
Terminal Evaluation of the UNEP-ADB-GEF Project “Pilot Asia-Pacific Climate Technology Network and Finance Center” (AP-CTNFC)



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For further information on this report, please contact:

Evaluation Office of UN Environment
P. O. Box 30552-00100 GPO
Nairobi, Kenya
Tel: (+254-20) 762 3389
Email: unenvironment-evaluation-director@un.org

Terminal Evaluation of the UNEP-ADB-GEF Project AP-CTNFC
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Short biography of the consultants

Dr. Joyce Miller is Founder and Director of a Swiss-based consultancy, CAPRESE Sàrl. She has undertaken evaluation work for United Nations' agencies since 2015, leveraging her 20+ years of experience in capacity building for resource efficiency, private sector development, entrepreneurship, impact monitoring, evaluation, and technical advice in international cooperation. As well as coaching 1'000 senior corporate staff over the years to tap their talents, build their leadership repertoire, and create high performance teams through programmes of the International Institute for Management Development (IMD in Switzerland), she co-developed a virtual 8-week learning journey in innovation, pioneering the first of its "global leadership in the cloud" offerings.

Eli De Friend is CAPRESE's Director of Operations and is on the Executive Board of the Swiss Project Management (SMP) association, a Founding Member of the Knowledge for Development Partnership (K4DP), and a regular contributor to the Swiss Knowledge Management Forum (SKMF) and LEGO Serious Play Community of Practice. With expertise in the areas of strategy, governance, and project management, he has contributed to evaluations over the past five years.

ABOUT THE EVALUATION

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Brief Description: This report is the terminal evaluation of the Global Environment Facility (GEF) project, “Pilot Asia-Pacific Climate Technology Network and Finance Centre” (AP-CTNFC), which was jointly implemented during 2013-2019 by the United Nations Environment Programme (UNEP) and Asian Development Bank (ADB). Initiated in the wake of the 2007 Poznan Strategic Programme on Technology Transfer (PSP) designed to help developing countries enhance action on climate change mitigation and adaptation, this pilot project was intended to assist developing countries in the Asia Pacific region to put in place the appropriate policies and measures to facilitate the transfer of environmentally-sound technologies (ESTs) through the establishment and strengthening of a network of national and regional centres, policy reform, demonstrations, and catalytic financing. This evaluation assessed this pilot project’s performance in terms of its relevance, effectiveness, efficiency, impact, and sustainability. The evaluation’s primary purposes were to (i) provide evidence of results to meet accountability requirements; and (ii) promote learning, feedback, and knowledge sharing through results and lessons learned for UNEP, ADB, GEF, and relevant organisations in the 17 countries that participated in the project.

Key words: Climate Change, Adaptation, Mitigation, Climate Technology Centre and Network, CTCN, Technology Mechanism, Resilience, Technology Transfer, Technology Deployment, Technology Mechanism, Low Carbon Technology, Environmentally-Sound Technology, EST, Energy, Energy Efficiency, Renewable Energy, Green Buildings, Climate Smart Agriculture, Crop Suitability Mapping, Climate Technology Mapping, Waste Heat Recovery, Steel Industry, Brick Kilns, Electric Vehicles, Residential Lighting, District Heating, Institutional Strengthening, Policy Advice, Climate Technology Finance, Catalytic Finance, Broker Model, Technical Assistance, Readiness Proposal, Scaling Up, Network, Collaboration, South East Asia Network of Climate Change Focal Points, SEAN-CC, North-South, South-South, Project Evaluation, Terminal Evaluation, TE

Evaluation Team

Dr. Joyce Miller, International Evaluation Expert

UN Environment, Office of Evaluation

Dr. Tiina Piironen, Evaluation Manager

Ms. Mercy Mwangi, Evaluation Programme Assistant

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List of Abbreviations and Acronyms

AP-CTNFC	Pilot Asia Pacific Climate Technology Network and Finance Centre project
ADB	Asian Development Bank
COP	(UNFCCC's) Conference of the Parties
CTCN	Climate Technology Centre and Network
DMCs	Developing Member Countries
EE	Energy Efficiency or Energy Efficient
EOU	(UNEP's) Evaluation Office
ESTs	Environmentally sound technologies
GCF	Green Climate Fund
GEF (SEC)	Global Environment Facility (Secretariat)
KPI	Key Performance Indicator
M & E	Monitoring and Evaluation
MTR	Mid-Term Review
MTS	(UNEP's) Medium-Term Strategy
NAMA(s)	Nationally Appropriate Mitigation Action(s)
NDC	Nationally Determined Contributions
NDE	Nationally Designated Entity
PDQ	Project Design Quality (assessment)
PIR	Project Implementation Report
PoW	Programme of Work
PRC	(UNEP's) Project Review Committee
ROAP	(UNEP's) Regional Asia and Pacific Office (in Bangkok, Thailand)
SDGs	Sustainable Development Goals
SMART	Specific, Measurable, Assignable, Relevant, Time-Specific
STAP	Scientific and Technical Advisory Panel
TA	Technical Assistance
TE	Terminal Evaluation
TM	Technology Mechanism
TOC, RTOC	Theory of Change, Reconstructed Theory of Change
ToR	Terms of Reference
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

Glossary of Relevant Evaluation-Related Terms

Term	Definition
Assumption	Assumptions are significant external factors or conditions that need to be present for the realization of the intended results but are largely beyond the influence of the project and its partners. Assumptions are often positively formulated risks.
Direct Outcomes	Outcomes that are intended to be achieved from the uptake of outputs and occurring prior to the achievement of Project Outcome(s).
Driver	Drivers are the significant external factors that, if present, are expected to contribute to the realization of the intended results. Drivers can be influenced by the project and its partners.
Effects	Changes which are a consequence of an action or other cause. These changes can be intended, unintended, positive or negative.
Impact	Long-lasting results arising, directly or indirectly from a project. Impacts are intended and positive changes and must relate to the donor's mandate
Indicator	Quantitative or qualitative measure that provides a simple and reliable means to assess results. (An attribute of a good indicator is that it conforms to SMART ¹ or CREAM ² principles)
Intermediate States	Intermediate states are changes (outcomes) beyond the Project Outcome(s) and that are required to achieve the intended impact of a project.
Lessons learned	The new knowledge or understanding gained by the experience of implementing a project that is applicable to, and useful in, other similar contexts.
Logframe	Management tool drawing on results-based management principles used to facilitate the planning, implementation and evaluation of an intervention. It involves identifying strategic elements (activities, outputs, outcomes, impacts) and their causal relationships, indicators, and assumptions that may affect project success or failure.
Monitoring	A continuing function that uses the systematic collection of data on project / programme parameters (e.g. expenditure, risk, milestone delivery, inclusive participation etc.) to provide management with indications of the extent of progress against plans and targets.
Outcomes	Outcomes are the use (i.e., uptake, adoption, application) of an output by intended beneficiaries, observed as changes in institutions or behaviour, attitude or condition.
Outputs	Outputs are the availability (for intended beneficiaries/users) of new products and services and/or gains in knowledge, abilities and awareness of individuals or within institutions.
Results	Results are intended changes in a state or condition that derive from a cause-and-effect relationship. Such changes must be describable and measurable/discernible. A results statement and its indicators should be collectively SMART or CREAM. Outputs, outcomes and impact are considered 'results' (as opposed to inputs and activities).
Theory of Change	Method for planning, participation and evaluation. It defines long term intended impact and then maps backward to identify necessary preconditions. It is a comprehensive description and illustration of how and why a desired change is expected to happen in a context. A Theory of Change also allows for unintended positive and/or negative effects to be depicted.

Source: These definitions consider various sources: RRBM glossary (UNDG, UNDP, OECD) including UNEP's own practice (RBM Training Material, Programme Manual, Evaluation Unit glossary). This work has been produced by UNEP's Programme Coherence and Assurance Unit, Programme Support Unit in Ecosystems Division, the Evaluation Office and inputs from colleagues of Policy and Programme Division.

¹ Refers to indicators that are Specific, Measurable, Achievable, Realistic and Time-Bound

² Refers to indicators that are Clear, Relevant, Economic, Adequate, and Monitorable

Project summary

GEF Project ID:	4512		
Implementing Agency:	ADB (lead); UNEP	Executing Agency:	UN Environment: Internally executed by the Economy Division
Sub-programme:	Climate Change	Expected Accomplishment(s):	EA (b) Low carbon and clean energy sources and technology alternatives are increasingly adopted, inefficient technologies are phased out and economic growth, pollution and greenhouse gas emissions are decoupled by countries based on technical and economic assessments, cooperation, policy advice, legislative support and catalytic financing mechanisms
ADB approval date: UNEP approval date:	29 August 2011 18 September 2012	Programme of Work Output(s):	1b3: Knowledge networks and United Nations partnerships to inform and support key stakeholders in the reform of policies, economic incentives and the implementation of programmes for renewable energy, energy efficiency and reduced greenhouse-gas emissions are established, supported and used to replicate successful approaches. (Target: three regional networks)
GEF CEO endorsement date:	31 May 2012	Project type:	FSP
GEF Operational Programme #:		Focal Area(s):	Climate Change
		GEF Strategic Priority:	
Expected start date:	1 June 2012	Actual start date:	ADB: 15 June 2012 UNEP: 18 September 2012
Planned completion date:	Feb 2015	Actual completion date:	March 2019
Planned project budget at approval:	US\$ 85,182,091	Actual total expenditures reported as of [June 2019]:	UNEP- GEF: US\$3,179,421 Co-finance: US\$4,440,000 ADB-GEF: 5,985,624 + 1,502,884 = 7,488,508
GEF grant allocation:	ADB: US\$ 7,359,091 UNEP: US\$3,250,000	GEF grant expenditures reported as of [28.5.2019]:	UNEP: US\$ 3,179,421
Project Preparation Grant - GEF financing:	0	Project Preparation Grant - co-financing:	0

GEF Project ID:	4512		
Expected Full-Size Project co-financing:	US\$ 74,372,000	Secured Full-Size Project co-financing:	US\$4,440,000
First disbursement:	ADB: 22 August 2012 UNEP: 12 March 2013	Date of financial closure:	
No. of revisions:	6	Date of last revision:	29 May 2018
No. of Steering Committee meetings:	3	Date of last/next Steering Committee meeting:	Last: 28 August 2015
Mid-term Review/ Evaluation (planned date):	March 2016	Mid-term Review/ Evaluation (actual date):	March 2016 (on ADB-managed components only)
Terminal Evaluation (planned date):	2019	Terminal Evaluation (actual date):	2020
Coverage - Countries:	ADB: India, China UNEP Southeast Asia (Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Vietnam), Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan and Turkmenistan) and additional TNA countries in the region (Mongolia, Sri Lanka, Nepal and Bhutan)	Coverage - Region(s):	Asia-Pacific (Southeast Asia, Central Asia, additional TNA countries in the region)

Executive Summary

Introduction

This document represents the full and final report of the Terminal Evaluation (TE) of the “Pilot Asia-Pacific Climate Technology Network and Finance Centre” project (henceforth, AP-CTNFC), jointly implemented by UNEP and ADB, under funding from the Global Environment Facility (GEF). The project ran from September 2012 to March 2019. This Evaluation Report describes the justifications, context and operation of this pilot project, its Reconstructed Theory of Change (RTOC), and contains the findings, conclusions, lessons learned, and recommendations that emerged from this independent evaluation. Complementary information is included in the annexes of this report.

Overview of Pilot Asia-Pacific Climate Technology Network and Finance Centre” project (AP-CTNFC)

Goal: to enhance diffusion of technologies that promote low-carbon and climate-resilient development

Donor: Global Environment Facility (GEF)

Implementers: ADB (lead agency), UNEP

Budget: USD 10,909,091 (grant) USD 74,732,000 (co-financing) 75% allocated to ADB; 25% (USD 3.5 million allocated to UNEP)

Duration: Originally planned to run for 30 months from September 2012. In its implementation, the project ran to March 2019, including a no-cost extension

Geography: Southeast Asia, Central Asia

2. This TE was initiated six months after the project’s closure with the remit to assess its strategic relevance, effectiveness, efficiency, impact, and sustainability, using criteria and guidance provided by UNEP’s Evaluation Office (EOU) and report this through ratings on 30 criteria, backed up by evidence-based findings triangulated using multiple data sources. The quality of project design was assessed as an input to this endeavour; it is included in the Inception Report prepared in advance of the main evaluation phase. This TE serves two main purposes; namely to: (i) provide evidence of results to meet accountability requirements; and (ii) promote operational improvement and knowledge sharing on the part of the donor (GEF) and implementing partners (UNEP, ADB), who are the primary target audience for this Evaluation Report.
3. The TE was executed by an independent Evaluator who was supervised and guided by UNEP’s Evaluation Office (EOU) and conducted the evaluation according to the scope outlined within the Terms of Reference (ToR) provided by UNEP for this mandate (see Annex 1). In this light, key actors involved in implementing, supervising, and benefitting from the intervention were interviewed for the UNEP-led components of the project, on the understanding that pertinent information, context, description, analysis, findings, lessons learned, and recommendations would be provided in a timely manner to the Evaluator through the independent Terminal Review commissioned by ADB of the components it managed, which was being conducted in the same period. Data regarding the UNEP-led components was gathered from multiple sources for the purpose of triangulation, to the extent that this was possible. Project reports and other relevant

documents were reviewed to the extent that these were available.

4. The Evaluator used a participatory approach whereby key stakeholders were kept informed and consulted throughout the process. Primarily qualitative methods were used to assess the project's performance against expected outputs, outcomes, and impacts. The formulation of the findings, conclusions, and recommendations are exclusively those of the Evaluator.
5. While it would have been ideal to have direct input from all actors involved in and benefitting from the project's implementation, due to budget and time constraints, field missions were carried out in only 4 of 17 beneficiary countries (Bhutan, Indonesia, Thailand, Vietnam) in January-February 2020. Seeking a more inclusive approach, input was requested from all stakeholders for whom contact information was available (a total of 171 informants) through the use of an electronic survey run in parallel to the evaluation field missions. This generated rather limited response (.05%, i.e. 9 responses).
6. The ability to generate a single, unified independent evaluation of this jointly implemented project was severely limited by the scope and resourcing of this exercise, the absence of a joint review at a strategic moment in the project's trajectory and at project closure, unavailability of project documentation for the ADB-led components and their anticipated Terminal Review. Consequently, the TE Report prepared herein has a significantly unbalanced focus on the UNEP-led components. This situation risks undermining the credibility and utility of this TE Report vis-à-vis the aims of the evaluation process.

Key Findings and Conclusions

7. The project had **high strategic relevance** for the Asia Pacific's regional, sub-regional, and national environmental priorities. It was fully aligned with UNEP's Medium-Term Strategy (MTS), Programme of Work (PoW), ADB's Strategy 2020, and the GEF's priorities and Climate Change focal area objectives. The project's relevance was further enhanced through its deliberate efforts to build strongly on existing networks and ongoing climate technology transfer initiatives.
8. While the ambition level of this intervention was relatively high, in terms of testing joint implementation by a UN agency and regional development bank, an as yet untried structure, the **project design** did not provide the structure, resourcing, support, and supervision to operationalise this innovative approach to cooperation in the technology transfer space.
9. In terms of **effectiveness**, the project successfully delivered its programmed outputs related to establishing and strengthening a network of national and regional centres/initiatives, policy reform, demonstrations, and catalytic financing. The project's support was experienced as useful by its intended beneficiaries and this pilot tangibly informed the operationalisation of the CTCN. Its **likelihood of impact** was deemed to be moderately likely in view of the lack of envisaged joint substantive collaboration, which would presumably have been a pertinent accelerator towards the project's overall objective to enhance diffusion of technologies that promote low-carbon and climate-resilient development in countries in the target region.

10. The project's **institutional sustainability** was judged likely given its close links and direct scaling up pathway to and replication by the CTCN. There is sufficient **socio-political support** at the highest levels across the Asia Pacific region, connected with the UNFCCC, TM, GCF, and CTCN, for assuring further development of the project's direct outcomes. ADB's demonstration of the effectiveness of linking technology and finance mechanisms to catalyse investment in ESTs is positively indicative of the **financial sustainability** of the project's outcomes.
11. The project's **efficiency** is rated as moderately unsatisfactory. Its timeline was significantly stretched out from the original 30-month duration to a 6.5 year implementation which included a 'no cost extension' to December 2018 and a further 3-month technical completion extension to allow UNEP to complete outputs initiated in November 2018. While the ADB-managed components, which were implemented as a TA cluster, were to be completed by September 2014, this was eventually extended to December 2014, then to December 2016, and ultimately to December 2018 to facilitate completion of subprojects.
12. The project's **M&E approach** did not adequately reflect the nature of the AP-CTNFC as trialling the implementation of a UN agency working together with a regional development bank to accelerate EST uptake. Insufficiencies in the scope, budget, and implementation arrangement for M&E had an impact on the ability of these activities to support the project's performance. The compartmentalisation and silos evident in the project right from the outset were particularly flagrant when it came to the design and conduct of the mid-term and terminal evaluations.
13. The fact that no resources were allocated for joint design and preparation and no attempt was made at the project's inception to establish a **common management structure** that would incline regular interaction and joint implementation impeded the project from fulfilling one its main objectives (in the eyes of the GEF), which was to trial such a collaboration. Enhanced supervision from the GEF side to more strongly signal, orient, and prioritize the collaboration would have likely significantly improved this aspect.
14. Given the lack of any budget provisioning for communications, there were limited efforts to **build public awareness and communicate** the Project's objectives, progress, and outcomes.
15. The project acknowledged the opportunity to address **human rights and gender equity** in its planning documents but appeared to have a slow start in operationalising the planned notions, with the result that this pilot did not manage to showcase the power of prioritizing such considerations with respect to technology transfer and deployment.
16. The Project was effective in **developing country ownership and driven-ness** and in choosing, leveraging, and building up elements to support the Project's delivery. Socio-political, institutional, and environmental dimensions of sustainability were addressed.
17. While there was no visibility regarding ADB's internal **project management and supervision**, on the UNEP side, the turnover of its project management staff reduced the early momentum that had been achieved. While an interim arrangement was put in place and a new Project Manager took over in August 2016, momentum was not regained due to an ineffective handover process

and weaknesses on the supervision side. The project's tripartite steering structure was completely ineffective. After its first meeting in November 2012, this **governance mechanism** which was intended to oversee the project's implementation and guide strategic planning decisions was not available to shape, guide, signal, orient, or prioritize the envisaged joint collaboration.

18. The Project's **overall performance and contribution is rated as moderately satisfactory**. Its **impact** through replication and upscaling is seen as **moderately likely**. This assessment would be enhanced if it would be the case that end beneficiaries are indeed able, in future, to secure access to adequate financial and technical resources to transfer and deploy appropriate mitigation and adaptation technology, in order to realise their full potential to addressing climate change effects and thereby generate the relevant evidence, data, and references for the value of low-carbon, climate resilient development.
19. Table 1 summarizes the evaluation ratings³ on a 6-point scale.

Table 1: Ratings Table (summary)

Criterion	Rating
A. Strategic Relevance	HS
i. Alignment to UNEP's MTS and POW	HS
ii. Alignment to ADB and GEF Strategic Priorities	HS
iii. Relevance to Regional, Sub-Regional, and National Environmental Priorities	HS
iv. Complementarity with Existing Interventions	HS
B. Quality of Project Design	MS
C. Nature of External Context	HF
D. Effectiveness: Attainment of Project Objectives & Results	S
i. Delivery of Outputs	S
ii. Achievement of Direct Outcomes	S
iii. Likelihood of Impact	ML
E. Financial Management	S
i. Completeness of Project Financial Information	S
ii. Communication between Finance and Project Management staff	S
F. Efficiency	MU
G. Monitoring and Reporting	U
i. Monitoring Design and Budgeting	U
ii. Monitoring of Project Implementation	U
iii. Project Reporting	U
H. Sustainability	L
i. Socio-Political Sustainability	L
ii. Financial Sustainability	L

³ Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Likelihood of impact and Sustainability are rated from Highly Likely (HL) to Highly Unlikely (HU). Nature of External Context is rated from Highly Favourable (HF) to Highly Unfavourable (HU).

Criterion	Rating
iii. Institutional Sustainability	L
I. Factors Affecting Project Performance	-
i) Preparation and Readiness	U
ii) Quality of Project Management and Supervision	U
iii) Stakeholder Participation and Cooperation	S
iv) Responsiveness to Human Rights and Gender Equity	MS
v) Country Ownership and Driven-ness	S
vi) Communication and Public Awareness	MS
Overall Project Rating	MS

Lessons Learned and Recommendations

20. Lesson 1: Substantive joint work needs to be backed up by strong signalling, orientation, and prioritization, supported by relevant management and supervisory structures, together with incentives and enforcement.
21. Lesson 2: In a jointly implemented project, it is incumbent on the key partners at the outset to discuss assumptions, clarify positions, align, and channel collective efforts to assure the project's envisaged performance.
22. Lesson 3: In a jointly implemented endeavour, the absence of independent joint evaluation conducted mid-way and at the project's closure missed vital opportunities to identify synergies, realign, and together build sustainability for the results and benefits of the intervention.
23. Lesson 4: Broadly-based regional projects, which by their nature and resourcing opt for breadth over depth, run the risk of designing and delivering activities at an overly superficial level, responding to the need for inclusiveness across countries, risking missing the in-depth assessment and demonstration value from focussing on a few, key priority areas.
24. Recommendation 1: Monitor and report in a more granular, cumulative (rather than incremental) manner, with specific details that relate activities and outputs and achievements directly to the metrics, targets, and indicators mentioned in the project's results framework; ensure that the narrative in monitoring reports displays evidence and comprehension of the ways in which the programmed outputs are driving the envisaged outcomes.
25. Recommendation 2: In view of the high level of turnover observed in project contexts, implementing partners should strengthen knowledge management processes and proactively prepare for handover during implementation.
26. Recommendation 3: During implementation and at project closure, non-resident agencies should make linkages with UN resident agencies which can contribute to sustaining a project's results and benefits through the UN Delivering as One concept.

1. Introduction

27. The project 'Pilot Asia-Pacific Climate Technology Network and Finance Centre' (henceforth, AP-CTNFC) was launched in September 2012 with an objective *"to enhance the diffusion of technologies that promote low-carbon and climate-resilient development"*. Supported by funding from the Global Environment Facility (GEF) set aside under the Poznan Strategy Action Plan (PSP), as a first regional pilot, this project was expected to contribute to the design of the operational procedures of the Technology Mechanism (TM) and the Climate Technology Centre and Network (CTCN), reflecting agreements reached at the 16th United Nations Climate Change Conference of the Parties (COP16) in Cancun in 2010. These institutional structures were expected to support and accelerate the transition to low-carbon and climate-resilient development in developing countries through technology transfer.
28. Jointly implemented by two major institutions, a specific purpose of the AP-CTNFC pilot was to test an approach in Asia Pacific under which UNEP was to provide technical assistance, capacity building, and policy advice to enhance the enabling environment for market transformation, and ADB was to provide and facilitate the financial investment. Together, these elements were expected to hasten the adoption, deployment, and investment in environmentally-sound technologies (ESTs) for climate mitigation and adaptation.
29. Conceived as a 30-month endeavour covering 17 countries (Bhutan, Cambodia, Indonesia, Lao People's Democratic Republic, Kazakhstan, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, the Philippines, Sri Lanka, Tajikistan, Thailand, Uzbekistan, Vietnam), the project was initially expected to close in February 2015. The project was granted a no-cost extension to December 2018, with an agreed spillover until March 2019 to allow for the completion of some outputs. The project was granted USD 10,909,091 in cash contributions from the GEF Trust Fund, complemented by anticipated co-financing contributions of USD 74,732,000.
30. The project's activities, outputs, and outcomes were organised through six components, divided between the implementing partners. Under this arrangement, UNEP managed three components: I) **strengthening cross-regional collaboration** through facilitating a network of national/regional centres and initiatives that could support the transfer of relevant climate technology; II) **building national infrastructure to leverage technology transfer services** by engaging appropriate institutions that could relate to the CTCN; and III) **stimulating demand for nationally-appropriate ESTs** through demonstration, documentation, and dissemination of results to facilitate technology assessment and eventual upscaling. ADB managed three components related to: IV) **integrating climate technology financing needs into national development strategies, plans, and investment priorities** through awareness-raising on climate change financing and deployment considerations; V) **catalysing investment in EST deployment** by increasing actual investment in projects using climate technologies; and VI) **accelerating technology transfer through market mechanisms** by establishing and demonstrating a marketplace of EST owners and users with high transfer potential and replicability.

31. This report presents the results of the Terminal Evaluation (TE) undertaken during October 2019 to February 2020 by an independent consultant team under the responsibility of UNEP's Evaluation Office (EOU). This exercise covered the project's entire duration from 18 September 2012 extending to 31 March 2019. The TE was conducted to (i) provide evidence of results to meet accountability requirements; and (ii) promote learning and knowledge sharing for UNEP, ADB, GEF, and actors in countries that participated in the project. In this respect, the TE focussed on identifying lessons and recommendations of operational relevance for future project formulation and implementation.

2. Evaluation Approach

32. This TE was carried out by an independent Swiss-based team under the responsibility of UNEP's Evaluation Office (EOU), in consultation with the Project Manager (Bangkok) and Task Manager (Nairobi). The TE's conduct followed GEF's requirements and UNEP's Evaluation Policy and Programme Manual, which guided the evaluation's aims, design, scope, and conduct.
33. The evaluation commenced with an inception phase in which the available project documentation was reviewed and key stakeholders were interviewed (remotely). An Inception Report was developed, which included a reconstruction of the project's Theory of Change (RTOC), an assessment of the project's design quality, and selection criteria to identify countries for evaluation field visits. Feedback on the RTOC was requested from key project stakeholders and the Evaluation Manager. The latter was the only actor to provide input, which was used to improve the formulation of result definitions to bring these to an adequate level of ambition. The RTOC was used to develop questions included in the online survey. It was shared with country-level informants in face-to-face interviews to gather their views on the project's intervention logic, drivers and assumptions, and the role they are playing in bringing about the envisaged change.
34. An Evaluation Matrix was developed following UNEP's nine core evaluation categories, together with the envisaged sources of data to address the questions and indicators that could be expected to provide concrete evidence of achieved results and impacts. These aspects were undertaken to assure a robust foundation for the evaluation. The intention of the inception phase was to build common understanding amongst the parties; clarify key issues; set out an approach and timeline for data-gathering, data analysis, and report writing; document deliverables and key milestones; and gain timely feedback to refine the evaluation approach. The assessment of the project's design quality (included in the Inception Report) documented that gender/minority groups were not addressed as the project's scope was supra-national and institutional.
35. The Inception Report included a proposal for developing a single TE report for this jointly implemented project based on undertaking an assessment of the UNEP-led components (including triangulation of findings through the review of UNEP's project documentation, interviews with key stakeholders, and selected field visits). This assessment was to be complemented with an independent Terminal Review of the ADB-managed components. The Terms of Reference (ToR) for the Terminal Review of the ADB-led components outlined the

following sections for data collection and assessment: 1. GEF Background; 2. Implementation; 3. Relevance, Effectiveness, Impact; 4. Global Environmental Benefits and Catalytic Role; 5. GEF Tracking Tools; 6. Sustainability; 7. M&E Framework and Institutional Arrangements. Using ADB's template, this was expected to be a concise 15-page report (plus appendices). In this light, and in accordance with the ToR provided by UNEP for the evaluation exercise (see Annex 1), the Evaluator focussed on assessing the UNEP-managed components and counted on having key information, context, description, analysis, findings, lessons learned, and recommendations provided in a timely manner by ADB as input. Finally, this input did not materialize (see Limitations on this Evaluation).

36. Regarding the UNEP-led components, a combined qualitative and quantitative approach was deployed for data collection, with the aim of developing insights into fundamental strengths and shortfalls as a basis for crystallizing the findings and extracting relevant lessons for organisational learning and operational improvement. To deepen understanding and triangulate results, data was sought from a variety of perspectives using multiple means, as follows:
- Desk Review: of all key project documentation supplied by UNEP, including project approval documents, revisions, annual work plans, meeting reports, bi-annual monitoring reports, annual Project Implementation Reports (PIRs), Steering Committee minutes, financial reports, technical assistance (TA) deliverables, dissemination materials, presentations, relevant correspondence, websites (e.g. CTCN) and thematic resources.
 - Telephone Interviews: were carried out with relevant UNEP project staff in Nairobi, Paris, and Bangkok (including key staff related to the CTCN which the Asia Pacific pilot was designed to support), and international consultants involved in developing and delivering TA.
 - Country Visits: undertaken in 4 (Bhutan, Indonesia, Thailand, Vietnam) of the 17 countries that benefitted from TA services under the pilot project to gauge the project's impacts on the ground. These visits allowed for direct field observations and meetings with the Nationally Designated Entities (NDEs), which the project had a key objective to strengthen and orient towards technology transfer services. Meetings were also held with other relevant actors seen as having potential to leverage the project's results (see Figure 1). The countries for field visits were selected in consultation with the EOU, Project Manager, and Task Manager. The criteria involved longevity of NDE, maturity of TA services provided, and geographic proximity given the limited budget available for data collection in the field.
 - Online Survey: to ensure inclusiveness and provide a mechanism for feedback from the large population of actors who were touched by this intervention, a 15-question survey was designed and administered in conjunction with the field visits with the aim of soliciting input from project Focal Points, NDEs, and others within the 17 countries covered by the project who benefitted from this intervention. The online survey was administered to 171 partners, of which 14% returned a failed delivery notice, and only 0.05% responded, representing only 9 responses (2 of whom indicated they did not at all remember participating in this project).

Figure 1: Data Collection through Evaluation Field Visits



37. Efforts were undertaken to assure the quality of data collection: i) the Evaluation Matrix organised along the required 9 categories for evaluation, together with an interview guideline (adapted according to respondent) was kept on hand as a reference, thereby maintaining focus on the purpose and scope of data gathering; ii) direct observations were immediately jotted down and put in context using field notes; iii) data collected through interviews was simultaneously noted down and clarifications were sought at the time or shortly afterwards by email; iv) interview notes were subsequently reviewed and corrected; v) photographic evidence was gathered where deemed useful; vi) facts were checked with relevant actors and verified with additional sources.

38. To preserve the integrity of the evaluation process and enhance freedom of expression, respondents were assured of the anonymity and confidentiality of their input. Stakeholder consultation was carried out independently, without participation of project implementing staff in order to collect input that was free of influence and/or a desire to please the project team. Respondents were encouraged to provide input in their mother tongue when they felt uncomfortable with their sufficiency in English. In such cases, translation was provided by peers.

39. The quality of data analysis was assured through the use of QDA Miner software⁴, which provided a clear trace back to evidence underpinning the findings of the evaluation. This tool was used to systematically analyse, code, cross-reference, and comment data gathered through interviews and written input according to the given evaluation categories. This approach allowed for the emergence of new, unanticipated categories and filtering by respondent cohort to detect further underlying patterns, orientations, similarities, and differences.

⁴ Used to manage, code, analyze data. <https://provalisresearch.com/products/qualitative-data-analysis-software/>

40. The data was analysed and developed into preliminary findings, which were shared with UNEP's EOU, implementing, and executing teams to gain clarification, identify further data sources, and agree on the TE Report outline. Based on available information, the project was rated according to UNEP's nine evaluation categories, using a 6-point scale⁵, with justifications elaborated through the findings in the report's main body. These ratings are summarized in Table 1.

A. Limitations on this Evaluation

41. This TE encountered typical limitations related to available budget and time: the evaluation could not cover direct inquiry with all implementing partners engaged in the entire range of activities and all relevant stakeholders in all involved countries. The Evaluator visited only 4 countries of the 17 covered and within those geographies, consultation was limited to 1-2 locations where implementing partners were based and accessible within the short period allowed for each country visit. The assumption has been made that these 4 countries are indicative of the results achieved and sustained across the 17 countries covered by the intervention. Further significant inquiry would need to be carried out to confirm this assumption.
42. Despite the attempt to broaden the outreach and assure inclusiveness through the administration of an online survey, there was an exceedingly low response rate (.05%). The survey data could therefore be considered as indicative and is by no means statistically significant.
43. As the project had a long duration (6.5 years), with activities/outputs reaching back to 2013, it proved relatively difficult for beneficiaries who were interviewed or surveyed in 2020 to recall specifics regarding their participation and the accrued benefits related to the bulk of the project's activities that occurred during 2013-2016, which brought Nationally-Designated Entities (NDEs) and other stakeholders together for networking and capacity-building under the UNEP-led components. Furthermore, the high level of staff turnover in the involved institutions over the period of this intervention meant that many participants listed in the project's database no longer held their previous positions and their recent contact details were not available. Consequently, the external triangulation of the project's performance and attribution of the value created through the UNEP-managed components could only be very weakly supported.
44. Another limiting factor for value attribution relates to the confusion that the majority of informants displayed regarding the project under evaluation. They had difficulty to distinguish between the Asia pilot project and the CTCN, both of which were launched in the same era and managed by UNEP. Illustrative of this situation, a UNEP informant explained, "*as this project started at the same time as the CTCN, that created confusion. The countries are looking for assistance; they don't care if it's one or the other; for them, it was all UNEP. We were building strong links between the two.*" Confirming this, a Vietnamese beneficiary asserted "*frankly speaking, we cannot recognize if an activity is under CTCN or AP-CTNFC. We had no clear division between the two*

⁵ Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability is rated from Highly Likely (HL) to Highly Unlikely (HU)

because everything was put under the CTCN". As the AP-CTNFC was intended to inform the CTCN's operationalisation, it is understandable that the pilot's management did not undertake deliberate efforts to distinguish between the two endeavours. However, the resulting confusion of interviewees for this evaluation meant that it was difficult to gauge and attribute results and benefits of the pilot project versus the intended longer-term institutional set-up under the CTCN.

45. While international consultants delivering TA were well-placed to gather impact data from beneficiaries, their ToR was limited in scope and typically, such follow-up was not included in their tasks. This missed an opportunity to generate material that could be used for triangulation during the project's evaluation; this type of impact data would have been very useful for directly linking lessons from the pilot to the CTCN and feeding into its institutional mandate.
46. Due to the above-mentioned limitations on the availability of external data, this evaluation has had to heavily rely on self-reported data from the UNEP team [i.e. interviews with internal UNEP staff (primary data) and self-reported progress on project performance provided through bi-annual reports (of UNEP) and PIRs that annually reported the status of UNEP- and ADB-led components]. This situation represents another significant limitation on this evaluation because this reporting consists largely of narrative description of activities carried out (or intended to be carried out in future) and focussed primarily on the delivery of outputs (which is only one of three constituent aspects for evaluating the project's effectiveness). Material related to outcomes was primarily a recap of the outputs. Furthermore, subjective self-ratings were used without making any reference to targets or indicators in the project's results framework (in the case of UNEP's bi-annual reports: % of implementation status as of the end of the respective reporting period; for the PIRs: ratings of satisfaction per component). The direct inquiry with beneficiaries (albeit limited) showed that their experience of the project's outputs and benefits differed at times and was less clear than what was asserted by the project's management who were intent on fulfilling the programmed outputs.
47. The prospect for generating a single, unified independent evaluation of this jointly implemented project was severely limited by several factors:
 - i) Absence of a joint review at a strategic moment in the project's trajectory: while an independent joint Mid-Term Review (MTR) was planned and budgeted, the 2016 PIR indicated that UNEP decided to forgo this assessment due to delays in engaging the consultant related to administrative challenges stemming from the institutional migration of the UN system to UMOJA. While ADB decided to go ahead with an MTR, the assessment was only carried out on ADB-managed components during November 2015 to March 2016;
 - ii) Absence of a joint review at project closure and unavailability of the ADB Terminal Review: in October 2019, ADB and UNEP each separately engaged an independent consultant to carry out an assessment of their respective components. These two consulting teams were in contact at an early stage, through telephone and by email, which set the stage for open, continuing communication. With the EOU's permission, relevant project documentation was shared (six years of bi-annual progress reporting, 2016 stocktaking, final UNEP report). Independent findings from the ADB Terminal Review were not available due to delays in the conduct of the evaluation exercise;

- iv) Unavailability of project documentation for ADB-led components: apart from the PIRs, there was a complete lack of internal project documentation and insights into the ADB side available to the Evaluator. ADB reporting through the PIRs focussed primarily on the delivery of outputs (which is just one part of Effectiveness).
48. In the absence of the anticipated independent Terminal Review to be provided by ADB, the Evaluator agreed to adopt the pragmatic suggestion of UNEP's EOU to use the PIRs as the only source of information for assessing the performance of the ADB-led components. It was observed that this annual reporting on ADB-managed components was quite positive regarding their performance, with "Highly Satisfactory" ratings assigned beginning in 2014 when the project had barely gotten off the ground. The PIRs are wholly self-reported data with no possibility under the Evaluator's current mandate to independently triangulate with external project stakeholders the description of progress, achievements, challenges, and opportunities provided by the ADB team.
49. Overall, the above-mentioned factors have seriously limited the extent to which the assessment of the ADB-led components could be properly reflected within the 30 criteria requested by UNEP (see evaluation ToR in Annex 1). Consequently, the TE Report prepared herein has a significantly unbalanced focus on the UNEP-led components for which documentation was available and where some triangulation effort could be undertaken through stakeholder interviews, field visits and the online survey. This situation risks undermining the credibility and utility of this TE Report vis-à-vis the aims of the evaluation process.

