

### ADB GEF PROJECT IMPLEMENTATION REPORT (PIR)

#### I. Project Profile

**ADB Official Project Title: Establishing a Pilot Center to Facilitate Climate Technology Investments in Asia and the Pacific**

**ADB Project Number: Cluster TA 0008**, with the following subprojects

**RETA 8109:** Integration of climate technology financing needs into national development strategies, plans and investment priorities

**RETA 8132:** Promotion of direct investment in priority climate technology projects

**RETA 8018:** Promotion of investment in climate technology products through venture capital funds

**RETA 8105:** Demonstration of an assisted broker model for transfer of low carbon technologies

**RETA 8122:** Project management

Stand-alone TA which is also part of the pilot center - **RETA 7842:** Enhancing knowledge on climate technology and financing mechanisms

**UNEP Official Project Title: Pilot of Climate Technology Network and Finance Center in Asia-Pacific (AP-CTNFC)**

**UNEP Project Number: GFL/5070-2722- 4C64**

1. General Information	1	GEF ID (PMIS ID)	4512
	2	Focal Area(s)	Climate Change
	3	Region	Regional
	4	Country	Asia-Pacific countries
	5	Project Title	Pilot Asia-Pacific Climate Technology Network and Finance Center (CTNFC)
	6	Project Size (FSP; MSP)	Full-sized project
	7	Trust Fund (GEFTF; SCCF; LDCF)	Multi-Trust Fund (GEF TF/SCCF)
2. Milestone Dates	8	GEF CEO Endorsement Date (mm/dd/yy)	05/31/2012
	9	ADB Approval Date (mm/dd/yy)	08/29/2011
		UNEP Approval Date	09/18/2012
	10	GEF Grant Signing (mm/dd/yy)	N/A
	11	ADB Project Implementation Start Date	06/15/2012 (1 <sup>st</sup> subproject approval)
		UNEP PROJECT Implementation Start Date	9/18/2012
	12	ADB Date of 1st GEF Grant Disbursement UNEP Date of 1st GEF Grant Disbursement <i>(Definition: Please include initial date of cash advance to Imprest accounts on GEF Funds)</i>	08/22/2012 02/12/2013
3. Funding	13	ADB Proposed/Revised Implementation End	12/31/2018
		UNEP Proposed/Revised Implementation End	12/31/2018
	14	ADB Actual Implementation End	N/A
		UNEP Actual Implementation End	N/A
	15	PPG/PDF Funding (USD)	None
	16	ADB GEF Grant (USD)	GEF Trust Fund: USD 6,090,909 SCCF: USD 1,568,182
		UNEP GEF Grant (USD)	GEF Trust Fund: USD 3,000,000 SCCF: USD 250,000
	17	ADB Total GEF Disbursement as of 30 June 2018 (USD)	GEF Trust Fund: USD 5,270,704 SCCF: USD 1,061,980

		UNEP Total GEF Disbursement as of 30 June 2018	USD 3,210,000
	18	ADB Confirmed Co-Finance at CEO Endorsement	USD 68,892,000
		UNEP Confirmed Co-Finance at CEO Endorsement	USD 5,480,000
	19	ADB Materialized Co-Finance at project mid-term	USD 107,232,909
		UNEP Materialized Co-Finance at project mid-term	Not Available; UNEP Mid-term Review has not been done
	20	ADB Materialized Co-Finance at project completion	N/A
		UNEP Materialized Co-Finance at project completion	N/A
4. Evaluations	21	Proposed Mid-term date – if applicable (mm/dd/yy)	March 2016
	22	ADB Actual Mid-Term date – if applicable (mm/dd/yy)	April 2016
		UNEP Actual Mid-Term date – if applicable	N/A
	23	ADB Proposed Terminal Evaluation date – if applicable (mm/dd/yy)	January 2019
		UNEP Proposed Terminal Evaluation date – if applicable	Early 2019
	24	Actual Terminal Evaluation Date - if applicable (mm/dd/yy)	N/A
	25	Tracking Tools Required (Yes/No/ Focal Area TT)	Climate Change Tracking Tool
	26	Tracking Tools Date - if applicable (mm/dd/yy)	
		Midterm Tracking Tool	March 2016
		Terminal Evaluation Tracking Tool	N/A
5. Ratings	27	Overall Implementation Progress Rating (IP)	Satisfactory
	28	Overall Development Objectives Rating (DO)	Satisfactory
	29	Overall Risk Rating	Modest Rating
	30	Overall Project Rating	Satisfactory
6. Status	31	Status (GEF grant for ADB board approval/ GEF grant on-going)	Under Implementation
	32	Implementation Status (1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> PIR..., Final PIR)	6 <sup>th</sup> PIR
7. Files	33	PIR File Name	GEF ID 4512 2018 PIR ADB-UNEP Regional CTNFC

## II. Project Contacts

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### III. Project Implementation

#### A. Project Description:

The Project is piloting a regional approach to facilitate deployment of climate technologies that combine capacity development, enhancement of enabling environments for market transformation, financial investments and investment facilitation. UNEP is implementing interventions to enhance enabling conditions for climate technology transfer and deployment processes through: (i) Network facilitation - supporting the development of regional networks which will enhance capacity by facilitating exchange of institutional and technological know-how to national and regional technology centers in Asia and the Pacific; (ii) Supporting the strengthening of capacities of regional and national climate technology centers; and, (iii) Supporting national capacity for policies to promote the transfer and dissemination of climate technologies, as well as more direct support for policy formation itself.

ADB is leading the financial investment and investment facilitation interventions. It is supporting mobilization of public and private financial resources for investment in climate technology, including: (i) Facilitating project and venture capital investment in climate technology; and, (ii) Development of a dedicated climate technology market place to facilitate climate technology intellectual property rights (IPR) deals. ADB also supported the mainstreaming climate technology considerations in national investment planning until September 2015. The scope of ADB's subproject to catalyze private investment for climate technologies was expanded in December 2012 to include private equity funds in addition to venture capital funds.

All the components of the Pilot Center Project contribute to addressing the different barriers to technology deployment and diffusion such as regulatory absence/uncertainty, lack of access to capital, high upfront costs, perceived high risks of introducing new technologies, weak flow of information, and inadequate developing country capacity.

Both GEF agencies are working closely together in project implementation through two centralized hubs. The UNEP components are implemented through a networking hub, the Climate Technology Network Secretariat based in Bangkok; while the ADB components constitute a functioning pilot Climate Technology Finance Center in Manila. Capacity building is considered a cross-cutting issue as it is a necessary element for the successful implementation of each of the project components.

