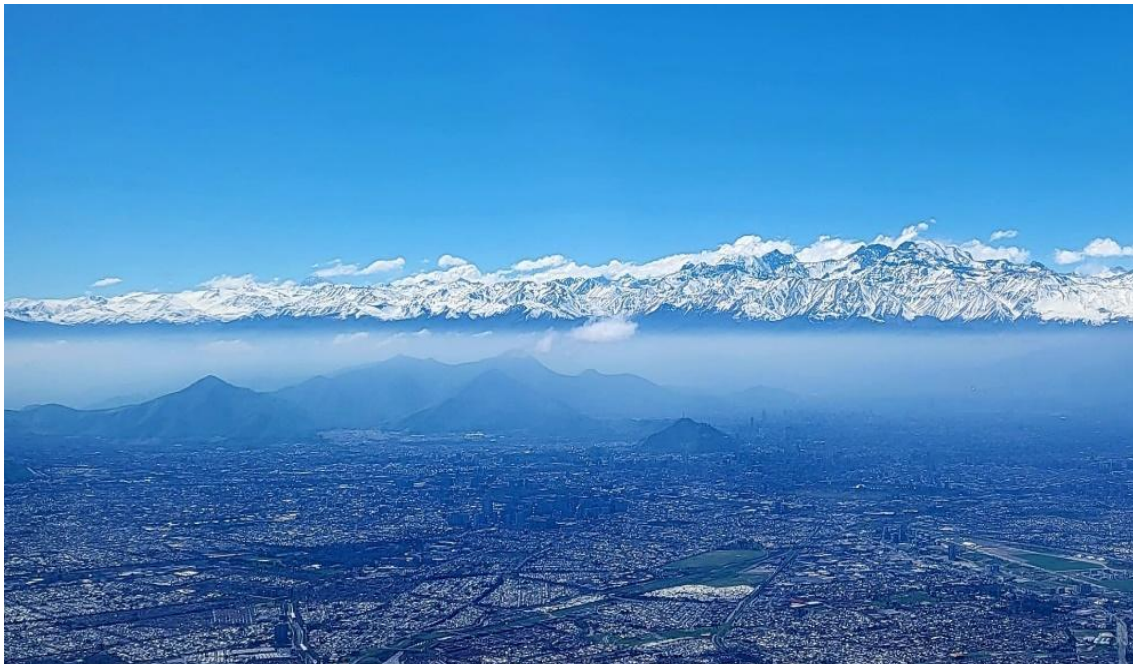


**Terminal Evaluation of the UNEP Projects
“Joint UNEP-UNIDO Programme to host and manage the Climate
Technology Centre and Network” (PIMS 01626)
and
“Support to Climate Technology Transfer Services and Partnership”
(EU Contract DCI-ENV/2016/377-145)
01/2024**



Evaluation Office of the United Nations Environment Programme

Distributed: May 2024



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Front cover: *Maria Kontro: The importance of climate technology can be seen in the smog layer over the city of Santiago de Chile, as well as in the climate vulnerability characteristics of a mountainous country.*

Page 22:

- Oulaykham Siphandone, Laos: Meeting with the Ministry of Energy and Mines.
- Saila Toikka, Antigua: Diann Black-Layne presenting the registry of technologies maintained by the Division of Environment (NDE).
- Ben Njamba Makayi, Zambia: Evaluation discussions with the staff of the Zambia Environmental Management Agency.
- National Commission for Science and Technology, Malawi: Meeting with the National Designated Entity.
- Catherine Figueroa, Chile: Agency for Sustainability and Climate Change. Executive Director shares her views with the evaluator and opens the project managers focus group discussion.
- Asira Chirawithayaboon, Thailand: Meeting with the National Science and Technology Development Agency.

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Title: Evaluation of the “Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network” (PIMS 01626) and “Support to Climate Technology Transfer Services and Partnership” (EU Contract DCI-ENV/2016/377-145)

Project number: PIMS 01626 and EU Contract DCI-ENV/2016/377-145

01/2024

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This Terminal Evaluation was prepared for UNEP by an external Evaluation Team of Ms. Maria Kontro in the capacity of Principal Evaluator/Team Leader, together with Evaluation Specialists Ms. Saila Toikka and Mr. Kevin Enongene.

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It is hoped that these findings, conclusions, lessons learned and recommendations will provide inspiration, guidance, and be useful for enhancing the future operation of the CTCN in the context of supporting to reach the goals of the Paris Agreement.

BRIEF CONSULTANT BIOGRAPHY

Ms. Maria Kontro (Principal Evaluator/ Team Leader) holds a MSc in Development Geography and Global Political Economy, as well as over 30 specialization courses on evaluations and her thematic areas of expertise. She has close to 15 years of professional experience in working as an advisor, programme manager and a consultant for companies and international organizations, including several UN offices, European Commission and the World Bank. Maria’s main thematic focus areas are within the interconnections between disaster risk reduction, climate change and sustainable development, and she excels in combining them with people-centered methodologies on gender and inclusion to enable more meaningful results. Maria has also worked with several large projects and global initiatives related to the private sector role in development and climate risk. Her experience as a researcher and her on-site work in four different continents has enabled her to find context-specific solutions for complex phenomena. Maria has led and participated to large variety of complex evaluations, reviews and research assignments, as well as designed monitoring systems in climate change related programmes. Her strong thematic background, combined with research and evaluation, supports her view on the importance of research-oriented approaches in addressing the goals of the Agenda 2030. Maria speaks fluent English, Spanish and Finnish, as well as some Portuguese and Swedish.

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Evaluation team

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Evaluation Office of UNEP

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ABOUT THE EVALUATION

Joint Evaluation: No

Report Language(s): English

Evaluation Type: Terminal Evaluation

Brief Description: This report is a Terminal Evaluation of a “Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network” (PIMS 01626; the 1st and 2nd phases) and “Support to Climate Technology Transfer Services and Partnership” (EU Contract DCI-ENV/2016/377-145), implemented between 2013-2022 and 2016-2022 respectively. The project 's overall development goal was to “Support action on climate mitigation and adaptation and thus enhance low emissions and climate-resilient development”. The evaluation sought to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation had two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, and the relevant agencies of the project participating countries.

Key words: Climate Change Mitigation, Climate Change Adaptation, Technology Transfer, Climate Technology, Technology Mechanism, Technical Assistance, Capacity Strengthening, Gender Equality.

Primary data collection period: August 2023 – October 2023

Field mission dates:

- **Field mission 1:** Chile, 10-16 September 2023
- **Field mission 2:** Antigua and Barbuda, 8-12 October 2023
- **Field mission 3:** Thailand, 15 – 20 October 2023
- **Field mission 4:** Zambia, 15 – 20 October 2023
- **Field mission 5:** Laos, 22 – 27 October 2023
- **Field mission 6:** Malawi, 22 – 27 October 2023
- **CTCN Advisory Board meeting:** Observer and meeting with the high-level key informants, Bonn, 27-28 September 2023

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LIST OF ACRONYMS

AB	Advisory Board
AF	Adaptation Fund
AFCIA	Adaptation Fund Climate Innovation Accelerator (programme)
AIT	Asian Institute of Technology
APL	Clean Production Agreement (Acuerdo de Producción Limpia)
ASCC	Sustainability and Climate Change Agency, Chile
BSP	Bali Strategic Plan for Technology Support and Capacity Building
CAEP	Climate Action Enhancement Package
COP	Conference of Parties (here in relation to UNFCCC)
COVID-19	Coronavirus disease caused by the SARS-CoV-2 virus
CSIR	Council for Scientific and Industrial Research
CSO	Civil society Organisation
CTC	Climate Technology Centre
CTCN	Climate Technology Centre and Network
CTN	Climate Technology Network
DANIDA	Danish International Development Agency
DHI	DHI group (Danish organisation)
EbA	Ecosystem-Based Adaptation
EC	European Commission
EC Grant	European Commission funding agreement “Support to Climate Change Technology Transfer Services and Partnerships”
ECOWAS	Economic Community of West African States
EOU	Evaluation Office of UNEP
ERG	Evaluation Reference Group
EU	European Union
EUR	Euro (currency)
FMO	Fund Management Officer
FTA	Fast Technical Assistance
G-STIC	Global Sustainable Technology and Innovation Community
GB	General Budget (here in the context of UNIDO)
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Green House Gas
HRBA	Human Rights Based Approach
ICA	Internal cooperation agreement
KCB	KCB group PLC (Bank in Kenya)
KII	Key Informant Interview
KMS	knowledge management system
KSQ	Key strategic question
Lao PDR	Lao People's Democratic Republic
LDCs	Least Developed Countries
LogFrame	Logical Framework
M&E	Monitoring and Evaluation
M&R	Monitoring and Reporting
MCTA	Multi-Country Technical Assistance
MIC	Middle-income country

MoU	Memorandum of Understanding
MTR	Mid-term Review
MTS	Medium-Term Strategy (UNEP)
N/A	Not Applicable
NDA	National Designated Authority (GCF related)
NDC	Nationally determined contribution
NDE	National Designated Entity
NGO	Non-Governmental Organisation
NIGT	National Institute of Green Technology
NREL	National Renewable Energy Laboratory
NXPO	Office of National Higher Education Science Research and Innovation Policy Council, Thailand
PCA	Programme Cooperation Agreement
PDGA	Programme Design Quality Assessment
PIMS	Programme Implementation Management System (UNEP-related)
PoW	Programme of Work
PPD	Policy and Programme Division (UNEP)
PPMM	Programme and Project Management Manual (UNEP)
PRC	Project Review Committee (UNEP)
ProDoc	Project Document (in UNEP context approved by PRC)
SAFEEM	Swiss Association for Entrepreneurship in Emerging Markets
SDG	Sustainable Development Goal
SIDS	Small Island Development States
SME	Small and Medium Enterprises
SRIF	Safeguard Risk Identification Form
SSFA	Small-scale funding agreement
TA	Technical Assistance (Here CTCN technical assistance project)
TAP	Technology Action Plan
TEC	Technology Executive Committee
TERI	The Energy and Resources Institute
TNA	Technology Needs Assessment
TOC	Theory of Change
ToR	Terms of Reference
U4E	United for Efficiency
UK	United Kingdom
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNEP DHI	Centre on Water and Environment is a United Nations Environment Programme (UNEP) centre of expertise
UNEP ProDoc	Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
USA	United States of America
USAID	United States Agency for International Development
USD	United States Dollar (currency)
WIPO	World Intellectual Property Organization
XB	Extra budgetary (in the context of UNEP financial management)

PROJECT IDENTIFICATION

Table 1. Project identification table

UNEP PIMS ID:	01626		
Implementing Partners	UNEP, Consortium Partners and Network Members		
Relevant SDG(s):	<p>SDG 7, Target 7.3: by 2030, double the global rate of improvement in energy efficiency; target 7.2: by 2030, increase substantially the share of renewable energy in the global energy mix;</p> <p>SDG 1, Target 1.5: by 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events;</p> <p>SDG 13, Target 13.3: improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning and targets 13.1, 13.2;</p> <p>SDGs 6 clean water and sanitation, 12 responsible consumption and production.</p> <p><u>SDGs relevant to EC grant:</u></p> <p>SDG13, Target 13.b: raising capacities for climate-related planning and management</p> <p>SDG 9, Target 9.b support domestic technology development, research and innovation</p> <p>SDG 12, Target 12.a Support to strengthen scientific and technological capacities on sustainable consumption and production</p> <p>SDG 6 Water/ sanitation</p> <p>SDG 7 energy</p> <p>SDG 8 Sustainable economic growth</p> <p>To a lesser extent, SDGs 10 and 11 reduce inequality between countries and resilient cities.</p>		
Sub-programme:	Climate Change	Expected Accomplishment(s):	
UNEP approval date:	June 27, 2013	Programme of Work Output(s):	<p>Outcome 1A: Decision-makers at all levels adopt decarbonization, dematerialization and resilience pathways.</p> <p>Outcome 1B: Countries and stakeholders have increased capacity, finance and access to technologies to deliver on the adaptation and mitigation goals of the Paris Agreement.</p>
Expected start date:	27 June 2013	Actual start date:	27 June 2013
	EC grant: 30 November 2016		December 2016
Planned completion date:	31 December 2022	Actual operational completion date:	1 December 2022
	EC grant: End date: 31 July 2022		EC grant end date: 31 July 2022

<i>Planned</i> total programme budget at approval (project revision # 6):	USD 114 562 367	Actual total expenditures reported as of 31 Dec 2022:	USD 71 936 224 (as per data received from the CTCN Secretariat 11/10/2023)	
	EC grant: (EUR 7 000 000) USD 7,645,427		EC grant: USD 7 636 671	
<i>Planned</i> Environment Fund allocation:	N/A	Actual Environment Fund expenditures reported as of n/a:	N/A	
<i>Planned</i> Extra-Budgetary Financing (project revision # 6):	USD 92,254,061	Secured Extra-Budgetary Financing:	USD 97 334 987 (as received from the CTCN Secretariat 24/10/2023)	
		Actual Extra-Budgetary Financing expenditures reported as of 31 December 2022:	USD 71 936 224 (as per data received from the CTCN Secretariat 24/10/2023)	
First disbursement:	March 2013	Planned date of financial closure:	Continuing POW	
No. of formal programme revisions:	4 ¹ EC grant: 3	Date of last approved programme revision:	1 February 2022	
No. of Advisory Board meetings:	20	Date of last/next Advisory Board meeting:	Last: 27– 29 March 2023	Next: 25 – 27 September 2023
Mid-term Review/ Evaluation (<i>planned date</i>):	N/A	Mid-term Review/ Evaluation (<i>actual date</i>):	N/A	
Terminal Evaluation (<i>planned date</i>):	October 2022	Terminal Evaluation (<i>actual date</i>):	April 2023 – January 2024	
Coverage - Country(ies):	Global	Coverage - Region(s):	Africa, Asia Pacific, Europe, Latin America & Caribbean, North America, West Asia	
Dates of previous programme phases:	CTCN formal start: June 2013	Status of future programme phases:	CTCN Third Programme of Work (CTCN POW 2023-2027)	

1 Four project revisions/extensions available to the evaluation team.

EXECUTIVE SUMMARY

Project background

1. Climate change constitutes one of the most serious challenges faced by society. Tackling its challenges requires a holistic, concerted, and global efforts. Technology considerations are considered fundamental for achieving climate change adaptation and mitigation. Consequently, an accelerated transfer, diffusion and deployment of climate technologies in developing countries is primordial for attaining a transition towards a low-emissions and climate resilient development at a global scale.
2. Since its establishment, the United Nations Framework Convention on Climate Change (UNFCCC) recognized the central place of technology in achieving the objectives of the Convention. The 16th session of the Conference of Parties (COP), organized in 2010, established the Technology Mechanism, which was tasked with addressing a set of barriers impeding the deployment of technologies. The Technology Mechanism comprises of i) a policy arm: the Technology Executive Committee (TEC), with the focus on identifying policies to accelerate development and transfer of low-emission and climate resilient technologies, and ii) an operational arm: the Climate Technology Centre and Network (CTCN), to promote adaptation and mitigation technology transfer through small size catalytic projects.
3. CTCN comprises of the Climate Technology Centre and its Network of members. Through a competitive tendering process, the United Nations Environment Programme (UNEP)-led consortium was selected at the 18th session of the COP to host and manage the CTCN. To formalize the hosting of the CTCN, a memorandum of understanding (MoU) was signed on February 2013. Therefore, the Climate Technology Centre is managed and hosted by UNEP-led consortium, implemented through the UNEP Industry and Economy Division, which provides administrative and infrastructural support to the centre.
4. The European Commission (EC) has been the largest individual donor of the CTCN and a key partner. The European Union Delegation Agreement in regard to “Support to Climate Technology Transfer Services and Partnership” was signed on November 2016. Both the UNEP ProDoc and EC Grant ended in 2022.
5. CTCN recognizes that the opportunities and challenges relating to climate technology transfer are country, region, sector and technology specific, influenced by varying levels of economic development, industrial and technical capacity, experience in climate change adaptation and mitigation activities, among other factors.
6. As the world is behind the climate change targets the COP, in its 28th session, decided to end the era of fossil fuels, underpinned by deep emissions cuts and scaled-up finance. The role of climate technology transfer is essential in this decision, highlighting the role of the CTCN also towards the future through its catalytic action on technology transfer.

This evaluation

7. In line with UNEP’s 2022 Evaluation Policy and the requirements of the EC Grant, this terminal evaluation had the following purposes: Be a source of accountability, contribute to learning, generate evidence and support evidence-based decision making, operational improvement and knowledge sharing. The evaluation was commissioned to assess the performance of the Programme against nine evaluation criteria applied by UNEP: Strategic Relevance, Quality of Programme Design, Nature of External Context, Effectiveness, Financial Management, Efficiency, Monitoring and Reporting, Sustainability, Factors Affecting Programme Performance and Cross-

Cutting Issues. It also provided an answer to the six Key Strategic Questions, as defined in the evaluation Terms of Reference (Annex X).

8. The evaluation concentrated on the activities of the United Nations Environment Programme project document “Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network” (hereafter UNEP ProDoc) and the European Commission funding agreement “Support to Climate Change Technology Transfer Services and Partnerships” (hereafter EC Grant). The evaluation covered the period from 2013 up to end of 2022, however, specific emphasis was placed on the period 2016-2022 and the activities undertaken using the European Commission funding agreement.
9. The methodology used a dual track methodological approach of theory-based evaluation and outcome harvesting to enable evaluating the complexity of the CTCN operations. The data collection included desk review; sub-project portfolio review of the Technical Assistance (TA), networking, information and capacity building services; 44 key informant interviews (KII) at the strategic level and 124 KIIs at the country-level (total gender balance 61 % male and 39 % female; gender balance was achieved at global level KIIs) conducted both online and in person; field visits to 6 countries (Malawi, Zambia, Laos, Thailand, Chile and Antigua and Barbuda) with sampling of 22 sub-projects of the technical assistance; and visit to the CTCN Advisory Board meeting. The evaluation process was managed by the Evaluation Office of UNEP in close consultation with the CTCN Secretariat and with strategic direction from the Evaluation Reference Group.

Key findings and conclusions

10. Based on the findings from this evaluation, the project demonstrated overall performance rated at the ‘Moderately Satisfactory’ level (a table of ratings against all evaluation criteria is found in the Conclusions section).
11. The project has demonstrated strong performance in the areas of relevance (with significant importance), quality of project design, availability of outputs, communication between finance and project management staff, adherence to UNEP’s financial policies and procedures, socio-political sustainability, and stakeholders’ participation and cooperation. CTCN was found to adapt well to changes in the external context. Gender dimensions were well recognized in the UNEP ProDoc and EC Grant, with a related gender policy developed in 2019.
12. The Evaluation Team found evidence of CTCN having contributed to the main outcome “capacity and capability of developing countries to identify technology needs/prepare and implement technology projects”, which can be considered the most important one to attain the intermediate state. The outcome is considered partially met, as the delivery is uneven, and the assumptions and drivers hold only partially. There was also evidence on contribution to the EC Grant outcome on “better coherence”, which is stronger particularly when connected to the national Technology Needs Assessment and Technology Action Plan processes. The CTCN TA projects were also often designed in a way that they could lead to bigger transformations and impact.
13. The strong country interest towards TAs and the TA alignment with national climate priorities was found to enable sustainability. TA results were often dependent on additional financial resources for their sustainability and to move from TA to the intermediate impact of transfer of climate technologies and gaps found in the follow-up and mobilization of additional financial resources (e.g. through partnerships) created stress for the sustainability. However, instances where TAs have contributed to leveraging additional financial resources did also exist, and in other instances, TA results (such as those related to policies) did not depend on the immediate

- mobilization of financial resources to be sustained. CTCN itself is dependent on external funding but had not used all the funding sources defined in the MoU.
14. Areas that would have benefited from further attention were financial sustainability and responsiveness to human rights and gender equality. On the latter, the country implementation of the related policy was not functioning well. Documentation of UNEP project revisions have not fully reflected the CTCN’s evolving mandate as done at the level of implementation. As the CTCN TA projects were meant to be catalytic by nature, the strong dependency of such projects on external partners and future funding (whether internal or external) for the continuity of the catalytic effect meant that the gaps in strategic and systematized partnership/ funding approach created insecurities to the likelihood of impact and sustainability.
 15. It is to be recognized, that CTCN has worked in different ways in different contexts with high level of diversity. The different stakeholder groups also had different expectations of the CTCN. While this diversity was a benefit in terms of being able to respond to the needs of the countries, it also created challenges in systematizing processes.
 16. Table 2 summarizes the ratings with respect to the evaluation criteria.

Table 2. Summarized rating table

Criterion	Rating²
A. Strategic Relevance	HS
B. Quality of Project Design	S
C. Nature of External Context	F Note: this rating is not included in the calculation of the overall project rating
D. Effectiveness	MS
E. Financial Management	S
F. Efficiency	MS
G. Monitoring and Reporting	MS
H. Sustainability	ML
I. Factors Affecting Performance	MS
Overall Project Rating	MS

Summary Responses to Key Strategic Questions

17. The EC was considered more of an important strategic partner than just a donor. The European Commission funding agreement had several significant added values in relation to strategic considerations and extent of operations. All the components in the EC results framework strengthened the CTCN approach to improve its likelihood of impact, for which its strategic value has been considerable.
18. The Advisory Board had a significant advisory role in the CTCN planning processes as mandated by the COP. On some key topics, internal consensus was at times hard to reach. The National Designated Entities (NDE), together with other national partners

² HU = Highly Unsatisfactory; U= Unsatisfactory; MS=Moderately Unsatisfactory; MS=Moderately Satisfactory; S=Satisfactory; HS=Highly Satisfactory; F=Favourable (in the six-level scale from Highly Unfavourable to Highly Favourable).

- and implementers, had a significant role in country-level success (results and impact), while their role at the global level was more limited. A wide Network is a strength of the CTCN e.g. in diversity of expertise. However, an implementer (Network member) - driven processes can limit the country ownership and the country's ability to maintain a relevant role in the planning and implementation of the technical assistance.
19. The design of the activities implemented under UNEP ProDoc project and EC Grant reflected the UNFCCC mandate well and the operations and activities that were implemented were also in line with the Convention's mandate. These mandates have been fulfilled strongest on the output of TA requests, while cooperation, collaboration, networks and capacity building would have benefited from further strategic considerations and volume.
 20. CTCN adapted to the extensive effects of COVID-19 rather quickly, while also experiencing challenges that have been typical to international projects. CTCN created some good practices during COVID-19 that apply for current and future operations. However, this development has not been equal as the "digital divide" is a reality for the countries benefiting from the CTCN support.
 21. No direct connection to actual impact could be drawn yet by the evaluation team, however, there were anticipated impacts. For example, the six country cases all provided connections to the intermediate impact, but none has materialized so far, partially due to six years being a short time since the first technical assistance projects were completed.
 22. Regular evaluations enabled the CTCN to learn, renew and continue to develop operations to the direction of strong likelihood of impact. Feasibility of conducting impact assessments was considered to be good by the evaluation team. The costs for functional impact assessment were estimated to be significantly higher than what has been implemented so far, as the diversity of the CTCN operations would mean that impact assessments would benefit from a large number of country cases in order to provide reliable sampling on the different elements.
 23. CTCN's further decentralized structure and wide Network has offered avenues for diverse expertise to engage with the CTCN, based on different regional needs.

Lessons Learned

24. Lesson 1: While the CTCN funding for technical assistance was a vital part of the programme, the CTCN's potential also underpins the extensive knowledge platform. Further leveraging on such technology data base offered a great opportunity in support of technology transfer. This could be further leveraged as expert consultant databases or as an easy-to-use technology catalogue. There was an explicit attempt by the CTCN to manage the knowledge platform in this direction, but in its current form it's not fully meeting the country level expectations.
25. Lesson 2: TA projects that were designed from the start with a link to other financing mechanisms such as GCF tended to be more successful in leveraging the funding needed for further piloting or technology transfer, and thus also increasing the CTCN catalytic effect and the likelihood of impact deriving from an individual TA. These cases highlighted the catalytic role and the potential of small-scale TA support for technology transfer.
26. Lesson 3: UNEP sets the programming and project management requirements for all of its projects. In case of the hosting agency arrangements, it was observed that the parallel results frameworks (such COP mandated Technology Framework and UNEP Prodoc) can pose unnecessary duplication of the processes. UNEP can further support in alignment of its programming requirements with other requirements related to the

hosting arrangement to support efficiency and quality of reporting while also ensuring full accountability towards different requirements.

27. Lesson 4: While allocating a proportion of the TA or project budget for gender analysis and mainstreaming in climate technology programming is important, CTCN examples showed that it is not a guarantee for securing a gender-responsive TA implementation or sufficient assessments of gendered impacts of climate change within the implementation process. This means that specific attention for rolling out the guidelines and training is needed for meaningful integration of gender perspectives in climate technology programming.
28. Lesson 5: The CTCN and its network demonstrated the diversity of needs in terms of technology transfer for climate change. Middle-income countries (MICs), lower Middle-income countries (LMICs) and Least Developed countries (LDCs) can have very different needs in terms of capacity, technologies and funding. This means that there is a need for considering specific approaches for countries with unrest while MIC with certain technology know how could play a more active role in south-south collaboration regionally.
29. Lesson 6: As a relatively slim organisation, CTCN was dependent on high performing and committed individuals. To keep this type of organisation or a project structure effective and efficient a specific consideration for strategic staffing and human resources of the core team is needed.

Recommendations

30. The recommendations focus mostly on the Programme level, also involving the Advisory Board, UNEP, the Network and the NDEs. It is recognized, however, that in the era of systemic change and changing COP decisions, the traditional way of doing things will not keep up with the needs – CTCN is suggested to change with the changing global context and the related needs. The recommendations should be understood through the lenses of a CTCN business model that assumes the adoption of a constant change logic in management, operational and strategic considerations.
31. Recommendation 1: CTCN Secretariat and UNEP are recommended to align the UNEP project document to the theory of change (TOC) of the Technology Framework, make the target areas flexible for new mandates and to consider the observations of the TOC at Evaluation (in relation to the assumptions and drivers) in its planning.
32. Recommendation 2: Clear, strategic, systematic and transparent partnerships should be developed at global, regional and country levels focusing on all stakeholder groups and strengthened resources (financial and human) in line with the decision 2/CP.17 paragraph 139 on financing, to enable the CTCN catalytic effect and likelihood of impact.
33. Recommendation 3: CTCN should strengthen systematized interaction, information exchange and impact monitoring between the CTCN Secretariat, NDEs, and other regional/local partners on the contextual needs/drivers, to support the design of targeted and fit for purpose country-level support in line with the context-specific drivers of the technology transfer.
34. Recommendation 4: Sufficient resources and support should be allocated to implement the existing monitoring and evaluation system, while ensuring that there is sufficient alignment and/or integration of the monitoring and evaluation approaches with multiple accountability requirements and learning needs.

35. Recommendation 5: Efficiency should be enhanced through improved TA processes and their connection to the other outputs and higher-level changes.
36. Recommendation 6: Integrate the new CTCN Gender Policy into the core of operations, including via systematic gender analysis, capacity strengthening at the country level, gender-sensitive communication into indicators and monitoring, communication, gender analysis and capacity strengthening at the country level., and specific gender targets and indicators in the monitoring & evaluation framework.

I. INTRODUCTION

37. The Climate Technology Centre and Network (CTCN) comprises of the Climate Technology Centre (CTC) located in Copenhagen, and its Network (CTN) of organizations. The CTC is managed and hosted by a United Nations Environment Programme (UNEP)-led consortium, which provides administrative and infrastructural support to the core staff of the CTC. CTCN is implemented by UNEP’s Industry and Economy Division.
38. Technology has an important role to play in the fight against climate change. Since its establishment, the United Nations Framework Convention on Climate Change (UNFCCC) recognized the central place of technology in achieving the objectives of the convention and the Conference of Parties (COP) has taken several decisions in this regard. By virtue of the recognition of the role of technology in climate change adaptation and mitigation, the COP at its 16th session, organized in 2010, established a technology mechanism, which was tasked with accelerating and enhancing the development and transfer of climate technology. The Technology Mechanism comprises of i) a policy arm – the Technology Executive Committee (TEC), with the focus on identifying policies to accelerate development and transfer of low-emission and climate resilient technologies, and ii) an operational arm – the CTCN, to promote adaptation and mitigation technology transfer through small sized catalytic projects. While the TEC is responsible for supporting parties in scaling up technology transfer activities under the Convention, the CTCN was conferred with the mission to stimulate technology cooperation and promote the development and transfer of technologies in view of supporting developing countries at their request and in line with their respective national circumstances, capabilities, and priorities.
39. Through a competitive tendering process, a UNEP-led consortium was selected at the 18th session of the COP³ to host and manage the CTCN. To formalize the hosting of the CTCN, a memorandum of understanding (MoU) was signed between UNFCCC Secretariat (on behalf of the COP Parties) and UNEP on 22 February 2013. The European Commission (EC) is one of the key donors and partners of CTCN. The European Union (EU) Delegation Agreement was signed on November 2016. Project revisions and extensions have taken place. Both projects ended in 2022. The total secured funding during 2013-2022 is USD 97,334,987. Implementing partners include the CTC Network Members and Consortium Members (latter until 2022). CTCN contributes to the results framework of the Technology Mechanism, as well as to the UNEP four-year Medium-Term Strategy (MTS) and biennial UNEP Programme of Work (PoW). CTCN has also its own PoW (hereafter CTCN PoW)⁴.
40. CTCN has had four evaluations. These include the 2016 UNEP case study (contributing to Terminal Evaluation of two projects); 2018 review of CTCN by Danish International Development Agency (DANIDA), and the first and second independent reviews by UNFCCC (2017 and 2021). In 2022, there was also the first UNFCCC periodic assessment of the effectiveness and adequacy of the support provided to the Technology Mechanism.
41. In line with UNEP’s 2022 Evaluation Policy and the requirements of the EC Grant, this evaluation had the following purposes: Be a source of accountability, contribute to learning, generate evidence and support evidence-based decision making, operational

³ Decision 14/CP.18. Available online at: <https://unfccc.int/resource/docs/2012/cop18/eng/08a02.pdf#page=8>

⁴ The UNEP PoW is a programming and guidance tool on UNEP operations (which include CTCN), prepared by UNEP, while the CTCN PoW is a programming and guidance tool for the specific CTCN Programme, negotiated with the CTCN stakeholders and approved by the CTCN Advisory Board representing the interests of the Conference of Parties.

improvement and knowledge sharing. The key intended audience for the findings includes UNEP, the CTCN Secretariat; the CTCN Advisory Board (AB), UNFCCC Secretariat and Parties, EC and other donors, CTCN Networks and consortium members; and the NDEs and core partners.

42. The evaluation was commissioned to assess the performance of the Programme against the following criteria: Strategic Relevance, Quality of Programme Design, Nature of External Context, Effectiveness, Financial Management, Efficiency, Monitoring and Reporting, Sustainability, Factors Affecting Programme Performance and Cross-Cutting Issues. It also provided an answer to key strategic questions (KSQ), as defined in the evaluation Terms of Reference (ToR).
43. The evaluation concentrated on the activities of the UNEP project document “Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network⁵” (referred to as UNEP ProDoc here forward) and the EC funding agreement “Support to Climate Change Technology Transfer Services and Partnerships⁶” (referred to as EC Grant here forward). The evaluation covered the period from 2013 up to end of 2022, however, specific emphasis was be placed on the period 2016-2022 and the activities undertaken using the EC grant.
44. The evaluation responded to the evaluation questions and strategic questions, in the evaluation ToR. Although this evaluation is not an impact assessment, information on the likelihood of impact has been made visible beyond the effectiveness criterion (e.g. though Annex IV Country case summaries) due to requests by the Evaluation Reference Group (ERG) and as it closely correlates to the catalytic role of CTCN.

⁵ The UNEP Prodoc is the unit of accountability with respect to the 2022 UNEP Evaluation Policy.

⁶ The EC Grant also has evaluation requirements.

