

GEF/ME/C.52/Inf. 04/B May 03, 2017

52<sup>nd</sup> GEF Council Meeting May 23 – 25, 2017 Washington, D.C.

# **EVALUATION OF GEF'S ENGAGEMENT WITH THE PRIVATE SECTOR**

# **VOLUME II: ANNEXES**

(Prepared by the Independent Evaluation Office of the GEF)

#### TABLE OF ANNEX

Annex I: Terminal Evaluation Review Instrument	1
Annex II: List of Private Sector Projects	3
Annex III: Survey and Interview respondents	21
Annex IV. Role of Semi-public development and Environmental Finance Institutions	24
Annex V. Methodology for Figure 8	35
Annex VI: Climate Finance Fund Comparative Table	37
Annex VII: Bilateral and Regional Agencies Providing Environment-Related Financing	41
Annex VIII. Guidance from the Conventions	43
Annex IX: List of Non-Grant Projects	48
Annex X: GEF/IFC Earth Fund (EF) Platform	51

	Question	Reponses Choices
1	Is there at least minimal evidence for private sector engagement in this project?	Yes, No
2	Provide the names of up to 6 private sector firms or companies appearing as participants in this project. If there are more than 6, select those that are most involved in the project. For entities not names, enter "Unspecified Private Sector Firm, Enterprise, Bank, etc."	Open ended response.
3	Classify the same 6 private sector entities, based on evidence in the TE, by project role and type of entity.	Role: Executing Agency, Co-financier, Beneficiary, Implementing Partner, Other, Unable to Assess (UA) Type: Multinational corporation, National corporation, SME, Individual/Entrepreneur, Capital provider, Financial intermediary, Market Facilitator, Unable to Assess (UA)
4	What was the total co-financing amount from private sector entities?	None, 0-10K, 11-50K, 51-100K, 101-500K, 501- 1M, Over 1M, UA
5	Which of the five intervention models described above best describes this project's approach to private sector engagement?	<ol> <li>Enabling policy environments</li> <li>Strengthening institutional capacity</li> <li>Specialized financial instruments</li> <li>Demonstrating innovative approaches</li> <li>Multi-stakeholder alliances</li> </ol>
6	What strategies did the project use to engage the private sector?	<ol> <li>Unable to assess (UA)</li> <li>Subsidy/Grant to private companies</li> <li>Public-Private Partnerships</li> <li>Public-Private Alliances</li> <li>Cooperatives/Joint Ownership Enterprises</li> <li>Indirect engagement</li> <li>Direct engagement</li> <li>No strategy</li> <li>Other (please specify)</li> </ol>
7	Was a private sector firm or entity consulted or formally included in the project design process?	Yes, No, Unable to Assess (UA)
8	What types of government entities participated in this project?	<ol> <li>Local or state government office/agency</li> <li>National government agency or national ministry</li> <li>Regional (multi-national) coordinating commission</li> <li>Other (please specify)</li> </ol>

9	What was the role of government entities in this project?	<ol> <li>Unable to assess</li> <li>Executing Agency (either sole or in collaboration)</li> <li>Co-financier</li> <li>Implementing partner</li> <li>Beneficiary</li> <li>No government involvement</li> </ol>
10	Do the key lessons learned address any of the following issues?	<ol> <li>Capacity to Execute the Project</li> <li>Stakeholder Engagement</li> <li>Country Ownership or Alignment to</li> <li>National and Regional Priorities</li> <li>Funding and Financial Planning</li> <li>Capacity Building</li> <li>Effects on Local Population</li> <li>Baseline Information</li> <li>Legal and Institutional Framework</li> </ol>
11	Do any key lessons learned have implications for private sector engagement?	Open ended response.
12	Summarize additional information about the role of private sector in this project.	Open ended response.
13	Which project evaluation documents were consulted in answering this questionnaire?	<ol> <li>Terminal Evaluation Report (TE)</li> <li>GEF EO Terminal Evaluation Report (TER)</li> <li>Other (please specify)</li> </ol>

#### **ANNEX II: LIST OF PRIVATE SECTOR PROJECTS**

GEF ID	Title	GEF Project Cycle	Categorized by Intervention Models	Performance Rated in APR2015
8	Rural Energy	GEF - 2	No	Yes
13	Removal of Barriers to Biomass Power Generation and Co-generation	GEF - 2	No	Yes
20	Conservation Planning for Biodiversity in the Thicket Biome	GEF - 2	No	Yes
27	Creation and Strengthening of the Capacity for Sustainable Renewable Energy Development in Central America	GEF - 2	No	Yes
59	Ship-Generated Waste Management	Pilot	No	Yes
67	Coal-to-Gas Project	Pilot	No	Yes
76	Alternate Energy	Pilot	No	No
91	Small and Medium Scale Enterprise Program (IFC)	GEF - 1	No	No
96	Efficient Lighting Project (PELP)	GEF - 1	No	No
104	Energy Services Delivery	GEF - 1	No	No
111	Energy Efficiency Co-Financing Program	GEF - 1	No	No
112	Photovoltaic Market Transformation Initiative (IFC)	GEF - 1	No	Yes
118	Sustainable and Participatory Energy Management	GEF - 1	No	Yes
119	Solar Home Systems (SHS)	GEF - 1	No	Yes
126	Brazilian Biodiversity Fund	Pilot	No	Yes
135	Small and Medium Scale Enterprise Program (IFC, first replenishment)	GEF - 1	No	No
267	Energy Efficiency Improvements and Greenhouse Gas Reductions	GEF - 1	No	Yes
295	Uganda photovoltaic pilot project for rural electrification	GEF - 1	No	No
314	A Program for Rural Electrification with Renewable Energy Using the Popular Participation Law	GEF - 1	No	Yes
325	Coal Bed Methane Capture and Commercial Utilization	GEF - 1	No	Yes
369	Building Capacity in the Maghreb to Respond to the Challenges and Opportunities Created by National Response to the Framework Convention on Climate Change	Pilot	No	No
371	Decentralized Wind Electric Power for Social and Economic Development (Alizes Electriques)	Pilot	No	Yes
376	Control of Greenhouse Gas Emissions through Energy Efficient Building Technology in West Africa	Pilot	No	Yes
377	Community Based Rangeland Rehabilitation for Carbon Sequestration	Pilot	No	Yes
386	Optimizing Development of Small Hydel Resources in Hilly Areas	Pilot	No	Yes
391	Fuel Efficiency in the Road Transport Sector	Pilot	No	Yes
398	Pollution Control and Other Measures to Protect Biodiversity in Lake Tanganyika	Pilot	No	Yes

407	Inventory, Evaluation and Monitoring of Botanical Diversity in Southern Africa: A Regional Capacity and Institution Building Network	GEF - 1	No	Yes
444	Energy and Water Sector Reform and Development	GEF - 1	No	Yes
448	Industrial Energy Efficiency Improvement Project	GEF - 1	No	Yes
449	Photovoltaic-Based Rural Electrification in Peru	GEF - 1	No	Yes
466	Promotion of Biodiversity Conservation within Coffee Landscapes	GEF - 1	No	Yes
490	Kibale Forest Wild Coffee Project	GEF - 2	No	Yes
519	Efficient Lighting Initiative (Tranche I)	GEF - 2	No	No
540	Building Chiller Replacement Program	GEF - 2	No	Yes
569	Efficient Street Lighting Program	GEF - 2	No	Yes
570	Energy Efficiency Market Development	GEF - 2	No	Yes
571	Low-Cost/Low-Energy Buildings in the Czech Republic	GEF - 2	No	Yes
590	Elimination of Ozone Depleting Substances in the Production of Household Refrigerators and Freezers	GEF - 1	No	No
610	Removal of Barriers to the Effective Implementation of Ballast Water Control and Management Measures in Developing Countries	GEF - 2	No	Yes
611	Redirecting Commercial Investment Decisions to Cleaner Technologies – A Technology Transfer Clearinghouse	GEF - 2	No	Yes
622	Energy Conservation and GHG Emission Reduction in Chinese Township and Village Enterprises (TVE), Phase II	GEF - 2	No	Yes
636	Barrier Removal for Cross Sectoral Energy Efficiency	GEF - 2	No	Yes
641	Barrier Removal to Renewable Energy Programme	GEF - 2	No	No
644	El Triunfo Biosphere Reserve: Habitat Enhancement in Productive Landscapes	GEF - 2	No	Yes
646	Market Development for Solar Water Heaters	GEF - 2	No	Yes
652	CEPALCO Distributed Generation PV Power Plant	GEF - 2	No	No
658	Removing Barriers to the Increased Use of Biomass as an Energy Source	GEF - 2	No	Yes
660	Barrier Removal to Secure PV Market Penetration in Semi-Urban Sudan	GEF - 2	No	No
671	Ecomarkets	GEF - 2	No	Yes
773	Caribbean Archipelago Biosphere Reserve: Regional Marine Protected Area System	GEF - 2	No	Yes
784	Methane Capture and Use (Landfill Demonstration Project	GEF - 2	No	Yes
786	Krakow Energy Efficiency Project	GEF - 2	No	Yes
819	Fuel Cell Bus and Distributed Power Generation Market Prospects and Intervention Strategy Options	GEF - 2	No	No
840	Caribbean Renewable Energy Development Programme	GEF - 2	No	Yes
843	Removal of Barriers to Rural Electrification with Renewable Energy	GEF - 2	No	Yes
844	Valdivian Forest Zone: Private-Public Mechanisms for Biodiversity Conservation	GEF - 2	No	Yes
847	Renewable Energy and Forest Conservation: Sustainable Harvest and Processing of Coffee and Allspice	GEF - 2	No	Yes

851	Expedited financing for (interim) measures for capacity building in priority areas.	GEF - 2	No	No
857	Renewable Energy Systems in the Peruvian Amazon Region (RESPAR)	GEF - 2	No	Yes
868	Establishment of Private Natural Heritage Reserves in the Brazilian Cerrado	GEF - 2	No	Yes
882	Removing Barriers to Improving Energy Efficiency of the Residential and Service Sectors	GEF - 2	No	Yes
883	Energy Efficiency Project	GEF - 2	No	Yes
920	Technology Transfer Networks, Phase 1	GEF - 2	No	Yes
922	Baltic Sea Regional Project, Tranche 1	GEF - 2	No	Yes
935	Barrier Removal to Namibian Renewable Energy Programme, Phase I	GEF - 2	No	No
938	Power and Communications Sectors Modernization and Rural Services Project (PROMEC)	GEF - 2	No	Yes
941	Demonstration of Fuel Cell Bus Commercialization in China (Phase II-Part I)	GEF - 2	No	Yes
944	Energy Efficiency Project	GEF - 2	No	Yes
948	Vilnius Heat Demand Management Project	GEF - 2	No	Yes
966	End Use Energy Efficiency Project	GEF - 3	No	Yes
967	Private Sector Led Development of On-Grid Wind Power in Tunisia	GEF - 3	No	Yes
1016	Development of National Implementation Plans for the Management of Persistent Organic Pollutants (POPs)	GEF - 2	No	Yes
1061	Inka Terra: An Innovative Partnership for Self-Financing Biodiversity Conservation & Community Development	GEF - 3	No	Yes
1084	Caribbean: Mainstreaming Adaptation to Climate Change	GEF - 2	No	Yes
1089	Asian Conservation Company (ACC)	GEF - 2	No	Yes
1096	Energy Management and Performance Related Energy Savings Scheme (EMPRESS)	GEF - 3	No	Yes
1103	Efficient Lighting Market Transformation Project	GEF - 3	No	Yes
1137	Promoting the Use of Renewable Energy Resources for Local Energy Supply	GEF - 3	No	Yes
1144	Komodo National Park Collaborative Management Initiative	GEF - 2	No	Yes
1158	Energy Reform and Access Project	GEF - 2	No	Yes
1196	Transformation of the Rural Photovoltaics (PV) Market	GEF - 3	No	Yes
1198	Biomass Energy for Heating and Hot Water Supply	GEF - 3	No	Yes
1199	Removal of Barriers to Biomass Power Generation, Part I	GEF - 3	No	No
1209	Rural Electrification and Renewable Energy Development	GEF - 2	No	Yes
1237	Energy Conservation Project, Phase II	GEF - 2	No	Yes
1245	Renewable Energy-based Rural Electrification	GEF - 3	No	Yes
1264	Capacity Building to Remove Barriers to Renewable Energy Development	GEF - 2	No	Yes
1265	Polish Energy Efficiency Motors Programme	GEF - 2	No	Yes
1281	Solar and Wind Energy Resource Assessment	GEF - 2	No	Yes
1291	Renewable Energy Resources Project	GEF - 2	No	Yes

1310	Building Wider Public and Private Constituences for the GEF in Latin America and the Caribbean: Regional Promotion of Global Environment Protection through the	GEF - 2	No	Yes
1010	Electronic Media	055.0	No	No
1316	Energy Efficiency Co-Financing Program 2 (HEECP2)	GEF - 2	No	No
1335	Bioenergy for Sustainable Rural Development	GEF - 3	No	No
1358	Renewable Energy-based Electricity Generation for Isolated Mini-grids	GEF - 3	No	Yes
1361	Generation and Delivery of Renewable Energy Based Modern Energy Services in Cuba; the case of Isla de la Juventud	GEF - 3	No	Yes
1397	Private Land Mechanisms for Biodiversity Conservation in Mexico	GEF - 2	No	Yes
1413	Energy Efficiency Measures in the Honduran Commercial and Industry Sectors	GEF - 3	No	Yes
1430	Support for the Implementation of the Stockholm Convention on Persistent Organic Pollutants	GEF - 2	No	Yes
1439	Efficient Lighting Initiative (ELI)	GEF - 2	No	No
1471	Improving Management of NGO and Privately Owned Nature Reserves and High Biodiversity Islands in Seychelles	GEF - 3	No	Yes
1491	Lalkisale Biodiversity Conservation Support Project	GEF - 3	No	No
1532	Electric Cooperative System Loss Reduction Project	GEF - 3	No	Yes
1541	Commercializing Energy Efficiency Finance (CEEF) - Tranche I	GEF - 2	No	No
1558	Obtaining Biofuels and Non-wood Cellulose Fiber from Agricultural Residues/Waste	GEF - 2	No	Yes
1571	EcoEnterprises Fund	GEF - 2	No	Yes
1591	Regional Program of Action and Demonstration of Sustainable Alternatives to DDT for Malaria Vector Control in Mexico and Central America	GEF - 2	No	Yes
1609	Renewable Energy Enterprise Development - Seed Capital Access Facility	GEF - 3	No	No
1646	Cost Effective Energy Efficiency Measures in the Russian Educational Sector	GEF - 2	No	Yes
1685	FC-1: Fuel Cells Financing Initiative for Distributed Generation Applications (Phase 1)	GEF - 3	No	No
1702	Rehabilitation and Expansion of Small Hydro-Plants on the River Raba in Hungary	GEF - 3	No	Yes
1735	Conservation of Dry Forest and Coastal Biodiversity of the Pacific Coast of Southern Nicaragua: Building Private- Public Partnerships	GEF - 3	No	Yes
1794	Removing Obstacles to Direct Private-Sector Participation in In-situ Biodiversity Conservation	GEF - 3	No	Yes
1838	Energy and Environment Upgrading of the Industrial Park of Sidi Bernoussi Zenata, Casablanca	GEF - 3	No	Yes

1839	Private Sector/GEF Co-financing of Global Warming Mitigation in Cameroon through Biomass Conservation, Restoration	Pilot Phase	No	No
1859	Conservation of the Eg-Uur Watershed	GEF - 3	No	Yes
1897	Building Integrated Photovoltaic (BIPV) Technology Application Project	GEF - 3	No	No
1899	Regional Programme on Electrical Energy Efficiency in Industrial and Commercial Service Sectors in Central America	GEF - 3	No	Yes
1900	Large Scale Renewable Energy Development Project	GEF - 3	No	No
1904	Small Scale Hydro Power Development in Haiti	GEF - 4	No	No
1905	Development of an Energy Efficiency Program for the Industrial Sector for Tunisia	GEF - 3	No	Yes
1916	Marine Aquarium Market Transformation Initiative (MAMTI)	GEF - 3	No	No
2000	Environmental Business Finance Program (EBFP)	GEF - 3	No	No
2105	Conservation and Sustainable Use of Biodiversity in the Dalmatian Coast through Greening Coastal Development	GEF - 3	No	Yes
2108	Philippines Sustainable Energy Finance Program	GEF - 3	No	No
2111	Russian Sustainable Energy Finance Program	GEF - 3	No	Yes
2117	Energy Efficiency Project	GEF - 3	No	Yes
2119	African Rift Geothermal Development Facility (ARGeo)	GEF - 3	No	No
2129	Demonstrating and Capturing Best Practices and Technologies for the Reduction of Land-sourced Impacts Resulting from Coastal Tourism	GEF - 3	No	Yes
2138	Livestock Waste Management in East Asia	GEF - 3	No	Yes
2139	SIP: Transboundary Agro-Ecosystem Management Programme for the Kagera River Basin (Kagera TAMP)	GEF - 4	No	No
2174	Commercializing Energy Efficiency Finance (CEEF) - Tranche II	GEF - 2	No	Yes
2188	East Asian Seas Region: Development and Implementation of Public Private Partnerships in Environmental Investments	GEF - 3	No	Yes
2194	Developing the Legal and Regulatory Framework for Wind Power in Russia	GEF - 3	No	Yes
2244	Building the Local Capacity for Promoting Energy Efficiency in Private and Public Buildings	GEF - 3	No	Yes
2256	Barrier Removal to Namibian Renewable Energy Programme (NAMREP), Phase II	GEF - 3	No	Yes
2355	Agricultural Productivity and Sustainable Land Management	GEF - 3	No	No
2376	Renewable Energy Project (RREP)	GEF - 4	No	No
2423	Assessment of Existing Capacity and Capacity Building Needs to Analyze POPs in Developing Countries	GEF - 3	No	Yes
2489	Rural Infrastructure (Electrification Sector)	GEF - 3	No	No
2531	Sustainable Energy Program	GEF - 3	No	Yes
2538	Assessment of Risk Management Instruments for Financing Renewable Energy	GEF - 3	No	Yes