As a whole, the project seeks to demonstrate, on a pilot basis, the effectiveness of linking technology and finance mechanisms in catalyzing climate change mitigation and adaptation actions. This will be accomplished through the transfer, and diffusion of low carbon and climate resilient technologies. These technologies will help realize lower emission growth pathways and greater resilience to climate change impacts, which can in turn enhance long term socio-economic development prospects and foster more sustainable development overall. It is expected that both the Bangkok Secretariat and the Manila Pilot Center will contribute valuable experience that could help inform the operations of the Climate Technology Centre and Network (CTCN). Lessons and experience from the Project can also be drawn upon in replicating the approach in other regions.

**B. Implementation Progress (IP) Rating:**

(Please provide information supporting your IP Rating. Describe the overall implementation of the projects including output and activities of the project. Provide highlights and issues regarding implementation)

During this reporting period, UN Environment has focused on achieving Component 3 to support countries in identifying and developing enabling environments, as well as financial mechanisms, for facilitating investment in priority climate technologies. The project has initiated several technical assistance activities in the region which will support countries in catalyzing national level scale up strategies for technology transfer. These scale-up strategies are aligned with country priorities which have previously been identified and, more recently, with their nationally determined contribution (NDC) priorities. The TAs continue to strengthen sector-specific technology transfer networks and increase capacity building efforts.

**Project Component 1** (Managed by UNEP) - **Facilitating a network of national and regional technology centers, networks, organizations, and initiatives.**

**Rating: Satisfactory.** (Narrative has been combined with narrative for Project Component 2).

**Project Component 2** (Managed by UNEP) - **Building/strengthening national and regional climate technology centers and centers of excellence.**

**Rating: Satisfactory.**

As mentioned in the previous PIR, Components 1 and 2 have been achieved and are being sustained through knowledge sharing and networking activities. Over the last reporting period, three more thematic e-newsletters have been produced and disseminated on (i) coastal adaptation, (ii) electric vehicles, and (iii) decentralized renewable energy. The e-newsletters share information on related outputs of the project and the CTCN (i.e. case studies, assessment reports, workshops, trainings etc.); interesting stories/case studies from the region; articles or reports showcasing implementation, best practices, and lessons learned; private sector companies involved in a related technology; and a brief biography on a technical institution with expertise in the sector. The project is also organizing a final Networking Meeting from 15-16 October 2018 with project focal point and technical partners to discuss NDC implementation, the Technology Framework, and other areas of technology transfer.

**Project Component 3** (Managed by UNEP) - **Design, development and implementation of country-driven EST transfer policies, programs, demonstration projects and scale-up strategies.**

**Rating: Satisfactory.**

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

Domestic Efficient Lighting Programme (DELP) in Viet Nam: As per the request from Vietnam Electricity (EVN), the institution tasked with implementing Vietnam's energy saving policy, the project provided support to undertake a feasibility study with the aim of developing a conceptual design for a domestic efficient lighting program (DELP). The CTNFC and Energy Efficiency Services Limited (EESL) completed the Preliminary Study Report and the final Conceptual Design of the DELP program. The results of the study showed that Viet Nam has the potential to replace 362.6 million LED bulbs in the domestic sector over the next 2 to 3 years, saving 15,186m units of electricity. The country is in the process of considering implementation of a pilot scheme, which it may do either through its own fund or may seek GCF funds.

The CTNFC and the Science and Technology Policy Institute (STEPI) in Korea worked in partnership on a research project to identify and map the climate change technologies needs of Vietnam, Indonesia, Philippines, Malaysia, Nepal, Cambodia, and Myanmar. The research includes detailed information on existing climate change projects for each country and provides useful information to the two organizations and policymakers on countries' climate technology needs and priorities. The report has been completed and will be presented at the project's upcoming Network Meeting in October 2018.

District Heating Systems in Mongolia: The project is collaborating with the Mongolian Ministry of Energy and Ministry of Environment and Tourism to develop an investment plan for introducing energy efficiency and renewable energy technologies in District Heating Systems in Mongolia. The proposal aims to address both energy efficiency and air pollution issues by reducing emissions from the current heating energy systems powered mainly by cheap coal, including looking at low carbon alternatives and private sector involvement. As part of the technical assistance, the project supported the development of the now approved GCF Readiness Proposal on "Scaling-up of Implementation of Low-Carbon District Heating Systems (DHS)." The project is supporting initial preparatory work to enable data collection and assessment that would support the work of readiness work.

Renewable Energy Maldives: The project is supporting the Government of Maldives in developing a funding program for increasing renewable energy (RE) share in the outer islands (other than the Greater Male). The government has plans to increase the share of RE in the grids to almost 100% in smaller and very small islands. At the same time, they would like to achieve 30% peak load through RE in large and medium islands. The project has contracted an international entity to deliver on the request and undertake a detailed assessment of technology options, feasibility, and program for implementation. The proposal has been received and is being reviewed by the country.

Electric Vehicles: UN Environment, along with the International Energy Agency (IEA), are developing a global project to support knowledge transfer and capacity building on supporting developing countries in transforming vehicle market to electric vehicles. In parallel, to bridge the gap between the developed and developing countries in transition to E-vehicle future, the project is assessing the support needs of countries with ambitious E-vehicle targets (including Thailand, India, Indonesia and Vietnam). The support needs assessment will be used to initiate a dialogue with government and other stakeholders in developing a project to the support the needs.

Cambodia National LED Dissemination Programme: The project is hiring an international entity to support the Government of Cambodia in developing a national LED dissemination program based on on-bill financing of LED sales to consumers. The technical assistance will include undertaking an assessment

of lighting appliance use and the financial viability of the replacement program, as well as developing a financing mechanism, assessing the institutional framework, assessing their capacities, and designing the institutional arrangements for the national LED program.

Laos Energy-Efficient Appliances: Laos has requested support to organize stakeholder consultations for a GCF Readiness request on energy efficient (EE) appliances with a focus on lighting, refrigerators, fans, and commercial air conditioners. The aim of the proposed readiness request is to develop an implementation plan for designing and implementing a Standards and Labelling Programme to enable Laos to achieve its national commitments, including the NDCs. The consultations will help Laos submit the GCF Readiness request to develop a national funding program. A mission is planned for the end of August to finalize the concept.