II. EVALUATION METHODS

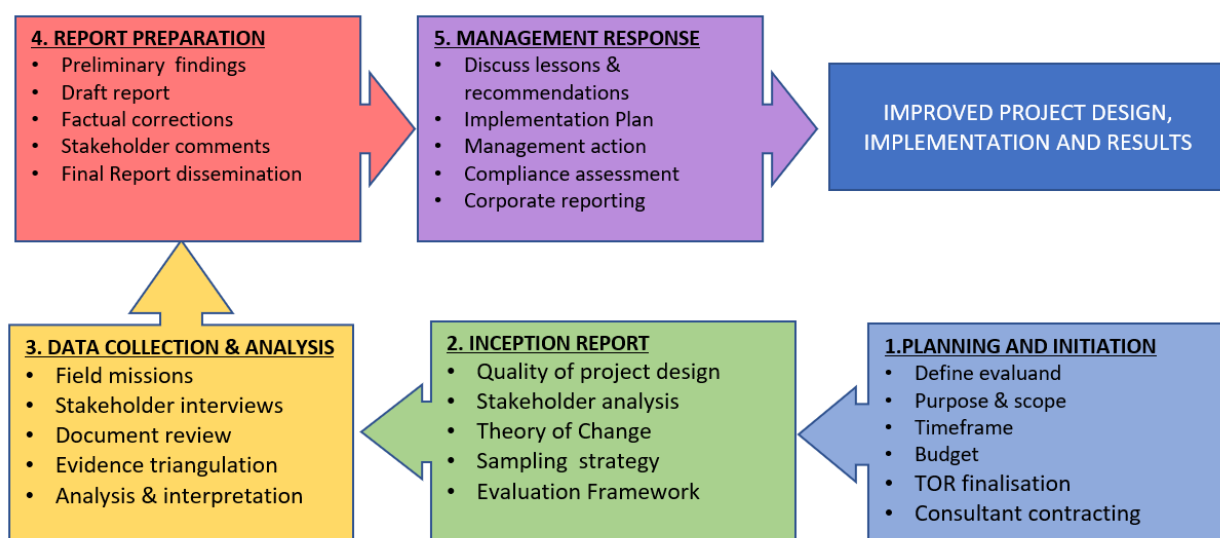
Evaluation approach and process overview

45. Definitions of evaluation criteria: In line with the UNEP Evaluation Policy and Manual, the UNEP Evaluation Office conducts evaluations at various levels that examine the different projects and programmes. In line with the related guidance documents, this evaluation was carried out using a set of nine commonly applied evaluation criteria which include: (1) Strategic Relevance, (2) Quality of Project Design, (3) Nature of External Context, (4) Effectiveness (incl. availability of outputs; achievement of outcomes and likelihood of impact), (5) Financial Management, (6) Efficiency, (7) Monitoring and Reporting, (8) Sustainability and (9) Factors Affecting Project Performance and Cross-Cutting Issues (see Table 22 in Annex VIII: Evaluation Matrix for more details on each evaluation criterion).
46. Most evaluation criteria were rated on a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability and Likelihood of Impact were rated from Highly Likely (HL) down to Highly Unlikely (HU) and Nature of External Context was rated from Highly Favourable (HF) to Highly Unfavourable (HU). The ratings against each criterion were ‘weighted’ to derive the Overall Project Performance Rating⁷. The greatest weight was placed on the achievement of outcomes, followed by dimensions of sustainability.
47. Matrix of ratings levels for each criterion: The UNEP Evaluation Office has developed detailed descriptions of the main elements required to be demonstrated at each level (i.e. Highly Satisfactory to Highly Unsatisfactory) for each evaluation criterion. The evaluation team considered all the evidence gathered during the evaluation in relation to this matrix in order to generate evaluation criteria performance ratings.
48. Strategic evaluation questions: In addition to the nine evaluation criteria outlined in paragraph 20, the evaluation addressed a number of key strategic questions (KSQ) that were formulated in the ToR. These questions were posed by the UNEP Evaluation Office in conjunction with members of the Project Team and Evaluation Reference Group (ERG).
49. This evaluation adopted a participatory approach, consulting with project team members, partners and beneficiaries at several stages throughout the process. Central to the evaluation was the analysis (and reconstruction) of the project’s Theory of Change (TOC). Consultations were held during the evaluation inception phase to arrive at a nuanced understanding of how the project intended to drive change and what contributing conditions (‘assumptions’ and ‘drivers’) would need to be in place to support such change. The reconstructed TOC, supported by a graphic representation and narrative discussion of the causal pathways, was discussed further with the selected key informants during the data collection phase, and refined as appropriate. The final iteration of the TOC is presented in this evaluation report and has been used throughout the evaluation process.
50. The evaluation included planning, inception, data collection, analysis and report preparation phases, and is followed by the management response supporting the

⁷ This means that particularly in cases in which the overall project performance rating (average of all criteria ratings) is in between two rating scale points, the ratings of achievement of outcomes and sustainability will have stronger weight in defining the overall rating.

implementation of the recommendations. The Figure 1 presents the evaluation process. Annex V includes the evaluation itinerary and schedule.

Figure 1. UNEP Evaluation Process applied in the CTCN Evaluation



Source: UNEP Evaluation Manual

51. The evaluation covers the entire period of CTCN activities from 2013 to 2022. However, a strong focus of the evaluation was placed on the work undertaken using EC funding during the period 2016-2022. This time-specific focus also supported data collection in the following way:

- **2013-2015:** During this period, fewer materials and key informants were available. In addition to the other available materials, the data collection focus was on previous evaluations, reviews and assessments, which largely provided accountability for the work undertaken 2013 – 2015.
- **2016-2022:** Within the overall CTCN context, this period had a strong focus on the EC Grant, which is implemented largely (but not only) during the CTCN Programme Phase II 2018-2022. Documents and key informants were more readily available for this time period.

52. The methodology applied used a dual track methodological approach. This meant that the CTCN progress in the strategic (global) level towards the outcomes and impact was assessed with theory-based evaluation (Track 1). In parallel, at country level, the evaluation pursued data collection largely through outcome harvesting (Track 2) in identifying the changes/outcomes that occurred at the national level. The main aspects of the two approach includes:

- Theory based evaluation (Track 1):** Guided by the TOC process, theory-based evaluation approach in this evaluation was used to assess the strategic structure and progress of the Programme/Grant as a whole towards the impact.
- Outcome harvesting (Track 2; applied):** Applied outcome harvesting⁸ was used in the country case studies to identify the intended and unintended outcomes/results.

⁸ Outcome harvesting works in opposite direction from theory-based evaluation, as it identifies changes (outcomes) brought about through the Programme in the field, or alternatively, the Programme/projects role in the change. It then collects evidence

c) The outcome harvesting results were then compared against the overall strategic level (track 2 comparison to track 1). Both approaches were connected to the TOC (Figure 8) from different perspectives.

53. In line with its purposes, the evaluation was also forward-looking. Evaluation, by definition, assesses past events to identify recommendations for future action. The issue with a completely traditional approach is that there is an underlying assumption that what has (or has not) worked in the past will also (or will not) work in the future. In other words, it is assumed that the context in which past events occurred will remain the same. This idea seems problematic in the current world, particularly in the context of climate change, where systemic and constant change is the new normal. CTCN gets its mandate from the COP, which aligns to this constant change through its decisions. A solution to integrate methods of future foresight into the evaluation implementation cycle⁹ was used a focus on how to understand and develop recommendations in this context.

Methods used

54. UNEP tools are used throughout the evaluation and adapted to case specific needs when relevant and justified. Some specific tools are developed particularly for this evaluation and included in annexes of the Inception Report.
55. A mixed-method approach is applied, using both qualitative and quantitative methods. The evaluation team has collected information through secondary and primary data sources. The data collection included the following information sources:
- **Desk review:** As great deal of information was gathered from secondary sources, a large variety of document sources was used (annex III) for comprehensive views and the document collection continued throughout the inception and data collection phase (and also towards the analysis and writing phase, where further information was needed).
 - **Sub-project portfolio review** of the Technical Assistance, networking, information and capacity building services was conducted. This included a) constructing of relevant lists in excel table, and b) conducting descriptive quantitative analysis to form an overall picture of the sub-project portfolio. This step was done at the start of the data collection phase to provide a holistic view and it supported also the country selection.
 - **Key informant interviews (strategic level):** Total of 44 strategic level KIIs were conducted (KIIs; Annex II). KIIs were conducted both online and in person. The Principal Evaluator was invited to participate to the CTCN Advisory Board meeting, where a large variety of key strategic KIIs were possible to reach, including the CTCN Secretariat. Where online key informants were difficult to contact or sensitive in nature, key informant contacting happened in close collaboration with the CTCN Secretariat. A large proportion of the strategic level KIIs were conducted prior to the field visits to countries. The interviews followed a semi-structured interview template. The interviews were conducted in English or Spanish, according to the preference of the language by the interviewee.

of the change and works backwards to assess contributions to that change. Outcome harvesting is ideal to deal with complexity or when cause-relations are not entirely clear or straightforward, as it does not require following linear models of change. Outcome harvesting is ideal also to learn about change in order to improve future performance.

⁹ Mikkolainen (2022). Start Here! Evaluation and Foresights. Available at: [mel_definitions.pdf \(niras.com\)](#). Mikkolainen (2022). Evaluation must become future sensitive. Available at: [evaluation_future_sensitive.pdf \(niras.com\)](#)

- **Field visits to six countries and sampling of 22 sub-projects** of the technical assistance was conducted in Malawi, Zambia, Laos, Thailand, Chile and Antigua and Barbuda in line with the pre-determined criteria and methodology. Within this work, 124 KIIs were conducted (Annex II).
56. All main stakeholder groups and ethics and human rights issues were included. Throughout this evaluation process and in the compilation of the Final Evaluation Report, efforts have been made by the evaluation team to represent the views of both mainstream and more marginalised groups¹⁰. Data was collected with respect for ethics and human rights issues. All pictures were taken, and other information gathered after prior informed consent from people, all discussions remained confidential, and all information was collected according to relevant United Nations Evaluation Group (UNEG) guidelines and UN standards of conduct. In strategic level KIIs, gender balance was achieved (annex II). In countries, gender balance was about two-thirds in favour of male participation; efforts were made to include female participants, for which the number is higher than without such measures, however, the reality of key informant profile in a technical field influenced the possibilities to achieve a fully balanced number.
57. The interviews were conducted mostly bilaterally and face-to-face, but in some cases also small focus group discussions and hybrid participation methods were conducted to enable participation in case of location or disability of movement. The interviews and focus group discussions were conducted according to the preference of the language by the key informant/group¹¹, further extending the participation opportunities. Follow-up on initial requests for participation was conducted extensively to maximise response rates of all groups.
58. **Criteria for country selection:** The selection was based on the following criteria in order of priority¹²:
- i. Regional diversity (Africa, Asia and the Pacific and Latin America and the Caribbean);
 - ii. Country type diversity: least developed countries (LDCs), middle income countries (MICs) and small-island development states (SIDSs), with slightly higher focus on LDCs;
 - iii. Inclusion of specific activities funded by the EC grant and non-EC grant funded activities;
 - iv. Inclusion of a representative number of CTCN sub-projects;
 - v. Diversity in types of services provided;
 - vi. Sector diversity, and;
 - vii. Equal focus on mitigation and adaptation (with focus also on their intersection).
59. **Criteria for sub-project sampling:** The selection is based on the following criteria in order of priority:
- i. Sub-projects were selected from the countries selected for country cases and thus the same priority list was applied, and;

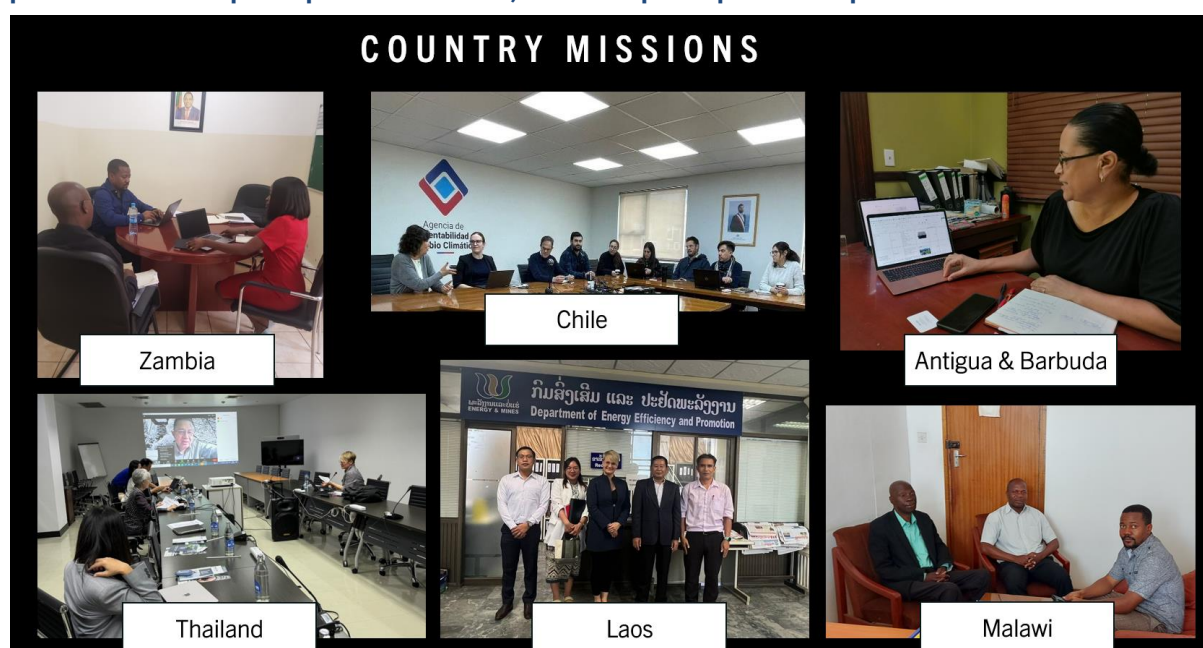
¹⁰ However, this was somewhat limited because CTCN considers country/NDE level as the beneficiaries (not the people). This is addressed in the evaluation findings and recommendations.

¹¹ The Evaluation Team had full working level of English, Spanish and French, along with smaller languages that were not used.

¹² The selection of countries has a higher focus on EC grant criteria, to allow the criteria to fit to both projects subject to this evaluation. In project selection it is set to include also some non-EC grant geographic areas to find a balance also with geographic diversity.

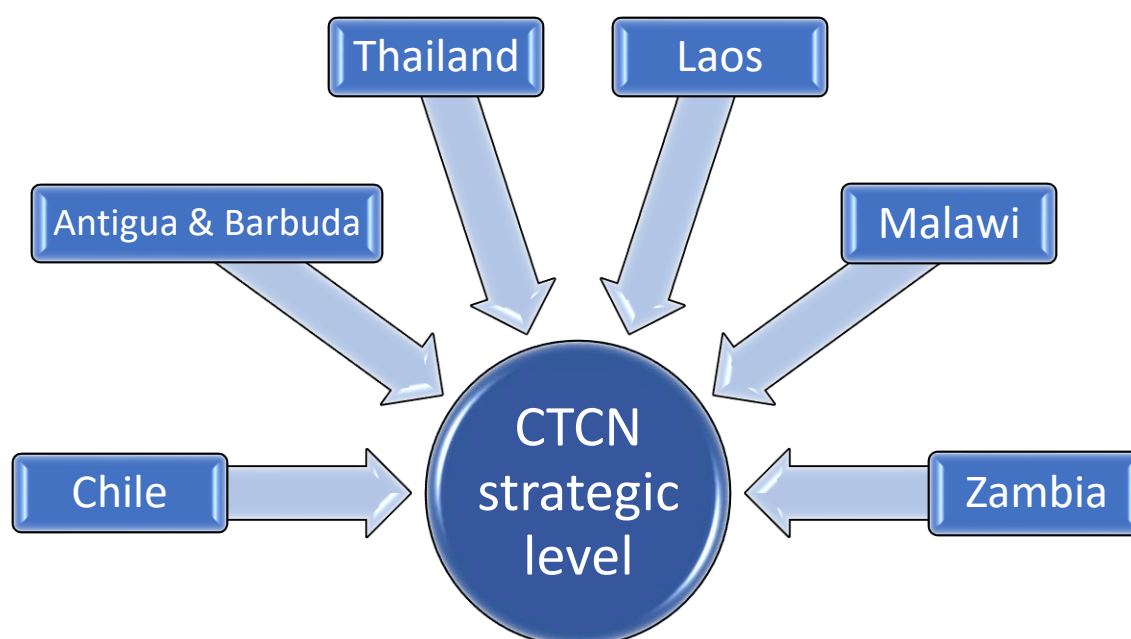
- ii. Inclusion of specific activities funded by the EC grant and non-EC grant funded activities (as a country may include both).

Figure 2. Most meetings were one-on-one interviews, but also group interviews, with blended in-person and online participation were used, to enable participation and presence of all stakeholders.



- 60. Due to low participation in surveys in previous evaluations of CTCN, survey was not included in the data collection methods due to the likely data bias and stakeholder preference to participate through other channels, which can be seen in the extensive number of KIIs.
- 61. Analysis phase: An analysis and synthesis of all information obtained in the data collection phase was conducted. The primary mode of analysis of track 1 relied on an exploration of the evidence that supports the causal pathways articulated in the TOC, along with the status of the assumptions and drivers. The track 2 then systematically connected the country cases with outcome harvesting to track 1 strategic Programme level (Figure 3), analysing particularly the intended and unintended changes correlation to the TOC.

Figure 3. Analytical approach combining track 1 and 2 elements



Source: Evaluation Team

62. Triangulation principles were applied to validate findings. In addition to document analysis, the Evaluation Team conducted a three-day internal analysis workshop and exercise for triangulation purposes. A minimum of three sources describing the same event independently were needed to form evidence that supports a finding. At the end of the analysis, a meeting with ERG and the CTCN Secretariat was held, to present and comment on the preliminary findings, conclusions and recommendations, ratings and TOC, and further inputs considered.
63. The Evaluation Team considered all the evidence gathered during the evaluation in order to generate evaluation criteria performance ratings. The rating generally focused on the shared effort of both UNEP ProDoc and EC Grant, with differentiation to each inside the text. In some cases, the rating was provided separately for the UNEP ProDoc and EC Grant, when necessary (e.g. in the quality of project design, due to the different designs). One overall project performance rating was awarded.
64. As there was no credible baseline data for a project’s results indicators and the project design did not allow for a control group, it was not possible to prove the attribution¹³ of

¹³ Attribution, Contribution and Credible Association: In order to attribute any outcomes and impacts to a project intervention, one needs to consider the difference between what has happened with, and what would have happened without, the project (i.e. take account of changes over time and between contexts in order to isolate the effects of an intervention). This requires appropriate baseline data and the identification of a relevant counterfactual, both of which are frequently not available for evaluations. Establishing the contribution made by a project in a complex change process relies heavily on prior intentionality (e.g. approved project design documentation, logical framework) and the articulation of causality (e.g. narrative and/or illustration of the Theory of Change). Robust evidence that a project was delivered as designed and that the expected causal pathways developed supports claims of contribution and this is strengthened where an alternative theory of change can be excluded. A credible association between the implementation of a project and observed positive effects can be made where a strong causal narrative, although not explicitly articulated, can be inferred by the chronological sequence of events, active involvement of key actors and engagement in critical processes (source: UNEP Evaluation Manual).

evidenced results to the project’s efforts. Therefore, the evaluation focused on how either ‘contribution’ or ‘credible association’ was established.

Limitations and Mitigation Measures

65. As in all evaluations, there are potential challenges and risks to be acknowledged. Being conscious of limitations during the evaluation is essential to mitigate their impact on the evaluation. The risks and limitations are mainly connected to evaluation matters (data availability, scope, extend, timelines, etc). CTCN external contexts challenges are perceived as typical challenges in a global programme, as specified in findings on “external context”, yet worth identifying as potential risks when considering the timing of field visits. The following risks and limitations were identified in the inception phase:
- Lack of **access to project documentation** and data sources. Materialized to some extent: E.g. list of sub-projects, capacity strengthening, and information events needed to be constructed by the CTCN Secretariat and the Evaluation Team to enable analysis¹⁴ and a commonly accepted categorizing of information was yet to be established. Mitigated to some extent through follow-up, constructing the information to correct excel formats to the extent possible, adjusting the methodology with some resulting delays.
 - Reaching the **key informants** (particularly considering the 2013-2015 period due to previous staff availability). Materialized to some extent, particularly with older TAs. Mitigated through CTCN Secretariat and National Designated Entities (NDEs) support on contacting. Note: Limited time with the interviewees was noted (breadth versus depth). Overall, prioritization had to be applied.
 - **Different timelines** of the CTCN ProDoc and EC grant. Did not create considerable difficulties, as it was mitigated from the start in methodology.
 - **A Programme in constant development.** This did not create considerable difficulties. Mitigated through correct methodology from the start and elaborating forward-looking recommendations.
 - A Programme with **multiple stakeholder groups with very different interests** towards the Programme and the evaluation. This did not create considerable difficulties. Mitigated through involvement of all stakeholder groups in the data collection, inclusion of the different perspectives into findings and applying the UNEP Evaluation Office recommendation guidelines to be suited to a complex programme logic.
 - Potential **hazards, risks and conflicts** during country field visits and ongoing cyclone/hurricane season during the data collection. This was about to materialize in some occasions, but eventually resulted in shorter preparation time¹⁵. Mitigated through follow-up of the situation and adjusting travel plans.
 - **Data bias in small sampling size** of six countries. This materialized to some extent. While sampling selection was done based on the criteria, six countries do not enable identification of robust patterns across highly diverse CTCN operations and

¹⁴ Note that this is not part of evaluation work and largely depends on the Programme’s data collection and monitoring methods. Evaluations use the data, that is made available by a programme, for purposes of analysis. Decisions on data categorizing are part of the Programme decisions.

¹⁵ Antigua and Barbuda had experienced a tropical depression on the week prior to the country mission. Chile had the commemoration of the 50th anniversary of the coup d’état in Chile happened during the mission, causing protests and restriction of movement in the location of government buildings. In both country cases, the mission was conducted successfully – In Antigua it affected to shorter preparation time and in Chile one afternoon meetings were partially rescheduled to apply safety and security recommendations provided by the NDE.

operating contexts. There is also limited ability to include countries with no success in TAs; managing ERG expectations in terms of measuring impact with available evaluation resources, time of evaluators and evaluation scope (the evaluation not being an impact assessment). Mitigated through portfolio review, global level interviews, and prioritization of the resources in key areas (noting that the possibilities are much greater than the resources).

- **COP28 overlapping with revision timelines**, which might slow down the revision process. This did not materialize and was mitigated through scheduling the evaluation writing phase to be in parallel with the COP to enable key COP decisions to be considered in the recommendations, as appropriate.

III. THE PROJECT

A. Context

66. Climate change constitutes one of the most worrisome contemporary environmental issues faced by society and tackling its challenges requires holistic, concerted, and global efforts. Technology considerations among other aspects are considered fundamental for achieving climate change adaptation and mitigation. Consequently, an accelerated transfer, diffusion and deployment of climate technologies is fundamental for attaining a transition towards a low-emissions and climate resilient development. As per the UNEP ProDoc, climate technology transfer involves a set of processes spanning experience, flows of know-how and equipment for reducing greenhouse gas (GHG) emissions and enhancing the resilience to climate change.
67. The widespread diffusion of climate technologies is impeded by several factors, including, but not limited to, the following which were also prevailing at the time of conception of the programme¹⁶:
- Lack of knowledge on accessing project finance;
 - Lack of opportunities in the energy sector to share technology standards, simulation models and test procedures;
 - Inadequate performance data, systems demonstrations and tools for conducting techno-economic assessments;
 - Lack of opportunity to share knowledge on energy efficiency;
 - Low levels of application of new agricultural practices and technologies; and
 - Inadequate capacity to elaborate technology proposals to attain international financing institutions’ standards.
68. Opportunities and challenges relating to climate technology transfer are country, region, sector and technology specific, influenced by varying levels of economic development, industrial and technical capacity, experience in climate change adaptation and mitigation activities, among other factors. The CTCN therefore emerged under the UNFCCC to accelerate, diversify, intensify, and scale up collaboration and transfer of climate technologies in view to achieve a climate-resilient and low-carbon development future in developing country parties. After signing the UNFCCC-UNEP MoU, the UNEP UNIDO joint programme (UNEP ProDoc) was conceived to establish, host and manage the CTCN as per its terms of reference and in line with the decisions of the COP. Through the joint programme, the CTCN aimed to reduce the risks and costs associated with technology transfer and deployment across relevant sectors of developing countries and function as a catalytic action at all stages of the technology cycle – from technology needs identification, assessment, selection and piloting of technological solutions to customisation and widespread deployment of technologies.
69. The EC Grant came into existence to strengthen the access of private and public actors from developing countries to state of the arts services and technologies through an enhanced CTCN and to support better coherence of national development, priorities, technology needs, international project finance and capacity building. The programme was envisaged to support CTCN’s operations, foster innovation and culminate in improved resilience to climate change and reduced GHG emissions in developing countries, while creating new employment opportunities in both developed and developing countries. The EC Grant Agreement is working at the intersection of the

¹⁶ As stated in the UNEP ProDoc “Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network”.

UNEP ProDoc and the Technology Framework. More details are provided in Box 1 below.

Box 1. Explanation of the UNEP ProDoc, EC Grant, CTCN PoW and Technology framework

UNEP ProDoc

The UNEP ProDoc was signed in June 2013 and the programme had as objective to host and support the CTCN in contributing to the reduction of carbon intensity and climate vulnerability of growth and development in developing nations. The programme was expected to achieve this by reducing the cost and risks of technology transfer and enabling widespread deployment of technologies in relevant climate related sectors of developing countries through supporting developing parties to make informed choices about adaptation and mitigation technologies. The programme is being implemented by UNEP’s Division of Technology, Industry and Economics.

EC Grant

The grant agreement was established in November 2016 between the European Commission and UNEP and funded by the European Union contribution. The purpose of the grant was to support the UNFCCC Climate Technology Centre and Network. Through the grant, several CTCN technical assistance projects have been funded in developing countries. The grant had as objective to enhance developing countries’ public and private entities to access state of the art technologies and services through an enhanced CTCN. The four priority areas of the grant includes: (i) to increase the capacity of developing countries technology stakeholders; (ii) support CTCN’s capacity to prepare adequate responses to requests from developing parties; (iii) implement technology partnerships with potentials for technology transfer; and (iv) establish incentive schemes for entrepreneurs and companies to engage in technology transfer to developing countries.

CTCN PoW

The CTCN has since its existence formulated three PoW: first (2013-2018), second (2019-2022) and third (2023-2027). The first and second PoW provided technical assistance and strengthened capacity for climate technology transfer and development at the request of parties. The third PoW is part of the 2023-2027 Joint Work Programme of the Technology Mechanism, which includes the CTCN PoW and the TEC Work Plan. It builds on the experience from the first two programmes of work and CTCN’s 10 years of experience providing technical assistance has as objective to support Parties to achieve their Paris Agreement commitments through technology development and transfer and to implement their NDCs, mitigate climate change and enhance resilience to the impacts of climate change. The third PoW focuses on two enablers – digitization and national system of innovation, and five system transformation – business and industry, sustainable mobility, energy systems, wood-energy-food nexus, and buildings and infrastructure¹⁷.

Technology framework

The technology framework was adopted under Article 10, Paragraph 4 of the Paris Agreement and has as purpose to provide an overarching guidance to the work of the Technology Mechanism in the promotion and facilitation of enhance action on technology transfer and development in view of supporting the implementation of the Paris Agreement. The principles of the technology framework including coherence, inclusiveness, results-oriented approach, transformational approach and transparency are expected to guide the Technology Mechanism in implementing the Paris Agreement¹⁸. The key themes of the technology framework representing focus areas of action include enabling environment and capacity building; support; innovation; implementation; and collaboration and stakeholder engagement.

¹⁷ [LINK](#) – CTCN Programme of Work 2023-2027.

¹⁸ [LINK](#) - Technology framework under Article 10, paragraph 4, of the Paris Agreement.

B. Results Framework

70. Table 3 describes the CTCN UNEP ProDoc and EC Grant results hierarchy as stated in the ProDoc and EC Grant and as revised for the reconstructed TOC at Evaluation inception. The project structure delivered against the project’s results framework, however, it is also worth noting that CTCN’s main results framework is that of the Technology Framework. These are further discussed under TOC at Evaluation and in the findings.

Table 3. UNEP ProDoc and EC Grant results hierarchy as stated in the ProDoc and EC Grant original results frameworks and as revised for the reconstructed TOC

	Formulation in original project documents (LogFrame)	Formulation for Reconstructed TOC	Justification for Reformulation
	LONG TERM IMPACT		
CTCN	<u>Objective in narrative</u> : Support action on climate mitigation and adaptation and thus enhance low emissions and climate-resilient development.	Low emissions and climate resilient development enhanced.	“Support action on climate mitigation and adaptation” is removed, as it repeats the outcome statement.
EC	<u>Objective/Impact</u> : Developing countries in Africa, Asia and Latin America, the Pacific, and the Caribbean and least developed countries in particular will emit less greenhouse gases per unit of GDP ¹⁹ and have a higher resilience to climate change.	As in original	N/A
	INTERMEDIATE STATES		
CTCN	<u>In narrative</u> : The objective is to be reached by promoting the transfer and scaling up of the deployment of adaptation and mitigation technologies in developing countries. <u>Objective in LogFrame</u> : Accelerated transfer and scaled-up deployment of adaptation and mitigation technologies in developing countries to support action on climate mitigation and adaptation	Accelerated transfer and scale-up deployment of adaptation and mitigation technologies.	“in developing countries to support action on climate mitigation and adaptation” removed as it repeats the outcome statement.
EC	N/A	N/A	N/A
	OUTCOMES		
CTCN	The capacity and capabilities of developing countries to identify technology needs; prepare and implement technology projects and strategies to support action on mitigation and adaptation; and to enhance low emission and climate-resilient development is increased	The capacity and capability of developing countries to identify technology needs and prepare and implement technology projects and strategies to support action on mitigation and adaptation is increased.	“to enhance low emission and climate-resilient development is increased” is removed as it repeats the impact statement.
EC	Improved access of public and private actors from developing countries to state-of-the-art technologies and services through an enhanced CTCN.	As in original	N/A
EC	Better coherence of national development, priorities, technology needs, international project finance and capacity building.	As in original	N/A

¹⁹ Gross Domestic Product.

	OUTPUTS		
CTCN	Developing country Parties’ needs for technical assistance (i.e., Requests) on climate technology are fulfilled/responded to.	As in original	N/A
CTCN	The development and transfer of existing and emerging environmentally sound technologies, as well as opportunities for North–South, South–South and triangular technology cooperation, is stimulated and encouraged, through collaboration with the private sector, public institutions, academia and research institutions.	As in original	N/A
CTCN	A network of national, regional, sectoral and international technology centres, networks, organization and initiatives is facilitated to support responses to country requests and capacity building.	As in original	N/A
EC	The improvement in the availability and accessibility of knowledge on climate technologies; the provision of knowledge support and technical assistance services to developing countries through the CTCN (response to requests).	The availability and access to knowledge on climate technologies improved (through response to requests on provision of knowledge support and technical assistance services to developing countries).	Small wording changes to correspond CTCN structure.
EC	Implemented incentive schemes for companies and entrepreneurs to engage in technology transfer to developing countries.	Incentive schemes for companies and entrepreneurs to engage in technology transfer to developing countries implemented.	Small wording changes to correspond CTCN structure.
EC	Implementation of three technology partnerships to advance the dissemination of solutions in priority regions and technology areas.	Three technology partnerships to advance the dissemination of solutions in priority regions and technology areas is implemented.	Small wording changes to correspond CTCN structure.

C. Stakeholders

71. Diverse stakeholders were involved in the CTCN. The stakeholders were basically the same for the UNEP ProDoc and the EC Grant, with slightly different emphasis. The stakeholders involved in the Programme can be grouped into two main levels: i) strategic/CTCN level; and ii) national level. National stakeholders refer to in-country stakeholders involved in the elaboration of technical assistance requests and their subsequent implementation. Strategic-level stakeholders are those engaged in the provision of guidance to the CTCN, and in the assessment, approval, financing and implementation of technical assistance request received from developing country parties. The roles and responsibilities of the different stakeholders are summarized in Table 4.