2554	Energy Efficiency Codes in Residential Buildings and Energy Efficiency Improvement in Commercial and	GEF - 3	No	Yes
	Hospital Buildings in Morocco			
2555	Promotion of a Wind Power Market	GEF - 3	No	No
2589	Institutionalizing Payments for Ecosystem Services	GEF - 3	No	Yes
2607	Rural Electrification	GEF - 3	No	No
2611	Integrated Energy Services for Small Localities of Rural Mexico	GEF - 3	No	No
2618	Biodiversity and Agricultural Commodities Program (BACP), Phase 1	GEF - 3	No	Yes
2619	Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation	GEF - 3	No	No
2624	China Utility-Based Energy Efficiency Finance Program (CHUEE)	GEF - 3	No	Yes
2670	Central American Markets for Biodiversity (CAMBio): Mainstreaming Biodiversity Conservation and Sustainable use within Micro, Small and Medium-sized Enterprise Development and Financing	GEF - 3	No	No
2806	Promoting Payments for Environmental Services (PES) and Related Sustainable Financing Schemes in the Danube Basin	GEF - 4	No	Yes
2820	Supporting the Development and Implementation of Access and Benefit Sharing Policies in Africa	GEF - 4	No	No
2870	Market Transformation for Efficient Biomass Stoves for Institutions and Small and Medium-Scale Enterprises	GEF - 3	No	Yes
2886	Energy Development and Access Project (formerly) Development of Renewable Energy and Energy Efficiency	GEF - 3	No	No
2889	Zambezi Valley Market Led Smallholder Development	GEF - 3	No	No
2900	GEF- Development Marketplace Partnership	GEF - 3	No	No
2918	Sustainable Energy Development Project (SEDP)	GEF - 3	No	No
2926	Environmentally Sound Management and Disposal of Obsolete POPs Pesticides and Other POPs Wastes	GEF - 4	No	No
2939	Solar Water Heating Market Transformation and Strengthening Initiative, Phase 1	GEF - 3	No	No
2941	Market Transformation for Energy Efficiency in Buildings	GEF - 4	No	No
2944	Sustainable Energy Financing	GEF - 3	No	No
2950	Lighting the "Bottom of the Pyramid"	GEF - 3	No	No
2996	Portfolio Approach to Distributed Generation Opportunity (PADGO) (Phase 1)	GEF - 3	No	Yes
3000	SFM: Sustainable Management of the Miombo Woodland Resources of Western Tanzania	GEF - 4	No	No
3005	CleanTech Fund	GEF - 3	No	No
3020	FC-1: Sub-project 1st Group/Plug Power - under the Global Fuel Cells Financing Initiative for Distributed Generation Applications (Phase 1)	GEF - 3	No	No
3022	FC-1: Sub-project 1st Group/Plug Power - under the Global Fuel Cells Financing Initiative for Distributed Generation Applications (Phase 1)	GEF - 3	No	No
3156	Coping with Drought and Climate Change	GEF - 3	No	No

	Pollution Reduction through Improved Municipal		No	Yes
3181	Wastewater Management in Coastal Cities in ACP Countries with a Focus on SIDS	GEF - 3		
3243	Climate Change Adaptation Project, Phase I	GEF - 4	No	No
3282	Establishment of PCB Waste Management and Disposal System	GEF - 4	No	No
3287	Community Based Adaptation to Climate Change through Coastal Afforestation	GEF - 4	No	No
3357	The GEF Earth Fund (formerly GEF Public-Private Partnership Fund)	GEF - 4	No	No
3359	Promoting Renewable Energy in Mae Hong Son Province	GEF - 4	No	No
3376	SIP: Private Public Sector Partnership on Capacity Building for SLM in the Shire River Basin	GEF - 4	No	No
3386	SIP: Innovations in Micro Irrigation for Dryland Farmers	GEF - 4	No	Yes
3418	Mainstreaming Biodiversity Management into Medicinal and Aromatic Plants Production Processes	GEF - 4	No	Yes
3445	SFM: Integrated Community-based Forest and Catchment Management through an Ecosystem Service Approach (CBFCM)	GEF - 4	No	No
3461	Promoting Sustainable Transport Solutions for East Africa	GEF - 4	No	No
3470	SLEM/CPP: Sustainable Rural Livelihood Security through Innovations in Land and Ecosystem Management	GEF - 4	No	No
3540	Industrial Energy Efficiency in Key Sectors	GEF - 4	No	No
3541	TT-Pilot (GEF 4): Phase Out HCFCs and Promotion of HFC- free Energy Efficient Refrigeration and Air-Conditioning Systems in the Russian Federation Through Technology Transfer	GEF - 4	No	No
3558	SP-SFIF: West Africa Regional Fisheries Program (WARFP)	GEF - 3	No	No
3565	Market Transformation of Energy Efficient Appliances in Turkey	GEF - 4	No	No
3597	RUS Improving Urban Housing Efficiency in the Russian Federation	GEF - 4	No	No
3626	PAS: The Micronesia Challenge : Sustainable Finance Systems for Island Protected Area Management - under the GEF Pacific Alliance for Sustainability	GEF - 4	No	No
3679	Economic Analysis of Adaptation Options in Support of Decision Making	GEF - 4	No	No
3732	Demonstration of BAT and BEP in Fossil Fuel-fired Utility and Industrial Boilers in Response to the Stockholm Convention on POPs	GEF - 4	No	No
3753	Sustainable Financing of the Protected Area System in Mozambique	GEF - 4	No	No
3766	Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW)	GEF - 4	No	No
3791	Energy Efficiency Standards and Labels in Peru	GEF - 4	No	No
3800	LGGE Policy Reforms and Market Transformation of the Energy Efficient Buildings Sector in the I.R. Iran	GEF - 4	No	No
3801	Strengthening the Implementation of the Biological Diversity Act and Rules with Focus on its Access and Benefit Sharing Provisions	GEF - 4	No	No

3803	Environmentally Sound Management of Medical Wastes in India	GEF - 4	No	No
3825	Mountains and Markets: Biodiversity and Business in Northern Pakistan	GEF - 4	No	No
3844	Sustainable Rural Biomass Energy	GEF - 4	No	No
3849	Improving the Financial Sustainability of the Carpathian System of Protected Areas	GEF - 4	No	Yes
3855	Strengthening the Implementation of Access to Genetic Resources and Benefit-Sharing Regimes in Latin America and the Caribbean	GEF - 4	No	No
3876	SPWA-CC: Promotion of Energy Efficiency Lighting in Public, Commercial and Residential Buildings	GEF - 4	No	No
3889	Mainstreaming biodiversity conservation through low- impact ecotourism in the SINAP	GEF - 4	No	No
3890	Vulnerability Assessment and Adaptation Programme for Climate Change in the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems	GEF - 4	No	No
3901	LGGE: Energy Efficiency in Public Buildings (EEPB)	GEF - 4	No	Yes
3908	CF Industrial Energy Efficiency for Malaysian Manufacturing Sector (IEEMMS)	GEF - 4	No	No
3921	Promoting Sustainable Energy Production and Use from Biomass in Pakistan	GEF - 4	No	No
3922	SPWA-CC: Promoting Renewable Energy Based Mini Grids for Productive Uses in Rural Areas in The Gambia	GEF - 4	No	No
3930	Energy Efficiency Standards and Labels in Colombia (S&L Colombia)	GEF - 4	No	No
3937	SPWA-CC: Promoting Mini Grids Based on Small Hydropower for Productive Uses in Sierra Leone	GEF - 4	No	No
3941	IND-BD Mainstreaming Coastal and Marine Biodiversity Conservation into Production Sectors in the Malvan Coast, Maharashtra State	GEF - 4	No	No
3946	Ensuring Financial Sustainability of the Protected Area System	GEF - 4	No	No
3947	Catalyzing Financial Sustainability of the PA System	GEF - 4	No	Yes
3951	Expanding FSC Certification at Landscape-level through Incorporating Additional Eco-system Services.	GEF - 4	No	No
3958	SPWA-CC: Promoting Development of Multi-purpose Mini-hydro Power Systems	GEF - 4	No	No
3959	SPWA-CC: Promoting renewable energy based mini-grids for rural electrification and productive uses	GEF - 4	No	No
3973	Armenia Energy Efficiency Project	GEF - 4	No	No
4000	PAS: Low Carbon-Energy Islands - Accelerating the Use of Energy Efficient and Renewable Energy Technologies in Tuvalu, Niue and Nauru	GEF - 4	No	No
4004	Mini-Grids Based on Small Hydropower Sources to Augment Rural Electrification	GEF - 4	No	No
4005	SPWA-CC: Promoting Renewable Energy-based Grids in Rural Communities for Productive Uses	GEF - 4	No	No
4020	Market Policy and Legislative Development for Mainstreaming the Sustainable Management of Marine and Coastal Ecosystems in Lebanon	GEF - 4	No	No

4027	Global Partnership with Fisheries Industry for the Sustainability of Living Aquatic Resources	GEF - 4	No	Yes
4035	MENARID: Ecotourism and Conservation of Desert Biodiversity	GEF - 4	No	No
4037	TT-Pilot (GEF-4): Overcoming Policy, Market and Technological Barriers to Support Technological Innovation and South-South Technology Transfer: The Pilot Case of Ethanol Production from Cassava	GEF - 4	No	No
4042	TT-Pilot (GEF-4): Climate Change Related Technology Transfer for Cambodia: Using Agricultural Residue Biomass for Sustainable Energy Solutions	GEF - 4	No	No
4068	Increasing Resilience to Climate Variability and Hazards	GEF - 4	No	No
4070	The GEF Earth Fund: Greening the Cocoa Industry - Market Transformation	GEF - 4	No	No
4080	SPWA-BD: Participatory Biodiversity Conservation and Low Carbon Development in Pilot Ecovillages in Senegal	GEF - 4	No	No
4096	Promoting Sustainable Biomass Energy Production and Modern Bio-Energy Technologies	GEF - 4	No	No
4099	Removal of Barriers to Solar PV Power Generation in Mauritius, Rodrigues and the Outer Islands	GEF - 4	No	No
4129	TT-Pilot (GEF-4)- Green Truck Demonstration Project	GEF - 4	No	No
4132	TT-Pilot (GEF 4): Promotion and Development of Local Wind Technologies in Mexico	GEF - 4	No	No
4147	Industrial Energy Efficiency in Ecuador	GEF - 4	No	No
4171	Energy for Sustainable Development in Caribbean Buildings	GEF - 4	No	No
4176	Encouraging the Establishment and Consolidation of an Energy Service Market in Chile	GEF - 4	No	No
4191	Promoting Ecotourism to Strengthen the Financial Sustainability of the Guatemalan Protected Areas System (SIGAP)	GEF - 4	No	No
4222	Promoting Autonomous Adaptation at the community level in Ethiopia	GEF - 4	No	No
4224	GEO: Turkey Geofund	GEF - 3	No	No
4236	GHG Assessment Methodologies in Public Transport	GEF - 4	No	No
4257	The GEF Earth Fund: IFC Earth Fund Platform	GEF - 4	No	No
4259	The GEF Earth Fund: Conservation Agreement Private Partnership Platform (CAPPP)	GEF - 4	No	No
4260	The GEF Earth Fund: Public-Private Funding Mechanisms for Watershed Protection	GEF - 4	No	No
4283	PAS: PNG Energy Sector Development Project	GEF - 4	No	No
4285	Promoting Energy Efficiency Technologies in Beer Brewing Sector in Burkina Faso	GEF - 4	No	Yes
4336	Lighting One Million Lives in Liberia	GEF - 5	No	No
4345	Renewable Energy for Rural Livelihood (RERL)	GEF - 5	No	No
4348	Reducing GHG Emissions through a Resource Efficiency Transformation Programme (ResET) for Industries in Kazakhstan	GEF - 5	No	No
4421	The GEF Earth Fund: Global Market Transformation for Efficient Lighting	GEF - 4	No	No

4427	Russia Energy Efficiency Financing (REEF) Project	GEF - 5	No	No
4431	Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector	GEF - 5	No	No
4434	Strengthening the Adaptive Capacity and Resilience of Rural Communities Using Micro Watershed Approaches to Climate Change and Variability to Attain Sustainable Food Security	GEF - 5	No	No
4453	Adaptation of Small-scale Agriculture (LASAP)	GEF - 5	No	No
4459	Development of Sustainable Renewable Energy Power Generation (SREPGen)	GEF - 5	No	No
4477	Comprehensive Reduction and Elimination of Persistent Organic Pollutants in Pakistan	GEF - 5	No	No
4497	Development of Renewable Energy, Energy Efficiency and Electrification of Suriname	GEF - 5	No	No
4512	Pilot Asia-Pacific Climate Technology Network and Finance Center	GEF - 5	No	No
4514	Greening the COP17 in Durban	GEF - 5	No	Yes
4515	Southeastern Europe and Caucasus Catastrophe Risk Insurance Facility (SEEC CRIF)	GEF - 5	Yes	No
4570	Adapting Agriculture Production in Togo (ADAPT)	GEF - 5	No	No
4586	Mainstreaming Biodiversity Conservation in Tourism Sector Development in Jordan	GEF - 5	No	No
4590	Delivering Multiple Global Environment Benefits through Sustainable Management of Production Landscapes	GEF - 5	No	No
4599	Building Adaptive Capacity to Catalyze Active Public and Private Sector Participation to Manage the Exposure and Sensitivity of Water Supply Services to Climate Change in Sierra Leone	GEF - 5	No	No
4626	Geothermal Power Generation Program	GEF - 5	No	No
4629	Strengthening Low-Carbon Energy Island Strategies	GEF - 5	Yes	No
4631	Watershed Approach to Sustainable Coffee Production in Burundi	GEF - 5	No	No
4657	Competitiveness and Sustainable Rural Development Project in the South Western Border Corridor (PROLENCA-GEF)	GEF - 5	No	No
4682	SolarChill Development, Testing and Technology Transfer Outreach	GEF - 5	No	No
4683	ARCTIC: Targeted Support for Energy Efficiency and Renewable Energy in the Russian Arctic	GEF - 5	No	No
4701	Scaling up Community-Based Adaptation (CBA) in Niger	GEF - 5	Yes	No
4718	Production of Sustainable, Renewable Biomass-based Charcoal for the Iron and steel Industry in Brazil	GEF - 5	Yes	No
4724	Enhancing Resilience of Vulnerable Coastal Areas and Communities to Climate Change in the Republic of Gambia	GEF - 5	No	No
4725	Solomon Islands Water Sector Adaptation Project (SIWSAP)	GEF - 5	No	No
4741	Integrated and Environmentally Sound PCBs Management in Ecuador	GEF - 5	No	No
4742	Green Urban Lighting	GEF - 5	Yes	No