3. The Project

B. Context

50. The AP-CTNFC project was conceived in the wake of the Bali COP14's 2008 endorsement of the GEF's proposal for the Poznan Strategic Programme on Technology Transfer (PSP). GEF's plan for the PSP's long-term implementation was approved during the COP16 in 2010, which generated a comprehensive package (Cancun Agreements) to assist developing countries in enhancing action on climate change mitigation and adaptation⁶. In this respect, a global approach was envisaged which consisted of three interlinked elements: i) a Technology Mechanism (TM) for finance, technology transfer, and capacity building; ii) a Green Climate Fund (GCF), financed by developed countries to help developing countries in mitigating climate change (e.g. through making technologies and services more efficient in terms of fossil fuel use and developing alternative energy sources) and adapting to its effects (e.g. developing effective techniques/technologies for climate resilient agriculture, for sustainable water management); and iii) a Climate Technology Centre and Network (CTCN), which was to facilitate the effective implementation of the TM. The CTCN was expected to be operational in 2012, following a known timetable that was established during the COP16⁷.

⁶ <https://unfccc.int/ttclear/support/poznan-strategic-programme.html>

⁷ Project Document prepared by UNEP

51. Following the PSP's creation, the GEF was contacted by several agencies to explore the extent to which their envisaged work was aligned with technology transfer and eligible for support. ADB and UNEP were amongst those that approached the GEF. UNEP's proposal covered technical assistance and network building; ADB's proposal related to facilitating the finance for EST transfer and deployment. According to informants interviewed for this evaluation, GEF suggested the idea of collaboration to ADB and UNEP, indicating, "*these two entities came to us at the same time looking at something similar and we thought that they might be able to collaborate*" and further maintaining that "*the GEF is not in a position to dictate to an agency who they should work with; it was up to them to discuss and agree*".
52. ADB and UNEP then proceeded to develop a single proposal for CEO endorsement. The fact that a coherent proposal was perceived to have been pulled together within a 5-month period (in interviews, this was characterized as a relatively short time), which successfully cleared technical hurdles, and was presented to the GEF Council Meeting in May 2011 was described as "*pretty impressively carried out*". This feat was also interpreted, it seems, as an indicator that the collaboration would carry on in a positive manner.
53. The resulting project was characterized as the GEF's first pilot to respond to the Cancun Agreements on technology transfer.⁸ Together, the elements contributed by the two implementing partners would combine to generate i) support for climate technology centers and a climate technology network; ii) public-private partnerships for technology transfer; and iii) demonstrate GEF's ability to be a catalytic supporting institution for technology transfer. These three dimensions mapped directly to the COP14 recognition (in its Decision 2) of the key elements needed to enhance technology transfer activities, including scaling up investment in ESTs.⁹
54. The first of four regional pilot projects approved by the GEF in the same era (see Table 2), the AP-CTNFC's overall objective was framed in terms of enhancing the diffusion of technologies that promote low-carbon and climate-resilient development in the Asia Pacific region. Also being the first regional pilot to launch, it was foreseen that lessons and experience from the Asia Pacific pilot could be leveraged in replicating the approach in the other regions.

Table 2: GEF-Funded Pilot Projects for Climate Technology and Finance Centres

<i>Project</i>	<i>Region</i>	<i>Implementing Agency</i>	<i>GEF Trust Fund (USD million)</i>	<i>GEF Special Climate Change Fund (USD million)</i>	<i>Co-financing (USD million)</i>
Pilot Asia-Pacific Climate Technology Network and Finance Centre	Asia and Pacific	ADB / UNEP	10.0	2.0	74.7

⁸ Scientific and Technical Advisory Panel, 19 April 2011

⁹ Request for CEO Endorsement, p13

<i>Project</i>	<i>Region</i>	<i>Implementing Agency</i>	<i>GEF Trust Fund (USD million)</i>	<i>GEF Special Climate Change Fund (USD million)</i>	<i>Co-financing (USD million)</i>
Pilot African Climate Technology Finance Centre and Network	Africa	AfDB	10.0	5.8	89.0
Regional Climate Technology Transfer Centre	Europe and Central Asia	EBRD	10.0	2.0	77.0
Climate Technology Transfer Mechanisms and Networks in Latin America and the Caribbean	Latin America and the Caribbean	IDB	10.0	2.0	63.4

Source: GEF Report to 12th session of Conference of the Parties to the UNFCCC on Collaboration between CTCN and Regional Technology Transfer and Finance Centres, 13 November 2015

55. These four regional pilots had a similar aim: to generate experience and learning that could inform the TM, CTCN, and facilitate cooperation on climate technology development and transfer. The AP-CTNFC was the only one of these projects to involve two distinct agencies as implementing partners. An aspect of specific interest mentioned in interviews was that the AP-CTNFC was conceived to pilot the notion of a UN agency working together with a regional development bank to “*promote innovation and catalyze finance on a continuum*”¹⁰. The project was conceived as a way to contribute to the design of the operational procedures of the TM and the CTCN by testing an approach in Asia Pacific whereby UNEP would provide capacity building, technical assistance and policy advice to enhance the enabling environment for market transformation and ADB would provide and facilitate financial investment. Together, these elements were expected to accelerate the adoption, deployment, and investment in climate mitigation and adaptation technologies. It was understood that from the GEF’s viewpoint, a specific purpose of this pilot was to test the collaboration between the two implementing entities and the extent to which this so far untried structure could facilitate and hasten uptake of ESTs.

C. Objectives and Components

56. This jointly implemented project had six constituent components, which were divided up and allocated to UNEP (Components 1, 2, 3) and ADB (Components 4, 5, 6), as shown in Table 3.

¹⁰ Characterization of the project’s innovative quality made in a key respondent interview, 14 November 2019

Table 3: The Project's Planned Components, Outcomes, Targets, and Outputs

Overall Project Objective: To accelerate the adoption and deployment of climate technologies and foster investments in ESTs in Asia Pacific		Target (by end of project): Total investment in low-carbon and climate-resilient technologies in participating countries increases by more than 10% from 2012 to 2020 (2012 baseline to be determined)	
<i>Project Component</i>	<i>Expected Outcomes</i>	<i>Targets (by end of project)</i>	<i>Planned Outputs</i>
1) Facilitating a network of national and regional centers, networks, organizations, and initiatives (UNEP-led)	Outcome 1: Increased collaboration in the region for transfer of climate technologies between thematic or sector/technology specific centers and institutions	5 new regional or sub-regional sector-specific or technology-specific climate technology networks 6-8 countries and 2 sub-regional associations/economic organizations (e.g. ASEAN) have officially made steps to improve coordination for climate technology transfer	1.1 Collaboration for climate technology transfer is strengthened between key stakeholders at national level 1.2 Regional/thematic expert groups are established to provide guidance and support to private and public actors for climate technology transfer 1.3 Public-private partnership on climate technologies are promoted and supported 1.4 North-South and South-South cooperation for sharing know-how, knowledge and good practices on climate technology transfer
2) Building and strengthening national and regional technology transfer centers and centers of excellence (UNEP-led)	Outcome 2: Thematic-specific and technology-specific institutions and centers capable of providing environmentally sustainable technology transfer services to governments, financial institutions, public and private technology developers/providers at national and regional levels are strengthened (and/or created)	At least 12 institutions/centres supported 70% of the supported institutions/centres respond that the support provided meet their needs	2.1 Appropriate institutions and centres for supporting climate technology transfer are identified 2.2 The establishment of specialized national climate technology transfer institutions is supported 2.3 The capacities of climate technology institutions and professionals are strengthened 2.4 Tech-entrepreneurship development and green productivity are promoted
3) Design, development and	Outcome 3: Support and opportunities for national, regional,	5-8 new high quality bankable country-driven EST transfer programmes,	3.1 The design, development and implementation of country-driven EST transfer programs, demonstration

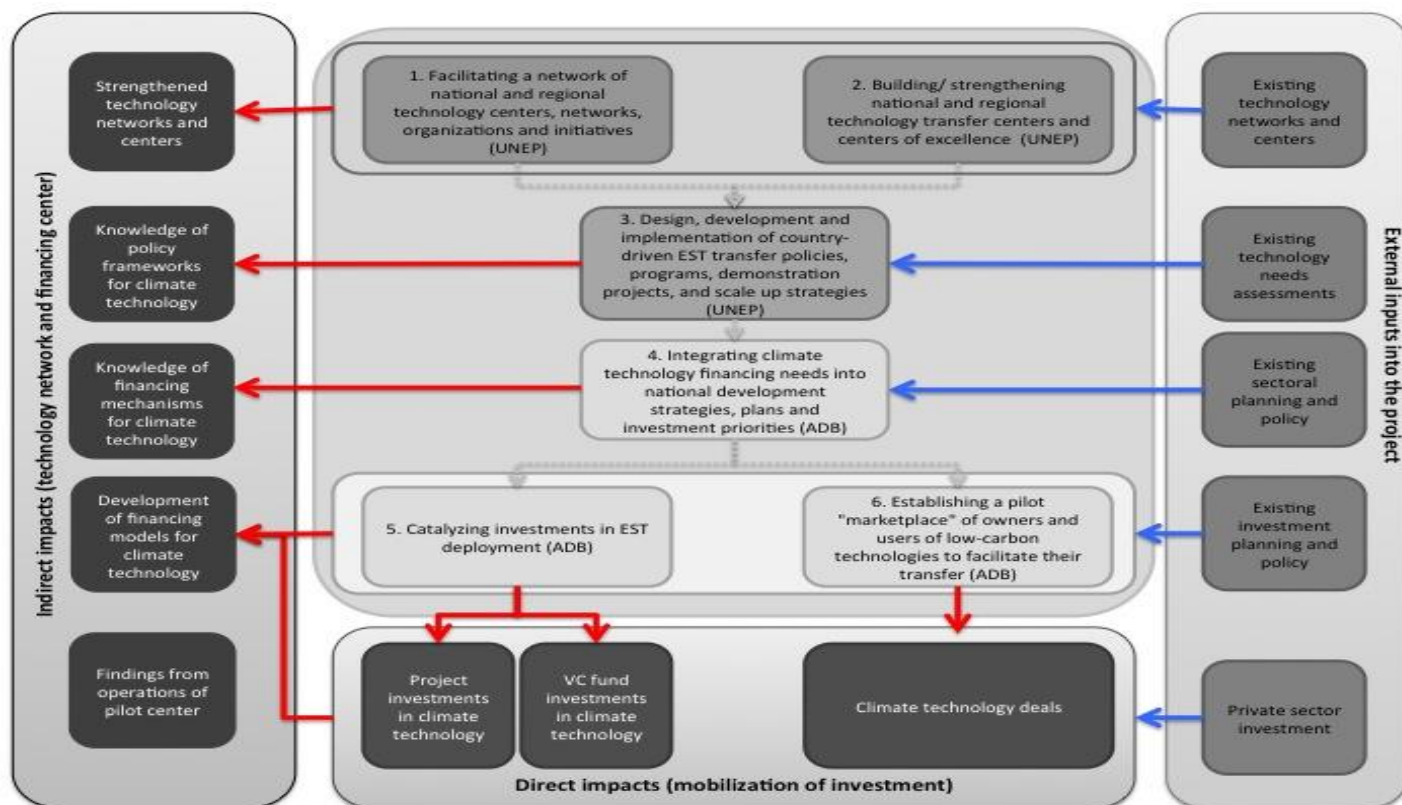
<p>Overall Project Objective: To accelerate the adoption and deployment of climate technologies and foster investments in ESTs in Asia Pacific</p>		<p>Target (by end of project): Total investment in low-carbon and climate-resilient technologies in participating countries increases by more than 10% from 2012 to 2020 (2012 baseline to be determined)</p>	
<p>implementation of country-driven EST transfer policies, programs, demonstration projects, and scale-up strategies (UNEP-led)</p>	<p>and global investments in ESTs are explored</p> <p>Outcome 4: Enabling policy environment and mechanisms created for transfer of climate technologies</p>	<p>demonstration projects, and scale-up strategies submitted for funding</p> <p>New enabling policies to foster climate technology transfer are established in 6-8 countries</p>	<p>projects, and scale-up strategies are supported</p> <p>4.1 The design and establishment of country-tailored pro-climate policies supporting climate technology transfer are supported</p> <p>4.2 The design and establishment of national and regional standards and regulations for identified priority climate technologies are supported</p> <p>4.3 The design and establishment of cost-effective mechanisms adapted to individual country conditions for leveraging increased public and private investment in climate technologies are supported</p> <p>4.4 The design and establishment of NAMA/NAPA-linked subsidies and other financial incentives aimed at reducing EST project development/transaction costs are supported</p>
<p>4) Integrating climate technology financing needs into national development strategies, plans, and investment priorities (ADB-led)</p>	<p>Outcome 5: Higher awareness and better participation of regional stakeholders in global discussions on climate change financing, including development of GCF and operations of the TM</p> <p>Outcome 6: Climate change technology transfer/deployment considerations integrated into Country Partnership Strategies (CPSs)</p>	<p>Climate technology investments integrated into 3-4 investment plans, including national and/or subnational investment plans and ADB CPSs and/or COBPs</p> <p>USD 120 million of ADB financing, leveraging at least USD 240 million in non-ADB financing for climate technology investment projects</p> <p>ADB assists 4-6 projects using adaptation technologies and 6-8 projects using mitigation</p>	<p>Integrate climate technology financing needs into national Development Strategies, plans, investment priorities</p>

<p>Overall Project Objective: To accelerate the adoption and deployment of climate technologies and foster investments in ESTs in Asia Pacific</p>	<p>Target (by end of project): Total investment in low-carbon and climate-resilient technologies in participating countries increases by more than 10% from 2012 to 2020 (2012 baseline to be determined)</p>		
	<p>and/or Country Operations Business Plans (COBPs), national and/or subnational investment plans</p>	<p>technologies that will reduce GHG emissions by 380,000 tons of CO₂e annually over 10 years, starting in 2015</p>	
<p>5) Catalyzing investments in EST deployment (ADB-led)</p>	<p>Outcome 7: Increased investments in projects using climate technologies</p> <p>Outcome 8: increased investments by selected Venture Capital funds in technologies that address climate technology products</p>	<p>USD 180 million investment for climate technologies mobilized from ADB, leading to USD 480 million leveraged from cofinanciers</p> <p>USD 60 million of ADB financing, leveraging at least USD 240 million of private capital invested by venture capital funds in early stage climate technology companies</p> <p>GHG emission reduction of 500,000 tons of CO₂e annually over 10 years, starting 2015 in developing member countries (DMCs) where climate technology investments are made by venture capital funds</p>	<p>Promote direct investment in priority climate technology projects</p>
<p>6) Establishing a 'marketplace' of owners/users of low-carbon technologies to facilitate their transfer (ADB-led)</p>	<p>Outcome 9: Successful demonstration of assisted broker model for transfer of low-carbon technologies that can be scaled up and replicated in other regions</p>	<p>Model is tested with at least 2 deals signed</p> <p>Business model for assisted broker has been finalized</p>	<p>Transfer of low-carbon technologies with significant replicability</p> <p>Develop platform and documentation for a full-fledged EST marketplace</p>

57. While the project was expected to address capacity readiness and enabling conditions for market transformation (which could be expected to drive the technology pipeline; see Figure 2) as a precursor for investment in technology transfer/deployment, the CEO Endorsement

Request indicated that the two partners' components would nonetheless be implemented in parallel.

Figure 2: Relationship of Project's Components to Building Technology Pipeline



Source: The Project's Request for CEO Endorsement, submitted to the GEF in December 2011

58. Project documentation asserted that interventions would rely on external inputs, rather than outputs from other project components as depicted in Figure 2. As an example, it was envisaged that existing Technology Needs Assessment (TNAs) would feed into the development of sector policies (Component 3, UNEP-led) and development of country investment plans (Component 4, ADB-led). Furthermore, several project outputs and outcomes were to focus on intermediate stages of the technology transfer process rather than direct realization of additional climate technology investments. Major additional investment in climate technologies was to be realized as a direct impact of financial investment and facilitation (Components 5 and 6, ADB-led).
59. In May 2012, GEF approved funding for the AP-CTNFC pilot, which was expected to run for 2.5 years until February 2015. Shortly after the GEF funding for the AP-CTNFC was approved, the UNFCCC selected UNEP and UNIDO to host the CTCN.

D. Stakeholder Engagement

60. At the planning stage, stakeholders at international, regional, and national levels who could be

affected by, participate in, and/or benefit from the project (e.g. by taking part in capacity building workshops, network meetings, conducting studies/assessments, developing training materials) were identified in the Project Document.

61. In operationalising the UNEP-led components, there was a strategic decision to leverage networks that were already operating in the target region and had previously benefitted from the support of UNEP; namely: the Southeast Asia Network of Climate Change Focal Points (SEAN-CC)¹¹ and the Central Asia Climate Change Network. These networks were seen as being in a position to facilitate knowledge-sharing amongst private and public stakeholders and to strengthen AP-CTNFC actions in Asia Pacific.
62. Further stakeholders engaged under UNEP-led components included technology and policy strategy centres throughout the region, which were identified as forming a backbone around which cooperation on research and development and technical knowledge-sharing could be built. Private sector actors (associations, companies) who could play a key role in financing technology deployment, fostering climate technology transfer, and building a marketplace for low carbon, climate resilient technologies were also identified.
63. While the specifics regarding the extent of involvement (if any) of specific stakeholders could not be verified through the evaluation, the posited level of their influence over the project's implementation/results and level of interest in the project was triangulated through the evaluation, supporting the suggested strategies for their management (see Table 4).

Table 4: Analysis of Stakeholder Influence and Interest

<i>Role</i>	<i>Involved Stakeholder</i>	<i>Level of influence over project implementation/ results and level of interest in project</i>	<i>Role & responsibility in project implementation</i>
Donor	GEF	Low influence / high interest → keep satisfied	Provide core funding
Implementing agencies	ADB (lead), UNEP	High influence / high interest → engage	Design, implement, monitor, and supervise the project

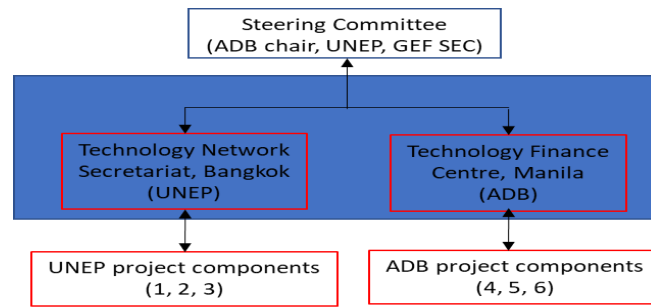
¹¹ According to the UNEP Project Document (p56), SEAN-CC was initiated in 2009 through funding from the Finnish government to provide support to 10 ASEAN countries to meet their UNFCCC commitments. While the network covered all aspects of climate change, its main emphasis was to inform and support Climate Change Focal Points and other relevant stakeholders in reforming policies and implementing programmes for energy efficiency, renewable energy, and to reduce greenhouse gas (GHG) emissions. SEAN-CC support was clustered into three broad categories: (i) facilitating knowledge generation and sharing; (ii) providing targeted capacity building; and (iii) providing sector specific technical assistance and policy advice for concrete national and regional actions. Overall priority areas for support were jointly defined by UNEP together with the national Climate Change Focal Points and related activities were designed in response to direct country requests.

<i>Role</i>	<i>Involved Stakeholder</i>	<i>Level of influence over project implementation/ results and level of interest in project</i>	<i>Role & responsibility in project implementation</i>
Implementing partners	World Resources Institute, Institute for Global Environmental Strategy, venture capital funds, technology marketplace operators, technology buyers and sellers, project developers (public and private), DMC line agencies and ministries, technology centers/institutes, regional agencies, Association of Southeast Asian Nations, Asia Pacific Energy Research Centre	High influence / high interest → engage	Undertake an integral part of project activities; benefit from project activities
Active cooperation partners	Other relevant regional initiatives in related fields: UNEP/UNDP GEF Technology Needs Assessment (TNA) project; UNEP's GEF Global Market Transformation for Efficient Lighting; UNEP's GEF Global Fuel Economy Initiative; UNEP/ADB/African Development Bank's GEF Seed Capital Assistance Facility; Southeast Asia Network of Climate Change Focal Points (SEAN-CC); Central Asia Climate Change Network; Asia-Pacific Climate Change Adaptation Network; Facilitating Implementation and Readiness for Mitigation project	Low influence / high interest → show consideration	Actively cooperate, coordinate, and/or avoid duplicating research or other work
Direct beneficiaries	Government and other institutional representatives in the 17 Asia-Pacific countries covered by this project	High influence / high interest → engage	Actively participate in training and other technical assistance to build capacities and ownership
Dissemination partners	USAID, World Bank, International Finance Corporation (IFC), bilateral agencies; UNEP's GEF Pacific Alliance for Sustainability Low Carbon-Energy Islands Accelerating the Use of Energy Efficient and Renewable Energy; National Cleaner Production Centers	Low influence / low interest → keep informed	Disseminate knowledge provided by the project

E. Implementation Arrangements

64. The GEF selected ADB as the lead agency responsible for reporting to and managing communications with the GEF; UNEP was to provide input regarding the components under its responsibility that would allow ADB to fulfil the project's reporting requirements to the GEF.
65. While the project was to be jointly implemented by ADB and UNEP working in partnership, the CEO Endorsement Request explicitly stated that UNEP and ADB components would be implemented independently, with the respective teams closely liaising on overall project management and reporting. Each agency was responsible for implementing designated activities for which they had the lead responsibility, although it was planned to maintain active communication and consultation between the two organisations, who were directed to *“work together closely in project implementation through two centralized hubs”*.¹²
66. To operationalise this concept, ADB established a Climate Technology Finance Centre in its Manila headquarters and UNEP established a Climate Technology Network Secretariat in its Regional Office Asia and Pacific (ROAP) in Bangkok.
67. Reflecting what the CEO Endorsement Request described as the “project's overarching focus”, the Manila-based centre was charged with facilitating and mobilizing investment in ESTs from public and private sources by assisting with the integration of technology transfer and diffusion considerations into developing countries' policies and investment programmes and strengthening design and enforcement capacities of public institutions vis-à-vis technology transfer.
68. In parallel, the UNEP-led Climate Technology Network Secretariat facilitated knowledge sharing between established technology institutions and partner countries and worked with their Focal Points to identify priority areas and run programmes to build capacities for NDE implementation and enhancing policy/legal frameworks to facilitate technology transfer/use and financing incentives and other mechanisms to promote the use of ESTs.
69. These two centralized hub structures in Manila and Bangkok, reflecting the ADB- and UNEP-led components, were to be guided by a tripartite Steering Committee, composed of members from the GEF Secretariat (GEFSEC), ADB, and UNEP (see Figure 3).

¹² CEO Request for Endorsement, p16

Figure 3: Project Steering and Management Structure

70. In terms of staffing: on the ADB side, according to the CEO Endorsement Request, a core team of management and technical staff in Manila handled overall project coordination and implementation of activities for which it had lead responsibility (Components 4, 5, 6). They were complemented by external consultants with climate change-related expertise in energy, transport, water, and agriculture sectors. Specific arrangements were mentioned for how each of the ADB components would be carried out. These were described as five interlinked sub-projects under a cluster technical assistance project that formed the operations of the Manila pilot centre.
71. On the UNEP side: a team of 6 staff members (including 1 coordinator, 2 programme officers, 1 technical expert for mitigation, 1 technical expert for adaptation, 1 administrative assistant) was identified in the planning documentation for carrying out activities under its Climate Technology Network Secretariat for which UNEP had lead responsibility (Components 1, 2, 3). In rolling out the project, finally only a Mitigation Advisor was allocated to the role of Project Manager, who was assisted by a full-time external consultant financed by project funds with in-kind contributions of administrative support services provided by other parts of the UNEP organisation.
72. The AP-CTCNF was internally executed. In this context, supervision and oversight (within UNEP, referred to as 'implementation') were handled by a Task Manager and Portfolio Manager, based in Bangkok and Nairobi, respectively. They liaised with the Project Manager based in UNEP's regional office (ROAP) in Bangkok (whose work was described as 'execution').
73. The AP-CTNFC got off to a quick start following the first fund disbursement to ADB on 22 August 2012. Following the first disbursement of funds to UNEP almost six months later (12 March 2013), a kick-off meeting was organised in Bangkok in May 2013 that brought key personnel from UNEP and ADB together with 30 Climate Change Focal Points (drawing on the SEAN-CC and Central Asia Regional Network established by UNEP under preceding projects) and officials from Ministries of the Environment, Science and Technology and others in beneficiary countries (Bhutan, Bangladesh, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, Vietnam, Kazakhstan, Tajikistan, Uzbekistan, Mongolia, Nepal, Sri Lanka, Maldives)¹³. During this session, national beneficiaries were informed that UNEP's Climate Technology Network

¹³ Summary Report, Project Kick-Off Meeting (22-23 May 2013), Hotel Amari Watergate, Bangkok, Thailand

Secretariat would work with National Climate Change Technology Focal Points [who were expected to subsequently take the role of NDEs of the CTCN] to support participating countries in scaling up the transfer of technologies for enabling implementation of pre-2020 actions and intended Nationally-Determined Contributions (NDCs) of reductions of GHG emissions under the UNFCCC. The AP-CTNFC's emphasis was on developing the appropriate policy environments, networks, and mechanisms that would promote EST transfer and diffusion¹⁴.

F. Project Financing

74. The project was granted USD 10,909,091 in cash contributions from the GEF Trust Fund, with anticipated co-financing contributions of USD 74,732,000. GEF's financial contribution (covering total direct costs and 7% programme support cost). ADB was allocated 75% of the project budget (USD 7,659,091) with the remaining 25% allocated to UNEP (USD 3,250,000).
75. The project budget summary and sources of funding and co-financing are provided in Annex 4.

4. Theory of Change at Evaluation

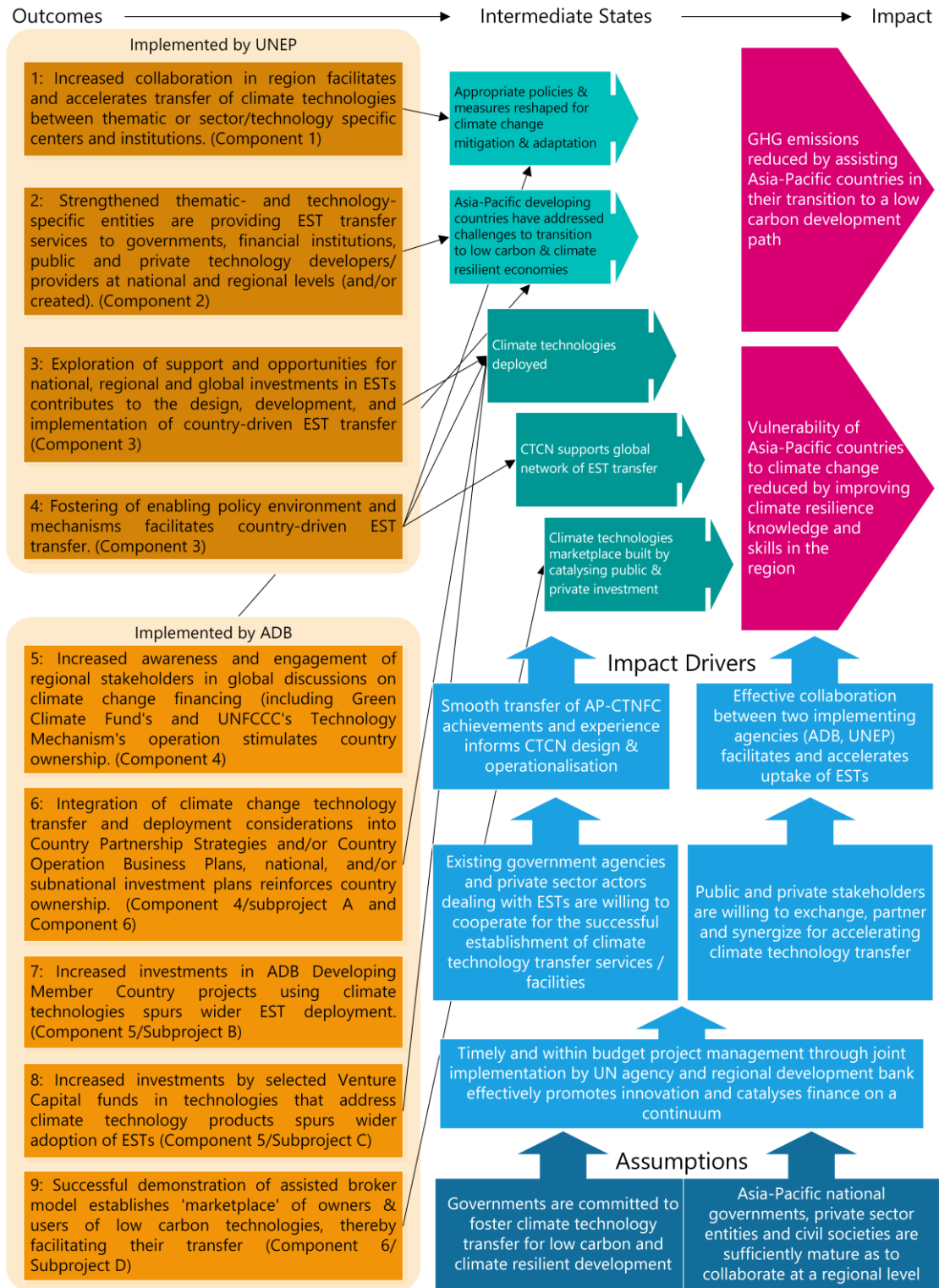
76. The TE was initiated six months after project closure in March 2019. However, its full impacts can be expected to be more observable and quantifiable in future, as changes in human and organizational behaviour need time to anchor into routine and habit, and the economic, environmental, and social impacts stimulated by the project become more evident. Extensive primary field data collection to verify impacts demands significant resources, which is a practical challenge for development projects. Therefore, to enhance assessment, a review of the project's progress along pathways from outcome to impact was undertaken to reconstruct the Theory of Change (RTOC) that implicitly underpins this intervention (see Figure 4).
77. As a first step, the outputs and outcomes in the original project document were checked, and where needed, reformulated to bring these to the adequate level of ambition, to more clearly convey the short- to medium-term behavioural or systemic effects to which the project intended to contribute, and to be in line with UNEP definitions. These reformulations, which are documented in the Inception Report and matched with the original text (for comparison and traceability), also link the purpose of the intended changes (in behaviour, practice, etc.) to ways in which they could help achieve the project's envisaged impact.
78. At project inception, constraints on the uptake and deployment of low-carbon technologies and climate-resilient growth were related to insufficient levels of public and private investment. This was attributed to a set of interlinked barriers¹⁵, which the project presumably set out to address:
 - Lack of adequate regulation and regulatory uncertainty;
 - Lack of coherent policy frameworks to support climate technology development, transfer and diffusion;

¹⁴ Responses to Project Reviews, included in Annex B of the Request for CEO Endorsement, 1 December 2012

¹⁵ Request for CEO Endorsement, p14

- Institutional arrangements that implicitly support, and therefore ‘lock in’ incumbent carbon intensive and climate-sensitive technologies;
 - Lack of access to capital for firms producing EST technologies, especially smaller firms;
 - Lack of sufficient commercial return for investors in climate technologies, particularly for adaptation solutions;
 - Lack of market demand for products with high upfront costs;
 - Perceived high risks of introducing new technologies, including concerns regarding protection of intellectual property rights;
 - Lack of information on appropriate technologies, policies and approaches to financing.
79. While largely beyond the control of the project, its implementing partners, and relevant stakeholders, some **key assumptions** were identified through documentation review. Through the field research and online survey, it was triangulated that if these were indeed present, they could positively influence the realisation of the intended impacts:
- Governments in developing countries of the Asia-Pacific region are committed to foster climate technology transfer for low carbon and climate-resilient development;
 - Asia-Pacific national governments, private sector entities, and civil societies are sufficiently mature (i.e. have the capacities, structures, and enabling mechanisms in place) as to collaborate at a regional level.
80. The **impact drivers** (seen to be under the influence of the project, its implementing partners, and relevant stakeholders, to some extent) seen as being able to transmit catalytic power through the impact pathways to foster EST adoption and thereby contribute to the project reaching its intended transformative effects were identified as follows:
- Smooth transfer of AP-CTNFC achievements and experience informs CTCN design and operationalisation;
 - Effective collaboration between the two implementing agencies (ADB, UNEP) facilitates and accelerates uptake of ESTs;
 - Existing government agencies and private sector actors are willing to engage and collaborate to design, develop, and implement climate technology transfer initiatives;
 - Public and private stakeholders are willing to exchange, partner, and synergize for accelerating climate technology transfer;
 - Timely and within budget project management through joint implementation by UN agency and regional development bank effectively promotes innovation and catalyses finance on a continuum.
81. The RTOC, and within that, the intermediate states, drivers, and assumptions (which were developed in theory primarily based on desk research, an analysis of the causal logic, and speculation) were checked through discussion with the project team and corroborated with field evidence. The RTOC was used to support the assignment of ratings and facilitate conclusions.

Figure 4: Reconstructed Theory of Change at Evaluation



5. Evaluation Findings

A. Strategic Relevance

Finding 1: The project has a high degree of strategic relevance for the intended beneficiaries, implementing partners, and the donor and was designed in complement to existing initiatives.

i. Alignment to UNEP's MTS and PoW

Finding 2: Fitting fully within UNEP's Climate Change thematic priority and incorporating notions of achieving sustainable development through empowering stakeholders and strengthening linkages between environmental sustainability and the economy, the project was highly aligned with UNEP's MTS and PoW and the Bali Strategic Plan.

82. Given the era in which the AP-CTNFC was designed and then subsequently launched, UNEP's Medium-Term Strategy (MTS, 2010-2013) and the corresponding Programme of Work (PoW, 2012-2013) were judged to be the most relevant reference materials to consult regarding the project's strategic alignment. This choice of benchmark was triangulated and confirmed through interviews with UNEP staff.
83. In fulfilling its role as a lead authority in articulating, facilitating and supporting a response to the world's key environmental challenges and opportunities, through the above-mentioned MTS and PoW and its mandate under the Bali Strategic Plan, UNEP had embarked on exploring new avenues to achieve sustainable development through empowering stakeholders, strengthening linkages between environmental sustainability and the economy, increased focus on the role of the private sector, national ownership, results-based management and seizing new opportunities for engagement within the international cooperation setting. The AP-CTNFC is fully illustrative of an aligned response to this call to action, as evidenced by several dimensions:
- i) one of the UNEP-led components consisted of strengthening enabling environments for innovative and creative approaches for identifying and encouraging appropriate technology transfer (which the ADB-led components could then take forward, in principle, to facilitate investment for their transfer and deployment in target countries);
 - ii) the joint implementation of UNEP and ADB fundamentally designed into this project was an untried structure, which represents an innovative approach to international cooperation;
 - iii) in this respect, the combination of a UN agency and a regional development bank (implying eventual outreach to the private sector) as implementing partners represented a marriage between environmental sustainability and an economic orientation, showcasing the MTS conviction that "linkages between environmental sustainability and the economy will emerge as a key nexus for public policy making and the future of markets";
 - iv) the AP-CTNFC had a strong emphasis on empowering national stakeholders and stimulating, responding to, and building country ownership of technology needs assessment and identification of appropriate ESTs through its technical assistance;
 - v) the project's provision of technical assistance was underpinned by a results-based focus [e.g. exploration of a national government's choice of technology to reach a decision regarding adoption; identification of appropriate EST; support for developing readiness proposals to obtain financing under the Green Climate Fund (GCF), etc.].