Philippines Energy-Efficient Buildings and Rooftop Solar: The Philippines has requested support for developing a funding program to develop EE residential buildings with rooftop solar integrated into the construction. The project will provide support to assess the residential housing market, including energy consumption and GHG emissions, identify EE and RE building features, calculate costs of B/L and determine financing structures, and review existing policy and legal frameworks related to the housing market. The scope of the work is being finalized in consultation with country partners.

Energy-Efficient Appliances Financing: The project is developing a publication which will compile knowledge on financial mechanisms for supporting the purchase of energy efficient appliances and replacing existing stocks of in-efficient appliances. The publication will cover lighting, ACs, and refrigerators. As EE appliances are listed as a priority in all NDCs in the region, this will be a useful study for countries to use in preparing their NDC implementation plans. This TA would aim to feed into a pilot scale EE appliance financing program and develop a scale-up proposal.

An Energy Efficiency Consultant has been hired to support background information collation and data analysis related to energy efficiency of appliances and buildings in Asia Pacific. She will be responsible for supporting the work of the project in promoting energy efficiency of appliances as well as its linkages with the Kigali Amendment for HFC phase out and efforts in promoting energy efficiency in buildings. The consultant will provide desk-based analyses of information, as well as literature-based collection of data to support the development of programs to facilitate energy efficiency technology use in partner countries who have identified energy efficient appliances and buildings as a priority in their NDCs.

#### **Project Component 4** (Managed by ADB) - Integrating climate technology financing needs into national development strategies, plans, and investment priorities.

##### 4.1. Stand-alone TA (RETA 7842)

**Rating:** Not applicable. This TA was completed on 30 June 2015.

##### 4.2. Subproject A (RETA 8109)

**Rating:** Not applicable. This TA was completed on 30 June 2015.

**Project Component 5** (Managed by ADB) - **Catalyzing investments in EST deployment.****5.1. Subproject B** (RETA 8132)

**Rating:** **Not applicable.** This TA was completed on 30 September 2015.

**5.2. Subproject C** (RETA 8018)

**Rating:** **Satisfactory.**

The subproject seeks to grow investment in cleantech startups and entrepreneurs in the Asia-Pacific region. The subproject's undertakings fall under the following core activities: (i) supporting cleantech entrepreneurs through accelerators, incubators and similar platforms; (ii) supporting cleantech-focused investors, including venture capital (VC) and private equity (PE) funds; and (iii) building a regional cleantech network and enabling sharing of best practices and knowledge.

Supporting accelerator and incubator programs for high-potential cleantech entrepreneurs. Subproject C continued to support the ADB-TusStar Cleantech Startup Competition, which aims to identify the most promising early-stage cleantech startups with innovative technologies or business models that address urgent climate challenges. The second competition, launched on 7 July 2017, had 10 finalists receiving mentorship and training on business development skills, and investor feedback to help them scale-up their cleantech solutions. The third edition of the competition was launched in Beijing on 26 June 2018.

TA 8018 also supported the Mekong Business Initiative—a joint venture of ADB and the Government of Australia—in its Vietnam Smart City Innovation Challenge, a competition and mini-accelerator program targeting leading smart-city and cleantech focused startups from around the world. The winners of the innovation challenge will be fast-tracked to the cities' programs to help accelerate the localization of their solutions. A venture capital partner for this Smart City Innovation Challenge Vietnam, is currently considering Series A funding for several high potential companies, subject to their internal due diligence.

The Subproject also helped several cleantech accelerators and similar initiatives through outreach and marketing efforts, as well as identifying Asian cleantech startups. Support was given to the Mekong Business Initiative's Mekong AgriTech Challenge (MATCH), Southeast Asia's first agritech-focused acceleration program; and, the German Energy Agency's (DENA) Startup Energy Transition, an international competition for startups and young companies worldwide working on ideas affecting the global energy transition and climate change.

Subproject support was also given to the Accelerate Energy Summit (AES), an annual gathering of clean energy incubators and accelerators around the world, which took place in November 2017 in Shanghai. About 78 clean energy accelerators and incubators, industry leaders and investors from 53 organizations across 20 countries participated in a series of strategic programming sessions, best practice sharing and discussions on China's cleantech landscape. AES Shanghai is a spin-off from the first AES held in Manila in June 2016, organized by ADB and the California Clean Energy Fund (CalCEF) in conjunction with the Asia Clean Energy Forum 2016.



The subproject, together with Subproject D, assisted ADB's RETA on Promoting Sustainable Energy for All in Asia and the Pacific in organizing a Workshop on Accelerating Clean Heating and Cooking Access from 29-30 January 2018 in Beijing, PRC. The workshop brought together key policymakers, industry, scholars and practitioners to present and evaluate various technical solutions for their potential to be replicated in other application scenarios, discuss major barriers based on an overview of status, as well as identifying key policy success factors.

Supporting cleantech-focused VC and PE funds and investors. The subproject continued to support the Hong Kong-based Asia Climate Partners (ACP), a low-carbon private equity (PE) fund jointly established by ADB, through its Private Sector Operations Department (PSOD), ORIX and Robeco. ACP, with its \$447.5 million mid-market PE fund, focuses on clean energy, resource energy efficiency, and environmental sectors in Asia. ACP has, so far, officially closed four deals: (i) a cold-chain logistics company in India; (ii) an advanced battery storage technology company where ADB also co-invested; (iii) a large solar IPP player in PRC; and, (iv) a wind and renewable energy platform in India.

Subproject C also continued its technical support for the establishment of Asia Climate Finance Facility (ACLiFF), formed to facilitate development and implementation of innovative financial risk management products to help unlock new capital and scale-up climate investments, including investments in new clean technologies, as well as strengthen climate resilience. Successfully set up in 2018, ACLiFF is currently expanding its team and building its deal pipeline with the first transaction targeted by the end of 2018.

In India, Subproject C kept its advisory support to Infuse Ventures in expanding its investment portfolio of cleantech companies, including six additional investments. Several of the portfolio companies have successfully raised additional scale-up financing in the past 12 months, including Fourth Partner Energy (rooftop solar), Tessol (thermal energy storage), Altizon (IoT/Big Data) and Surya Power Magic (solar pumps/farming equipment). The TA also supported PowerStart, India's first cleantech startup accelerator backed by the Centre for Innovation, Incubation and Entrepreneurship at Indian Institute of Management Ahmedabad, and Infuse Ventures.

In PRC, the subproject continued to support the setup and operations of new green financing, including equity investment platforms, with a focus on improving air quality in the Greater Beijing-Tianjin-Hebei (BTH) Region. The subproject continued its support to the Green Financing Platform for Accelerated Air Quality Improvement in the BTH Region in developing business models for financing—particularly potential VC/PE financing for cleantech businesses—and identifying technology and investment options.