4745	Promoting Utility-Scale Power Generation from Wind Energy	GEF - 5	No	No
4753	Sustainable Energy Initiative for Industries	GEF - 5	No	No
4780	Promoting the application of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing in Panama	GEF - 5	No	No
4784	Introduction of Energy Management System Standard in Ukrainian Industry	GEF - 5	No	No
4785	Promoting Integrated Biomass and Small Hydro Solutions for Productive Uses in Cameroon	GEF - 5	No	No
4788	Promoting Business Models for Increasing Penetration and Scaling up of Solar Energy	GEF - 5	No	No
4790	Utilizing Solar Energy for Industrial Process Heat in Egyptian Industry	GEF - 5	Yes	No
4801	Promotion of Non-fired Brick (NFB) Production and Utilization	GEF - 5	No	No
4840	Energy Efficient Production and Utilization of Charcoal through Innovative Technologies and Private Sector Involvement	GEF - 5	No	No
4866	Promoting Energy Efficiency in Industrial Heat Systems and High Energy-consuming (HEC) Equipment	GEF - 5	No	No
4881	Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Latin American and Caribbean Region	GEF - 5	Yes	No
4884	Nationally Appropriate Mitigation Actions in the Energy Generation and End-Use Sectors	GEF - 5	No	No
4890	Towards a Green Economy in Uruguay: Stimulating Sustainable Production Practices and Low-emission Technologies in Prioritized Sectors	GEF - 5	No	No
4899	Promoting Energy Efficiency for Non-HCFC Refrigeration and Air Conditioning (PENHRA)(RESUBMISSION)	GEF - 5	Yes	No
4900	Scale Up of Access to Clean Energy for Rural Productive and Domestic Uses	GEF - 5	No	No
4902	Catalyzing Market Transformation for Industrial Energy Efficiency and Accelerate Investments in Best Available Practices and Technologies in the Former Yugoslav Republic of Macedonia	GEF - 5	Yes	No
4904	Pilot African Climate Technology Finance Center and Network	GEF - 5	Yes	No
4918	Partial Risk Sharing Facility for Energy Efficiency	GEF - 5	No	No
4921	Efficient and Sustainable City Bus Services	GEF - 5	No	No
4923	Promotion of Mini and Micro-hydro Power Plants in Congo DR	GEF - 5	No	No
4927	Facility for Low Carbon Technology Deployment	GEF - 5	Yes	No
4929	AfDB-PPP Public-Private Partnership Program	GEF - 5	No	No
4936	EAS Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas through Implementation of Intergovernmental Agreements and Catalyzed Investments (PROGRAM)	GEF - 5	Yes	No
4957	Small and Medium Enterprise Energy Efficiency Project	GEF - 5	Yes	No

4958	Climate Risk Finance for Sustainable and Climate Resilient Rainfed Farming and Pastoral Systems	GEF - 5	No	No
4959	IDB-PPP MIF Public-Private Partnership Program	GEF - 5	No	No
4967	Scaling up Risk Transfer Mechanisms for Climate Vulnerable Agriculture-based Communities in Mindanao	GEF - 5	No	No
4974	Enhancing Adaptive Capacity and Resilience to Climate Change in the Agriculture Sector in Comoros	GEF - 5	No	No
4991	Strengthening Climate Information and Early Warning Systems in Tanzania to Support Climate Resilient Development and Adaptation to Climate Change	GEF - 5	No	No
5002	Strengthening Climate Information and Early Warning Systems in Western and Central Africa for Climate Resilient Development and Adaptation to Climate Change	GEF - 5	No	No
5015	Implementing Urgent Adaptation Priorities Through Strengthened Decentralized and National Development Plans.	GEF - 5	No	No
5038	Implementation of BAT and BEP for Reduction of UP- POPs Releases from Open Burning Sources in Armenia	GEF - 5	No	No
5055	ASTUD: Mongolia Urban Transport Development Investment Program	GEF - 5	No	No
5059	Nationally Appropriate Mitigation Actions for Low-carbon Urban Development	GEF - 5	Yes	No
5063	Catalysing the Use of Solar Photovoltaic Energy	GEF - 5	No	No
5064	Grid-connected Small Scale Photovoltaic Systems	GEF - 5	Yes	No
5086	Achieving Low Carbon Growth in Cities through Sustainable Urban Systems Management in Thailand (LCC)	GEF - 5	No	No
5087	Organic Waste Streams for Industrial Renewable Energy Applications in India	GEF - 5	No	No
5088	Conserving Biodiversity in Coastal Areas Threatened by Rapid Tourism and Physical Infrastructure Development	GEF - 5	No	No
5091	Mainstreaming Biodiversity Conservation and Sustainable Use into NTFP and AFS Production Practices in Multiple- Use Forest Landscapes of High Conservation Value	GEF - 5	Yes	No
5111	Reducing Vulnerability and Increasing Adaptive Capacity to Respond to Impacts of Climate Change and Variability for Sustainable Livelihoods in Agriculture Sector in Nepal	GEF - 5	No	No
5143	PPP-EBRD South Eastern Mediterranean EE/ ESCO Markets Platform (PROGRAM)	GEF - 5	No	No
5145	GEF UNIDO Cleantech Programme for SMEs	GEF - 5	No	No
5147	Enhancing Resilience of Agricultural Sector in Georgia (ERASIG)	GEF - 5	No	No
5150	Delivering the Transition to Energy Efficient Lighting	GEF - 5	Yes	No
5152	Delivering the Transition to Energy Efficient Lighting	GEF - 5	Yes	No
5157	ESCO Moldova - Transforming the market for Urban Energy Efficiency in Moldova by Introducing Energy Service Companies (ESCO)	GEF - 5	No	No
5170	Discovering Nature-based Products and Build National Capacities for the Application of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing	GEF - 5	No	No

5211	Integrated Water Harvesting Technologies to Adapt to Climate Change Induced Water Shortage	GEF - 5	No	No
5226	Improving Women and Children's Resilience and Capacity to Adapt to Climate Change in the Democratic Republic of the Congo.	GEF - 5	No	No
5233	Enabling Climate Resilience in the Agriculture Sector in the Southwest Region of Madagascar	GEF - 5	No	No
5291	Nationally Appropriate Mitigation Actions (NAMAs) for Low-carbon End-use Sectors in Azerbaijan	GEF - 5	Yes	No
5297	Promoting Access to Clean Energy Services in Saint Vincent and the Grenadines	GEF - 5	Yes	No
5299	Delivering the Transition to Energy Efficient Lighting	GEF - 5	Yes	No
5316	Promotion and Up-scaling of Climate-resilient, Resource Efficient Technologies in a Tropical Island Context	GEF - 5	No	No
5317	Increased Energy Access for Productive Use through Small Hydropower Development in Rural Areas	GEF - 5	Yes	No
5339	Market Transformation through Design and Implementation of Appropriate Mitigation Actions in Energy Sector	GEF - 5	Yes	No
5341	South Africa Wind Energy Project (SAWEP) Phase II	GEF - 5	Yes	No
5344	Cape Verde Appliances & Building Energy-Efficiency Project (CABEEP)	GEF - 5	Yes	No
5379	Industrial Energy Efficiency Improvement in South Africa through Mainstreaming the Introduction of Energy Management Systems and Energy Systems Optimization	GEF - 5	Yes	No
5388	PPP-IDB Sustainable Caribbean Basin Private Equity Fund (PROGRAM)	GEF - 5	Yes	No
5420	Promoting the Application of the Nagoya Protocol through the Development of Nature-based Products, Benefit-sharing and Biodiversity Conservation	GEF - 5	Yes	No
5421	Reduction of GHG Emission through Promotion of Commercial Biogas Plants	GEF - 5	Yes	No
5452	Guangdong Agricultural Pollution Control	GEF - 5	Yes	No
5453	Disaster Risk & Energy Access Management (DREAM):Promoting Solar Photovoltaic Systems in Public Buildings for Clean Energy Access, Increased Climate Resilience and Disaster Risk Management	GEF - 5	Yes	No
5466	Reducing Greenhouse Gases and ODS Emissions through Technology Transfer in the Industrial Refrigeration and Air Conditioning Sector	GEF - 5	Yes	No
5501	Promoting Sustainable Rural Energy Technologies (RETs) for Household and Productive Uses	GEF - 5	Yes	No
5505	GEF UNIDO Cleantech Programme for SMEs in Turkey	GEF - 5	Yes	No
5530	Green Shipping Programme for Russia	GEF - 5	No	No
5532	Disposal of PCB Oils Contained in Transformers and Disposal of Capacitors Containing PCB in Southern Africa	GEF - 5	Yes	No
5586	Appropriate Mitigation Actions in the Energy Generation and End-Use Sectors in Sri Lanka	GEF - 5	Yes	No
5604	Technology Transfer for Climate Resilient Flood Management in Vrbas River Basin	GEF - 5	Yes	No

	Greening the Productive Sectors in Gambia: Promoting		Yes	No
5609	the Use and Integration of Small to Medium Scale	GEF - 5		
	Renewable Energy Systems in the Productive Uses			
	Reducing GHG Emissions Through Community Forests	055 5	Yes	No
5610	and Sustainable Biomass Energy in Afghanistan	GEF - 5		
5605	Increasing Productivity and Adaptive Capacity in	055 5	No	No
5685	Mountain Areas of Morocco (IPAC-MAM)	GEF - 5		
	Reducing Environmental and Health Risks to Vulnerable		Yes	No
5701	Communities from Lead Contamination from Lead Paint	GEF - 5		
	and Recycling of Used Lead Acid Batteries			
	Promoting Organic Waste-to-Energy and other Low-		No	No
	carbon Technologies in Small and Medium-scale			
5704	Enterprises (SMMEs): Accelarating Biogas Market	GEF - 5		
	Development			
	Rhino Impact Bonds An Innovative Financing Mechanism		Yes	No
5721	for Site-Based Rhinoceros Conservation			_
	Sustainable Energy Financing Mechanism for Solar PV in		Yes	No
5732				
			Yes	No
5742	Institutional Capacities to Accelerate Sustainable Energy	GEF - 5	100	
07.1	for All (SE4A) Progress	<b>UI</b> . <b>U</b>		
	Mainstreaming Sustainable Management of Tea		Yes	No
5750	Production Landscapes	GEF - 5		
	IDB-GEF Climate-Smart Agriculture Fund for Latin		Yes	No
5754	America and the Caribbean (PROGRAM)	GEF - 5	100	
5776	Supply Change Securing Food Sustaining Forests	GEF - 5	No	No
	Delivering the Transition to Energy Efficient Lighting in		Yes	No
5799	Residential, Commercial, Industrial, and Outdoor Sectors	GEF - 5	105	110
5800	GEF UNIDO Cleantech Programme for SMEs	GEF - 5	No	No
5820	Promoting the Application of the Nagoya Protocol on ABS	GEF - 5	Yes	No
5820		GEF - 5		
5830	Nationally Appropriate Mitigation Actions in the	GEF - 5	Yes	No
	Construction Sector in Mongolia			
5024	Establishing the Foundations of a Partnership to		Yes	No
5831	Accelerate the Global Market Transformation for Efficient	GEF - 5		
	Appliances and Equipment			
5839	Mitigating Deforestation in Brazil Nut Concessions in	GEF - 5	Yes	No
	Madre de Dios, Peru			
5044	NAMA Pilot Implementation of Technology Transfer	055 5	Yes	No
5841	Projects in the Industrial Sector of the Cundinamarca-	GEF - 5		
	Bogotá Region			
5843	Deployment of Renewable Energy and Improvement of	GEF - 5	Yes	No
	Energy Efficiency in the Public Sector			
	Enhancing Biodiversity Protection through Strengthened		Yes	No
5846	Monitoring, Enforcement and Uptake of Environmental	GEF - 5		1
	Regulations in Guyana's Gold Mining Sector			
6913	Market Transformation for Sustainable Rural Housing	GEF - 6	Yes	No
	Project			
6919	Upgrading of China SHP Capacity Project	GEF - 6	Yes	No
6921	Demonstration of Mercury Reduction and Minimization	GEF - 6	Yes	No
0721	in the Production of Vinyl Chloride Monomer			1

6025	Umbrella Programme for Biennial Update Report to the	GEF - 6	No	No
6925	United National Framework Convention on Climate Change (UNFCCC)	GEF - 6		
	Reducing UPOPs and Mercury Releases from Healthcare		Yes	No
6928	Waste Management, e-Waste Treatment, Scrap	GEF - 6	163	NO
0520	Processing and Biomass Burning	GEI O		
6930	Energy Efficiency Improvement in Public Sector Buildings	GEF - 6	No	No
	Finance and Technology Transfer Centre for Climate		No	No
6942	Change (FINTECC)	GEF - 6		
6054	Enhancing the Climate Resilience of the Moroccan Ports		No	No
6951	Sector	GEF - 6		
6052	Implementation of the Strategic Action Program of the		No	No
6952	Gulf of Mexico Large Marine Ecosystem	GEF - 6		
6955	Strengthening the Adaptive Capacity to Climate Change in	GEF - 6	No	No
0955	the Fisheries and Aquaculture Sector	GEF - O		
6960	Supporting Climate Resilient Livelihoods in Agricultural       GEF - 6         Communities in Drought-prone Areas       GEF - 6		No	No
0900	Communities in Drought-prone Areas	GEF - 0		
	UPOPs Reduction through BAT/BEP and PPP-based		Yes	No
6966	Industry Chain Management in Secondary Copper	GEF - 6		
	Production Sector in China			
6974	Improving Mobility in Parakou	GEF - 6	No	No
	Continuing Regional Support for the POPs Global		Yes	No
6978	Monitoring Plan under the Stockholm Convention in the	GEF - 6		
	Pacific Region			
6980	The International Lighting Efficiency Facility (iLEF)(non-	GEF - 6	Yes	No
0960	grant)	GEF - 0		
8000	Improve Mercury Management in Tunisia	GEF - 6	Yes	No
8005	Sustainable Land Management for Increased Productivity	GEF - 6	No	No
	in Armenia(SLMIP)	· · · ·		
8017	GEF-6 POPs Legacy and Sustainable Chemicals	GEF - 6	Yes	No
	Management			
	Effective Implementation of the Access and Benefit	055 6	Yes	No
8025	Sharing and Traditional Knowledge Regime in Peru in	GEF - 6		
	accordance with the Nagoya Protocol		NI -	NIE
9037	Sustainable Forest and Land Management	GEF - 6	No	No
9040	Sustainable Development of Comoros Islands by	GEF - 6	No	No
	Promoting the Geothermal Energy Sources			
	Moldova Sustainable Green Cities: Catalyzing Investment		No	No
9042	in Sustainable Green Cities in the Republic of Moldova	GEF - 6		
	Using a Holistic Integrated Urban Planning Approach			
9043	Investing in Renewable Energy Project Preparation under	GEF - 6	Yes	No
	the Sustainable Energy Fund for Africa (SEFA)(non-grant)			NIE
9045	Comprehensive Environmentally Sound Management of	GEF - 6	Yes	No
	PCBs in Montenegro			NI-
9046	Reduction and Phase-out of PFOS in Priority Sectors in	GEF - 6	Yes	No
9047	China Green Logistics Program (non-grant)	GEF - 6	Yes	No
	Moringa Agro-forestry Fund for Africa (non-grant)			
9051		GEF - 6	Yes	No
00750	Reducing Argentina's Greenhouse Gas Emissions from the	0.55	Yes	No
9053	Energy Sector through the Utilization of Organic Waste	GEF - 6		
	for Energy Generation in Agriculture and Agro Industries			

9056	Promotion of Small Hydro Power (SHP) for Productive Use and Energy Services	GEF - 6	Yes	No
9057	Biogas Applications for the Brazilian Agro-industry	GEF - 6	Yes	No
9058	Impact Investment in Support of the Implementation of the Nagoya Protocol on Access and Benefit Sharing (non- grant)	GEF - 6	Yes	No
9067	Renewable Energy Sector Project	GEF - 6	No	No
9070	Food-IAP: Fostering Sustainability and Resilience for Food Security in Sub-Saharan Africa - An Integrated Approach (IAP-PROGRAM)	GEF - 6	No	No
9071	Global Partnership on Wildlife Conservation and Crime Prevention for Sustainable Development (PROGRAM)	GEF - 6	Yes	No
9072	Comm-IAP: Taking Deforestation Out of Commodity Supply Chains (IAP-PROGRAM)	GEF - 6	Yes	No
9078	Implementation of PCB Management Programs for Electric Cooperatives and Safe e-wastes Management	GEF - 6	Yes	No
9079	Environmentally Sound Management of Products and Wastes Containing POPs and Risks Associated with their Final Disposal	GEF - 6	Yes	No
9081	Promoting Energy-Efficient Motors in Small and Medium Sized Enterprises (SMEs)	GEF - 6	Yes	No
9083	LF Leapfrogging Markets to High Efficiency Products (Appliances, including Lighting, and Electrical Equipment) (PROGRAM)	GEF - 6	Yes	No
9085	Equity Fund for the Small Projects Independent Power Producer Procurement Programme (non-grant)	GEF - 6	Yes	No
9103	Building Adaptive Capacity through the Scaling-up of Renewable Energy Technologies in Rural Cambodia (S- RET)	GEF - 6	No	No
9112	The Ten Island Challenge: Derisking the Transition of the Caribbean from Fossil Fuels to Renewables	GEF - 6	Yes	No
9115	IBRD Geothermal Energy Upstream Development Project	GEF - 6	Yes	No
9116	Promoting Access to Renewable Energy and Development of IT Tools for Rural Communities of Cameroon	GEF - 6	No	No
9133	Food-IAP: Climate-Smart Agriculture for Climate-Resilient Livelihoods (CSARL)	GEF - 6	No	No
9136	Niger: Food-IAP: Family Farming Development Programme (ProDAF)	GEF - 6	No	No
9139	Food-IAP: Establishment of the Upper Tana Nairobi Water Fund (UTNWF)	GEF - 6	No	No
9141	GEF-IAP:Participatory Natural Resource Management and Rural Development Project in the North, Centre-North and East Regions (Neer Tamba project)	GEF - 6	No	No
9146	Vientiane Sustainable Urban Transport Project	GEF - 6	No	No
9151	Catalyzing Environmental Finance for Low-Carbon Urban Development	GEF - 6	No	No
9189	Reduction and Elimination of POPs and Other Chemical Releases through Implementation of Environmentally Sound Management of E-Waste, Healthcare Waste and Priority U-POPs Release Sources Associated with General Waste Management Activities	GEF - 6	Yes	No