Table 4. CTCN stakeholders and their roles in relation to the programme

Stakeholder group	Key roles/responsibilities in CTCN
Strategic/CTCN level stakeholders	

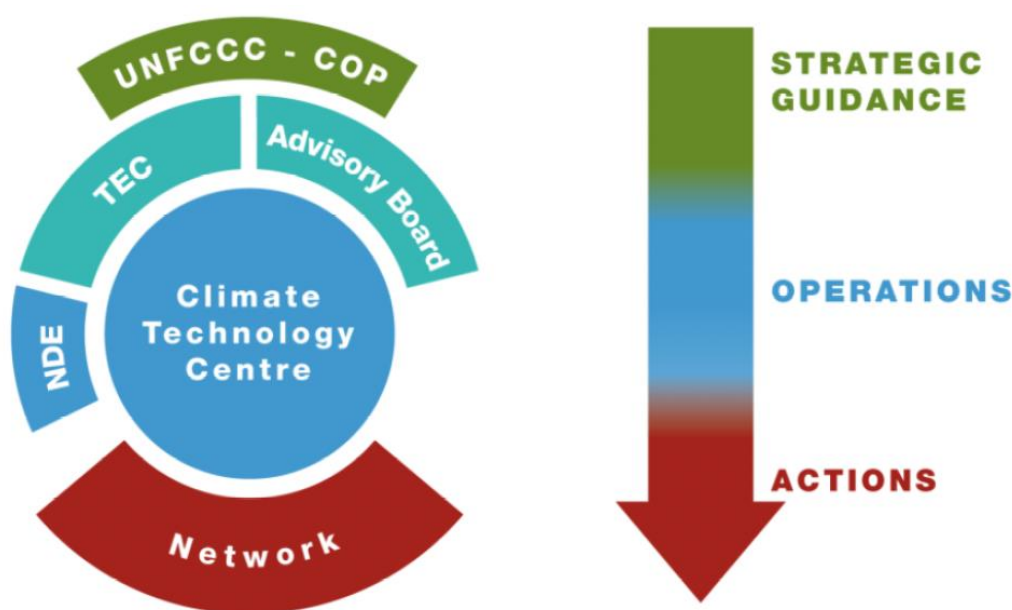
Donors, the Financing Mechanisms (Green Climate Fund [GCF], Global Environment Facility [GEF]) and Adaptation Fund [AF])	-Provided funding for the delivery of CTCN’s mandate - Financial Mechanism and the AF were also strategic partners in taking the TAs forward towards the transfer of technologies.
CTCN Advisory Board (AB) members	-Provided guidance and advice regarding the work of the CTCN; CTCN is responsible to the COP through its AB. -Supported resource mobilization through facilitating engagement with a wide range of stakeholders, direct fundraising efforts, strategic guidance, monitoring of the effectiveness of CTCN’s resource mobilization strategies and partnership development.
Operational partners (UNEP)	-UNEP provided administrative and infrastructural support to the CTCN Secretariat comprising of a small core staff. In line with the MoU and COP decisions, UNEP also provided financial support.
Technical partners (11 consortium partners ²⁰ and Climate Technology Network members)	-The consortium partners provided appraisals of the technical assistance requests submitted to the CTCN -The Network Members engaged with the CTCN in the execution of technical assistance submitted by parties and approved by the CTCN. They are called the implementers.
Stakeholders at the national level	
Government officials and duty bearers (NDEs, national focal points – GEF, UNFCCC, GCF and AF)	-The NDEs of non-Annex I parties were responsible for the generation of technical assistance (TA) requests in consultation with national stakeholders. NDEs also supervised the implementation of TAs. -The GCF and GEF Focal Points ensured that proposals and activities in the country were consistent with country priorities and the country commitments under global environmental conventions. -The AF Focal Points made sure that AF proposals aligned with countries’ adaptation priorities and plans
Civil Society Organizations (CSOs)	-Within the context of the CTCN, CSOs referred to organizations that fall under any of the following categories: Business and industry NGOs, Environmental NGOs, Farmers, Indigenous peoples organizations, Local government and municipal authorities, Research and independent NGOs, Trade union NGOs, Women and Gender, and Youth NGOs. These served as watchdogs, ensuring that the views and concerns of the respective entities they represent were taken into consideration by the CTCN AB and/or at the level of TAs.
Financial institutions and private sector	-These actors were envisaged to engage in technology development and transfer through financing and implementing initiatives.
Beneficiaries	-These are government institutions (direct beneficiaries). The institutions were consulted during the conception of TAs as they were to take part in their implementation. Local communities were understood as final beneficiaries (including women, men and youths) by the evaluation team and within sites where implementation of CTCN technical assistance occurred; however, this was not stated in the UNEP ProDoc and EC grant.

²⁰ Asian Institute of Technology (AIT) – Thailand, Bariloche Foundation – Argentina, Council for Scientific and Industrial Research (CSIR) – South Africa, The Energy and Resources Institute (TERI) – India, Environment and Development Action in the Third World – Senegal, Tropical Agricultural Research and Higher Education Center (CATIE) – Costa Rica, World Agroforestry Centre (ICRAF) – Kenya, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) – Germany, Energy Research Centre of the Netherlands (ECN) – The Netherlands, National Renewable Energy Laboratory (NREL) – United States of America, UNEP Copenhagen Climate Centre (CCC) – Denmark, UNEP-DHI Centre on Water and Environment– Denmark.

D. Project implementation structure and partners

72. The UNFCCC COP through the CTCN Advisory Board (AB) and COP sessions provided overall governance and (at times changing) direction to the CTCN. The TEC is represented on the CTCN AB, facilitating the coordination within the Technology Mechanisms. The AB provided guidance to the CTCN, approving procedures and annual operating plans, endorsing financial statements, monitoring CTCN activities and results through snapshots and presentations submitted to the AB during its semi-annual meetings. CTCN is responsible to the COP through the AB. The CTCN Secretariat (core centre) managed the overall CTCN processes including screening requests received from NDEs, engaging the technical resource pool in further development of proposals, and outsourcing the implementation of activities to network members (Figure 4).

Figure 4. CTCN set-up²¹



Source: UNEP ProDoc

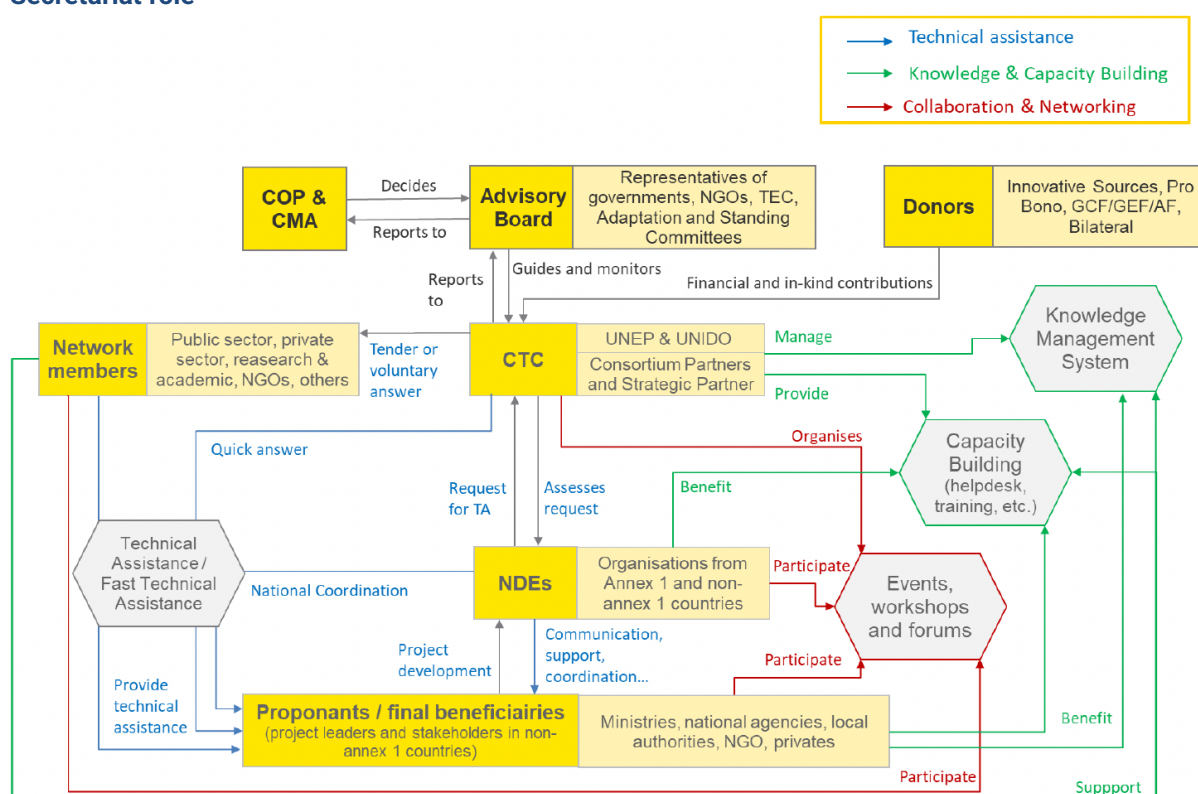
73. The UNEP and UNIDO joint programme (UNEP ProDoc) was established to host and support the CTCN. The host institutions and the CTC core centre in Copenhagen²² ensured delivery of the CTCN. The CTC is headed by the CTCN director and the CTCN built on the expertise of its hosts institutions. The CTCN core centre operated as a programme unit. It used to comprise of UNEP and UNIDO staff but at a later stage (in 2022), the structure of the administration of the programme changed and UNIDO exited the partnership (See Box 2 for more information relating to UNIDO’s exit from the partnership). UNEP played an important role in resource mobilization, financial management and reporting. The CTC took charge of the overall coordination of the CTCN, Network management and development and liaison with the NDEs.
74. The CTCN set up also included 11 other consortium partners possessing expertise in climate technologies and constituted a technical resource pool that can be promptly tapped as need arises (e.g. through Fast Technical Assistance). The partners provided support to the core centre in the preparation of country response plans and

²¹ While the Secretariat is not included in the Figure, it is part of the CTC as per the UNEP ProDoc.

²² Since, the CTC has been relocated to different regions.

implemented technical assistance when no suitable network members were identified. The consortium partners also provided other support outside supporting the TA process. The National Renewable Energy Laboratory for instance supported the elaboration of CTCN’s knowledge management platform. The CTCN Network members represented a community of climate technology stakeholders who supported implementation of Technical Assistance projects (TAs). The NDEs served as National Focal Points for the CTCN and facilitated support from the CTCN to their countries through articulating and prioritizing requests and proposals and managing the technical assistance requests submission to the CTCN (**Error! Reference source not found.**).

Figure 5. Organigram of the Project with key project key stakeholders. CTC also reflects the Secretariat role²³



Source: UNFCCC / Ernst & Young, 2017²⁴

E. Changes in design during implementation

75. Since the renewal of the hosting agreement (in December 2017), four official project revisions were prepared during 2019-2022 for the UNEP ProDoc and contained updates to the project implementation period, secured funding, and results framework targets (Table 5). While the targets and timelines were revised, no changes to the UNEP ProDoc content were introduced. At the same time, a revised UNEP ProDoc has been under preparation. CTCN has gone through four evaluations and reviews (see

²³ While the Secretariat is not included in the Figure, it is part of the CTC as per the UNEP ProDoc.

²⁴ Report on the independent review of the effective implementation of the Climate Technology Centre and Network.

also Table 10). These have not triggered changes to the ProDoc in 2013-2022 but informed the new UNEP ProDoc with a start date of 1 January 2023.

76. EC Grant had three addendums to the Delegation Agreement no DCI-ENV/2016/377-14. These did not lead to revision of the project content.

Table 5. UNEP approved revisions to the ProDoc and new ProDoc

Project revision date	Period	Key reasons for revision	Budget revision (key figures)	Changes to the design/content
UNEP ProDoc Revision until the end of 2019 (PPD clearance date 24/1/2019)	Extended from 12/2018 to 12/2019	The hosting agreement was renewed for four years, and a new joint project document was under discussion (by UNEP and UNIDO)	with a total revised secured budget: USD 57 996 205 Total revised planned budget (all): USD 72,2 million	The results framework target dates were extended by one year. Some targets under output areas B and C were revised to match the project extension date.
UNEP ProDoc Revision until the end of 2020 (PPD clearance date 11/12/2019)	Extended from 12/2019 to 12/2020	Reference to the extra time needed to align UNEP with the UNIDO project document extended timeframe.	Total revised secure budget: USD 55 193 408 Total revised planned budget (all): USD 59 702 607	The results framework target dates were extended by one year. Some targets under output areas A, B, and C were revised to match the project extension date.
UNEP ProDoc Revision until the end of 2021 (PPD clearance date 22/01/2021)	Extended from 12/2020 to 12/2021	Reference to discussions on a joint project document involving UNIDO and UNEP.	Total revised secured budget: USD 65 090 109 Total revised planned budget (all): USD 74 078 498	The results framework target dates were extended by one year. Some targets under output areas A, B, and C were revised to match the project extension date.
UNEP ProDoc Revision until the end of 2022 (PPD clearance date 25/1/2022)	Extended from 12/2021 to 12/2022	Reference to discussions on a joint project document involving UNIDO and UNEP.	Total revised secured budget: USD 83 254 061 Total revised planned budget: USD 114 562 367	The results framework target dates were extended by one year. Some targets at the outcome level and in relation to outputs A, B, and C were revised to match the project extension date.
New UNEP ProDoc to host CTCN ²⁵ (PPD approval date 14/7/2023)	The new project document covers the period of 2023-2026	n/a	Total revised secured budget: USD 112 677 829 Total revised planned budget(all): USD 152 355 886 (for the period beyond 2022)	n/a (a new ProDoc)

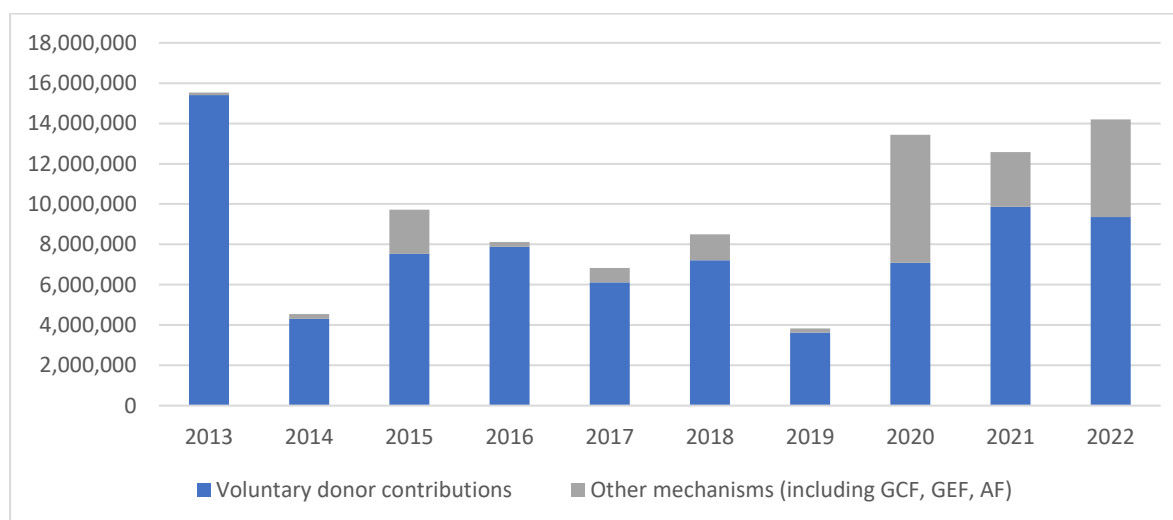
Source: Project revision documents.

²⁵ The new ProDoc “UNEP Programme to host and manage the Climate Technology Center and Network” is beyond the scope of this evaluation. However, it provides official details regarding the CTCN secured funding details since the revision of 25/1/2022.

F. Project financing

77. CTCN secured USD 97,334,988 in 2013-2022 for its operations²⁶. This included voluntary contributions and contributions from other mechanisms (such as GCF, GEF and adaptation fund). The CTCN anticipated budget at design was USD 50 million for the 5-year period. Total secured funding during these first five years (2013-2017) was USD 44,7 million. The UNEP ProDoc, hosting MoU and COP decision noted that UNEP provided financial and in-kind contributions to CTCN²⁷. The UNEP-specific cash or in-kind contributions were not counted in the CTCN total secured funding in the later project revisions. Figure 6 shows the secured funding (cash receipts) from voluntary sources and other mechanisms²⁸ over the CTCN implementation period 2013-2022.

Figure 6. Secured funding 2013-2022 (extra-budgetary) of USD 97,3 million



Source: CTCN Finance Team

78. CTCN funding structure consisted of three types of mechanisms: 1) CTCN trust fund (un-earmarked), 2) earmarked donor contributions, 3) other mechanisms (such as GCF, GEF funding). Each grant is valid for the period defined in donor agreement. The CTCN also mobilized in kind contributions²⁹ from its partners (Japan and Korea). Total in-kind contributions from these partners according to CTCN Advisory Board reporting were USD 2,3 million during 2018-2022. The CTCN financial management approach does not quantify other in-kind support received by the CTCN³⁰.

79. A large majority (81 per cent) of the CTCN extrabudgetary funding is from the ‘voluntary contribution’ of bilateral donors and the EC. At the same time the GCF, GEF, Adaptation Fund, UNDP-Togo and UNIDO General Budget (GB) represented 18 per cent of the total income. Figure 7 presents the donors and the total volume of their

²⁶ This is according to the reported cash receipts by the CTCN Secretariat.

²⁷ USD 1,9 million in a form of professional staff contribution.

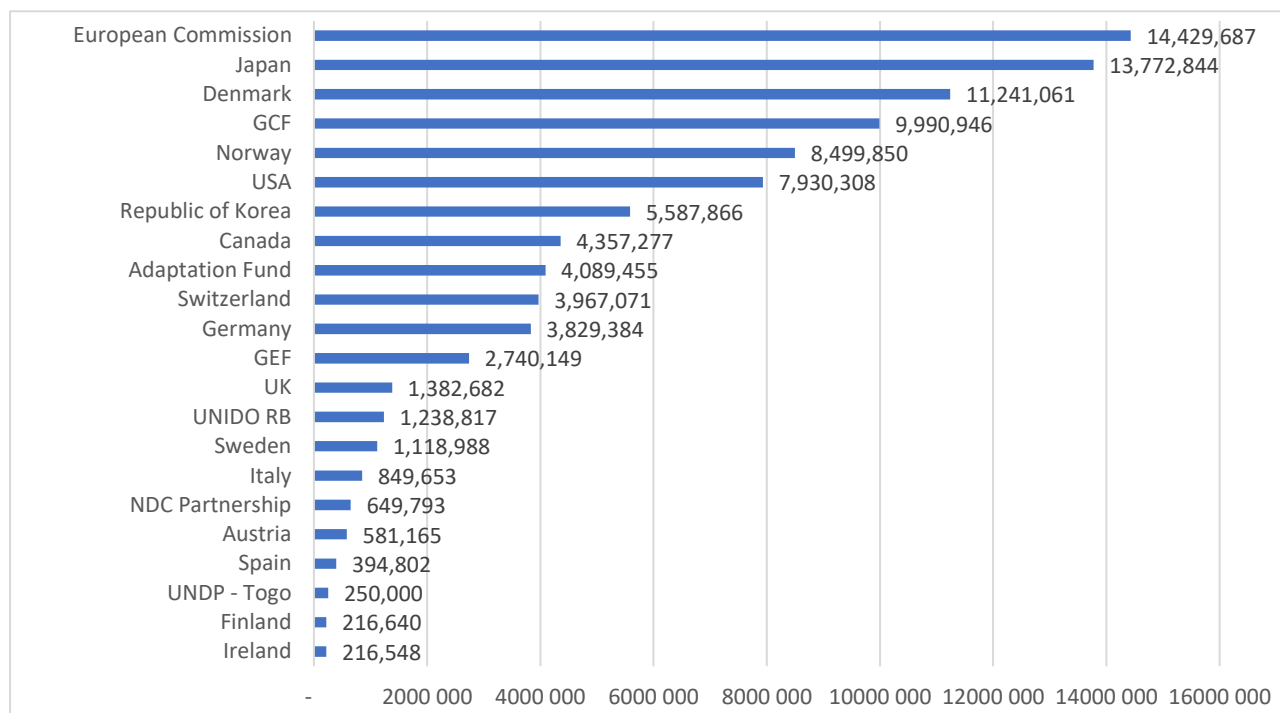
²⁸ These correspond with UNEP extra-budgetary funding categories.

²⁹ The CTCN uses the ‘Pro bono’ term for the contributions that correspond with co-financing that is not channeled through UNEP. As per UNEP Project and Programme Management Manual: “Co-financing information is important in understanding the overall resources available for project delivery. However, funding administered directly by the partners, and not channelled through UNEP, should not be part of the total project budget calculation. Project Managers are encouraged to provide relevant information in budget tables, project documents and progress reporting. UNEP is increasingly being asked by donors and partners to report co-financing”. This evaluation uses the term ‘In kind’ term in line with UNEP terminology for the CTCN Pro Bono contributions.

³⁰ The Evaluation Team does not have complete data of in-kind support. It is noted that the US provided USD540,000 to NR NREL to support the operation of CTCN during the first years of operation.

contribution in 2013-2022 (see Table 17. CTCN secured funding sources 2013-2022 Table 17 in Annex VII further annual breakdown). The share of funding from other mechanisms has increased relative to donor contributions over the years.

Figure 7. CTCN secured funding by sources 2013-2022 in USD^{31, 32}



Source: CTCN Secretariat.

80. As per information received from the CTCN Secretariat, the CTCN total expenditure 2013-2022 was USD 71,936,224. Please see financial management section findings for details.
81. The EC has been the largest individual donor of the CTCN, with an overall contribution of USD14,4 million, representing 15 percent of the total secured funding of USD97,3 million. The contribution of USD 7,645,427 in relation to the EC grant was mobilized since 2016 as per the donor agreement and the related addendums.

³¹ UNIDO provided financial contribution from the bilateral donors (Government of Japan and Switzerland) in addition to the UNIDO regular budget. Japan’s financial contribution was either: directly from Ministry of Environment to UNEP, or from Ministry of Economy, Trade and Industry and Ministry of Foreign Affairs to UNIDO.

³² While the evaluation uses the information of the CTCN Secretariat, which is separated by country, it is also noted that the EU and its Member States reports their financial contributions jointly to UNFCCC. This can be seen in the following link, including the CTCN Contributions under the umbrella of the European Union (Austria, Denmark, Finland, Germany, Ireland, Italy, Spain and Sweden and the European Commission) – please note that the time period of the graph in the link does not fully correlate with the time period of the evaluation: [Walking the talk: EU’s Latest EUR 2 Million Grant Bolsters Technology for Climate Action via CTCN | Climate Technology Centre & Network | Thu, 02/08/2024 \(ctc-n.org\)](https://www.ctc-n.org/2024/02/08/walking-the-talk-eu-latest-eur-2-million-grant-bolsters-technology-for-climate-action-via-ctcn/)

IV. THEORY OF CHANGE AT EVALUATION

82. The Theory of Change (TOC) for CTCN UNEP ProDoc and EC Grant was reconstructed³³ by the Evaluation Team based on the logical framework, intervention logic, and accompanying narrative description (see Table 3) and presented in the Inception Report. The TOC was tested and discussed with the stakeholder groups (e.g. in key informant interviews at strategic and country levels, as well as with the ERG for their comments), including aspects identified in the TOC at Inception and in the “further needs from Inception”. There were no new stakeholder groups found, but the role and nature of relationships that exist among stakeholders is included in the analysis. The TOC was tested in the country cases with focus on whether: 1) the reconstructed TOC was an accurate reflection of the project intention, 2) the assumptions and drivers held, and 3) there were other factors that were essential to arrive to outcome, intermediate impact and impact. After this process, RTOC at Evaluation was constructed. The RTOC at Evaluation was presented to the ERG on 13 November 2023 and further improvements made.
83. During the data collection and analysis, it was found that, although revisions of the UNEP ProDoc have taken place, there were no changes in outputs, outcome or impact, for which the causal pathway of inputs, outcome, intermediate impact and impact remains the same. During the data collection and analysis, the reconstructed TOC was also found to be an accurate reflection of the project’s intentions. The same was seen to apply for the EC grant.
84. The overarching **Theory of Change for the *UNEP ProDoc*** is that *if* the capacity and capability of developing countries to identify technology needs and prepare and implement technology projects and strategies to support action on mitigation and adaptation is increased, *then*, low emissions and climate resilient development are enhanced, *because* there is accelerated transfer and scale-up deployment of adaptation and mitigation technologies.
85. This can be reached if the following assumptions hold:
- Governments are committed to foster climate technology transfer for low carbon and climate resilient development.
 - Public and private stakeholders engaged at the design stage and support the country driven technology projects and strategies (moved to start from the lower level).
 - Sufficient public and private resources are committed/allocated to support country driven technology projects and strategies.
 - There is a genuine national intent to address climate change mitigation and adaptation challenges (underlying assumption³⁴).
 - Climate technology transfer is beneficial, and perceived as beneficial, for recipient countries (underlying assumption).
 - The recipient country, through its NDE, is able to process and articulate request(s) for technical assistance with regard to climate technology (underlying assumption).

³³ Reconstructed and documented in the Inception Report, this is called ‘TOC at Evaluation Inception’. Having tested its intervention logic, assumptions and drivers, the TOC is here documented as ‘TOC at Evaluation’, reflecting any refinements gleaned through the data collection and analysis process.

³⁴ Underlying assumptions that operate outside the scope of influence of the Programme management and the main collaborators (i.e. the Consortium Partners and the Network Members).

- From an operational perspective, the CTCN benefitted from sufficient and adequate resources to operate efficiently and effectively (underlying assumption).
86. *The EC grant* intended to support this in the following way: *if* access of public and private actors from developing countries to state-of-the-art technologies and services through an enhanced CTCN is improved, *and*, there is better coherence of national development, priorities, technology needs, international project finance and capacity building, *then*, developing countries in Africa, Asia and the Pacific and Latin America and the Caribbean and least developed countries in particular will emit less greenhouse gases (GHG) per unit of GDP and have a higher resilience to climate change.
87. This could be reached if the following assumptions held:
- CTCN structure is sustained in the longer term.
 - Sufficient financing is available.
 - UNFCCC COP 21 will not modify mandate of CTCN (converted from risk).
 - The CTCN services are sufficiently or effectively used (converted from risk).
 - Sufficient funding for CTCN operation and overlapping donor support existed (converted from risk).
 - Engagement of private sector stakeholders was successful (converted from risk).
 - Sufficient countries were in position to submit requests that are eligible for CTCN assistance, as well as draft and implement the projects.
88. More specifically, the *UNEP ProDoc* had three outputs:
- **Output 1:** Developing country Parties’ needs for technical assistance (i.e., Requests) on climate technology are fulfilled/responded to.
 - **Output 2:** The development and transfer of existing and emerging environmentally sound technologies, as well as opportunities for North–South, South–South and triangular technology cooperation, is stimulated and encouraged, through collaboration with the private sector, public institutions, academia and research institutions.
 - **Output 3:** A network of national, regional, sectoral and international technology centres, networks, organization and initiatives is facilitated to support responses to country requests and capacity building.
89. These outputs could be made available to targeted recipients if the following assumptions held:
- The recipient country, through its NDE, was able to generate, process and articulate appropriate request(s) in consultation with public-private stakeholders at country level (output 1).
 - From an operational perspective, the CTCN benefitted from sufficient and adequate resources to operate efficiently (output 1).
 - Public and private stakeholders were willing to exchange, partner and synergize for accelerating climate technology transfer (output 2).
 - Existing technology centers had the necessary expertise to respond to country requests and meet the criteria to join the CTC’s Network (output 3).
 - The willingness and capacity of various stakeholders to engage in the Programme to contribute to unfolding its objective and outcomes (underlying assumption).

- Engagement of national stakeholders was successful (converted from risk).
 - Engagement with international stakeholders was successful and synergies were created (converted from risk).
90. The EC grant intends to support these outputs by contributing to them through the following EC Grant outputs:
- **Output 1:** The availability and access to knowledge on climate technologies improved (through response to requests on provision of knowledge support and technical assistance services to developing countries).
 - **Output 2:** Incentive schemes for companies and entrepreneurs to engage in technology transfer to developing countries implemented.
 - **Output 3:** Three technology partnerships to advance the dissemination of solutions in priority regions and technology areas is implemented.
91. Based on the documents and initial key informant interviews, the following aspects were considered as drivers towards the results:
- Country ownership and motivation.
 - Engagement of donors and the private sector.
 - Existence of framework conditions at the national level.
 - Governments good capacity.
 - The good quality of requests which reflect priority areas.
 - Lessons learned and sustainability factors are included in design.
 - Gender, vulnerable groups and the poor are integrated as recognized to be the most vulnerable to, and important actors in action addressing the climate change.
 - Application of environmental and social safeguards.
92. However, while some assumptions and drivers were found to hold, other **assumptions and drivers were found not to hold fully in practice**. The light red cross in Figure 8 is marked where assumption/driver³⁵ did not truly hold for 50-70 per cent of the six field visit countries visited by the Evaluation Team and red cross is marked where they did not hold for 70-100 per cent of the field visit countries. These findings are supported also by other evidence at strategic level. They did not apply particularly on private sector engagement and resources, inclusion of lessons learned, gender and vulnerable groups, which are recognized strongly in the ProDoc and EC Grant, but the implementation has not been optimal. Many of these were recognized to have a key role in the likelihood of impact (please see findings under effectiveness).
93. The Evaluation Team found that the long-term impact relies on the materialization of intermediate state on “accelerated transfer and scale-up deployment of adaptation and mitigation technologies”. **There are new drivers that were identified as missing pieces (or needed to support change) for the change towards the intermediate impact/impact to take place**. The Figure 8 includes these new drivers in turquoise colour and described here:
- a) Connection to the country priorities in political and technical level: CTCN can support the coherence by further connecting the TAs not only to the NDCs, but also to the other

³⁵ Please note the definition of **assumptions** - significant external factors or conditions that need to be present for the realization of the intended results but that are beyond the influence of the project and its partners. **Drivers** - significant external factors that, if present, are expected to contribute to the realization of the intended results of a project and which can be influenced by the project and its partners.

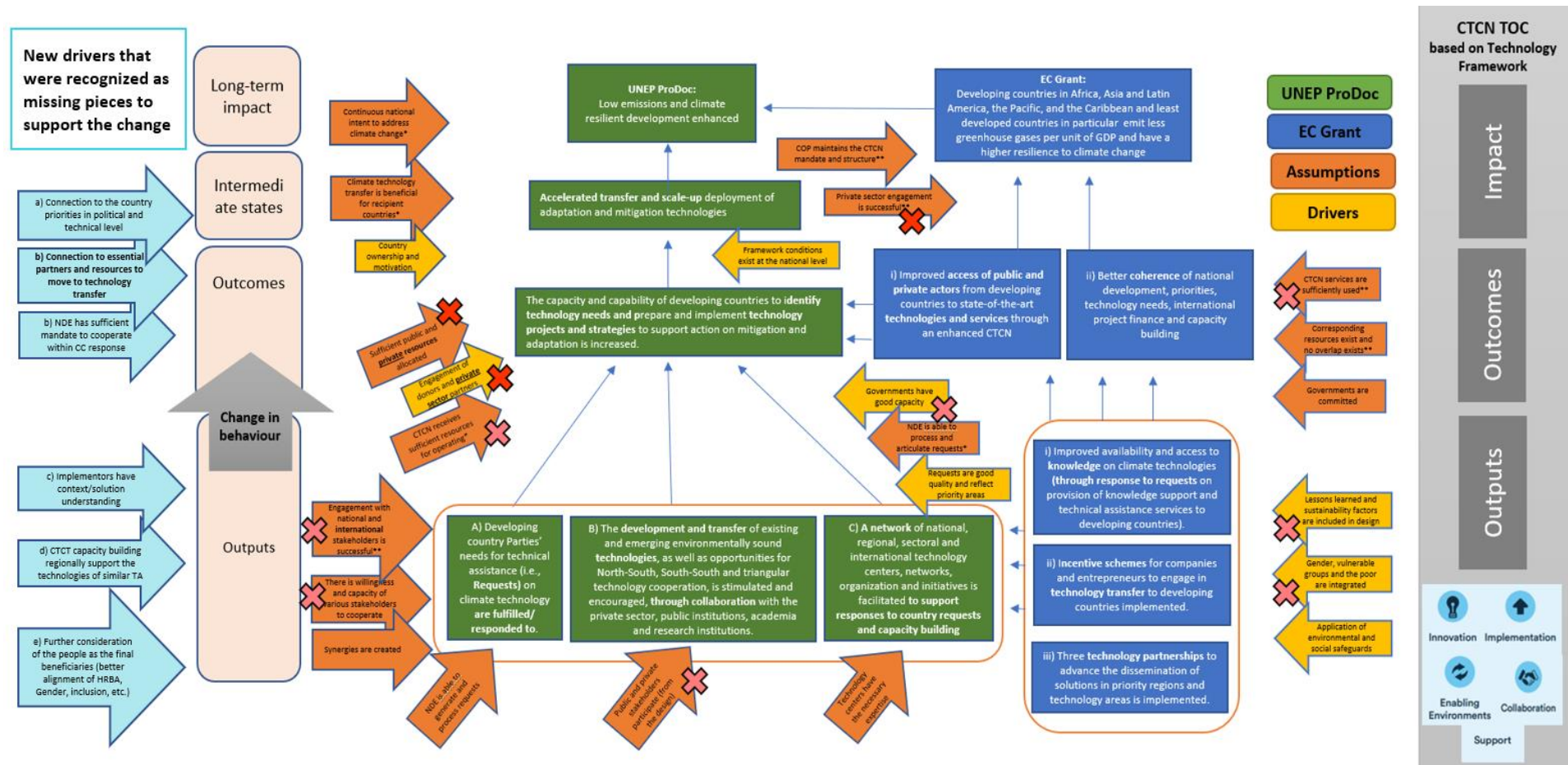
levels, such as the TNA and TAPs, as they have a significant role in improved coherence of national technology needs, and a potential role also in financing.