Subproject C also maintained its assistance to the Clean Air Fund, which is focused on deploying the best low-emissions technologies in key sectors, targeting major emitters in the BTH region. By integrating the expertise of the China Energy Conservation and Environmental Protection Group (CECEP)—a state-owned enterprise with technical knowledge of advanced technologies, substantial experience in investing in clean energy technologies, and managing clean energy funds—the Fund aims to encourage commercial financial institutions to leverage additional funding. The subproject supported the conceptualization and design of the Fund and engaged a financial expert to conduct financial structuring and feasibility analysis to help ensure the project complies with PRC's regulations for green financing platforms.

Subproject C also continued to work with ADB's operational departments to facilitate more financing and investment in climate and clean energy projects and businesses through ADB. The subproject provided cleantech investment expertise to help ADB's PSOD source, develop, assess and process a pipeline of financing and investment projects that are structurally and financially sound. PSOD is growing its portfolio and pipeline of cleantech and clean energy investment related activities in the Greater Mekong Area (including Thailand, Myanmar, Laos, Cambodia and Vietnam).

In addition, the subproject also helped ADB's Pacific Regional Department (PAR), which partnered with the University of the South Pacific (USP) on its Green Campus initiative to power six USP campuses with 100% renewable energy. The subproject provided technical expertise, such as detailed load assessment, technical system design and optimization, techno-financial modelling and analysis. It also advised USP on energy efficiency measures with capacity building on technical performance monitoring.

Creating a regional cleantech network and enabling knowledge sharing on best practices and market trends. Subproject C supported the second Asia Pacific Forum on Low Carbon Technology, jointly organized by ADB's CTFC and the East Asia Regional Department, in partnership with the Development and Reform Commission of Hunan Province. The Forum was held in Changsha, Hunan Province, People's Republic of China from 29-30 November 2017. With the theme, "Transitioning Towards Sustainable Low-Carbon City Development", the Forum showcased success stories and experiences in promoting LCT deployment and of low-carbon city development and served as a platform to enhance networking and partnership of stakeholders for LCT investment.

The subproject partnered with the New Energy Nexus and the California Clean Energy Fund to organize a series of activities during the Asia Clean Energy Forum 2018. This included a Deep Dive Workshop on "From Startup to Scaleup: Startup Growth Hacking" (5 June 2018), and the Knowledge Dim Sum with Entrepreneurs (7 June 2018). The deep dive workshop brought together more than 24 startups across the world which were engaged in discussions on opportunities and practical challenges experienced by startups. The ACEF Knowledge Dim Sum with Entrepreneurs session gave participating entrepreneurs the opportunity to pitch their businesses and engage ACEF participants who were interested in their products and services.

Subproject C also supported the New Energy Leaders program. Launched in 2017, the program aims to showcase and promote the next generation of entrepreneurs who are shaping the future of the clean energy sector in Asia, to raise awareness about the practical challenges the entrepreneurs are facing, and to help key stakeholders better understand how they can support clean energy entrepreneurship and innovation in Asia. The program has since welcomed two batches of leaders: the inaugural batch introduced during the Asia-Pacific Forum on Low-Carbon Technology in Hunan Province, PRC, on 29 November 2017; and, the 2018 batch announced at the opening plenary of the Asia Clean Energy Forum 2018.

**Project Component 6** *(Managed by ADB)* - **Establishing a pilot "marketplace" of owners and users of low-carbon technologies to facilitate their transfer.**

**Subproject D** *(RETA 8105)*

**Rating: Moderately Satisfactory.**

Subproject D established and operated its pilot marketplace of low-carbon technologies through IPEX Cleantech Asia from December 2014 to June 2017. With the conclusion of the services IPEX, the subproject through its team of individual consultants and ADB staff carried on with activities promoting low-carbon technology (LCT) solutions and connecting technology providers with potential adopters and stakeholders—including ADB operations departments, developing member country (DMC) governments, and other organizations—to accelerate diffusion of LCTs in Asia and the Pacific.

The subproject, working closely with ADB operations departments, supported scoping activities for floating solar projects in Nepal, Sri Lanka, Vietnam, Cambodia, Indonesia, and Bangladesh. It provided expert technical inputs to facilitate inclusion of low-carbon technological solutions in power generation and transmission projects in Afghanistan, power distribution projects in India, and air quality improvement project in PRC.

Subproject D supported knowledge sharing activities co-organized by ADB in India and the People's Republic of China (PRC). In India, the subproject supported a series of regional and national workshops co-organized by ADB with the International Energy Agency, and India's National Institution for Transforming India (NITI Aayog). The workshops were held in support of the Indian power sector's low-carbon transition.

In coordination with Subproject C, Subproject D helped organize the second Asia-Pacific Forum on Low-Carbon Technology held on 29-30 November 2017 in Changsha City, Hunan, PRC. With the theme, "Transitioning towards Low-Carbon City Development", the Forum, which was co-organized by ADB and the Hunan Provincial Government, showcased global and country experiences in promoting LCT development and investments in cities, and included an exhibition featuring LCTs from seven countries. The Forum attracted 477 participants from 25 countries, including 19 government officials from DMCs of ADB, senior representatives from KfW, GIZ, ICLEI and other development partners.

In line with the Asia-Pacific Forum on Low-Carbon Technology, Subproject D helped draft the booklet, *Low Carbon Technologies for Low Carbon Cities: A Brief Overview*. The booklet, produced by the Hunan Provincial Government and Hunan Provincial Development and Reform Commission, presents a summary on some of the commercially available low-carbon technologies for major city sectors, such as waste management, buildings, transport, and manufacturing. This booklet was launched during the Forum. After the Forum, Subproject D organized visits to two solar PV farms in PRC—one is a floating solar farm and the other is a fishery and solar integrated farm—to promote innovative forms of solar farms to ADB DMCs. Nineteen representatives from 10 DMCs of ADB joined the site visits.

Continuing its collaboration with the Beijing Energy Club (BEC), Subproject D together with Subproject C, co-organized with BEC the Workshop on Clean Energy Development held on 2 September 2017 in Binhai New Area in Tianjin City, PRC. A follow-up event of BEC's clean energy technology assessment and dissemination platform, the workshop showcased four clean technologies and had a group of industry experts as participants. Subproject D also assisted Subproject C in organizing TusStar-ADB Cleantech Startup Competition in PRC.