9191	Green Energy SMEs Development Project	GEF - 6	No	No
9192	De-risking Renewable Energy Investment	GEF - 6	Yes	No
9204	A Systemic Approach to Sustainable Urbanization and Resource Efficiency in Greater Amman Municipality (GAM)	GEF - 6	No	No
9210	NAMA on Integrated Waste Management and Biogas in Uganda	GEF - 6	Yes	No
9214	Environmentally Sound Management and Destruction of PCBs in Mexico: Second Phase	GEF - 6	Yes	No
9218	Sustainable Use of Biomass to Assist the Development of Turkey's Economy Towards a Low-carbon Development Path	GEF - 6	No	No
9220	Facilitation of the Achievement of Sustainable National Energy Targets of Tuvalu (FASNETT	GEF - 6	Yes	No
9222	Greening the Scrap Metal Value Chain through Promotion of BAT/BEP to Reduce U-POPs Releases from Recycling Facilities	GEF - 6	Yes	No
9225	Towards Sustainable Energy for All in Mozambique: Promoting Market-Based Dissemination of Integrated Renewable Energy Systems for Productive Activities in Rural Areas	GEF - 6	Yes	No
9226	Integrated Adoption of New Energy Vehicles in China	GEF - 6	Yes	No
9236	Environmentally Sound Management and Disposal of PCBs	GEF - 6	Yes	No
9249	Grid-Connected Rooftop Solar PV Program	GEF - 6	Yes	No
9251	Improving the Performance and Reliability of RE Power Systems in Samoa (IMPRESS)	GEF - 6	Yes	No
9255	Development of Value Chains for Products derived from Genetic Resources in Compliance with the Nagoya Protocol on Access and Benefit Sharing and the National Biodiversity Economy Strategy	GEF - 6	Yes	No
9258	Creating and Sustaining Markets for Energy Efficiency	GEF - 6	No	No
9273	Facilitating Renewable Energy & Energy Efficiency Applications for Greenhouse Gas Emission Reduction (FREAGER)	GEF - 6	No	No
9277	Risk Mitigation Instrument for Land Restoration (Non- Grant)	GEF - 6	Yes	No
9279	Sustainable Cities: Integrated Green Urban Development in Ashgabat and Awaza	GEF - 6	No	No
9281	Promotion of Bio-Ethanol as Alternative Clean Fuel for Cooking in the United Republic of Tanzania	GEF - 6	Yes	No
9283	Development of a Market for Energy Efficient Lighting, Air Conditioners and Refrigerators	GEF - 6	No	No
9291	Promotion of Small Hydropower Based Mini-Grids for a Better Access to Modern Energy Services in Central African Republic	GEF - 6	No	No
9292	Increasing Energy Access through the Promotion of Energy Efficient Appliances in Liberia	GEF - 6	No	No
9309	The Climate Finance Aggregation Initiative for Developing Countries	GEF - 6	No	No
9320	Increasing Investments in District Energy Systems in Cities - a SE4All Energy Efficiency Accelerator	GEF - 6	Yes	No

9329	Scaling up the SE4ALL Building Efficiency Accelerator (BEA)	GEF - 6	Yes	No
9337	Global Project to leapfrog markets to energy efficient lighting, appliances and equipment	GEF - 6	No	No
9340	Food-IAP: Sustainable Land and Water Management Project, Second Additional Financing	GEF - 6	No	No
9342	Climate Smart Urban Development Challenge	GEF - 6	No	No
9354	Public Lighting Energy Efficiency Program: Public lighting replacement of low-efficiency VSAP bulbs with high- efficiency LEDs in Colombia	GEF - 6	No	No
9355	Outer Island Renewable Energy Project	GEF - 6	No	No
9357	Strengthening the Environmentally-sound Management and Final Disposal of PCBs in Paraguay	GEF - 6	No	No
9370	The Meloy Fund : A Fund for Sustainable Small-scale Fisheries in SE Asia (Non-grant)	GEF - 6	Yes	No
9379	Application of Green Chemistry in Vietnam to Support Green Growth and Reduction in the use and Release of POPs/harmful Chemicals	GEF - 6	Yes	No
9382	Shepherding Biodiversity Back into South Africa's Productive Landscapes	GEF - 6	No	No
9393	Project of Hybridization of Diesel Engines of Multifunctional Platforms with Solar Systems	GEF - 6	No	No
9480	Towards a Sustainable and Efficient Urban Mobility System in Uruguay	GEF - 6	No	No
9485	Programme for Cleantech Innovation and Green Jobs in Morocco	GEF - 6	No	No
9492	Leapfrogging South Africa's Markets to High Efficiency LED Lighting and High Efficiency Distribution Transformers	GEF - 6	No	No
9493	Advancing Indonesia's Lighting Market to High Efficient Technologies (ADLIGHT)	GEF - 6	No	No
9496	Leapfrogging Chilean's Markets to more Efficient Refrigerator and Freezers	GEF - 6	No	No
9498	Leapfrogging Tunisia's Lighting Market to High Efficiency Technologies	GEF - 6	No	No
9499	Leapfrogging Myanmar's Market to High Efficiency Lighting and Appliances	GEF - 6	No	No
9563	Third South West Indian Ocean Fisheries Governance and Shared Growth Project (SWIOFish3)	GEF - 6	No	No
9567	Renewable Energy for the City of Marrakech's Bus Rapid Transit System	GEF - 6	No	No
9719	Piloting Innovative Investments for Sustainable Landscapes	GEF - 6	No	No

#### ANNEX III: SURVEY AND INTERVIEW RESPONDENTS

Private sector						
Name	Position	Organization	Survey	Interview		
Asset Managers						
Kai Buntrock	CEO	Stichting ReNew	$\checkmark$			
Gheeta Tharmaratnam	Director	The Abraaj Group	$\checkmark$			
David Brand	CEO	New Forests Pty Limited	$\checkmark$			
Markus van den Burg	Managing Director	Conning Asset Management Limited	$\checkmark$			
Commercial Banks						
Fabian Huwyler	Vice President Sustainability Affairs	Credit Suisse	$\checkmark$			
Joop Hessels	Executive Director, Head of Green Bonds	ABN AMRO	$\checkmark$			
Alain Cracau	Director Sustainable Business Development	Rabobank	$\checkmark$			
Abyd Karmali	Managing Director Climate Finance	Bank of America Merrill Lynch	$\checkmark$			
Bruce Schlein	Director Alternative Energy Finance	Citi	$\checkmark$			
Development Finance Ins	stitutions					
Xavier Echasseriau	Senior Investment Officer	Proparco	$\checkmark$			
Elvira Eurlings	Director Energy	FMO	$\checkmark$			
Ritu Kumar	Director Environment & Social Responsibility	CDC	$\checkmark$			
Dr Christopher Cosack	VP Climate Protection Projects	DEG	$\checkmark$			
Institutional investors						
Orsalia Kalantzopoulos	CEO	Europe Reinsurance Ltd	$\checkmark$			
Silva Dezelan	Senior Sustainability Manager	RobecoSAM	$\checkmark$			
Patrick Coady	Senior Director	Seale and Associates	$\checkmark$			
Companies						
Clay Nesler	VP Global Energy and Sustainability	Johnson Controls	$\checkmark$			
Elisa Prieto Casana	CEO Office and Strategy Director	Acciona Energia	$\checkmark$			
David Stevens	CEO	AMF Guarantee Holdings	$\checkmark$			
Steve Kukoda	VP Membership, Funding and Partnerships	International Copper Association	$\checkmark$			
Dr Vidal Garza	Founding Director	FEMSA	$\checkmark$			
Martine Provost	Executive Director	Global Sustainable Electricity Partnership	$\checkmark$			

	CEO	EPS Capital Corporation		
Tracy Austin	GM Corporate Communications	Mitsubishi Corporation		
Jeff Seabright	Chief Sustainability Officer	Unilever		
Harry Verhaar	Senior Director Energy and Climate Change	Philips Lighting		
Network Organizations//	Advisors			
Marco van der Linden	Senior Carbon Finance Specialist	Forest Carbon Partnership Facility		
Johnny Brom	Director Innovative Finance	IDH		
Manuel Adamini	Director, Advisory Services	Climate Bonds Initiative	$\checkmark$	
Robert Youngman	ENV Climate Change Division	OECD		
Guido Scmidt-Traub	Executive Director	SDSN		
Jessica Brown	Executive Director Climate Finance	Climate Policy Initiative		
Weihui Lily Dai	Research Analyst	Climate Bonds Initiative		$\checkmark$
Renat Heuberger	CEO	South Pole Group		
Darius Nassiry	Senior Research Associate	Climate Bonds Initiative		$\checkmark$
	GEF			
Name	Position 0	organization	Survey	Interview
GEF Secretariat				
Naoko Ishii	CEO and Chairperson	GEF		V
David Rodgers	Senior Climate Change Specialist	GEF		V
Jean-Marc Sinnassamy	Senior Environmental Specialist	GEF		
Roland Sundstrom	Senior Policy Officer	GEF		
Dustin Schinn	Climate Change Analyst	GEF	V	
Focal Points				
Senad Oprasic	Chief Environmental Officer	Gov'ment of Bosnia & Herzegovina	V	
•		Environmental Protection Agency	<b>1</b>	
Anyaa Vohiri	Executive Director	Liberia	$\checkmark$	
Yousef Muayad Yousif		LINCHU		
Pellumb		Ministry of Environment	N	
FEIIUIIID		Ministry of Environment	V	
	Soniar Donuty of Environmental Health	Ministry of Environment Albania	V	
Abdirizak Mohamud	Senior Deputy of Environmental Health	Ministry of Environment Albania Government of Somalia	V V	
Abdirizak Mohamud Jose Antonio Gonzalez	Director, International Cooperation	Ministry of Environment Albania Government of Somalia Government of Peru	\ \ \ \	
Abdirizak Mohamud		Ministry of Environment Albania Government of Somalia Government of Peru Ministry of Environment Mali Environmental Protection Agency	V V	
Abdirizak Mohamud Jose Antonio Gonzalez Issa Fahiri Kone	Director, International Cooperation Specialist Forestry	Ministry of Environment Albania Government of Somalia Government of Peru Ministry of Environment Mali Environmental Protection Agency Kosovo Environmental Protection Agency	$\sqrt[n]{}$	
Abdirizak Mohamud Jose Antonio Gonzalez Issa Fahiri Kone Ilir Morina Ndey Bakurin	Director, International Cooperation Specialist Forestry CEO Executive Director	Ministry of Environment Albania Government of Somalia Government of Peru Ministry of Environment Mali Environmental Protection Agency Kosovo Environmental Protection Agency Gambia		
Abdirizak Mohamud Jose Antonio Gonzalez Issa Fahiri Kone Ilir Morina Ndey Bakurin Diann Black-Layne	Director, International Cooperation Specialist Forestry CEO Executive Director Chief Environment Officer	Ministry of Environment Albania Government of Somalia Government of Peru Ministry of Environment Mali Environmental Protection Agency Kosovo Environmental Protection Agency Gambia Government of Antigua and Barbuda		
Abdirizak Mohamud Jose Antonio Gonzalez Issa Fahiri Kone Ilir Morina Ndey Bakurin Diann Black-Layne Vesna Indova Tochko	Director, International Cooperation Specialist Forestry CEO Executive Director Chief Environment Officer Head of Unit Department	Ministry of Environment Albania Government of Somalia Government of Peru Ministry of Environment Mali Environmental Protection Agency Kosovo Environmental Protection Agency Gambia Government of Antigua and Barbuda Government of Macedonia		
Abdirizak Mohamud Jose Antonio Gonzalez Issa Fahiri Kone Ilir Morina Ndey Bakurin Diann Black-Layne Vesna Indova Tochko Shamiso Nandi Najira	Director, International Cooperation Specialist Forestry CEO Executive Director Chief Environment Officer	Ministry of Environment Albania Government of Somalia Government of Peru Ministry of Environment Mali Environmental Protection Agency Kosovo Environmental Protection Agency Gambia Government of Antigua and Barbuda Government of Macedonia Government of Malawi		
Abdirizak Mohamud Jose Antonio Gonzalez Issa Fahiri Kone Ilir Morina Ndey Bakurin Diann Black-Layne Vesna Indova Tochko	Director, International Cooperation Specialist Forestry CEO Executive Director Chief Environment Officer Head of Unit Department	Ministry of Environment Albania Government of Somalia Government of Peru Ministry of Environment Mali Environmental Protection Agency Kosovo Environmental Protection Agency Gambia Government of Antigua and Barbuda Government of Macedonia Government of Malawi Environmental Agency Sierra Leone The Development Bank of South		
Abdirizak Mohamud Jose Antonio Gonzalez Issa Fahiri Kone Ilir Morina Ndey Bakurin Diann Black-Layne Vesna Indova Tochko Shamiso Nandi Najira Abdul Bakarr Salim Nomsa T. Zondi	Director, International Cooperation Specialist Forestry CEO Executive Director Chief Environment Officer Head of Unit Department Principal Environmental Officer	Ministry of Environment Albania Government of Somalia Government of Peru Ministry of Environment Mali Environmental Protection Agency Kosovo Environmental Protection Agency Gambia Government of Antigua and Barbuda Government of Macedonia Government of Malawi Environmental Agency Sierra Leone The Development Bank of South Africa		
Abdirizak Mohamud Jose Antonio Gonzalez Issa Fahiri Kone Ilir Morina Ndey Bakurin Diann Black-Layne Vesna Indova Tochko Shamiso Nandi Najira Abdul Bakarr Salim	Director, International Cooperation Specialist Forestry CEO Executive Director Chief Environment Officer Head of Unit Department	Ministry of Environment Albania Government of Somalia Government of Peru Ministry of Environment Mali Environmental Protection Agency Kosovo Environmental Protection Agency Gambia Government of Antigua and Barbuda Government of Malawi Environmental Agency Sierra Leone The Development Bank of South Africa Ministry of Environment, Moldova Ministry of Natural Resources		
Abdirizak Mohamud Jose Antonio Gonzalez Issa Fahiri Kone Ilir Morina Ndey Bakurin Diann Black-Layne Vesna Indova Tochko Shamiso Nandi Najira Abdul Bakarr Salim Nomsa T. Zondi Inga Podoroghin Do Nam Thang	Director, International Cooperation Specialist Forestry CEO Executive Director Chief Environment Officer Head of Unit Department Principal Environmental Officer International Cooperation Unit Deputy Director General	Ministry of Environment Albania Government of Somalia Government of Peru Ministry of Environment Mali Environmental Protection Agency Kosovo Environmental Protection Agency Gambia Government of Antigua and Barbuda Government of Malawi Environment of Malawi Environmental Agency Sierra Leone The Development Bank of South Africa Ministry of Environment, Moldova Ministry of Natural Resources Vietnam		
Abdirizak Mohamud Jose Antonio Gonzalez Issa Fahiri Kone Ilir Morina Ndey Bakurin Diann Black-Layne Vesna Indova Tochko Shamiso Nandi Najira Abdul Bakarr Salim Nomsa T. Zondi Inga Podoroghin	Director, International Cooperation Specialist Forestry CEO Executive Director Chief Environment Officer Head of Unit Department Principal Environmental Officer International Cooperation Unit	Ministry of Environment Albania Government of Somalia Government of Peru Ministry of Environment Mali Environmental Protection Agency Kosovo Environmental Protection Agency Gambia Government of Antigua and Barbuda Government of Malawi Environmental Agency Sierra Leone The Development Bank of South Africa Ministry of Environment, Moldova Ministry of Natural Resources		

GEF Coordination	Conservation International		
Due due un Meine de la		N	
Program Manager	World Bank		
Regional Officer	UNEP	V	
Senior Coordinator GEF	FAO		
GEF Coordinator	UNEDO	V	
Deputy Director General	ADB		
Climate Finan	ce Fund		
Position	Organization	Survev	Interviev
Head of Private Sector Facility	Green Climate Fund		
Private Sector Development Strategist	Green Climate Fund		$\checkmark$
	Senior Coordinator GEF GEF Coordinator Deputy Director General Climate Finan Position Head of Private Sector Facility	Senior Coordinator GEF       FAO         GEF Coordinator       UNEDO         Deputy Director General       ADB         Climate Finance Fund         Organization         Position       Organization         Head of Private Sector Facility       Green Climate Fund	Senior Coordinator GEF       FAO       V         GEF Coordinator       UNEDO       V         Deputy Director General       ADB       V         Climate Finance Fund         Position       Organization       Survey         Head of Private Sector Facility       Green Climate Fund

#### ANNEX IV. ROLE OF SEMI-PUBLIC DEVELOPMENT AND ENVIRONMENTAL FINANCE INSTITUTIONS

#### Structure

1. Successful financing and development of private sector projects that address environmental issues require the involvement of different public and private sector actors. Figure 1 provides a simplified mapping of the key actors and flows of financial and non-financial inputs and outputs.