84. Based on desk research and triangulation with UNEP informants, the AP-CTNFC fits fully within the Climate Change thematic priority, one of six cross-cutting dimensions identified within UNEP’s MTS seen as reflecting the agency’s comparative advantage and mandate. Within this, the project had an emphasis on renewable energy and energy efficiency, which was aligned with the MTS’ focus on climate change mitigation and accounts for the bulk of effort and funding under the AP-CTNFC context being directed towards mitigation, with a lesser portion allocated towards fostering transfer of adaptation technologies.
85. This project is a pertinent example of UNEP’s outreach to national governments, private sector, and other stakeholders in delivering its MTS and PoW. Through its overall objective “to enhance the diffusion of technologies that promote low-carbon and climate-resilient development”, underpinned by outputs and outcomes, the project made a tangible contribution to Expected Accomplishment #1b3: “Low carbon and clean energy sources and technology alternatives are increasingly adopted, inefficient technologies are phased out and economic growth, pollution and greenhouse gas emissions are decoupled by countries based on technical and economic assessments, cooperation, policy advice, legislative support and catalytic financing mechanisms”.

Alignment with UNEP’s MTS and PoW is rated as ‘Highly Satisfactory’

ii. Alignment to UNEP/ADB/Donor Priorities

Finding 3: The project was highly aligned with UNEP’s priority to strengthen integrated climate change responses into national development processes; it fully supported ADB’s Strategy 2020 which had put environment and climate change dimensions at its core; and it was fully consistent with GEF’s Climate Change focal area objectives.

86. The project was fully consistent with UNEP’s long-time priority on strengthening countries’ ability to integrate climate change responses into national development processes, reflecting the agency’s strengthened mandate in this respect under the 2007 Bali Action Plan, the 2008 Copenhagen Accord, and the 2010 Cancun Agreement, which defined the key terms of the Technology Mechanism (TM) and included the establishment of a Climate Technology Centre and Network (CTCN) which was seen to entail setting up regional and national technology centres and networks to facilitate information-sharing, coordination, and investment. In this light, the AP-CTNFC fully responded to UNEP’s priority in this domain in that it was conceived as a pilot to inform the operationalisation of the CTCN, which UNEP had been appointed to host shortly after funding for the pilot was approved by the GEF. Furthermore, the project was aligned with UNEP’s commitments under the Bali Strategic Plan for Technology Support and Capacity Building in light of its objectives to build institutional capacities to facilitate technology transfer. South-South Cooperation was reflected in strengthening the network of entities across the Asia Pacific region that could collaborate in transferring climate technologies. This project showed relatively more alignment with UNEP’s Policy and Strategy for Gender Equality and the Environment in its design in terms of intentions (¶194); less of these were realised in its implementation (¶196).
87. According to ADB’s Completion Report, the project was highly relevant to UNFCCC’s strategic actions on climate change adaptation and mitigation and to ADB’s Strategy 2020, which identified environmentally sustainable growth as a top development concern and made

environment, including climate change, a core area of operations. This project was consistent with ADB's prioritization of finance, technology, and capacity-building as tools to address climate change. Moreover, the cluster modality adopted by the project was seen as appropriate for providing flexible ways in line with evolving climate initiatives and climate technology development to respond to emerging climate challenges faced by developing member countries (DMCs). Based on a review of project documentation¹⁶, its overall objective supported ADB's efforts to help developing countries address both climate change and energy security.

88. The project was fully consistent with GEF's priorities at the time vis-à-vis its Climate Change focal area objectives. The CEO Endorsement Request shows full alignment of the AP-CTNFC's outputs and outcomes across the project's six components. In this regard, given the overarching focus on the diffusion and deployment of mitigation and adaptation technologies and the incorporation of innovative financing mechanisms (e.g. the assisted brokers', the EST marketplace), the project was expected to expand the coverage of technologies and steer the flow of investment towards broader sets of beneficiaries, thereby delivering incremental Global Environmental Benefits (GEBs¹⁷) on the side of mitigation and substantial GEBs with respect to adaptation.
89. The AP-CTNFC provided a timely, concrete response to UNFCCC member states' requests, to initiate funding under the Poznan Strategic Plan (PSP). According to an informant interviewed for this evaluation, at the time, "there were no dedicated funds coming from the GEF for the technology side". The project embodied real funding of USD 3.25 million allocated to UNEP-led components with USD 7,488,508 allocated to ADB-led components as the first of four pilots that the GEF funded in implementing the PSP. Informants mentioned that these other regional pilots expected to learn lessons from the Asia Pacific pilot of UNEP-ADB. Arguably, the AP-CTNFC's quick start and rapid success would have had an even higher priority in the eyes of the GEF in the interest of experience-sharing. At the time of the project's conceptualisation, various actors (including the GEF and UNEP) were interested in hosting the CTCN. In this light, informants asserted that the Asia Pacific pilot (together with the three other regional pilots) formed a key part of the GEF's strategy to position itself for a leadership role vis-à-vis the CTCN.

Alignment with UNEP/ADB/Donor priorities is rated as 'Highly Satisfactory'

iii. Relevance to Regional, Sub-Regional, and National Environmental Priorities

Finding 4: The project's use of international cooperation to facilitate technology transfer by reducing the adoption cost and supporting capacity development and strengthening for its use was highly relevant for the Asia Pacific region and accelerating its access to the CTCN infrastructure.

90. The Asia Pacific region was highly relevant for such a pilot given that it is home to 60% of the world's population, island nations, and other territories which are very vulnerable to climate change and natural disaster, and major growing economies (e.g. China, India, Southeast Asia) with corresponding growth of GHG emissions. Despite their rapid expansion, many of the region's countries could not afford advanced technologies. Prohibitive pricing limited prospects for technology transfer, putting constraints on what the target countries could do themselves to adopt and implement a low-carbon, climate-resilient development path. In this context, the

¹⁶ "Establishing a Pilot Center to Facilitate Climate Technology Investments in Asia and the Pacific", Project # 45134-001, Regional-Cluster-Capacity Development Technical Assistance, ADB, July 2011

¹⁷ GEB is a key tool and indicator of the GEF in quantifying the value of an intervention

use of international cooperation was highly pertinent to facilitate this technology transfer by reducing the adoption cost and supporting capacity development and strengthening for its use.

91. Acting as a pilot to stimulate the exploration of ESTs and familiarize NDEs with relevant processes to access and deploy these, the AP-CTNFC was expected to facilitate and accelerate the region's access to services provided under the CTCN.
92. Evidence of the project's relevance to national stakeholders emerged during the field evaluation visits through assertions that *"the project fits very well with national priorities of climate change which are very pronounced in the Himalayas"*. Others pointed out that interest in climate change issue *"was quite new compared with other issues"* and indicated that climate change was not a top priority as it was in competition with needs for free education, healthcare facilities, etc. Consequently, there was a suggestion that *"unless an agency like UNEP comes and educates people like us working in the field (i.e. NDEs), we will not be able to convince the government to put more priority on climate change"*. Yet other stakeholders pointed out that the growing awareness of Asia Pacific populations of climate change effects led to a description of the activities and outcomes of the AP-CTNFC and similar projects as *"very limited compared to the demand in the country"*, which again underlines its relevance. Through the online survey, the majority of informants characterized the project as being in the direction of *"highly relevant"* and coming to their country at *"exactly the right time"*.

Relevance to Regional, Sub-Regional, and National Environmental Priorities is rated as 'Highly Satisfactory'

iv. Complementarity with Existing Interventions

Finding 5: The project built strongly on existing networks and complemented existing climate technology transfer initiatives, building on the GEF-funded Technology Needs Assessment work implemented by UNEP and UNDP, which was a starting point for the exploration of ESTs. In its precursor role, the AP-CTNFC also had very strong linkages with the CTCN, sensitizing relevant institutions to the NDE role.

93. According to the CEO Endorsement Request, the AP-CTNFC project was explicitly designed to complement and build synergies with ongoing climate technology transfer projects and programmes. Numerous examples were cited, both GEF- and non-GEF interventions, at global, regional, and national levels. A particularly complementary intervention mentioned was the GEF-funded Technology Needs Assessment implemented by UNEP and UNDP. Carried out in 36 countries, this involved analysis of the market and trade barriers that hindered the transfer of a prioritized selection of technologies, together with assessment of policy, institutional, and finance options to overcome these barriers. Directly related to this, the AP-CTNFC was described as being intended to *"strengthen the dialogue on climate technology transfer between the private sector and governments based on TNA results to communicate about the establishment of enabling policies and appropriate market mechanisms"*. The project's actual operation in this direction was triangulated and confirmed with field evidence: several informants mentioned that the AP-CTNFC was the starting point for EST identification and assessment in order to *"take it to the next step"*.
94. The project was highly complementary to the work and aims of the Central Asia Regional Network as well as the South East Asia Network of Climate Change Focal Points (SEAN-CC). UNEP had supported the latter since 2009, with funding from the Finnish government. Through this platform, a network of government and research institutions had been identified as NDEs

and engaged in high-level negotiations being conducted at UNFCCC level. The AP-CTNFC was described as bringing “*the substantive and technical topics related to technology to the discussion and sensitizing the NDEs to their roles*”. Another informant asserted that “*one block of the project was to set up the network, the other block was about enabling the countries to access the financing*” (to underpin EST transfer and deployment).

95. There were also very strong linkages between the AP-CTNFC and the CTCN. The NDE concept itself was linked to the envisaged future operation of the CTCN. The AP-CTNFC was depicted as the “pre-cursor” to this in that the pilot project sensitized relevant institutions (and individuals) to the role and responsibility of the NDE at national level. Furthermore, the project provided some technical assistance to participating countries “*to help design the type of service that the CTCN is now providing*”. Its complementarity with other interventions, in terms of building on existing institutions and networks and acting as a bridge and conduit for lessons learned to inform the operationalisation of the CTCN, was highly pertinent at this point in time.

Complementarity with Existing Interventions is rated as ‘Highly Satisfactory’

96. Having looked at the project through the four above-mentioned lenses, which all pointed to and provided evidence of the pertinence, timeliness, and catalytic power of this intervention, the AP-CTNFC has been judged to have a high degree of strategic relevance for the intended beneficiaries, implementing partners, and the donor.

Strategic Relevance is rated as ‘Highly Satisfactory’

B. Quality of Project Design

Finding 6: Project design strengths were found in the comprehensive problem and situation analysis, articulation of strategic relevance, and elaboration of the results framework. However, insufficient conceptualisation of an approach to learning and communication and omission of an explicit mechanism to ensure and resource collaboration of the implementing partners weakened the quality of project design.

97. The quality of project design was assessed during the evaluation’s inception phase using a UNEP template with identified criteria and scoring system, based on the CEO Endorsement Request (1 December 2012) and the UNEP Project Document (2012). This project’s overall project design quality score of 4.04 reflects a rating of moderately satisfactory. The full assessment is contained within the Inception Report (January 2020).
98. In summary, the project design’s strengths are seen in its: i) clear and comprehensive problem analysis and situation analysis; ii) articulation of the alignment and relevance of the project to UNEP’s MTS and PoW, Bali Strategic Plan, South-South Cooperation; iii) complementary with other interventions, particularly the linkage to the CTCN; iv) inclusion of a logical framework that reflects the project’s intervention logic. In the context of its overall objective to enhance diffusion of technologies promoting low-carbon and climate-resilient development in Asia Pacific, the project had a well-elaborated results framework which outlined 10 outcomes, each underpinned by outputs (and further constituent activities) with baseline data mentioned where available, together with the means of verification for indicators and targets. Their formulation in a SMART manner (**S**pecific, **M**easurable, **A**ssignable, **R**ealistic, **T**ime-Specific) provides the advantage of being understandable and heightening prospects of being able to gauge when they have been achieved.

99. The project design's weaknesses are seen in its approach to learning and communication. The term 'learning' was not even mentioned in the CEO Endorsement. While a key aspect of UNEP's components was to strengthen knowledge sharing (North-South, South-South), there is no mention of an approach to manage the substantive Climate Technology knowledge and more programmatic knowledge to be shared with the extensive network of stakeholders. Furthermore, there was no mention of how ADB/UNEP/GEF would manage their knowledge and communications.
100. Another key project design weakness is the failure to include an explicit mechanism to ensure the collaboration of the joint implementing partners. Neither at the outset nor during implementation, did the GEF or its two implementing agencies flag the need for a formal mechanism to ensure coordination, collaboration, and the genuinely joint collaboration portrayed in the CEO Endorsement Request. Nor was there mention of any resource allocation to underpin and give credence to the collaboration. The project design did not reflect the significance of this pilot in testing an untried approach (i.e. a UN agency collaborating with a regional development bank), which UNEP's PRC itself identified as the project's main innovative aspect¹⁸. This risk remained a fundamental weakness in the project's design, given the extent to which each agency had its own designated responsibilities and had never worked together before in such an endeavour.
101. A further area of weakness relates to the governance and supervision arrangements. UNEP's Project Document emphasized the execution arrangements and identified which staff would constitute the Core Team and Secretariat but did not specify which arrangements and resources would be put in place to assure its appropriate supervision and coordination. The initial project design was subjected to UNEP review processes [Senior Programme Officer (SPO), Project Review Committee (PRC), Scientific and Technical Advisory Panel (STAP)] as well as input from (unspecified) actors in Switzerland and Germany. In this regard, UNEP's PRC observed that "there was no strong arrangement for operational coordination between ADB and UNEP and remarked that the project would risk that its governance would be subject to personal relations between the two organisations" (which turned out to be the case). There was no visibility in the available project documentation about the extent, if any, of similar type of input collected from the ADB side.
102. While an MTR was undertaken by ADB in March 2016 focussed on the ADB-led components, this exercise did not recommend any changes in project design. Due to administrative challenges stemming from the institutional migration of the UN system to UMOJA, there was no MTR of the UNEP-led components related. The six revision requests initiated by UNEP did not involve any changes in project design or scope. They reflected actual expenditure, with requests to re-phase unspent balances to future years, in the context of planned future budget commitments. Budget lines were also revised to better reflect the reality of project implementation due to constraints regarding resources and the partnership with ADB.

Quality of Project Design is rated as 'moderately satisfactory'

¹⁸ Checklist for the Full Proposal, Completion by SPO for submission to UNEP GEF PRC, 14 November 2011 (considered as the PRC input which collected feedback from 8 reviewers amongst UNEP staff)

C. Nature of External Context

Finding 7: At the design stage, the project was embedded in a context that was highly favourable to enabling traction and uptake of its support due to the relatively low likelihood of conflict, natural disaster, or political upheaval.

103. During the evaluation's inception phase, as part of the Project Design Quality assessment, the external context seen as highly favourable as no ongoing or high likelihood of conflict, natural disaster, or political upheaval was identified in the Project Document. The risk assessment carried out at the design stage identified political, economic, technical (in terms of availability of qualified staff/experts), and institutional risks. The risk of having inadequate support from governments and other stakeholders to commit to policy or institutional reforms or to provide the needed human and financial resources was seen to have a low likelihood. This risk was seen to be principally managed by the Network Secretariat (Bangkok) through its adoption of a participatory and consultative approach in project planning, design, and implementation to ensure strong ownership.
104. The 2007 Bali Action Plan, the 2008 Copenhagen Accord, and the 2010 Cancun Agreement, together with its provisions for the Poznan Strategic Plan for Technology (PSP) reflected the reaffirmation of the UNFCCC's parties that climate change is one of the greatest challenges of modern time. Stemming from this recognition, a vision has been evolving and strengthening over the years since the launch of the AP-CTNFC that mitigation, adaptation, finance, technology development and transfer, and capacity-building need to be integrated and delivered in a comprehensive manner in order to enhance and achieve the full, effective, and sustained implementation of the UNFCCC. This clarity of vision provides very favourable conditions for enabling traction and uptake of the support offered by the AP-CTNFC.
105. One of the justifications for the project related to the fact that the levels of both public and private investment in developing countries for low-carbon and climate-resilient growth were not sufficient to address the problems posed by climate change due to a number of interlinked barriers to investment, including. (i) inadequate regulation/regulatory uncertainty; (ii) lack of coherent policy frameworks to support climate technology development, transfer, and diffusion; (iii) institutional arrangements that 'locked in' incumbent carbon intensive and climate-sensitive technologies; (iv) inadequate access to capital for firms producing EST, especially smaller firms; (v) insufficient commercial return for investors in climate technologies, particularly for adaptation solutions; (vi) weak market demand for products with high upfront costs; (vii) perceived high risks of introducing new technologies, including concerns regarding protection of intellectual property rights; and (viii) lack of information about appropriate technologies, policies and approaches to financing.¹⁹ Combined, these dimensions represented potentially significant barriers for the project in addressing the investment gap that was needed in order to build institutional and human capacity to create an environment that promotes investment in EST transfer and deployment.

Nature of External Context is rated as 'highly favourable'

D. Effectiveness

i. Delivery of Outputs

Finding 8: The project's outputs are presumed to have been delivered successfully, based primarily on the self-reporting of progressive achievement over time by the two implementing agencies. Limited external evidence was available for triangulation (see Limits on this Evaluation).

106. The project was implemented through six components, each constituted by a set of outputs as shown in Table 3, with milestones and budget laid down in a delivery plan. Given the limited evidence available from external sources, the assessment of effectiveness has had to predominantly rely on the self-reporting of the implementing agencies about their achievement of outputs, which is presumed to have been done in good faith.
107. Having reviewed the bi-annual progress reports prepared by UNEP and the PIRs that convey the project's status based on input from UNEP and ADB, the project's outputs are presumed to have been delivered satisfactorily. According to the annual project reporting to the GEF during 2013-2018, a progressive achievement of outputs was documented in the PIRs, as shown in Figure 5. This reporting consists largely of narrative description of activities carried out (or intended to be carried out in future). Descriptions of activities carried out related primarily to the delivery of outputs and were provided in an incremental (rather than cumulative) manner with each yearly reporting exercise. Subjective self-ratings were used without making any reference to targets or indicators in the project's results framework (in the case of UNEP's bi-annual reports: % of implementation status as of the end of the respective reporting period; for the PIRs: ratings of satisfaction per component). Consequently, gauging the achievement of outputs was a relatively complex exercise as the narrative description had to be unpacked and achievements had to be deduced.
108. On the UNEP side, the criteria that were internally used to determine whether an output had been fulfilled according the established targets/indicators established were not evident. The assessment was also complicated by an early change in project management followed by a 1-year gap where the project was under interim management, with the remaining time under yet another project manager. A perception evolved that many activities had been carried out which appeared to lead to an inference that the outputs must have been achieved. UNEP's Final Report (June 2019) indicated full completion of outputs across all three components under its management.

Figure 5: Evolution of (Self-) Reported Satisfaction on Achievement of Outputs, 2013-2018

PIR Date	Component 1	Component 2	Component 3	Component 4 – Technical Assistance	Component 4 – Subproject A	Component 5 – Subproject B	Component 5 – Subproject C	Component 5 – Subproject D	Component 5 – Subproject E
2013	MS	MS	MS	S	MS	MS	MS	MS	S
2014	MS	MS	MS	HS	S	S	MS	S	S
2015	S	MS	S	HS	HS	S	S	S	HS
2016	MS	S	S	Completed 30 June 2015	HS	S	S	MS	HS
2017	S	S	S	-	Completed 30 Sept 2015	Completed 30 Sept 2015	S	MS	HS
2018	S	S	S	-	-	-	S	MS	Completed 31 Dec 2016

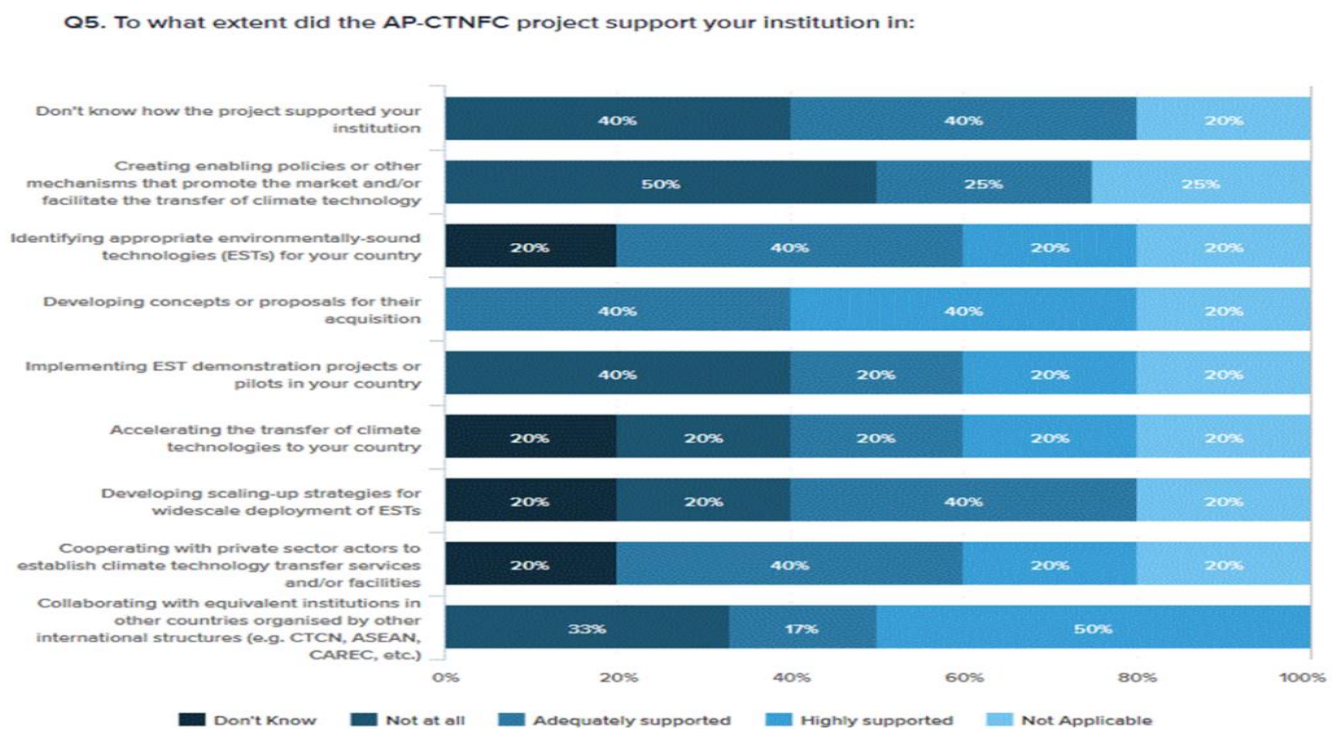


109. There was very limited external evidence to triangulate these self-perceptions regarding the project's performance on the part of the implementing agencies. The evaluation field visits

entailed inquiry with a small pool of stakeholders and end beneficiaries. Their experience of the project’s outputs and benefits differed at times and was less clear than what was asserted by the project’s management who were intent on fulfilling the programmed outputs. Significantly broader inquiry in the field would be needed in order to interpret whether this was an isolated situation or indicative of the wider population of the project’s intended beneficiaries.

- 110. Some very limited external evidence was available from the survey data (which reflects the combined input of only 9 respondents amongst the hundreds touched by the intervention across the 17 countries covered). Their responses suggested that the AP-CTNFC’s project support was useful in the various ways in which it was intended in the project design (see Figure 6). In the most optimistic light, this data could be considered as indicative; however, it is by no means statistically significant due to the exceedingly low response rate (.05%).

Figure 6: Usefulness of Project Support to Target Beneficiaries



- 111. On the ADB side, the first full completion of outputs (Components 4 and 5) was reported as being achieved already in 2015. The Completion Report produced by ADB in September 2019, in fulfilment of its internal project management requirements, indicated that its TA cluster project, which covered the ADB-managed components of the AP-CTNFC project, was deemed effective as the subprojects had substantially met their objectives and outputs were completed except for output 4 (successful demonstration of assisted broker model for transfer of LCT). The Completion Report indicated that overall, a satisfactory performance had been delivered by ADB as executing agency. At the time of the preparation of this TE Report, the external assessment of the ADB-managed components was still under preparation and the Evaluator therefore did not have a view independent of ADB’s own management to triangulate their own assessment.

- 112. Within the AP-CTNFC arrangement, sets of outputs related to their respective component were under the designated responsibility of the two implementing partners and seen to be largely under the control of the respective project teams to deliver. Based on the available information,

with its own limitations as outlined above, the Evaluator is prepared to give the implementing parties the benefit of the doubt concerning satisfactory delivery of the envisaged outputs.

The Project’s effectiveness in terms of Delivery of Outputs is rated as ‘Satisfactory’

ii. Achievement of Direct Outcomes

Finding 9: Given the positive signalling in the self-reports, limited access to underpinning project information and external triangulation, in the absence of contradicting material, the project’s achievement of direct outcomes has been presumed to be satisfactory.

- 113. The AP-CTNFC was expected to directly generate 10 outcomes distributed across its six components. In the PIRs used to annually report on the project’s performance to the GEF, there was a progressive achievement of direct outcomes, both ADB and UNEP reported progressive gains in satisfaction over time, as shown in Figure 7. Moreover, ADB indicated several areas of high satisfaction with respect to achieving the envisaged outcomes earlier in time than UNEP and full completion of three outcomes as early as 2015.
- 114. In reviewing this overly positive self-assessment, the Evaluator would like to draw attention to the fact that outcomes are typically achieved (sometimes even long) after the completion of an intervention. In this project’s reporting to the donor, it was curious to see such high levels of satisfaction so early in the process and assertions from the side of ADB that outcomes had been achieved in conjunction with the completion of the delivery of project outputs. In assessing the effectiveness of this intervention, the UNEP definition of outcome (see Glossary) has been used. It refers to the use (uptake, adoption, application) of an output by intended beneficiaries, observed as changes in institutions or behaviour, attitude or condition. In this light, it would be difficult to believe that the AP-CTNFC’s envisaged outcomes had been achieved in lockstep with the delivery of the project’s outputs.

Figure 7: Evolution of (Self-) Reported Satisfaction with Direct Outcomes, 2013-2018

PIR Date	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6	Outcome 7	Outcome 8	Outcome 9	Outcome 10
2013	-	-	-	-	HS	S	MS	-	MS	MS
2014	MS	MS	MS	MS	HS	HS	S	MS	S	S
2015	S	S	MS	MS	HS	HS	MS	MS	S	HS
2016	S	S	MS	MS	Completed 30 June 2015	HS	S	S	MS	HS
2017	S	S	S	MS	-	Completed 30 Sept 2015	Completed 30 Sept 2015	S	MS	HS
2018	S	S	S	MS	-	-	-	S	MS	Completed 31 Dec 2016



- 115. The Evaluator noted the perception of some stakeholders interviewed that it would have taken a much longer period of time to establish the CTCN without the AP-CTNFC experience, which provided its basis, as the network of Focal Points and NDEs had been consolidated under the AP-CTNFC framework and could therefore be contacted to take approvals forward.

116. Attempts were made through the evaluation field visits to triangulate this perception and to gauge the trajectory regarding the achievement of direct outcomes. Some evidence was gathered that supports the satisfactory achievement of outcomes related to the UNEP-led components:
- i) the Asia Pacific pilot succeeded in creating the in-country technology focal points (now known as NDEs) on which the whole CTCN is now working. A CTCN informant verified that *“these focal points were first created in the pilot countries”*;
 - ii) Another CTCN informant indicated that the AP-CTNFC’s early start *“enabled the target countries to initiate TA systems and made it easier for the CTCN to come in and contribute to the sizeable common task”*;
 - iii) The four NDEs interviewed face-to-face in Thailand, Vietnam, Bhutan, and Indonesia demonstrated clear understanding of their role within this setting; this was further supported by a survey respondent who indicated, *“we are gradually improving to be the national focal point in the development of the CTCN network”*.
117. ADB’s internally prepared Completion Report (September 2019) indicated that the outcome for the TA cluster (which covered the outcomes related to the ADB-managed components) was successfully achieved. The Completion Report indicated that TA cluster helped mobilize at least USD 1.632 billion investments from ADB, USD 2.823 billion from co-financiers, and that public and private sector investment opportunities triggered by the TA cluster were expected to materialize even after the completion of the TA cluster sub-projects. These assertions were supported by positive signalling in the PIRs submitted to the GEF during project implementation.
118. The project’s achievement of direct outcomes is presumed satisfactory. In the longer term, the project’s outcomes are dependent on level of institutional sustainability achieved (¶166) as well as the likelihood that future financial resources become available (¶165).

Achievement of the project’s Direct Outcomes is rated as ‘satisfactory’

iii. Likelihood of Impact

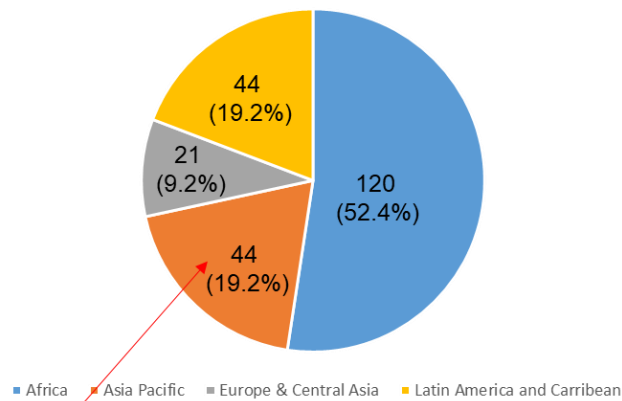
Finding 10: While some evidence could be found for impact drivers related to the project’s impact in informing the CTCN’s operation, the joint collaboration expected to catalyse finance for EST transfer and deployment was not realised, despite good intentions. The likelihood of impact was deemed to be moderately likely in view of the lack of envisaged joint collaboration, which would presumably have been a pertinent accelerator.

119. The likelihood that the project would achieve its overall impact was examined using the RTOC, particularly looking for evidence regarding the impact drivers (¶80), which are seen to be under the influence of the project, its implementing partners, and relevant stakeholders (to some extent). These were assessed in relation to their ability to transmit catalytic power through the impact pathways to foster EST adoption and thereby support the project in reaching its intended transformative effects.
120. In reviewing the impact driver, “smooth transfer of AP-CTNFC achievements and experience informs CTCN design and operationalisation”, a CTCN informant reported that in its first year of operation, Thailand, Pakistan, Bhutan, Indonesia, and Vietnam were amongst the first countries to engage in and deliver TA requests to the CTCN. Arguably, this transfer between the two entities was facilitated by UNEP’s hosting of the CTCN, internal information flows within the

agency, and the fact that the AP-CTNFC’s first Project Manager joined the CTCN in 2014.

121. This development was attributed to the awareness that the respective NDEs gained under the AP-CTNFC. A CTCN informant contended that the Centre had received about 70 TA requests from Asia Pacific countries to date. According to the information available on the CTCN website, there were currently 44 active CTCN projects in the Asia Pacific region; 26 (11.4% of these) were from AP-CTNFC countries (see Figure 8). This provides some evidence of the AP-CTNFC’s contribution to generating TA requests submitted to the CTCN and is indicative of the uptake of the project’s outputs by its intended beneficiaries, with a resulting change in institutional behaviour.

Figure 8: Active Technical Assistance Projects of the CTCN (February 2020)



Of these, 26 (11.4% from AP-CTNFC countries)

Source: CTCN website <https://www.ctc-n.org/technical-assistance/data>

122. The objective of any pilot project is to demonstrate “proof of concept” and then, importantly, for the pilot approach to be taken up and more broadly applied. In this light, the Asia Pacific pilot appears to have supported replication and informed the operationalisation of the CTCN as attested by the conviction conveyed by a key stakeholder, who asserted: *“The ground laid by the AP-CTNFC is the reason why the CTCN started its activities so early and could hit the ground running. All the base in Asia was done. Then it was easy to transfer the ideas to Africa and Latin America. We already had the experience from the Asia Pacific pilot about what kind of networking should be developed, what kind of capacity-building should be done. There was a lot of institutional memory from this pilot project that was copied, borrowed, and leveraged by the CTCN”*.
123. Further evidence regarding the likelihood of the project’s impact was derived from a CTCN interviewee, referring to the set of four regional pilot projects (of which the AP-CTNFC was the first to launch) who attested that “the pilot projects were instrumental in raising awareness and capacity of national technology focal points in responding to the CTCN’s call for TA services”. In this respect, apparently, the CTCN worked most closely with the UNEP/ADB technical assistance, which provides evidence for this project’s assessed likelihood of impact. However, the EDRB pilot in Eastern Europe worked on fuel switching TA projects and some cities applied for EDRB funding. Furthermore, the CTCN reported that it had discussed possible TAs that could enter the portfolio of the AfDB. Lastly, the IADB had agreed to use the CTCN’s Consortium Members as technical resources, thereby leveraging technical experience in the Latin America and Caribbean region.

124. The reporting in the annual PIRs supports the existence of impact drivers that enhance climate technology transfer (i.e. “existing government agencies and private sector actors are willing to engage and collaborate to design, develop, and implement climate technology transfer initiatives”; “public and private stakeholders are willing to exchange, partner, and synergize for accelerating climate technology transfer”).
125. In reviewing the impact drivers related to collaboration (“effective collaboration between the two implementing agencies (ADB, UNEP) facilitates and accelerates uptake of ESTs”; “timely and within budget project management through joint implementation by UN agency and regional development bank effectively promotes innovation and catalyses finance on a continuum”), the evidence gathered suggests that this remained primarily at the level of superficial communication. In contrast to the easy transfer and information flow within a single agency (¶120), when it came to collaborating substantively, an informant explained, “*what we were doing was very different. We tried to come together. The components didn’t connect together*”. While it was reported that “*both parties tried to make the best of it*” and “*had good intentions*”, the two implementing agencies had their own organisations and own agendas. Another informant recounted, “*if you look at ADB’s financing, they were already set and clear before the AP-CTNCF arrived; it had already been decided with the countries*” under their Country Partnership Strategies.
126. There was strong signalling from the donor of interest in “doing something unusual, not just TA only and not just investment only; the idea was to have a continuum of support (¶125). The aspiration that UNEP would do the market preparation and then engage ADB for the financing did not materialise as ADB had prepared its own pipeline of investments. An informant asserted, “there were no institutional mechanisms for UNEP to build pipeline, once it was agreed that we would each move forward with our own parts of the project”. The combination of these aspects built into the very design of the intervention unwittingly impeded the meaningful collaboration and sequenced approach desired by the donor.
127. While the AP-CTNFC’s progress-to-impact was judged to be on a positive trajectory, the Evaluator concurs with the implementing parties’ own conclusion that “*it is hard to assess how long it will take for TAs to be translated into policies, programs, or for investment to happen*”²⁰. The extent to which this could have been accelerated through meaningful collaboration and sequenced activity, as per the project design (¶176), remains untested and a matter of conjecture as the Asia Pacific pilot did not succeed in realising the envisaged joint collaboration, which was a key objective for the pilot and its generation of impact potential.

Likelihood of Impact is rated as ‘moderately satisfactory’

128. Having considered the three constituting dimensions according to the above-mentioned aspects, which have been assessed using the available evidence (with its significant limitations), the project’s overall effectiveness is deemed to be satisfactory.

The project’s overall effectiveness is rated as ‘satisfactory’

E. . Financial Management

129. ADB and UNEP received and managed their funding support for this project separately. The Evaluator had no visibility into any aspect of the ADB’s financial management. The only

²⁰ PIR 2018, p7

financial management information in the PIRs related to the first GEF grant disbursement for the ADB-managed subprojects on 22 August 2012 with mention that its utilisation of GEF funds was affected by the need to disburse funds received from other co-financing sources.

i. Completeness of Financial Information for UNEP-led Components

Finding 11: The UNEP-led components were implemented and executed internally, following an Accountability Framework for Directly Executed GEF Projects and following UNEP procedures and financial management guidance, which generated confidence in the completeness of financial information.