In January 2018, Subproject D together with Subproject C, helped ADB's RETA on Promoting Sustainable Energy for All in Asia and the Pacific and Tsinghua University in organizing a workshop on accelerating clean heating and cooking access. The workshop, featuring 10 clean heating and cooking solutions, was

participated in by government officials from Ulaanbaatar, Mongolia; Changzhi City, PRC; and, Jinan City, PRC.

In support of the activities of ADB's Asia Clean Energy Forum 2018, Subproject D team helped invite Trina Solar (PRC) and China Urban Construction Design & Research Institute to present their floating solar technology and waste to energy experiences in China. Subproject D also facilitated three matchmaking events among Trina Solar, the Philippine National Oil Company, and Hangzhou Regional Center for Small Hydro Power.

#### **Project Management Component** *(Managed by ADB)* -

##### **Subproject E** *(RETA 8122)*

**Rating:** **Not applicable.** This TA was completed on 31 December 2016.

###### **a. GEF Grant Disbursement**

*(Please provide information on the reasons for any delays in the project disbursements for GEF grants, including delays in first disbursement more than 3 months after ADB Board approval for TAs or 3 months after loan effectiveness).*

ADB and UNEP receive and manage their funding support for this project separately. The implementation start date for ADB was on 15 June 2012, coinciding with the management approval for its first subproject (RETA 8105: Subproject D).

The first GEF grant disbursement for the ADB-managed projects was on 22 August 2012. The project experienced some delays in mobilizing consultant due to difficulties in securing required clearances from counterpart government agencies. Utilization of GEF funds have also been affected by the need to disburse funds received from other cofinancing sources.

###### **b. Gender Action Plan Implementation Status**

*(Please provide a brief update on the status of the implementation of Gender Action Plan (if applicable), including output and activities of the project. Provide highlights and issues regarding implementation)*

Although the project does not have a specific Gender Action Plan, UN Environment has taken active steps to be gender-responsive in its activities where possible. Capacity building workshops have been well attended by female participants with the lowest participation rate being 24% and the highest 55%. With the introduction of Gender-Sensitive Minimum Operating Standards, the project ensures a minimum of 30% of both female and male participants.

Activities are designed and developed using a gender lens, for example gender-related stories in the e-newsletters. Future workshops and technical assistance activities will also highlight gender aspects relating to prioritized climate change adaptation and mitigation technologies, and include outreach to women's organizations and civil society that promote gender equality and women's empowerment within the area of climate change technologies.

c. **Social and Environmental Safeguard Plan Implementation Status**

Not applicable.

C. **Global Environmental Benefits (GEB) Objective/ Development Objective (DO) Rating:**

(Please describe the overall rating in achieving its major GEB/DO in particular. Include information on the status progress and achievements of key indicators as reflected in the Projects Result Framework. The GEB should cover only those relevant to the project, as set out in the DMF and/or GEF Approval document.

Provide where available substantive indicator based on the projects Monitoring and Evaluation System.

In the case that the project is at an early stage of the implementation, provide general comments on achieving its overall objectives.)

**Outcome 1: Increased collaboration in the region for transfer of climate technologies between thematic or sector/technology specific centers and institutions** (*Component 1: UNEP*)

**Rating: Satisfactory.**

Through its technical assistance activities (Component 3), the project continues to increase collaboration between associated technology centres and institutions, as well as within government. With the Paris Agreement and the NDCs providing additional insight into climate change priorities and promoting global and regional cooperation, the project can use these as leverage for initiating technology transfer programs and encouraging collaboration between institutions and government. For example, the TA activities related to the development of a Domestic Efficient Lighting Programme (DELP) in Viet Nam involved the collaboration between the state-run Energy Efficiency Services Limited (EESL), which is implementing the Government of India's DELP, and Viet Nam Electricity (EVN), which is tasked with implementing Viet Nam's energy saving policy.

The project continues to promote regional South-South and North-South cooperation through its various capacity building workshops and meetings which allow for sharing of knowledge and good practices between focal points/NDEs and partner institutions. The quarterly e-newsletters on identified climate technology priorities and themes also contribute to regional collaboration by sharing information on project outputs, success stories and best practices, guidelines and tools, and private sector knowledge.

**Outcome 2: Thematic and technology specific institutions and centers are strengthened (and/or created)** (*Component 2: UNEP*)

**Rating: Satisfactory.**

Activities related to this Outcome/Component are mostly completed (see last PIR); however, the technical expertise of stakeholders engaged in the project's ongoing TA activities are continuously strengthened through associated workshops and meetings.

**Outcome 3: Support and opportunities for national, regional and global investments in ESTs are explored** (*Component 3: UNEP*)

**Rating: Satisfactory.**

The TA activities completed under the project have laid the foundation for developing larger programs and scale-up strategies. They provided recommendations on appropriate technologies, good practices, and plans and contributed to creating an enabling environment for upscaling the interventions. The project has completed six TAs for which opportunities for scaling up or investment are being explored with the GCF, GEF, ADB, industry owners, and the CTCN.

As mentioned in Section B, through ongoing TAs the project is supporting several countries initiate the implementation of national technology transfer scale-up programs; for example, district energy in Mongolia and Malaysia, efficient lighting in Viet Nam and Cambodia, and energy-efficient appliances in Laos. These programs will support decision makers in achieving low-carbon and resilient development and will strengthen private sector engagement and attract donor funding. The project also continues to provide guidance to requesting partner countries on developing and submitting TA requests to the CTCN.

**Outcome 4: Enabling policy environment and mechanisms created for transfer of climate technologies** (*Component 3: UNEP*)

**Rating: Moderately Satisfactory.**

Activities under the project are primarily driven by the needs expressed by national focal points/NDEs and partner institutions in the region. These requests have led to TAs to assess information required for developing policies and mechanisms for promoting climate technology transfer. The project is focusing on supporting countries in implementing their NDCs. Based on prior TAs, INDC analysis, and consultations with NDEs and other national stakeholders, the project is supporting countries in developing full implementation plans based on policy and legal frameworks required to facilitate technology use and stakeholder engagement important for implementation of the technology, as well as financing incentives and mechanisms to promote the use of technology. This includes working closely with the UN Environment GEF and GCF teams and other possible avenues to facilitate access to financing for implementation of the programmes developed.

The upcoming publication on financial mechanisms for purchasing energy-efficient appliances and replacing existing stock in the region will provide guidelines to countries on how to develop or strengthen relevant policies and implement appropriate mechanisms. This will in turn feed into the NDC implementation plans while enabling the transfer of climate technologies.