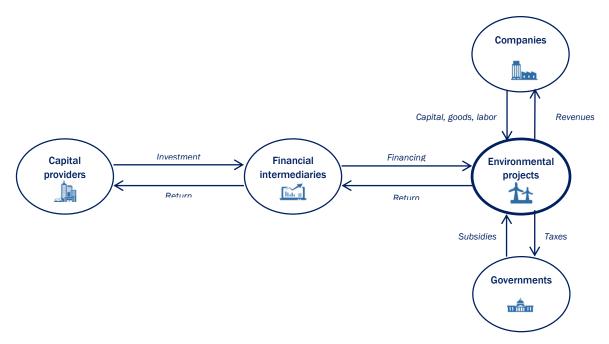


Figure 1: Structure and Main Actors in Private Sector Environment Projects<sup>1</sup>

### Actors

2. As shown in Figure 1 the four key types of actors are private sector companies, governments, capital providers and financial intermediaries. Each has an important role in the environmental finance ecosystem. In addition, there is a specific key role for (semi)public development and environmental finance institutions. They are critical players in the flow of finance to developing countries for environmental finance activities.

#### Main actors

#### Companies

3. Private sector companies are usually the initiators of projects or activities that address environmental issues. These companies may vary from large corporations, infrastructure

<sup>&</sup>lt;sup>1</sup> This concerns a simplified, linear and non-exhaustive mapping of the core actors involved in the financing and development chain of environmental projects. It does not take into account the original source of finance (savings of individuals and corporations) nor the role of enabling actors or platforms such as industry associations, (sustainability) rating agencies, civil society organizations etc.

project developers to small and medium sized enterprises (SMEs) or even innovative individual entrepreneurs. These companies generate the idea, technical expertise, capital goods and labor to the project. In return, the project generates revenues through which the company can acquire goods, pay salaries, and generate profits.

# Capital providers

4. Capital providers are key actors in the financing of environmental projects. The initial source of private finance is the savings of individuals and corporations. These savings are entrusted to capital providers, which include pension funds, insurance companies, commercial trusts, endowment funds or high net worth individuals (HNWIs). The mandate and primary motive for capital providers is to pool funds and achieve a risk-adjusted return for the providers of the funds (the 'fiduciary duty' to corporate or household savers). Co-benefits such as sustainable development outcomes may be explicitly or implicitly included as related motives or filters for investment.

### Financial intermediaries

5. Financial intermediaries may be used by capital providers as middlemen that link capital to investment opportunities, such as environmental projects. Primary examples of financial intermediaries include commercial banks, investment banks, investment management firms, or private equity firms. Their main function is to appraise the risk and return of investment opportunities, and determine the financial instruments most suited to the opportunity. This appraisal process increasingly includes a focus on environmental risks and opportunities, while environmentally focused financial instruments such as green loans, climate bonds or impact investments are on the rise.

### Governments

6. Governments are the key actors providing the location (on land or at sea) for a project and determining the operating environment and 'rules of the game' through policy and regulation. Governments may also take a direct financing role by providing subsidies to a project, or an indirect financing role through subsidized policies or tax incentives. In return, governments receive tax payments from the projects through companies.<sup>2</sup>

# (Semi)public environmental finance actors

# Multilateral organizations

7. Multilateral organizations include international environmental finance mechanisms and funds, which have been created by multiple government donors to channel public funds from developed countries to relevant projects in developing countries. The two prime examples are the GEF itself and the Green Climate Fund (GCF), a mechanism established in 2010. These

<sup>&</sup>lt;sup>2</sup> It should be noted that the above examples of institutions are not exclusively part of one of the four groups. Private sector companies and governments may also invest in projects and act as capital providers, while investment banks or pension funds can take up the role of both capital provider and financial intermediary.

international mechanisms often cooperate with multilateral development banks (MDBs) such as the World Bank, Asian Development Bank (ADB), European Investment Bank (EIB), African Development Bank (AfDB), and Inter-American Development Bank (IDB). These MDBs provide funds using their own capital or on behalf of multiple government donors. MDBs also have their own dedicated climate funds. Examples are the World Bank-managed Clean Technology Fund (CTF) and Strategic Climate Fund (SCF) or the EIB-managed Global Energy Efficiency and Renewable Energy Fund (GEEREF).

### **Bilateral organizations**

8. These organizations include bilateral development finance institutions (DFIs) and dedicated environmental finance funds that each provide finance bilaterally, typically from one developed country to multiple developing countries. It is estimated that bilateral sources and intermediaries account for the largest share of public finance flowing from developed to developing countries for environmental finance purposes. Examples of bilateral development banks include FMO, DEG, CDC Group and Proparco, examples of dedicated environmental finance funds include the Germany's International Climate Initiative (ICI), the UK's International Climate Fund (ICF) or Norway's International Forest Climate Initiative (IFCI).

### Domestic organizations

9. These organizations include national development banks, government agencies, and nationally sponsored climate funds. These institutions are playing an increasingly critical role as intermediaries and providers of environmental finance within their respective countries. This is particularly the case in emerging markets like Brazil, China, and India. The Brazilian Development Bank (BNDES) is currently one of the world's largest development banks and manages the Amazon Fund, a climate fund of over US\$1 billion.

### Role in the market

10. (Semi)public development and environmental finance institutions execute their dual role of directly financing and leveraging private sector financing through several financial instruments and advisory services. Through these financing and advisory services, these institutions can help attract foreign and domestic private sector co-investment in developing countries by taking risks that the private sector is not (yet) willing to bear.

11. The financial activities can be simplified into two main directions:

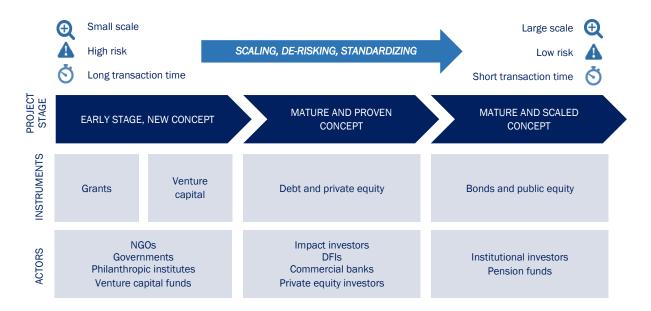
(a) Financing private sector projects directly through the main financial instruments outlined in Figure 2. The main added value of the direct financing is that these mechanisms generally have a higher risk appetite than commercial financiers. This means that they can go to countries and/or markets where commercial financiers do not yet go, support innovative projects or local financial intermediaries with limited track record and/or collateral, and they are able to charge lower interest rates if necessary. Whereas the traditional focus is mostly on debt and private equity, public finance mechanisms may also provide grants and venture capital, or non-financial support such as technical assistance;

- (b) Mobilizing additional private sector investment in projects through the strategic use of finance and grant funding. In the past few years a new model gained traction under the phrase 'blended finance'. The main form of blended finance is a Public-Private Partnership (PPP), which is often initiated by environmental finance institutions. PPPs concern partnerships where services and infrastructure that traditionally are public sector responsibilities are provided by the private sector under an agreed funding model. In the environmental finance field this may concern the development of wind energy or forest conservation projects. Additional private sector capital can also be mobilized through the effective use of de-risking instruments such as loan guarantees.
- 12. The non-financial advisory services include the following:
  - (a) Supporting domestic regulatory frameworks that create attractive private sector investment conditions. Environmental finance mechanisms can undertake activities that directly support improvements to the local investment climate in emerging and frontier markets. For example, engagement with governments on procurement processes and strategic investment plans can help align incentives with capital providers and drive new sources of capital flows;
  - (b) Sharing local market knowledge and experience. Environmental finance mechanisms can utilize their local expertise and presence to help bridge knowledge gaps of investors and banks necessary for a successful transaction. Leveraging their local partners and networks can facilitate the sourcing of deals, due diligence, and deal structuring, creating a pipeline of investable opportunities and introducing global investors to new markets.

Projects and instruments

13. Environmental projects vary in size, maturity, and extent to which a concept is proven as an investment opportunity. For each type of environmental project, different financial instruments are suited, which are offered by different types of institutions. Figure 2 provides a basic mapping of the relation between project, financial instruments and capital providing institutions. As projects progress from a new concept to a mature concept, the transaction time shortens, the scale increases and the risk of the investment opportunity lowers. Ideally, environmental projects gradually move towards standardized, commercialized and scaled forms of finance.

Figure 2: Types of Project and Financing



Maturity stages and matching financial products

14. Support for innovative early stage and new concepts is key, as these projects provide new pathways to help tackle environmental problems. Examples are the development of concrete environmental solutions such as bioplastic applications or smog vacuum cleaners. Given their smaller scale, unproven nature and hence higher risk, these projects often initially require grants for research and development, feasibility studies, start-up, and initial development stages. Grants are mostly offered by non-governmental organizations (NGOs), governments or philanthropic institutions. In some cases venture capital may also be used, offered by specialized venture capital funds such as Khosla Ventures or impact investors such as the EcoEnterprises Fund.

15. More mature concepts that are known and tested concepts are eligible to be financed by debt and private equity instruments, which is offered by commercial financial institutions. Examples on a smaller scale are loans for the greening of residential or commercial real estate, examples on a larger scale include offshore wind farms, solar PV, solar thermal and biomass. These financial instruments are increasingly offered by major global financial institutions such as Bank of America Merrill Lynch, Deutsche Bank or Goldman Sachs, who have designed specific product lines and reserved specific capital amounts for green financing. Examples of private equity investors include Hudson Clean Energy Partners in renewables, or the Moringa Fund in agro-forestry. In this category, development finance institutions often play an important role in providing financing to those companies and projects in developing countries that commercial banks are not yet willing to finance.

16. The largest amounts of financing are available for mature, proven, scaled and/or bundled concepts. These projects can have access to the potentially biggest source of capital available, that of institutional investors such as pension funds and insurance companies, who are looking for large-size, low-risk investments. These institutional investors allocate capital to green infrastructure investment vehicles, or invest in publicly traded stocks of multinational companies with an environmental focus, such as Dong Energy or Tesla Motors. The main challenge is to unlock more of this capital towards environmental projects and companies. One new development is the concept of climate or green bonds, which are used to finance – or refinance – projects needed to address climate or environmental challenges (see below for more on green bonds).

17. The GEF and its stakeholders have long acknowledged the important role GEF can play in stimulating the environmental finance market, either by supporting new initiatives to blossom or existing ones to scale up. The remainder of this chapter analyzes the strengths and weaknesses of GEF private sector engagement in the environmental finance arena, and its comparative advantages in this space.

# Investment funds

18. Investment funds with a focus on environmental companies can be an effective mechanism to indirectly provide finance to new environmental technology or innovative business models. Compared to bank financing, these funds are often able to take more risk, and target younger and smaller companies with limited track records. In the case of specialized environment funds, the fund team often consists of specialists, combining financial with environmental expertise.



19. Specialist investment funds operate in innovative and thus often risky fields which makes it hard for these funds to get the first investor on board. Testing and demonstration

effects are important to improve the investors' perception of an innovative project's investment opportunity. The first investor, or group of investors, signals confidence in the fund manager and can be a decisive factor for others to follow suit. Due to the GEF's experiences with public private partnerships, in which they focus on the use of non-grant instruments and the provision of technical assistance, the GEF can effectively support specialized investment funds through:

- (a) *Cornerstone investment:* The GEF is well-placed to take up this cornerstone role, as its risk appetite allows it to commit this first capital. GEF's investment will serve as a seal of approval for the fund and help raise capital from other investors;
- (b) Co-investment: the companies targeted by environmental investment funds can be interesting opportunities for the GEF if it wants to consider direct equity investments in innovative companies. As the GEF has little capacity to source these kinds of investment opportunities, it can effectively leverage the fund manager's capacity to do this work. If the GEF is interested in these companies, it can coinvestment alongside the fund with relatively low effort;
- (c) *Grants for technical assistance*: in addition to equity investments the GEF may consider providing grants for technical to companies invested by these funds. This technical assistance can be used for feasibility studies or to arrange funding for hardware required to apply new innovative technologies.

### Risk-sharing instruments

20. Investments in innovative companies, projects or funds present risks for private investors. Projects may entail specific risks associated with the use of new technologies, untested business propositions, and uncertain demand; or general risks such as foreign exchange, political or regulatory risks. Environmental projects often have longer term investment horizons, which may further complicate potential deals. The risks are even larger, perceived or actual, in case of investments in developing countries. These considerations may hold potential investors back from deciding to invest in these companies, projects or funds.

21. Risk-sharing instruments for investments such as guarantees, risk-sharing facilities, and insurance products can be attractive and relatively inexpensive ways for the public sector to mobilize private investment in environmental companies, projects or funds.

Text Box 2: Examples of Risk-Sharing Mechanisms



 Small Investment Program (SIP): An example of a more generic risk
 sharing program is the SIP. The SIP was launched by the World Bank Group's Multilateral Investment Guarantee Agency (MIGA) in 2005 already, and aims to facilitate foreign direct investment into SMEs in developing countries. The SIP offers investors investing in SMEs a standardized package of risk coverage, including currency inconvertibility and transfer restriction, expropriation, and war and civil disturbance;

Geothermal Financing and Risk Transfer Facility : An example of a more A specific risk-sharing instrument is the facility developed by the Inter-American Development Bank that aims to scale up private investment in geothermal power generation projects in Mexico. The facility offers risk mitigation in the early stages of exploration and test drilling, with financing solutions adapted to different project phases of geothermal projects. The focus is on private and private-led PPP projects;

A

USAID loan guarantee to Althelia : An example of risk-sharing support to a specialist fund is USAID's loan guarantee to the Althelia Climate Fund, an investment fund with focusing on sustainable land use and payment for ecosystem services (including forest carbon, or REDD+). In 2015 USAID agreed on a \$133.8 million loan guarantee. Under the deal USAID guarantees 50% of loans that Althelia makes to REDD project developers. With carbon prices dropping on the voluntary markets, the guarantee was intended to reassure private investors entering a new investment sector.

22. There is increasing acknowledgement among governments, environmental finance mechanisms and other public financial institutions about the potential of risk-sharing tools to leverage private investment. Particularly in investment areas that are fundamentally costeffective and profitable (e.g. energy efficiency) more efficient allocation of risks can catalyze significant private capital flows without necessarily disrupting any private sector finance construction.

23. Through its Public Private Partnerships Programs, submitted under the GEF-5 replenishment cycle, the GEF aimed to reduce risk through the provision of incremental financing. For example, in the IADB Climate-Smart Agriculture Fund the GEF played a crucial role in reducing the risks by providing guarantees for the risks associated with the long payback period for forestry projects in Paraguay. Its experience in reducing risk through the provision of both financial and advisory services mean the GEF is well-positioned to step up its support through two key risk sharing measures:

- (a) *Risk sharing instruments*: through risk sharing instruments the GEF can mitigate potential high risk perceptions and/or a lack of confidence in the financial viability of environmental projects or innovative investment funds. This will catalyze additional financing by private investors in these projects or funds. The GEF could therefore consider stepping up its support through risk sharing instruments in cases of projects where these risk sharing measures can make a difference.
- (b) Due diligence: Although technically not considered part of risk sharing instruments, risk can also be mitigated by carrying out due diligence for innovative projects or funds. Many long-term investors lack the resources to carry out the intensive and technical due diligence required on for instance a renewable energy project in Africa. By executing due diligence and sharing the findings, the GEF can pave the way for investors to step in. This does require the GEF to streamline its project





appraisal processes more along the lines of private sector due diligence processes, and requires a switch to a more services-oriented organization.