- b) **MAIN driver:** Connections to essential partners and resources to move from output/outcome levels to intermediate impact AND NDE has sufficient mandate to coordinate or cooperate within the climate change response³⁶: CTCN can influence the NDE position in coordinating with other focal points for technology transfer, if supported by CTCN Secretariat through official letters, communication and inclusion of those focal points into the capacity strengthening (in which also highlighting the chain towards the impact and the role of the stakeholders). This reflects significantly not only likelihood of achieving impact, but also on the catalytic role of the CTCN and the sustainability of its outputs and outcome.
- c) Implementers to always have context and solution understanding: CTCN can strengthen this through the TOR design and selection process from CTCN.
- d) CTCN capacity building regionally to support the technologies of similar TAs: CTCN can influence the success of the TAs and their chain towards the outcome by strategically placing and focusing on correct events to the correct audience at the correct time.
- e) Gender, human rights, the poor and marginalized groups recognition and implementation are considered to benefit from CTCN design where the people are considered as the final beneficiaries in the TOC design.

94. A lesson in the project design that became apparent to the Evaluation Team was that **there is a parallel (main) TOC of the Technology Framework** described on the right of Figure 8. The UNEP ProDoc and EC Grant contribute to it, but these are different results frameworks. Implications e.g. to the Programme components are discussed in the findings.

³⁶ Coherence in-country is not seen as CTCN role, as the priority lies within the mandate of the NDE. However, it is seen that the CTCN can support the coherence by having dialogue with the country on the key needs.

Figure 8. TOC at Evaluation. Note: TOC at Inception is in the middle. The red “X” means where existing assumption/driver did not hold in practice (light red for over 50 per cent, and dark red for over 70 per cent of case countries, both supported by other evidence). Turquoise arrows on the left are new drivers contributing to change, which application varied greatly in the case countries. Grey section on the right is the CTCN main TOC based on the Technology Framework, to which UNEP ProDoc and EC Grant contribute to. *=underlying assumption; **=converted from risk.



V. EVALUATION FINDINGS

A. Strategic Relevance

Alignment to UNEP MTS, POW and Strategic Priorities

95. The CTCN UNEP ProDoc implementation strategies and results showed full alignment with UNEP’s mandate and thematic priorities, as represented in the Medium-Term Strategy (MTS) 2010-2013 and Programme of Work (POW) 2012-2013, under which the project was approved. The project is well aligned and consistent with the Bali Strategic Plan for Technology Support and Capacity building (BSP) through its core purpose, and to the South - South Cooperation (S-SC) policies particularly through the specific output on it. Although the corresponding MTS and POW do not have Expected Accomplishment indicators, the Project is considered to contribute directly to the priorities of (a) Climate change and (b) Disasters and conflicts, as well as indirectly to (c) Ecosystem management; (f) Resource efficiency – sustainable consumption and production, and to the related expected accomplishments.
96. The EC grant agreement (signed in November 2016) is aligned with UNEP’s MTS 2014-2017 and UNEP’s biennial POW 2016-2017, under which it was approved.
97. The UNEP ProDoc and EC Grant have kept their original design of the results framework despite of several project revisions. Both have contributed to and are aligned with the MTS 2014-2017 and MTS 2018-2021 and the corresponding biennial PoW:s. The UNEP MTS’ have also increasingly taken the Technology Mechanism into consideration in their design; the project has forward-looking alignment through MTS 2022-2025, Climate Action subprogramme, defining Outcome 2 to be “*Countries and stakeholders have increased capacity, finance and access to technologies to deliver on the adaptation and mitigation goals*”.
98. The key informant interviews support the assessment of full alignment.

Rating for Alignment to UNEP MTS, POW and Strategic Priorities: Highly Satisfactory

Alignment to Donor/Partner Strategic Priorities

99. CTCN was well suited to the EC funding agreement and other donor priorities in its design. The UNEP ProDoc implementation strategies and delivered contributions (results) showed alignment and consistency with the EC priorities e.g. in climate action³⁷ and gender equality, and as expressed in the EC Grant agreement (please also see figure 7 on TOC). There were clear contributions anticipated and reported towards the EC’s reported results’ indicators; this was as the EC Grant formed a separate results framework, against which the CTCN Secretariat provided reporting (among other reporting). These EC Grant indicators were aligned to both CTCN and EC priorities. While the separate set of indicators increased the reporting requirements, the reports were delivered meeting requirements and the EC grant agreement was well in line with the UNEP ProDoc, bringing some specific focus areas into the center of the operations.

Rating for Alignment to Donor/Partner Strategic Priorities: Highly Satisfactory

³⁷ This is corroborated by the attribution of a new project by the EC to the CTCN on climate and security, connected to climate and security. Announced in COP 27 and to be started in the beginning of 2024.

Relevance to UNFCCC Mandate and the Technology Mechanisms of the UNFCCC and Other Environmental Priorities

100. CTCN was well aligned to the UNFCCC Mandate and the Technology Mechanisms of the UNFCCC. The UNEP ProDoc was designed based on Decision 1/CP.16 paragraph 123 and its outputs align directly with the corresponding mandates. CTCN, established under the COP at its 16th session organized in 2010, is the operational arm of the Technology mechanism, aimed to promote adaptation and mitigation technology transfer through small size catalytic projects. Therefore, CTCN alignment to the Technology mechanism is high. However, CTCN financial arrangements have not fully been aligned to the Decision 2/CP.17 (e.g. paragraph 139) on financial arrangements of the CTCN, which is also part of the UNFCCC-UNEP MoU. The Parties had also frequently given new mandates to the CTCN, while the UNEP ProDoc design/revisions were not keeping up with the new mandates. CTCN also supported the SDGs and Agenda 2030 and the degree of alignment was good particularly on the SDGs 13, 12, 7, 9 and 17. The EC Grant intervention logic brought added value based on exiting needs towards the impact level (e.g. coherence, private sector role, gender).
101. The extent to which CTCN is suited and responding to the needs of the countries is high. As a consensus of the negotiations with the Parties, CTCN could work with a great variety of climate technology projects (as opposed to focusing), to deliver according to the needs of the countries, and it operated in a large variety of countries and regions. The CTCN operated on the basis of demand and in most cases these principles and operational ideas are followed. CTCN responded to the environmental priorities through the urgency of climate change actions.

Rating for Relevance to UNFCCC Mandate and the Technology Mechanisms of the UNFCCC and Other Environmental Priorities: Highly Satisfactory

Complementarity with Existing Interventions/ Coherence

102. The intervention design/adjustments during inception showed no duplication/overlap of activities among the same target groups with other recent, ongoing or planned interventions by UNEP or other organisations working in the project area or on the same problem/issue. CTCN is unique and does not compete (but rather complements) with other interventions.
103. At design stage or during the project inception/mobilization, there were knowledge of, and some dialogue/engagement with, other recent, ongoing or planned interventions working in the project area or on the same problem/issue. However, the design had not sufficiently anticipated or identified benefits to collaboration with other recent, ongoing or planned interventions working on the same problem/issue, mainly, how to systematically design the project to connect to the likelihood of impact through other actors. This gap was particularly important considering the catalytic effect of CTCN; the CTCN TAs were small in scale and in order to be “adequate” to the needs of the country, the link to the other interventions or funding is critical to achieve the catalytic effect. Therefore, the concern of the complementarity in practical and sufficient level between the different mechanisms of the UNFCCC remains (particularly the Financing Mechanism), as expressed first in the 2016 CTCN evaluation regarding the financing mechanism, as well as the 2017 CTCN evaluation observation of the greater demand than what it was able to fund. If the importance of linking with other interventions was

recognized, the planning documents would have included a priority of partnership strategy development and roll-out from the beginning e.g. with the Financing Mechanism and the private sector. Good amount of mentions on coherence and collaboration exist in the planning documents, however, it was not sufficiently planned to guide the implementation in a systematic way, which can be seen in the gaps in the corresponding assumptions and drivers (paragraphs 85-91 on TOC). The opportunities in CTCN partnerships had been much greater and more important than the level of importance placed on them in the planning documents and other strategic documents, to make the higher levels of TOC work systematically in practice (for further information, please see chapter on effectiveness).

104. Alignment with country partners in their design of TAs varied from country to country. The CTCN structure was designed to have a country focal point, the NDE. These focal points were one among many other UN focal points in a country. In general, the UN struggled to cooperate internally in terms of having unified focal points within a global structure that can coordinate requests. The plethora of different focal points for different issues made it difficult for the countries with limited resources to have focal points that understood what is needed to cooperate with the country focal points for other issues / institutions (e.g. GCF, GEF, UNFCCC, other country partners). For CTCN, this is further complicated by the multi-sectoral and multi-actor cooperation required. The design of this (or the gaps in guidance for the countries for the NDE collaboration arrangements) was seen to have drifted away from the joint climate change targets, which required strong coherence and cooperation, to a lower level of reaching own CTCN-related Programme outputs and outcomes. The matter went beyond CTCN but was evident also in CTCN operations. The country level saw and experienced these gaps in practice, but there was no sufficient feedback loop with the countries and the CTCN Secretariat to connect the learning opportunities on coherence and promote duplication or replication of TAs.
105. CTCN had been flexible and kept on updating its operations in situations where there were unforeseen changes in the external context. CTCN by its nature, as responding to the country needs, had been flexible to adapt the operations when contexts changed, which made it very relevant for the countries. These have included natural hazards situations to political changes (for the COVID-19³⁸ case, please see KSQ.d.). Adaptation to context changes have caused delays in operations, but what was lost in time and efficiency was gained in relevance to the countries. CTCN has also responded to the institutional changes by adapting its operations, as updates to its mandate have been conducted by the Parties, further refined by the priorities expressed by the AB. These changes were more evident in practice than in design and documentation (such as in the project revisions, which have mostly kept the original design).

Rating for Complementarity with Existing Interventions/ Coherence: Moderately Satisfactory

Rating for Strategic Relevance: Highly Satisfactory

³⁸ COVID-19 refers to Coronavirus disease caused by the SARS-CoV-2 virus. In this context, it refers to the larger society impact, shut-downs and travel restrictions rather than to the disease itself.

B. Quality of Project Design

106. UNEP ProDoc, with four formal UNEP project revisions, and the EC grant agreement (2016) with extensions formed the basis for assessing the project design. The Evaluation Team assessed the project design as Satisfactory at the evaluation inception stage. The analysis was further specified during the evaluation implementation stage utilising the UNEP project design rating tool. However, the score remained the same. The UNEP ProDoc (2013) for hosting the CTCN served as a suitable and well-designed starting point for the support. However, the project document would have benefitted from a comprehensive revision to ensure better alignment with CTCN’s evolving Programmes of Work 1 and 2³⁹. (see also ‘project preparedness’ under Factors Affecting Performance and Cross-Cutting Issues)
107. *The key strengths of the CTCN project design are the description of the operational context, strategic relevance, governance and supervision arrangement, partnerships, budgeting and financial planning, efficiency, risk identification, and social safeguards.*
108. Both project documents elaborated clearly on the CTCN mandate within the global climate governance structures and provided a solid basis to the CTCN work in line with the mandate under the UNFCCC and the Technology Mechanism. The EC grant document further highlighted the localized needs for technology deployment, diverse financing mechanisms, relevant donor policies, private sector role and the coherence needed for the catalytic effect to take place.
109. Regarding the governance and supervision structure, the UNEP ProDoc had a sufficiently clear division of roles and responsibilities between the Advisory Board, CTC core centre (CTCN Secretariat), NDEs, consortium members, and global resource pool, the Network, and UNEP. In terms of the roles at the regional level, the consortium members are bringing regional knowledge on board. Considering the global and multi-dimensional nature of the CTCN, the ProDoc sufficiently described the partnership strategy for the implementation as well as for hosting the CTCN. The UNEP ProDoc and EC Grant specifically required North-South, South-South, and triangular technology cooperation. The EC Grant was implemented in the structures established in the UNEP ProDoc.
110. By design, the UNEP ProDoc was established for a period of five years with the possibility of extending the hosting agreement for two four-year periods. Thus, the project document was extended four times (see Table 5). The UNEP ProDoc described the initial resource mobilization approach. The same applied to partnership and networking dimensions.
111. Learning, communication, and outreach; *monitoring and evaluation design; sustainability; replication and catalytic effect were assessed as slightly weaker elements of the project design.* At the same time, it is worth noting that communications, outreach, and Monitoring and Evaluation (M&E) approaches were intended to be developed at the later stages of the CTCN implementation and in collaboration with diverse stakeholders.
112. The CTCN design considered support to catalytic interventions that can trigger a larger impact in the selected countries, sectors, and knowledge areas. However, apart from the multi-country joint projects where replication practices are expected to be found, there were no direct references to the replication of various initiatives (section on TOC

³⁹ The first Programme of Work (PoW) was approved 2013 for 5 years. The second Programme of Work (2019) is aligned with the UN Technology Framework and the related themes. The CTCN PoWs are the COP decisions and the mission of the UN Technology mechanism. PoW implementation is reviewed by the CTCN Advisory Board.

and section on effectiveness further discuss these). The EC Grant has established the project logic and results framework in line with EC requirements. These were well aligned with the purpose of overall UNEP ProDoc.

Rating for Project Design: UNEP – Satisfactory, EC – Satisfactory

C. Nature of the External Context

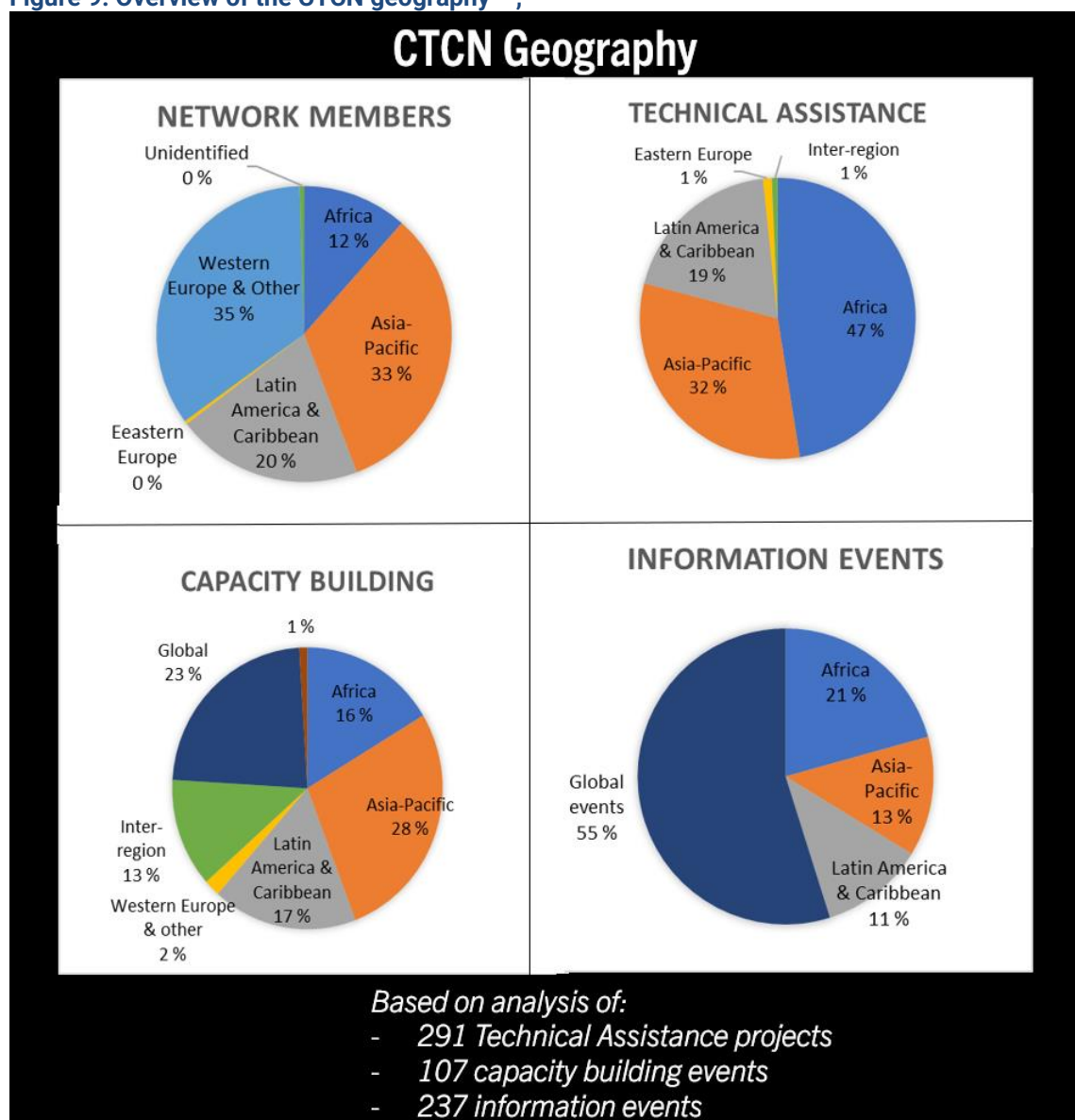
113. **CTCN operations at country-level were at times negatively affected by political changes, conflict and natural hazards where these were prevalent.** The occurrences of political changes and conflict in countries with ongoing TAs negatively affected the countries’ security situation, occasionally causing the implementation of TAs to stall, for example:
- In Niger, UNEP had to put on hold the technical assistance due to the coup d'état that happened in the country in July 2023. Implementation will recommence once the conflict has been resolved.
 - In Sudan, the conflict that occurred in April 2023 caused delays in the implementation of the TAs, with one of the TAs placed on hold and to recommence following an improvement of the security situation on the ground.
 - In Latin America, changes in Government and therefore priorities have delayed several TA processes.
114. In 2020 and 2021, the COVID-19 pandemic affected project implementation. The impact of the COVID-19 pandemic on mobility delayed the implementation of some activities. In-person meetings, stakeholder consultations, and workshops were either delayed or held virtually. The pandemic resulted in the cancellation of three TAs funded under the EC grant. However, it also created opportunities (please see paragraph 258 on KSQ.d).
115. The security situation and economic conditions were not found by the Evaluation Team to influence the project.
116. Considering the global extent of CTCN, the CTCN evaluation does not apply scoring adjustment due to external context, and it assumes that the total of CTCN contexts challenges is not more than an average of global contextual challenges. The Evaluation Team, however, recognized that the general progression of climate change has and will continue to pose a serious threat also to CTCN changing contexts of operations.

Rating for Nature of the external context: Favourable

D. Effectiveness

117. Through portfolio analysis, the Evaluation Team has visualized some information that was made available for the use of the evaluation. These graphs are presented in Figures 9 and 10. The graphs are indicative (please see limitations in paragraph 65), and they do not directly correspond to the evaluation questions of this evaluation; they are presented as additional information to support an overview of the CTCN geography and characteristics of the TAs.

Figure 9. Overview of the CTCN geography ^{40, 41}

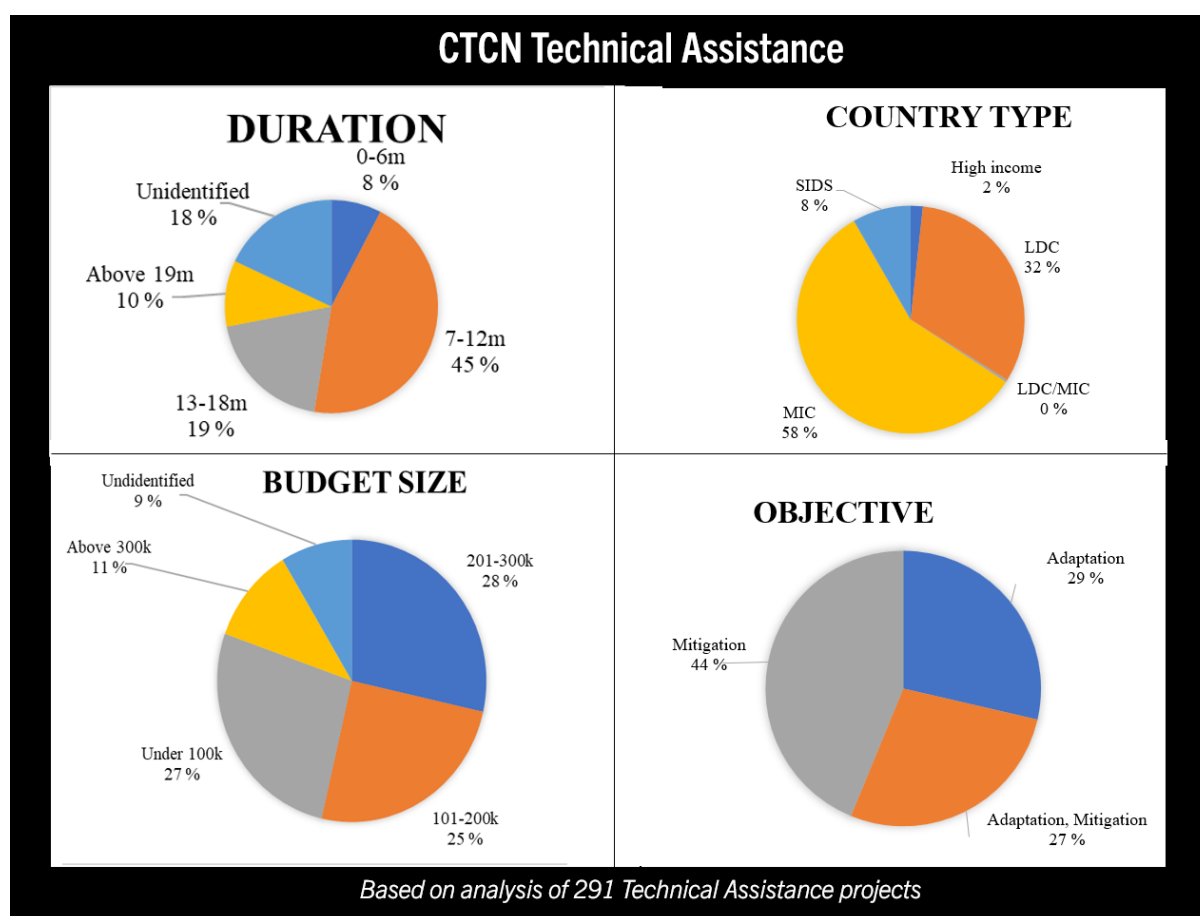


Source: Evaluation Team portfolio analysis, based on the data by the CTCN Secretariat.

⁴⁰ The information in Figure 9 is based on geographic regions, while Figure 10 provides information by country type. The global events in the Information Events and Capacity Building tables refers to events organized as part of global meetings/conferences, such as the COP or the CTCN Advisory Board meetings, as well as to global web-based trainings, workshops and seminars. The unidentified refer to the location information that was not available to the Evaluation Team in the data provided by the CTCN Secretariat.

⁴¹ Network members are mainly from “Western Europe and Other” and in the Asia-Pacific region, followed by Latin America and the Caribbean region and Africa. TA takes place mostly in Africa, followed by Asia-Pacific, Latin America and the Caribbean. Capacity building happens in all regions. Information events largely coincide with COPs and Advisory Board meetings or are web-based; these are categorized as “global events”.

Figure 10. Overview of the Technical Assistance characteristics⁴², ⁴³



Source: Evaluation portfolio analysis, based on the data by CTCN Secretariat.

Availability of Outputs

118. CTCN delivered its programmed outputs and milestones towards the intended beneficiaries. A detailed Table 15 on output-level indicator reporting can be found in Annex VI. While there were certain challenges⁴⁴ of measuring effectiveness of the UNEP ProDoc and EC Grant, it was assessed that around 85 per cent of the outputs were delivered fully.

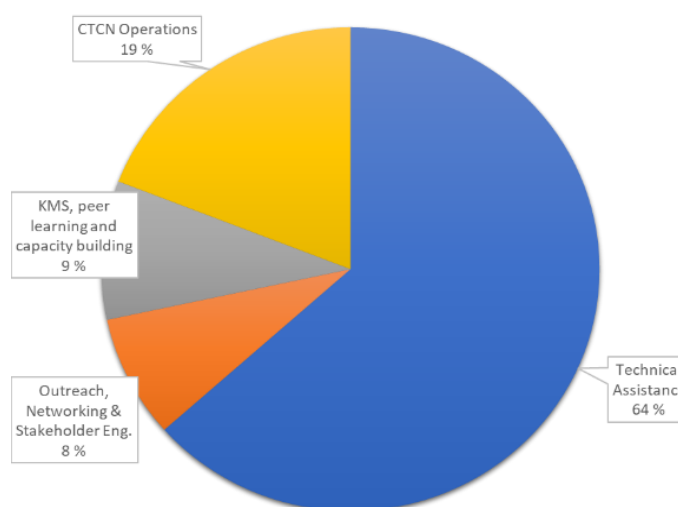
⁴² A TA Project typically lasts between 7-18 month. Most are implemented in MIC countries, but also a relatively good percentage in LDC. SIDS are about 8 per cent. Slightly higher focus is on mitigation than in adaptation. Separation of TA to EC grant and “others” in CTCN operations has been done only on some occasions, for operational fluency and intention towards pooled funds. Budget size was typically between USD100-300 thousand. Unidentified refers to gaps in CTCN Secretariat data on TA lists.

⁴³ The unidentified refer to the TA information that was not available to the Evaluation Team in the data provided by the CTCN Secretariat. The “country type” is based on the classification used by the CTCN Secretariat in the TA information provided (this was verified by the Evaluation Team to follow UN classification available on [here](#), [here](#) and [here](#)). Please see paragraph 65 for further information.

⁴⁴ Two challenges apply: 1) While the ProDoc and EC Grant kept their outputs, outcomes and impact throughout the time of the evaluation, there were changes in the indicators, which made the direct measuring challenging. The Evaluation Team bases the percentages to the indicators against which the 2022 reporting was conducted. 2) On the practical level of operations, CTCN aligned its monitoring system to the five key themes of the Technology Framework, which is a different system from the UNEP ProDoc and EC Grant Agreement. This will be further explained under the monitoring criterion.

119. CTCN had particular focus on the TAs, which were considered by the Evaluation Team to be the most important outputs for achieving the outcome (Figure 11). The TAs were perceived positively by the countries and in line with country priorities. One contributing factor to this was the good levels of user ownership, as the intended users of key outputs were meaningfully involved into their preparation, by drafting the initial concept.

Figure 11 Expenditure by CTCN service areas (in line with the ProDoc outputs) in the last 5 years (2018-2022; USD 45 million).



120. The delivered outputs, including the TAs, had both strengths and challenges, but they were mostly deemed to be of good quality and utility by users and reviewers. The evidence from country cases, KIIs and reports showed that there were several strengths, including a high alignment to national priorities, the level of use was considered high, the CTCN international network was active, good quality of the tools and information materials, trainings and capacity strengthening activities were perceived positively, a good number of CTCN knowledge portal visitors and percentage of developing countries within it. The reported challenges included operationalizing the triangular cooperation, systemic collection and use of lessons learned and good practices, gaps in cooperation with the country level to understand practical constrains in TAs, trainings and cooperation, public-private partnerships (PPP) on technology and private sector events, as well as twinning arrangements, country level CTCN visibility (e.g. capacity training does not effectively reach other stakeholders apart from NDE and core partners), and CTCN not being known in many country contexts going further from the NDE. The availability of outputs depended highly on the NDE’s own activity towards the CTCN Secretariat and participation in related processes where they can be initiated. The CTCN Secretariat has a TA prioritization criterion, but the systematic application of it remained somewhat unclear to the evaluation team. The delivery time was mostly timely but suffered from lack of fluent communication of the approval process towards the country level. There are also cases of moderate or significant delays.

121. The other outputs were also largely delivered, but there is room for growth in size, significance, innovation and strategic considerations. The gaps in strategic considerations (such as TAs supported by trainings that would enable a seamless connection to the strengthened capacities, coherence and private sector integration; please see the TOC in figure 7) were seen to limit also the output levels connection to outcome level. While TAs were recognized as the most important outputs also by the Evaluation Team, the significantly lower level of strategic focus on learning and capacity building, as well as stakeholder engagement means that the good results of the TAs were not transferred as fluently to the outcome level. This was due to many of the key actors in the country (including other focal points, where the NDE is not from the same ministry as them) not being knowledgeable of the existence of CTCN or how it could be used as a catalytic initiative towards strengthened capacity and climate technology transfer. The needs and demands were also much greater than what the

current budget and resources enabled, which was already noted in the 2017 CTCN evaluation.

122. Some specific output level evidence included:

- There was somewhat unequal geographic distribution of Network Members in comparison to TA implementation. In some cases, the connections were working better than in others. The most beneficial connections were found to be in cases where both national/regional and international expertise were provided, forming triangular cooperation. However, this model was underutilized. Asia in terms of technology knowhow, network size and country needs form a strong context for this type of collaboration.
- While mitigation is important and easier to measure, it was surprising to the Evaluation Team how countries that suffer mostly from climate change impacts and have a minor role in the global emissions (e.g. all SIDS together are responsible for less than 1 per cent) seemed to focus mainly on mitigation TAs. The reasons for this remained partially unclear, however, the ability to measure resulting actions in mitigation projects seemed to play a role also at the country level as there are monitoring requirements at country, regional and global levels. There were also cases where the CTCN Secretariat had proposed mitigation TAs, in line with country strengths and interests. The same matter of larger mitigation focus was recognized within the Technology Mechanism assessment⁴⁵, which recommended CTCN to pursue its efforts in building capacity for adaptation and in supporting an increase in technical assistance requests for adaptation.
- The supervision and guidance provided by the CTCN Secretariat to implementing partners and national governments was fairly limited and affected the achievement of results and coherence. This will be detailed further in the related criterion.

Rating for Availability of Outputs: Satisfactory

Achievement of Project Outcomes

123. While both opportunities and challenges existed, there was evidence⁴⁶ of CTCN having contributed to the UNEP ProDoc outcome “capacity and capability of developing countries to identify technology needs/prepare and implement technology projects”, which can be considered the most important to attain the intermediate state, as well as to EC Grant outcome on “better coherence⁴⁷”. Unequal geographic evidence was found on the other EC Grant outcome “improved access of public and private actors from developing countries to state-of-the-art technologies and services through an enhanced CTCN”. Outcome level indicator reporting can be found in Annex VI however, it should be noted that at outcome level, conclusions cannot be drawn directly from the indicators reporting because the indicators themselves do not measure the change, but components that enable it. They were therefore reflected also against other evidence. In relation to the main outcomes, the CTCN contribution was considered to be the following:

⁴⁵ UNFCCC (2022). First periodic assessment of the effectiveness and adequacy of the support provided to the Technology Mechanism in supporting the implementation of the Paris Agreement on matters relating to technology development and transfer.

⁴⁶ Country cases, KIIs, portfolio review and document review support this finding.

⁴⁷ Strengthened particularly when connected to the TNA/TAP processes.