**Outcome 5: Higher awareness and better participation of regional stakeholders in global discussions on climate change financing, including the development of the GCF and the operations of the Technology Mechanism** (*Component 4 / Stand-alone TA - ADB*)

**Rating: Not applicable.** This TA was completed on 30 June 2015.

**Outcome 6: Climate change technology transfer and deployment considerations integrated into CPSs and/or COBPs, national and/or subnational investment plans** (*Component 4 / Subproject A - ADB*)

**Rating: Not applicable.** This TA was completed on 30 September 2015.

**Outcome 7: Increased investments in projects using climate technologies in DMCs** (*Component 5 / Subproject B - ADB*)

**Rating: Not applicable.** This TA was completed on 30 September 2015.

**Outcome 8: Increased investments by selected Venture Capital funds in technologies that address climate technology products** (*Component 5 / Subproject C - ADB*)

**Rating: Satisfactory.**

The Subproject has identified more than 40 candidate startup firms through the continuing support that it has provided to Asia Climate Partners (ACP), Infuse Venture, TusStar, and other investors. ACP has evaluated around 300 investments, which led to more than 15 investment proposals, resulting in four executed deals totaling more than US\$ 100 million. Infuse Ventures, through PowerStart, identified more than 40 candidate startup firms for investment.

TusStar, through the ADB-TusStar Cleantech Startup Competitions in 2016 and 2017, has identified more than 40 startups for potential investment. As a result of their participation during the 2016 ADB-TusStar Cleantech Startup competition, some of the winning startups received their Pre-A investment in 2017, including Jiangsu Gaiya Environmental Science and Technology Co., Ltd. (receiving 19 million RMB in early 2017 and eventually receiving their A round investment of 40 million RMB in October 2017) and Ce-Tech Co.,Ltd. (receiving 10 million RMB).

As of June 2018, Subproject C-supported accelerator programs have received more than 700 cleantech startup applications, with around 100 startups receiving further training and mentoring. More than 30 of these startups eventually received investments and other sources of financing.

**Outcome 9: Successful demonstration of assisted broker model for transfer of LCTs** (*Component 6 / Subproject D - ADB*)

**Rating: Moderately Satisfactory.**

Demonstration of the pilot marketplace concluded with the end of the engagement of the marketplace operator, IPEX Cleantech Asia. By the end of the pilot marketplace demonstration in 30 June 2017, IPEX has signed three advisory and deal facilitation service contracts and has successfully brokered a technology deployment agreement between a technology provider based in Singapore and project developer in India.

Subproject D, pursuing to facilitate transfer of low-carbon technologies even after the conclusion of the engagement of the market place operator, continued to link technology providers and adopters and

enable discussions among them. Since the end of 2017, Subproject D team started to focus on clean heating solutions to address air pollution issues in Northern China. Responding to a Changzhi City (PRC) government's request, ADB with the assistance of Subproject D, helped identify clean alternative solutions to burning raw coals and promoting the adoption of alternative fuels for heating in rural areas. A related international workshop, which the subproject helped organize, showcased 10 technology solutions and facilitated dialogue among the different stakeholders. Following the workshop, one of the 10 solutions were piloted in Ulaanbaatar and five solutions are planned to be piloted in Zhangzi County of Changzhi City, PRC. The latter pilot in PRC is being supported by the Subproject D team.

The subproject has also helped countries gather direct technical information on floating solar farms from manufacturers and operators through the previously mentioned site visits to floating solar farms in PRC and a deep dive workshop on floating solar organized and supported by the subproject. Following its participation in these activities, Bangladesh expressed strong interest in putting up floating solar farms.

**Outcome 10: Project managed on time and within budget** (*Project management / Subproject E - ADB*)

**Rating: Not applicable.** This TA was completed on 31 December 2016.

**Global Environmental Benefits (GEB) Rating: Satisfactory**

- **Mitigated GHG emissions in metric tons of CO<sub>2</sub> equivalent; and Increased use of renewable energy and decreased use of fossil energy resources.**

**Rating: Satisfactory.**

The startup accelerator programs supported by Subproject C include a number of technologies which have the potential of increasing the use of renewable energy and decreasing the use of fossil energy resources. Examples of these technologies include Internet-of-Things platform for energy efficiency for heavy industries, commercial buildings, and distributed power grids; advanced materials that can improve energy and resource efficiency; and, smart street lighting for cities.

The VC and PE funds supported by the Subproject have invested in companies engaged in advanced battery storage, wind and solar PV farms, rooftop solar PV, thermal energy storage, and Internet-of-Things energy analytics. Subproject C has also provided technical support in the design of a solar PV project, as well as technical advice on energy efficiency measures, to a university in Fiji.

Subproject D has opened direct linkages between providers of clean energy technologies, such as floating solar PV and clean heating solutions, and keen adopters of the technologies. These linkages help in accelerating the use of renewable energy and reduce dependence on fossil fuels.

- **Increased adoption of a low-carbon development path through technology transfer, market transformation, and enabling activities.**



**Rating: Moderately Satisfactory.**

Subprojects C and D continued to work closely with the Hunan Provincial Government, Hunan Development and Reform Commission, and the Hunan Innovative Low Carbon Center. Through advisory support, knowledge sharing activities, and establishment of linkages between market stakeholders, the subprojects have supported the Hunan local government in its initiatives for sustainable, low-carbon development.

**D. Risk Rating:**

(Please provide explanation for Risk rating. Highlight in particular any specific risks relating to any of the GEBs relevant to the project. In the case of projects with HR, SR and MR, provide details of any planned/ undertaken risk management or corrective activities.)

**Risk: Limited and unclear demands for targeted technical assistance activities by UN Environment's project partner countries. Rating: Modest risk.**

This remains a risk since UN Environment provides technical assistance based on requests submitted by country focal points. With the CTCN being up and running for some time now, most requests for TA support are submitted to Copenhagen. In response, most CTNFC TAs going forward will be focused on supporting partner country focal points to identify priority areas and design and develop programs based on policy and legal frameworks required to facilitate technology use and NDC implementation, as well as financing incentives and mechanisms to promote the use of technology. The big challenge is the time it takes for the governments to send official requests, and most of requests are made informally.