#### Green bonds

24. In recent years, green bonds and climate bonds (collectively referred to as green bonds hereafter) have become increasingly significant instruments to mobilize finance for projects with environmental benefits. Green bonds facilitate investment for new and existing projects by aggregating and structuring debt financing in a way that enables even small scale investments to raise dedicated funding from debt capital markets. For investors, green bonds are a way to tap the huge pool of patient private capital managed by global institutional fixed-income investors. For smaller project developers, green bonds can bridge the gap between them and debt capital providers with large minimum investment requirements.

25. The lack of a globally harmonized definition of this type of bond makes it difficult to quantify the volume and development of the market. However, existing data suggest that it has been growing at a strong pace. According to the Climate Bonds Initiative (CBI) the size of the green bonds market reached a total size of \$118 billion in 2016. Only a small portion of these bonds have actually been labeled as green or climate bonds by their issuers: the CBI estimates that a further \$576 billion in outstanding bonds can be labeled climate-aligned (but not officially labeled as green). Moreover, 2016 was notable as China overtook the US to be the largest issuer of green bonds.

### Text Box 3: Examples of Green Bonds



- EIB Climate Awareness Bond (CAB): The European Investment Bank (EIB) issued its first Climate Awareness Bond in 2007. With this issuance, the EIB pioneered the ring-fencing of proceeds in a dedicated liquidity portfolio within the EIB. The funds are earmarked to match disbursements to EIB lending projects contributing to climate action. The EIB still is the largest issuer to date of Green Bonds with EUR10 billion raised across 10 currencies. Over the years, CAB proceeds have been allocated to 55 projects in 19 countries across the globe;
- ABN AMRO Green Bonds: In 2015 ABN AMRO issued a €500 million (\$ ABN AMRO 530 million) green bond. It was the first commercial European bank to issue a green bond of this size. The proceeds are used exclusively to finance sustainable real estate: mortgages for energy-efficient homes and sustainable commercial real estate. The bond was externally assessed by Oekom, a sustainability rating agency, and certified by the Climate Bonds Initiative. The bank produces reports that give investors information on how and where their investments are making an impact. As the demand for the bond was oversubscribed two times, a second €500 million green bond was issued in 2016;

Shanghai Pudong Development Bank green bonds: The Shanghai Pudong Development Bank has raised \$5 billion in two deals this year. The bank's RMB 20 billion (\$3.04 billion) China-focused issuance still ranks as the world's largest green bond deal. It is anticipated that Chinese green bonds may become more attractive than traditional financing options for environmentally-friendly initiatives, particularly as the People's Bank of China is considering offering interest rate subsidies for green bond issuers to keep borrowing costs low and still attract investors in a growing market.

26. The green bond market has grown immensely in the past year and awareness among FIs is growing. To illustrate, a group of financial institutions were among the founders of the Green Bond Principles, which are voluntary process guidelines that clarify the process for issuance. In order for the market to continue to develop successfully it is necessary that a global definition of what a green bond is exists. A threat to market developments is that a lot of ESG-screened investments are being relabeled as 'green bonds' with a risk of being perceived as green washing. In China, key factors for the success of the past year were the encouraging policy and regulatory developments, such as the launch of the green bond guidelines by the People's Bank of China.

27. Continued development of green bonds and the market will require involvement of many different actors. The GEF, with its established network and experience in providing advisory services is well positioned to explore how it could best support governments and different market players in working on measures to further develop the green bond market. Examples of how the GEF could support different actors are:

- (a) *Standardization*: the GEF could support the development of more standardization on definitions and disclosure to enhance credibility and address reputational risk, such as the 'Green Bond Principles', a voluntary guidelines developed by a number of major financial institutions;
- (b) *Validation and rating*: the GEF could support the development of criteria for independent validation and rating, which are particularly important as confidence-builders in markets where green technologies are less well known;
- (c) *Regulatory support*: the GEF could work with governments in developing regulatory improvements for green bond market development, including by removing unintended barriers to institutional investment in green bonds and other instruments.

Text Box 4: Conservation Finance – Upcoming Asset Class

An innovative and upcoming asset class to which the abovementioned financial instruments can be effectively applied is conservation finance. Conservation finance is a mechanism

through which a financial investment into an ecosystem can be made, whereby it intends to generate profit and aims to conserve the values of the ecosystem in the long term.

The players in the conservation finance landscape include, amongst others, NGOs, philanthropists, public entities, development banks and private sector financial actors. Currently, the source of the financial flows in this asset class is predominantly public sector financing; in particular, domestic budget allocation, agricultural subsidy reform and overseas development aid. The GEF is also active in this field, committing funds to protecting the international waters through, for example, the reduction of ocean pollution. The private sector has increasingly become involved in conservation finance, with private capital commitments growing by 62% in two years<sup>3</sup>. This is partly due to the development of conservation finance mechanisms such as carbon finance and nutrient trading, which create incentives for the private sector and harness private capital<sup>4</sup>.

Although delineating what financial flows constitute as conservation finance is difficult, the recent Ecosystem Marketplace report (2016) has identified three core groups into which investments are made: sustainable food and fiber production, habitat conservation, and water quality and quantity protection. Of these three groups, sustainable food and fiber production continued to attract the bulk of the capital, approximately four times the amount of capital committed for habitat conservation and water quality and quantity protection. The private capital committed was predominantly in developed countries, with North America and Oceania receiving about \$ 2.7bn (52% of total committed).

The types of instruments that are being used in this asset class range from real assets to environmental credits. The finance solutions discussed earlier in the Annex, to which the financial and advisory services of (semi)-public FIs can effectively be leveraged, are also found in conservation finance: specialized investment funds (e.g. Ecosystem Investment Partners), risk reduction mechanisms (e.g. the No Net Loss policy in the US Clean Water Act), and green bonds (e.g. the District of Columbia Water and Sewer Authority's \$350 million taxable bond).

There has been a growth in private sector involvement in conservation finance, yet despite an unmet demand for funding of projects there remained \$3.1 billion of private capital uncommitted at the end of 2015. Within these asset class opportunities thus exist for both public and private actors to further develop financial mechanisms and instruments. It is key that private capital is effectively catalysed and directed to ensure equal distribution across geographies and environmental issues.

<sup>&</sup>lt;sup>3</sup> Figures come from the recent Ecosystem Marketplace report (2016), which is based on surveys sent to investors, investment funds, project developers, banks, and other financial entities. It thus does not provide a complete overview of all global conservation finance flows.

<sup>&</sup>lt;sup>4</sup> Credit Suisse, WWF, McKinsey & Company. (2014).

#### **ANNEX V. METHODOLOGY FOR FIGURE 8**

1. To provide an overview of the (semi) public environmental finance field in which the GEF operates, a sample of 14 multilateral, bilateral and national funds and mechanisms were mapped. The data used for the mapping was sourced directly from the websites of the funds and mechanisms (see table below for links). The methodology in assessing the funds and mechanisms was to imitate the private sector's approach in seeking out opportunities for engagement in the environmental finance field.

- 2. The following characteristics and information of the funds and mechanisms were extracted from the source data:
- 3. Type of fund or mechanism
  - (a) National, bilateral or multilateral
- 4. Fund size

6.

- (a) In US\$ million
- 5. Thematic and instrumental focus
  - (a) Thematic focus includes geographic, environmental issue, and sector focus
  - (b) Instrumental focus includes services (in addition to financing) and type of financial products offered Accessibility to the private sector
  - (a) Communication of private sector engagement
    - (b) Communication of project cycle information
    - (c) Level of engagement with the private sector

#### Semi-public environmental finance actors

Name	Source
National actors	
Amazon Fund	www.amazonfund.gov.br
Brazilian National Fund on Climate Change	www.bndes.gov.br
Rwanda National Climate Fund	www.fonerwa.org
Bilateral actors	
International Climate Fund	www.gov.uk/government/publications/international-climate-fund/international- climate-fund
Global Climate Partnership Fund	www.gcpf.lu
International Climate Initiative	www.international-climate-initiative.com
International Forest Climate Initiative	www.regjeringen.no/en/topics/climate-and-environment/climate/climate-and- forest-initiative
Multilateral actors	
Adaptation Fund	www.adaptation-fund.org/
Clean Technology Fund	www-cif.climateinvestmentfunds.org/fund/clean-technology-fund
Strategic Climate Fund	www-cif.climateinvestmentfunds.org/fund/strategic-climate-fund
Africa Climate Change Fund	www.afdb.org/en/topics-and-sectors/initiatives-partnerships/africa-climate- change-fund/
Green Climate Fund	www.greenclimate.fund

Global Environmental Facility <u>www.thegef.org</u>

Global Energy Efficiency and Renewable Energy Fund

www.geeref.com

#### ANNEX VI: CLIMATE FINANCE FUND COMPARATIVE TABLE

Parameter	GEF	CIFs CTF	CIFs SCF	GCF
Funding	\$4.4B in GEF-6, of which \$1.2B allocated for Climate Change⁵.	\$5.8Bfund, of which \$3.8B deployed (Nov 2016)	Three funds totaling \$2.8B; \$1.5B with indicative allocation to projects (as of late 2016). FIP: \$758M in fund, \$603M approved. SREP: \$839M in fund, of which \$822M allocated; PPCR: \$1.2B in fund, of which \$121M allocated	\$10.3B pledged; \$2.2B invested since 2015 (as of April 2017)
Accredited Entities/ Implementing Agencies	18 Implementing Agencies: international development institutions, MDBs, some others	6 Implementing Agencies (multilateral development banks)	6 Implementing Agencies (multilateral development banks)	48 Accredited Entities: MDBs, development institutions, NGOs, national & international financial institutions
Programmatic Focus of the Fund	Focus ofGEF-4 Earth Fund and GEF-5 PPPs. IAPs launched in GEF-6, Focal areas and various intervention models long- standing practice.Increasing focus on leveraging private investment and neglected clean energy & transportation technologies in CTF 2.0Mostly national investment plans (largely not applicable). Private sector carveout activities under development.		Roughly 50% of projects (all non-sovereign government implementers) implemented through Private Sector Facility.	

<sup>&</sup>lt;sup>5</sup> GEF-6 Programming Directions - Extract from GEF Assembly Document GEF/A.5/07/Rev.01, May 22, 2014

Thematic/Geographic Focus of the Fund	STAR allocation system; many non-climate programs across MEAs; Programmatic carveouts for non-grant projects in GEF-5 and GEF-6.	Climate change & clean energy only. National investment plans; middle- income countries	Climate change only. Adaptation (PPCR), forests (FIP), and LDC clean energy (SREP) funding windows	Climate change only. Broad geographic focus. 50% carveout for adaptation, of which 50% for the most vulnerable countries, including LDCs, SIDS, and African States.
Size and Focus of Private Sector Programs	Mainstreaming, non-grant and integrated approach pilots;. Funding: GEF-4 (2006-2010): \$56 million set aside to the GEF's Earth Fund. GEF-5 (2010- 2014): \$80M set aside across all focal areas, of which \$70M committed. GEF-6 (2014-2018): \$110M across all focal areas (access to both public and private) <sup>6</sup>	Private sector carveouts established in 2012. \$508.5M (Phase 1: \$150M, Phase II: \$358M), of which \$466.5M endorsed, \$341.6M approved. <sup>7</sup> Project focus includes: Geothermal power, mini-grids, mezzanine finance, energy efficiency, solar photovoltaic power, and early stage renewable energy.	Private sector carveouts since 2012 in PPCR, FIP and SREP; not yet very successful to date. FIP set- aside: \$56M. SREP set- aside: \$93M (Phase I: \$60M, Phase II: \$30M). PPCR set- aside: \$70 million. <sup>8</sup> No sectoral focus of SCF carveouts.	No sectoral focus. Two RFPs establishing thematic focus: Pilot Program for Mobilizing Funds (\$500M) and the Pilot Micro, Small, and Medium-Sized Enterprise Program (\$200M)
Level and Type of Concessional Instruments	Mostly grants aside from private sector set-aside programs.	Mostly non-grant. Some market-rate loans.	Mix of grants and loans, depending upon fund.	Primarily non-grant but not mandated as such. Some market-rate investments.

<sup>&</sup>lt;sup>6</sup> Climate Policy Initiative (CPI). "Role of the Climate Investment Funds." 2016. <u>https://climatepolicyinitiative.org/wp-content/uploads/2016/06/The-role-of-the-</u> <u>Climate-Investment-Funds-in-meeting-investment-needs.pdf</u>.

<sup>&</sup>lt;sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> Ibid.

				1
Investment Mechanisms and 'Percentage Distribution of Concessional Instruments Used	Various (debt, equity, investment guarantees, others). In GEF-5 Climate Change Focal Area: Non-grant instruments: 12.2%, (Debt: 4.7%, Equity: 1.0%, Risk mitigation: 4.7%, Mixed: 1.8%), Grant instruments: 87.8% <sup>9</sup>	Primarily debt investment (roughly 80%). Breakdown as of late 2015: Grants: 3%, guarantees: 2%, softer- termed concessional loans: 47%, harder-termed concessional loans: 21%, Private sector loan: 26% <sup>10</sup>	FIP breakdown: Grants: 21%, Loans: 79%. SREP breakdown: Grants: 21%, Loans: 77%, Guarantees: 2%, Other instruments: 0.4%. PPCR breakdown: Grants: 67%, Loans: 33%. <sup>11</sup>	GCF portfolio breakdown as of late 2015: Guarantees (12%), equity (12%), grants (76%), others under consideration <sup>12</sup>
Risk Appetite	High	Moderate	High	Moderate (still in flux)
Investment Size	Various, including small and mid-sized <sup>13</sup>	All CTF investments are greater than \$150M. <sup>14</sup>	Various, including small and mid-sized. PPCR: \$10M to \$110M; SREP: \$2M to \$50M; FIP: \$30M to \$95M <sup>15</sup>	Various; primarily mid- sized and large (greater than \$50M) <sup>16</sup>
Private sector leveraging	Various (moderate to high), depending on mechanism, intervention approach and focal area. In GEF-5 and GEF-6, \$300M leveraged \$4.7B from the private sector.	High (\$2.4B expected to leverage \$20B)	Low	Medium (\$1.3B expected to leverage \$4B)

<sup>&</sup>lt;sup>9</sup> Ibid.

<sup>14</sup> CTF Annual Report 2015.

<sup>&</sup>lt;sup>10</sup> Ibid.

<sup>&</sup>lt;sup>11</sup> Ibid.

<sup>&</sup>lt;sup>12</sup> Ibid.

<sup>&</sup>lt;sup>13</sup> Full-sized Projects (>\$2M), Medium-sized Projects (Up to \$2M), Enabling Activities (Up to \$1M)

<sup>&</sup>lt;sup>15</sup> Annual Report 2015. <u>http://www-cif.climateinvestmentfunds.org/sites/default/files/annual-report-2015/cif-annual-report-ebook.pdf</u>

<sup>&</sup>lt;sup>16</sup> Micro (<\$10M), Small (\$10-50M), Medium (\$50-250M), Large (>\$250M)

Niches	Non-climate change specific; frontier markets; small scale, high risk, and innovative; conservation finance; crosscutting programs addressing environmental drivers; capacity building, multi-stakeholder platforms, policy enabling environments	Country-specific programs; bringing clean energy technology investment to scale in new markets; pairing donor funds with MDB investment and market- driven private investment funds & transactions; large debt, equity funds, green bonds	Catalyzing clean energy, forests, adaptation investment in LDCs and underdeveloped, pre- commercial climate change- related markets; capacity building and policy enabling environments	Linking UNFCCC NDC commitments to government policies and investments; linking international capital markets with domestic climate institutions; climate finance market development
Mandate from any Multilateral Environmental Agreement (MEA)	Minamata Convention on Mercury, the Stockholm Convention on Persistent Organic Pollutants (POPs), the United Nations Convention on Biological Diversity (UNCBD), the United Nations Convention to Combat Desertification (UNCCD) and the United Nations Framework Convention on Climate Change (UNFCCC)	No	No	The United Nations Framework Convention on Climate Change (UNFCCC)

#### ANNEX VII: BILATERAL AND REGIONAL AGENCIES PROVIDING ENVIRONMENT-RELATED FINANCING

1. Overseas Private Investment Corporation (OPIC): OPIC is the bilateral development finance institution of the United States. Interestingly, OPIC's website today makes no mention of its earlier stated policy objective of encouraging the use of renewable resources, though energy remains a focus area. It offers a range of financing products to the private sector in developing countries: debt, funds and structured products, and de-risking instruments such as political risk insurance and guarantees. It cannot take direct equity stakes in projects (but can do so indirectly through debt or other support for private equity funds), and neither does it provide grants nor technical assistance. <sup>17</sup> In 2016 alone, OPIC committed \$1.4 billion to energy and critical infrastructure projects, including \$55 million for off-grid energy. OPIC's Power Africa project has committed \$1.5 billion in financing and insurance for energy projects in sub-Saharan Africa between 2013-18.<sup>18</sup>

2. OPIC debt financing is offered on negotiated terms (interest rate consists of a spread over the base-cost of funds) and includes various fees; tenors can go up to 30 years. While not explicitly concessional, OPIC financing is made available to projects that would be unlikely to attract commercial financing on the same terms.