- A ‘credible association’ between the project’s efforts and the observed results can be seen in the design logic of the UNEP ProDoc results framework⁴⁸, which builds from the COP decision 1/CP.16 (paragraph 100) reflecting the interests of both annex 1 and non-annex 1 countries and provides a logical chain of events towards the outcome. The EC Grant complements the UNEP ProDoc design by strengthening elements, such as the private sector engagement, that had been considered as a key during the implementation to support the chain towards the outcome (as well as strengthening the UNEP ProDoc outcome by two other contributing outcomes of coherence and enhanced CTCN). While the CTCN Secretariat implemented the activities, the COP and the CTCN Advisory Board would update the requests towards CTCN based on country and context needs.
 - Substantive contributions of CTCN can be associated with the main outcome, considering that the countries’ reflections support this view. The association to the contribution was strongest where the CTCN support had the potential to support national stakeholders’ capacity beyond the NDE, to identify their technology needs and implement technology initiatives. However, as each country has specific internal and external structures, there was a great amount of variation.
124. Constraints included that the capacity building events were not considered frequent enough by various stakeholders and by the Evaluation team (in analyzing the process towards the change) and did not always consider strategically whose capacities are being developed. For example, support to all key stakeholders’ capacity was seen to increase country capacity in a meaningful way (and vice versa when this was not in place). It was also stated by various interviewed stakeholders that it is the Network member (consultant) whose capacities increased the most – when the consultant was not from the country/region, the capacity development gains were lost. The Advisory Board did not often have unanimous views and the interests included other than needs-based considerations, as CTCN is an initiative within the complicated climate negotiations. MICs also continued to have better position to identification and use for new technologies, as CTCN can only contribute or initiate the strengthened capacities process but does not have the mandate or resources to be the main player. Please also see the next paragraph on assumptions and drivers for other constraints.
125. The well delivered outputs supported the achievement of the project outcomes. However, there were some particular considerations in relation to the assumptions and drivers that strongly influence the achievement of the outcome(s) (please also see the reconstructed Theory of Change in Figure 8):
- Assumptions for progress from project outputs to project outcome(s) hold only partially. NDEs were generally able to process requests and technology centers had the required expertise. While public stakeholders participated from the design stage, private stakeholders were mostly left out. The Evaluation Team found that this should not be an assumption but a driver, since the CTCN was able to influence it – which the EC Grant had supported by bringing specific outputs and outcomes closely connected to the topic. Engagement with international stakeholders particularly was not always found to be successful⁴⁹, and not all the stakeholders had the willingness and capacity to cooperate. From an operational perspective, the CTCN did not benefit from sufficient and

48 As there was no credible baseline data for a project’s results indicators and the project design did not allow for a control group, it was not possible to prove the attribution of evidenced results to the project’s efforts. Therefore, the evaluation focused on how either ‘contribution’ or ‘credible association’ was established. Please see the methodology chapter for further details.

49 There are several reasons for this. GCF, for example, itself took several years to establish structures to operate well, and since it was established at the same time with CTCN, many matters overlapped.

adequate resources (human and financial) to operate efficiently, which influence was seen to affect the intervention logic and the likelihood of impact, as key strategic considerations and operational volume was not always met.

- Drivers to support transition from outputs to project outcome(s) were only partially in place. Country ownership and motivation was mostly good, but naturally the more motivated countries participated more and obtained more TAs. TA requests were mainly good quality and reflected priority areas, although CTCN Secretariat support was also needed and at times providing support delayed the other processes. The application of environmental and social safeguards was assessed by the Evaluation Team as successful. Lessons learned and good practices were not systematically integrated in a way that enabled their use. Gender, vulnerable groups and the poor were not systematically integrated in practice (please see paragraph 136). There are **new drivers** that were recognized as missing pieces for the chain towards the outcome in data collection and analysis (please see paragraph 93 TOC at Evaluation).

Rating for Achievement of Project Outcomes: Moderately Satisfactory

- With UNEP ProDoc outcome achievement: Moderately Satisfactory.

Box 2. Systematic partnership building for a catalytic effect

Systematic partnership building for a catalytic effect

Achieving the targets of the Paris Agreement requires overall strong collaboration beyond programme and office structures, towards a common goal. The characteristics and gaps of the CTCN strategic and systematic partnerships building have had an effect on the coherence that is required for CTCN’s catalytic effect, and which has implications to the CTCN likelihood of impact.

CTCN has been developing partnerships and resource mobilization to a significant degree but has done so on rather a case-by-case basis, rather than by creating strategic standard processes, which could be well communicated to all stakeholders. As a result, slow progress on partnerships and resource mobilization was observed by the Evaluation Team over the time period covered by the evaluation, despite the significant interest of actors to cooperate in the area of climate technology. The cooperation with TEC has experienced significant progress only during 2022. Previously there had not been a systematic use of TEC publications that would support CTCN operations. Although the Technology Mechanism was established at the same time with the Financing Mechanism (GCF and GEF), the cooperation has been limited to specific occasions rather than done in a systematic and transparent way, for which many key actors were not very well aware of the dialogues and progress. The CTCN engaged with the GEF and accessed GEF resources (USD 1.8 million) for the implementation of the project “promoting accelerated transfer and scaled up deployment of mitigation technologies through the CTCN”. CTCN equally engaged with the GCF and mobilized USD 11 million for the implementation of 31 GCF readiness projects (TAs). The partnership with the private sector has not been developed in a systematic way and to the extent expected in the TOC and components and assumptions related to the private sector. CTCN interventions overall are described not to be credible without private sector engagement. There are also many other key partners, such as the UNEP Copenhagen Climate Centre (connected to TNA and TAP processes), that would have seemed like natural allies for cooperation, but which cooperation did not seem to have taken place in a systematic way.

A key interest of the stakeholders in the evaluation was the **UNEP-UNIDO partnership**. The project, by its ProDoc name, was planned to be co-hosted by UNEP and UNIDO. The cooperation was working well in the beginning but resulted in UNIDO leaving the partnership in 2022 as the cooperation agreement was not continued. Three reasons were identified for UNIDO leaving the partnership: 1) Difficulties of the UN system to co-manage projects (e.g. paragraph 140). This was more evident during the first years, and UN systems to aid co-management have incorporated several improvements since; 2) Lack of written roles and responsibilities (apart from the MOU) that would clearly establish the standard procedures, roles and decision-making practices between the agencies; 3) This, coupled with management changes later led to different views between UNEP and UNIDO. The departure of UNIDO has had several implications to CTCN budget, partnerships, staffing, expertise, country-level presence, which are reflected in the other criteria findings. Many core Advisory Board members also expressed their concern of the gaps in UNEP transparency of this process and decision, which affected the existing relationship and trust. UNIDO continued to collaborate on the CTCN TAs at the country level as a Network member, bringing added value through this channel.

Achievement of Likelihood of Impact

126. CTCN was meant to be catalytic⁵⁰ project, where the real value is at the impact level. As the project outcome was partially achieved, and assumptions for progress from project outputs to project outcomes held partially and drivers to support transition from outputs to the main project outcome were partially in place, the CTCN likelihood of the intended, positive impacts becoming a reality is moderately likely.
127. CTCN TAs were often designed in a way such that they could lead to bigger transformations and are therefore aligned with their catalytic purpose. TAs often have also contributed to larger impact at country level (climate technology transfer, low emission and climate resilient development), but the role of these contributions varied greatly and was subject to many limitations at the practical level (please see Annex IV).
128. CTCN or the TAs could not deliver the impact alone, but only created the groundwork for the likelihood of impact, to be achieved if further actions were implemented (Box 1 and paragraph 85 TOC). The likelihood of impact therefore greatly depended on partnership arrangements and strategic positioning. CTCN operations would have had a higher likelihood of impact mainly if TA had been tied to support leveraging of other funding (e.g. GCF). The country cases offered indications that CTCN global TOC held when country future financing was considered as part of TA design. The six case countries assessed by the Evaluation Team, however, produced evidence that there had been materialized /demonstratable impact within the six years from when the first TA was implemented⁵¹, although some did have indications that the intermediate impact may happen in the future (paragraph 183 and 185). At the strategic level there also appeared to be progress happening, but no systematic technology transfer (intermediate impact) took place.
129. On challenges, increasing the likelihood of moving towards the impact was seen to lack the sufficient strategic consideration for systematic and constant cooperation with the other global and country-level actions and partnerships. This tends to challenge the causal pathway and likelihood of impact. Other challenges include insufficient strategic consideration, unclear funding arrangements (varying involvement of national financing institutions and the financing mechanism), partnerships collaboration and systematic follow-up towards impact, gaps in strategic consideration also the other service areas apart from TAs at output level (which could have been supported to improve this), lack of funds, lack of support from Parties to their NDEs, lack of constant dialogue with key partners, lack of CTCN Secretariat staff and staff turnover, different actors expecting different impacts and the diversity in size and types of projects being high.
130. The UNEP ProDoc and EC Grant assumptions and drivers further support the view of the Evaluation Team that impact is ‘Moderately Likely’, including the following aspects:
 - Assumptions for progress from project outcome to impact held partially. Governments were committed to foster climate technology transfer for low carbon and climate resilient development. There was often a genuine national intent to address climate change mitigation and adaptation challenges. Climate technology transfer was beneficial, and perceived as beneficial, for recipient countries. The recipient country, through its NDE, was mostly able to process and articulate requests for technical assistance with regard to climate

⁵⁰ The term catalytic effect generally refers to extending the coverage or magnitude of the effects of a project. Catalytic effect is associated with triggering additional actions that are not directly funded by the project and can rely on funding from another source or have no financial requirements.

⁵¹ It has been six years since the first TAs were concluded.

technology. CTCN structure was also sustained in the longer term. However, from an operational perspective, the CTCN did not fully benefit from sufficient and adequate resources to operate efficiently and effectively (underlying assumption). Sufficient private resources were not found to be committed/allocated to support country driven technology projects and strategies. Unlike the assumption, UNFCCC COPs have modified the mandate of CTCN, which adds to the complexity of the ProDoc. Sufficient funding for CTCN operation and overlapping donor support does not fully exist, but rather than an assumption, the Evaluation team considered this to be a driver as CTCN can influence it.

- Drivers to support the transition from outcome to impact were only partially in place. The CTCN services were mostly sufficiently and effectively used. However, the engagement of private sector stakeholders has shown little success.
131. In terms of influencing factors, the previously stated matters of Project Management and Supervision in outputs (paragraph 122) also influenced the likelihood of impact. In addition, CTCN would have benefited from more adaptive management, which was in place in relation to external threats, but the project, according to many stakeholders, was somewhat reluctant to be innovative and open to internal renewal as the leadership had preferred a more traditional approach despite CTCN’s innovative nature.
 132. The roles of the CTCN Advisory Board and CTCN Secretariat were important in connecting CTCN to the larger scope to enable the likelihood of impact. Their communication was systematic thanks to recurring AB meeting practices, however, more transparency for internal communication between the entities was considered needed. The Advisory Board and COP represented many different interests, which did become somewhat difficult for the CTCN Secretariat to manage due to a lack of clarity of direction.
 133. Country ownership and driven-ness was beneficial, but also affected in cases when the NDE was not under the same ministry as the other focal points. In those cases, there was no good knowledge of the CTCN’s existence or opportunities. This was partly a matter of communication and public awareness (please see chapter I).
 134. No direct negative effects were observed as a result of CTCN operations.

Rating for Achievement of Likelihood of Impact: Moderately Likely

Inclusion of human rights and gender considerations (scoring under chapter I. Factors Affecting Performance and Cross-cutting issues)

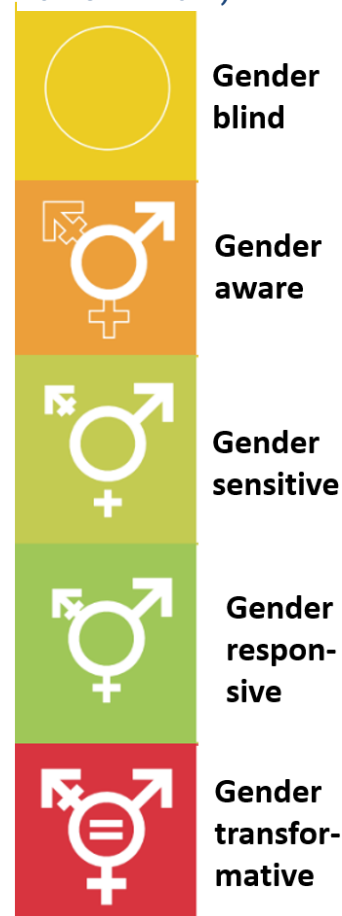
135. The ProDoc and EC Grant recognized well the key aspects of gender considerations in climate change and their approach can be considered gender responsive. The commonly used gender equality scales include gender blind, gender aware, gender sensitive, gender responsive and gender transformative.

136. CTCN applied gender consideration in its guidelines and templates in a relatively systematic manner into the TA templates, and in line with the UNEP Policy and Strategy for Gender Equality and the Environment. Since 2019 there has also been a CTCN-specific gender policy, with gender budgeting of 1 per cent. However, in practice it had been insufficient to address the ProDoc’s recognition of women’s position in climate change impact. In practice, as found through the evaluation country cases and key informant interviews, the gender elements were largely recognized but not applied in the TAs and other components. It was found to be more a “tick the box” exercise. No gender analysis/assessments were obligatory and therefore not used, which prevented an understanding of the positive effects or negative effects of the intervention on differentiated gender and other groups. The CTCN gender policy was largely unknown within the NDAs. Indicators were sex disaggregated depending on the case. Therefore, it can be considered that while the gender policy was gender sensitive, the practical implementation was only gender aware, which means that gender was recognized as a factor but not addressed in concrete actions.

137. Human rights-based approach (HRBA) and rights of indigenous people were mentioned, but not equally strong within CTCN design. The UN Common Understanding on the HRBA and the UN Declaration on the Rights of Indigenous People were therefore not systematically applied. This was closely connected to the lack of recognition of people as the final beneficiaries (see figure 7 on TOC and outcome formulation), which then limited the application of these aspects. The project had representation of gender expertise and NGO within its AB, but it did not systematically consult with larger/country groups of gender or marginalized groups in design and implementation.

138. However, there was a recent development in 2023. While 2023 was not within the scope of the evaluation, the matter was considered important to acknowledge to connect it to the forward-looking recommendations. Gender considerations have been strengthened in the new CTCN gender policy 2023-2027, which enabled it to grow from gender aware practices towards gender responsive approaches (to match and address the ProDoc recognition of women in climate change impact). It increased gender budgeting from 1 per cent to 5 per cent. The policy recognized intersectionality⁵² which enabled to consider the other inclusion approaches, such as the indigenous people. This enabled a better contribution also to HRBA.

Figure 12 Gender equality scale (source: modified from UNDP 2021)



Rating for Effectiveness: Moderately Satisfactory

52 Intersectionality refers to the ways in which systems of inequality based on gender, race, ethnicity, sexual orientation, gender identity, disability, class and other forms of discrimination “intersect” to create unique discrimination dynamics and effects.

E. Financial Management

Adherence to UNEP’s Financial Policies and Procedures

139. CTCN administrative and financial processes were established in a manner that they were adherent to the UNEP financial policies, rules, and procedures. The host agreement⁵³ noted that UNEP was to design the organization structure, manage the CTC, and provide necessary administrative and infrastructural support for the effective functioning of the CTC. This was to be done in accordance with relevant UN and UNEP regulations, rules, and procedures, UNEP Governing Council decisions, and the host agreement. The CTCN financial and administrative management has been established within the UNEP system (including support from UNEP finance staff and division director).
140. The overall financial management approach has been overall functional and responsive to issues that required attention. The past evaluations and interviews for this evaluation noted a weighty but functioning arrangement between the UNEP and UNIDO financial and administrative systems. The UN processes were perceived as heavy and limiting prompt processes by some stakeholders (see section on ‘Efficiency’ paragraph 160). The CTCN Secretariat has now been in existence for 10 years and has established processes that support financial management in line with the UNEP requirements. There had been a gradual improvement in the internal arrangement of the financial management approaches between the hosting organisations.
141. The EC Grant was managed as part of the overall CTCN financial envelope and financial statements submitted as part of the reporting. The transparency of budgeting process, support to financial projections and resource mobilisation, are dimensions that are valued and hoped for by the CTCN stakeholders. CTCN Secretariat was responsive to the documentary inquiries during the evaluation process.
142. The Advisory Board (AB) endorses the CTCN budget and financial statements⁵⁴. These are available to AB prior to each bi-annual meeting. The CTCN Secretariat has dedicated staff to ensure adherence to the UNEP financial management rules and procedures. These resources have been adjusted to fit the CTCN needs and currently consist of a full-time administrative officer and UNEP division FMO. The processes relating to grant management, fund transfers, and procurement were established in line with the UNEP system (see Table 16, Annex VII for details).
143. At the same time, the CTCN Trust Fund was established as a mechanism with funds being extended to the following year (e.g. to the new PoW or project document period) to enable effective budgeting in line with demand-based nature of CTCN.
144. The main vehicle for the CTCN to deliver its services is through technical assistance, which represents over 60 percent of expenditure (see Figure 10). While the evaluation interviewees noted delays in the CTCN and UN-related procurement processes that contain multiple steps, there is no indication that the issues would have been particularly due to financial disbursements or financial management-related issues. Some stakeholders also noted the appreciation to the management of the TA procurement processes through the UN system, which enabled oversight of any potential miss-use of funds.

53 In line with the Memorandum of Understanding between the Conference of the Parties to the United Nations Framework Convention on Climate Change and the United Nations Environment Programme regarding the Hosting of the Climate Technology Centre, dated 22/02/2013.

54 Source: project document 2013.

Rating for Adherence to UNEP’s Financial Policies and Procedures: Satisfactory

Completeness of Financial Information

145. The Evaluation Team has reviewed the project revisions, annual budget documentation, UNEP financial statements, and a sample of legal agreements with donors and implementing partners 2013-2022. The Evaluation Team, however, was unable to establish a full picture of CTCN budget and expenditure by components over 2013-2022, in particular for the period 2016-2018. Table 6 depicts the CTCN secured funding (cash transfers) with total expenditure, annual budget and expenditure (total USD 71,936,224) as per details received from the CTCN Secretariat. The UNEP official financial statements available to the Evaluation Team indicated that the total CTCN expenditure is USD 75,019,358. The summary of financial statements by UNEP categories is presented in Table 19 (Annex VII) and provides additional details regarding the figures. These differences in the total expenditure figures concerning 2016-2018 relate to one or more reasons listed here: 1) exclusions of UNIDO information in the Report by CTCN Service Areas, 2) PSC is not included in the reports on CTCN Service Areas, or 3) UNEP financial statements are only reporting the actual expenses while the reports by service categories include actuals and commitments.

Table 6. CTCN secured budget, approved annual budget (endorsed in Advisory Board) and expenditure

Year	Cash Receipts /USD	Approved Budget ⁵⁵ /USD	Expenditure /USD
2013	15 540 535	0	383 674
2014	4 548 884	6 000 000	5 836 203
2015	9 729 262	14 500 000	4 155 809
2016	8 122 963	18 980 000	6 990 231
2017	6 831 053	13 700 000	9 614 150
2018	8 504 392	9 110 000	8 673 263
2019	3 823 965	9 210 000	6 128 969
2020	13 444 524	10 000 000	8 590 462
2021	12 585 743	10 003 800	10 505 432
2022	14 203 667	10 003 800	11 058 031
TOTAL	97 334 988	101 507 600	71 936 224

Source: CTCN Secretariat.

146. In-kind contributions of USD 2,3 million were reported as part of the CTCN annual operational plan reporting to the Advisory Board and expenditure tables to the AB⁵⁶. This only covers the in-kind contribution from Korea and Japan (“Probono”)
147. Budget revisions on income budget) submitted to and approved by UNEP also contained an estimated budget on the UNEP-approved outcomes and outputs in line with UNEP requirements, budget annex to the revision document. However, the UNEP system does not enable extraction of the expenditure figures at the level of approved project outcomes and outputs. (See Table 19 in Annex VII).
148. The Evaluation Team appreciates the CTCN Secretariat’s practice for preparing the CTCN budgets and expenditures by the CTCN service areas 1) Technical Assistance; 2) Outreach, networking & stakeholder Engagement; 3) KMS, peer learning, and capacity

⁵⁵ As per Annual Operating Plans

⁵⁶ This is in line with the UNEP guidance regarding in-kind contribution reporting.

building; and 4) CTCN Operations, which enables a more transparent presentation of budgets and expenditures to the Advisory Board. The financial details in line with the service categories were available to the Evaluation Team for 2018-2022 (see Table 20 in Annex VII 145). The financial reports by CTCN Services Areas along with the official Financial Statements by UNEP’s expenditure categories are being provided consistently since 2018 (change from UNEP legacy system IMIS to UMOJA has facilitated this).

Table 7. Summary of final approved budget and expenses of the EC grant

Component by UNEP budget categories	Revised final budget /USD	Final expenses /USD	Variance	Expenditure rate/%
Personnel	1 862 412	1 977 451	-115 039	106
Sub-contract component	4 841 774	4 801 753	40 021	99
Training component	229 550	234 689	-5 139	102
Miscellaneous component	211 523	123 183	88 340	58
Project Support Cost (PSC)	500 168	499 595	573	100
TOTAL	7 645 427	7 636 671	8 756	100

Source: EC final report.

Rating for Completeness of Financial Information: Moderately Satisfactory

Communication Between Finance and Project Management Staff

149. The CTCN communications regarding the CTCN finances and financial management effectively enabled planning and addressing operational issues within the Secretariat. The financial management and administrative issues are discussed during the CTCN regular meetings as well as in meetings of the advisory board. The CTCN Secretariat’s regular meetings also contained discussions on administrative and financial issues.
150. The CTCN Advisory Board offered a forum where CTCN budgets and expenditure reports were presented, discussed, and endorsed by the members. It was also the forum to address topics relating to finances and resource mobilization more broadly. Close collaboration between the (UNEP division) FMO and the CTCN management supports CTCN’s overall ability to respond to issues relating to financial management.

Rating for Communication Between Finance and Project Management Staff: Highly Satisfactory

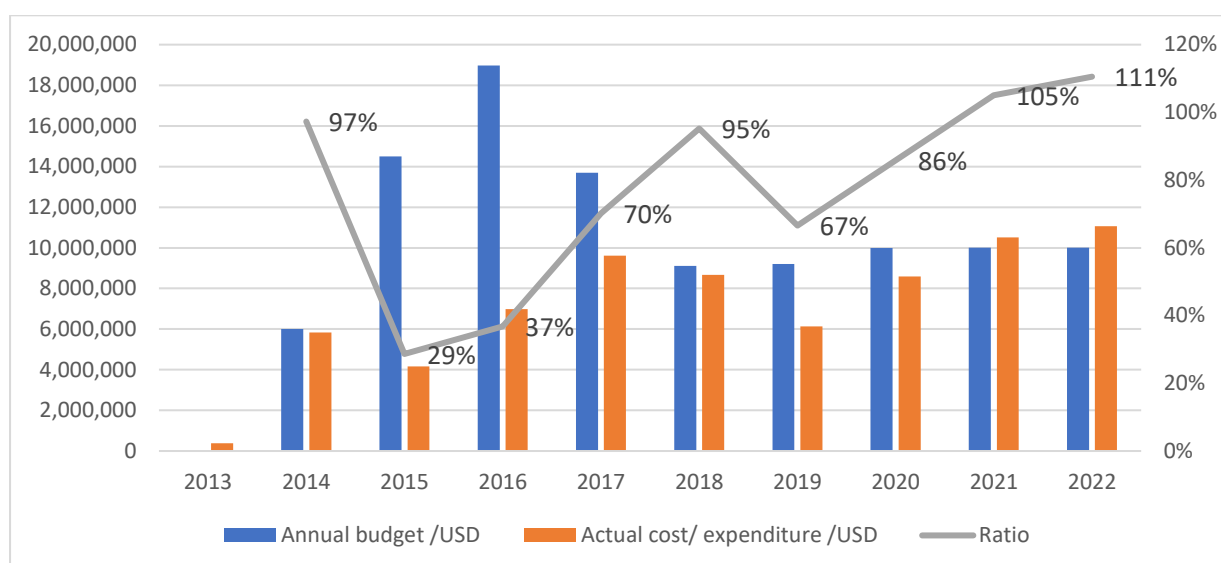
Rating for Financial Management: Satisfactory (UNEP Prodoc and covers also EC grant)

F. Efficiency

151. **Cost-effectiveness.** The CTCN was set up in a cost-effective way building on a small core team, consortium, and network members with technology expertise. Both strengths and challenges to the CTCN cost-effectiveness were observed.
152. In line with the past evaluative evidence while the CTCN operations have evolved, the core team consisting of the UNEP and UNIDO staff (until 2022, see Box 2) has operated

with relatively slim resources⁵⁷ and the Network has enabled leveraging technology know-how and capacities for delivering its services. The CTCN budget and expenditure ratio has significantly enhanced over the years (Figure 13), indicating improved planning by the CTCN in terms of matching available funding with TA requests and other services. At the same time, CTCN as a demand-based structure and the dedicated implementing arm of technology mechanism is dependent on successful resource mobilization and especially non-earmarked funds to be able to respond to the country's requests, while also delivering other service areas. As discussed in the section on financial sustainability, this continues to be a critical topic for ensuring the CTCN ability to function (paragraphs 188-195).

Figure 13. CTCN expenditure rate



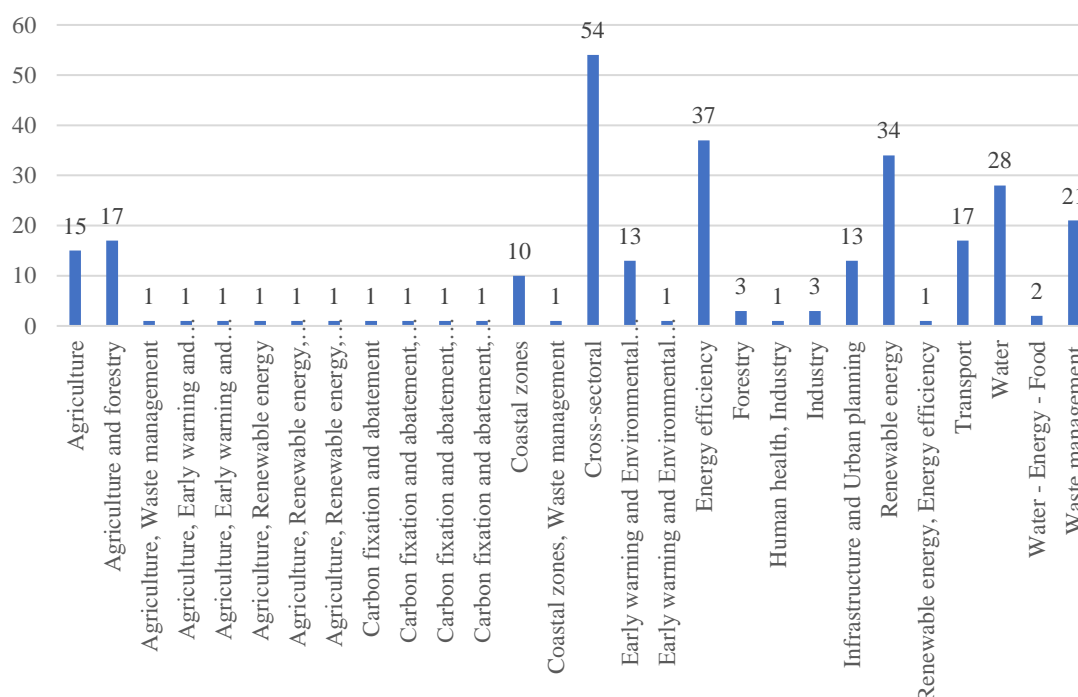
Source: CTCN Secretariat.

153. The CTCN has managed to utilize the existing networks of its host organizations, including building on the 11 consortium members, links to climate finance mechanisms such as GCF and GEF, UNIDO country offices, and UNEP resources, to build its operational capacity. While there is a growing need to further leverage the strategic partnerships and links with mechanisms beyond direct CTCN technical assistance (see paragraphs 92-93 on outcome drivers), diverse examples exist on the CTCN efforts to build technical partnerships and leverage the Network and other partnerships for its operations (See section on ‘Stakeholders Participation and Cooperation’). Another example of leveraging the network resources is the in kind (Pro Bono) contributions by Japan and Korea. While guidance and processes relating to this type of support were not fully established or available, the procurement process was handled outside the UN system. From the CTCN perspective, the process was lighter, but depending on the partner/donor funding requirements, it can create an additional layer of administrative requirements for implementers and country partners.

⁵⁷ Staff and consultant resources in addition to the director were 20 people (organogram dated May 2023): Partnership and Liaison Office – 5; global operations – 4; Africa Regional team – 4; Asia Pacific Regional Team – 1; Latin America & Caribbean Regional team – 2; Administration & Financial Management – 3; Seconded (South Korea) – 1.

154. The CTCN operated within the mandate of the COP and is thus inherently subject to political influence. CTCN responded to a diversity of interests through the Advisory Board and catered for further interests in its network. As observed by interviewees, this diversity of interests within the Advisory Board and the CTCN is making the global level decision-making slower, and important decisions face delays or are harder to reach.
155. At the same time, CTCN catered for a variety of sectoral and thematic needs (Figure 14). The diversity of themes and sectors in operation has, at times, created an overemphasis on technical work, limiting the space for considering the CTCN drivers and factors in implementation such as connection to the country priorities in political level and connection to essential partnerships and resources driving the scale-up beyond the delivery of technical assistance (see TOC Figure 8). This has, in turn, hindered the cost-effectiveness of overall processes, as it made the standardized processes more challenging. The diversity is significant also in operational contexts of the countries, including different partnership arrangements, the economic development status, knowledge and use of technology, among other factors.

Figure 14. Diversity of CTCN technical assistance sectors (n=281?)



Source: Evaluation team portfolio review based on CTCN data.

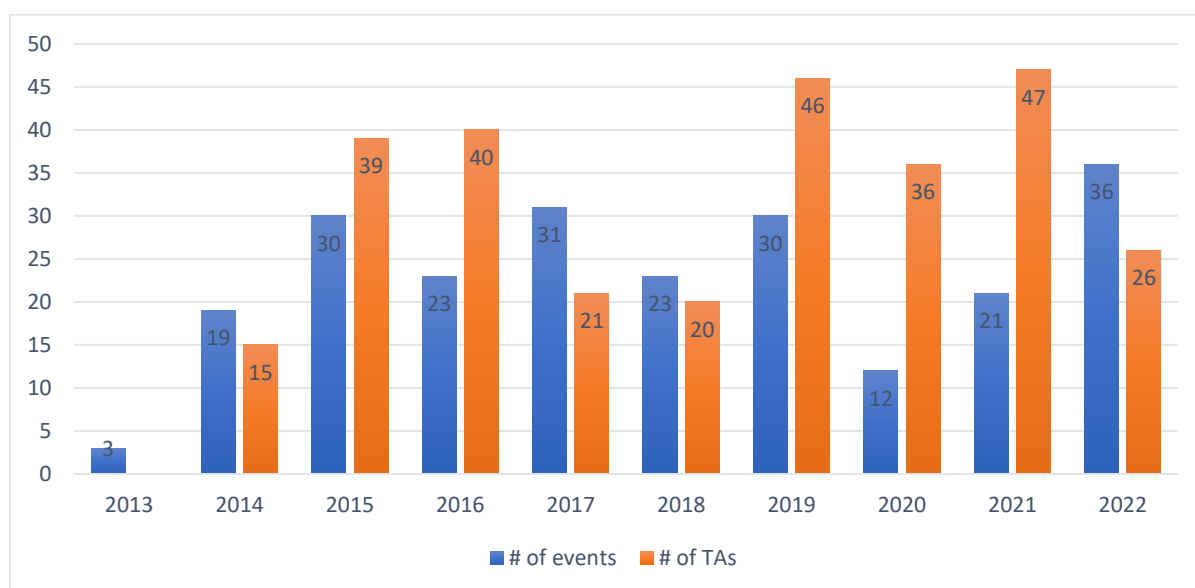
156. While the CTCN human resource structure has evolved in size and in terms of decentralization in response to the past review recommendations⁵⁸, in comparison to other climate finance mechanisms, the size of the CTCN core team was relatively slim (see paragraph 152). However, the current human resource arrangements continue

⁵⁸ E.g. Recommendation and management actions to UNEP 2016 Case Study for the Joint UNEP-UNIDO Programme to host and Manage the Climate Technology Centre and Network (CTCN): “Clear risk assessment with respect to staffing structure is highly recommended. As discussed above, it is necessary to assess the risks to the functioning of the mechanism associated with the lean staffing structure. The organizations have demonstrated significant flexibility in light of the time it takes to hire staff (about 1 year).”

putting pressure on the CTCN's ability in delivering its support efficiently (see also factors affecting the performance: ‘Quality of Project Management and Supervision’).

157. The CTCN operation's cost-effectiveness and lowering of the carbon footprint is also supported by the diverse opportunities for the partners and network members to engage with CTCN online. The pandemic challenged the delivery of individual technical assistance interventions and events, the CTCN continued to operate relatively well. The number of organised events dropped in 2020 due to COVID-19. However, the activities were recovered promptly and the CTCN reached the peak figure in terms of technical assistance project in 2021 (Figure 15). While overall recovery was good, variation in digital readiness also varied by country affecting the ability to provide support in some countries.