130. From the UNEP side, the project was implemented and executed internally and therefore operated under the Accountability Framework for Directly Executed GEF Projects signed by UNEP's Senior Management Team and Executive Director. This framework responded to the GEF Council's minimum set of fiduciary standards. It has been deemed satisfactory vis-à-vis the project's over-arching governance in that UNEP, acting as an "implementer" of the GEF Trust Fund, had established a segregation of duties and clear lines of accountability within the institution between its Implementing Agency and Executing Agency functions to avoid conflicts of interest. Under this framework, UNEP was accountable to the GEF Executive Council for ensuring that agreed outcomes were realised and for assuring the timely delivery and cost-effectiveness of activities.
131. Beginning in June 2015, UNEP moved from its Integrated Management Information System (IMIS) to a new enterprise resource planning system (UMOJA). This change took longer and had unexpected negative impacts on the effective delivery of the project; for example: i) significant disruption in the flow of resources (e.g. difficulty in issuing consultant contracts; this was specifically mentioned in relation to the inability to contract the MTR in a timely manner); ii) during this transition, it was exceedingly difficult for the project's management team to determine how much funding was available in the budget due to confusion regarding the coding system and budget categories; iii) the rigidity that accompanied the change to UMOJA was a key driver for the numerous project revisions in that once an amount was allocated in the planning phase to a particular output, then it was expected to be used in that manner. An informant explained that *"the budget lost granularity, creating challenges to map the expenditures in UMOJA to the more detailed level that was used in IMIS"*. As the AP-CTNFC was a pilot project, operating in a dynamic environment with many unknowns, such constraints on its financial management would have reduced opportunities for more adaptive responses.
132. The Evaluator can confirm that the six revision requests initiated by UNEP did not involve any changes in project design or scope. They reflected actual expenditure, with requests to re-phase unspent balances to future years, in the context of planned future budget commitments, correctly following UNEP procedures and financial management guidance.
133. Having reviewed the project expenditure reports provided by UNEP, which were prepared on an annual basis for 2013-2018, and through discussions with the project's Financial Manager, the Evaluator can confirm that the preparation and presentation of reports reflect UNEP's rules and regulation and have appropriately followed the agency's guidelines in place at the time. The Evaluator's interaction with the project's Financial Manager generated a high degree of confidence in the completeness of financial information stemming from the fact that when expenditure reports came in, these were promptly and meticulously reviewed by the project's Task Manager to confirm that the information was aligned with what was being reported by the Project Manager on the substantive side. Variances were checked and verified. Budgets were

highly detailed with the result that even any small change had to be discussed and agreed. Preparation and oversight of the project's financial management appeared to be a heavy weight on the project's smooth operation.

134. As the project's final financial report was expected to be available after April 2020, outside the timeframe of the TE, it was not possible to confirm the actual spend across the life of the project for the UNEP-led components; however, it is expected to be in alignment with the approved budget of USD 3.25 million. In-kind contributions of administrative services were not quantified and added to this budget. According to UNEP's evaluation guidance²¹, projects should report expenditure at output level, compared with the approved budget. Similar to the situation of other projects developed and executed mainly under the IMIS period, expenditures could not be captured per component. The reporting template therefore required expenditures to be reported per budget line.

Financial Management is rated as 'satisfactory'.

ii. Communication between Finance and Project Management Staff for UNEP-led Components

Finding 12: Ongoing communication between Finance Management and Project Management staff and problem-solving attitudes effectively supported the project.

135. The quality of the relationship and communication between the project's Finance Staff and Project Management Staff appeared to be sufficient and effective. Informants mentioned "we didn't face any problems that could not be resolved". As the Project Manager did not have direct access to the project's financial reports (in maintaining integrity between UNEP's Implementing and Executing Agency functions), there was frequent communication between the two teams (e.g. to raise, process, approve expenditure requests).
136. In the project's start-up phase, it was reported that most of the communication involved following up on expenditure reports when there was a need to release a portion of the budget. In the project's latter phase, there was significant discussion around the decision to request a project extension (to December 2018) and then again subsequently related to the granting of an additional 3-month spillover (to March 2019) to allow for the completion of some outputs.

The communication between Finance and Project Management Staff is rated as 'satisfactory'

137. Having considered the above-mentioned aspects, the overall financial management of the UNEP-led components is deemed to be satisfactory.

Financial Management is rated as 'satisfactory'


F. Efficiency

Finding 13 While the project built on existing networks, data sources, and synergies with other initiatives, the stretching of its original 30-month duration to 6.5 years so that the implementing partners could achieve all of their outputs. This substantially undercut the project's efficiency with respect to both cost and time, with both implementing parties incurring significant unstated costs in the case of this "no cost" extension.

²¹ Evaluation Criteria and Ratings Table, Financial Management, p5, Evaluation Office of UN Environment. Last revised: 17.04.2018

138. The project was explicitly designed to complement the numerous GEF- and non-GEF climate technology transfer projects and programmes at global, regional, and national levels (¶95). In this light, the AP-CTNFC built on the data developed under the UNEP/UNDP Technology Needs Assessment work and Nationally Appropriate Mitigation Actions (NAMAs) that had been carried out in the Asia Pacific region with the specific aim of implementing activities using the financial, technical, and capacity-building support from developing countries. Additionally, the project built directly on the focal points established by the SEAN-CC and Central Asia Climate Change Network (¶61), using this as a foundation for consolidating the NDEs that would feed into the CTCN platform.
139. The project gained cost efficiency through the physical location of the UNEP Project Manager in the ROAP office. This enhanced interaction with the target countries and institutions by tapping the networks of the regional office than if this function had been located in the Energy and Climate Branch of UNEP's Paris office which housed its ultimate responsibility. The project's cost efficiency was also enhanced through the in-kind provision of administrative services by the regional office.
140. There was a built-in dampener on cost-efficiency related to activities that brought together NDEs and other institutional actors from across 17 countries in various Asia Pacific locations for relatively short (2-3 day) knowledge exchange and dissemination activities. Cost-saving measures were sought by project personnel in the past two years where the AP-CTNFC's beneficiaries were brought together in conjunction with other events like Asia Climate Weeks so that they could tap a larger pool of experts, institutions (e.g. The World Bank, UNIDO, Emissions Trading Association, GIZ, etc.) and get exposure to a wider set of issues and ongoing work in the climate change domain, whose costs the project itself did not have to bear as they had been brought to the venue by the UNFCCC. Such an approach also functioned to reduce the project's environmental footprint.
141. The project's cost efficiency appeared to suffer greatly with the loss of momentum linked with the June 2015 departure of the initial UNEP Project Manager with a successor finally put in place in June 2016. During this intervening period, part of the project stagnated. Following a 'stock-taking' exercise carried out in June 2016, the level of completion of several outputs was downgraded, as shown in Figure 9. While the reporting through the annual PIRs and UNEP's half-yearly progress reports initially appeared to suggest that inputs were efficiently translated into outputs, the reassessment of this situation shed a different light on the project's performance. The downgrading of achievement was based on an assessment of the progress against the indicators, the role that the CTCN had taken up in terms of delivering some of the outputs, and the funds that were available.

Figure 9: Reported Completion of Outputs of UNEP-led Components/Outputs, 2013-2019



		% completion of AP-CTNFC project outputs over time													
OUTPUT		Jun 13	Apr 14	July 14	Dec 14	Aug 15	Dec 15	July 16	Dec 16	July 17	Dec 17	Jun 18	Dec 18	Mar 19	
Component 1	1.1	10	15	35	60	75	missing	90	90	90	90	90	100	100	
	1.2	5	30	35	50	65	missing	60	70	70	70	70	100	100	
	1.3	0	10	25	60	70	70	50	50	50	60	60	80		
	1.4	0	0	25	60	60	70	70						100	
Component 2	2.1	0	20	60	80	95	missing	90	100	100	100	100	100	100	
	2.2	5	5	15	60	80	85	50	100	100	100	100	100	100	
	2.3	0	30	45	60	75	75	30	80	80	80	80	100	100	
	2.4	0	0	15	45	50	50	10	10	10	10	10			
Component 3	3.1		5	20	50	70	70	20	30	45	50	70	100	100	
	4.1	0	15	25	55	60	missing	40	40	40	40	40	40	100	
	4.2	10	15	25	50	65	missing	40	50	50	50	50	100	100	
	4.3	0	5	15	45	50	missing	0	0	0	0	5	100	100	
	4.4	0	5	20	55	60	missing	0	0	0	0	0	0	100	

142. The project’s cost- and time-efficiency were affected by the change in management, insufficient handover documentation and discussion, and the corresponding time taken to decide about the project’s extension. It was reported that up to one year after the arrival of the new Project Manager in 2016 “was spent to decide whether to make an extension”. Once the decision to extend was made, the project incurred further costs, as an informant explained: “the costs related to revisions and extensions are high; you spend a lot of time on administrative documents instead of spending time on substantive matters” as specific rules and procedures need to be followed to comply with the governance system. While these costs were not calculated for this project, the situation was described as “certainly not cost-efficient for UNEP as an organisation” and can be inferred as representing an increase in unstated costs to both implementing parties, (see Figure 7).
143. ADB’s Completion Report indicated that its TA cluster (which covered the ADB-managed components) was assessed as less than efficient considering delays in implementation. The Completion Report indicated that the TA cluster accomplished its objectives with about 10.46% savings. While the ADB-managed components, which were implemented as a TA cluster, were to be completed by September 2014, this was eventually extended to December 2014, then to December 2016, and ultimately to December 2018 to facilitate completion of subprojects. The standalone TA was completed in June 2015, two subprojects in September 2015, one in December 2016, and the last two subprojects in December 2018.
144. Overall, the project was initially designed to have a 30-month span. Due to the extension, the project finally wrapped up in March 2019 with a 6.5-year duration. As already noted, some of ADB’s components reached full completion by June 2015 (¶111). From what was documented in the PIRs, ADB’s components appeared to be delivered for the most part at a reasonably early stage and the project was considered highly successful. This could not be independently verified by the Evaluator. While the project was supposed to finish in 2016, “it dragged on” as the shape of the TM and CTCN were not yet fully clear and the Asia Pacific pilot was expected to provide some lessons for their operationalisation. It was reported that “it would not be in the interest of UNEP to give up on a project” before the funds were all spent. Such an attitude has the risk to over-ride considerations regarding both efficiency and effectiveness.
145. In reviewing the project’s performance according to the above-mentioned aspects, on balance, its efficiency is deemed to be moderately unsatisfactory.

The project's Efficiency is rated as 'moderately unsatisfactory'

G. Monitoring and Reporting

Finding 14: The project's M&E approach did not adequately reflect the nature of the AP-CTNFC as a pilot trialling joint implementation, thereby strengthening silos and compartmentalisation and missing the opportunity to instil monitoring and accounting for a joint, sequenced, leveraged implementation approach.

i. Monitoring Design and Budgeting

Finding 15: Insufficiencies in the scope, resourcing, and implementation arrangement for monitoring and evaluation had an impact on the ability of these activities to effectively support the project's performance.

146. As the lead implementing agency, ADB was given responsibility for M&E processes and an M&E plan was laid out as part of the CEO Endorsement Request, which elaborated tasks, identified the responsible parties, timeline, and allocated budget. As the project had a well-elaborated results framework, which outlined 10 outcomes, each underpinning by outputs with baseline data mentioned where available, this was available as the basis for designing the M&E plan. The verification of indicators and targets was facilitated by their SMART formulation (¶98). An amount of USD 208,000 was set aside for M&E activities with allocations for mid-term and terminal evaluations that followed standard practice. However, these allocations were made per agency, which reinforced the notion that the project's components were being conducted separately, in parallel, rather than sequenced according to the logic of the project's theory of change (¶176). Furthermore, a relatively major allocation (USD 60,000, i.e. 29% of the overall M&E budget) was allocated for an internal review of the functioning of ADB's Climate Technology Finance Center in Manila and the design and functioning of its assisted broker model (under Component 6), with no allocation for the Bangkok Secretariat or any parts of the UNEP-managed components. This unbalanced allocation seems to have neglected the need to review the functioning and sustainability of the technical assistance provided under UNEP's responsibility. Had this opportunity for exploration and reflection been built into the project for the UNEP side, its effectiveness could have potentially been enhanced.
147. At design, there was no allocation in the M&E budget for the annual preparation of the PIRs following GEF guidelines, which were to be prepared through collaboration between the two implementing agencies and respective government counterparts. While ADB received a substantial allocation for project management costs (264 person weeks) which included providing assistance in the preparation of progress reports²², this effort was presumably to be covered through in-kind contributions on the UNEP side. The fact that no allocations were made for the monitoring of technical assistance outcomes on the part of project staff and international consultants meant that the scoping and mandating of this very valuable exercise (in terms of validating the effectiveness and sustainability of the project's results and benefits) was overlooked.
148. While the AP-CTNFC was to follow all standard ADB-UNEP-GEF processes for monitoring, evaluation, and reporting, arguably some tailoring of these aspects, together with clearly allocated budget, would have been necessary to reflect that an intended objective of this project was to trial the implementation of a UN agency working together with a regional development

²² Request for CEO Endorsement, p69, Annex C: Consultants to be hired for the project using GEF/LDCF/SCCF resources

bank to accelerate the uptake of ESTs (¶55). The absence of meaningful resource allocation to underpin and give credence to the collaboration at design (¶100) represents a fundamental weakness in the project's monitoring design and budgeting.

The project's Monitoring Design and Budgeting is rated as 'unsatisfactory'

ii. Monitoring of Project Implementation

Finding 16: The two implementing agencies monitored their respective components of the project following the structure laid out in the CEO Endorsement Request and encountered significant challenges when it came to collaborating on the project's mid-term and terminal evaluations, thereby missing vital opportunities for joint-reflection, recalibration and learning.

149. The CEO Endorsement Request indicated that the ADB- and UNEP-managed components were to be monitored independently by the respective agencies. It is assumed that monitoring was carried out, presumably using the allocated funding, although the latter cannot be verified as the project's final financial report was not available at the time of this evaluation. The former was deduced from the fact that bi-annual progress reports were produced by UNEP and annual PIRs were compiled by ADB and submitted the GEF. The extent to which monitoring of objective, outcome, output and activity indicators was performed (which was to be verified according to the guidance provided by UNEP for this TE²³) was not clear from the available project documentation. While UNEP's bi-annual progress reports were provided to the GEF Unit within UNEP (following the segregation of responsibilities under the afore-mentioned Accountability Framework, ¶130), these half-yearly reports were apparently not exchanged with its implementing partner, ADB.
150. The project did not monitor the representation and participation of gendered, vulnerable, or marginalised groups.
151. Project monitoring played a role in adaptive management, which can be seen from the 2016 'stocktaking' exercise. The project appears to have benefitted less than anticipated from the monitoring process due to deficits in the supervision structure put in place, which was affected by the less-than-optimal relationship between UNEP's Project Manager and Task Manager. This significantly improved in the project's later phase, corresponding to a change in personnel in both positions. Little information was available to understand the ways in which project monitoring was carried out within ADB. Worryingly, the PIR 2018 indicated that the technical assistance related to the outcome "project managed on time and on budget", which was under ADB's responsibility and correspondingly resourced, "was completed on 31 December 2016". Input subsequently received from ADB indicated that project monitoring activities were carried out by ADB through the Project Management component, Technical Assistance 8122 until 31 December 2016. While the related TA was closed on 31 December 2016, tasks related to project monitoring and reporting were subsequently continued by another subproject component. The PSC did not appear to play any role in monitoring (¶188).
152. While budget was allocated for mid-term evaluation, there were delays in this being carried out, missing a valuable opportunity for reflection and recalibration. Finally, an MTR was carried out by ADB on the components that it managed (¶102). No such exercise was carried out on the UNEP-managed components; this was put down to not being able to contract the independent

²³ Evaluation Criteria and Ratings Table, Monitoring and Reporting, p6, Evaluation Office of UN Environment. Last revised: 17.04.2018

consultant due to the migration from IMIS to UMOJA (¶131).

153. Sufficient budget was allocated for the TE. There were substantial delays in embarking on this process, given that the project wrapped up in March 2019 and the TE was initiated in autumn 2019. As the lead implementing agency, ADB held M&E responsibility, which included the responsibility to undertake the project's TE. As ADB did not agree to commission a joint evaluation of the entire project, due to constraints in timing and limitations in joint engagement of an Evaluator, UNEP EOU's exceptionally commissioned a TE covering data collection for UNEP components only. At the time of this report's preparation, ADB's Terminal Review was not available. This limited the possibility to develop a unified TE report based on inputs of both partners.

The project's Monitoring of Project Implementation is rated as 'unsatisfactory'

iii. Project Reporting

Finding 17: The consolidated reporting to the donor did not reflect adequate understanding of outcomes (compared to outputs), showed institutional silos between the two implementing partners while at the same time portraying an overly optimistic picture of joint implementation, which appeared to not be questioned by any of the involved parties.

154. Following the guidance laid down in the CEO Endorsement request, as the performance of the respective components was monitored separately by each agency (¶149), the resulting information was delivered by UNEP to ADB, which then presented the project's performance in a consolidated format. The PIRs showed evidence of institutional silos between UNEP and ADB. This suggests that the reporting exercise did not function to help the two implementing agencies identify and leverage the anticipated synergies of their partnership.
155. The PIRs contained an overly optimistic presentation of the joint implementation between the partners, as illustrated by various utterances in the annual reports (see Figure 10), the veracity of which appeared to not be questioned by any of the involved stakeholders. A narrative was developed in the project's reporting to the donor that reflected the underpinning justification that this project's power lay in joint (sequenced) collaboration of the implementing partners, which in the reality of the project's implementation, simply did not materialise at any juncture.

Figure 10: The Project's Narrative of Collaboration between the Two Implementing Partners

PIR Date	Narrative regarding Collaboration
2013	Collaboration and information sharing between ADB and UNEP continues to be strengthened as full implementation of all the projects get underway
2014	ADB and UNEP are collaborating in Mongolia to build on the technology needs assessment linked to their national Green Development Strategy
2015	A concept note for the mid-term review was prepared and coordination carried out with UNEP for its conduct (scheduled for 3 rd quarter of 2015) Regular coordination meetings have been carried out to ensure the open flow of communication and foster collaboration between project teams, particularly for joint undertakings; e.g. Hunan workshop, March 2015; upcoming workshop in August 2017: AP Summit on Low Carbon Technology)
2016	Collaboration between the two agencies...has been encouraged with positive results as described in write-ups of previous sections (but these do not mention any actual joint collaboration in outputs and outcomes)
2017	Coordination meetings have been regularly carried out to ensure an open flow of communication between team members and promote collaboration
2018	Collaboration not mentioned. Outcome 10 (Project Management) described as being completed on 31 December 2016

- 156. The reporting on outcomes within the PIRs does not have a perspective towards changing behaviour. This reporting is mainly a recap of the outputs, which represents poor practice.
- 157. Within the PIRs, ADB stopped reporting on outcomes once the related outputs were completed. This shows insufficient understanding that outcomes materialize sometimes long after the outputs have been delivered, as this entails a change process. The fact that the project carried on for up to four years after some of the first outputs were completed provided an invaluable opportunity to gauge and report on outcomes, an opportunity that was missed for being able to understand the sustainability of the project's results and benefits.
- 158. While it can be confirmed that these yearly PIRs were assembled and submitted to the GEF, the extent to which they performed the anticipated accountability function can be questioned. The use of an incremental, rather than cumulative, approach to the reporting makes it difficult to gauge and verify achievements and effectiveness and even more difficult to identify gaps. To do so would have required perseverance and high attention to detail on the part of supervisory actors. Based on information available to the Evaluator, these PIRs were fully accepted and not questioned by the GEF. Given their deficits, this could be interpreted as a weakness in the governance function.

The project's Reporting is rated as 'unsatisfactory'

- 159. Having considered the above-mentioned aspects, the project's monitoring and reporting is deemed to be unsatisfactory.

The Project's Monitoring and Reporting is rated as 'unsatisfactory'

H. Sustainability

Finding 18: The project's overall sustainability is deemed as likely.

160. In this context, sustainability is understood as the probability of direct outcomes being maintained and developed after project closure. Given that this pilot was conceived to directly inform and channel results into the CTCN, which was already well-established and functioning, the sustainability of the AP-CTNFC is judged to be relatively promising.

i. Socio-Political Sustainability

Finding 19: Embodying a direct response to countries' request for dedicated funds and support to facilitate technology transfer to address climate change challenges, the project's outcomes have a high level of socio-political support which bodes well for their continuation and further development.

161. As this project was a direct response to UNFCCC member states' request for dedicated funds and support under the Poznan Strategic Plan to facilitate technology transfer to address climate change effects, it can be deduced that sufficient socio-political support exists at the highest levels across the Asia Pacific region to sustain the results and benefits of the AP-CTNFC and the further development of the project's direct outcomes.
162. The project's orientation, through its design (¶83), to develop country ownership has enhanced the socio-political factors supporting the continuation of the project's outcomes. The fact that NDEs are in place in most countries (¶167) and are relating to the CTCN (¶121), the structure to which the pilot project has a direct scaling up pathway (¶166), are taken as evidence of ownership, interest, and commitment on the part of government and other stakeholders to take the project's achievements forward. The socio-political context within each individual country would need to be investigated to understand the extent to which more or less facilitating conditions for uptake are present and to identify the suitable levers to strengthen adoption (such an effort is beyond the scope of this exercise). Within the evidence that was available, it was reported in project documentation that the change of government mid-way through the project in the Maldives brought with it new policies related to taking on public debt and a general debt crisis, which could possibly dampen the results of the AP-CTNFC and was outside the control of the project team.
163. The individual capacity development efforts undertaken during the project's implementation through participation in stakeholder consultation, technical assistance activities, dissemination workshops, meetings, and training were highly appreciated by those involved at the time. While a high level of turnover was observed and many of those individuals are no longer occupying the positions that they did during the AP-CTNFC's implementation (¶167), the project must nevertheless be credited with building these capacities which can be expected to be leveraged in other organisational structures.

The Project's Socio-Political Sustainability is rated as 'likely'

ii. Financial Sustainability

Finding 20: ADB's demonstration of the effectiveness of linking technology and finance mechanisms to catalyse investment in ESTs through this pilot is positively indicative of the financial sustainability of the project's outcomes.

164. The project was a pilot designed to demonstrate the effectiveness of linking technology and finance mechanisms in catalysing climate change mitigation and adaptation actions. Through the PIRs, ADB reported that its technical support and advisory service was extended to six mitigation and three adaptation projects as well as two projects with both mitigation and adaptation components in ADB's public sector investment project pipeline during the project period (PIR 2015). While assistance to some of these projects had already resulted in changes to project design and technology choices, others were at an early stage of project development and decisions about the design, technology choice, and prioritization of investment projects to be supported were subject to a number of factors both within ADB as well as the respective country governments.
165. Financial sustainability could be enhanced by the allocation of government funding or private sector investment. The extent to which this has already occurred could not be confirmed by field interviews conducted by the Evaluator. Monitoring reports indicated that private sector elements for implementation were incorporated in GCF Readiness Proposals prepared with the project's supported (e.g. District Heating in Mongolia, Renewable Energy in the Maldives, District Energy System in Malaysia). Further encouraging signs were noted (i.e. linkages to work being done by other AP-CTNFC components, financial support available under the GCF and GEF) which are taken as a sign that the availability of climate financing was on the increase and would have the potential to facilitate more technology investments, moving forward. Such future potential successes in catalysing investments in EST deployment could therefore be taken as indicative of the financial sustainability of the project's outcomes.

The Project's Financial Sustainability is rated as 'likely'

iii. Institutional Sustainability

Finding 21: The project's institutional sustainability resides in its close linkages and direct scaling up pathway to and replication by the CTCN, the structure which it was designed to inform. By the closure of the pilot project, institutions assigned the NDE role had been mostly secured although turnover of individuals undertaking NDE duties without sufficient handover weakened prospects of continuity.

166. As the project was conceived to contribute to the design of the operational procedures of the TM and the CTCN, the AP-CTNFC's outcomes presumably had a direct scaling up pathway, although there was no mention in the project's design about how the roles performed by ADB and UNEP would evolve after the formal closure of the project. Although an exit strategy was not elaborated, according to the project's RTOC, its direct outcomes were designed to feed into a continuing process. The project's design could have been strengthened by putting more attention on strategies to deliberately assure the sustainability of its results, replication, and catalytic effects.
167. ADB's internal Completion Report indicated that the outcome of the TA cluster was assessed as likely sustainable as there was strong interest from governments, relevant institutions, the private sector, as well as ADB operations departments to deploy climate technologies and to pursue investments in climate technologies. Moreover, it was foreseen that climate technology exchange centres, start-up accelerators, and network groups that the TA cluster had helped to establish would likely continue given the reach that had been established and the backing that they had received from governments and other stakeholders. Furthermore, aspects of the Asia Pacific pilot had been mainstreamed within ADB's operations and its Energy Sector Group.

168. A CTCN informant reported that the CTCN has tried to model itself along the lines of the regional pilot projects that were carried out. This replication is an indicator for the project's institutional sustainability. The ongoing relationship and interaction between the NDEs and the CTCN will pave the way for sustaining the institutional capacity development efforts undertaken by the AP-CTNFC. By the time of the pilot project's closure, institutions playing the NDE role were mostly secured (see Table 5) although it had been difficult to engage with 23.5% (i.e. 4 of 17) countries. In this respect, Indonesia was very active early in the project until there was a change in the Focal Point. Lao PDR was reportedly difficult to engage as the Focal Point was at a too senior level but it became easier to access this individual towards the end of the project. Mongolia was active in the beginning of the project but once its Focal Point had departed and not been replaced. Uzbekistan and Tajikistan limited their involvement to sending participants to workshops and meetings and did not make efforts to engage further.
169. Interviews indicated that there was a relatively high level of turnover of individuals in the positions expected to perform NDE duties (as well as ongoing vacancies, in the case of Mongolia). From evidence gained during the field mission, there had been insufficient handover and/or taking up of these duties (e.g. in Indonesia) to assure full continuity.

The institutional sustainability of the project is rated as 'likely'

170. Having considered the above-mentioned aspects, the project's overall sustainability is deemed to be likely. As a note, this rating is obliged to be the lowest of all three of the above-mentioned dimensions of sustainability, according to UNEP's guidance.

The overall sustainability of the project's benefits is rated as 'likely'

Table 5: Nationally Designated Entities at Closure of the Pilot Project

Country	Acting Focal point in AP-CTNFC	Acting NDE in CTCN	Acting NDE in AP-CTNFC (if different from Focal Point)	Difficult to Engage Countries
Bangladesh	Joint Secretary, Ministry of Environment and Forests		Officer, Department of Environment and Forests	X
Malaysia	Under Secretary, Environment Management and Climate Change Division, Ministry of Energy, Science, Technology, Environment and Climate Change	✓		X
Myanmar	Director, Pollution Control Division, Environmental Conservation Department, Ministry of Natural Resources and Environmental Conservation	✓		X
Philippines	Climate Change Commission	✓		X
Indonesia	Ministry of Environment and Forestry, Indonesia		Secretary of Transfer Technology Working Group, National Council on Climate Change of Indonesia	X
Mongolia	National Focal Point for CTCN and Head of National CDM Bureau (left the organisation), Climate Change Coordination Office of the Ministry of Environment and Green Development			No official NDE replacement
Cambodia	Director, Climate Change Department, Ministry of Environment	✓		
Lao PDR	Ministry of Natural Resources and Environment, Department of Disaster Management and Climate Change	✓		
Vietnam	Deputy Director, Division of Science Technology and International Cooperation, Department of Meteorology Hydrology and Climate Change (DMHCC), Ministry of Natural Resources and Environment		Deputy Director General, DMHCC, Ministry of Natural Resources and Environment	
Thailand	Senior Policy Researcher, National Science Technology and Innovation Policy Office (STI)		Office of National Higher Education, Science Research and Education Policy Council	
Bhutan	Senior Program Officer, Policy and Planning Services, National Environment Commission	✓		
Sri Lanka	Director, Ministry of Mahaweli Development and Environment	✓		
Nepal	Under-Secretary and Head-Climate Change Section, Ministry of Population and Environment	✓		
Kazakhstan	Acting Director, Information and Analytical Center, Ministry of Environment Protection	✓	Officers, Nazarbayev University Research & Information Systems	
Uzbekistan	Minister and Chief	✓		
Tajikistan	Senior Climate Change Expert, Climate Change Centre	✓	Officer, State Administration for Hydrometeorology	

Source: Project Documentation

I. Factors Affecting Performance

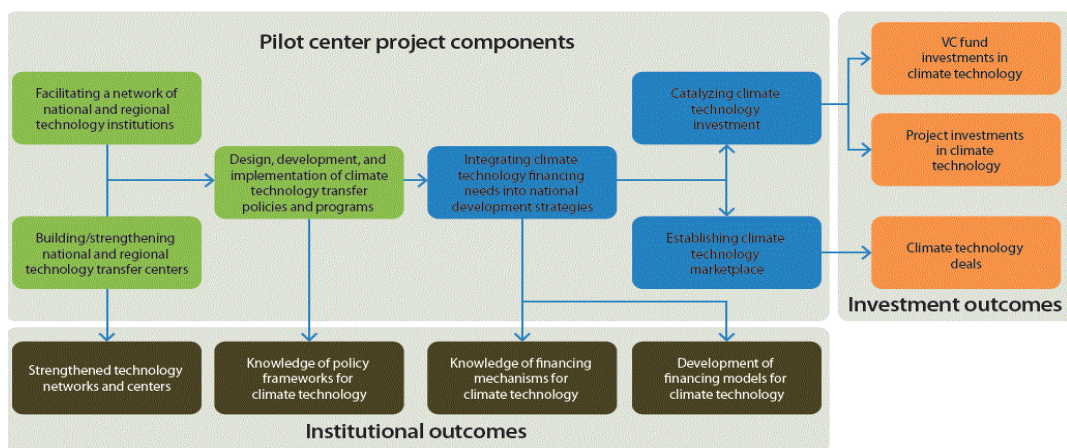
i. Preparation and Readiness

Finding 22: While the project was built on a comprehensive analysis of the problem, context, and its contribution, deficits in resourcing (of project management on the UNEP side) and the failure to establish a common management structure were aspects that undermined the project's performance.

171. Some aspects regarding the project's preparation were included in the Project Design Quality assessment (in the Inception Report). These were rated positively in that the project document had a comprehensive problem and situation analysis and there was clarity regarding the project's contribution. While there was an adequate identification of international, regional, and national stakeholders that would be of interest to involve in and/or benefit from the project, there was no evidence that any of the institutions identified in the stakeholder mapping were actually consulted during the project's design and preparation.
172. The Evaluator did not have any visibility regarding the inception and mobilisation stage of the project from the side of ADB and no information as to whether appropriate measures had been taken to identify and address weaknesses in the project design or respond to changes that took place between the project's approval and first disbursement. On the UNEP side, resources within its regional Bangkok office were involved in reviewing the project and aligning it with the agency's PoW to show how and where the project would contribute to the mandate of the member states. Furthermore, the initial project design benefitted from UNEP's standard review processes [Senior Programme Officer (SPO), Project Review Committee (PRC), Scientific and Technical Advisory Panel (STAP)] as well as input from (unspecified) actors in Switzerland and Germany. This input was addressed in a detailed way and included as an annex in the Request for CEO Endorsement.
173. A readiness factor that did not get highlighted in UNEP's review procedure was the lack of an allocation for project management from the GEF's source of funding. This weakness in the project design affected UNEP's implementation throughout the project period, triggering substantial internal discussion and negotiation for in-kind provision of support services and attention.
174. This aspect was compounded by staffing decisions. While UNEP's side of the project had an initial provision for two P3 positions, this was collapsed into a single P4 position, with the subsequent recruitment of a Mitigation Advisor taking up this role on what seems to be an 80% basis, with the remaining 20% allocated to providing technical advisory in the regional office. The AP-CTNFC project document did not even mention the role of Project Manager. Consequently, the needed competences in project management may have been assumed to be present but from descriptions of the relationships that unfolded, with inadequate communication and liaison with the Task Manager and insufficient handover processes, the project's performance eventually suffered. While beneficiaries of the project's TA reported satisfaction with the technical advice provided and appreciative of the knowledge, the key role was to manage the project on time, scope, and budget.
175. A further aspect that undermined the project's preparation and readiness is that no resources were allocated for joint design and preparation (no face-to-face meetings between the two agencies at this phase) and there was no attempt to make a common management structure and put in place a framework that would incline regular interaction and joint implementation. An informant suggested that this omission "*may have been a reflection of things being put together without sufficient time to think*", referring to request by and respond to the GEF to present a joint project design. While the implementing partners pulled this off and it was perceived quite positively by the donor (¶51), the lack of instilling a structure to facilitate the collaboration impeded the project from fulfilling one its main objectives, which was to trial such a collaboration (¶55).

176. ADB and UNEP were both responsible for and contributed synergistic aspects to the project’s overall objective (see Figure 11). Their complementary contributions were key to driving the envisaged institutional and investment outcomes. It was also clearly seen that the design, development, and implementation of climate technology transfer policies and programs (stimulated through UNEP’s TA) was to feed into ADB’s work in integrating climate technology financing needs into national development strategies. UNEP’s work was to generate awareness of and demand for ESTs. ADB’s work was to facilitate EST deployment through access to funding. Following the logic of the RTOC, intermediate states deriving from outcomes generated by UNEP’s work were expected to occur before intermediate states achieved by ADB’s work. While the sequencing of outcomes was not depicted in Figure 4, this would be logical in so far as national demand for ESTs would emerge before demand for funding their deployment.

Figure 11: Joint Responsibility and Complementary Contributions of ADB and UNEP



Source: AP-CTNFC project flyer, jointly produced by ADB, UNEP, GEF, July 2012

177. However, prospects for joint implementation were weakened at design phase: three components were allocated to UNEP; the remaining three (plus Project Management and M&E) were given to ADB, which was also assigned as lead implementing agency by the GEF. The PIRs indicated that ADB and UNEP received and managed their funding support from the GEF separately. Each agency then developed its own Project Document which predominantly reflected aspects of their allocated responsibility. The UNEP-led components were depicted as focussing on consolidating upstream infrastructure and mindset (through strengthening of networks, institutions, enabling policies), identifying appropriate technology through TA, and fostering country ownership. The ADB-led components were described as “*following on from these, supporting technology transfer and deployment through the mobilization of financial resources*”²⁴. ADB’s project documentation indicated that its 5 subprojects would “combine with UNEP’s components to constitute a cohesive program to promote climate technology transfer and deployment in Asia and the Pacific”.

178. At the conceptual level, the structure and accompanying narrative contained within the CEO Endorsement Request seem sound and likely to achieve the project’s overall objective. An informant interviewed for this evaluation observed, “*we thought these two agencies could work together, the GEF can’t dictate; it was up to them to discuss, coordinate, and collaborate*”. Furthermore, there was a perception that their ability to quickly pull together and present a

²⁴ ADB’s Technical Assistance Report on Establishing a Pilot Center to Facilitate Climate Technology Investments in Asia and the Pacific, July 2011

coherent document was taken as a very positive signal regarding their collaboration. However, key stakeholders inside the collaborating agencies characterized this as “a forced marriage”, mentioned that it was clear from the beginning that it would be difficult to link the activities, and that ADB was already very clear about where they were going and had their own agenda.

Preparation and Readiness is rated as ‘unsatisfactory’

ii. Quality of Project Management and Supervision

Finding 23: Overall, the lack of a common management structure and limited perceptions regarding project management responsibility reduced opportunities, synergies, and collaboration. There was no visibility regarding ADB’s internal project management and supervision. On the UNEP side, the turnover in its project management staff reduced the early momentum, which was not recaptured due to an ineffective handover process and weaknesses on the supervision side.

Finding 24: The project’s tripartite steering structure was completely ineffective and did not function to oversee the project’s implementation and guide strategic project planning decisions, according to its remit.

- 179. According to the project’s design, a Project Management Unit (PMU) was to be established that would be “responsible to consolidate UNEP and ADB work plans to create joint work plans for the project”²⁵. However, no common management structure was put in place (¶175). Furthermore, the implementation arrangement to independently managed the components of the project that had been allocated to their responsibility (¶65), which was agreed by the two implementing partners, put down in the CEO Endorsement Request, and approved by the GEF directly undercut the vision of creating and implementing joint work and by extension, limited view of potential synergies.

- 180. While Project Management was described in the PIRs as managing on time and within budget, this responsibility appears to have been interpreted by ADB as being restricted to preparing and submitting PIRs, thereby (perhaps unwittingly) circumventing the opportunity for joint substantive work. Mysteriously, ADB communicated that its Project Management responsibility was complete in 2016 (see Table 6) and no further information was subsequently reported in the PIRs about this aspect although the project actually ran until March 2019.

Table 6: PIR Annual Reporting on Project Management, 2013-2018

Project Management	
PIR Date	Output 10
2013	MS
2014	S
2015	HS
2016	HS
2017	HS
2018	Completed 31 Dec 2016

- 181. Apart from this aspect, the Evaluator had no visibility regarding the performance of project management, technical backstopping, and supervision provided by ADB nor were insights available into its leadership towards achieving the planned outcomes, management team structures, maintaining productive partner relationships, communication with internal

²⁵ Request for CEO Endorsement, p72

colleagues, risk management, use of problem-solving, project adaptation or overall project execution.

