF will step up its efforts to engage the private sector during GEF-5, and climate change is the key focal area which has presented the greatest experience and opportunities to leverage private sector investments for the protection of the global environment. The latest version of the GEF-5 Programming Document and the GEF-5 Climate Change Strategy is available at the GEF website:

http://thegef.org/interior.aspx?id=27392.

Annex 1: List of Prioritized Technology Transfer Pilot Projects

Annex 1: List of Prioritized Technology Transfer Pilot Projects						
Country	GEF Agency	Title	TT Fund* ('000\$)	Other GEF* ('000\$)	Total GEF* ('000\$)	Co- financing ('000\$)
Brazil	UNDP	Renewable CO ₂ Capture and Storage from Sugar Fermentation Industry in Sao Paulo State	2,970	-	2,970	7,715
Cambodia	UNIDO	CC related TT for Cambodia: Using Agricultural Residue Biomass for Sustainable Energy Solutions	1,947	-	1,947	3,965
Chile	IADB	Promotion and Development of Local Solar Technologies in Chile	3,000	-	3,000	32,400
China	World Bank	Green Truck Demonstration Project	2,998	1,870	4,868	17,400
Colombia, Kenya	World Bank	Solar Chill: Commercialization and Transfer	2,995	-	2,995	5,050
Cote d'Ivoire	AfDB	Construction of 1000 Ton per day Municipal Solid Wastes Composting Unit in Akouedo Abidjan	2,888	-	2,888	36,899
Jamaica	UNDP	Introduction of Renewable Wave Energy Technologies for the Generation of Electric Power in Small Coastal Communities	816	-	816	1,420
Jordan	IFAD	dHRS Irrigation Technology Pilot Project to Face CC Impact	2,200	-	2,200	6,000
Mexico	IADB	Promotion and Development of Local Wind Technologies in Mexico	3,000	2,500	5,500	18,600
Russia	UNIDO	Phase out of HCFCs and Promotion of HFC-free Energy Efficient Refrigeration and Air- Conditioning Systems in the Russian Federation through Technology Transfer	2,970	16,830	19,800	40,000
Senegal	UNDP	Typha-based Thermal Insulation Material Production in Senegal	2,310	-	2,310	3,400
Sri Lanka	UNIDO	Bamboo Processing for Sri Lanka	2,700	-	2,700	10,700
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	2,970	-	2,970	8,340
Turkey, Cook Islands	UNIDO	Realizing Hydrogen Energy Installations on Small Island through Technology Cooperation	3,000	-	3,000	3,500
Total		<u> </u>	36,763	21,200	57,963	195,389

^{*} Including agency fee and project preparation grants (if any).