Global Climate Partnership Fund (GCPF): GCPF is an interesting structure that is billed as a Public Private Partnership, with a tiered shareholding structure that de-risks returns for private sector investors. The German Federal Ministry for the Environment, the UK Department of Business, Energy and Industrial Strategy, and the Danish Ministry of Foreign Affairs hold the junior tranche, or Class C shares, in the waterfall structure. A mezzanine tranche, or Class B shares, is held by the fund manager responsible, while the senior tranche, or Class A shares, is held by OeEB (Austrian development bank), KfW (German development bank), FMO (Dutch development bank) and IFC. A German pension fund and a Dutch are private noteholders in the structure. The Class C shares represent the first loss equity of the fund; B shares rank senior to C shares and A shares rank senior to B shares, but all shares rank junior to noteholders. Remuneration of notes and shares is based on 6-month LIBOR and an agreed spread.

3. GCPF invests in renewable energy and energy efficiency in emerging and developing markets globally. It does this directly or via local financial intermediaries. Financing products include senior and subordinated debt, as well as equity and mezzanine finance. <sup>19</sup>

4. European Investment Bank (EIB): Although focused primarily on the European Union

<sup>&</sup>lt;sup>17</sup> Christianson, Giulia, Shally Venugopal, Shilpa Patel. 2013. <u>Unlocking Private Climate Investment Focus on OPIC</u> <u>and Ex-Im Bank's Use of Financial Instruments</u>. Working Paper, Instalment 3 of Public Financial Instruments Series. Washington DC: World Resources Institute.

<sup>&</sup>lt;sup>18</sup> Overseas Private Investment Corporation website

<sup>&</sup>lt;sup>19</sup> Global Climate Partnership Fund website

(EU), the EIB is able to offer finance in "Associated Countries", which include several developing countries of geopolitical interest to the EU. While lending comprises the bulk of the EIB's activities, it is also able to provided blended finance and advisory assistance. None of the programs described below have an explicit environmental focus, but are governed by the EU's commitment to low-carbon and climate resilient growth and the EIB's stated goal of committing 25% of its lending portfolio to such activities. Programs of relevance to the GEF include:

- (a) InnovFin: this facility aims to facilitate access to finance for innovative businesses, which may not be able to attract conventional finance due to technological complexity, unproven markets and other barriers. It consists of financing tools such as loans and guarantees, and advisory services, provided directly or through financial intermediaries. As of September 2016, InnovFin had financed over 100 projects and provided over €100 million in financial support for activities in a range of sectors, including risk sharing facilities with FIs, and energy (11% and 13% respectively). By 2020, InnovFin expect to make EUR 24 billion of debt and equity financing available to innovative companies to support EUR 48 billion of final investment.
- (b) Trust Funds: Grant resources provided by donors such as the European Commission and EU member states are pooled by the EIB and provided directly to beneficiaries or leveraged with financial products from the EIB or other financial institutions. These trust finds can help in financing TA and other advisory services, and fill financing gaps. Currently the EIB manages four trust funds, all of which have activities in countries that would also be eligible for GEF assistance. Total funding provided or available as of this writing was close to EUR 2 billion.
- (c) Risk Capital Facility for the Southern Neighbourhood: This is a €142.5 million facility to provide access to equity and debt financing to SMEs in the Mediterranean region for private sector development. It invests in private equity funds, microfinance institutions and investment vehicles, and provides TA to financial intermediaries or final beneficiaries.<sup>20</sup>

<sup>&</sup>lt;sup>20</sup> This section drawn from the European Investment Bank website.

#### ANNEX VIII. GUIDANCE FROM THE CONVENTIONS

Convention and	Strategic Document/COP	Guidance on PS Engagement
Corresponding GEF Focal Area	Decision/Others	
Convention on Biological Diversity (CBD)   Biodiversity	Strategic Plan for Biodiversity 2011- 2020 and the Aichi Biodiversity Targets	• By 2020, the private sector and stakeholders from all other sectors to have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.
		• Business sector entities, among others, to make available the necessary resources for the implementation of the Strategic Plan for Biodiversity 2011-2020.
		• Forge partnerships with the private sector, among others, to leverage actions at the scale necessary and to ensure mainstreaming of biodiversity across sectors of government, society and the economy.
	COP 8 Decision VIII/17 Private-sector engagement	• Following types of tools and mechanisms may be of use in facilitating contributions from business and industry towards the implementation of the Convention - voluntary or mandatory reporting and performance standards, guidelines, and indices; certification schemes; biodiversity benchmarks; public-private partnerships; tools for assessing the value of biodiversity and ecosystem services.
		• Urge national focal points, working with relevant government departments, to communicate the importance of biodiversity to companies operating within the jurisdiction of Parties.
		<ul> <li>Invites businesses and relevant organizations and partnerships to develop and promote the business case for biodiversity.</li> </ul>
United Nations Convention on Combatting Desertification (UNCCD)   Climate Change Mitigation & Adaptation	10-year strategic plan and framework to enhance the implementation of the Convention (2008–2018)	• Identify innovative sources of finance and financing mechanisms to combat desertification/land degradation and mitigate the effects of drought, including from the private sector and market-based mechanisms, among others (Outcome 5.4).

	UNCCD business engagement strategy as contained in annex I to document ICCD/COP(12)/3	<ul> <li>Businesses and relevant organizations and partnerships to develop and promote the business case for biodiversity.</li> <li>Establish an enabling policy environment for business sector engagement.</li> <li>Identify and engage with the major global business networks that have sustainability agendas open to SLM approaches (Global Compact principles, World Business Council for Sustainable Development, World Economic Forum, International Chamber of Commerce) and mainstream SLM targets into these agendas; form partnerships and jointly develop tools that help business to mainstream SLM into the business operations, practices and policies of network members.</li> <li>Support the documentation of business- relevant evidence for action and case studies for the Economics of Land</li> </ul>
		Degradation Initiative (for business) or the Offering Sustainable Land-use Options Consortium • Finance sustainable land management through incentives and market-based
		funding mechanisms.
United Nations Framework Convention on Climate Change (UNFCCC)   Land Degradation	Adoption of the Paris Agreement. Proposal by the President. Draft decision -/CP.21	• Uphold and promote regional and international cooperation in order to mobilize stronger and more ambitious climate action by all Parties and non-Party Stakeholders, including the private sector.
		• Encourage the coordination of support from, inter alia, private and alternative sources in accordance with relevant decisions by the Conference of the Parties.
		• Welcome the efforts of all non-Party stakeholders to address and respond to climate change, including those of the private sector.
		• Incentivize and facilitate participation in the mitigation of greenhouse gas emissions by private entities authorized by a Party.
		• Enhance public and private participation in the implementation of nationally determined contributions.

	UNFCCC Nairobi Work Programme Private Sector Initiative (NWP PSI)	• NWP PSI aims to catalyze private sector engagement in climate change adaptation efforts. It provides a platform for the private sector to showcase and exchange best practices and experiences. The PSI also presents organizations with the opportunity to develop knowledge on climate change adaptation, build adaptive capacity and be part of a growing network of organizations taking measures to adapt to the impacts of climate change.
Stockholm Convention on Persistent Organic Pollutants (POPs)   Chemicals and Waste	Stockholm Convention - Text and Annexes	• The Convention recognizes the important contribution that businesses and industry (e.g. producers, manufacturing sector, wastes treatment companies) can make to achieve the reduction and/or elimination of releases of persistent organic pollutants into the environment by offering new and efficient technologies and by making investments for the development of alternatives, etc.
		• Businesses and industry may make various contributions to the scientific and technical work under the Convention, e.g. through provision of information to the Persistent Organic Pollutants Review Committee when a proposal for listing a new chemicals to the Convention is under consideration. Without the active involvement and engagement of the industry sectors, none of the goals of elimination, reduction, or environmentally sound disposal, are likely to be achieved.
Minamata Convention on Mercury   Chemicals and Waste	Minamata Convention on Mercury - Text and Annexes	• The private sector involvement is regarded as one of the resources that the Party uses to implement the Convention, in accordance with the Party's national policies, priorities, plans and programmes.
		• The Financial Mechanism shall encourage the provision of resources from other sources, including the private sector, and shall seek to leverage such resources for the activities it supports.
		• Capacity-building, technical assistance and technology transfer through partnerships, including partnerships involving the private sector.

Vienna Convention for the Protection of the Ozone Layers and Montreal Protocol on Substances that Deplete the Ozone Layer   Chemicals and Waste	Handbook for the Montreal Protocol on Substances that Deplete the Ozone Layer Tenth edition (2016)	<ul> <li>Request the Scientific Assessment Panel and the Technology and Economic Assessment Panel to develop a guidance paper on mechanisms to facilitate public- private sector cooperation in the evaluation of the ozone depletion potential of new chemicals in a manner that satisfies the criteria to be set by the Panels; (Dec. XI/19), and produce a guidance paper on public/private sector partnerships in this assessment (Decision XIII/5).</li> <li>Prevent illegal trade in ozone-depleting substances, and crosscheck trade information, including through private- public partnerships (Decision XIX/12).</li> </ul>
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal   Chemicals and Waste	Strategic Framework for the implementation of the Basel Convention for 2012–2021 (decision BC-10/2)	<ul> <li>The private sector and partnerships, among others, are identified as the options for implementing the Basel Convention.</li> <li>"Industry involvement, including public- private partnerships and the use of economic instruments at the national and international levels" has been identified as one of the four tracks of an integrated approach towards financing the sound management of chemicals and wastes.</li> </ul>
	Document UNEP/CHW.10/INF/34 - New strategic framework for the implementation of the Basel Convention for 2012-2021 Means of Implementation. Note by the Secretariat	<ul> <li>To launch or contribute to strategic and operational partnerships and cooperation with public and private stakeholders to leverage the impact of the Basel Convention, and to promote public-private partnerships could be the means of implementation of the Basel Convention.</li> <li>There are different levels of means of implementation, for instance, industry involvement, including strategic public-private partnerships and the use of economic instruments at national and international levels, and collaboration between governments, the private sector and international finance institutions to guarantee effective support to industry, business and education. The latter requires an enabling environment for its development.</li> </ul>
	The Basel Convention Partnerships Programme	• Public-private partnership provides an effective and open way for stakeholders to meet together to address common areas of concern and identify a programme of actions to undertake collectively. Industry,

	in particular, plays a vital role in partnerships as it possesses the technical skills, know-how and infrastructure needed for the environmentally sound management (ESM) of many waste streams, including sound recycling and safe disposal of end-of-life products.
Multilateral Agreements on International Waters and Transboundary Water Systems   International Waters	The International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM), the UN Law of the Sea Treaty, the MARPOL treaty for shipping (International Convention for the Prevention of Pollution From Ships), and the UN Agreement on conservation and management of straddling fish stocks and highly migratory fish stocks have not offered any guidance on private sector engagement.
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade   Chemicals and Waste	The Convention has not offered any guidance on private sector engagement.

## ANNEX IX: LIST OF NON-GRANT PROJECTS

GEF ID	Title	GEF Phase	Reflow to the GEF Project
377	Community Based Rangeland Rehabilitation for Carbon Sequestration	Pilot	No
386	Optimizing Development of Small Hydel Resources in Hilly Areas	Pilot	No
391	Fuel Efficiency in the Road Transport Sector	Pilot	No
91	Small and Medium Scale Enterprise Program (IFC)	GEF - 1	No
111	Energy Efficiency Co-Financing Program	GEF - 1	Yes
112	Photovoltaic Market Transformation Initiative (IFC)	GEF - 1	No
135	Small and Medium Scale Enterprise Program (IFC, first replenishment)	GEF - 1	Yes
267	Energy Efficiency Improvements and Greenhouse Gas Reductions	GEF - 1	No
314	A Program for Rural Electrification with Renewable Energy Using the Popular Participation Law	GEF - 1	No
448	Industrial Energy Efficiency Improvement Project	GEF - 1	No
13	Removal of Barriers to Biomass Power Generation and Co- generation	GEF - 2	No
540	Building Chiller Replacement Program	GEF - 2	No
622	Energy Conservation and GHG Emission Reduction in Chinese Township and Village Enterprises (TVE), Phase II	GEF - 2	No
641	Barrier Removal to Renewable Energy Programme	GEF - 2	No
646	Market Development for Solar Water Heaters	GEF - 2	No
658	Removing Barriers to the Increased Use of Biomass as an Energy Source	GEF - 2	No
660	Barrier Removal to Secure PV Market Penetration in Semi- Urban Sudan	GEF - 2	No
786	Krakow Energy Efficiency Project	GEF - 2	No
843	Removal of Barriers to Rural Electrification with Renewable Energy	GEF - 2	No
882	Removing Barriers to Improving Energy Efficiency of the Residential and Service Sectors	GEF - 2	No
883	Energy Efficiency Project	GEF - 2	No
935	Barrier Removal to Namibian Renewable Energy Programme, Phase I	GEF - 2	No
944	Energy Efficiency Project	GEF - 2	No
1237	Energy Conservation Project, Phase II	GEF - 2	No
1264	Capacity Building to Remove Barriers to Renewable Energy Development	GEF - 2	No
1265	Polish Energy Efficiency Motors Programme	GEF - 2	No
1291	Renewable Energy Resources Project	GEF - 2	No
1316	Energy Efficiency Co-Financing Program 2 (HEECP2)	GEF - 2	No
1541	Commercializing Energy Efficiency Finance (CEEF) - Tranche I	GEF - 2	No
1571	EcoEnterprises Fund	GEF - 2	No
1646	Cost Effective Energy Efficiency Measures in the Russian Educational Sector	GEF - 2	No

	Inka Terra: An Innovative Partnership for Self-Financing		
1061	Biodiversity Conservation & Community Development	GEF - 3	No
1137	Promoting the Use of Renewable Energy Resources for Local Energy Supply	GEF - 3	No
1198	Biomass Energy for Heating and Hot Water Supply	GEF - 3	No
1199	Removal of Barriers to Biomass Power Generation, Part I	GEF - 3	No
1245	Renewable Energy-based Rural Electrification	GEF - 3	No
1335	Bioenergy for Sustainable Rural Development	GEF - 3	No
1358	Renewable Energy-based Electricity Generation for Isolated Mini-grids	GEF - 3	No
1361	Generation and Delivery of Renewable Energy Based Modern Energy Services in Cuba; the case of Isla de la Juventud	GEF - 3	No
1413	Energy Efficiency Measures in the Honduran Commercial and Industry Sectors	GEF - 3	No
1532	Electric Cooperative System Loss Reduction Project	GEF - 3	No
1609	Renewable Energy Enterprise Development - Seed Capital Access Facility	GEF - 3	No
2105	Conservation and Sustainable Use of Biodiversity in the Dalmatian Coast through Greening Coastal Development	GEF - 3	No
2111	Russian Sustainable Energy Finance Program	GEF - 3	No
2117	Energy Efficiency Project	GEF - 3	No
2119	African Rift Geothermal Development Facility (ARGeo)	GEF - 3	No
2256	Barrier Removal to Namibian Renewable Energy Programme (NAMREP), Phase II	GEF - 3	No
2531	Sustainable Energy Program	GEF - 3	No
2619	Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation	GEF - 3	No
2624	China Utility-Based Energy Efficiency Finance Program (CHUEE)	GEF - 3	No
2670	Central American Markets for Biodiversity (CAMBio): Mainstreaming Biodiversity Conservation and Sustainable use within Micro, Small and Medium-sized Enterprise Development and Financing	GEF - 3	No
2939	Solar Water Heating Market Transformation and Strengthening Initiative, Phase 1	GEF - 3	No
2944	Sustainable Energy Financing	GEF - 3	Yes
3005	CleanTech Fund	GEF - 3	No
3558	SP-SFIF: West Africa Regional Fisheries Program (WARFP)	GEF - 3	No
2000	Environmental Business Finance Program (EBFP)	GEF - 3	Yes
2941	Market Transformation for Energy Efficiency in Buildings	GEF - 4	No
3597	RUS Improving Urban Housing Efficiency in the Russian Federation	GEF - 4	No
3626	PAS: The Micronesia Challenge : Sustainable Finance Systems for Island Protected Area Management - under the GEF Pacific Alliance for Sustainability	GEF - 4	No
3766	Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW)	GEF - 4	No
4176	Encouraging the Establishment and Consolidation of an Energy Service Market in Chile	GEF - 4	No