**E. Overall Rating of the Project:**

**Overall Rating: Satisfactory**

With the nearing end of the project, implementation of the Pilot Asia-Pacific Climate Technology Network and Finance Center continued to go well. For UN Environment, the first two components have been completed but are reinforced and sustained throughout the activities pertaining to Component 3. The remaining subprojects as well as the components being managed by UNEP have been extended until 31 December 2018 to compensate for initial delays in implementation, as well as to better address the needs of developing countries in the Asia-Pacific region. The two remaining active subprojects of ADB carried on catalyzing climate mitigation and adaptation actions. Working in synergy with other organizations and stakeholders, the project has facilitated the diffusion of climate technologies in Asia and the Pacific as described in the previous sections of this report.

**F. Additional Comments – Good Practices and Lessons Learned:**

Additional comments, including any specific achievements, innovations, good practices and lessons learned.

The main lesson for UN Environment's components is that it is a challenge to assess if or how long it will take for TAs to be translated to policies, larger programs, or demonstration projects or for investment to happen. Maintaining strong ties with focal points and stakeholders is crucial for exploring options for

scaling up the TAs through collaboration with ADB, GEF, CTCN, and the GCF. In addition, the relationships built over the last few years with project focal points/NDEs and regional technical institutions, through the TAs and capacity building and networking events, have set the stage for collaboration in designing and developing identified programs and strategies for supporting countries with NDC implementation.

An important lesson that ADB has realized is that early-stage climate technology businesses play critical roles in developing, validating and de-risking new climate technologies, business models and services needed to deploy and finance next generation climate solutions at scale in Asia. These businesses will be particularly important as countries move beyond utility-scale renewable energy solutions into more distributed and service-oriented technologies, including distributed energy, energy efficiency, sustainable mobility, smart cities, and climate-smart agriculture.

The level of investment (risk capital) in early-stage climate technology businesses in Asia is still, however, very weak. Overall, this is mainly due to a lack of investable deals—rather than a lack of risk capital per se. There is an estimated 1 trillion of 'dry powder' (i.e., committed but yet to be deployed capital) in the global VC/PE industry, much of that in Asia. The lack of investable deals shows that early-stage climate technology businesses in Asia still face considerable sector as well as location-specific risks. Similar issues are also faced by climate tech business in developed countries, but many of the risks are amplified in Asia. These include (i) market risks (uncertain demand and policies, strong incumbents, capped returns, etc.), (ii) operational risks (red tape, weak business environment, weak local ecosystems including supply-chains and O&M specialists, etc.), (iii) management risks (inexperienced entrepreneurs, difficulty in recruiting and retaining required talent, etc.), and (iv) financing risks (lack of follow-on funding, lack of access to credit for working capital, etc). Taken together, these combined risks usually significantly outweigh the potential returns from early-stage climate technology investment in Asia.

Given all of these, activities aimed at reducing or transferring the risks faced by early-stage climate tech businesses in Asia are crucial. These activities will help grow the pool of investable early-stage climate technology companies in Asia, investment into these companies, and eventually the availability of new proven climate technologies and business models. Such de-risking activities include greater support for effective accelerator programs, new types of market-based partnerships with larger companies and adopters, policy support for startups (specially to reduce red tape, and provide easier to access talent), new blended financing instruments (that reduce the risks for early-stage investors), etc. These in turn needs to be underpinned by a much stronger climate technology ecosystem in developing Asia, involving many more types of stakeholders and enabling completely new types of interactions and collaborations.

#### **G. Knowledge Management:**

- 1) List the Knowledge Management Materials that have been prepared during the reporting period (1 July 2016 to 30 June 2017) – Title, date and links to documents; websites or blogs
- 2) List the proposed Knowledge Management Materials

#### Prepared Knowledge Management Materials

Knowledge management materials prepared and/or supported by UNEP and ADB for the reporting period are listed in the table below:

Title	Partners/ Authors	Date	Link
Final Report: Feasibility Study on Domestic Efficient Lighting Program (DELP) in Viet Nam	EESL	January 2018	<a href="https://drive.google.com/open?id=1kc5tCIUCLvrPXqfXtdfxWWub-WmqHhR5">https://drive.google.com/open?id=1kc5tCIUCLvrPXqfXtdfxWWub-WmqHhR5</a>
E-newsletter – Coastal Adaptation	UN Environment	July 2017	<a href="https://drive.google.com/open?id=0BzhZfcYnDxpwwWdOLXhNNDZySFU">https://drive.google.com/open?id=0BzhZfcYnDxpwwWdOLXhNNDZySFU</a>
E-newsletter – E-Vehicles	UN Environment	November 2017	<a href="https://drive.google.com/open?id=0BzhZfcYnDxpwaUMwNm9RMjh4UE0">https://drive.google.com/open?id=0BzhZfcYnDxpwaUMwNm9RMjh4UE0</a>
E-newsletter – Decentralized Renewable Energy	UN Environment	April 2018	<a href="https://drive.google.com/open?id=1iCBAPNVEI97naSfwDzVwuaLfnikTrSPP">https://drive.google.com/open?id=1iCBAPNVEI97naSfwDzVwuaLfnikTrSPP</a>
New Energy Leaders video	ADB	June 2018	<a href="https://www.youtube.com/watch?v=MyFBBndqoD8">https://www.youtube.com/watch?v=MyFBBndqoD8</a>
New Energy Leaders (updated brochure)	ADB	June 2018	<a href="https://drive.google.com/open?id=1SHQFWxQd9CCPihXaw1m8nm3kX8AB7m6l">https://drive.google.com/open?id=1SHQFWxQd9CCPihXaw1m8nm3kX8AB7m6l</a>
New Energy Leaders website	ADB	May 2018	<a href="https://newenergyleaders.splashthat.com">https://newenergyleaders.splashthat.com</a>
Startup Space: Knowledge Dim Sum with Entrepreneurs - Overview of Participating Startups	ADB	June 2018	<a href="https://drive.google.com/open?id=1I-z6qbFd9PemTPoHL1BRtFqSOyYOREsD">https://drive.google.com/open?id=1I-z6qbFd9PemTPoHL1BRtFqSOyYOREsD</a>
Low-Carbon Technologies for Low-Carbon Cities: A Brief Overview	Hunan Provincial Government, Hunan Development and Reform Commission and ADB	November 2017	English version: <a href="https://drive.google.com/file/d/1B_XCWqeDDiTiNdUuRSHtFYR7Ma5upo0a/view?usp=sharing">https://drive.google.com/file/d/1B_XCWqeDDiTiNdUuRSHtFYR7Ma5upo0a/view?usp=sharing</a>  Chinese version: <a href="https://drive.google.com/file/d/1-QaQB0zpVw7QPuqN3H_lo3P502R2C6Pf/view?usp=sharing">https://drive.google.com/file/d/1-QaQB0zpVw7QPuqN3H_lo3P502R2C6Pf/view?usp=sharing</a>
The Impact of Nationally Determined Contributions on the Energy Sector: Implications for ADB and Its Developing Member Countries	ADB	July 2018	<a href="https://www.adb.org/sites/default/files/publication/437896/sdwp-054-nationally-determined-contributions-energy.pdf">https://www.adb.org/sites/default/files/publication/437896/sdwp-054-nationally-determined-contributions-energy.pdf</a>

**H. Location Data:**

Indicate where the project is located/where the project will take place. This includes Feature Name, Feature ID, Latitude and Longitude (in decimal degrees). Please use [www.geonames.org](http://www.geonames.org) if possible. Please use the finest scale available for the location(s). If you prefer to provide a GIS shapefile you may do that instead.