182. As the UNFCCC had laid out the concept for the TM and CTCN, which the AP-CTNFC was designed to support, including an agreed timetable for their operationalisation, the predictability of institutional structures being put in place was high. In principle, this should have provided a favourable aspect for the project to gain early momentum.
183. On the UNEP side, the project benefitted from the delineation between the implementing and executing responsibilities established through the Accountability Framework, which provided clarity on boundaries and functions (¶130). The project got off to a quick start following the May 2013 kick-off workshop which brought together all involved stakeholders to build mutual understanding of the project's objectives and develop a roadmap for moving forward (¶72). However, the project lost momentum (and efficiency) with the departure of its first Project Manager in June 2015 (¶141), when the project still had 18 months to complete its outputs according to the original timeline. During the 1-year period that was needed to recruit a replacement, the project *"suffered from a major gap in the interim"*. This was also related to the switch from IMIS to UMOJA, which caused many delays with respect to contracting work and making expenditures during this period. While oversight and interim management was put in place, a list of activities was being followed up, and whatever was in the pipeline was moving forward with the support of an external consultant engaged by the project who provided continuity throughout this period, but with insufficient authority and institutional level, *"no decisions were being taken"*.
184. Once the new candidate was in place in August 2016, as Project Manager on an 80% basis, with 20% of his time allocated for providing technical expertise on climate mitigation, this was seen as *"a chance to revive the project"*. Some advice and supervision was available from UNEP's Paris Climate Change Branch, but the absence of adequate handover documentation and process was an impediment in that there were no insights into the thinking of the previous person or background on key actors that would have provided a basis for understanding the project and managing the transition. Furthermore, according to insights gathered through this evaluation, key tasks (financial management, communication) outside the competence of the Project Manager were shifted to his responsibility, which generated quite some administrative burden (¶133), potentially distracting from and leaving less time and energy for developing and guiding the project's substantive work.
185. This situation was exacerbated by a lapse on the supervision side. Due to insufficient communication and sharing of information between the Task Manager and Project Manager, the former was poorly informed about the project, despite both being based in the Bangkok office. Consequently, the Task Manager was limited in the ability to provide guidance to the incoming Project Manager. This situation generated additional complexity (and delay) for making decisions about how to manage the intervention moving forward. Just ahead of when the project was expected to be wrapping up, much of the first year of the new Project Manager's tenure was spent trying to understand the project, decide on, and then finally engineer its extension.
186. Given that the aim of project management is to manage a project on scope, time, and budget, the trajectory set in the first phase of the intervention set it on a course which the incoming Project Manager understandably had difficulty to alter, in a context where the agency's supervisory structure adopted a fairly hands-off approach, leaving it to the Project Manager to

interpret and design outputs. An informant explained, “it’s a hands-off management approach; supervisors trust the person sitting with the task will do their best”. In this case, setting up a firewall between the Implementing Agency (Nairobi) and Executing Agency (Bangkok) sides in relation to the accountability framework, combined with personal preferences for communication and managing, appears to have inadvertently weakened the agency’s supervisory role. Inside UNEP, the Task Manager role on this project appeared to focus primarily on reconciling financial management issues with what was reported substantively in bi-annual reports and PIRs (¶133).

- 187. It was observed that the project documentation was less than optimal with many aspects left undocumented as both the CTCN and the pilot project were under responsibility of UNEP. While internal communication and exchange may have supported the gradual transition of some of the pilot’s activities to the CTCN as it was ramping up, there was no institutional structure in place to manage the transition of a regional project to a global project. There is evidence of adaptive management in that the pilot’s elements related to institutional strengthening and developing a network of experts was taken over by the CTCN, so the AP-CTNFC “decided it would focus on other elements of the project”.
- 188. The project’s steering structure was completely ineffective. The Project Steering Committee (PSC) was to be chaired by ADB and composed of members from the GEF Secretariat (GEFSEC), UNEP, and ADB. The PSC was to meet yearly face-to-face with discussions documented in Minutes. This governance mechanism was designed to oversee the project’s implementation and guide strategic project planning decisions. After the first PSC meeting in November 2012, this structure ceased to function properly and then stopped meeting altogether mid-way through the intervention (see Table 7). No informants could explain this.

Table 7: Participation in Meetings of the Project Steering Committee, 2012-2019

PSC meeting date	GEFSEC	UNEP	ADB
	# of participating individuals		
1 st –2012	3	2	4
2 nd – November 2013	0	3	0
3 rd – 28 August 2015	0	4	0
4 th – 21 October 2016 (cancelled)			
2017 (none)			
2018 (none)			
2019 (none)			

- 189. Supervision from the GEF side did not appear to function as optimally as it could have. For a project of this complexity, which was trialling a jointly implemented structure said to be of interest to the GEF, it would have been expected that GEFSEC would play a strong governance role. According to evidence gathered for this evaluation, there was no participation from the GEFSEC side after the first PSC meeting nor feedback on the annual PIRs, at least none that trickled down to UNEP. The Evaluator was not aware of whether feedback was provided to ADB, which had the lead reporting relationship with the GEF.

Quality of Project Management and Supervision is rated as ‘unsatisfactory’

iii. Stakeholder Participation and Cooperation

Finding 25: The project identified, engaged, and leveraged existing networks, institutions, and their constituent stakeholders, which was a key aspect in building interest and participation in TA activities.

190. The genesis of this project's underlying concept was to inform and accelerate operationalisation of the CTCN. Presumably the outcomes of all project components heavily relied on identifying, engaging, and leveraging existing networks and institutions (¶61). Evidence from the evaluation field mission which involved meetings with government partners (e.g. NDEs in the four countries visited), the state-owned electricity provider in Vietnam, and three Bhutanese companies is indicative of following through on the intention mentioned in the CEO Endorsement Request to identify existing mechanisms for public-private cooperation and private sector engagement.
191. Within the UNEP-led components, based on data gathered in all four countries covered by the evaluation field visit, the TA deployment was initially launched with a consultation of relevant stakeholders. The TA deliverables that involved assessment studies were disseminated through workshops attended by relevant stakeholders in the respective country/industry sectors. The experience reported from the Maldives has been taken to be illustrative of the project's approach. As an informant explained, "UNEP colleagues have strong ongoing collaboration with government representatives. UNEP initiated the project in the Maldives after close collaboration with the Ministry of Environment and Energy regarding their technology transfer priorities".

iv. Responsiveness to Human Rights and Gender Equity (HR/GE)

Finding 26: While the project's design expressed good intentions, it appears there was a relatively slow start in bringing HR/GE considerations to the forefront, given the view that the project was about institutional strengthening, network building, and stimulating national ownership for ESTs.

192. The UN has a mandate to address human rights and gender equality (HR/GE) in all interventions in order to promote social justice and equality²⁶. The guidance provided by UNEP concerning the assessment of this aspect indicates that the TE should ascertain the extent to which the project has applied the UN Common Understanding on the human rights-based approach (HRBA) and the UN Declaration on the Rights of Indigenous People. Within this human rights context, the TE is also expected to assess the extent to which the intervention adheres to UNEP's 2015 Policy and Strategy for Gender Equality and the Environment.
193. At design, the project reflected the spirit of these policies through its indication that the intended transfer/deployment of mitigation and adaptation technologies would benefit the poorest, most vulnerable segments of society (e.g. by providing basic services like power and clean water supplies to those with no access to grid-connected services, such as slum dwellers and remote rural communities. Furthermore, in justifying the project, it was mentioned that many adaptation technologies (e.g. flood protection, disease prevention) could address important climatic impacts that tend to fall more heavily on the poor as well as directly addressing aspects of poverty itself. Mitigation and adaptation technologies that the project could promote in land use, agriculture and water use would allow more efficient resource management and promote sustainable resource use practices and poverty reduction. Examples

²⁶ Guidance Document: Integrating Human Rights and Gender Equality in Evaluations, United Nations Evaluation Group, August 2014, p19

were cited in relation to new crop varieties, drip irrigation techniques, new types of fertilizer, and the introduction of no- or low-till technologies.

194. Regarding gender considerations, at design, it was foreseen that some climate technologies that could be promoted would have positive impacts for women in addressing household water and energy needs (e.g. renewable energy-based cooking stoves, which could improve infant and maternal health due to decreased indoor air pollution, and with greater efficiency, they would also reduce the need for women to collect fuel-wood, thus giving women more time to engage in more productive economic activities). In reflecting about the project's design, there was a recognition that technologies that reduced risks from climate-related disasters would directly benefit women, as they are disproportionately victims of such events. In this light, the notion was expressed that the project would pay careful attention to gender issues and, wherever possible, give preference to facilitating the transfer of technologies of direct benefit to women. Mainstreaming Gender at the GEF was identified as 'background information'.²⁷
195. The Evaluator had no visibility into how ADB considered HR/GE in project design, implementation, and monitoring in order to assess the extent to which (i) possible gender inequalities in access to, and the control over, natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.²⁸
196. On the UNEP side, the project appeared to have a very slow start in bringing these considerations to the forefront, as there was a view that the project was about institutional strengthening, network building, and stimulating national ownership for identifying appropriate climate technologies. An informant explained that *"since the project was designed more in terms of bringing institutions together and creating an institutional home for them, looking at financial mechanisms to put it place. These issues [about gender and human rights] were not overt. When you get to implementation, those issues become directly relevant."*
197. The inclusion of a "gender lens" story in three of the project's five E-newsletters (April 2018, May 2019, January 2019) demonstrated a symbolic attempt to shine a light on the gender equity topic. In the annual reporting to the donor during 2013-2019, there was one single reference to gender. The PIR 2017 mentioned that as the project did not have a specific Gender Action Plan, UNEP had taken steps to be gender responsive where it was possible, citing that the capacity building workshops convened in relation to its TA were "well attended by female participants" (with a participation rate of 24-55%). Following the introduction of Gender-Sensitive Minimum Operating Standards, it was reported that the project ensured a minimum of 30% of both female and male participants but without mentioning when such a standard was actually put in place.
198. In reviewing UNEP's TA activities, a few references to gender were found but this consideration did not appear to be top of mind nor mainstreamed. For instance, the 76-page Feasibility Study for Vietnam's Launch of the DELP Program (which was finally not carried out), contained a paragraph on "gender considerations of equality". Another illustrative example is the Social, Gender and Environmental Impact Assessment undertaken for the GCF Readiness proposal for Sri Lanka, which mentioned that the promotion of Electric Vehicles did not represent very

²⁷ Request for CEO Endorsement, p24. [Mainstreaming Gender at the GEF.](#)

²⁸ Criteria for assessment of HR and GE according to the Evaluation ToR provided to the Evaluator by UNEP

significant gender-related impacts but that the shift could bring more female participation in system design, maintenance and repair services and even as drivers in public transport systems”.²⁹

199. Within the TA in Bhutan, a notion put forward by UNEP’s Project Team to explore gender roles and decision-making power in farming communities was taken up in the Crop Suitability Mapping training and described as “*a very new and interesting experience to do network mapping*”. A short video was produced. As one training participant explained, “*women are the seed savers and it’s usually women who are in the marketplace. The farmers understood the benefits of the decisions made by women. It’s very important to engage women, especially in the agriculture sector*”.
200. While the 2017 PIR indicated that “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”, it was not possible to verify that any of these intentions materialised as there was no follow-up reporting on this by either implementing partner.

Responsiveness to Human Rights and Gender Equity is rated as ‘moderately satisfactory’

v. Country Ownership and Driven-ness

Finding 27: The project put an emphasis on stimulating and responding to national needs and assuring country ownership as a key factor for sustaining the results and benefits of the intervention.

201. The ADB-led components were strongly linked to its existing country programmes which accounted for these parts of the project gaining early and quick traction. While there was limited visibility into the extent to which these were ADB-driven or country driven, a review of the PIR reporting suggests that there were elements of both in the design and implementation of various interventions.
202. In reviewing the UNEP-led components, it was observed that the networks, technical studies/assessments/tools, and training developed through the project were designed to ensure that following project closure, its objective and benefits would be owned and internalized by relevant institutional stakeholders within the target countries and furthermore, that these stakeholders would have the capacity to sustain the project’s overall objective. PIRs indicated that activities were developed in response to needs expressed by national project focal points during meetings and other activities. This was triangulated and confirmed by evidence gathered in the field. For instance, the dissemination workshop related to the TA on Waste Heat Recovery in Bhutan was reported to have generated “lots of demand”.
203. A UNEP informant attested that, “we took country requests as the starting point and then we tried to address these. We looked at all the relevant work that UNEP was doing and tried to connect that”. While aimed at embedding country ownership, one of the risks of this approach is that the TA proposals emerging from workshops convened by the project reflected the knowledge and experience of the participants at that point in time, without necessarily being connected into other key national infrastructure like a country’s climate change planning.

²⁹ Pilot Asia-Pacific Climate Technology Network – EV Mobility Evaluation Sri Lanka, Janathakshan (Gte) Ltd., May 2019

204. A total of 15 interventions were undertaken with the aim of creating the needed groundwork to bring a technology into a country. Through this, the NDEs developed their understanding of their institutional role in relation to the CTCN and learned about the opportunity for their country to gain support for technology transfer. The UNEP team appeared to undertake substantial efforts to stimulate and respond to national needs; it was the responsibility of the countries to indicate what they saw as a priority for addressing climate change challenges. This approach was aimed at facilitating country ownership. At the same time, it was observed that “most of the countries haven’t been very proactive, despite us pushing them”.
205. One of the risks to sustaining country ownership that was observed through the evaluation field mission relates to the high level of turnover within the NDE institutions and other stakeholders that were engaged during the intervention. While this aspect is outside the control of the project, it is an aspect to keep in mind when investing and undertaking capacity-building activities to be assured that the institutional memory is sufficiently broad and robust.

Country Ownership and Driven-ness is rated as ‘satisfactory’

vi. Communication and Public Awareness

Finding 28: Lessons of the pilot were transferred to the CTCN; however, additional resourcing of communication could have improved the project’s public outreach. With the resources that were available, the UNEP team made laudable efforts to create a page on the CTCN website and five E-newsletters were developed for public dissemination, these investments could have been even better leveraged with a communication strategy and suitable competence in place.

206. The project’s approach for communication, learning, and outreach was reviewed as part of the project’s design quality (contained in the Inception Report prepared by the Evaluator). While the term ‘learning’ was not explicitly mentioned in the CEO Endorsement Request, this pilot was fully intended to provide lessons learned for the TM and CTCN and evidence was brought forward that related outcomes materialised (¶115). In UNEP’s Project Document, the dissemination of lessons and results was mentioned in association with cross-country linkages. Informants reported that the workshops in which NDEs and other institutional representatives were brought together from across the region functioned for knowledge exchange and dissemination.
207. There was no mention in the project documentation about how ADB, UNEP, and the GEF would manage their knowledge and communications, apart from ADB being allocated the responsibility for communications with the GEF. UNEP’s Project Document offered a very high-level assertion that the project would pursue a participatory approach based on regular communications with decision-makers and international partners and that a communication strategy would be designed and implemented to share results with target audiences but without any mention of specific plans or analysis. An informant indicated that “the public at large was not a target for this project and there was not the capacity for that”. In this light, the fact that the UNEP team managed to design and develop five E-newsletters is laudable. But the extent to which this investment was leveraged without a communication strategy in place is not clear.
208. The quality and effectiveness of communication and consultation with stakeholders throughout a project’s life and the support provided to maximise collaboration and coherence between various stakeholders (e.g. sharing plans, pooling resources, promoting exchange) is a factor on effectiveness. It was therefore surprising to see that the CEO Endorsement Request

did not provide any allocation for communications as part of the project management cost. Stakeholder consultations and dissemination workshops carried out in relation to TA potentially contributed to influencing attitudes and shaping behaviour in wider communities. Given the limited opportunity for consultation of those who directly participated (¶43), further indepth inquiry would be needed to confirm changes in attitude and behaviour. Some communications activities were handled by the project team based in Bangkok whose capacities and communications expertise were limited. They did what they could with the resources that were available. With a strategy and adequate resourcing, the project would have been better placed to develop and disseminate curated knowledge to reach and influence increasingly solicited stakeholders and the public at large.

Communication and Public Awareness is rated as 'moderately satisfactory'

J. Conclusions

209. Table 8 provides a summary of the findings according to the criteria of UNEP’s Evaluation ToR. These findings, which are underpinned by the preceding analysis and justifications, together with the resulting ratings³⁰, are the basis for drawing conclusions, lessons, and recommendations.

Table 8: Summary of Findings and Ratings by Evaluation Criteria

Criterion	Summary Assessment of the Findings	Rating
A. Strategic Relevance	The project has a high degree of strategic relevance for the intended beneficiaries, implementing partners, and the donor. It was designed in complement to existing initiatives.	HS
i. Alignment to UNEP’s MTS and POW	Fitting fully within UNEP’s Climate Change thematic priority and incorporating notions of achieving sustainable development through empowering stakeholders and strengthening linkages between environmental sustainability and the economy, the project was highly aligned with UNEP’s MTS and PoW and the Bali Strategic Plan.	HS
ii. Alignment to UNEP, ADB and GEF strategic priorities	The project was highly aligned with UNEP’s priority to strengthen integrated climate change responses into national development processes; it fully supported ADB’s Strategy 2020 which had put environment and climate change dimensions at its core; and it was fully consistent with GEF’s Climate Change focal area objectives.	HS
iii. Relevance to regional, sub-regional, and national environmental priorities	The project’s use of international cooperation to facilitate technology transfer by reducing the adoption cost and supporting capacity development and strengthening for its use was highly relevant for the Asia Pacific region and the accelerating its access to the CTCN infrastructure.	HS

³⁰ Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Likelihood of impact and Sustainability are rated from Highly Likely (HL) to Highly Unlikely (HU). Nature of External Context is rated from Highly Favourable (HF) to Highly Unfavourable (HU).

iv. Complementarity with existing interventions	The project built strongly on existing networks and complemented existing climate technology transfer initiatives, building on the GEF-funded Technology Needs Assessment work implemented by UNEP and UNDP, which was a starting point for the exploration of ESTs. In its precursor role, the AP-CTNFC also had very strong linkages with the CTCN, sensitizing relevant institutions to the NDE role.	HS
B. Quality of Project Design	Project design strengths were found in the comprehensive problem and situation analysis, articulation of strategic relevance, and elaboration of the results framework. However, insufficient conceptualisation of an approach to learning and communication and omission of an explicit mechanism to ensure and resource collaboration of the implementing partners weakened the quality of project design.	MS
C. Nature of External Context	At the design stage, the project was embedded in a context that was highly favourable to enabling traction and uptake of its support due to the relatively low likelihood of conflict, natural disaster, and political upheaval.	HF
D. Effectiveness: Attainment of Project Objectives & Results	Having considered the three constituting dimensions (mentioned below), which have been assessed using the available evidence (with its significant limitations), the project's overall effectiveness is deemed to be satisfactory	S
i. Delivery of outputs	The project's outputs are presumed to have been delivered successfully, based primarily on the self-reporting of progressive achievement over time by the two implementing agencies. Limited external evidence was available for triangulation (see Limits on this Evaluation). Survey data (albeit also limited) pointed to the usefulness of project support as experienced by intended beneficiaries.	S
ii. Achievement of direct outcomes	Given the positive signalling in the self-reports, limited access to underpinning project information and external triangulation, in the absence of contradicting material, the project's achievement of direct outcomes has been presumed to be satisfactory.	S
iii. Likelihood of impact	While some evidence could be found for impact drivers related to the project's impact in informing the CTCN's operation, the joint collaboration expected to catalyse finance for EST transfer and deployment was not realised, despite good intentions. The likelihood of impact was deemed to be moderately satisfactory in view of the lack of envisaged joint collaboration, which would presumably have been a pertinent accelerator	ML
E. Financial Management	Having considered the two constituting dimensions (mentioned below), which have been assessed using the available evidence (with its significant limitations), the financial management of the UNEP-led components is deemed to be satisfactory. There was no visibility regarding the ADB-led components at the time of this evaluation.	S
i. Completeness of project financial information	The UNEP-led components were implemented and executed internally, following an Accountability Framework for Directly Executed GEF Projects and following UNEP procedures and financial management guidance, which generated confidence in the completeness of financial information.	S
ii. Communication between finance and project	Ongoing communication between Finance Management and Project Management staff and problem-solving attitudes effectively supported the project	S

management staff		
F. Efficiency	While the project built on existing networks, data sources, and synergies with other initiatives, the stretching of its original 30-month duration to 6.5 years so that the implementing partners could achieve all of their outputs, substantially undercut the project's efficiency with respect to both cost and time, with both implementing parties incurring significant unstated costs in the case of this "no cost" extension.	MU
G. Monitoring and Reporting	The project's M&E approach did not adequately reflect the nature of the AP-CTNFC as a pilot trialling joint implementation, thereby strengthening silos and compartmentalisation and missing the opportunity to instil monitoring and accounting for a joint, sequenced, leveraged implementation approach	U
i. Monitoring design and budgeting	Insufficiencies in the scope, resourcing, and implementation arrangement for monitoring and evaluation had an impact on the ability of these activities to effectively support the project's performance.	U
ii. Monitoring of project implementation	The two implementing agencies monitored their respective components of the project following the structure laid out in the CEO Endorsement Request and encountered significant challenges when it came collaborating on the project's mid-term and terminal evaluations, thereby missing vital opportunities for recalibration and learning.	U
iii. Project reporting	The consolidated reporting to the donor did not reflect adequate understanding of outcomes (compared to outputs), showed institutional silos between the two implementing partners while at the same time portraying an overly optimistic picture of joint implementation, which appeared to not be questioned by any of the involved parties.	U
H. Sustainability	The project's overall sustainability is deemed as likely.	L
i. Socio-Political Sustainability	Embodying a direct response to countries' request for dedicated funds and support to facilitate technology transfer to address climate change challenges, the project's outcomes have a high level of socio-political support which bodes well for their continuation and further development.	L
ii. Financial Sustainability	ADB's demonstration of the effectiveness of linking technology and finance mechanisms to catalyse investment in ESTs through this pilot is positively indicative of the financial sustainability of the project's outcomes.	L
iii. Institutional Sustainability	The project's institutional sustainability resides in its close linkages and direct scaling up pathway to and replication by the CTCN, the structure which it was designed to inform. By the closure of the pilot project, institutions assigned the NDE role had been mostly secured although turnover of individuals undertaking NDE duties without sufficient handover weakened prospects of continuity.	L
I. Factors Affecting Project Performance		-
i. Preparation and Readiness	While the project was built on a comprehensive analysis of the problem, context, and its contribution, deficits in resourcing (of project management on the UNEP side) and the failure to establish a common management structure were aspects that undermined the project's performance.	U
ii. Quality of project management and supervision	The lack of a common management structure and limited perceptions regarding project management responsibility reduced opportunities, synergies, and collaboration. There was no visibility regarding ADB's internal project management and supervision. On the UNEP side, the	U

	turnover in its project management staff reduced the early momentum, which was not recaptured due to an ineffective handover process and weaknesses on the supervision side. The project's tripartite steering structure was completely ineffective and did not function to oversee the project's implementation and guide strategic project planning decisions.	
ii. Stakeholder Participation and Cooperation	The project identified, engaged, and leveraged existing networks, institutions, and their constituent stakeholders, which was a key aspect in building interest and participation in TA activities.	S
v. Responsiveness to Human Rights and Gender Equity	While the project's designed expressed good intentions, it appears there was a relatively slow start in bringing HR/GE considerations to the forefront, given the view that the project was about institutional strengthening, network building, and stimulating national ownership for EST identification.	MS
v. Country Ownership and Driven-ness	The project put an emphasis on stimulating and responding to national needs and assuring country ownership as a key factor for sustaining the results and benefits of the intervention	S
vi. Communication and Public Awareness	Lessons of the pilot were transferred to the CTCN; however, additional resourcing of communication could have improved the project's public outreach. With the resources that were available, the UNEP team made laudable efforts to create a page on the CTCN website and five E-newsletters were developed for public dissemination, these investments could have been even better leveraged with a communication strategy and suitable competence in place.	MS
Overall Project Rating		MS

210. The project was **highly relevant** to the Asia Pacific's regional, sub-regional, and national environmental priorities (¶90); responded to developing countries' request for dedicated funds coming from the GEF under the PSP (¶89), and reflected growing awareness of the target populations of the effects of climate change ((¶92) and the opportunity to address these challenges through the transfer and deployment of nationally appropriate mitigation and adaptation technologies. The project was aligned with ADB's Strategy 2020 (¶87); fully aligned with UNEP's mandate and contributed to its MTS and PoW (¶84); and consistent with the GEF's priorities and Climate Change focal area objectives (¶88). The project's strategic relevance was further enhanced through its deliberate efforts to build strongly on existing networks and ongoing climate technology transfer initiatives. Through its role as a 'pre-cursor' to the CTCN, the pilot project was highly pertinent in sensitizing the relevant institutions (and individuals) to the role and responsibility of the NDE at national level, thereby giving early insight into the practical operation of the envisaged mechanism (¶95).
211. While the ambition level of this intervention was relatively high, in terms of testing the collaboration and joint implementation by a UN agency and regional development bank (¶83), which was as yet, an untried structure, the **project design** did not provide the structure (¶65, ¶175), resourcing (¶129), support, spirit (¶100), and supervision (¶188, ¶189) to operationalise this innovative approach to international cooperation in this domain. While there were good intentions, which set a positive direction, the trajectory into substantive collaboration could not be achieved due to the design decision to separately manage funding streams (¶129) and allocate responsibility to the two partners to independently implement their separate parts

(¶126). Following the project's Theory of Change regarding the sequencing of activities (¶176), the notion that UNEP's provision of capacity building, technical assistance and policy advice would enhance the enabling environment for market transformation (¶176), thereby generating technology pipeline (¶57) for ADB to take forward by providing and facilitating financial investment was undercut by the design decision to implement the partners' components in parallel (¶57) and by the fact that ADB received its first fund disbursement from the GEF a full six months ahead of UNEP (¶73), giving ADB's parts of the project early and quick traction (¶201), without any linkages to the UNEP side as ADB had prepared its own pipeline of investments (¶126).

212. In terms of **effectiveness**, the project appears to have successfully delivered its programmed outputs (¶107) related to establishing and strengthening a network of national and regional centres/initiatives, policy reform, demonstrations, and catalytic financing. The project's support was experienced as useful in the eyes of its intended beneficiaries (¶110). The Asia Pacific pilot appears to have tangibly informed the operationalisation of the CTCN and supported replication (¶122). Looking at the quick submission of proposals to the CTCN by AP-CTNFC countries shortly after its formal opening (¶120), it is concluded that the pilot's operation facilitated and accelerated the region's access to services provided under the CTCN (¶115, ¶116). The **likelihood of impact** was deemed to be moderately likely in view of the lack of envisaged joint substantive collaboration, which would presumably have been a pertinent accelerator towards the project's overall objective to enhance diffusion of technologies that promote low-carbon and climate-resilient development in countries in the target region.
213. Given that this pilot was conceived to directly inform and channel results into the CTCN, which was already well-established and functioning during the implementation of the AP-CTNFC, prospects for sustaining the results and benefits of the project's results and benefits are seen as relatively promising (¶160). Its **institutional sustainability** is judged to be likely as most institutions playing the NDE role were secured and the pilot project had a direct scaling up pathway to and replication by the CTCN (¶167). Further effort to assure handover to individuals performing NDE duties would strengthen continuation of the project's outcomes. There is sufficient **socio-political support** at the highest levels across the Asia Pacific region (linked to the UNFCCC, TM, GCF, and CTCN) for assuring further development of the project's direct outcomes (¶161). ADB's demonstration of the effectiveness of linking technology and finance mechanisms to catalyse investment in ESTs is positively indicative of the **financial sustainability** of the project's outcomes (¶165).
214. Looking at this intervention through the lens of **efficiency**, it has been rated moderately unsatisfactory. The project's timeline was significantly stretched out from the original 30-month duration to finally a 6.5 year implementation which included a 'no cost extension' and a further 3-month technical completion extension to allow UNEP to complete its outputs (¶143). The project's cost- and time-efficiency were negatively affected by the change in management, insufficient handover documentation and discussion, and the corresponding time taken to decide about the project's extension (¶142). While the ADB-managed components, which were implemented as a TA cluster, were to be completed by September 2014, this was eventually extended to December 2014, then to December 2016, and ultimately to December 2018 to facilitate completion of subprojects.
215. The project's **M&E approach** did not adequately reflect the nature of the AP-CTNFC as trialling the implementation of a UN agency working together with a regional development bank to

accelerate the uptake of ESTs (¶55). Moreover, the lack of a meaningful resource allocation to underpin and give credence and direction to the collaboration represents a fundamental weakness in the project's monitoring design (¶100). Insufficiencies in the scope, budget, and implementation arrangement for M&E had an impact on the ability of these activities to support the project's performance (¶146). The compartmentalisation and silos that were evident in the project right from the start were particularly flagrant when it came to the design and conduct of the mid-term and terminal evaluations, which risks the credibility and utility of the evaluation process (¶49).

216. Several **additional factors affected the project's performance**. A readiness factor that did not get flagged and addressed at the earliest stage was the **lack of an allocation for project management for the UNEP-led components** from the GEF's source of funding (¶173). This situation affected UNEP's implementation throughout the project period, triggering substantial internal discussion and negotiation for in-kind provision of support services and attention. The fact that no resources were allocated for joint design and preparation and no attempt was made at the project's inception to establish a **common management structure** that would incline regular interaction and joint implementation (despite the fact that a PMU was to be established to consolidate UNEP and ADB efforts and create joint work plans, (¶179) was a weakness that dogged the project throughout its tenure and impeded the project from fulfilling one its main objectives (in the eyes of the GEF), which was to trial such a collaboration (¶55). Enhanced supervision from the GEF side to more strongly signal, orient, and prioritize the collaboration would have likely significantly improved this aspect (¶189).
217. While there was no visibility regarding ADB's internal **project management and supervision**, on the UNEP side, the turnover of its project management staff reduced the early momentum that had been achieved following the first and only adequately functioning PSC meeting (¶179, ¶188) and the May 2013 kick-off in Bangkok that brought together all key implementing partners and beneficiaries from across the 17 target countries (¶73). While an interim arrangement was put in place and a new Project Manager took over in August 2016, momentum was not regained due to an ineffective handover process (¶142, ¶174) and weaknesses on the supervision side (¶186).
218. It was surprising to see that the CEO Endorsement Request did not provide an allocation for **communications**, given that the its quality and effectiveness and support provided to maximise consultation, collaboration, and coherence between various stakeholders (including sharing plans, pooling resources, and promoting exchange of learning and expertise) was a particularly factor for this project's effectiveness (¶208) in light of its network building and institutional strengthening mandate. Regarding **human rights and gender considerations**: these were addressed in the project's design in the context of the intended transfer and deployment of mitigation and adaptation technologies would benefit the most vulnerable parts of society (¶193). However, the project appeared to have a slow start in operationalising the planned notions (¶196) with the result that this pilot did not manage to showcase the power of prioritizing such considerations in the technology transfer/deployment space.
219. The project's efforts to build **country ownership and driven-ness** are recognized. The organisation of TA, resulting technical studies/assessments, and sharing of the related knowledge through dissemination workshops were aimed at ensuring that relevant institutional stakeholders internalized the material and felt a sense of ownership. Despite the lack of proactivity on the part of the countries, the UNEP team's efforts to nonetheless still try to

stimulate and respond to national needs was aimed at facilitating country ownership. However, the observed high level of turnover within the NDE institutions and other stakeholders that participated in various capacity-building activities risks a deterioration in country driven-ness, without further intervention.

The key strategic questions outlined in the Evaluation ToR are briefly answered as follows:

a) What were the key strengths and weaknesses of the project in regards promoting climate technology transfer in the Asia-Pacific Region?

220. The project's key strengths lie in its theoretical foundations: the concept and its implementation design. Its concept addressed clear needs arising out of the Cancun Agreements and provisioning in the PSP (¶27) and it was illustrative of an aligned response to the Bali Strategic Plan's call to action (¶83). The combination of a UN agency working together with a regional development bank to promote innovation and catalyse finance on a continuum (¶55) was a precursor to the understanding that development should be done in partnership. In this light, the design of the AP-CTNFC could be considered as having significant foresight vis-à-vis the intention of SDG 17. Another strength relates to the strategic decision to build directly on the focal points established by existing networks (¶61), using this to consolidate the NDE structure that was to feed the CTCN platform (¶138).

221. The project's key weaknesses are found in the lack of preparedness of the donor and the implementing partners to resource, structure, support, and enforce an arrangement to operationalise the implementation design (¶211). Insufficient coordination between the implementing partners and structures put in place [e.g. the donor's design decision to separately manage funding streams (¶129) and allocate responsibility to the two partners to independently implement their separate parts (¶126)], meant that the co-implementing agencies ended up following their own paths, irrespective of the donor's expressed wish (¶126). Incentives were not put in place nor was there enforcement to ensure joint substantive collaboration. In this multipartite governance setting, it was still necessary to have a single overarching decision-making entity. While foreseen in the Project Document, a PMU was not established to consolidate UNEP and ADB efforts and create joint work plans (¶179). This weakness dogged the project throughout its tenure and impeded the fulfilment of one its main objectives (in the eyes of the GEF), which was to trial such the innovative approach and unique collaboration (¶55). The formal governance structure (PSC) did not function adequately (¶188).

b) To what extent did the pilot projects support the scaling-up of the piloted approaches? To what extent did the project use the experiences from these pilots to promote the successful approaches?

222. Within the span of the AP-CTNFC's duration, the pilot projects did not lead to replication and scaling up. Through its TA, the project supported mitigation technologies that were aligned with NAMAs of the countries pursuant to the Cancun Agreements. The resulting concepts and studies were designed to create the building blocks for subsequently developing strategies, projects, and programs. In terms of promoting successful approaches, the project used the experience from the pilot projects to create material to share with other countries. While the project had a long-term objective to enhance the diffusion of technologies that promote low-carbon and climate-resilient development (¶54), the project support is better understood as having been designed to enhance capacities and the enabling environment (¶55) rather than actively scaling up piloted approaches. Furthermore, it is important to recall that the objective of the AP-CTNFC as a pilot project was to demonstrate proof of concept (¶122). In this light the

project has been judged successful with respect to informing the operationalisation of the CTCN. It is therefore more appropriate to position the pilot projects as having been successful in raising awareness and capacity of national technology focal points to respond to the CTCN's call for TA services (¶123).

c) How did the project implementation delays and subsequent extensions influence the project's relevance and results? What were the costs born to UN Environment due to these extensions? Which management actions were taken to assess and address the delays in project implementation?

223. The very first delay observed in the project's implementation relates to the delay in the first disbursement of funds to UNEP, which trailed the disbursement of funds to ADB by a full six months (¶73) and triggered concomitant delays in generating substantive results on which the co-implementer could have had an opportunity to build. Given that the components under UNEP's responsibility were to feed into ADB's work (¶176), the results eventually generated by UNEP presumably lost significant relevance in the eyes of its co-implementer. Implementation delays linked with the departure of an initial Project Manager in June 2015 had cascading impacts (¶183), together with the delays in contracting work and making expenditures link to the change from IMIS to UMOJA. The resulting gap until a new candidate could be put in place in August 2016 meant that no decisions were being taken during an 18-month period, there was a significant loss of momentum, and there was a downgrading of achievement of several outputs during the subsequent 'stock-taking' exercise (¶141). A pertinent indicator of the project's relevance to end beneficiaries, given its long period of implementation and periods of silence, is that those who were interviewed or surveyed in 2020 had tremendous difficulty to recall the accrued benefits of their participation (¶43).

224. As UNEP covered costs related to project management, financial management, and supervision as in-kind contributions (¶173), these costs were additional for the agency for the period of extension. It was not feasible for the Evaluator to quantify this additional cost as in-kind contributions of administrative services were not calculated and added to the budget at the outset, and the project's final financial report was not available at the time of the TE Report's preparation (¶134). While the project was supposed to finish in 2016 with a 30-month span, it finally wrapped up in March 2019 with a 6.5-year duration. Rather than stopping the project, management's assessment was that its prolongation would provide the opportunity to spend the available funds. This attitude over-rode considerations regarding both efficiency and effectiveness (¶143).

d) Which challenges and opportunities did the internal execution modality at UN Environment bring to the project?