Figure 15. Number of Technical Assistance projects⁵⁹ (n=290) and events (n=228) 2013-2022



Source: Evaluation Team portfolio analysis based on data provided by the CTCN Secretariat.

158. **Timeliness.** The extensions of the UNEP ProDoc were necessary considering the renewed hosting agreement of the CTCN. Four project revisions/extensions, approved during 2019-2022, were available to the evaluation team. While the Evaluation Office guidelines lowers the rating of project with multiple extensions, in the case of the CTCN the Evaluation Team found that these were largely justified. The UNEP mandate to host CTCN was established for 5-year period with the possibility for two 4-year extensions to the hosting mandate if the conditions are filled. The revisions contained updates to the budget (following resource mobilization), extensions of the project implementation period, and revisions of the UNEP results framework target figures (see Table 5). The extensions of the project document have been justified and approved by UNEP keeping the CTCN operational with extended hosting agreement. The project extensions also enabled UNEP and UNIDO to continue discussions and preparations of a new joint project document, which was eventually prepared by UNEP alone for the CTCN Programme of Work 3-period.
159. While the extensions were needed to keep the CTCN operational for an extended hosting period, the Evaluation Team has noted that a more thorough revision of the results

⁵⁹ The data set includes TAs that are accepted by CTCN and have status 1) bidding, 2) design, 3) implementation, 4) completed, and 5).

framework and alignment with CTCN would have benefitted the design (see also Table 5 on the summary content of the project revisions). EC grant had three addendums to the Delegation Agreement no DCI-ENV/2016/377-14. These were also well justified, mainly considering the context related delays and adjusting to country needs. Addendum 2 contained an extension of the implementation period and contracting deadline⁶⁰.

160. While the overall perception of stakeholders interviewed or the Evaluation Team is that the CTCN Secretariat has taken steps to maintain efficient operations with regard to its ability to respond to the country's needs in a timely manner, there was also evidence of delays. Technical Assistance (TA) forms a major part of CTCN expenditure. Over the last five years⁶¹ 64 percent of the CTCN expenditure was consisted of offering TA. The provision of the technical assistance has taken place through a Small-Scale Funding Agreement (up to USD 15,000 as Fast Technical Assistance (FTA) by the consortium members⁶² or Programme Cooperation Agreements (PCA) between the hosting organization (UNEP or UNIDO) and a Network member (up to USD 250,000), with different processes.
161. FTA provided by the consortium members was perceived as a light process. Other TA projects go through a competitive bidding process as per the UN Secretariat and UNEP procurement rules and procedures, which the CTCN Network members can participate in. The assessment of these TA projects' timeliness, delays, and overall efficiency in the case countries and by the implementing partners varied. Interviews in case countries and among implementing partners noted general satisfaction with the CTCN process; CTCN support was timely, and the process was relatively clear. The CTCN funding is relatively small-scale and, in many cases, the administrative processes that came with it were seen by the technology partners⁶³ implementing technical assistance and country partners as acceptable in consideration of the larger climate finance mechanisms. However, also cases of significant delays in CTCN responses and confusion due to lack of communication concerning TA status were reported. The CTCN Secretariat's efforts to be responsive were noted.
162. Approximately 64 percent⁶⁴ of the TA projects had an implementation period of 12 months or less (Figure 16). While the portfolio statistics at hand are inconclusive about the total number of extensions of the TA project implementation periods at the country level, the stakeholders (technology partners⁶⁵ and TA proponents) and TA reporting showed that project extensions were needed on multiple occasions. These cases related to COVID-19-related challenges and delays that required extensions to the implementation periods, mode of delivery and change in contents.
163. Factors that supported the efficient delivery of the TA projects related to:
 - CTCN Secretariat staff with prompt response times
 - Support from locally established Network members, and responsiveness by NDEs

60 7 million Euros over the period 1 December 2016 – 31 May 2022 (final report).

61 Data for 2018-2022 was available as part of the Advisory Board endorsed budgets.

62 Memorandum of Understanding signed with 11 consortium partners: Asian Institute of Technology (AIT) – Thailand; Bariloche Foundation – Argentina; Council for Scientific and Industrial Research (CSIR) – South Africa; The Energy and Resources Institute (TERI) – India; Environment and Development Action in the Third World – Senegal; Tropical Agricultural Research and Higher Education Center – Costa Rica; World Agroforestry Centre (ICRAF) – Kenya; Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) – Germany; Energy Research Centre of the Netherlands (ECN) – The Netherlands; National Renewable Energy Laboratory (NREL) – United States of America; UNEP Risø Centre, including UNEP-DHI Centre on Water and Environment – Denmark.

63 These are network members or consortium members.

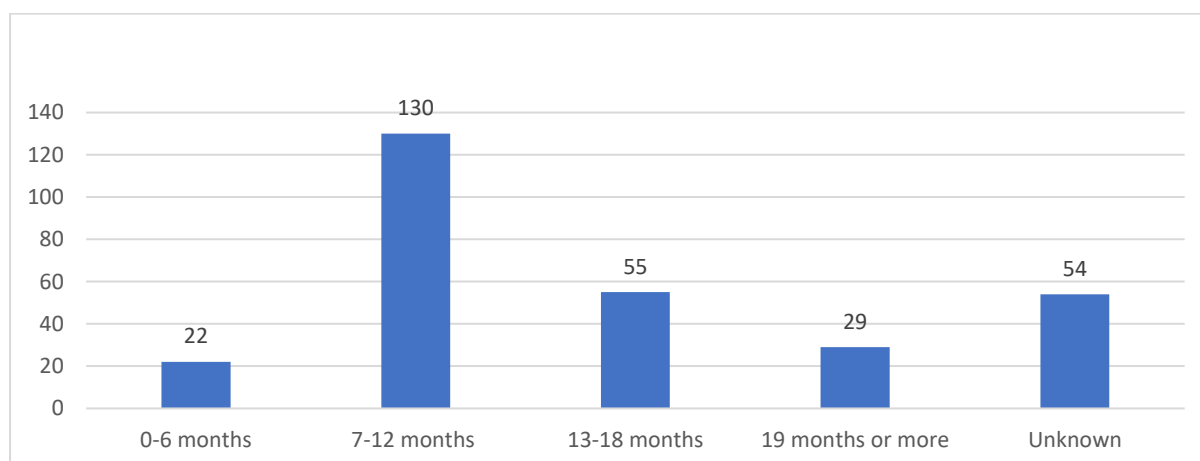
64 Category 'unknown' was not included in the denominator to calculate the percentage.

65 These were network or consortium members.

- Efficient use of meetings, including online meetings during COVID-19

164. The EC reporting specifies the progress of activities funded by the grant. No exceptional delays or issues were noted. The issues noted in the reporting on the EC fund delivery also related to the beginning of COVID-19, after which processes were accelerated.

Figure 16. Technical Assistance project by length of implementation (n=290)⁶⁶



Source: Evaluation Team portfolio analysis, data from the CTCN Secretariat.

Rating for Efficiency: Moderately Satisfactory

G. Monitoring and Reporting

Monitoring Design and Budgeting

165. The systematic monitoring of the CTCN results (as per UNEP ProDoc/EC Grant) has been challenged by the multiple results frameworks associated with the CTCN. These have not been fully aligned with each other nor properly linked with consistent data collection approaches.
166. The UNEP ProDoc has a results framework with acceptable results and indicators covering the initial five-year period. The results framework was established as a starting point and minor revisions have been introduced in the later project revisions. The baselines (since 2013) have been set as zero at the output and outcome level. The initial results framework and indicators specify sources of verification, which would require further specification. The impact indicators were defined at the start. However, these were no longer specified in the UNEP project revisions.
167. While the ProDoc didn't have clear data collection methods nor responsibilities defined, it noted that one knowledge management system will serve both the reporting to the Advisory Board in line with COP requirements and the ProDoc results framework. This highlighted the intention to have an integrated Monitoring and Evaluation (M&E) design and approach serving multiple accountability requirements. The details and data

⁶⁶ Category “unknown” contains those that still under implementation or were marked as unknown timeframe in the portfolio data.

collection approaches were to be specified at later stages (see also ‘Monitoring of Project Implementation’).

168. While multiple challenges regarding the CTCN M&E system have been reported in the past evaluations/reviews and noted by interviewees during this evaluation process, there has been a visible effort by the CTCN to respond to these observations and to put in place systems for tracking progress as well as assessing impact (also noted in the second independent review)⁶⁷. In line with COP decisions/recommendations, the CTCN M&E system was developed with an in-kind contribution from USAID⁶⁸ and launched in 2020. This was based on the UN Technology Framework and is understood as the main results framework of the CTCN (made visible in the TOC at Evaluation, Figure 8). It described the outcomes in relation to the five priority areas and TOC in line with this framework. While this plan does not have an explicit link to the UNEP ProDoc indicators elaborated, it does provide a TOC, results framework, detailed indicator description sheets, and a plan for data collection in line with the COP mandate and reporting requirements to donors and host agencies. It linked the CTCN tracking with the technical assistance (TA) projects for which the data collection tools have been established.
169. This means that the assessment of the UNEP ProDoc monitoring design needs to be considered in relation to the many accountabilities of the CTCN. These include a) CTCN periodic reporting as part of the technology mechanism, b) CTCN Programmes of Work progress (including numeric indicators), c) UNEP-approved project documents and d) donor requirements if specified beyond the COP reporting (see Table 8). This has resulted in multiple indicator frameworks that have relatively similar data needs.

Table 8. Examples of CTCN-related indicator frameworks

Key document	Summary description	Indicator Summary	Available data/reporting
UNEP ProDoc	The results framework established in the project documents 2013, official revisions to the targets elaborated in four project revisions.	One objective statement with 3 indicators, 1 outcome with 3 indicators, 3 outputs, each with 2-5 indicators. Later project revisions aligned with the UNEP PoW indicator under the Climate change sub program.	The data compilation process for the Project Implementation Monitoring System (PIMS) has been established. The availability of indicator data in PIMS has not been confirmed. Project revisions contain summaries of progress and renewed targets.
EC Results Framework for CTCN support	Established as part of the grant agreement DCI-ENV/2016/377-145	One impact/overall objective statement with 5 indicators, 2 outcomes with 5 indicators 3 outputs with 8 indicators	The final progress report to EC contains also indicator data (at the end of the project)
CTCN Programme of Work (1st)	CTCN's first Programme of Work was Approved by AB in 11/2013	Three outcomes, each with an indicator and target for the 5-year period. 15 outputs organized by CTCN services areas ⁶⁹ , with target values set for each output.	Reporting is available in the CTCN Annual Operating Plan reporting.

⁶⁷ Also UNEP evaluation/case study 2016 scored the CTCN evaluation design “unsatisfactory”, showing the significant efforts taken by the CTCN in this front since then.

⁶⁸ Refers to United States Agency for International Development

⁶⁹ CTCN service areas 1) Technical assistance in response to country requests; 2) Outreach, networking and private sector engagement, 3) Knowledge Management, peer learning and capacity building.

<p>CTCN Performance Measurement Framework</p>	<p>Established as part of the CTCN Monitoring and Evaluation system in 2020 in line with UN Technology Framework</p>	<p>Two Impact statements and 4 impact level indicators.</p> <p>Contains 5 outcome areas In line with the UN Technology Framework under Article 10, paragraph 4, of the Paris Agreement (UNFCCC). 11 outcome level indicators. 10 outputs with 25 indicators</p>	<p>Currently being rolled out.</p> <p>The section on the CTCN activities in the joint annual report with the TEC (2020-2022) describes the annual activities under each 5 outcome areas and presents some data in line with the performance measurement framework.</p>
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Source: Prepared by the Evaluation Team based on document review and interviews.

170. While the UNEP financial reporting categories do not have a separate category for the M&E budget, this is set as part of the CTCN annual budgeting process endorsed by the Advisory Board in association with the approved Programme of Work. Table 9 shows the M&E budget and expenditure for 2018 – 2022. While gender considerations have become more visible in CTCN planning and narrative reporting, the indicator data has been disaggregated to some extent only in more recent progress reports.

Table 9. M&E budget and expenditure in USD

	2018	2019	2020	2021	2022
Budget	60,000	60,000	70,000	30,000	30,000
Expenditure	0	35,802	65,087	6,033	101,925*

* Includes evaluation budget.

Source: Financial reports submitted for endorsement by the Advisory Board.

Rating for Monitoring Design and Budgeting: Moderately Satisfactory

Monitoring of Project Implementation

171. CTCN has been slow in rolling out an appropriate monitoring system since the establishment in 2013. While the Advisory Board presentations and past evaluation findings indicated that the M&E system has been under development for a while, the system was finally revised and described in a systematic manner in 2020. Based on the interviews, parts of it have been rolled out e.g., TA forms relating to impact and indicators. These form a core part of the data collection with templates that contain questions on quantitative and qualitative indicators. In the context of the CTCN the setting baselines and tracking of TA response to the needs of diverse groups can be done in the specific implementation context. The TA impact statement form and M&E plan forming the basis for progress monitoring. The CTCN templates also guided towards recording the gender differentiated results. The Performance Measurement Framework of the CTCN lacked explicit reference with UNEP ProDoc. At the same time the overall M&E system was intended to serve donors’ (including EC) and host agency monitoring needs.

172. The CTCN knowledge management platform⁷⁰ captured details on the CTCN portfolio regarding technical assistant inquiries, events, and their distribution by thematic and geographic areas. This data was utilized in presenting CTCN progress to the Advisory Board and in diverse reports. As of March 2017, the TA closure template enhanced its focus on monitoring and generation of lessons learned. The impact briefs prepared for each TA which were aggregated in a publication on the website, constituted evidence of emphasis on the learning and dissemination of experience generated from each project. Since the establishment of the monitoring framework the TA level templates were further adapted.
173. Based on the interviews and past reviews, key challenges relating to the CTCN M&E system relate to the following factors:
- The M&E plan in line with the Technology Framework is in place. Still, CTCN does not have sufficient dedicated resources to ensure proper rollout and data verification at the CTCN portfolio level (e.g., impact level data).
 - There is high interest in the outcome and impact-level results. At the same time, processes for post-monitoring or impact assessments of the technical assistance have not been sufficiently established.
 - To roll out the CTCN M&E system, further guidance, support, and quality assurance are needed in the utilization of quantitative and qualitative indicators for tracking different level results (outputs, outcomes, impact)
 - While an excellent platform for knowledge management is in place, insufficient resources to ensure that it is up to date seemed to hinder full utility of the platform for monitoring.
174. Annual progress tracking takes place in the Advisory Board by assessing progress towards the targets set in the Annual Operational Plan building on the CTCN Programme of Work and CTCN service areas⁷¹. Over time, efforts have been made to enhance the CTCN monitoring approaches (e.g. by establishing regular NDE survey⁷²).
175. The current monitoring systems are not well set to provide data and assessment against the CTCN's intended impact. The TA closure reports collected information of the next steps (ideally indicating the connection to the transfer of technologies), but there was no monitoring whether the next steps were implemented. Impact indicators currently set in the M&E system (GHG emissions avoided, mobilized funding, and resilience) were relevant measures, but required a proper rollout. While there was a clear interest of different stakeholders towards the impact of CTCN, impact assessments have not taken place⁷³.
176. CTCN has been largely accountable for tracking actions taken on the review and evaluation recommendations. As noted in Table 10, in three out of four review and evaluation processes CTCN has tracked the actions to recommendations in some fora. The UNEP managed evaluation (2016) had a management action plan established that was closed as compliant. The COP mandated reviews are monitored and recorded in the TEC and CTCN joint reporting. The CTCN reviews have not triggered changes in the

⁷⁰ 2017 CTCN Review: The platform provides valuable information including but not limited to information resources (over 15,852); number of countries supported; network members; and technology transfer projects. The platform attracts thousands of visitors from both developed and developing countries. As the platform contains rich information on climate technologies, it is likely that it will continue to be a resource to different countries beyond the life of the CTCN.

⁷¹ The CTCN service areas align with the UNEP budget categories.

⁷² https://www.ctc-n.org/sites/default/files/AB_2021_17_18.1_CTCN%202020%20NDE%20Survey%20Findings.pdf

⁷³ It seems that within certain core stakeholders there is a confusion on the differences between regular evaluations and impact assessments. For the diversity of the CTCN operations and the impact happening at the country level, an impact assessment would require somewhat considerable resources to be able to have a meaningful sampling of case countries.

UNEP ProDoc (). The responses and actions have been addressed through mechanisms and reports specified in Table 10.

Table 10. CTCN response to reviews and evaluations

Evaluation/review	Information on responses
Evaluation case study prepared as part of a UNEP Evaluation office evaluation (2016) ⁷⁴	Management action plan prepared in line with the UNEP Evaluation Office approach. Response to the evaluation case study recommendations closed as ‘compliant’ in 2018 ⁷⁵
Independent review of the Climate Technology Centre and Network (2017)	UNEP response was prepared in 2018 ⁷⁶ . No specific action plan is available, however, the second independent review of the CTCN summarizes the CTCN responses to the recommendations and some key actions taken.
Danida Review of the Climate Technology Centre and Network (CTCN) Review Report (2018)	According to the second independent review “CTCN also developed its 2018 Annual Report in response to recommendations from the DANIDA evaluation report.” No specific action plan or report on compliance is available.
Second Independent Review of the Climate Technology Centre and Network (2021)	The joint annual report by TEC and CTCN to COP specifies actions taken with regard to the second independent review on 1) resource mobilization, 2) efficiency and impact of technical assistance, and 3) reinforcing involvement of Network members.

Source: Information compiled by the Evaluation Team based on document review.

Rating for Monitoring of Project Implementation: Moderately satisfactory

Project Reporting

177. The CTCN is fulfilling multiple reporting requirements in line with its COP mandate. While a process for UNEP reporting has been established, the availability of official reporting is limited.
178. The UNEP ProDoc formed reporting requirements within the UNEP system. The Project Implementation Management Systems (PIMS)⁷⁷ had the CTCN highlights reported and available for the 6-monthly reporting periods. The Evaluation Team has confirmed that the CTCN Secretariat has established a process for compiling the indicator data and other UNEP reporting requirements (in line with the Project Performance Management System field). The CTCN Secretariat data collection approach relied on the inputs by regional and other focal points. While the process for PIMS reporting has been established, the impact, outcome, or output level progress reporting was not available in the system. The same applies to the indicator data as per the project document requirements.
179. The CTCN reported to the Advisory Board annually against its Annual Operating Plans and Programme of Work. Further, CTCN reported to COP together with the Technology Executive Committee on an annual basis. COP reporting also formed the basis for donor reporting (see paragraph 112), unless it has been separately agreed to prepare donor-

74 Case Study for the Joint UNEP-UNIDO Programme to host and Manage the Climate Technology Centre and Network (CTCN) -contributing to Terminal Evaluation of “Project 12/3-P1 – Support for Integrated Analysis and Development of Framework Policies for Greenhouse Gas Mitigation” and “Project 12/3-P2 – Support for the Deployment of Renewable Energy and Energy-efficient Technologies in Developing Countries”.

75 Source: UNEP Evaluation Office.

76 <https://unfccc.int/sites/default/files/resource/inf05.pdf>

77 The platform for UNEP reporting has recently changed. In 2023, PIMS was replaced by IPMR.

specific reports. Reports on the CTCN annual operational plans are available for 2015-2022. Since 2019, the reports have been increasingly detailed while still focusing on activity-level reporting. Since the establishment of the Technology Framework, the annual report structure was revised to correspond to the key areas of the Technology Framework. The CTCN annual reporting to the Advisory Board includes some sex-disaggregated data available activity /output indicators reported annually, but these were not disaggregated by other vulnerability/inclusion criteria.

180. In addition, the CTCN submitted regular joint report with TEC to the COP and publishes a public progress report on annual basis on its webpage.
181. The reporting to donors and other contributors took place according to the donor agreements.⁷⁸ In many cases, it has been agreed that copies of the CTCN annual substantive and financial reporting to the COP are submitted to the donors, forming the key accountability requirements regarding the reporting. Beyond the EC reporting, the Evaluation Team did not review other donor-specific narrative reporting. Interviews did not indicate any issues with regard to donor reporting.
182. As per the EC contract, annual (interim reports) and final reports were required. The Evaluation Team has access to the final project report and two interim narrative reports on the EC grant. The interim reporting focused on activities and the implementation of the country-specific projects funded by EC. The numeric progress indicators were covered. The results framework is referred to as being part of other reporting packages. The interviews do not indicate any issues regarding the reporting. Donors are highlighting the need to further focus on outcomes and impacts.

Rating for Project Reporting: Moderately Satisfactory (ProDoc); Satisfactory (EC Grant)

Rating for Monitoring and Reporting: Moderately Satisfactory

H. Sustainability

Socio-political Sustainability

183. The strong alignment of TAs with national priorities has in many instances warranted additional political support and ensured work can be further sustained, scaled up and continued. TAs benefitted from a fairly strong interest, commitment and ownership from state and non-state actors in their countries of implementation. Ownership of the CTCN TAs by countries was ensured through the country-driven nature of the CTCN. The TA requests were based on countries’ priorities as endorsed by NDEs and in most cases, their design and implementation involved diverse stakeholders (particularly the government stakeholders, the rest is very case-specific depending on country, TA and sector). The commitment and interest of governments and other stakeholders to advance the achievements of TAs varied from country to country. In Zambia for instance, the implementation of the energy efficiency TA influenced the nation’s electricity supply company to transit to the use of energy efficient transformers and to promote energy efficiency measures among residential customers. Similarly, the TA on e-mobility in Indonesia contributed towards the purchase of electric buses for the city of Jakarta (see paragraph 184). In some instances, countries were very enthusiastic at the beginning and appeared committed but towards the end of the TA, that commitment was either no longer there or was reduced. This might also be a result of a government

⁷⁸ The evaluation team had access to those donor agreements available on the CTCN webpage.

change, which is known to affect the sustainability in some cases, due to shift in priorities.

184. In cases where a country was able to commit to the partners ensuring continuity (such as the Financing Mechanism), ownership was even further strengthened. GCF readiness support, for example, is a thoroughly country owned process, and country ownership is secured at its highest level. Without the strong involvement of the NDAs and endorsement of the projects to be aligned with national priorities, the grants would not be provided by the GCF. Not only do the NDAs play an important role in the process, the NDEs are also involved in the readiness grants formulated by the CTCN, thereby further strengthening country ownership.
185. The strong alignment of TAs with politically communicated climate priorities at country levels (NDCs, NAPs) rendered TA outcomes to have a lower dependence on political factors to be sustained. This alignment enabled social and political support for the further development and continuation of benefits generated by TAs, although this varied from one country to another:
 - In Jakarta, the e-mobility roadmap that was elaborated by the TA saw further continuity and development through the purchase of 60 electric buses for the city and this happened after closure of the TA.
 - Thailand NDE has the key mandate in the innovation policy. At the same time, they engaged closely in the climate change related arenas nationally and in relation to UNFCCC COP. This sets them in a strong position by linking innovation and climate technology.

The existence and establishment of key national institutions or processes, with mandates related to the domain of intervention of the TAs can potentially support the continuation of TA benefits:

- In Zambia, the creation of the new ministry – the Ministry of Green Economy and Environment - demonstrated political will of the government to enhance environmental management. Pending the availability of funds, this institution will be capable to move forward with the operationalization of the circular economy roadmap for plastic waste produced by the circular economy for waste CTCN TA.
 - In Chile, the TA processes have led or participated to the elaboration of key policies, such as the TNA and the TAP, along with being aligned to all related national policies and plans on climate.
186. In other instances, despite the existing links between TAs and priorities as expressed in national policies, the continuation of TAs’ benefits after closure was hampered by country-level key partners either being unaware of the CTCN or of the intent to move forward with the outcomes of TAs. Therefore, the socio-political sustainability has been limited by gaps in strategic focus on the follow-up on TA during and after action, including partnerships and collaboration (both global and country level).
 187. The alignment of TAs with national policies and priorities implied that political priorities of countries were integrated into the TAs from their conception, establishing a strong mechanism to adapt political/social context changes.

Rating for Socio-political Sustainability: Likely

Financial Sustainability

188. CTCN itself is dependent on external funding. The UNFCCC-UNEP MoU and the Decision 2/CP.17 paragraph 139 on financial arrangements of the CTCN state that CTCN is funded from various sources, including:
- the financial mechanism of the Convention,
 - bilateral, multi-lateral and private sector channels,
 - philanthropic sources and
 - financial and in-kind contributions from the host organization and participants in the Network.
 - UNEP shall provide financial and in-kind contribution to the CTC.
189. Currently, the CTCN budget is about USD 10 million a year, although the demand on TAs is high and as the evaluation found (under effectiveness) that the utility of other outputs was not sufficient (paragraph 119). Mixed views exist as to whether the CTCN should be requesting for more funding. What seems to be clear, however, is that CTCN has not used all the funding sources defined in the MoU and Decision 2/CP.17 and there has not been a resource mobilization strategy based on this. Although CTCN has been able to mobilize funding, financial sustainability could have been enhanced through a stronger strategic focus on this issue in both design and implementation. Without financial sustainability, CTCN was referred by various sources as facing the risk of becoming an empty envelope or a 'zombie' initiative; both referring to the fact that without funding CTCN is not alive, but due to the COP mandate, it is not able to 'die' either.
190. Achievement of TA results were in some cases not dependent on further funding to be sustained while in other instances, these were dependent on additional financial resources for their sustainability and to move from TA to the intermediate impact of transfer of climate technologies. Examples of TAs that leveraged additional funding exist. However, the financial sustainability (and catalytic effect) of the CTCN was limited by gaps in strategic focus on the other outputs that would support it (paragraphs 121 and 122 on outputs), and on financial and strategic partnerships, those development has been on case by case basis. Good practice also exists; for example, the CTCN has taken steps to address COP emphasis on linking CTCN and GCF by establishing the PALO office in Songdo, Korea. The CTCN office is in close proximity with GCF Head Office enabling further opportunities for collaboration with the climate finance mechanism.
191. CTCN operations in countries have focused on preparation of the groundwork for further actions and less on the piloting of technologies. Most of the time, the CTCN delivered policies, pre-feasibility studies, roadmaps, and action plans. While the policies or policy changes delivered by TAs may not immediately require additional financial resources to move to higher level of impact, other TA outcomes including but not limited to action plans and roadmaps needed to be further operationalized or implemented by the countries for which additional financial resources were required to sustain the TA benefits. Issues of financial sustainability varied considerably from one TA to another. Overall, upon completion of technical assistance projects, difficulty in accessing financial resources for the implementation of the recommendations of the TA has been highlighted as a challenge⁷⁹. In some instances, CTCN-supported initiatives have

⁷⁹ EC grant to support the CTCN Interim Report for the period 1 December 2020 to 30 November 2021.

contributed to leveraging additional financial resources for further implementation. These examples include:

- In Laos, CTCN support for conducting vulnerability assessments relating to urban flooding provided vital information on site selection and documentation required to complete GCF project proposal. This follow-on GCF-project is now under implementation⁸⁰.
- After hurricane Irma in 2017 the CTCN assisted the Antigua and Barbuda with a feasibility study for weather proofing public buildings. This study supported the preparation of a successful GCF funding application. This GCF project is now under implementation.⁸¹
- Thailand NDE together with its partners are currently working on a national hydrogen strategy with support from the CTCN and the Network. From the very beginning of the project, further funding for the next steps is being considered in the preparation of the TA deliverables⁸².
- In Ghana, the CTCN TA “Drought early warning system” funded through GCF’s readiness programme led to the elaboration of the GCF funding proposal “Improving resilience of food security and water management to climate variability and change”⁸³. The elaboration process of the proposal was reported to be ongoing at the time of this evaluation and was being managed by UNEP. The budget for the funding proposal is USD 30 million.

192. The CTCN incorporated business models within TAs to enable countries to approach their national banks for financing. However, success stories relating to the mobilization of additional resources from national financial institutions for continuity of TAs was scarce. Key challenges impeding access to financial resources from national financial institutions in some of the countries for the implementation of climate actions includes, among others, high interest rates, short grace periods, and stringent requirements on collateral⁸⁴. In line with the Evaluation Office rating approach, the evaluation team assesses that only about 25-50 per cent of the required future funding requirements have been secured.

193. The CTCN has supported several countries to carry out technology needs assessments (TNA) and the elaboration of technology action plans (TAPs). In 2020 alone, 21 TNA-TAP TAs were either under implementation or approved⁸⁵. These TAs resulted in the identification of country-specific technologies relevant for curbing greenhouse gas emissions and for enhancing the resilience of communities and selected sectors. The potential adaptation and mitigation benefits from the TAs would be achieved following the operationalization of the TAPs, for which financial resources are required.

194. Most of the TAs funded by the GCF ended up developing one or more concept notes targeting GCF financing. This is meant to leverage additional funding for the implementation of projects which are a continuation of the TAs or operationalizing the outcomes of the TAs such as the technology action plans. While developing a concept note is a good idea, these need to be robust in order to evolve into funding proposals. Assessing the robustness of the concept was based on several criteria including but not limited to the six investment criteria of the fund. The main question relating to the GCF-funded TAs is whether the concept notes elaborated from the GCF readiness grants

80 <https://www.unep.org/topics/climate-action/adaptation/ecosystem-based-adaptation/ecosystem-based-adaptation-lao-pdr>
81 <https://www.greenclimate.fund/project/fp133>

82 <https://www.ctc-n.org/technical-assistance/projects/development-national-hydrogen-strategy-and-action-plan-accelerating>

83 Ghana’s experience with CTCN technical assistance on Green Climate Fund readiness. [LINK](#)

84 Present in many instances, and particularly observed during the country visits in Zambia and Malawi.

85 2020 CTCN Annual Operating Plan Report.

have the requisite quality for an Accredited Entity to transform them into a funding proposal for onward submission to the GCF. An interesting question that remains relates to how robust and ready in terms of quality, the concept notes formulated from the over 31 readiness projects funded by the GCF are to be taken up by an accredited entity for transformation into a funding proposal package. Engagement between the GCF and the CTCN Secretariat revealed that the CTCN was exploring the option of transforming some of the concept notes to a GCF funding proposal, but scarce information exist relating to the extent to which this has materialized. The CTCN worked with two accredited entities (Kenya Commercial Bank - KCB and West Africa Development Bank) to submit two concept notes to the GCF Secretariat. It remains to be seen how these two concept notes will evolve into a funding proposal package submitted to the GCF. The CTCN further co-developed with these accredited entities two GCF Project Preparation Facility submissions including: “Promoting the Adoption of Environmentally Sound Technologies by Small and Medium Sized Enterprises in Kenya to Enhance Production Efficiency and Business Value”, estimated at USD 250 million (for KCB); and “West African Low Emissions and Climate Resilient Agriculture Financing Facility’, estimated at USD 210 million (for the West Africa Development Bank)⁸⁶. It could be interesting for a stock-taking exercise to be conducted to confirm the number of developed GCF concept notes and those targeting other financiers have been or are currently being developed into funding proposals.

195. While the TA final reports can to some extent be considered as exit strategies, they do not seem to refer to financial arrangements. The lack of private sector and financial mechanism involvement in many of the processes (paragraphs 123 and 125 under effectiveness) further supports the finding that exit strategies were generally not in place for financial sustainability.

Rating for Financial Sustainability: Moderately Unlikely

Institutional Sustainability

196. The sustainability of the main project outcome (UNEP ProDoc) has a high dependency on institutional support, as the structure of continuity from TAs to technology transfer required institutionalized approaches. Equally, the two outcomes of the EC Grant require institutional support for sustainability. The EC Grant outcome on better coherence of national development, priorities, technology needs, international project finance and capacity building for instance require support and coordination between institutions to be sustained. A robust mechanism was in place to sustain/support the institutionalisation of project outcomes, as the CTCN has a fundamental role and position under the COP climate convention. The continuity of CTCN’s existence and operations continue to remain relevant unless the UNFCCC undergoes a fundamental change. At country level, TAs were implemented on topics deemed relevant to the national context and policies, and laws emanating from TAs were in most cases endorsed by countries, supporting institutional sustainability (unless government change takes place). However, the way NDEs are set up matters a lot to the outcome of the CTCN and institutionalization of TAs in the country. In some countries, the NDE was hosted within the Ministry responsible for environmental issues with relatively good legal/institutional mandate on climate change issues, constituting a relatively strong set up to provide follow up support for continuity or implementation of the results of TAs.

⁸⁶ CTCN (2023). Draft CTCN chapter of the 2023 Joint Annual Report. [LINK](#)

However, inadequate coordination, communication and information exchange between relevant ministries for the implementation of a TA emerged as aspects that limit institutional sustainability.