4257	The GEF Earth Fund: IFC Earth Fund Platform	GEF - 4	Yes
4237		GEF - 4	165
4348	Reducing GHG Emissions through a Resource Efficiency Transformation Programme (ResET) for Industries in	GEF - 5	No
4540	Kazakhstan	GEF - J	NO
4427	Russia Energy Efficiency Financing (REEF) Project	GEF - 5	No
	Pilot Asia-Pacific Climate Technology Network and Finance		
4512	Center	GEF - 5	No
4626	Geothermal Power Generation Program	GEF - 5	No
4683	ARCTIC: Targeted Support for Energy Efficiency and Renewable Energy in the Russian Arctic	GEF - 5	No
4753	Sustainable Energy Initiative for Industries	GEF - 5	No
4784	Introduction of Energy Management System Standard in Ukrainian Industry	GEF - 5	No
4788	Promoting Business Models for Increasing Penetration and Scaling up of Solar Energy	GEF - 5	No
4801	Promotion of Non-fired Brick (NFB) Production and Utilization	GEF - 5	No
4890	Towards a Green Economy in Uruguay: Stimulating Sustainable Production Practices and Low-emission Technologies in Prioritized Sectors	GEF - 5	No
4918	Partial Risk Sharing Facility for Energy Efficiency	GEF - 5	No
4957	Small and Medium Enterprise Energy Efficiency Project	GEF - 5	No
5530	Green Shipping Programme for Russia	GEF - 5	No
5704	Promoting Organic Waste-to-Energy and other Low-carbon Technologies in Small and Medium-scale Enterprises (SMMEs): Accelerating Biogas Market Development	GEF - 5	No
4929	AfDB-PPP Public-Private Partnership Program	GEF - 5	Yes
4959	IDB-PPP MIF Public-Private Partnership Program	GEF - 5	Yes
5143	PPP-EBRD South Eastern Mediterranean EE/ ESCO Markets Platform (PROGRAM)	GEF - 5	Yes
5388	PPP-IDB Sustainable Caribbean Basin Private Equity Fund (PROGRAM)	GEF - 5	Yes
5754	IDB-GEF Climate-Smart Agriculture Fund for Latin America and the Caribbean (PROGRAM)	GEF - 5	Yes
6980	The International Lighting Efficiency Facility (iLEF)	GEF - 6	Yes
9043	Investing in Renewable Energy Project Preparation under the Sustainable Energy Fund for Africa (SEFA)	GEF - 6	Yes
9047	Green Logistics Program	GEF - 6	Yes
9051	Moringa Agro-forestry Fund for Africa	GEF - 6	Yes
9058	Impact Investment in Support of the Implementation of the Nagoya Protocol on Access and Benefit Sharing (non-grant)	GEF - 6	Yes
9085	Equity Fund for the Small Projects Independent Power Producer Procurement Programme	GEF - 6	Yes
9277	Risk Mitigation Instrument for Land Restoration (Non-Grant)	GEF - 6	Yes
9370	The Meloy Fund : A Fund for Sustainable Small-scale Fisheries in SE Asia	GEF - 6	Yes
9563	Third South West Indian Ocean Fisheries Governance and Shared Growth Project (SWIOFish3)	GEF - 6	Yes
	Piloting Innovative Investments for Sustainable Landscapes	GEF - 6	Yes

## ANNEX X: GEF/IFC EARTH FUND (EF) PLATFORM

# Introduction

1. The GEF Earth Fund was approved by Council and endorsed by the GEF CEO in May 2008 (midway through the GEF-4 programming cycle), as a pilot Public-Private Partnership (PPP) initiative with \$50 million of GEF resources plus another \$6 million to cover Agency fees. <sup>21</sup>

2. The main features were as follows: (1) a private sector set-aside outside the RAF/STAR; (2) based on the concept of portfolios or "Platforms" that were approved by the Council, with delegated authority then given to the implementing Agencies to approve individual private sector projects within their already-approved funding envelope; (3) establishment of an advisory Earth Fund Board to provide private sector expertise and recommendations to the Council; (3) a minimum of \$150 million of leverage was required, and specifically at least 3x for each Platform; (4) Platform proposals needed to be well developed prior to Council approval (i.e. not concepts) in order to facilitate a single step "portfolio-level" approval by the Council; and (5) industry, foundations, NGOs and other partners were enabled to originate proposals that were subsequently developed in partnership with one or more GEF Agencies.

# The IFC Earth Fund Platform

3. The first Earth Fund platform, the IFC Earth Fund Platform ("*IFC EF Platform*") was also approved and endorsed in May 2008. <sup>22</sup> The *IFC EF Platform* was allocated \$30 million of the GEF resources plus Agency fees, which corresponded to 60% of the GEF Earth Fund's resources.

4. An independent terminal review of the *IFC EF Platform* ("Terminal Review of the Earth Fund Platform – Final Evaluation Report") was issued by the professional services firm EY (formerly Ernst & Young) in August 2016. It stated that the *IFC EF Platform* received an initial capitalization of \$40M: \$30M from the GEF Earth Fund and \$10m from IFC. When the *IFC EF Platform* was approved, IFC received delegated authority from the GEF to approve IFC Earth Fund projects governed by IFC's policies and procedures. This exempted IFC Earth Fund projects from the GEF project-cycle procedures, increasing flexibility, and speeded up the decision-making process. The *IFC EF Platform* became operational in June 2008 and closed in June 2014.

5. IFC and the GEF recognized that market transformation is a long-term process that is unlikely to be achieved through a single project, but requires long term support. Furthermore, both organizations recognized that the private sector plays a central role in driving market

<sup>&</sup>lt;sup>21</sup> At the June 2006 Council meeting, the Council requested the IFC, in collaboration with the Secretariat and the Regional Development Banks, and in consultation with other Implementing and Executing Agencies, to elaborate its proposal to enhance financing through a public/private sector partnership. The GEF Public Private Partnership Initiative was approved within the Council work program of June 2007. Following extensive negotiations, the final project document for the GEF Public Private Partnership Initiative (now renamed the GEF Earth Fund) was submitted to the Council on April 7, 2008, and was endorsed by the GEF CEO on May 27, 2008.

<sup>&</sup>lt;sup>22</sup> The final proposal for the IFC Earth Fund Platform was submitted to the Council on May 7, 2008.

change. As a result, the *IFC EF Platform* was supposed to focus its interventions on creating *"lasting change in market behavior by removing identified barriers,"* such as access to finance, lacking technical capacity or insufficient market knowledge, particularly by focusing on testing and pilot interventions and scale-up interventions:

- (a) Testing and piloting interventions Support demonstrations that show the ability to mitigate or eliminate the perceived risk associated with new technologies, financial products, and business models.
- (b) Scale-up interventions Support scale-up initiatives of previously successfully tested technologies, financial products, or business models to encourage widespread adoption.

6. The *IFC EF Platform's* realized project portfolio is described on page 16 of the EY evaluation report. A total of 14 projects have been supported (5 Investment Services and 9 Advisory Services projects). The current portfolio of projects totals \$38.1 million in funds from the Platform and covers 16 countries. Total project costs sum to \$1.068 billion [which corresponds to a 26.7x multiple of the allocated \$40 million of GEF and IFC concessional financing]. \$1.019 billion of this is for Investment Services and \$48.6 million is for Advisory Services. Committed concessional financing totals \$38.1 million, with \$28.6 million for Investment Services projects.

7. The overall program performance of the *IFC EF Platform* was rated as highly successful. It is noted on page 33 of the EY evaluation that "while the GEF's initial vision of the Earth Fund as a hybrid institution that would absorb private sector funds directly never materialized", the *IFC EF Platform* was very successful in establishing a mechanism for investing GEF funds alongside IFC funds and mobilizing investments from commercial investors in projects that generate returns and achieve environmental benefits. The *IFC EF Platform's* position in investing early in certain areas or technologies helped demonstrate viability and encourage other participants to join the market, as well as giving IFC a leadership role in assisting other donors in understanding market needs. This is notably the case for IHS (an equity investment to promote the development of affordable "green" homes in South Africa), in which IFC's early investment led to a follow on KfW investment.

8. The experience of the *IFC EF Platform* also shaped IFC's approach to Blended Finance, including development of the Blended Finance Principles and the governance of Blended Finance operations at IFC.

### The GEF Earth Fund

9. Following the initial approval and endorsement of the GEF Earth Fund and the *IFC EF Platform* in May 2008, the attention of the Secretariat was turned to the programming of the remaining \$20 million of the \$50 million of GEF resources dedicated to the GEF Earth Fund. Before additional programming could be done, it was necessary to establish the Earth Fund Board and obtain Council approval for a set of procedures governing the operation of the Earth Fund, titled "The GEF Earth Fund Board Procedures (Pilot Project) - Strategic Priorities, Governance and Operational Procedures", hereinafter "*EF Procedures*". The *IFC EF Platform* was not subject to the guidance of the Earth Fund Board or the *EF Procedures* (having already been approved and endorsed), and was independently managed by IFC.

10. It is important to note that the "GEF's initial vision of the Earth Fund as a hybrid institution that would absorb private sector funds" cited in paragraph 7 above was merely an initial vision promoted by the Secretariat, and it was not the Earth Fund project design that was approved by Council and endorsed by the GEF CEO in May 2008.

11. The first meeting of the Earth Fund Board was held in April 2009, by which time four initial Board members had been appointed, including then GEF CEO (Monique Barbut) as the Chair. At this meeting, a draft of the *EF Procedures* and two Earth Fund platform proposals were reviewed and recommended for approval. In June 2009, the *EF Procedures* and these two Earth Fund Platforms (each \$5 million of GEF funding) were approved by the Council and subsequently CEO-endorsed. This formalized the operationalization of the remainder of the GEF Earth Fund other than the *IFC EF Platform*.

12. The second meeting of the Earth Fund Board was held in February 2010. At this meeting, another two Earth Fund Platforms (again each \$5 million of GEF funding) were reviewed and recommended for approval. In March 2010, these two Earth Fund Platforms (each \$5 million of GEF funding) were approved by the Council and subsequently CEO-endorsed. Therefore all \$50 million of the GEF Earth Fund resources had been programmed by March 2010. <sup>23</sup>

13. The five Earth Fund platforms and their main participants are as follows:

- (a) IFC EF Platform (\$30 million GEF) IFC and its investment and advisory clients;
- (b) <u>Global Market Transformation for Efficient Lighting</u> (\$5 million GEF) UNEP, Osram and Philips Lighting in partnership with a range of institutional and other partners;
- (c) <u>Conservation Agreement Private Partnership Platform</u> (\$5 million GEF) UNEP and Conservation International in partnership with community organizations and SMEs;

<sup>&</sup>lt;sup>23</sup> The successful programming of all of the pilot-phase GEF Earth Fund resources facilitated the allocation of \$80 million that was set aside in the 2010 GEF Replenishment for an expansion of the Earth Fund or other private sector initiative in GEF-5. The GEFEO published the "GEF Earth Fund Review" in October 2010 containing four recommendations (basically to define the objectives, niche and market barriers to be addressed by the Earth Fund, clarify access to the Earth Fund and strengthen its management for GEF-5). At the GEF Council meeting in November 2010, the Council decided to request the Secretariat, in collaboration with the GEF Agencies and representatives of the private sector, foundations, and civil society organizations, to prepare for the May 2011 Council meeting a revised strategy for enhancing engagement with the private sector. This strategy should provide a clear analysis of the gaps and opportunities for GEF activities, which would secure good value for GEF resources.

- (d) <u>Greening the Cocoa Industry</u> (\$5 million GEF) UNEP and Rainforest Alliance in partnership with Mars, Inc, and Kraft Foods (Mondelez) and other partners; and
- (e) <u>Latin American Water Funds Partnership</u> (\$5 million GEF) IDB and The Nature Conservancy with foundation, corporate, utility and government partners.

14. Given that the other four Earth Fund Platforms were initiated 1-2 years after the *IFC EF Platform*, terminal evaluations for these other four Platforms should soon be available. At that time, it will be possible to have a more complete evaluation and assessment of the overall GEF Earth Fund. At this time, it is suggested that the following preliminary conclusions can be drawn:

- (a) The five Earth Fund platforms propose a variety of ways of engaging the private sector: direct equity and debt investment, intervention in supply chain management, using corporate funds and expertise to support policy and market development, creating demand for an agricultural commodity produced in a sustainable fashion, and creating local mixed-ownership approaches to finance protection of the water supply through watershed management.
- (b) The Secretariat's "initial vision" for the GEF Earth Fund (as a hybrid institution that would absorb private sector funds directly) was not the final project that was approved by the Council and endorsed by the GEF CEO in May 2008. In particular, the GEF Earth Fund was not approved and endorsed as an investment fund (in the normal commercial usage of the term). It was actually approved as a GEF project. 24
- (c) The first two years 2008-2009 coincided with the Global Financial Crisis, and this may have put an early damper on the progress of the *IFC EF Platform* as far as launching investment projects were concerned, however it did not delay the approval of the other four Earth Fund Platforms (including evidence of their required financial leverage). The *IFC EF Platform's* progress with investments improved markedly after 2010.
- (d) The terminal evaluation of the *IFC EF Platform* in August 2016 has indicated that it was highly successful. Terminal evaluations are awaited for the other four Earth Fund platforms.
- (e) The private sector set-aside featuring a single-step Council "portfolio-level" approval of Platforms along with full delegated authority for approval of subprojects has been proven to streamline and accelerate the approval process for Earth Fund Platforms and projects and facilitate private sector engagement and high investment leverage.

<sup>&</sup>lt;sup>24</sup> For example, the Earth Fund Board was initially proposed by the Secretariat to be a decision-making body, however after extensive negotiations with Council members and GEF Agencies it was agreed that funding approval decisions for Earth Fund Platforms would remain with the Council and that the Earth Fund Board would be constituted as an advisory body to bring industrial and commercial finance expertise. A similar dispute initially took place in connection with the Green Climate Fund (GCF). The GCF Board finally decided to constitute a Private Sector Advisory Group (PSAG) as an advisory body and the GCF Board will make the funding decisions itself.

- (f) The Earth Fund Board did not feature very positively in the October 2010 GEFEO review of the Earth Fund, however consideration could be given to the fact that it was not fully resourced (only four members including GEFCEO) and it was in place for only one year. A proposal was made by the Secretariat (in GEF/R.5/31, May 2010) to strengthen it. A similar advisory body, the Private Sector Advisory Group (PSAG) is in place at the Green Climate Fund, and the PSAG has already made some robust and useful recommendations. The PSAG has ten external experts and four GCF Board members.
- (g) If the Council wishes to consider the formation of a GEF Private Sector Facility (PSF) or similar body for GEF-7, the Earth Fund (and particularly its proposed expansion for GEF-5 as documented in GEF/R.5/31) provided a structure that appears to encompass the key governance and operational procedures that would be relevant for such a PSF. Indeed, the Earth Fund could rightfully be regarded as a pilot-stage PSF. A rigorous examination of lessons learned from the Earth Fund may now or soon be useful in light of the recent and pending terminal evaluations of its Platforms.

Project Title	Brief description	Туре	EF Funds Approved (\$M)	Leverage Ratio of EF Funds
	In Progress			I
International Housing Solutions (IHS)	An equity investment into a leading real estate development of affordable "green" homes in South Africa	Investment	10	1:3
Quarzazate	An equity investment to support a concentrated solar power plant development in Morocco	Investment	10	1:83.1
Lighting Global	Program and technical support for companies that provide modern lighting services for un-electrified populations	Advisory	0.695	1:6.1
Green Buildings PDP	Development of a web platform and software to help housing developers meet green building standards	Advisory	1	1:3.3
Bank of the Philippines Islands (BPI) Sustainable Energy Finance (SEF) II	A risk sharing facility to support a leading financial institution in the Philippines in their lending business for SE projects	Investment	2.6	1:26.5
Mexico Sustainable Energy Finance (SEF)	A technical assistance program to promote sustainable energy lending amongst financial institutions in Mexico	Advisory	0.8	1:0.7

#### List of projects in GEF/IFC Earth Fund

Cleantech Innovation	An investment into a cleantech			
Facility	venture capital fund managed by IFC to support early stage cleantech companies operating in challenging geographies and markets	Investment	5	1:3
Global Cleaner Production Facility	A global cleaner production facility to support CP projects	Advisory	5.8	1:4.1
	Completed			
Africa Renewable Energy Advisory Services (AREAS) South Africa	A technical assistance program to help South Africa meet its targets for universal electrification	Advisory	0.196	1:5.5
Green Power for Mobile Global II	A technical assistance program to increase the deployment of RE and EE technologies for mobile network tower base stations	Advisory	0.35	1:8.3
Brazil Environmental Permits	A technical assistance program to improve the regulatory environment for sustainable forestry in Brazil	Advisory	0.183	1:2.6
Techcom-bank	A senior loan to a financial institution in Vietnam to encourage energy efficiency and cleaner production lending	Investment	1	1:36
Research and Engagement on Private Equity Investing in Climate Change Abatement (RECCIPE)	Support capital allocation to investment funds in climate change-related sectors	Advisory	0.2	1:5.2
Carbon Index	Development of a carbon efficiency index	Advisory	0.272	1:5.8