225. While most UNEP projects are executed externally, the AP-CTCNF was an exception with its internal execution (¶72). The Accountability Framework for Directly Executed GEF Projects used in this situation to segregate duties and establish clear lines of accountability within the institution between its Implementing Agency and Executing Agency functions effectively avoided conflicts of interest and maintained accountability to the GEF for the timely delivery and cost-effectiveness of programmed outputs and envisaged outcomes (¶130). However, this firewall, combined with a fairly hands-off approach that was adopted to supervision, appears to have inadvertently weakened the agency's exercise of its supervisory role in the case of this project (¶186).

e) To what extent were the UN Environment and Asian Development Bank project components executed in close collaboration, fully exploiting synergies of the interventions? How could they have improved on these joint implementation modalities for greater impact and cross organizational and country learning?

226. The UNEP and ADB project components were not executed in close collaboration. The project design whereby UNEP’s TA was to generate awareness of and demand for ESTs and ADB’s work was to facilitate EST deployment through access to funding (¶176) was not respected. Joint implementation modalities could have been improved by avoiding a situation of independently management funding streams (¶176), allowing for the sequencing of activities according to the project design rather than giving directives to work in parallel (¶57); avoiding the ring-fencing of components (¶177); providing resourcing for a genuine joint project design and ongoing collaboration (¶129); establishing the envisaged PMU (¶179) as a common management structure to orient, motivate, and enforce regular interaction and joint implementation (¶175); and ensuring a functioning multipartite over-arching governance structure (¶188).

K. Lessons Learned and Recommendations

227. In the spirit of promoting organisational learning, key lessons have been distilled from the project’s experience which are seen to be relevant for future programme formulation and implementation by UNEP, ADB, GEF and other main project partners.

Lesson Learned #1:	Substantive joint work needs to be backed up by strong signalling, orientation, and prioritization, supported by relevant management and supervisory structures, together with incentives and enforcement.
Context/comment:	<p>The project’s design did not contain the requisite elements to operationalise the intended innovative approach to international cooperation in the technology transfer/deployment space (¶209). The AP-CTNFC was related to an interest in trialling an innovative structure (¶83) where collaboration between the two implementing agencies was expected to facilitate and accelerate uptake of ESTs (¶125) and provide an opportunity to test out the GEF’s idea to promote innovation and catalyze finance on a continuum (¶55, ¶126). Both implementing parties expressed goodwill (¶125) and reported regular communication and coordination (¶155) to the donor who was interested in gauging the power of such a collaboration¶. However, in the absence of the envisaged PMU (¶179), which would have functioned as a common management structure to orient, motivate, and enforce regular interaction and joint implementation (¶175), good intentions were not translated into substantive joint work plans.</p> <p>In fact, the implementing partners and donor established structures that explicitly worked against and undercut the envisaged collaboration, and by extension, limited the partners’ view of potential synergies. These structural barriers included: ring-fencing of components (¶176); independently managed funding streams (¶176); the directive to work in parallel (¶57) rather than sequenced activities that would build technology pipeline according to the project’s TOC</p>

	<p>(¶175); staggered funds disbursement (¶73), with funds released to ADB (the actor expected to take forward the demand for EST financing/deployment) a full six months ahead of UNEP (the actor expected to generate the country-driven demand for ESTs).</p> <p>The project was also let down by its supervisory structure which did not function effectively following its first tripartite gathering in 2012 (¶188). Consequently, over the course of its 6.5 years of operation, the very governance mechanism that was intended to oversee the project’s implementation and guide strategic planning decisions was not available to shape, guide, signal, orient, prioritize, or enforce the envisaged joint collaboration (¶189).</p>
Lesson Learned #2:	<p>In a jointly-implemented project, it is incumbent on the key partners at the outset to discuss assumptions, clarify positions, align, and channel collective efforts to assure the project’s envisaged performance.</p>
Context/comment:	<p>The ‘forced marriage’ between the two implementing partners was not challenged by the implementing partners themselves even though it was clear from the start that it would be difficult to link their activities (¶178). From the outset, there was an assumption that the collaboration between the partners would carry on in a positive manner because a single proposal for CEO endorsement was compiled in what was perceived to be a relatively short time (¶52) and a position was taken that it was up to the implementing partners themselves to discuss, coordinate, and collaborate (¶178). While communication and coordination were reported annually, this rather positive portrayal was not questioned (¶155) even though no joint work plans were evident.</p> <p>In the wake of perceptions of competition and resistance related to UNEP being selected as host, the documentation of the AP-CTNFC’s contributions to the CTCN were reportedly muted (¶182) and there were lingering doubts about the extent of institutional support for the pilot on the part of the donor.</p>
Lesson Learned #3:	<p>In a jointly implemented endeavour, the absence of independent joint evaluation conducted mid-way and at project closure missed vital opportunities to identify synergies, realign, and together build sustainability for the results and benefits of the intervention.</p>
Context/comment:	<p>The compartmentalisation and silos built into the project right from the start (¶215) were particularly evident when it came to the design and conduct of the mid-term and terminal evaluations. At the mid-way point, ADB conducted an evaluation but only on the components that it was managing (¶152). While planned and budgeted, no such exercise was conducted on the UNEP side due to administrative hiccups related to the migration from IMIS to UMOJA (¶131). This missed a valuable opportunity for reflection, identification of opportunities for joint substantive work, and recalibration.</p>

	<p>This would have been a timely moment to explore the project’s originally intended notion of sequencing the work so that UNEP’s capacity building, technical assistance and policy advance outputs could build technology pipeline for ADB to take forward by providing and facilitating financing (¶209). The pertinence of this approach in accelerating outcomes in support of the project’s overall objective to enhance diffusion of technologies that promote low-carbon and climate-resilient development in countries in the target region could have been more effectively pursued (¶212) Testing out these hypotheses would have enabled this project to gauge the probability of its direct outcomes being maintained and developed after the close of the project, heightening the its prospects of sustainability (¶160).</p>
<p>Lesson Learned #4:</p>	<p>Broadly-based regional projects, which by their nature and resourcing opt for breadth over depth, run the risk of designing and delivering activities at an overly superficial level, responding to the need for inclusiveness across countries, risking missing the indepth assessment and demonstration value from focussing on a few, key priority areas.</p>
<p>Context/comment:</p>	<p>In designing its capacity building and institutional strengthening, the project opted to bring together NDEs and other institutional actors from across 17 countries in various Asia Pacific locations for relatively short periods (2-3 days) for knowledge exchange and dissemination activities (¶140). While this approach was consistent with the AP-CTNFC’s character as a regional programme, resources were stretched thin (¶140) to cover so many geographies, activities remained at a fairly superficial level, and due to the high level of turnover of many of those who participated, the networks that they were expected to populate and strengthen did not meaningfully materialise (¶219).</p> <p>While the project succeeded in undertaking 15 interventions with the aim of creating the needed groundwork to bring a technology in a country (¶204), indepth assessment over a longer period of time in a few key priority areas may have had a higher chance of catalysing the transfer and deployment of the envisaged ESTs.</p>

228. Based on the TE’s conclusions and lessons learned, some recommendations are offered with the aim of sustaining the project’s results and reaching impact.

<p>Recommendation #1:</p>	<p>Monitor and report in a more granular, cumulative (rather than incremental) manner, with specific details that relate activities and outputs and achievements directly to the metrics, targets, and indicators mentioned in the project’s results framework; ensure that the narrative in monitoring reports displays evidence and comprehension of the ways in which the programmed outputs are driving the envisaged outcomes.</p>
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Context/comment:	While the AP-CTNFC had a well-elaborated results framework that outlined 10 outcomes, each underpinned by outputs and their constituent activities, with the formulation of SMART indicators and targets, the project’s monitoring and reporting was at an insufficiently granular level to be able to gauge achievement and identify when there might be a need to recalibrate or to seize emergent opportunities, as the project moved along in its implementation (¶146). Although the (PIR) reporting format is adequate, the way in which this template was used for reporting resembled more of like a listing of activities and outputs than a reflection on the status of the project’s performance and the ways in which the planned outputs are integrally generating the anticipated outcomes.
Priority Level:	Important Recommendation
Responsibility:	UNEP and ADB project managers and supervisors
Proposed implementation time-frame:	Immediately transfer this recommendation to the implementing partners for application to ongoing and future project formulation and implementation
Recommendation #2:	In view of the high level of turnover observed in project contexts, implementing partners should strengthen knowledge management processes and proactively prepare for handover during implementation.
Context/comment:	This project had a high level of staff turnover in the project management role (¶182), which is not necessarily uncommon as individuals pursue their own career development and the fact that projects are regularly extended, and staff move on to other opportunities. Given this reality, it is imperative to develop (and enforce) a handover process and documentation (¶217) to enable subsequent project management to quickly get up to speed. The AP-CTNFC was never able to regain its initial momentum on the UNEP side, following the departure of its first Project Manager, primarily because of the absence of adequate handover and documentation.
Priority Level ³¹:	Opportunity for Improvement
Responsibility:	UNEP and ADB project designers and project managers

³¹ Select priority level from the three categories below:

Critical recommendation: address significant and/or pervasive deficiencies in governance, risk management or internal control processes, such that reasonable assurance cannot be provided regarding the achievement of programme objectives.

Important recommendation: address reportable deficiencies or weaknesses in governance, risk management or internal control processes, such that reasonable assurance might be at risk regarding the achievement of programme objectives. Important recommendations are followed up on an annual basis.

Opportunity for improvement: comprise suggestions that do not meet the criteria of either critical or important recommendations, and are only followed up as appropriate during subsequent oversight activities.

Proposed implementation time-frame:	Immediately transfer this recommendation to the implementing partners for application to ongoing and future project formulation and implementation
Recommendation #3:	During implementation and at project closure, non-resident agencies should make linkages with UN resident agencies which can contribute to sustaining a project’s results and benefits through the UN Delivering as One concept.
Context/comment:	The AP-CTNFC project covered 17 countries of the Asia Pacific region. During the evaluation field visit to Bhutan, the Evaluator had the opportunity to meet with the UN resident coordinator (represented by UNDP in this instance) who was not at all informed about the operation of this project and indicated that there were opportunities for more effective anchoring in the country with their support. If the experience in Bhutan is indicative of other countries in the region, there is a great opportunity for non-resident agencies, like UNEP, to make linkages with the UN infrastructure in countries to identify synergies, better sustain the results of interventions, and demonstrate on the ground the notion of delivering as one organisation.
Priority Level:	Opportunity for Improvement
Responsibility:	UNEP and ADB Project Managers
Proposed implementation time-frame:	Immediately transfer this recommendation to the implementing partners for application to ongoing and future project formulation and implementation

6. Annexes

Annex 1 – Terms of Reference of this Evaluation

Terminal Evaluation of the UN Environment-Asian Development Bank/Global Environment Facility project “Pilot Asia-Pacific Climate Technology Network and Finance Center³²”

Section 1: PROJECT BACKGROUND AND OVERVIEW

1. Project General Information

Table 1. Project summary

GEF Project ID:	4512		
Implementing Agency:	ADB; UN Environment	Executing Agency:	UN Environment: Internally executed by the Economy Division
Sub-programme:	Climate Change	Expected Accomplishment(s):	EA (b) Low carbon and clean energy sources and technology alternatives are increasingly adopted, inefficient technologies are phased out and economic growth, pollution and greenhouse gas emissions are decoupled by countries based on technical and economic assessments, cooperation, policy advice, legislative support and catalytic financing mechanisms
UN Environment approval date: ADB approval date:	18 Sep 2012 29 Aug 2011	Programme of Work Output(s):	1b3: Knowledge networks and United Nations partnerships to inform and support key stakeholders in the reform of policies, economic incentives and the implementation of programmes for renewable energy, energy efficiency and reduced greenhouse-gas emissions are established, supported and used to replicate successful approaches. (Target: three regional networks)
GEF CEO endorsement date:	31 May 2012	Project type:	FSP
GEF Operational Programme #:		Focal Area(s):	Climate Change
		GEF Strategic Priority:	
Expected start date:	1 June 2012	Actual start date:	UN Environment: 18 Sep 2012 ADB: 15 June 2012

³² ADB adopted the project title “Establishing a pilot center to facilitate climate technology investments in Asia and the Pacific.”

GEF Project ID:	4512		
Planned completion date:	Feb 2015	Actual completion date:	May 2019
Planned project budget at approval:	\$ 85,182,091	Actual total expenditures reported as of [June 2019]:	UN Environment- GEF: US\$3,179,421 Co-finance: US\$4,440,000 ADB-GEF: 5,985,624 + 1,502,884
GEF grant allocation:	UN Environment: \$3,250,000 ADB: \$7,359,091	GEF grant expenditures reported as of [28.5.2019]:	UN Environment: US\$3,179,421
Project Preparation Grant - GEF financing:	0	Project Preparation Grant - co-financing:	0
Expected Full-Size Project co-financing:	US\$ 74,372,000	Secured Full-Size Project co-financing:	US\$4,440,000
First disbursement:	UN Environment: 12 March 2013 ADB: 22 Aug 2012	Date of financial closure:	
No. of revisions:	6	Date of last revision:	29 May 2018
No. of Steering Committee meetings:	3	Date of last/next Steering Committee meeting:	Last: 28 August 2015 Next:
Mid-term Review/Evaluation (planned date):	March 2016	Mid-term Review/Evaluation (actual date):	Not conducted
Terminal Evaluation (planned date):		Terminal Evaluation (actual date):	2019
Coverage - Country(ies):	UN Environment: Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Thailand, Vietnam, Kazakhstan, Tajikistan, Uzbekistan, Mongolia, Sri Lanka, Nepal, Bangladesh, and Bhutan	Coverage - Region(s):	Asia-Pacific
Dates of previous project phases:	N/A	Status of future project phases:	N/A

2. Project rationale

1. The Asia-Pacific region is home to 60% of the world's population. The region's economic and demographic growth is driving a fast growth in energy demand. Consequently, the region's greenhouse gas emission levels are rising and increasingly contributing to global climate change to the extent that the region is now the largest overall greenhouse gas emitter in the world, led by China, India, Japan, Republic of Korea and Australia. The region has also a large number of developing countries and islands, which both are vulnerable to climate change. Asia-Pacific countries will face adverse effects of climate change, including variability of seasonal precipitation, droughts and floods, and with a majority of its population living in or near coastal areas, rising sea levels and storms will pose serious challenges for adaptation. In Asia-Pacific, and more specifically for East Asia, sustaining economic growth without compromising the environment is the greatest challenge facing the region over the next two decades. Therefore, supporting countries in the Asia-Pacific region in their efforts to reduce greenhouse gas emissions and enhancing their resilience to the effects of climate change is a priority for the international community and critical for ensuring sustainable development in the region.

2. Technology development and transfer have an important role in addressing the challenges posed by climate change; technological innovation is required both to mitigate climate change and to adapt to its effects. Without technological innovation, the transition to low carbon and climate resilient development will not be possible. Both financial and technical assistance is needed to ensure the development of new technologies. Despite the rapid growth in the Asia-Pacific region, many countries cannot afford the more advanced technologies, and technology transfer is often limited due to inappropriate conditionalities and prohibitive prices. Therefore, international cooperation is critical. While developing countries in the Asia-Pacific region are taking steps to follow low-carbon and climate-resilient development pathways, they are requesting international financing and technical support to identify, prioritize and deploy innovative technologies.

3. In the UNFCCC COP 16, the Parties to the Convention agreed on the establishment of the Technology Mechanism (TM), which aims to enhance action and cooperation for technology development and transfer, particularly to developing countries, in support of climate change mitigation and adaptation. To facilitate the implementation of the Technology Mechanism, two components were established; the Technology Executive Committee (TEC) and the Climate Technology Center and Network (CTCN). The CTCN was to facilitate a network of national, regional, sectoral and international technology networks, organizations and initiatives.

4. The "Pilot Asia-Pacific Climate Technology Network and Finance Centre" project, or "Establishing a pilot center to facilitate climate technology investments in Asia and the Pacific" as ADB titled the project, was designed to contribute to the design of the operational procedures of the Technology Mechanism, and more specifically the CTCN by testing a regional CTCN approach for the Asia-Pacific region. The project, jointly implemented by UN Environment and the ADB, aimed at supporting the development of low carbon and climate resilient societies in Asia and the Pacific by providing technical assistance and facilitating investments to the public and private sector with a view to fostering climate technology transfer. The UN Environment-led components of this project were built on the experience, lessons and activities of the GEF funded Technology Needs Assessment (TNA) project and the UN Environment-led climate change networks in the

region. The ADB managed components were to be strongly linked with two key initiatives established by the ADB to support an up-scaling of investments in low-carbon and climate-resilient technologies in Asia and the Pacific. The project was to pilot a regional approach to facilitate the deployment of climate technologies, via technical support provided to Asia-Pacific countries in order to help them reach enabling conditions that would prepare the market to accommodate development of environmentally sound technologies in the region.

5. The project stakeholders, as identified in the project document, included international organizations, networks and research centres, regional associations that have the potential to reach out to policy and decision makers, technology and policy strategy centers, private sector, and different actors at national level, including government institutions.

3. Project objectives and components

6. The main goals of the project, as described in the project document were; i) facilitate deployment of climate technologies; ii) assist developing countries of Asia-Pacific in addressing challenges to make transition towards low carbon and climate change economies; iii) assist the reshape of appropriate policies and measures for climate change mitigation and adaptation; iv) build a market place for climate technologies by catalyzing public and private investment for these technologies; and v) provide technical assistance, policy advice and expertise. The ultimate goal of the project was to reduce greenhouse gas emissions by assisting Asia-Pacific countries in their transition to a low carbon development path and reduce their vulnerability to climate change by improving climate resilience knowledge and skills in the region.
7. The CEO Endorsement Request – document also presents a project objective “*Diffusion of technologies that promote low-carbon and climate-resilient development enhanced*”. The project was expected to make significant contributions to climate change mitigation. The project was to generate associated global environmental benefits through greenhouse gas reductions, which are expected to include approximately 12.5 million tCO₂^e in greenhouse gas reductions directly attributable to project investments, assuming greenhouse gas benefits over a 10-year project lifetime. Energy savings projected were 1.5 million barrels of oil and 12.3 million MWh of electricity over 10 years. This translates to less than US\$ 1.2 per ton of direct CO₂^e reductions for the GEF financing.
8. The project had six components, combining a global approach with three country readiness building components managed by UN Environment and three investment facilitation components implemented by ADB (Table 2).

Table 2. Project components (Source: CEO Endorsement Request document)

Component	Responsible party	GEF Grant allocation (US\$)
1. Facilitating a network of national and regional technology centers, networks, organizations and initiatives	UN Environment	1,000,000
2. Building / strengthening national and regional technology transfer centers and centers of excellence	UN Environment	1,000,000
3. Design, development and implementation of country-driven environmentally sound technologies	UN Environment	1,250,000

Component	Responsible party	GEF Grant allocation (US\$)
(EST) transfer policies, programs, demonstration projects, and scale up strategies		
4. Integrating climate change technology financing needs into national development strategies, plans and investment priorities	Asian Development Bank	1,059,091
5. Catalyzing investments in environmentally sound technologies deployment	Asian Development Bank	3,900,000
6. Establishing a pilot “marketplace” of owners and users of low-carbon technologies to facilitate their transfer	Asian Development Bank	2,400,000

9. The following demonstration/ pilot projects were planned under Component 3; i) Domestic efficient lighting programme in Viet Nam; ii) District heating systems in Mongolia; iii) Renewable energy Maldives; iv) Electric Vehicles; v) Cambodia national LED dissemination programme; vi) Laos energy-efficient appliances; vii) Philippines energy-efficient buildings and rooftop solar; and viii) Energy-efficient appliances financing.

10. The results framework presented in the UN Environment project document only includes outcome-level results. However, a table titled ‘costed M&E plan’ included a ‘results framework’ that also identified output-level results (with indicators, baselines, targets and means of verification) but only for the outcomes 1-4, thus only the outcomes UN Environment was responsible for delivering. The CEO Endorsement Request includes a results table presenting the results for all 6 project components. Table 3 below presents the results as presented in the CEO Endorsement Request document.

Table 3. Project outcomes and outputs (*Source: CEO Endorsement Request document*)

Project Objective: Diffusion of technologies that promote low-carbon and climate-resilient development enhanced		
Components	Outcomes	Outputs
1. Facilitating a network of national and regional technology centers, networks, organizations and initiatives	Outcome 1: Increased collaboration in the region for transfer of climate technologies between thematic or sector/technology specific centers and institutions	Output 1.1: Collaboration is strengthened between key stakeholders at national level Output 1.2: Regional and thematic expert groups are established to provide guidance and support to private and public actors for climate technology transfer Output 1.3: Public-private partnership on climate technologies are promoted and supported Output 1.4: North-South cooperation is promoted and South-South cooperation supported for sharing know-how, knowledge and good practices
2. Building / strengthening national and regional technology transfer centers and centers of excellence	Outcome 2: Thematic and technology specific institutions and centers are strengthened (and/or created)	Output 2.1: Appropriate institutions and centres for supporting climate technology transfer are identified Output 2.2: The establishment of specialized national climate technology transfer institutions is supported Output 2.3: The capacities of climate technology institutions and professionals are strengthened Output 2.4: Tech-entrepreneurship development and green productivity is promoted
3. Design, development and implementation of country-driven environmentally sound technologies (EST) transfer policies, programs, demonstration projects, and scale up strategies	Outcome 3: Support and opportunities for national, regional and global investments in ESTs are explored	Output 3.1: The design, development and implementation of country-driven EST transfer programs, demonstration projects, and scale-up strategies is supported
	Outcome 4: Enabling policy environment and mechanisms created for transfer of climate technologies	Output 4.1: The design and establishment of country-tailored pro-climate policies supporting climate technology transfer is supported Output 4.2: The design and establishment of national and regional standards and regulations for identified priority climate technologies is supported Output 4.3: The design and establishment of cost-effective mechanisms adapted to individual country conditions for leveraging increased public and private investment in climate technologies is supported

		Output 4.4: The design and establishment of NAMA/NAPA-linked subsidies and other financial incentives aimed at reducing EST project development/transaction costs is supported
4. Integrating climate technology financing needs into national development strategies, plans and investment priorities	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	Output 5.1: Organization of a series of workshops that will facilitate knowledge sharing among national climate change institutions in ADB’s DMCs Output 5.2: Development of knowledge products on the issues of climate change financing and best practices of climate-friendly technology in Asia and the Pacific
	Outcome 6: Climate change technology transfer and deployment considerations integrated into CPSs and/or COBPs, national and/or subnational investment plans	Output 6.1: National and/or sub-national development strategies, investment plans and policies which promote investments in climate technology and technology transfer
5. Catalyzing investments in environmentally sound technologies deployment	Outcome 7: Increased investments in projects using climate technologies in DMCs	Output 7.1: Assistance provided to potential climate technology investment projects (such as alternative technology assessments etc.)
	Outcome 8: Increased investments by selected Venture Capital funds in technologies that address climate technology products	Output 8.1: Identification of technology opportunities across sectors Output 8.2: Identification of candidate start up firms Output 8.3: Technology assessments of proposals from fund managers Output 8.4: Monitoring report on technology aspects of investments made by fund managers
6. Establishing a pilot “marketplace” of owners and users of low-carbon technologies to facilitate their transfer	Outcome 9: Successful demonstration of assisted broker model for transfer of LCTs	Output 9.1: The transfer high-impact LCTs in a period of 24 months Output 9.2: The necessary operational documentation for a full-fledged business based on the assisted broker model
	Outcome 10: Project managed on time and within budget	Output 10.1: Work plans Output 10.2: Reporting

4. Executing Arrangements

11. The project was jointly implemented by UN Environment and the Asian Development Bank (ADB), with ADB being the lead agency (Figure 1). UN Environment was responsible for implementing and managing a technical assistance component focusing on capacity readiness and enabling conditions for climate technology transfer and deployment. The ADB was responsible for providing support for the mobilization of public and private financial resources to foster ESTs markets in the region. According to the CEO Endorsement Request document, the UN Environment and ADB components were to be implemented independently, but the two Agencies were to work closely together to fully exploit synergies of their project interventions. The ADB was to establish a Climate Technology Finance Center in Manila, and UN Environment was to establish a Climate Technology Network Secretariat in Bangkok. The overall coordinator of the Climate Technology Secretariat was to be the Head of the Technology Transfer Unit at the Energy Branch of the UN Environment Economy Division.
12. ADB was to be the lead agency for reporting to and managing communications with GEF. Both Agencies were to be responsible for administering and reporting on the use of the GEF grant resources allocated to their respective components.
13. The two agencies were to establish a Project Management Unit, jointly led by the coordinator of the Climate Technology Network and the Coordinator of the Climate Technology Finance Center. This joint ADB-UN Environment PMU was to include the project staff from the Climate Technology Finance Center in Manila, the Climate Technology Network Secretariat in Bangkok, and the UN Environment Economy Division.
14. The project was to have a Steering Committee (SC) with members from the GEF Secretariat, ADB and UN Environment. ADB was to act as the Steering Committee Chair. The Steering Committee was to meet face-to-face at least once a year and to decide on key operational matters such as work plans and resource allocation priorities.
15. Separate Advisory Committees were to be established as needed to oversee and advise on the implementation of project components.
16. The CEO Endorsement Request identified the executing partners as “national governments and other public institutions, private sector, regional and national thematic or sector/technology specific centers or research institutions and academia.”
17. For the UN Environment managed components, the Regional Office for Asia-Pacific was to act as the Implementing Agency and the Economy Division as the Executing Agency. Thus, the UN Environment component was internally executed. For the ADB managed components, the project was implemented by Sector Advisory Services Cluster – Energy Sector Group, Sustainable Development and Climate Change Department.

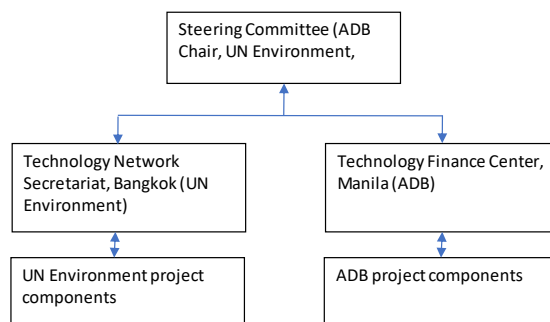


Figure 1. Project management structure

5. Project Cost and Financing

18. The total GEF Grant for the project was US\$ 10,609,091, with US\$ 8,790,909 from the GEF Trust Fund and US\$ 1,818,182 from the GEF Special Climate Change Fund (SCCF). From this, US\$ 3,250,000 was allocated for UN Environment from the GEF Trust Fund and US\$ 7,359,091 for ADB (US\$ 6,090,909 from the GEF Trust Fund and US\$ 1,568,182 from the GEF SCCF). The total project costs at design were US\$ 10,909,091, including US\$ 300,000 of project management costs. The total pledged co-financing at the time of the CEO Endorsement Request submission was US\$ 74,372,000, including both cash and in-kind contributions (Table 4). From the UN Environment side, the total GEF grant expenditure as per May 2019 was US\$ 3,179,421. From the ADB side, the GEF grant expenditure in July 2019 was US\$ 5,985,624 + SCCF disbursement 1,502,884.

Table 4. Sources of confirmed co-financing for the project (*source: CEO endorsement request*)

Source of Co-financing	Name of Co-financier	Type of Co-financing	Co-financing Amount (\$)
Bilateral Aid Agency (ies)	Government of Finland (UNEP)	Grant	2,640,000
Bilateral Aid Agency (ies)	Government of Denmark (UNEP)	Grant	1,000,000
Bilateral Aid Agency (ies)	Government of Korea (UNEP)	Grant	840,000
GEF Agency	UNEP	In-kind	1,000,000
GEF Agency	AsDB Equity Investment (AsDB)		60,000,000
GEF Agency	AsDB Climate Change Fund (AsDB)	Grant	2,850,000
GEF Agency	AsDB TA Special Fund (AsDB)	Grant	842,000
GEF Agency	Asian Clean Energy Fund under the Clean Energy Financing Partnership Facility – Government of Japan (AsDB)	Grant	5,000,000

GEF Agency	VITO-Flemish Institute for Technological Research (AsDB)	Grant	200,000
Total Co-Financing			74,372,000

6. Implementation Issues

19. The project implementation was delayed from the original expected completion date of February 2015 to December 2018. The project was revised six times; August 2013, April 2014, September 2014, March 2015, January 2017, and May 2018. The ADB commissioned a Mid-Term Review, which provided an assessment of the ADB-led project components. The first GEF grant disbursement was in March 2013 for UN Environment and August 2012 for ADB. The first Project Implementation Review (PIR) report was prepared for July 2013-June 2014. The PIR for 2016 provides a brief explanation of the initial delays in project implementation, including “late start in initiating activities at the beginning of the project and administrative slowdowns due to the shift to UMOJA starting in June 2015”. The Outcome 10 “project managed on time and within budget” is rated by the project team as “Satisfactory” in the 1st PIR, and ‘Highly Satisfactory’ in the following PIRs (not rated in the 2018 PIR) despite the delays and six project extensions. The Project Implementation Review (PIR) report for July 2017-June 2018 provides a self-rating of ‘Satisfactory’ for the overall implementation progress, and a “Modest” rating for the overall risk.
20. Some changes to project design were noted at the time of development of these ToR. The UN Environment Project Document listed a number of countries where the project was to be implemented in (Southeast Asia (Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam), Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan and Turkmenistan) and additional TNA countries in the region (Mongolia, Sri Lanka, Nepal and Bhutan). The actual countries where the project was implemented were Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Thailand, Vietnam, Kazakhstan, Tajikistan, Uzbekistan, Mongolia, Sri Lanka, Nepal, Bangladesh, and Bhutan.
21. Similarly, there was a difference between the planned and actual partners of the project. The partners listed in the project document included WRI, IGES, UNDP, UNIDO, UNFCCC, IEA, selected actors on Venture Capital Funds; market place operators, technology buyers/sellers, both public and private project developers, and technology centers/ institutes. The actual implementing and cooperation partners included WRI, IGES, UNDP, UNIDO, UNFCCC, IEA, selected actors on Venture Capital Funds; market place operators, technology buyers/sellers, both public and private project developers, and technology centers/ institutes.

Section 2. OBJECTIVE AND SCOPE OF THE EVALUATION

7. Key Evaluation principles

22. Evaluation findings and judgements should be based on **sound evidence and analysis**, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from

different sources) as far as possible, and when verification is not possible, the single source will be mentioned (whilst anonymity is still protected). Analysis leading to evaluative judgements should always be clearly spelled out.

23. **The “Why?” Question.** As this is a terminal evaluation, particular attention should be given to learning from the experience. Therefore, the “Why?” question should be at the front of the consultants’ minds all through the evaluation exercise and is supported by the use of a theory of change approach. This means that the consultants need to go beyond the assessment of “what” the project performance was, and make a serious effort to provide a deeper understanding of “why” the performance was as it was. This should provide the basis for the lessons that can be drawn from the project.
24. **Baselines and counterfactuals.** In attempting to attribute any outcomes and impacts to the project intervention, the evaluators should consider the difference between *what has happened with, and what would have happened without, the project*. This implies that there should be consideration of the baseline conditions, trends and counterfactuals in relation to the intended project outcomes and impacts. It also means that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project. Sometimes, adequate information on baseline conditions, trends or counterfactuals is lacking. In such cases this should be clearly highlighted by the evaluators, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.
25. **Communicating evaluation results.** A key aim of the evaluation is to encourage reflection and learning by UN Environment staff and key project stakeholders. The consultant should consider how reflection and learning can be promoted, both through the evaluation process and in the communication of evaluation findings and key lessons. Clear and concise writing is required on all evaluation deliverables. Draft and final versions of the main evaluation report will be shared with key stakeholders by the Evaluation Manager. There may, however, be several intended audiences, each with different interests and needs regarding the report. The Evaluation Manager will plan with the consultant(s) which audiences to target and the easiest and clearest way to communicate the key evaluation findings and lessons to them. This may include some or all of the following; a webinar, conference calls with relevant stakeholders, the preparation of an evaluation brief or interactive presentation.

8. Objective of the Evaluation

26. This Terminal Evaluation will assess the project components managed by UN Environment, and will make use of findings of a terminal review (under preparation) of the ADB managed components to produce a single, coherent Terminal Evaluation report of the intervention as a whole.
27. In line with the UN Environment Evaluation Policy³³ and the UN Environment Programme Manual³⁴, the Terminal Evaluation (TE) is undertaken at completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine

³³ <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

³⁴ http://www.unep.org/QAS/Documents/UNEP_Programme_Manual_May_2013.pdf . *This manual is under revision.*

outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UN Environment and main project partners. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation.

9. Special Considerations

28. As described above, the consultant(s) will deliver a terminal evaluation report of the Asia-Pacific CTNFC project following the evaluation criteria outlined in this ToR. The consultants will make use of findings of a Terminal Review report of the ADB managed components, particularly in terms of Relevance, Effectiveness, Impact, Global Environmental Benefits and Catalytic Role, Sustainability, Monitoring and Evaluation and Institutional Arrangements. In addition, the consultants will conduct data collection and analysis to assess the project components managed by UN Environment and collect evidence across all evaluation criteria, to allow for triangulation of evidence from the different information sources. The evaluation will provide a single set of ratings for the entire project.

10. Key Strategic Questions

29. In addition to the evaluation criteria outlined in Section 10 below, the evaluation will address the **strategic questions** listed below. These are questions of interest to UN Environment:

- (a) What were the key strengths and weaknesses of the project in regards promoting climate technology transfer in the Asia-Pacific Region?
- (b) To what extent did the pilot projects support the scaling-up of the piloted approaches? To what extent did the project use the experiences from these pilots to promote the successful approaches?
- (c) How did the project implementation delays and subsequent extensions influence the project's relevance and results? What were the costs born to UN Environment due to these extensions? Which management actions were taken to assess and address the delays in project implementation?
- (d) Which challenges and opportunities did the internal execution modality at UN Environment bring to the project?
- (e) To what extent were the UN Environment and Asian Development Bank project components executed in close collaboration, fully exploiting synergies of the interventions? How could they have improved on these joint implementation modalities for greater impact and cross organizational and country learning?

11. Evaluation Criteria

30. All evaluation criteria will be rated on a six-point scale. Sections A-I below, outline the scope of the criteria and a link to a table for recording the ratings is provided in Annex 1). A weightings

table will be provided in excel format (link provided in Annex 1) to support the determination of an overall project rating. The set of evaluation criteria are grouped in nine categories: (A) Strategic Relevance; (B) Quality of Project Design; (C) Nature of External Context; (D) Effectiveness, which comprises assessments of the delivery of outputs, achievement of outcomes and likelihood of impact; (E) Financial Management; (F) Efficiency; (G) Monitoring and Reporting; (H) Sustainability; and (I) Factors Affecting Project Performance. The evaluation consultants can propose other evaluation criteria as deemed appropriate.

A. Strategic Relevance

31. The evaluation will assess, in line with the OECD/DAC definition of relevance, *'the extent to which the activity is suited to the priorities and policies of the target group, recipient and donor'*. The evaluation will include an assessment of the project's relevance in relation to the mandates of UN Environment and ADB and the project's alignment with UN Environment and ADB policies and strategies at the time of project approval. Under strategic relevance an assessment of the complementarity of the project with other interventions addressing the needs of the same target groups will be made. This criterion comprises four elements:
 - i. *Alignment to the UN Environment Medium Term Strategy³⁵ (MTS) and Programme of Work (POW)*
32. The evaluation should assess the project's alignment with the MTS and POW under which the project was approved and include, in its narrative, reflections on the scale and scope of any contributions made to the planned results reflected in the relevant MTS and POW.
 - ii. *Alignment to UN Environment / ADB / Donor/GEF Strategic Priorities*
33. Donor, including GEF, strategic priorities will vary across interventions. UN Environment strategic priorities include the Bali Strategic Plan for Technology Support and Capacity Building³⁶ (BSP) and South-South Cooperation (S-SC). The BSP relates to the capacity of governments to: comply with international agreements and obligations at the national level; promote, facilitate and finance environmentally sound technologies and to strengthen frameworks for developing coherent international environmental policies. S-SC is regarded as the exchange of resources, technology and knowledge between developing countries. GEF priorities are specified in published programming priorities and focal area strategies. The evaluation will also assess the alignment to ADB priorities.
 - iii. *Relevance to Regional, Sub-regional and National Environmental Priorities*
34. The evaluation will assess the extent to which the intervention is suited, or responding to, the stated environmental concerns and needs of the countries, sub-regions or regions where it is being implemented. Examples may include; national or sub-national development plans, poverty reduction strategies or Nationally Appropriate Mitigation Action (NAMA) plans or regional agreements etc.
 - iv. *Complementarity with Existing Interventions*

³⁵ UN Environment's Medium-Term Strategy (MTS) is a document that guides UN Environment's programme planning over a four-year period. It identifies UN Environment's thematic priorities, known as Sub-programmes (SP), and sets out the desired outcomes, known as Expected Accomplishments (EAs), of the Sub-programmes.