197. The CTCN is mandated to support institutional changes and in this light, it provided the countries with support to develop their policy frameworks, develop standards and certifications. These documents can promote sustainability as soon as they are endorsed by the country. Most times, the outcomes of technical assistance such as policies and laws among others, targeting an improvement of an enabling environment for technology transfer and climate actions get approved, becoming an official document and roadmap for the country. The involvement of relevant national stakeholders with institutional mandates on the sectors covered by TAs implied the existence of institutional and governance frameworks for outcomes of TAs to thrive. These institutions are potentially able to oversee the roll out or implementation of the TA outcomes relating to policies, laws, roadmaps and standards among others. However, the sustainability of the policies and laws developed through TAs depends on the serving government because priorities tend to differ from one serving government to another. Hence, sustainability may be challenged if an incoming government does not prioritize what was implemented by the previous government.
198. Capacity of relevant individuals has been enhanced. The NDEs received capacity building support from the CTCN and are of good quality. Involving other actors in such trainings was considered needed for sustainability. At country level, there were limited funds to follow-up on capacity building activities. There is often lack of clarity relating to what will happen next – the steps needed were at times documented into the final project reports, but no system existed to ensure follow-up.
199. The TA final reports defined next steps (ideally indicating the connection to the transfer of technologies) and can therefore be considered as an exit strategy, usually involving an institutional component. However, there was no monitoring of whether the next steps were implemented with the partners enabling the connection to the likelihood of impact, and therefore sustainability.

Rating for Institutional Sustainability: Moderately Likely

Rating for Sustainability: Moderately Likely

I. Factors Affecting Performance and Cross-Cutting Issues

Preparation and Readiness ⁸⁷

200. The preparation and readiness with regards to the management arrangements and strategic partnerships were not sufficient to respond to the need for a strong framework for strategic partnerships. The UNEP project review committee (PRC) comments were addressed, and the mechanisms to engage stakeholders (e.g., Advisory Board, consortium members) were planned sufficiently at design. The CTCN Programme of Work, Advisory Board, and CTCN Secretariat processes were established to operationalize the CTCN in line with the COP mandate. However, the findings of this evaluation indicated that there was a limited preparation and readiness to manage the

⁸⁷ The preparation and readiness relate to the project design and to the extent project design issues were addressed at the inception stage and before the resource mobilization or actual implementation.

multi-agency hosting arrangement (e.g. detailed standard operating procedures that would clarify roles in case unexpected situations or different views). This slowed down some of the CTCN processes at the end of 2022.

201. The UNEP ProDoc is not a well-known document even at the CTCN Secretariat. While the CTCN ProDoc has been extended multiple times to ensure that it caters for the new funding and the extended hosting mandate, the design has not seen major changes over the period of 10 years. The long implementation period (2013-2022) without a revision of the UNEP ProDoc was assessed by the Evaluation Team as a limitation. While the overall logic of the UNEP and UNIDO support to the CTCN has remained the same, the results framework and tracking of results have taken “two paths” (see ‘Monitoring of Project Implementation’ for more details), and the roles of different actors have evolved.
202. The interviews carried out by the Evaluation Team showed that to some extent the CTCN Secretariat staff and consultants needed to balance between the CTCN COP mandate and the related requirements and the UNEP administrative structure. The UNEP ProDoc has served as a starting point for the CTCN support and continued as an administrative arrangement, which later can be characterized also as an ‘artificial’ document due to it becoming not well aligned with the CTCN main results framework of the Technology Framework.

Rating for Preparation and Readiness: Moderately Satisfactory

Quality of Project Management and Supervision

203. While the CTCN structures have demonstrated overall good adaptive capacity to changing situations, the diversity of needs and interests are challenging effective decision making. The CTCN supervision and management structures were established around the Advisory Board that provided advise and strategic direction and the Secretariat that managed the day-to-day operations. Among other communication channels, Advisory Board members interacted with CTCN in the Advisory Board meetings every six months and endorsed the CTCN annual plans, budgets, and financial statements (see Table 4). The roles and responsibility between the Secretariat and Advisory Board in relation to giving strategic advice or providing a more operational framework for action was not fully straightforward. This limited clarity in roles is hindered decision-making for efficient and, more importantly, effective delivery of the CTCN services. This is at times, further challenged by diverse expectations from multiple actors, coordination of a larger network, and COP and UNEP mandated related matters. This has affected the CTCN Secretariat’s ability to focus on key operations, establish clear responsibility areas within the Secretariat and in relation to stakeholders and how to communicate these to the partners.
204. CTCN has been supporting effective management and implementation capabilities at the country level by providing capacity building to the NDEs and other national stakeholders. While the CTCN has demonstrated leadership geared towards achieving the planned outcomes and effective implementation of the TA projects, the successful management of the TA processes depended heavily on the NDEs and their ability to support the TA processes. To further strengthen local capacity CTCN has been active in offering in-person and virtual trainings and organizing networking events to capacitate NDEs and other stakeholders, in view of enabling them to take a leading role in preparation and implementation of TAs. Between 2013 and 2016, the CTCN organized

- 21 regional forums and workshops to train NDEs, with the objective of ensuring a sustained flow of high-quality requests from developing countries⁸⁸. In 2022, 27 training and workshop events involving NDEs, youths and other stakeholders were organized⁸⁹. In addition, the Incubator Programme destined to support Least Developed Countries (LDCs) to implement the climate actions was included in their respective Nationally Determined Contributions (NDCs)⁹⁰. The incubation programme was successful in stimulating technical request from LDCs. The trainings and events have not, however, always included all key stakeholders in countries to increase the likelihood of impact.
205. In addition, to enhance the CTCN presence at the local level, the Secretariat took steps to decentralise its structure to regional offices. Also, establishment of the Partnership and Liaison Office in Songdo, South Korea took CTCN Secretariat supports further regional coordination, capacity building and linking with partners. While this process has been received positively by many of the evaluation interviewees, the need for further strengthening of the internal coordination and management practices have been also noted by the Evaluation Team.
206. The CTCN has adopted various measures to ensure effective implementation of TAs and stakeholder involvement in the TA management. The implementation of them has both strengths and challenges. The overall TA management and implementation process was established in a manner that it promoted participation by different stakeholder. For instance, a stakeholder working group was often established to support TA implementation and monitoring. Other TA steps that support stakeholder participation in the TA process were joint planning, kick-off meetings, stakeholder meetings, engaging the end users to review the TA deliverables. This engagement ensured that the expectations were managed in order to minimize or avoid conflict between the implementing entity and the country or the beneficiary down the line during implementation of the TA. These mechanisms with regards to TA implementation have also supported problem solving by the CTCN, for instance, by adapting scope of the work or extending the implementation periods when needed.
207. The Implementation of TAs follows UNEP rules, while the process was at times perceived as slow, the country level stakeholders also appreciated the CTCN for managing the procurement related process.
208. Various interview sources and past evaluative findings indicated that the CTCN staffing structure was sub-optimal in terms of number of staff, staff turnover, and as well as clarity of roles and responsibilities. There was high dependence on few core persons with heavy workload. Interviews indicated that the CTCN was facing challenges with regards to the high staff turnover and issues with the human resource management. The understanding of the Evaluation Team was that the CTCN staff expertise, roles and responsibilities were not always clearly elaborated or well matched with the position or workload. Despite the human resources and organizational issues, the commitment and responsiveness of Secretariat staff have been referred to on many occasions as being at the core of supporting CTCN delivery (see paragraph 151 under efficiency), also noting that CTCN received more TA requests than could be financed, increasing the workload.

⁸⁸ 2017 CTCN Review

⁸⁹ CTCN 2022 Annual Operating Plan Report

⁹⁰ See: <https://www.ctc-n.org/capacity-building/incubator-programme>

209. The 2016 UNEP evaluation case study and the Danida review 2018 noted limitations in the CTCN risk assessment approaches⁹¹. While the project implementation issues were regularly discussed in the CTCN internal meetings and twice a year in the Advisory Board, this evaluation has not detected regular use of risk logs to support decision making or implementation. Systematic tracking of risks was not evident in the regular CTCN annual reporting or at the TA level.
210. The CTCN deploys diverse consultations and communications approaches to engage key stakeholders with the global CTCN process. However, the interviews indicated that these have been relatively irregular. In 2022 for instance, the CTCN engaged the Network, NDEs and a broad range of stakeholders in a participatory and inclusive manner for the elaboration of CTCN’s third Programme of Work⁹² (see Box 1 for description of the CTCN PoW). The regional and global approach to the consultations was effective in ensuring that the views of diverse stakeholders were integrated into the CTCN’s Programme of Work. At the national level, interviews provided evidence that in some instances, some key stakeholders were not effectively consulted and involved in the implementation of TAs. While it is the responsibility of the NDE to identify and coordinate at the country level, gaps in systematic supervision, guidance and communication from the global and regional levels on different stakeholder groups participation needs and roles also influenced the full participation. Equally, in-country communication of the CTCN and its operations to national stakeholders in general seemed inadequate as non-state and even some state actors had very limited or no knowledge of the CTCN.

Rating for Quality of Project Management and Supervision: Moderately Satisfactory

Stakeholders Participation and Cooperation

211. While CTCN was noted to lack strategic and systemic partnership planning (effectiveness), examples existed of individual partnerships. The CTCN overall provided good opportunities for maximizing operational collaboration between various stakeholders when interconnected. The CTCN maintained productive partnerships through constant cooperation with its stakeholders while exploring new partnership opportunities. This has been evident from the beginning when the programme was designed to build on the consortium member participation. The network of 800 members demonstrated the CTCN effort to build on strong networking and partnership.
212. The CTCN has established multiple series of Regional Forums to provide opportunities for NDEs, technology stakeholders, and Network members to meet, share experiences and discuss key issues of the CTCN⁹³. The forums equally provided opportunities for NDEs and network members to interact and reinforce their relationship with regional Consortium Partners and key financial institutions. A more recent step to build CTCN

⁹¹ The financial risk of inadequate funding for the CTCN was envisaged to be addressed by the COP relying on the GEF to close funding gaps, but this had not materialised by the time the DANIDA reviews was conducted (2018). The 2016 evaluation recommended that a clear risk assessment be undertaken for the staffing structure of the CTCN. The DANIDA review highlighted that there was insufficient prioritization of assumptions and risk management in the technical assistance templates, and this was based on the findings of the review of the closure reports of some technical assistance. These reports included elements under the lessons learnt sections which should have been identified as risk factors and mitigated in the TA requests and response plans. The 2018 DANIDA review highlighted the need for focus on risks and assumptions, including in the TA templates of the CTCN.

⁹² 2022 CTCN Annual Operating Plan Report.

⁹³ See: <https://www.ctc-n.org/capacity-building/regional-forums>

cooperation Network was the opening of the CTCN Partnership and Liaison Office in Songdo in July 2022.⁹⁴ Examples of the diversity of the CTCN partnership:

- The Women and Gender Constituency Group, supported the awards and workshop on Up-Scaling Gender-Just Climate Change Solutions.⁹⁵
- As part of a technical assistance project, CTCN partnered with the Private financing Advisory Network and the Economic Community of West African States (ECOWAS) Centre for Renewable Energy and Energy Efficiency to provide coaching to a women-led sustainable energy enterprises from West Africa for the development of financially, socially and environmentally sustainable business plans.⁹⁶
- Partnership and joint action plan between the CTCN and the Islamic Development Bank South- South and Triangular Cooperation.
- Partnership between the CTCN and the United for Efficiency (U4E) for the implementation of the multi-country technical assistance on National framework for leapfrogging to energy efficient appliances and equipment in Namibia.
- Partnership between the CTCN and World Intellectual Property Organization (WIPO) which commenced as an annual collaboration on the Green Technology Book⁹⁷.
- Partnership between the CTCN and the University of Michigan School for Environment and Sustainability, for the realization of an in-depth analysis of the climate technology needs, trends, and gaps of developing country’s NDC plans submitted after January 1st, 2016.
- Partnership between the CTCN and the NDC Partnership – implementing partner of the Climate Action Enhancement Package (CAEP) programme launched in 2019.⁹⁸
- Collaboration between the CTCN and the Swiss Association for Entrepreneurship in Emerging Markets (SAFEEM) to host two Youth Climate Innovation Labs.⁹⁹
- Partnership between the CTCN and the Asian Development Bank (ADB) for the organization of the Deep Dive Workshop on Accelerating Clean Energy Transformation in Partnership with the Private Sector.¹⁰⁰
- The CTCN partnered with an enterprise Global Sustainable Technology and Innovation Community (G-STIC)¹⁰¹ in 2019 to organize a matchmaking event geared at increasing the engagement of the private sector in technology transfer to developing countries in the area of climate change mitigation, specifically energy.
- In 2019, the CTCN established technology clinics for small and medium-sized enterprises to strengthen developing country enterprises.

213. Through country cases and interviews, stakeholders raised the need for better coordination between GCF National Designated Authorities (NDAs) and those of other

⁹⁴ 2022 CTCN Annual Operating Plan Report

⁹⁵ 2018 CTCN Annual Report

⁹⁶ 2018 Annual report

⁹⁷ WIPO received inputs, review, and communications support from CTCN towards the launch of the first edition of its Green Technology Book 2022: Solutions for Climate Change Adaptation. This first edition focused on adaptation technologies, highlighting proven, frontier, and horizon technologies for adaptation in the following sectors: agriculture and forestry, water and coastal regions, and cities. The book was launched at COP27 and by the end of 2022, 284,240 unique visitors to the site and 8,033 downloads of the publication had been recorded.

⁹⁸ Through this partnership, the Centre identified opportunities to leverage the technical expertise of its Network to support 7 countries under CAEP. CAEP funds totaling USD 649,793 was provided to the CTCN for technical assistance implementation. The CTCN has co-financed, and in some cases completely financed, the remainder of individual technical assistance costs. Two of such co-financed (CTCN and NDC CAEP) TAs were completed in Jamaica and Guatemala 2021.

⁹⁹ 2020 CTCN Annual Operating Plan Report

¹⁰⁰ 2019 CTCN Annual Operating Plan Report

¹⁰¹ <https://www.gstic.org/contact/>

UNFCCC focal points including the NDE as an issue. Several GCF-funded TAs have been implemented through the CTCN, involving the NDAs and NDEs working together. The lessons generated from the NDA and NDE working together are yet to be systematized and documented by the CTCN, as the options on how such lessons could be transferred to other readiness projects delivered by other delivery partners would be beneficial to be explored to foster coordination between stakeholders.

214. The different stakeholder groups have different expectations of the Climate Technology Centre and Network. While this diversity is a benefit in terms of being able to respond to the needs of the countries, it also created challenges in systematizing processes.
215. While efforts were made by the CTCN to ensure inclusivity in TAs, these did not seem to systematically culminate in the inclusion and participation of differentiated groups. The CTCN partnered with specialised institutions to promote gender mainstreaming into climate technology projects. For instance, the CTCN collaborated with Women and Gender Constituency and ECOWAS Centre for Renewable Energy and Energy Efficiency to promote gender mainstreaming. The establishment of a stakeholder working group comprising of all relevant stakeholders was achieved, but interviews revealed scant evidence relating to the inclusion and participation of gender and marginalized groups in the implementation of TAs in the participating countries.

Rating for stakeholder participation: Satisfactory

Responsiveness to Human Rights and Gender Equality

216. Evidence suggested human rights/gender considerations were demonstrated in project expenditure (particularly in TA budgets), but not demonstrated the actual project implementation and interpretation of results. Project implementation has also been on a consistent basis moderately below the gender score/approach at approval. See section on effectiveness (paragraphs 136–138 for details)

Rating for Responsiveness to Human Rights and Gender Equality: Unsatisfactory

Environmental and Social Safeguards

217. CTCN builds on the UNEP safeguard tools to ensure compliance to environmental and social issues. Some examples exist of the UNEP Safeguard Risk Identification Form (SRIF) employed in TAs under the Adaptation Fund Climate Innovation Accelerator (AFCIA) programme¹⁰². Section 3 of the tool was designed as a safeguard risk checklist against which the TAs are screened for potential risks.
218. Examples of a project-specific grievance mechanism is also demonstrated in relation to the TAs implemented within the AFCIA TA building on UNEP’s grievance mechanism while respecting the 15 safeguarding principles of the Adaptation Fund. The elaborated project-specific grievance mechanisms are yet to be made available on the CTCN’s website, to be used by stakeholders to file a complaint concerning the TA. Most TAs posed no or very minimal social and environmental risk as there were no field activities implemented with potential for causing harm to humans or the environment. It is important for a grievance mechanism to be established or applied to all TAs as it will

¹⁰² For instance, see: [the Pakistan AFCIA TA](#).

provide a channel for national stakeholders to raise concerns they may have relating to a TA under implementation.

219. No information is available on the systematization of use of the tools.

Rating for Environmental and Social Safeguards: Moderately Satisfactory

Country Ownership and Driven-ness

220. Country ownership established through the TA projects is an overall strength of the CTCN. The CTCN technical assistance process is built in a manner that the NDEs, Network Members and relevant national stakeholders from diverse institutions were encouraged to engage in the implementation of TAs. But overall, the TA processes were established in a manner that it promoted participation of key national ministries and stakeholders that were also intended users of the TA deliverables.

221. The CTCN support to the TA processes is country-driven (see also supervision and management, paragraph 204 1), and TAs were designed to be in alignment with existing policies, strategies and plans of respective countries, such as the NDCs. The established links between the TAs and national strategic documents ensured that the TAs were consistent with the strategic documents and contributed towards the attainment of their objective, enhancing country ownership.

222. However, country ownership of TA process and outcomes vary considerably. The degree of engagement of the different stakeholder groups varied from stakeholder to stakeholder, project to project, and country to country and technology to technology. The NDEs in some countries have a strong interest in advancing CTCN TAs while this interest was not strong in other countries. While TAs were known to have a stakeholder working groups and other mechanisms to boost participation of stakeholders and consequently country ownership, in-country interviews provided evidence to confirm that some of the TAs were either missing the participation and involvement of one or more key national stakeholders, or these actors were engaged only at a later stage in the implementation process of the TAs, jeopardizing the overall country ownership of the TAs. Examples from the country level also showed that Network driven processes can also further limit the country ownership in the process, despite the discussed TA and technologies at hand being relevant to the needs.

Rating for Country Ownership and Driven-ness: Moderately Satisfactory

Communication and Public Awareness

223. The CTCN used different communication channels (social media, website, etc.) and forums/meetings to communicate to and consult stakeholders at the international level. The CTCN communications approach and themes were set in the communication strategy and plan that set key themes, channels and approaches for the CTCN approach. These were implemented by using several communication activities/channels including: videos, newsletters, progress reports, organizing events at COP, media coverage and with press releases in collaboration with international media, and social media (Facebook and Twitter). The key social media statistics were monitored and

- reported regularly. As an example, in 2022, the CTCN recorded 309 million¹⁰³ media and social media impressions and made 1025 appearances on national and global press. 16 newsletters were distributed in 2022 to a total of 222,480 subscribers.
224. The CTCN had demonstrated significant effort in setting up the knowledge portal with the large global resource of online climate technology information. The CTCN knowledge management platform provided over 15,852 resources including climate technology descriptions, case studies, national planning documents, publications, tools, and webinars. Importantly, it also served as a data base for TA monitoring¹⁰⁴. Also provided by the portal is information on CTCN technical assistance provided to developing countries. In 2022, the portal was visited by 554,666 individuals from 50 countries, with 58 per cent of the users emerging from developing countries¹⁰⁵.
225. While the platform attracted thousands of visitors from both developed and developing countries and it contains rich information on climate technologies, further updates and enhancements on the platform were needed to ensure its ability to respond to the needs of the audiences. The CTCN communication products and newsletters were welcomed by the stakeholders. At the same, there were hopes for more active information sharing, communication, promotion of technologies by some country level stakeholder. Particularly, the communication efforts do not reach many of the core stakeholders apart from the NDE, which is considered essential when thinking of the importance of knowledge of the key partners that can support the catalytic projects sustainability towards the intermediate impact.
226. While several communication channels are used by the CTCN, it was difficult to judge how the communication channels used by the CTCN met differentiated needs of gendered and marginalized groups at country levels, as the data does not exist. In the African context for instance, there are people in countries with poor internet access and weak network and it is challenging for them to access CTCN's website and this might affect the sustainability of the communication channel of the CTCN.
227. Internal information sharing between the core CTCN actors such as CTCN Secretariat, Advisory Board and NDEs had both strengths and limitations. Many materials were made available through the AB meetings, but the partnership processes and development have opportunities for improvement in terms of communication to the core stakeholders. These are also discussed under the other criteria due to their connection to effectiveness, efficiency and sustainability.
228. For learning, the CTCN used webinars, stories on CTCN's website, and annual NDE forums where TAs are being showcased. During the NDE forums, the CTCN engaged with the NDEs to identify their technological problems for which technological solutions could be provided by the CTCN. CTCN's capacity building team organized different capacity building initiatives and programmes. The knowledge management platform on CTCN's website is the main channel where different stories are shared. The CTCN has been engaged in the organization of outreach, networking and engagement activities which are mainly dedicated to strengthening the capacity of NDEs through regional networking events and raising awareness of the CTCN and its services among network members and potential beneficiaries¹⁰⁶.
229. There were limitations in experience sharing between project partners and other interested groups/stakeholders. As one example, the regional TA processes had limited

¹⁰³ CTCN Twitter impressions totalled 662,000, Facebook totalled almost 3,150,000, Twitter totalled 662,000, and YouTube was 53,500.

¹⁰⁴ The CTCN's knowledge management system was developed with the consortium partner National Renewable Energy Laboratory (NREL).

¹⁰⁵ 2022 CTCN Annual Operating Plan Report

¹⁰⁶ 2017 CTCN Review

opportunities to reflect learning and scaling up, although such opportunities existed. Participants expressed that there was need for exit workshops and joint action plans.

230. Donor visibility is most prominent within CTCN managed events and publications. There were observed gaps in the visibility at country level. The EC funding and related communications was discussed in regular meetings with the donor. There was an attempt to ensure EC visibility in case of EC funded TA, a more visible example of the CTCN EC joint communication effort relates to the Innovative Community-based Climate Technology for Communities at Risks of Conflicts¹⁰⁷.

Rating for Communication and Public Awareness: Moderately Satisfactory

Rating for Factors Affecting Performance and Cross-Cutting Issues: Moderately Satisfactory

¹⁰⁷ <https://www.ctc-n.org/news/climate-change-and-security-joint-eu-ctcn-programme>

VI. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

Strengths to leverage further

231. The CTCN UNEP ProDoc and EC Grant were **highly relevant** for the purposes they were created. The UNEP ProDoc was designed based on the Decision 1/CP.16 paragraph 123 and its outputs align directly with the corresponding mandates. The project was therefore well aligned to the UNFCCC Mandate and the Technology Mechanisms of the UNFCCC. CTCN also supported the SDGs and Agenda 2030.
232. CTCN was well suited to the **EC funding agreement** and other donor priorities in its design and EC brought some important considerations to higher focus at CTCN. CTCN is unique and does not compete (but rather complements) with other interventions.
233. CTCN responded to the **needs of the countries**, as the countries themselves initiated the design of the concepts. CTCN has responded to the diverse needs in line with country priorities and it has been flexible and kept on updating its operations in unforeseen context changes.
234. Alignment to **UNEP MTS, POW and Strategic Priorities** was high, with also forward-looking aspect on MTS 2022-2025, as also UNEP has taken the Technology Mechanism into consideration in their design and included the corresponding Climate Action sub-programme Outcome 2.
235. On **external context**, conflict, political upheaval and natural hazards were known to halt or interrupt CTCN operations in countries where these were experienced. These challenges were, however, part of regular climate and development work. CTCN adapted well to the context changes, including its good delivery after the initial adaptation phase in COVID-19 context (see KSQ.d).
236. CTCN delivered its programmed UNEP ProDoc and EC Grant **outputs and milestones** towards the intended beneficiaries well. CTCN had particular focus on the TAs, which can be considered the most important outputs for achieving the outcome and mostly considered good quality.
237. There was evidence of CTCN having **contributed to the UNEP ProDoc outcome** “capacity and capability of developing countries to identify technology needs/prepare and implement technology projects”, which can be considered the most important one to attain the intermediate state. It was considered partially met. There was evidence also on contribution to the EC Grant outcome on “better coherence”, which is stronger particularly when connected to the TNA/TAP processes. The TAs were also often designed in a way that they could lead to bigger transformations and impact.
238. **Gender dimensions** of CTCN were well recognized in the UNEP ProDoc and EC Grant agreement and the TAs have had a dedicated gender budget of two per cent.
239. The CTCN has been set up in way that **efficiency** in terms of cost effectiveness and timeliness is present and enabled by the extensive Network. The system was coordinated by the CTC, whose committed experts kept CTCN operational.
240. **Financial management**: The CTCN internal communication channels, as well as the Advisory Board, offered an arena for discussion of financial management-related issues or topics relating to budgeting and resource mobilization. Beyond the adherence to the UNEP requirements, the CTCN Secretariat prepared budgets and financial summaries for the Advisory Board in CTCN service categories and created a basis for resource mobilization.

241. The strong country interest and alignment with national climate priorities enabled **sustainability**. There was fairly strong interest, commitment and ownership from state and non-state actors in their countries of implementation.

Less successful aspects with potential for improvement

242. Despite the high relevance of CTCN, the Parties have frequently given new mandates to the CTCN and the **UNEP ProDoc** revisions have not kept up with the new mandates. While the original ProDoc design was fit for purpose and the later revisions and extensions justified, the project design would have benefitted from a thorough revision in 2019. The UNEP ProDoc intervention logic therefore became somewhat artificial, as it is the Technology Framework TOC that has guided the implementation and monitoring of operations.
243. Despite CTCN having a significant number of **partnerships**, these have happened more on case-by-case basis, without systematic and strategic partnership plan/approach. There have also been particular challenges in implementation coherence; in order to be "adequate" to the needs of the country, the link to the other interventions (financing mechanism, private sector, academia, etc.) or funding is critical to achieve the desired **catalytic effect, impact and continuity (sustainability)**.
244. The partnership considerations have also connected to the gaps in **resources** and the resource mobilization has not been fully in line with the MoU and COP decisions on diversity of funding sources. As a consequence, CTCN overall does not have sufficient resources (financial or human) to respond to the high demand.
245. Although the other **outputs** apart from TAs were also largely implemented, there was room for growth in size, significance and strategic considerations. The gaps in these strategic considerations, as well as in assumptions and drivers also meant that the good results of the TAs do not transfer as fluently to the outcome level.
246. The connection from the **outcome level to the intermediate impact** also suffered from gaps in assumptions and drivers, in relation to them holding. Improvement potential was also found in identifying and making visible some key "new" drivers, such as "connections to essential partners and resources to move from output/outcome levels to intermediate impact". The dependence on partnerships for CTCN catalytic effect (and the related gaps in systematizing these partnerships strategically) meant that uncertainties increase towards the **impact level**.
247. The **gender dimensions** of CTCN have not been strong at the operational level. Despite having a gender strategy, the knowledge of it at county level was weak, without systematized evidence of actual implementation. **HRBA and indigenous people** have not been mentioned in project documents, overall are not recognized as the final beneficiaries.
248. The expectations of CTCN are different for different stakeholders. **Efficiency** is being challenged by diversity of interests at the global level and recent issues relating to management and human resources capabilities. The TA processes at the operational level had both strengths and challenges. The diversity of operations has created difficulties in providing standard systems and procedures that fit the diverse realities. The global and local level interactions have created a functional feedback loop to update country level efficiency towards the impact.
249. **Financial management** has enhanced over the years and managed to address issues relating to the complexities in UN regulations and accommodating UNIDO and UNEP finances in one project envelope. While the UNEP ProDoc has served as an administrative vehicle ensuring the allocation and management of the funds in accordance with the UNEP rules and procedures the co-hosting arrangements made the

arrangements somewhat cumbersome (while not being a contributor to separation of the agencies).

250. There was high interest in understanding the CTCN contribution to technology transfer and setting up of a systematic **monitoring** approach to track and assess results and effectiveness is long overdue. The monitoring framework and methodologies have been now developed and described, but a proper roll out and resourcing as well as coordination and alignment with diverse data needs is still lacking. Reporting process has been established, but the results structures of this ProDoc, CTCN PoW, and CTCN M&E system have not been aligned, creating duplication in processes.
251. **The financial sustainability** of CTCN operations greatly depend on availability of funding for rolling out of the TA results, although in some instances, the results do not require immediate mobilization of financial resources to be sustained. The related actors have, however, been connected from the design in only a few cases and mostly there is no knowledge at country level of CTCN's potential to catalyze action. The connections to the Financial Mechanism have therefore not materialized, although connections have started to occur.

Key Strategic questions

(a) **KSQ.a. What has been the added value of the EC grant in achieving CTCN's objectives?**

252. There were several significant added values of the EC Grant in relation to strategic considerations and extent of operations. The emphasis on light earmarking of funds supported CTCN operations. It has been considered more of an important strategic funding partner than just a donor. Further, the EC can have a larger impact in the CTCN than only "one vote", as it works with Team Europe approach in the CTCN Advisory Board expressing harmonized views with EU Member States. While the EC Grant contributes to the same impact level as the UNEP ProDoc, it would have been operationally easier if the funding had contributed to a shared trust fund with one results framework rather than a separate results framework. On the other hand, the EC Grant Agreement brought added value in private sector collaboration (including incentive schemes) and coherence, in order to support the achievements of the outcome "the capacity and capability of developing countries to identify technology needs and prepare and implement technology projects and strategies to support action on mitigation and adaptation is increased" (please see Figure 8 on TOC at evaluation). EC has also been a strong supporter of the strengthened gender equality approach. All the components EC strengthened in CTCN through its results framework are considered strong enablers for CTCN to improve likelihood of impact. Also due to these aspects, EC grant's strategic value is significant in enabling results also in higher level of results hierarchy.

(b) **KSQ.b. To what extent is the Advisory Board, National Designated Entities (NDEs) and Network members engage in planning and implementation to ensure the efficient delivery of CTCN's services?**

253. The Advisory Board (AB) played a significant advisory role in CTCN planning processes as mandated by the COP. CTCN is responsible to the COP through Advisory Board. The AB constitutes of 18 Government representatives, as well as of 12 observer organizations representing research, environment, business and industry, indigenous people, women and gender, youth and other key areas of collaboration. It offered an arena for discussing the CTCN strategic approach, implementation and results, among

other aspects, increasing overall transparency. However, as discussed under 'Project management and supervision (paragraph 203) issues with roles limited the effectiveness planning processes. The AB representatives also have struggled to find a consensus among them on certain topics.

254. The CTCN has consistently focused on the regional/country level needs and efforts to decentralize the CTCN structure and processes are ongoing. This was evident e.g. in the establishment of the regional offices and strengthening of the Asia collaboration through the partnership and liaison office in Songdo. The NDEs, together with other national partners and implementers, have a significant role in country-level success (results and impact), while their role at the global level is more limited. The CTCN links with the NDEs is an overall strength of the CTCN. They have a key role in planning, coordinating and supporting the TAs. While NDE forums are a much-appreciated channel, there is also some indication of demand for more capacity building and technology-specific networking that would enable NDEs in their role in relation to the CTCN. At the same time, there were limited channels for NDEs to influence in the CTCN processes more broadly through Advisory Board or other channels.
255. A significant change has taken place regarding the 11 consortium members. These partners were part of the original UNEP application to host the CTCN in UNEP. Since the Networks has grown, the role of consortium members has diminished. A wide Network is a strength of the CTCN e.g. in diversity of expertise. However, it is not clear whether modification of the role of original consortium members had been discussed and disclosed with consortium members themselves. Some of the original consortium members maintained an active role through invitation to the CTCN Advisory Board, while others are now "regular" network members participating in TA bids with global north offerors.
256. While having an essential role in the implementation and provision of expertise (see paragraph 148), the implementer/network member-driven processes can limit the country ownership and the country's ability to maintain a relevant role in the planning and implementation of the TA. The country cases showed instances where TAs were proposed and driven by network members reducing the sustainability of some TAs.

(c) To what extent do the operations of the CTCN and activities implemented under the UNEP project and EC funding agreement reflect the UNFCCC mandate?