Subproject	Assistance extended to	Coordinates: Latitude	Coordinates: Longitude
TA 8109	Bangladesh	23.6850° N	90.3563° E
	Bhutan	27.5142° N	90.4336° E
	Hunan, PRC	28.1124° N	112.9838° E
	Ningxia, PRC	38.4713° N	106.2588° E
	Mongolia	46.8625° N	103.8467° E
	Pakistan	30.3753° N	69.3451° E
	Papua New Guinea	6.3150° S	143.9555° E
	Viet Nam	14.0583° N	108.2772° E
TA 8132	Tonga	21.1790° S	175.1982° W
	Tajikistan	38.8610° N	71.2761° E
	Cambodia	12.5657° N	104.9910° E
	Viet Nam	14.0583° N	108.2772° E
	Indonesia	0.7893° S	113.9213° E
	Tajikistan	38.8610° N	71.2761° E
	Fiji	17.7134° S	178.0650° E
TA 8018	People's Republic of China	35.8617° N	104.1954° E
	India	20.5937° N	78.9629° E
	Viet Nam	14.0583° N	108.2772° E
	Philippines	12.8797° N	121.7740° E
UNEP	Mongolia	46.8625° N	103.8467° E
	Laos	18° N	105° E
	Vietnam	14.0583° N	108.2772° E
	Philippines	12.8797° N	121.7740° E
	Cambodia	13° N	105° E
	Maldives	12.8797° N	121.7740° E

**For Projects that have conducted Midterm Review Mission and Project Completion Mission (from 1 July 2017 to 30 June 2018)**

**IV. Materialized Cofinancing**

**Co-financing Table**

(For projects which underwent a mid-term review/evaluation or terminal evaluation in FY)

*Materialized Co-financing*

[Please refer to the PIF template on the GEF webpage]

Sources of Co-financing <sup>1</sup>	Name of Co-financer	Type of Co-financing <sup>2</sup>	Amount Confirmed at CEO endorsement / approval	Actual Amount Materialized at Midterm	Actual Amount Materialized at Closing
<b>TOTAL</b>					

Explain "Other Sources of Co-financing": \_\_\_\_\_

**Reminder: Kindly include in your submission a copy of the following:**

1. For projects that conducted Midterm Review Mission: Copy of the MOU Midterm Review Mission; BTOR and Updated Tracking Tools
2. For projects that conducted Project Completion Mission: Copy of the PCR, Copy of the MOU Midterm Review Mission; and Updated Tracking Tools

<sup>1</sup> Sources of Co-financing may include: Bilateral Aid Agency(ies), Foundation, GEF Agency, Local Government, National Government, Civil Society Organization, Other Multi-lateral Agency(ies), Private Sector, Other

<sup>2</sup> Type of Co-financing may include: Grant, Soft Loan, Hard Loan, Guarantee, In-Kind, Other

Signature:



Name of Project Officer:

**David C. Elzinga**

Position:

Senior Energy Specialist

Date:



Endorsed by:

**Robert Guild**

Division Director

Chief Sector Officer, Sector Advisory Service Cluster,  
Sustainable Development and Climate Change Department

## Annex 1: DEFINITION OF RATINGS

### Implementation Progress Ratings

**Highly Satisfactory (HS):** Implementation of **all** components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be presented as “good practice”.

**Satisfactory (S):** Implementation of **most** components is in substantial compliance with the original/formally revised plan except for only a few that is subject to remedial action.

**Moderately Satisfactory (MS):** Implementation of **some** components is in substantial compliance with the original/formally revised plan with **some** components requiring remedial action.

**Moderately Unsatisfactory (MU):** Implementation of **some** components is not in substantial compliance with the original/formally revised plan with **most** components requiring remedial action..

**Unsatisfactory (U):** Implementation of **most** components is not in substantial compliance with the original/formally revised plan.

**Highly Unsatisfactory (HU):** Implementation of **none** of the components is in substantial compliance with the original/formally revised plan.

### Global Environment Objective/Development Objective Ratings

**Highly Satisfactory (HS):** Project is expected to achieve or exceed **all** its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as “good practice”.

**Satisfactory (S):** Project is expected to achieve **most** of its major global environmental objectives, and yield satisfactory global environmental benefits, with only minor shortcomings.

**Moderately Satisfactory (MS):** Project is expected to achieve **most** of its major relevant objectives but with either significant shortcomings or modest overall relevance. Project is expected not to achieve **some** of its major global environmental objectives or yield some of the expected global environment benefits.

**Moderately Unsatisfactory (MU):** Project is expected to achieve of its major global environmental objectives with major shortcomings or is expected to achieve only **some** of its major global environmental objectives.

**Unsatisfactory (U):** Project is expected **not** to achieve **most** of its major global environment objectives or to yield any satisfactory global environmental benefits.

**Highly Unsatisfactory (HU):** The project has failed to achieve, and is not expected to achieve, **any** of its major global environment objectives with no worthwhile benefits.

### Risk Rating

Risk ratings will assess the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risks of projects should be rated on the following scale:

**High Risk (H):** There is a probability of greater than 75% that assumptions may fail to hold or materialize, and/or the project may face high risks.

**Substantial Risk (S):** There is a probability of between 51% and 75% that assumptions may fail to hold and/or the project may face substantial risks.

**Modest Risk (M):** There is a probability of between 26% and 50% that assumptions may fail to hold or materialize, and/ or the project may face only modest risks.

**Low Risk (L):** There is a probability of up to 25% that assumptions may fail to hold or materialize, and/ or the project may face only modest risks.