³⁶ <http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf>

35. An assessment will be made of how well the project, either at design stage or during the project mobilization, took account of ongoing and planned initiatives (under the same or other UN Environment Sub-programme, other ADB initiatives, or initiatives being implemented by other agencies) that address similar needs of the same target groups. The evaluation will consider if the project team, made efforts to ensure their own intervention was complementary to other interventions, optimized any synergies and avoided duplication of effort. Examples may include UN Development Assistance Frameworks or One UN programming. Linkages with other interventions should be described and instances where UN Environment's / ADB's comparative advantage has been particularly well applied should be highlighted.

Factors affecting this criterion may include:

- Stakeholders' participation and cooperation
- Responsiveness to human rights and gender equity
- Country ownership and driven-ness

B. Quality of Project Design

36. The quality of project design is assessed using an agreed template during the evaluation inception phase, ratings are attributed to identified criteria and an overall Project Design Quality rating is established. This overall Project Design Quality rating is entered in the final evaluation ratings table as item B. In the Main Evaluation Report a summary of the project's strengths and weaknesses at design stage is included, while the complete Project Design Quality template is annexed in the Inception Report.

Factors affecting this criterion may include (at the design stage):

- Stakeholders participation and cooperation
- Responsiveness to human rights and gender equity

C. Nature of External Context

37. At evaluation inception stage a rating is established for the project's external operating context (considering the prevalence of conflict, natural disasters and political upheaval). This rating is entered in the final evaluation ratings table as item C. Where a project has been rated as facing either an Unfavourable or Highly Unfavourable external operating context, and/or a negative external event has occurred during project implementation, the ratings for Effectiveness, Efficiency and/or Sustainability may be increased at the discretion of the Evaluation Consultant and Evaluation Manager together. A justification for such an increase must be given.

D. Effectiveness

i. Delivery of Outputs

38. The evaluation will assess the project's success in producing the programmed outputs (*products, capital goods and services resulting from the intervention*) and achieving milestones as per the project design document (ProDoc). Any *formal* modifications/revisions made during

project implementation will be considered part of the project design. Where the project outputs are inappropriately or inaccurately stated in the ProDoc, reformulations may be necessary in the reconstruction of the TOC. In such cases a table should be provided showing the original and the reformulation of the outputs for transparency. The delivery of outputs will be assessed in terms of both quantity and quality, and the assessment will consider their ownership by, and usefulness to, intended beneficiaries and the timeliness of their delivery. The evaluation will briefly explain the reasons behind the success or shortcomings of the project in delivering its programmed outputs and meeting expected quality standards.

Factors affecting this criterion may include:

- Preparation and readiness
- Quality of project management and supervision³⁷

ii. Achievement of Direct Outcomes

39. The achievement of direct outcomes (short and medium-term effects of the intervention's outputs; a change of behaviour resulting from the use/application of outputs, which is not under the direct control of the intervention's direct actors) is assessed as performance against the direct outcomes as defined in the reconstructed³⁸ Theory of Change. These are the first-level outcomes expected to be achieved as an immediate result of project outputs. As in 1, above, a table can be used where substantive amendments to the formulation of direct outcomes is necessary. The evaluation should report evidence of attribution between the intervention and the direct outcomes. In cases of normative work or where several actors are collaborating to achieve common outcomes, evidence of the nature and magnitude of UN Environment's / ADB's 'substantive contribution' should be included and/or 'credible association' established between project efforts and the direct outcomes realised.

Factors affecting this criterion may include:

- Quality of project management and supervision
- Stakeholders' participation and cooperation
- Responsiveness to human rights and gender equity
- Communication and public awareness

iii. Likelihood of Impact

40. Based on the articulation of longer-term effects in the reconstructed TOC (*i.e. from direct outcomes, via intermediate states, to impact*), the evaluation will assess the likelihood of the

³⁷ In some cases 'project management and supervision' will refer to the supervision and guidance provided by UN Environment to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UN Environment.

³⁸ UN Environment staff are currently required to submit a Theory of Change with all submitted project designs. The level of 'reconstruction' needed during an evaluation will depend on the quality of this initial TOC, the time that has lapsed between project design and implementation (which may be related to securing and disbursing funds) and the level of any changes made to the project design. In the case of projects pre-dating 2013 the intervention logic is often represented in a logical framework and a TOC will need to be constructed in the inception stage of the evaluation.

intended, positive impacts becoming a reality. Project objectives or goals should be incorporated in the TOC, possibly as intermediate states or long-term impacts. The Evaluation Office's approach to the use of TOC in project evaluations is outlined in a guidance note available on the Evaluation Office website, <https://www.unenvironment.org/about-un-environment/evaluation> and is supported by an excel-based flow chart, 'Likelihood of Impact Assessment Decision Tree'. Essentially the approach follows a 'likelihood tree' from direct outcomes to impacts, taking account of whether the assumptions and drivers identified in the reconstructed TOC held. Any unintended positive effects should also be identified and their causal linkages to the intended impact described.

41. The evaluation will also consider the likelihood that the intervention may lead, or contribute to, unintended negative effects. Some of these potential negative effects may have been identified in the project design as risks or as part of the analysis of Environmental, Social and Economic Safeguards.³⁹
42. The evaluation will consider the extent to which the project has played a catalytic role or has promoted scaling up and/or replication⁴⁰ as part of its Theory of Change and as factors that are likely to contribute to longer term impact.
43. Ultimately UN Environment and all its partners aim to bring about benefits to the environment and human well-being. Few projects are likely to have impact statements that reflect such long-term or broad-based changes. However, the evaluation will assess the likelihood of the project to make a substantive contribution to the high-level changes represented by UN Environment's Expected Accomplishments, the Sustainable Development Goals⁴¹ and/or the high-level results prioritised by the funding partner.

Factors affecting this criterion may include:

- Quality of Project Management and Supervision (including adaptive management)
- Stakeholders participation and cooperation
- Responsiveness to human rights and gender equity
- Country ownership and driven-ness
- Communication and public awareness

E. Financial Management

44. Financial management will be assessed under two themes: *completeness* of financial information and *communication* between financial and project management staff. The evaluation will establish the actual spend across the life of the project of funds secured from all donors. This expenditure will be reported, where possible, at output level and will be compared with the approved budget. The evaluation will assess the level of communication between the Project/Task Manager and the Fund Management Officer as it relates to the

³⁹ Further information on Environmental, Social and Economic Safeguards (ESES) can be found at <http://www.unep.org/about/eses>

⁴⁰ *Scaling up* refers to approaches being adopted on a much larger scale, but in a very similar context. Scaling up is often the longer-term objective of pilot initiatives. *Replication* refers to approaches being repeated or lessons being explicitly applied in new/different contexts e.g. other geographic areas, different target group etc. Effective replication typically requires some form of revision or adaptation to the new context. It is possible to replicate at either the same or a different scale.

⁴¹ A list of relevant SDGs is available on the EO website www.unep.org/evaluation

effective delivery of the planned project and the needs of a responsive, adaptive management approach. The evaluation will verify the application of proper financial management standards and adherence to UN Environment's financial management policies. Any financial management issues that have affected the timely delivery of the project or the quality of its performance will be highlighted.

Factors affecting this criterion may include:

- Preparation and readiness
- Quality of project management and supervision

F. Efficiency

45. In keeping with the OECD/DAC definition of efficiency the evaluation will assess the extent to which the project delivered maximum results from the given resources. This will include an assessment of the cost-effectiveness and timeliness of project execution. Focusing on the translation of inputs into outputs, cost-effectiveness is the extent to which an intervention has achieved, or is expected to achieve, its results at the lowest possible cost. Timeliness refers to whether planned activities were delivered according to expected timeframes as well as whether events were sequenced efficiently. The evaluation will also assess to what extent any project extension could have been avoided through stronger project management and identify any negative impacts caused by project delays or extensions. The evaluation will describe any cost or time-saving measures put in place to maximise results within the secured budget and agreed project timeframe and consider whether the project was implemented in the most efficient way compared to alternative interventions or approaches.
46. The evaluation will give special attention to efforts by the project teams to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency. The evaluation will also consider the extent to which the management of the project minimised the project's environmental footprint.
47. The factors underpinning the need for any project extensions will also be explored and discussed. As management or project support costs cannot be increased in cases of 'no cost extensions', such extensions represent an increase in unstated costs to implementing parties.

Factors affecting this criterion may include:

- Preparation and readiness (e.g. timeliness)
- Quality of project management and supervision
- Stakeholders participation and cooperation

G. Monitoring and Reporting

48. The evaluation will assess monitoring and reporting across three sub-categories: monitoring design and budgeting, monitoring implementation and project reporting.

i. Monitoring Design and Budgeting

49. Each project should be supported by a sound monitoring plan that is designed to track progress against SMART⁴² indicators towards the delivery of the project outputs and achievement of direct outcomes, including at a level disaggregated by gender, vulnerability or marginalisation. The evaluation will assess the quality of the design of the monitoring plan as well as the funds allocated for its implementation. The adequacy of resources for mid-term and terminal evaluation/review should be discussed if applicable.

ii. Monitoring of Project Implementation

50. The evaluation will assess whether the monitoring system was operational and facilitated the timely tracking of results and progress towards projects objectives throughout the project implementation period. This should include monitoring the representation and participation of disaggregated groups (including gendered, vulnerable and marginalised groups) in project activities. It will also consider how information generated by the monitoring system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensure sustainability. The evaluation should confirm that funds allocated for monitoring were used to support this activity.

iii. Project Reporting

51. UN Environment has a centralised Project Information Management System (PIMS) in which project managers upload six-monthly status reports against agreed project milestones. This information will be provided to the Evaluation Consultant(s) by the Evaluation Manager. Some projects have additional requirements to report regularly to funding partners, which will be supplied by the project team (e.g. the Project Implementation Reviews and Tracking Tool for GEF-funded projects). The evaluation will assess the extent to which both UN Environment, ADB and donor reporting commitments have been fulfilled. Consideration will be given as to whether reporting has been carried out with respect to the effects of the initiative on disaggregated groups.

Factors affecting this criterion may include:

- Quality of project management and supervision
- Responsiveness to human rights and gender equity (e.g. disaggregated indicators and data)

H. Sustainability

52. Sustainability is understood as the probability of direct outcomes being maintained and developed after the close of the intervention. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of achieved direct outcomes (i.e. 'assumptions' and 'drivers'). Some factors of sustainability may be embedded in the project design and implementation approaches while others may be contextual circumstances or conditions that evolve over the life of the intervention. Where applicable an assessment of bio-physical factors that may affect the sustainability of direct outcomes may also be included.

i. Socio-political Sustainability

⁴² SMART refers to indicators that are specific, measurable, assignable, realistic and time-specific.

53. The evaluation will assess the extent to which social or political factors support the continuation and further development of project direct outcomes. It will consider the level of ownership, interest and commitment among government and other stakeholders to take the project achievements forwards. In particular the evaluation will consider whether individual capacity development efforts are likely to be sustained.

ii. Financial Sustainability

54. Some direct outcomes, once achieved, do not require further financial inputs, e.g. the adoption of a revised policy. However, in order to derive a benefit from this outcome further management action may still be needed e.g. to undertake actions to enforce the policy. Other direct outcomes may be dependent on a continuous flow of action that needs to be resourced for them to be maintained, e.g. continuation of a new resource management approach. The evaluation will assess the extent to which project outcomes are dependent on future funding for the benefits they bring to be sustained. Secured future funding is only relevant to financial sustainability where the direct outcomes of a project have been extended into a future project phase. Even where future funding has been secured, the question still remains as to whether the project outcomes are financially sustainable.

iii. Institutional Sustainability

55. The evaluation will assess the extent to which the sustainability of project outcomes (especially those relating to policies and laws) is dependent on issues relating to institutional frameworks and governance. It will consider whether institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. are robust enough to continue delivering the benefits associated with the project outcomes after project closure. In particular, the evaluation will consider whether institutional capacity development efforts are likely to be sustained.

Factors affecting this criterion may include:

- Stakeholders participation and cooperation
- Responsiveness to human rights and gender equity (e.g. where interventions are not inclusive, their sustainability may be undermined)
- Communication and public awareness
- Country ownership and driven-ness

I. Factors and Processes Affecting Project Performance

(These factors are rated in the ratings table, but are discussed within the Main Evaluation Report as cross-cutting themes as appropriate under the other evaluation criteria, above)

i. Preparation and Readiness

56. This criterion focuses on the inception or mobilisation stage of the project (i.e. the time between project approval and first disbursement). The evaluation will assess whether appropriate measures were taken to either address weaknesses in the project design or respond to changes that took place between project approval, the securing of funds and project mobilisation. In particular the evaluation will consider the nature and quality of

engagement with stakeholder groups by the project team, the confirmation of partner capacity and development of partnership agreements as well as initial staffing and financing arrangements. (*Project preparation is included in the template for the assessment of Project Design Quality*).

ii. Quality of Project Management and Supervision

57. In some cases 'project management and supervision' will refer to the supervision and guidance provided by UN Environment to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping and supervision provided by UN Environment.
58. The evaluation will assess the effectiveness of project management with regard to: providing leadership towards achieving the planned outcomes; managing team structures; maintaining productive partner relationships (including Steering Groups etc.); communication and collaboration with colleagues; risk management; use of problem-solving; project adaptation and overall project execution. Evidence of adaptive management should be highlighted.

iii. Stakeholder Participation and Cooperation

59. Here the term 'stakeholder' should be considered in a broad sense, encompassing all project partners, duty bearers with a role in delivering project outputs and target users of project outputs and any other collaborating agents external to UN Environment and ADB. The assessment will consider the quality and effectiveness of all forms of communication and consultation with stakeholders throughout the project life and the support given to maximise collaboration and coherence between various stakeholders, including sharing plans, pooling resources and exchanging learning and expertise. The inclusion and participation of all differentiated groups, including gender groups should be considered.

iv. Responsiveness to Human Rights and Gender Equity

60. The evaluation will ascertain to what extent the project has applied the UN Common Understanding on the human rights-based approach (HRBA) and the UN Declaration on the Rights of Indigenous People. Within this human rights context the evaluation will assess to what extent the intervention adheres to UN Environment's Policy and Strategy for Gender Equality and the Environment.
61. In particular the evaluation will consider to what extent project design, implementation and monitoring have taken into consideration: (i) possible gender inequalities in access to, and the control over, natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; and (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

v. Country Ownership and Driven-ness

62. The evaluation will assess the quality and degree of engagement of government / public sector agencies in the project. While there is some overlap between Country Ownership and Institutional Sustainability, this criterion focuses primarily on the forward momentum of the intended projects results, i.e. either a) moving forwards from outputs to direct outcomes or b)

moving forward from direct outcomes towards intermediate states. The evaluation will consider the involvement not only of those directly involved in project execution and those participating in technical or leadership groups, but also those official representatives whose cooperation is needed for change to be embedded in their respective institutions and offices. This factor is concerned with the level of ownership generated by the project over outputs and outcomes and that is necessary for long term impact to be realised. This ownership should adequately represent the needs of interest of all gendered and marginalised groups.

vi. Communication and Public Awareness

63. The evaluation will assess the effectiveness of: a) communication of learning and experience sharing between project partners and interested groups arising from the project during its life and b) public awareness activities that were undertaken during the implementation of the project to influence attitudes or shape behaviour among wider communities and civil society at large. The evaluation should consider whether existing communication channels and networks were used effectively, including meeting the differentiated needs of gendered or marginalised groups, and whether any feedback channels were established. Where knowledge sharing platforms have been established under a project the evaluation will comment on the sustainability of the communication channel under either socio-political, institutional or financial sustainability, as appropriate.

Section 3. EVALUATION APPROACH, METHODS AND DELIVERABLES

64. The Terminal Evaluation will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used as appropriate to determine project achievements against the expected outputs, outcomes and impacts. It is highly recommended that the consultant(s) maintains close communication with the project team and promotes information exchange throughout the evaluation implementation phase in order to increase their (and other stakeholder) ownership of the evaluation findings. Where applicable, the consultant(s) should provide a geo-referenced map that demarcates the area covered by the project and, where possible, provide geo-reference photographs of key intervention sites.
65. The findings of the evaluation will be based on the following:
- (a) A **desk review** of (but not limited to):
- Relevant background documentation, inter alia UN Environment MTS and PoW documents, relevant documents on UNFCCC; documentation related to the country context such as UNDAF documents;
 - Project design documents (including minutes of the project design review meeting at approval); Annual Work Plans and Budgets or equivalent, revisions to the project (Project Document Supplement), the logical framework and its budget;
 - Project reports such as six-monthly progress and financial reports, progress reports from collaborating partners, meeting minutes, relevant correspondence and including the Project Implementation Reviews and Tracking Tool etc.;

- Documentation on project outputs;
 - Terminal Review report of the project's ADB-managed components;
 - Other evaluations/reviews of similar projects, such as Terminal Evaluation of the TNA phase I project.
- (b) **Interviews** (individual or in group) with (but not limited to):
- UN Environment current Task Manager (TM) and the former TMs as possible;
 - UN Environment Fund Management Officer (FMO);
 - Representatives of Governments of the participant countries Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Bangladesh, Thailand, Vietnam, Kazakhstan, Tajikistan, Uzbekistan, Mongolia, Sri Lanka, Nepal and Bhutan;
 - Selected project beneficiaries and stakeholders both positively and negatively affected by the project in the participant countries;
 - Project Manager at Asian Development Bank;
 - Climate Technology Network Secretariat, Bangkok;
 - Climate Technology Finance Center, Manila;
 - Members of the Project Steering Committee;
 - Members of the Project Management Team;
 - UN Environment Climate Change Sub-Programme Coordinator;
 - Project implementing and active cooperation partners, including: International Institute for Energy Conservation (IIEC), The Energy and Resources Institute (TERI), Badan Pengkajian dan Penerapan Teknologi (BPPT Indonesia), Science and Technology Policy Institute (STePI Korea), South East Asia Network of Climate Change Officers (SEAN-CC), Janathakshan (Sri Lanka), IT Power, International Centre for Integrated Mountain Development (ICIMOD), Global Reach Centre (GRC Mongolia), International Centre for Tropical Agriculture (CIAT), Carbon Trust, Climate Analytics, Basel Agency for Sustainable Energy (BASE)
 - Stakeholders targeted for knowledge dissemination activities, including: IGOs, NGOs, USAID, World Bank, IFC, and bilateral agencies;
 - Other relevant resource persons.
- (c) **Surveys**; the possible use of surveys will be clarified in the evaluation inception report.
- (d) **Field visits**; visits will be organized to selected pilot countries (Vietnam, Mongolia, Maldives, Cambodia, Laos, Philippines), where both project implementing partners as well as beneficiaries will be interviewed. The evaluation consultant and the Evaluation Office will make the decision of the country visits based on the evaluation inception phase review. In addition, the consultant(s) will visit the Climate Technology Network Secretariat in Bangkok.
- (e) **Other data collection tools**; the use of other data collection tools will be described in the evaluation inception report.

12. Evaluation Deliverables and Review Procedures

66. The evaluation team will prepare:

- **Inception Report:** (see Annex 1 for links to all templates, tables and guidance notes) containing an assessment of project design quality, a draft reconstructed Theory of Change of the project, project stakeholder analysis, evaluation framework and a tentative evaluation schedule. The inception report will describe the collection of primary data to assess UN Environment-led project components and the integration of findings from the Terminal Review of the ADB-led components⁴³ into a single TE report. The inception report will identify potential data gaps in the Terminal Review report of the ADB components and describe how the TE will be adjusted to these limitations.
- **Preliminary Findings Note:** typically in the form of an online presentation (e.g. PowerPoint), the sharing of preliminary findings is intended to support the participation of the project team, act as a means to ensure all information sources have been accessed and provide an opportunity to verify emerging findings. The focus of these preliminary findings is the assessment of the UN Environment-led components
- **Draft and Final Evaluation Report:** (see links in Annex 1) containing an executive summary that can act as a stand-alone document; detailed analysis of the evaluation findings organised by evaluation criteria and supported with evidence; lessons learned and recommendations and an annotated ratings table for the project as a whole. This report will integrate findings from the Terminal Review report conducted to assess the ADB-led components. The assessment of evaluation criteria described in this ToR, but which are not covered by the Terminal Review of the ADB-led components, will be mainly based on the findings from the evaluation of UN Environment-led components.
- **Evaluation Bulletin:** a 2-page summary of key evaluation findings for wider dissemination through the Evaluation Office website.

67. **Review of the draft evaluation report.** The evaluation team will submit a draft report to the Evaluation Manager and revise the draft in response to their comments and suggestions. Once a draft of adequate quality has been peer-reviewed and accepted, the Evaluation Manager will share the cleared draft report with the Task Manager and the Fund Management Officer as well as the project manager at the Asian Development Bank, who will alert the Evaluation Manager in case the report contains any blatant factual errors. The Evaluation Manager will then forward revised draft report (corrected by the evaluation team where necessary) to other project stakeholders for their review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions as well as providing feedback on the proposed recommendations and lessons. Any comments or responses to draft reports will be sent to the Evaluation Manager for consolidation. The Evaluation Manager will provide all comments to the evaluation team for consideration in preparing the final report, along with guidance on areas of contradiction or issues requiring an institutional response.

⁴³ The Terms of Reference for the Terminal Review of the Asian Development Bank-led components outlines the following sections; 1. GEF Background; 2. Implementation; 3. Relevance, Effectiveness and Impact; 4. Global Environmental Benefits and Catalytic Role; 5. GEF Tracking Tools (where appropriate); 6. Sustainability; 7. M&E Framework and Institutional arrangements.

68. Based on a careful review of the evidence collated by the evaluation consultants and the internal consistency of the report, the Evaluation Manager will provide an assessment of the ratings in the final evaluation report. Where there are differences of opinion between the evaluator and the Evaluation Manager on project ratings, both viewpoints will be clearly presented in the final report. The Evaluation Office ratings will be considered the final ratings for the project.
69. The Evaluation Manager will prepare a **quality assessment** of the first and final drafts of the main evaluation report, which acts as a tool for providing structured feedback to the evaluation consultants. The quality of the report will be assessed and rated against the criteria specified in template listed in Annex 1 and this assessment will be appended to the Final Evaluation Report.
70. At the end of the evaluation process, the Evaluation Office will prepare a **Recommendations Implementation Plan** in the format of a table, to be completed and updated at regular intervals by the Task Manager. The Evaluation Office will track compliance against this plan on a six-monthly basis.

13. The Evaluation Consultant

71. For this evaluation, a single consultant will be selected who will work under the overall responsibility of the Evaluation Office represented by an Evaluation Manager [Tiina Piironen], in consultation with the UN Environment Task Manager [Geordie Colville], Fund Management Officer [Leena Darlington] and the Sub-programme Coordinator of the Climate Change Sub-programme [Niklas Hagelberg]. The consultant will liaise with the Evaluation Manager on any procedural and methodological matters related to the evaluation. It is, however, the consultants' individual responsibility to arrange for their visas and immunizations as well as to plan meetings with stakeholders, organize online surveys, obtain documentary evidence and any other logistical matters related to the assignment. The UN Environment Task Manager and project team will, where possible, provide logistical support (introductions, meetings etc.) allowing the consultant to conduct the evaluation as efficiently and independently as possible.
72. The consultant will be hired for 6 months spread over the period 1 September 2019 – 28 February 2020 and should have: an advanced university degree in environmental sciences, international development or other relevant political or social sciences area; a minimum of 5 years of technical / evaluation experience, including of evaluating large, regional or global programmes and using a Theory of Change approach; a broad understanding of climate technology and technology transfer; excellent writing skills in English is required; team leadership experience and, where possible, knowledge of the UN system, specifically of the work of UN Environment is an asset.
73. The consultant will be responsible, in close consultation with the Evaluation Office of UN Environment, for overall management of the evaluation and timely delivery of its outputs, described above in Section 11 Evaluation Deliverables.
74. Specifically, the evaluation consultant will undertake the following duties:
Inception phase of the evaluation, including:
 - Preliminary desk review and introductory interviews with project staff;

- draft the reconstructed Theory of Change of the project;
- Prepare the evaluation framework;
- Develop the desk review and interview protocols;
- Draft the survey protocols (if relevant);
- Develop and present criteria for country and/or site selection for the evaluation mission;
- Plan the evaluation schedule;
- Prepare the Inception Report, incorporating comments until approved by the Evaluation Manager.

Data collection and analysis phase of the evaluation, including:

- Conduct further desk review and in-depth interviews with project implementing and executing agencies, project partners and project stakeholders;
- Conduct an evaluation mission(s) to selected countries, visit the project locations, interview project partners and stakeholders, including a good representation of local communities. Ensure independence of the evaluation and confidentiality of evaluation interviews;
- Regularly report back to the Evaluation Manager on progress and inform of any possible problems or issues encountered and;
- Keep the Task Manager informed of the evaluation progress and engage the Task Manager in discussions on emerging findings throughout the evaluation process.

Reporting phase, including:

- Draft the Main Evaluation Report, incorporating findings from the Terminal Review report of the ADB-led components, ensuring that the evaluation report is complete, coherent and consistent with the Evaluation Office guidelines both in substance and style;
- Liaise with the Evaluation Manager on comments received and finalize the Main Evaluation Report, ensuring that comments are taken into account until approved by the Evaluation Manager;
- Prepare a Response to Comments annex for the main report, listing those comments not accepted by the Evaluation Consultant and indicating the reason for the rejection; and
- Prepare a 2-page summary of the key evaluation findings and lessons.

Managing relations, including:

- Maintain a positive relationship with evaluation stakeholders, including ADB and the consultant preparing the terminal review of the ADB-led components. Ensure that the evaluation process is as participatory as possible but at the same time maintains its independence;
- Communicate in a timely manner with the Evaluation Manager on any issues requiring its attention and intervention.

14. Schedule of the evaluation

75. The table below presents the tentative schedule for the evaluation.

Table 3. Tentative schedule for the evaluation

Milestone	Tentative Dates
Evaluation consultant(s) contracted	1 September 2019
Inception Report finalized	31 September 2019
Evaluation Mission	October 2019
Telephone interviews, surveys etc.	October 2019
Online presentation on preliminary findings and recommendations	November 2019
Draft report to Evaluation Manager (and Peer Reviewer)	December 2019
Draft Report shared with UN Environment Project Manager and team	January 2020
Draft Report shared with wider group of stakeholders	February 2020
Final Report	Late February 2020
Final Report shared with all respondents	End of February 2020

15. Contractual Arrangements

76. Evaluation Consultants will be selected and recruited by the Evaluation Office of UN Environment under an individual Special Service Agreement (SSA) on a “fees only” basis (see below). By signing the service contract with UN Environment/UNON, the consultant(s) certify that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of the contract) with the project’s executing or implementing units. All consultants are required to sign the Code of Conduct Agreement Form.

77. Fees will be paid on an instalment basis, paid on acceptance by the Evaluation Manager of expected key deliverables. The schedule of payment is as follows:

78. Schedule of Payment for the Consultant:

Deliverable	Percentage Payment
Approved Inception Report	30%
Approved Draft Main Evaluation Report	30%

Approved Final Main Evaluation Report	40%
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79. Fees only contracts: Air tickets will be purchased by UN Environment and 75% of the Daily Subsistence Allowance for each authorised travel mission will be paid up front. Local in-country travel will only be reimbursed where agreed in advance with the Evaluation Manager and on the production of acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion.
80. The consultants may be provided with access to UN Environment’s Programme Information Management System (PIMS) and if such access is granted, the consultants agree not to disclose information from that system to third parties beyond information required for, and included in, the evaluation report.
81. In case the consultants are not able to provide the deliverables in accordance with these guidelines, and in line with the expected quality standards by the UN Environment Evaluation Office, payment may be withheld at the discretion of the Director of the Evaluation Office until the consultants have improved the deliverables to meet UN Environment’s quality standards.
82. If the consultant(s) fail to submit a satisfactory final product to UN Environment in a timely manner, i.e. before the end date of their contract, the Evaluation Office reserves the right to employ additional human resources to finalize the report, and to reduce the consultants’ fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard.

Annex 2 – List of Stakeholders Consulted

Implementing Agencies, Donor, and other UN Staff

	<i>Name</i>	<i>Function / Organisation</i>	<i>Country (city)</i>	<i>Role in AP-CTNFC Project</i>	<i>Approach used to gather input</i>
Mr.	Alam, Mozaharul (Babu)	UNEP ROAP	Thailand (Bangkok)	Interim Project Manager, 2015 (Regional Climate Change Coordinator, UNEP)	Face-to-Face meeting during evaluation field mission
Ms.	Aoki, Chizuru	Global Environment Facility (GEF)	United States (Washington)	Participant in 1 st Project Steering Committee meeting	Telephone call
Mr.	Duwyn, Jonathan	UNEP	France (Paris)	Supervisory	Telephone call
Ms.	Darlington, Leena	UNEP	Kenya (Nairobi)	Financial Manager	Telephone call
Mr.	Colville, Rupert (Geordie)	UNEP	Kenya (Nairobi)	Portfolio Manager and subsequently also Task Manager	Telephone calls during Inception Period and during the evaluation
Mr.	Garg, Rajiv	UNEP	Kenya (Nairobi)	1 st Project Manager for AP-CTNFC; currently Regional Manager, Climate Technology Centre and Network (CTCN)	Telephone calls during Inception Period and during the evaluation
Ms.	Kubota, Azusa	UNDP Representative	Bhutan (Thimphu)	UN stakeholder in UN resident Coordinator's Office	Face-to-Face meeting during evaluation field mission
Ms.	Mohanty, Parmita	UNEP ROAP	Thailand (Bangkok)	Financial Manager support in UNEP ROAP	Face-to-Face meeting during evaluation field mission
Mr.	Radka, Mark	UNEP	France (Paris)	Supervisory	Telephone call during Inception Period
Ms.	Phuntsho, Kesang Choden	United Nations Bhutan	Bhutan (Thimphu)	UN stakeholder in UN resident Coordinator's Office	Face-to-Face meeting during evaluation field mission
Ms.	Rabgye, Sonam	UNDP	Bhutan (Thimphu)	UN stakeholder in UN resident Coordinator's Office	Written input

	<i>Name</i>	<i>Function / Organisation</i>	<i>Country (city)</i>	<i>Role in AP-CTNFC Project</i>	<i>Approach used to gather input</i>
Mr.	Sharma, Sudhir	UNEP ROAP	Thailand (Bangkok)	Project Manager Aug 2016 to present (Focal Point, GEF CCM and Regional Liaison, CTCN, Asia Pacific Office)	Face-to-Face meeting during evaluation field mission
Ms.	Stanfield, Julia	Consultant	France (Paris)	Consultant based in Bangkok, Thailand	Telephone call during Inception Period
Ms.	<i>Tsering, Dechen</i>	<i>UNEP ROAP</i>	<i>Thailand (Bangkok)</i>	<i>UNFCCC Secretariat, Director of Finance, Technology, and Capacity-Building Programme</i>	<i>Written Input</i>

Nationally Designated Entities (NDEs)

	<i>Name</i>	<i>Function / Organisation</i>	<i>Country (city)</i>	<i>Role in AP-CTNFC Project</i>	<i>Approach used to gather input</i>
Mr.	Sathitkunarath, Surachai	Office of National Higher Education, Science Research and Education Policy Council (NXPO)	Thailand (Bangkok)	Nationally- Designated Entity for Thailand	Face-to-Face meeting during evaluation field mission and input through survey
Mr.	Tan, Pham Van	Deputy Director-General, Department of Meteorology Hydrology and Climate Change (DMHCC), Ministry of Natural Resources and Environment	Vietnam (Hanoi)	Nationally- Designated Entity for Vietnam	Face-to-Face meeting during evaluation field mission
Mr.	Tshering, Karma	Head of Policy & Programming Services, National Environment Commission (NEC)	Bhutan (Thimphu)	Nationally- Designated Entity for Bhutan	Face-to-Face meeting during evaluation field mission

	<i>Name</i>	<i>Function / Organisation</i>	<i>Country (city)</i>	<i>Role in AP-CTNFC Project</i>	<i>Approach used to gather input</i>
Ms.	Sih Winati, Widiatmini	Secretary of Transfer Technology Working Group in National Council on Climate Change of Indonesia	Indonesia (Jakarta)	Energy Efficiency in Steel Industries	Face-to-Face meeting during evaluation field mission

Recipients of Technical Assistance under the Project

	<i>Name</i>	<i>Function / Organisation</i>	<i>Country (city)</i>	<i>Role in AP-CTNFC Project</i>	<i>Approach used to gather input</i>
Vietnam - Electricité de Vietnam					
Mr.	Nguyen, Tran Viet	Electricité de Vietnam (EVN)	Vietnam (Hanoi)	Feasibility Study on Domestic Efficient Lighting Program (DELP)	Face-to-Face meeting during evaluation field mission
Mongolia – Ministry of Environment and Tourism					
Mr.	Zamba, Batjargal	Ministry of Environment and Tourism	Mongolia (Ulaanbaatar)	Scaling-up of Implementation of Low-Carbon District Heating Systems in Mongolia	Written feedback on questions (by email)
Bhutan - Lhaki Steels & Rolling Pvt. Ltd					
Mr.	Gurung, Robee	Safety Officer, Lhaki Steels & Rolling Pvt. Ltd.	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Japhel, Sangy	Deputy General Manager, Electrical Lhaki Steels & Rolling Pvt. Ltd.	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Kuwal, Khem	Deputy Manager, Instrumentation Lhaki Steels & Rolling Pvt. Ltd.	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Lehalley, Anoop	General Manager, Continuous Improvement,	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission

	<i>Name</i>	<i>Function / Organisation</i>	<i>Country (city)</i>	<i>Role in AP-CTNFC Project</i>	<i>Approach used to gather input</i>
		Lhaki Steels & Rolling Pvt. Ltd.			
Mr.	Singh, Man	Quality Manager, Lhaki Steels & Rolling Pvt. Ltd. Lhaki Steels & Rolling Pvt. Ltd.	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Wang, Phub Dorji	Technical Advisor, Lhaki Steels & Rolling Pvt. Ltd.	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Bhutan - Druk Wang Alloys					
Mr.	Choida, Tenzin	Deputy General Manager, Mechanical, Druk Wang Alloys	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr	Dendup, Ngroang	General Manager, Process, Druk Wang Alloys	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Norbu, Ugyen	Deputy Manager, Administration, Druk Wang Alloys	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Pradhan, Rajesh	Manager, Electrical, Druk Wang Alloys	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Sunar, K.B.	General Manager, Administration, Druk Wang Alloys	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Tamay, Damber	Manager, Mechanical, Druk Wang Alloys	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Thinlay, Pema	Health Safety and Environment Officer, Druk Wang Alloys	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Yardav, R.B.	General Manager Works, Druk Wang Alloys	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission

	<i>Name</i>	<i>Function / Organisation</i>	<i>Country (city)</i>	<i>Role in AP-CTNFC Project</i>	<i>Approach used to gather input</i>
Bhutan - Bhutan Carbide (BCCI)					
Mr.	Dorji, Jambay	Deputy General Manager, Production, Bhutan Carbide (BCCI)	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Dulai, Monorath Dulal	Deputy Chief Engineering, , Bhutan Carbide (BCCI)	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Ghalay, Gofoal	Environment Focal Person, Bhutan Carbide (BCCI)	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Labet, Jeet Bafander	Bhutan Carbide (BCCI)	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Roy, Amitava Dutta	General Manager, Mechanical, Bhutan Carbide (BCCI)	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission
Mr.	Tshering, Sonan	Deputy General Manager, Administration and Human Resources, Bhutan Carbide (BCCI)	Bhutan (Pasakha Lam)	Waste Heat Recovery and Energy Efficiency Improvements	Face-to-Face meeting during evaluation field mission

Other Institutional Representatives in Beneficiary Countries

	<i>Name</i>	<i>Function / Organisation</i>	<i>Country (city)</i>	<i>Role in AP-CTNFC Project</i>	<i>Approach used to gather input</i>
Mr.	Aphaiwong, Apichat	Office of National Higher Education, Science Research and Education Policy Council (NXPO)	Thailand (Bangkok)	Colleague of Nationally-Designated Entity (NDE) for Thailand	Face-to-Face meeting during evaluation field mission

	<i>Name</i>	<i>Function / Organisation</i>	<i>Country (city)</i>	<i>Role in AP-CTNFC Project</i>	<i>Approach used to gather input</i>
Mr.	Dung, Nguyen Dinh	Expert, Division of Science & Technology and International Cooperation, Department of Climate Change (DCC); Ministry of Natural Resources and Environment (MONRE)	Vietnam (Hanoi)	Participant in Regional Workshop on Innovative and Sustainable Energy Technologies for Developing Countries: Opportunities and Challenges (TERI): May 2014 (New Delhi, India)	Input through survey
Mr.	Harun, Mohammad	Assistant Director, Department of Environment	Bangladesh	Participant in Regional Workshop on Innovative and Sustainable Energy Technologies for Developing Countries: Opportunities and Challenges (TERI): May 2014 (New Delhi, India)	Input through survey
Mr.	Jangavar, Hassan	Department of Environment, Center for Innovation and Technology Cooperation	Iran	Participant in Training Workshop for NDEs: 9-13 December 2013 (Cha-Am, Thailand)	Input through survey
Ms.	Kumari, Nirosha	Environment Management Officer, Climate Change Secretariat, Ministry of Environment and Renewable Energy	Sri Lanka (Colombo)	Participant in Regional Training Workshop on Adaptation Technologies (IIED, ICCCAD): April 2014 (Dhaka, Bangladesh)	Input through survey
Mr.	Seitkasymov, Merder	Leading Specialist, Department of International Cooperation, State Agency on Environment and Forestry	Kyrgyzstan	Participant in Training Workshop for NDEs: 9-13 December 2013 (Cha-Am, Thailand)	Input through survey

	<i>Name</i>	<i>Function / Organisation</i>	<i>Country (city)</i>	<i>Role in AP-CTNFC Project</i>	<i>Approach used to gather input</i>
Mr.	Sobirov, Faridun	Senior Specialist, Center of Climate Change and Ozone Layer	Tajikistan	Participant in Regional Workshop on Innovative and Sustainable Energy Technologies for Developing Countries: Opportunities and Challenges (TERI): May 2014 (New Delhi, India)	Input through survey
Ms.	Thanh, Le Thi Mai	Official, Division of Science & Technology and International Cooperation, Department of Climate Change (DCC); Ministry of Natural Resources and Environment (MONRE)	Vietnam (Hanoi)	Assistant to Nationally-Designated Entity (NDE) for Vietnam	Face-to-Face meeting during evaluation field mission
Ms.	Wangmo, Choki	Chief of Environment Assessment and Compliance Division, National Environment Commission (NEC)	Bhutan (Thimphu)	Colleague of Nationally-Designated Entity (NDE) for Bhutan	Face-to-Face meeting during evaluation field mission
Ms.	Wangmo, Tenzin	Chief Environment Officer, Water Resources Coordination Division, National Environment Commission (NEC)	Bhutan (Thimphu)	Participant in Regional Training Workshop on Adaptation Technologies (IIED, ICCCAD): April 2014 (Dhaka, Bangladesh)	Input through survey

Technical Assistance Consultants

	<i>Name</i>	<i>Function / Organisation</i>	<i>Country (city)</i>	<i>Role in AP-CTNFC Project</i>	<i>Approach used to gather input</i>
Mr.	Fernandez, David	Principal Renewable Energy Consultant, ITP Energised	United Kingdom (Bristol)	Delivered Technical Assistance in Mongolia	Telephone call
Ms.	Guerten, Nora	Early Warning Early Action Specialist, Food and Agriculture Organisation of the United Nations (FAO)	Italy (Rome)	Delivered Technical Assistance in Bhutan while employed by International Center for Tropical Agriculture (CIAT) in Hanoi, Vietnam	Telephone call and written input (email)
Ms.	Neve, Jasmine	Climate Change and Environmental Finance Specialist, Deputy Director, Basel Agency for Sustainable Energy (BASE)	Switzerland (Basel)	Delivered Technical Assistance in Maldives	Written input (email)
Mr.	Pal, Prosanto	Senior Fellow, Industrial Energy Efficiency Division, The Energy and Resources Institute (TERI)	India (New Delhi)	Delivered Technical Assistance in Bhutan and Indonesia	Written input (email)
Mr.	Seti, Girish	Senior Director, Energy Program, The Energy and Resources Institute (TERI)	India (New Delhi)	Delivered Technical Assistance in Bhutan and Indonesia	Telephone call
Ms.	Wangmo, Choki	Chief of Environment Assessment and Compliance Division, National Environment Commission (NEC)	Bhutan (Thimphu)	Colleague of Nationally-Designated Entity (NDE) for Bhutan	Face-to-Face meeting during evaluation field mission

Other Stakeholders

	<i>Name</i>	<i>Function / Organisation</i>	<i>Country (city)</i>	<i>Role in AP-CTNFC Project</i>	<i>Approach used to gather input</i>
Ms.	<i>Revenaz Webb, Jaime</i>	Director of Programme Delivery, Canadian International Resources and Development Institute (CIRDI)	Vancouver, Canada	Regional Manager for Asia Pacific, Climate Technology Centre and Network (CTCN)	
Mr.	Rauniyar, Ganesh	Independent	New Zealand	Independent Evaluator for ADB Terminal Review	Telephone calls, written input
Mr.	<i>Uosukainen, Jukka</i>	Chief Specialist, Government Strategy Department, Prime Minister's Office Finland	Helsinki, Finland	1 st Director, Climate Technology Centre and Network (CTCN)	

Annex 3 – List of Documents and Other Resources Consulted

Project Design and Approval Documentation

Project Document, prepared by UNEP, covering design of jointly implemented project, 2012
UNEP Project Review Committee (PRC) minutes, covering entire project design, 15.11.2011
Request for CEO Endorsement, prepared by ADB, covering design of jointly implemented project, 01.12.2011
CEO Endorsement, prepared by the GEF, covering design of jointly implemented project, 31.05.2012
GEF Secretariat Review for Full/Medium-Sized Projects, 31 March 2011
UNEP's Scientific and Technical Advisory Panel (STAP) Review, 19 April 2011

Co-Financing Information

List of sources of ADB co-financing
ADB Board Approval related to Equity Investment Climatech Venture Capital Funds, Cluster Technical Assistance Pilot Centre, Asian Clean Energy Fund, Flemish Institute for Technological Research

Implementation Related

UNEP Internal Cooperation Agreement for Full-Sized Project Pilot of Climate Technology Network and Finance Center in Asia Pacific between Economy Division and the Regional Office for Asia and Pacific (ROAP)
Integration of GEF Operations in UNEP: Accountability Framework for Directly Executed GEF Projects, Sept 2011
3rd Steering Committee Minutes, 28 August 2015 (discussion of project January 2014-June 2015)

Monitoring and Evaluation Information

Monitoring and Evaluation Framework for AP-CTNFC, November 2013
Bi-annual progress reports prepared by UNEP covering the implementation of its 4 components during the period of 01.07.2012 to 31.12.2018
Annual Project Implementation Reports (PIRs) submitted to the GEF for 2013-2018, covering implementation of all 6 components and 10 anticipated outcomes
Stocktaking: Assessment of Achievements, prepared by UNEP with respect to the implementation of its 4 components. June 2016
Request for Project Extension letter, 01.12.2016
Budget Revision Requests (6 in total), prepared by UNEP, spanning August 2013 to Feb 2016
Mid-Term Review, conducted by ADB, on ADB-implemented components, March 2016
Final Report prepared by UNEP covering implementation of its 4 components (spanning 13.09.2012 to 31.03.2019)
Update on Technology Transfer Activities for GEF Report to UNFCCC COP22, covering July 2015 to June 2016
Update on Technology Transfer Activities for GEF Report to UNFCCC COP23, covering July 2016 to June 2017
Update on Technology Transfer Activities for GEF Report to UNFCCC COP24, covering July 2017 to June 2018
Update on Technology Transfer Activities for GEF Report to UNFCCC COP25, covering July 2018 to June 2019
CTNFC Summary of Outputs, prepared by UNEP, covering implementation of its 4 components during 2013-2019
ADB Completion Report related to Establishing a Pilot Center to Facilitate Climate Technology Investment in Asia and the Pacific, September 2019

Stakeholder Analysis

Stakeholder questionnaires (completed, by country) and metrics

Mapping of Institutions working in Climate Change Adaptation and Mitigation in Bangladesh, Bhutan, Cambodia, Indonesia, Kazakhstan, Malaysia, Mongolia, Myanmar, Nepal, Philippines, Sri Lanka, Tajikistan, Thailand, Uzbekistan, Vietnam

CTCNFC Workshops, Guidance, etc. for National Designated Entities, Project Focal Points, etc.

Terms of Reference for a Nationally Designated Entity (NDE)

Kick-off Meeting. Project Overview (22-23 May 2013, Bangkok, Thailand)

Summary First Training Workshop for National Designated Entities (11-13 December 2013, Thailand)

Summary of CTNFC Meeting for Regional Institutions with Climate Change Expertise and Project Focal Points (20-22 August 2014, Bangkok, Thailand)

Summary First Forum for National Designated Entities (NDEs) of the Climate Technology Centre and Network (CTCN), 28-30 April 2015, Bangkok, Thailand

Summary of CTNFC Regional Networking Meeting (25 August 2015, Manila, Philippines)

Meeting Report: CTNFC Network Meeting and 6th Asia Pacific Climate Change Adaptation Forum (15-19 October 2018, Manila, Philippines)

CTCN (Climate Technology Centre and Network) Documentation

Technical Assistance Request Form for submission to the CTCN

Summary Asia Expert Dialogue, 2013

Summary of the Forum for National Designated Entities (NDEs) of the Climate Technology Centre and Network (CTCN), 11-13 July 2016, Bangkok, Thailand

Summary of CTCN Regional Forum for National Designated Entities (NDEs) from Asia and the Pacific and Regional Technical Expert Meeting, in parallel with Korea Climate Technology 2018 (16-20 July 2018, Seoul, Korea)

CTCN website: <https://www.ctc-n.org/>

Pilot AP-CTNFC description on CTCN website: <https://www.ctc-n.org/about-ctcn/organisations/pilot-asia-pacific-climate-technology-network-and-finance-centre>

Technical Assistance Deliverables

Dossiers with design reports, market assessment, readiness proposals, feasibility studies, assessment reports, etc.

Indonesia (2015) Energy Efficiency in Steel Industries Phase 1

Indonesia (2016) Energy Efficiency in Steel Industries Phase 2

Bhutan (2016) Waste Heat Recovery

Bhutan (2016) Crop Suitability Mapping

Mongolia (2016) Dynamic Model for Green School Buildings

Mongolia (2017-2018) District Energy Systems

Vietnam (2017-2018) Domestic Efficient Lighting Plan (DELP)

Laos (2018-2019) Energy Efficient Appliances

Maldives (2018-2019) Renewable Energy in the Outer Islands

Cambodia (2018-2019) National LED Programme

Malaysia (2018-2019) District Energy Systems

Sri Lanka (2018-2019) Electric Vehicles

Pakistan (2018-2019) Brick Kilns

Publicity, Dissemination Materials

Brochure (July 2012): Pilot Asia-Pacific Climate Technology Network and Finance Center from www.adb.org/publications/pilot-asia-pacific-climate-technology-network-and-finance-center

AP-CTNFC E-newsletters

Energy Efficiency in Industry (May 2017)

Coastal Adaption (July 2017)
 Electric Vehicles (November 2017)
 Decentralised Renewable Energy (April 2018)
 Sustainable Cities (January 2019)

Capacity Building Documentation

Adaptation Technologies dossier containing country case studies (Bangladesh, Bhutan, Indonesia, Kazakhstan, Mongolia, Tajikistan) and institute studies (BRRI – rice), 2014
 Mitigation Technologies: Compendium of Case Studies (Bangladesh, Indonesia, Kazakhstan, Myanmar) in Report on Regional Workshop on Innovative and Sustainable Energy Technologies for Developing Countries: Opportunities and Challenges, The Energy and Resources Institute (TERI), 2014
 Report on Training Workshop on Converting Waste Agricultural Biomass into Energy” (May 2015, Kazakhstan)
 Training Report for Policy and Regulatory Frameworks for Promoting Energy Efficiency and Renewable Energy in Buildings and Appliances Sector, TERI, 2015
 Compendium of Green Building Case Studies in Report on Policy and Regulatory Frameworks for Promoting Energy Efficiency and Renewable Energy in the Buildings Sector, TERI, 2016
 Workshop Report: Climate Smart Agriculture Technologies in Asia (2-4 June 2016, Philippines), organised by UNEP, CGIAR Research Program on Climate Change, Agriculture, Food Security, International Rice Research Institute
 Workshop Report: Regional Training Workshop on Climate Adaptation Technologies (9-12 April 2014, Dhaka, Bangladesh), organised by UNEP, Institutional Institute for Environment and Development (IIED), International Centre for Climate Change and Development (ICCCAD)

National-Level Studies, Roadmaps, and Guidance

Electric Fans

Study and Assessment of Electric Fan Markets in South and Southeast Asia, prepared by International Institute for Energy Conservation – Asia (IIEC), April 2014

Energy Efficiency

Energy Efficient Residential Lighting Manual, prepared by IIEC, September 2014
 Energy Efficient Street Lighting Manual (working draft), prepared by IIEC, October 2014
 Policymakers Guide to Implementing Energy Efficient Agricultural Pumping Program, prepared by IIEC, Nov 2014

Air Conditioning

Harmonization of Air Conditioner Standards in ASEAN Economies – A Regional Policy Roadmap, February 2015
 Air Conditioner Roadmap Guidelines, June 2016
 National Roadmap of the Union of Myanmar for implementation of Regional Policy Roadmap for Harmonization of Energy Performance Standards for Air Conditioners in ASEAN countries by 2020 (endorsed 7 October 2015)
 National Roadmap of Lao Peoples Democratic Republic for implementation of Regional Policy Roadmap for Harmonization of Energy Performance Standards for Air Conditioners in ASEAN countries by 2020
 Philippines National Roadmap of Energy-Efficient Air Conditioners 2016-2025
 Thailand National Policy Roadmap under framework of ASEAN Shine Air Conditioner Program, 2016
 Vietnam National Roadmap Harmonization of Energy Performance Standards for Air Conditioners, May 2016

Financing Energy Efficiency

Workplan for Green Climate Fund Proposal to Scale Up Investments in Renewable Energy in the Maldives, prepared by Basel Agency for Sustainable Energy (BASE), 10 August 2018

Manual of Financing Mechanisms for Energy Efficiency, developed by BASE, March 2019

Decarbonisation

Decarbonising South and South East Asia, produced by Climate Analytics, March 2019

Country Profiles for India, Indonesia, Philippines, Pakistan, Vietnam; March 2019

Other Relevant Resources

UNEP Medium Term Strategy (MTS). 2010-2013 and 2014-2017

UNEP Programme of Work (PoW), 2014

UN Environment Policy and Strategy for Gender Equality and the Environment, 2015
<https://www.unenvironment.org/resources/policy-and-strategy/un-environment-policy-and-strategy-gender-equality-and-environment>

UNDP Handbook for Conducting Technology Needs Assessment for Climate Change, 2010

GEF's Financing Adaptation Action: Least Developed Countries Fund, Special Climate Change Fund, 2009

Transfer of Environmentally Sound Technologies: Case Studies from GEF Climate Change Portfolio, 2010

<http://documents.worldbank.org/curated/en/610301468160516462/pdf/656920WP0Tech000Box365722B00PUBLIC0.pdf>

GEF and Technology Transfer: An Overview, presentation delivered 15-17 February 2011 at GEF Expanded Constituency Workshop, Kinshasa, DR Congo

GEF's Implementing the Poznan Strategic and Long-Term Programs on Technology Transfer

Report of the GEF to 12th session COP to UNFCCC on Collaboration between the CTCN and the Regional Technology Transfer and Finance Centres supported by the Global Environment Facility, 13 November 2015

Evaluation Guidance

UNEP Operational Guidelines for Implementing the Accountability Framework for Internally Executed GEF Projects, April 2012

ADB's ToR for Terminal Review (draft), 8 April 2019

UNEP's ToR for Terminal Evaluation, July 2019

Evaluation Process Outline for Evaluation Consultants, last reviewed 14 December 2016

Annex 4 – Project Financing Summary

Table 9: Overview of Planned Funding Sources for UNEP-led Components

	Cost of Project	USD	%
Cost to the GEF TF	3,000,000		34.4%
Cost to SCCF	250,000		2.8%
<i>Sub-total</i>	3,250,000		37.2%
Co-financing			
In-kind			
UNEP	1,000,000		11.4%
In cash			
Finland (SEAN- CC)	2,640,000		30.2%
Korea (CAN-CC)	840,000		9.6%
Denmark	1,000,000		11.4%
<i>Sub-total</i>	5,480,000		62.7%
Total	8,730,000		100%

Source. UNEP Project Document, p1

ADB Sources of Planned Cofinancing

Baseline Project	Sources of Cofinancing	Link to Proposed Pilot Project	Commitment Documents	Sub-total ('000 \$)	Total ('000 \$)
Proposed Equity Investments Climatech Venture Capital Funds -Aloe Environment Fund III (Regional) -Keytone Ventures II (People's Republic of China) -VenturEast Life Fund III (India) [Attachment 1]	ADB's Equity Investment (ADB-funded)	provides cofinance for "Catalyzing investments in EST deployment (component 5), and increased investments by selected VC funds in climate mitigation and adaptation products (outcome 8)	-Minutes of ADB Board Meeting (paragraphs 5.1, 5.2, 5.3); -Report and Recommendation of the President to the Board of Directors on the proposed equity investments	60,000	60,000
Cluster Technical Assistance (TA): Establishing a Pilot Center to Facilitate Climate Technology Investments in Asia and the Pacific [Attachment 2]	ADB's Technical Assistance Special Fund (ADB-funded)	provides cofinance for "Catalyzing investments in EST deployment (component 5), and increased inv by selected VC funds in climate mitigation and adaptation products (outcome 8)	-Memo of Board approval of Cluster TA -Cluster TA paper	842	842
	ADB's Climate Change Fund (ADB-funded)	provides cofinance for "Catalyzing investments in EST deployment (component 5), and increased inv by selected VC funds in climate mitigation and adaptation products (outcome 8)	-Memo of Board approval of Cluster TA -Cluster TA paper	950	2,850
		provides cofinance for "Establishing a marketplace of owners and users of low-carbon technologies to facilitate their transfer (component 6); and successful demo of assisted broker model for transfer of LCTs (outcome 9)	-Memo of Board approval of Cluster TA -Cluster TA paper	1,900	
	Asian Clean Energy Fund (ACEF) under the Clean Energy Financing Partnership Facility (funded by the Government of Japan and administered by ADB)	provides cofinance for "Catalyzing investments in EST deployment (component 5), and increased inv by selected VC funds in climate mitigation and adaptation products (outcome 8)	Memo from ADB's Office of Cofinancing Operations on approval of ACEF funding by the Government of Japan for the TA	1,500	3,500
		provides cofinance for "Establishing a marketplace of owners and users of low-carbon technologies to facilitate their transfer (component 6); and successful demo of assisted broker model for transfer of LCTs (outcome 9)	Memo from ADB's Office of Cofinancing Operations on approval of ACEF funding by the Government of Japan for the TA	2,000	
VITO-Flemish Institute for Technological Research NV; (Externally-funded)		provides cofinance for "Establishing a marketplace of owners and users of low-carbon technologies to facilitate their transfer (component 6); and successful demo of	-VITO parking letter of funds in ADB account; - ADB's acknowledgement of receipt	200	200

Baseline Project	Sources of Cofinancing	Link to Proposed Pilot Project	Commitment Documents	Sub-total ('000 \$)	Total ('000 \$)
		assisted broker model for transfer of LCTs (outcome 9)			
TA: Enhancing Knowledge on Climate Technology and Financing Mechanisms [Attachment 3]	Asian Clean Energy Fund (ACEF) under Clean Energy Financing Partnership Facility; (funded by Government of Japan, administered by ADB	provides cofinance for "Integrating climate technology financing needs into national development strategies, plans, and investment priorities (component 4)	-Memo from ADB's Office of Cofinancing Operations on approval of ACEF funding by the Government of Japan for the TA -Memo of ADB Management approval of TA; TA paper	1,500	1,500
Total				68,892	68,892

Annex 5 – Quality Assessment of the Evaluation Report

Quality Assessment of the Evaluation Report

Evaluand Title:

Pilot Asia-Pacific Climate Technology Network and Finance Centre (AP-CTNFC)

All UNEP evaluations are subject to a quality assessment by the Evaluation Office. This is an assessment of the quality of the evaluation product (i.e. evaluation report) and is dependent on more than just the consultant's efforts and skills.

	UNEP Evaluation Office Comments	Final Report Rating
Substantive Report Quality Criteria		
<p>Quality of the Executive Summary:</p> <p>The Summary should be able to stand alone as an accurate summary of the main evaluation product. It should include a concise overview of the evaluation object; clear summary of the evaluation objectives and scope; overall evaluation rating of the project and key features of performance (strengths and weaknesses) against exceptional criteria (plus reference to where the evaluation ratings table can be found within the report); summary of the main findings of the exercise, including a synthesis of main conclusions (which include a summary response to key strategic evaluation questions), lessons learned and recommendations.</p>	Final report: The executive summary provides a concise overview of the evaluation.	6
<p>I. Introduction</p> <p>A brief introduction should be given identifying, where possible and relevant, the following: institutional context of the project (sub-programme, Division, regions/countries where implemented) and coverage of the evaluation; date of PRC approval and project document signature); results frameworks to which it contributes (e.g. Expected Accomplishment in POW); project duration and start/end dates; number of project phases (where appropriate); implementing partners; total secured budget and whether the project has been evaluated in the past (e.g. mid-term, part of a synthesis evaluation, evaluated by another agency etc.)</p> <p>Consider the extent to which the introduction includes a concise statement of the purpose of the evaluation and the key intended audience for the findings?</p>	Final report: The introduction covers all the required elements.	6
<p>II. Evaluation Methods</p> <p>A data collection section should include: a description of evaluation methods and information sources used, including the number and type of respondents; justification for methods used (e.g. qualitative/quantitative; electronic/face-to-face); any selection criteria used to identify respondents, case studies or sites/countries visited; strategies used to increase stakeholder engagement and</p>	Final report: Evaluation methods have been well described	5

	UNEP Evaluation Office Comments	Final Report Rating
<p>consultation; details of how data were verified (e.g. triangulation, review by stakeholders etc.).</p> <p>Methods to ensure that potentially excluded groups (excluded by gender, vulnerability or marginalisation) are reached and their experiences captured effectively, should be made explicit in this section.</p> <p>The methods used to analyse data (e.g. scoring; coding; thematic analysis etc.) should be described.</p> <p>It should also address evaluation limitations such as: low or imbalanced response rates across different groups; gaps in documentation; extent to which findings can be either generalised to wider evaluation questions or constraints on aggregation/disaggregation; any potential or apparent biases; language barriers and ways they were overcome.</p> <p>Ethics and human rights issues should be highlighted including: how anonymity and confidentiality were protected and strategies used to include the views of marginalised or potentially disadvantaged groups and/or divergent views. Is there an ethics statement?</p>		
<p>III. The Project</p> <p>This section should include:</p> <ul style="list-style-type: none"> • <i>Context:</i> Overview of the main issue that the project is trying to address, its root causes and consequences on the environment and human well-being (i.e. synopsis of the problem and situational analyses). • <i>Results framework:</i> Summary of the project’s results hierarchy as stated in the ProDoc (or as officially revised) • <i>Stakeholders:</i> Description of groups of targeted stakeholders organised according to relevant common characteristics • <i>Project implementation structure and partners:</i> A description of the implementation structure with diagram and a list of key project partners • <i>Changes in design during implementation:</i> Any key events that affected the project’s scope or parameters should be described in brief in chronological order • <i>Project financing:</i> Completed tables of: (a) budget at design and expenditure by components (b) planned and actual sources of funding/co-financing 	<p>Final report: Description of the project is well prepared and includes all the required elements.</p>	<p>6</p>
<p>IV. Theory of Change</p> <p>The <i>TOC at Evaluation</i> should be presented clearly in both diagrammatic and narrative forms. Clear articulation of each major causal pathway is expected, (starting from outputs to long term impact), including explanations of all drivers and assumptions as well as the expected roles of key actors.</p>	<p>Final report: The ToC is clear but ideally, should also identify outputs</p>	<p>4</p>

	UNEP Evaluation Office Comments	Final Report Rating
<p>This section should include a description of how the <i>TOC at Evaluation</i>⁴⁴ was designed (who was involved etc.) and applied to the context of the project? Where the project results as stated in the project design documents (or formal revisions of the project design) are not an accurate reflection of the project's intentions or do not follow UNEP's definitions of different results levels, project results may need to be re-phrased or reformulated. In such cases, a summary of the project's results hierarchy should be presented for: a) the results as stated in the approved/ revised Prodoc logframe/TOC and b) as formulated in the <i>TOC at Evaluation</i>. <i>The two results hierarchies should be presented as a two-column table to show clearly that, although wording and placement may have changed, the results 'goal posts' have not been 'moved'</i>.</p>		
<p>V. Key Findings</p> <p>A. Strategic relevance:</p> <p>This section should include an assessment of the project's relevance in relation to UNEP's mandate and its alignment with UNEP's policies and strategies at the time of project approval. An assessment of the complementarity of the project at design (or during inception/mobilisation⁴⁵), with other interventions addressing the needs of the same target groups should be included. Consider the extent to which all four elements have been addressed:</p> <ul style="list-style-type: none"> v. Alignment to the UNEP Medium Term Strategy (MTS) and Programme of Work (POW) vi. Alignment to Donor/GEF Strategic Priorities vii. Relevance to Regional, Sub-regional and National Environmental Priorities viii. Complementarity with Existing Interventions 	Final report: Relevance has been well assessed	6
<p>B. Quality of Project Design</p> <p>To what extent are the strength and weaknesses of the project design effectively <u>summarized</u>?</p>	Final report: Project design strengths and weaknesses have been well described.	6

⁴⁴ During the Inception Phase of the evaluation process a *TOC at Evaluation Inception* is created based on the information contained in the approved project documents (these may include either logical framework or a TOC or narrative descriptions), formal revisions and annual reports etc. During the evaluation process this TOC is revised based on changes made during project intervention and becomes the *TOC at Evaluation*.

⁴⁵ A project's inception or mobilization period is understood as the time between project approval and first disbursement. Complementarity during project implementation is considered under Efficiency, see below.

	UNEP Evaluation Office Comments	Final Report Rating
<p>C. Nature of the External Context</p> <p>For projects where this is appropriate, key <u>external</u> features of the project's implementing context that limited the project's performance (e.g. conflict, natural disaster, political upheaval⁴⁶), and how they affected performance, should be described.</p>	Final report: Nature of external context has been well described	5
<p>D. Effectiveness</p> <p>(i) Outputs and Project Outcomes: How well does the report present a well-reasoned, complete and evidence-based assessment of the a) availability of outputs, and b) achievement of project outcomes? How convincing is the discussion of attribution and contribution, as well as the constraints to attributing effects to the intervention.</p> <p>The effects of the intervention on differentiated groups, including those with specific needs due to gender, vulnerability or marginalisation, should be discussed explicitly.</p>	Final report: Effectiveness has been adequately assessed within the limits of data availability	4
<p>(ii) Likelihood of Impact: How well does the report present an integrated analysis, guided by the causal pathways represented by the TOC, of all evidence relating to likelihood of impact?</p> <p>How well are change processes explained and the roles of key actors, as well as drivers and assumptions, explicitly discussed?</p> <p>Any unintended negative effects of the project should be discussed under Effectiveness, especially negative effects on disadvantaged groups.</p>	Final report: Likelihood of impact has been adequately assessed within the limits of data availability	4
<p>E. Financial Management</p> <p>This section should contain an integrated analysis of all dimensions evaluated under financial management and include a completed 'financial management' table.</p> <p>Consider how well the report addresses the following:</p> <ul style="list-style-type: none"> • <i>Adherence</i> to UNEP's financial policies and procedures • <i>completeness</i> of financial information, including the actual project costs (total and per activity) and actual co-financing used • <i>communication</i> between financial and project management staff 	Final report: Financial management has been adequately assessed within the limits of data availability	4
<p>F. Efficiency</p> <p>To what extent, and how well, does the report present a well-reasoned, complete and evidence-based assessment of efficiency under the primary categories of cost-effectiveness and timeliness including:</p>	Final report: Efficiency has been well assessed	5

⁴⁶ Note that 'political upheaval' does not include regular national election cycles, but unanticipated unrest or prolonged disruption. The potential delays or changes in political support that are often associated with the regular national election cycle should be part of the project's design and addressed through adaptive management of the project team.

	UNEP Evaluation Office Comments	Final Report Rating
<ul style="list-style-type: none"> • Implications of delays and no cost extensions • Time-saving measures put in place to maximise results within the secured budget and agreed project timeframe • Discussion of making use during project implementation of/building on pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. • The extent to which the management of the project minimised UNEP's environmental footprint. 		
<p>G. Monitoring and Reporting</p> <p>How well does the report assess:</p> <ul style="list-style-type: none"> • Monitoring design and budgeting (<i>including SMART results with measurable indicators, resources for MTE/R etc.</i>) • Monitoring of project implementation (<i>including use of monitoring data for adaptive management</i>) • Project reporting (<i>e.g. PIMS and donor reports</i>) 	Final report: Monitoring and reporting have been well assessed	5
<p>H. Sustainability</p> <p>How well does the evaluation identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of achieved project outcomes including:</p> <ul style="list-style-type: none"> • Socio-political Sustainability • Financial Sustainability • Institutional Sustainability 	Final report: The assessment of sustainability is adequate	4
<p>I. Factors Affecting Performance</p> <p>These factors are <u>not</u> discussed in stand-alone sections but are integrated in criteria A-H as appropriate. Note that these are described in the Evaluation Criteria Ratings Matrix. To what extent, and how well, does the evaluation report cover the following cross-cutting themes:</p> <ul style="list-style-type: none"> • Preparation and readiness • Quality of project management and supervision⁴⁷ • Stakeholder participation and co-operation • Responsiveness to human rights and gender equity • Environmental and social safeguards 	Final report: Factors affecting performance have been well covered throughout the report	5

⁴⁷ In some cases 'project management and supervision' will refer to the supervision and guidance provided by UNEP to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UNEP.

	UNEP Evaluation Office Comments	Final Report Rating
<ul style="list-style-type: none"> Country ownership and driven-ness Communication and public awareness 		
<p>VI. Conclusions and Recommendations</p> <p>i. Quality of the conclusions: The key strategic questions should be clearly and succinctly addressed within the conclusions section. It is expected that the conclusions will highlight the main strengths and weaknesses of the project and connect them in a compelling story line. Human rights and gender dimensions of the intervention (e.g. how these dimensions were considered, addressed or impacted on) should be discussed explicitly. Conclusions, as well as lessons and recommendations, should be consistent with the evidence presented in the main body of the report.</p>	Final report: Conclusions have been well presented	5
<p>ii) Quality and utility of the lessons: Both positive and negative lessons are expected and duplication with recommendations should be avoided. Based on explicit evaluation findings, lessons should be rooted in real project experiences or derived from problems encountered and mistakes made that should be avoided in the future. Lessons must have the potential for wider application and use and should briefly describe the context from which they are derived and those contexts in which they may be useful.</p>	Final report: The lessons are well formulated	5
<p>iii) Quality and utility of the recommendations:</p> <p>To what extent are the recommendations proposals for specific action to be taken by identified people/position-holders to resolve concrete problems affecting the project or the sustainability of its results? They should be feasible to implement within the timeframe and resources available (including local capacities) and specific in terms of who would do what and when.</p> <p>At least one recommendation relating to strengthening the human rights and gender dimensions of UNEP interventions, should be given.</p> <p>Recommendations should represent a measurable performance target in order that the Evaluation Office can monitor and assess compliance with the recommendations.</p>	Final report: Recommendations have been well formulated	5
<p>VII. Report Structure and Presentation Quality</p>		
<p>i) Structure and completeness of the report: To what extent does the report follow the Evaluation Office guidelines? Are all requested Annexes included and complete?</p>	Final report: The report follows the EOU guidelines quite well	5

	UNEP Evaluation Office Comments	Final Report Rating
ii) Quality of writing and formatting: Consider whether the report is well written (clear English language and grammar) with language that is adequate in quality and tone for an official document? Do visual aids, such as maps and graphs convey key information? Does the report follow Evaluation Office formatting guidelines?	Final report: The report has been well written and formatted	6
OVERALL REPORT QUALITY RATING		5.1 Satisfactory

A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1. The overall quality of the evaluation report is calculated by taking the mean score of all rated quality criteria.

At the end of the evaluation, compliance of the evaluation process against the agreed standard procedures is assessed, based on the table below. *All questions with negative compliance must be explained further in the table below.*

Evaluation Process Quality Criteria	Compliance	
	Yes	No
Independence:		
1. Were the Terms of Reference drafted and finalised by the Evaluation Office?	x	
2. Were possible conflicts of interest of proposed Evaluation Consultant(s) appraised and addressed in the final selection?	x	
3. Was the final selection of the Evaluation Consultant(s) made by the Evaluation Office?	x	
4. Was the evaluator contracted directly by the Evaluation Office?	x	
5. Was the Evaluation Consultant given direct access to identified external stakeholders in order to adequately present and discuss the findings, as appropriate?	x	
6. Did the Evaluation Consultant raise any concerns about being unable to work freely and without interference or undue pressure from project staff or the Evaluation Office?		x
7. If Yes to Q6: Were these concerns resolved to the mutual satisfaction of both the Evaluation Consultant and the Evaluation Manager?		
Financial Management:		
8. Was the evaluation budget approved at project design available for the evaluation?	x	
9. Was the final evaluation budget agreed and approved by the Evaluation Office?	x	
10. Were the agreed evaluation funds readily available to support the payment of the evaluation contract throughout the payment process?	x	
Timeliness:		
11. If a Terminal Evaluation: Was the evaluation initiated within the period of six months before or after project operational completion? Or, if a Mid Term Evaluation: Was the evaluation initiated within a six-month period prior to the project's mid-point?	x	
12. Were all deadlines set in the Terms of Reference respected, as far as unforeseen circumstances allowed?	x	
13. Was the inception report delivered and reviewed/approved prior to commencing any travel?	x	
Project's engagement and support:		
14. Did the project team, Sub-Programme Coordinator and identified project stakeholders provide comments on the evaluation Terms of Reference?	x	
15. Did the project make available all required/requested documents?	x	
16. Did the project make all financial information (and audit reports if applicable) available in a timely manner and to an acceptable level of completeness?	x	
17. Was adequate support provided by the project to the evaluator(s) in planning	x	

and conducting evaluation missions?		
18. Was close communication between the Evaluation Consultant, Evaluation Office and project team maintained throughout the evaluation?	x	
19. Were evaluation findings, lessons and recommendations adequately discussed with the project team for ownership to be established?	x	
20. Did the project team, Sub-Programme Coordinator and any identified project stakeholders provide comments on the draft evaluation report?	x	
Quality assurance:		
21. Were the evaluation Terms of Reference, including the key evaluation questions, peer-reviewed?	x	
22. Was the TOC in the inception report peer-reviewed?	x	
23. Was the quality of the draft/cleared report checked by the Evaluation Manager and Peer Reviewer prior to dissemination to stakeholders for comments?	x	
24. Did the Evaluation Office complete an assessment of the quality of both the draft and final reports?	x	
Transparency:		
25. Was the draft evaluation report sent directly by the Evaluation Consultant to the Evaluation Office?	x	
26. Did the Evaluation Manager disseminate (or authorize dissemination) of the cleared draft report to the project team, Sub-Programme Coordinator and other key internal personnel (including the Reference Group where appropriate) to solicit formal comments?	x	
27. Did the Evaluation Manager disseminate (or authorize dissemination) appropriate drafts of the report to identified external stakeholders, including key partners and funders, to solicit formal comments?	x	
28. Were all stakeholder comments to the draft evaluation report sent directly to the Evaluation Office	x	
29. Did the Evaluation Consultant(s) respond adequately to all factual corrections and comments?	x	
30. Did the Evaluation Office share substantive comments and Evaluation Consultant responses with those who commented, as appropriate?	x	

Provide comments / explanations / mitigating circumstances below for any non-compliant process issues.

<u>Process Criterion Number</u>	<u>Evaluation Office Comments</u>