257. The operations of the CTCN and activities implemented under the UNEP project and EC funding agreement reflect the UNFCCC mandate well. As stated under relevance, CTCN aligns well to the Technology Mechanism and the UNEP ProDoc outputs have been designed based on the Decision 1/CP.16, paragraph 123. The EC Grant Agreement complemented these efforts by bringing key priorities that support the CTCN likelihood of impact. As stated under effectiveness, these mandates have been fulfilled strongest on the output of TA requests, while cooperation, collaboration, networks and capacity building would have benefited from further strategic attention and volume, in order to strengthen the activities likelihood towards impact. The operations and activities under the private sector collaboration and coherence (promoted through EC Grant Agreement) have not received sufficient operationalization. Overall, although insufficient in terms of volume, the operations and activities that were implemented are in line with the UNFCCC mandate.

(d) What changes were made to adapt to the effects of COVID-19 and how might these changes have affected the project’s performance?

258. CTCN performed well in the COVID-19 challenges. It adapted to the extensive context changes rather quickly, while also experiencing challenges that have been typical to other international projects, such as strong restrictions on the ability of the international experts to travel, Governments suspending many non-essential activities in the beginning. CTCN created some good practices during COVID-19 that apply to current and future operations. It changed its operations to adapt to remote working conditions, which in practice started to increase efficiency of operations and enabled time saved. Delivery was the highest during the pandemic and less travel enabled less pollution and climate change mitigation, contributing also to environmental aspects [lesser environmental footprint]. The countries’ technology skills were developed, and the interest towards climate technology remained (and increased). During the pandemic it became obligatory for a country to have a National Network member to be able to operate CTCN TAs within the country when international travel was restricted, and this later enabled the national ownership and national capacity development (with the notion from one country on the capacity development output, “it is the consultant who most develops their capacity”). **However, this development has not been equal as the “digital divide” is a reality for the countries benefiting from CTCN support.** The inequalities in digital readiness, particularly LDCs, have impacted their ability to benefit from CTCN services. Internet access remains limited in many regions, particularly for larger events for capacity strengthening and technical assistance consultations.

(e) Are there examples of estimates of actual impacts (as opposed to anticipated impacts) and socioeconomic co-benefits of CTCN’s technical assistance and what is the feasibility of and resources needed to provide such impact assessments and ex-post evaluations in the future?

259. There is likelihood of impact on the country level mainly through CTCN contribution to the Intermediate/impact level. It cannot, however, do this alone. The impact likelihood potential is significant in theory, but needed further strategic alignment, systematic partnership, and coherence to work in practice. Considering the catalytic nature of the CTCN, this alignment was particularly related to how the CTCN work had been connected to the larger UNFCCC work and the different financing mechanism within the country.

260. The six country cases all provided examples of estimates of impacts, but none has materialized so far, considering the medium time from the end of the first TAs (six years). The likelihood of impact emerging from the UNEP ProDoc and EC Grant activities varied at country level. The evaluation found that there was correlation between extent and type of the partnership arrangement with the estimates of actual impacts.

261. Regular evaluations and impact assessments enabled CTCN to better continue to develop operations to the direction of strong likelihood of impact. Evaluation cost-effectiveness ratio tended to be good due to their support on learning and strategic decision-making. The feasibility of the evaluations and impact assessments was considered to be good. The costs were likely to be significantly higher than what had been implemented so far, considering the interest of various actors towards the impact, and the diversity of CTCN operations meant that impact assessments benefitted from a large number of country cases in order to provide reliable sampling on the different elements.

(f) How are members’ sector and geographical expertise engaged in the Network to ensure the efficient delivery of CTCN’s services?

- 262. The CTCN’s further decentralized structure and wide Network has offered avenues for diverse expertise to engage with CTCN, based on different regional needs. Examples exist of Networks members taking active role in regions. Combinations of both local and global expertise is often ideal, forming triangular cooperation.
- 263. The Network members¹⁰⁸ and implementers are at the core of delivering the CTCN support to the countries requesting support. They brought expertise to the CTCN and implemented valuable support with small-scale funding available through the CTCN.
- 264. As also noted by some interviewees the CTCN network size has reached maturity¹⁰⁹ with over 800 members. As only a small proportion of them are active and participate in bidding processes, new and/or enhanced approaches were needed to engage with and leverage on the extensive Network.
- 265. The evaluation showed that the Network members (in some cases with support from CTCN) have been active in establishing links with NDEs or ministries with the technology related mandates. These examples have led to technical assistance on emerging technology support and sometimes in the introduction of new Network members thereby demonstrating the importance and potential of an active Network. It was also evident that the Network consisted of diversity of interests and motivations driving active engagement. Countries and members have technologies and solutions that can be tested and further promoted through the CTCN collaboration. At the same time network member driven processes can hinder sustainability of the introduced solutions or technologies (see paragraph 256).

VII. Summary of project findings and ratings

- 266. The table below provides a summary of the ratings and findings discussed in Chapter 5. Overall, the project demonstrates a rating of ‘Moderately Satisfactory’ due to having significant potential and importance, but also opportunities for further development.

Table 11. Summary of project findings and ratings

Criterion	Summary assessment	Rating ¹¹⁰
Strategic Relevance	The strategic relevance of CTCN is strong and it is a highly relevant programme.	HS
1. Alignment to UNEP MTS, POW and strategic priorities	The alignment to UNEP MTS, POW and strategic priorities was strong.	HS
2. Alignment to UNEP/Donor strategic priorities	The alignment to donor/EC strategic priorities was strong. The EC Grant had a separate set of indicators, aligned to the overall priorities and with EC indicators reporting.	HS
3. Relevance to UNFCCC Mandate and the Technology Mechanisms of the UNFCCC and Other Environmental Priorities	The relevance to UNFCCC Mandate and the Technology Mechanisms of the UNFCCC and Other Environmental Priorities was high through to direct alignment. Also certain aspects on funding and design updates remained as opportunities to be addressed.	HS

¹⁰⁸ This now includes the past consortium members as well.

¹⁰⁹ The network size as off 28/11/2023 is 828 members. <https://www.ctc-n.org/network/network-members>

¹¹⁰ HU = Highly Unsatisfactory; U= Unsatisfactory; MS=Moderately Unsatisfactory; MS=Moderately Satisfactory; S=Satisfactory; HS=Highly Satisfactory; F=Favourable (in the six-level scale from Highly Unfavourable to Highly Favourable).

Criterion	Summary assessment	Rating ¹¹⁰
4. Complementarity with existing interventions / Coherence	Complementarity with existing interventions / Coherence was moderately satisfactory. CTCN does not compete or overlap with any other initiative, but it does cooperate with them. Its cooperation approach, however, was not designed to the level needed to reach the ambitious (intermediate) impact and the country coherence was not fully planned.	MS
Quality of Project Design	The UNEP ProDoc for hosting the CTCN served as a suitable and well-designed starting point for the support. However, the project document would have benefitted from a comprehensive revision to ensure better alignment with CTCN’s evolving Programmes of Work and catalytic effects. The EC Grant brought added value emphasizing diverse financing mechanisms, coherence and the private sector role.	S
Nature of External Context	CTCN operations at country-level were at times negatively affected by political changes, conflict and natural hazards where these were prevalent.	F
Effectiveness	Effectiveness was moderately satisfactory. CTCN delivered its outputs well but has opportunities to make i strategic improvements to increase the likelihood of impact.	MS
1. Availability of outputs	The availability of outputs was satisfactory, as the outputs were mainly delivered well, but could also benefit of further strategic consideration	S
2. Achievement of project outcomes	The achievement of the outcome was moderately satisfactory, as it had delivered on the main outcome. However, the delivery is uneven, and the assumptions and drivers hold only partially.	MS
3. Likelihood of impact	The likelihood of impact was moderately likely. Good examples exist, but they were case by case, rather than a result of a systematic practice, which required a strong and stable partnerships approach.	ML
Financial Management	The CTCN financial management system had been established based on UNEP financial rules and regulations. The co-hosting arrangement caused the arrangements to be somewhat cumbersome.	S
1. Adherence to UNEP’s financial policies and procedures	The CTCN financial management had been established in line with UNEP requirements. Delays in TA processes had been noted at time to relate to overall heavy UN administrative process, but this was not particularly linked to financial management	S
2. Completeness of project financial information	UNEP financial statements and core documentation were available to the Evaluation Team. However, Evaluation Team was unable to establish the project expenditure and budget figures either by UNEP component or by CTCN service areas covering the whole implementation period subject to this evaluation.	MS
3. Communication between finance and project management staff	Communication provided good basis linking financial management with programming. There were multiple arenas for discussing the CTCN financial managements aspects.	HS
Efficiency	The CTCN had been set up in way that efficiency in term of cost effectiveness and timeliness was present and enabled by the extensive Network. At the same time, it had been challenged by diversity of interest at the global level and recent issues relating to management and human resources. At the country level there had been observed both satisfaction as well as cases of delays. Considering the nature of the CTCN project and its links to renewal of hosting mandate, no-cost extensions have been justified.	MS

Criterion	Summary assessment	Rating ¹¹⁰
Monitoring and Reporting	Monitoring and reporting carried out in line with COP decisions and past evaluative finding. Multiple steps had been taken to enhance the CTCN monitoring and evaluation approach, however, sufficient resources had not been allocated to effectively implement the monitoring approaches.	MS
1. Monitoring design and budgeting	The systematic monitoring of the CTCN results (as per UNEP ProDoc/EC Grant) had been challenged by multiple indicator frameworks associated with the CTCN. These have not been fully aligned with each other nor properly linked with consistent data collection approaches.	MS
2. Monitoring of project implementation	CTCN had been slow in rolling out an appropriate monitoring system since the start of the programme in 2013. The rollout of the Performance Measurement Framework of the CTCN lacked explicit links with UNEP ProDoc but offered overall good direction for the CTCN to build its monitoring approach.	MS
3. Project reporting	The CTCN is fulfilling its multiple reporting requirements in line with its COP mandate. While a process for UNEP reporting had been established, the availability of official reporting is limited. EC grant reporting has been satisfactory.	MS
Sustainability	The strong country interest and alignment with national climate priorities enables sustainability. Gaps in the mobilization of additional financial resources (through partnerships at global and local levels) create stress for the financial sustainability of the results of some TAs. In some instances, TA results such as those related to policies have not depended on the immediate mobilization of financial resources to be sustained.	ML
1. Socio-political sustainability	There was strong interest, commitment and ownership from state and non-state actors in their countries of implementation. Sustainability was limited by gaps in strategic focus on the follow-up on TA during and after action.	L
2. Financial sustainability	CTCN itself is dependent on external funding but has not used all the funding sources defined in the MoU and 2/CP.17. TA results are often dependent on additional financial resources for their sustainability and to move from TA to the intermediate impact of transfer of climate technologies, which is not always secured due to the partnership gaps. However, for some TAs, their results do not require additional financial resources to be sustained.	MU
3. Institutional sustainability	The sustainability of project outcomes have a high dependency on institutional support. A robust mechanism was in place to sustain/support the institutionalisation of project outcomes. TA final reports exist, which can be considered as exit strategies, but the next step implementation is not monitored.	ML
Factors Affecting Performance	The factors affecting performance and cross-cutting topics have large diversity of strengths and opportunities for further development.	MS
1. Preparation and readiness	The UNEP ProDoc was not a well-known document even at the CTCN Secretariat. The CTCN Programmes of Work and the Programme of Work/Annual Operating Plan served as the actual guiding documents through which the project had been operationalised.	MS

Criterion	Summary assessment	Rating ¹¹⁰
2. Quality of project management and supervision	To enhance the CTCN presence at the local level, Secretariat took steps to decentralise its structure to regional offices. The diversity of needs and interests are challenging the effective decision making. The CTCN staffing structure was sub-optimal in terms of number of staff and as well as clarity of roles and responsibilities, which had implications to project management and supervision.	MS
3. Stakeholders’ participation and cooperation	CTCN overall provided good opportunities for maximizing operational collaboration between various stakeholders when interconnected. Various good examples existed. Different country focal point coordination and gender and inclusion aspects had opportunities for development.	S
4. Responsiveness to human rights and gender equality	Human rights/gender considerations were demonstrated in project document and expenditure (particularly in TA budgets), but not demonstrated in actual project implementation and interpretation of results. Project implementation had also been on a consistent basis moderately below the gender score/approach at approval.	U
5. Environmental and social safeguards	Some practical examples existed of the UNEP Safeguard Risk Identification Form (SRIF) employed. No information is available on the systematization of their use.	MS
6. Country ownership and driven-ness	Country ownership established through the TA projects, was an overall strength of the CTCN. Practices differed from country to country; some of the TAs were either missing the participation and involvement of one or more key national stakeholders, or these actors were engaged only at a later stage in the implementation process of the TAs, jeopardizing the overall country ownership of the TAs.	MS
7. Communication and public awareness	The CTCN used different communication channels (social media, website, etc.) and forums/meetings to communicate to and consult stakeholders at the international level. Further updates and enhancements on the platform were needed to ensure its ability to respond to the needs of the audiences. Communication between CTCN own core entities had both strengths and challenges. Donor visibility was most prominent within in CTCN managed events and publications.	MS
Overall Project Performance Rating	The overall rating for the UNEP ProDoc and EC Grant was Moderately Satisfactory due to both strengths and opportunities for development found during the evaluation.	MS

VIII. Lessons learned

Lesson Learned #1:	While the CTCN funding for technical assistance was a vital part of the programme, the CTCN’s potential also underpins the extensive knowledge platform. Further leveraging on such technology data base offered a great opportunity in support of technology transfer. This could be further leveraged as expert consultant databases or as an easy-to-use technology catalogue. There was an explicit attempt by the CTCN to manage the knowledge platform in this direction, but in its current form it’s not fully meeting the country level expectations.
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Context/comment:	The structure of the CTCN including its Core Center and the Network, was ideal for a wider impact and use of diverse expertise with relatively low cost. It also provided access to a significant knowledge platform. CTCN is in a unique position to extend the use of this platform and its network. This was also expected by many stakeholders in terms of knowledge sharing and access to new knowledge and support resources.
Lesson Learned #2:	In some cases, technical assistance projects that were designed from the start with a link to other financing mechanisms such as GCF tended to be more successful in leveraging the funding needed for further piloting or technology transfer, and thus also increasing the CTCN catalytic effect and the likelihood of impact deriving from an individual TA. These cases highlighted the catalytic role and potential of small-scale TA support for technology transfer.
Context/comment:	Some CTCN TA projects demonstrated that developing concept notes from TAs for leveraging additional resources is a step in the right direction, however, additional resources can only be mobilized if the concept notes are transformed into funding proposals that end up being approved by the solicited financier. Some TAs developed financial models geared towards accessing financing from national financial institutions, and concept notes for leveraging additional funding from climate funds. These concept notes can only leverage financing if transformed into a funding proposal that receives approval from the targeted funding mechanisms. This enables the further funding and catalytic effect of the CTCN TAs.
Lesson Learned #3:	UNEP sets the programming and project management requirements for all of its projects. In case of the hosting agency arrangements, it was observed that the parallel results frameworks (such COP mandated Technology Framework and UNEP Prodoc) can pose unnecessary duplication of the processes. UNEP can further support in alignment of its programming requirements with other requirements related to the hosting arrangement to support efficiency and quality of reporting while also ensuring full accountability towards different requirements.
Context/comment:	The UNEP ProDoc under evaluation was aligned to the original COP mandate but started to drift apart from the main CTCN M&E Framework of the Technology Framework. The CTCN new project document was fully aligned with the UN technology framework, ensuring that CTCN applies well aligned and coordinated M&E approaches and processes to enable learning and accountability. Better alignment of multiple programming requirements can also increase the efficiency of monitoring and reporting and avoid unnecessary duplication.

<p>Lesson Learned #4:</p>	<p>While allocating a proportion of the technical assistance or project budget for gender analysis and mainstreaming in climate technology programming is important, CTCN examples showed that it is not a guarantee for securing a gender-responsive TA implementation or sufficient assessments of gendered impacts of climate change within the implementation process. This means that specific attention for rolling out the guidelines and training is needed for meaningful integration of gender perspectives in climate technology programming.</p>
<p>Context/comment:</p>	<p>CTCN demonstrated the challenge of integrating gender considerations in the climate technology programming. The terms of reference for TAs required 1 per cent of the overall budget to be allocated for gender mainstreaming. The proportion of the budget for gender mainstreaming was recently increased from 1 to 5 per cent. However, the budget allocation in most cases does not translate into the involvement of gendered groups in TAs implementation at country level and many NDEs are not familiar with CTCN gender policy or materials.</p>
<p>Lesson Learned #5:</p>	<p>CTCN and its network demonstrated the diversity of needs in terms of technology transfer for climate change. Middle-income countries (MICs), lower Middle-income countries (LMICs) and Least Developed countries (LDCs) can have very different needs in terms of capacity, technologies and funding. This means that there is a need for considering specific approaches for countries with unrest while MIC with certain technology know how could play a more active role in south-south collaboration regionally.</p>
<p>Context/comment:</p>	<p>CTCN has paid attention to LDCs, however, it was not sufficient to address the larger issues of technology transfer, particularly in countries with political instability or conflict. What was considered straightforward global processes on implementing technical assistance, may result in the opposite in the county level if the country needs, timing of the support are not known or sufficiently considered. At the same time, MICs with a strong orientation towards technology transfer in their region (such a Thailand and Chile) could have a strengthened role e.g. in South-South Cooperation. CTCN and other actors supporting technology transfer need to provide a set of services that can meet this diversity of needs.</p>
<p>Lesson Learned #6:</p>	<p>As a relatively slim organisation, CTCN was dependent on high performing and committed individuals. To keep this type of organisation or a project structure effective and efficient a specific consideration for strategic staffing and human resources of the core team is needed.</p>
<p>Context/comment:</p>	<p>The management and human resource issues were observed to pose a risk to the CTCN implementation. The CTCN separation</p>

	with UNIDO and lack of director are explicit and immediate factors causing an unprecedented burden on the staff. The CTCN performance was associated with committed individuals that keep the CTCN operational. The programmes and mechanisms such as CTCN need certain flexibility and balance between different roles and capacities to respond to challenging tasks.
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IX. Recommendations

267. As noted by several publications¹¹¹, the world is behind the targets of the climate change emissions and the climate-related events are increasing in their frequency and intensity, making climate change adaptation an increasing challenge. As noted by several recent reports¹¹², meeting national and international climate targets requires efficient and rapid scaling up of the implementation and use of climate technologies, but that current levels of climate technology implementation are inadequate to address this challenge.
268. On 13 December 2023, the COP 28 decided to end the era of fossil fuels, underpinned by deep emissions cuts and scaled-up finance (e.g. through GCF and accelerating the ongoing establishment of new and innovative sources of finance). This is done by tripling of renewable energy capacity and doubling energy efficiency improvements by 2030. Parties agreed on targets for the Global Goal on Adaptation (GGA), which reflects a global consensus on adaptation targets and the need for finance, technology and capacity-building support to achieve them.
269. Climate technology transfer is at the centre of future work in enabling the COP 28 decision for the developing countries. CTCN, as a catalytic initiative, has significant relevance, potential and forward-looking opportunities to support this and become greater than its budget size, by supporting the catalytic and transformational change by enabling an opportunity to initiate larger processes in reaching the COP decisions on mitigation and adaptation. To reach this, transformational actions are suggested in this evaluation – they are to serve both strategic and operational levels.
270. Noting the development and climate related challenges towards the future, future foresight is considered in these forward-looking recommendations. As the climate field is systemic and constantly changing, recommendations cannot be based on past actions only, nor with stable contexts – we need to look towards the future scenarios of climate change, the changing climate and technology contexts, and therefore to the future needs of climate technology, based on the most recent COP decisions. It is suggested in a general level, that these recommendations are to be understood through the lenses of adopting a constant change logic. This means, in the era of systemic change, traditional way of doing things will not keep up with the change – CTCN needs to change with the changing climate and the related needs.
271. Finally, the UNEP Evaluation focuses on essential recommendations for improving performance. Due to the complexity of CTCN operations, stakeholders’ interests and multiple levels of influence, this evaluation has prescribed six recommendations. For the same complexity, there are more aspects than can be addressed in detail. The six

¹¹¹ E.g. UNEP GAP reports; UNDRR Mid-term review of the implementation of the Sendai Framework.

¹¹² E.g. UNEP, 2022. The Climate Technology Progress Report. Insights on technology transfer and development and clarity on gaps and enablers in amplifying climate action. Available at: [The Climate Technology Progress Report - UNEP-CCC \(unepccc.org\)](https://www.unepccc.org/)

recommendations have prioritized the overarching elements¹¹³ that tackle the root causes of issues affecting the project or the sustainability of its results. The operationalization of these six issue areas is expected to contribute to continuous development of smooth CTCN operations. Operational matters have been recognized within the details of the recommendations to the extent possible, and further evaluations are recommended to deepen the understanding of new and existing aspects related to CTCN’s work.

<p>Recommendation #1:</p> <p>INTERVENTION LOGIC</p>	<p>CTCN Secretariat and UNEP are recommended to align the UNEP ProDoc to the TOC of the Technology Framework, make the target areas flexible for new mandates and to consider the observations of the TOC at Evaluation (in relation to the assumptions and drivers) in its planning.</p>
<p>Challenge/problem to be addressed by the recommendation, including details of the recommendation</p>	<p>Due to the larger political/framework changes, UNEP ProDoc intervention logic has become an artificial intervention logic, as it is the Technology Framework TOC that has guided the implementation and monitoring of operations. Revision, that should have been conducted long time ago, was done in the 3rd POW¹¹⁴ and ProDoc (outside the scope of the evaluation). This alignment process is encouraged to be maintained and continued.</p> <p>Making indicator and target areas flexible is important in line with the constant change, changing climate context and therefore the changing mandates that COP provides for CTCN. COP itself conducts the future foresight that is needed for a mechanism like CTCN. The change of the mandates needs to go hand-in-hand with how the operations are designed.</p> <p>TOC at Evaluation offers reflections to improve likelihood of impact, particularly noting the need to strengthen those drivers that have not held and the “new drivers” that are considered to support the likelihood of impact, to integrate them into the CTCN structures.</p> <p>To reach the steps mentioned, it is suggested that the CTCN Secretariat’s highest management applies constant creative and strategic thinking, with focus on 1) look beyond CTCN or UNEP mandates, to the anticipatory big picture of climate change, supported by a shared goal and ongoing flow of related publications (e.g. from TEC¹¹⁵), 2) adopt constant change logic¹¹⁶ in renewing operations, and 3) recognize the opportunities technology transfer offers to address the previously mentioned climate challenges and the extremely well positioned opportunities CTCN has in initiating these processes.</p>

¹¹³ For the CTCN complexity, this has limited to certain extent the ability to address concrete problems with specific actions, in order to serve the needs of CTCN and recommend further evaluations in line with the Evaluation KSQ requests.

¹¹⁴ The 3rd CTCN PoW is part of the 2023-2027 Joint Work Programme of the Technology Mechanism, which includes the CTCN POW and the TEC Work Plan.

¹¹⁵ In line with strengthened partnerships, the evaluation also supports the recommendation 4 of the Technology Mechanism assessment (2022) on encouraging the TEC and the CTCN to strengthen their collaboration regarding the outreach of TEC products and the creation of knowledge products that address the practical needs of developing countries.

¹¹⁶ This means, in the era of systemic change, traditional way of doing things “how things have always been done” will not provide best possible results as it does not keep up with the changing world and new COP decisions – CTCN needs to change with the changing climate and the related needs. In practice it means TOC and operational flexibility and regular (yearly) revisions of the correct direction.

	<p>The Evaluation Team notes that many of these aspects have been initiated in the new phase of CTCN.</p> <p>The operationalization of this recommendation could include (but is not limited to) following aspects:</p> <ul style="list-style-type: none"> • CTCN Secretariat and UNEP to review the TOC at Evaluation and take decisions on the integration to the new ProDoc and POW 3 in relation to assumptions, drivers, flexibility of the targets in the changing contexts and COP mandates, in line with the TOC at Evaluation and the related findings. • Consider the application of the constant change and creative strategic thinking aspects in the CTCN Director TORs. • CTCN Secretariat to develop an impact-based M&E plan to support the previous step OR strengthen the existing plans with impact M&E components. <p>This recommendation addresses the conclusion in paragraph 246.</p>
Priority Level:	Critical Recommendation
Type of Recommendation	Project-level (CTCN Secretariat and UNEP), supported by Partners (particularly the Advisory Board)
Responsibility:	CTCN Secretariat; UNEP; CTCN Advisory Board
Proposed implementation time-frame:	Within 2024, with immediate initiation.

Recommendation #2: PARTNERS AND RESOURCES	<p>Place strong effort in the clear, strategic, systematic and transparent partnerships development at global, regional and country levels, including all stakeholder groups and strengthened resources (financial and human) in line with the decision 2/CP.17 paragraph 139 on CTCN financing, to enable the CTCN catalytic effect and likelihood of impact.</p>
Challenge/problem to be addressed by the recommendation, including details of the recommendation	<p>Despite CTCN having recently increased its cooperation particularly with the TEC (Please see recommendation 1) and having established and maintained a significant number of <u>partnerships</u> also during 2013-2022, the latter has happened more on case-by-case basis, without systematic and strategic approach/ strategy. Some key cooperation structures (e.g. UNEP-UNIDO) also experienced challenges during parts of the evaluation timeframe. While the approach does at times bring good results, it is also somewhat chaotic and not ideal from an efficiency perspective. Partnerships are therefore recommended to be approached in a systematic manner through a partnership strategy that focuses on the likelihood of impact and sustainability. The complementarity and coherence (e.g. with the TEC, Financial Mechanism of the UNFCCC, private sector, etc.) is recommended to be considered with a “constant dialogue” –approach, with efficient communication and dedicated staffing with relevant background. Some specific notes include:</p> <ul style="list-style-type: none"> • As there are countries that have already used climate technology on a solution -level to respond to future climate threats (Asia, Nordics), strengthen triangular cooperation in TAs and trainings to enable 1) Local knowledge (local partner), and 3) Learning

	<p>from the peers focused on these solutions (international partner). This requires building and systematizing related mechanisms for mainstream use in CTCN.</p> <ul style="list-style-type: none">• One core aspect of TOC is the roles of stakeholders, however, CTCN is at times complex. Transparent CTCN processes highlighting role and processes with partners is encouraged (e.g. by documentation) to enable smooth and clear cooperation needed for the multi-actor intervention logic. <p>In terms of <u>resources</u>¹¹⁷, it is recommended for UNEP and CTCN to consider strategic planning and scaling up for resources and resource mobilization, including 1) planning resource mobilization in line with the MoU and 2/CP.17 decisions to enable expanding the resource mobilization approach (the new resource mobilization strategy is in line with this and it is recommended to continue/strengthen the process); 2) assessing if the budget request can be increased for CTCN to better respond to the country needs, resulting also to 3) strengthened CTCN Secretariat staffing structure and human resources strategy, which is to increase efficiency and effectiveness. In this regard, it is first and foremost important to note the optimization of the regional roles and responsibilities and balancing the consultant / staff balance to increase the CTCN performance also through strategic staff planning. The resource scale-up is recommended to be done in an ascending manner within a 5-year time-frame, to allow time to adapt to larger operations and CTCN staffing structure in a planned manner and in line with the recommendation 1.</p> <p>It is also worth noting the significant connections between partnership and resources and the connection to the partners and resources enables sustainability of CTCN actions with catalytic effect.</p> <p>The operationalization of this recommendation could include (but is not limited to) following aspects:</p> <ul style="list-style-type: none">• UNEP and UNIDO to convene a high-level meeting to discuss future collaboration roles and responsibilities within the CTCN.• Development of CTCN partnership strategy with a key focus on how to ensure CTCN catalytic effect (meaning partners enabling the CTCN likelihood of impact, sustainability of operations, strategic triangular cooperation approaches). This means high focus on systematic partnership with GCF, GEF, TEC and the private sector as priorities, as well as the effective communication of the strategy and its progress updates to all stakeholders.• CTCN Secretariat, in collaboration with UNEP and in consultation with the AB, to develop a resource mobilization strategy (or strengthen the operationalization of the current one) to support the decision 2/CP.17 paragraph 139, as well as to represent strategic approach and complementarity with the partnership strategy. The resource mobilization strategy is also recommended to consider stepping up efforts towards strategic thinking in this regard, e.g. through considering broader good
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¹¹⁷ In line with strengthened resources, the evaluation also supports the recommendation 7 of the Technology Mechanism assessment (2022) on encouraging the TEC and the CTCN to continue efforts to enhance resource mobilization to meet the costs associated with their activities and to report on the lack of resources for implementing their respective mandates.

	<p>practices at UNEP and the elaboration of large multi-country projects targeting the GCF and GEF resources.</p> <p>This recommendation addresses the conclusions in paragraphs 243, 244, 251).</p>
Priority Level:	Critical Recommendation
Type of Recommendation	Project-level (CTCN Secretariat), UNEP wide, Partners (e.g. AB, UNIDO, NDEs, Financial Mechanism, annex-1 bilateral partners, multi-lateral partners, private sector, philanthropic entities, academia, etc.)
Responsibility:	CTCN Secretariat; UNEP; CTCN Advisory Board; Partners.
Proposed implementation time-frame:	Within 2024, with immediate initiation.

Recommendation #3: SUPPORT TO DIVERSE COUNTRIES AND NEEDS	Strengthen systematized interaction, information exchange and impact monitoring between the CTCN Secretariat, NDEs, and other regional/local partners on the contextual needs/drivers, to support the design of targeted and fit for purpose country-level support in line with the context-specific drivers of the technology transfer.
Challenge/problem to be addressed by the recommendation, including details of the recommendation	<p>The CTCN impact takes place at the country level. Current evidence shows that further support is needed for addressing the actual drivers and assumptions on the ground to ensure that the chain towards the CTCN impact and technology transfer is realized at country level (findings relating to the KSQ.e in paragraph 259).</p> <p>While CTCN direct accountability lies at the output and outcome level and it is noted that technology transfer also takes time, the evaluation evidence shows that there is currently insufficient resources and/or emphasis in place to support key impact drivers such as partnership, leverage financing, and strategic consideration for the support of country level impact (see paras 127, 128, 129). Country contexts and needs are highly different and versatile. This applies to capacities, for which there is a need for improved country-specific dialogue to understand what is needed to reach the impact.</p> <p>The CTCN strength is in its large Network and ability mobilize knowhow for the benefit of the countries. At the same, in line with findings relating to key strategic question (KSQ.b), there is a risk that Network driven processes lack the country ownership and relevance. The evaluation has identified two types of situations:</p> <ul style="list-style-type: none"> • The CTC and Network driven processes have been able to stimulate interest and capabilities around emerging technologies (such as hydrogen development) and the process was built in a way that country level links and capabilities have been supported. • The CTC and Network driven processes have left some of the stakeholders to experience that the technical output was produced but key country level actors were not fully part of the process and were lacking the technology specific capacity building and much needed knowledge transfer.

	<p>These identified situations show that the needs vary by country and technology. The NDEs and other national stakeholders are in the position to identify the practical enablers (drivers and assumption) (see also paragraph 89 on TOC) that can enable translating the Technical Assistance to adoption and scale up of the technologies.</p> <p>The operationalization of this recommendation could include (but is not limited to) following aspects:</p> <ul style="list-style-type: none"> • Operationalise the community engagement and stakeholder engagement in line with CTCN communication strategy and goals to support differentiated country level needs. • Ensure (via CTCN and country collaboration) that in addition to the TA selection criteria TA implementation and after-action impact monitoring processes are further finetuned to ensure that the required check points for country drivenness are included. • Further promote capacity building during the TA processes to ensure country level participation in the process. • Engage with and leverage on past consortium members especially in the regions of the global south to collaborate on capacity building, knowledge sharing on technology transfer. <p>This recommendation addresses the findings on strategic questions b, e and f and conclusion in paragraph 248.</p>
Priority Level:	Important Recommendation
Type of Recommendation	Project-level (CTCN Secretariat), UNEP wide (project level), Partners
Responsibility:	CTCN Secretariat; UNEP
Proposed implementation time-frame:	Within 2024, with immediate initiation.

Recommendation #4: MER + LEARNING	Ensure sufficient resources and support to implement the existing monitoring and evaluation system, while ensuring that there is sufficient alignment and/or integration of the M&E approaches with multiple accountability requirements and learning needs.
Challenge/problem to be addressed by the recommendation, including details of the recommendation	<p>The CTCN’s work is driven by the COP mandate in line with Technology Framework. At the same time there exists the UNEP ProDoc/EC Grant agreement results frameworks, donor reporting, Annual Operating Plans and reporting COP from the accountability requirements on the CTCN results. The CTCN is currently demonstrating result in diverse forms (paragraphs 120, 121and 123),</p> <p>The CTCN has been slow in establishing and rolling out the monitoring framework and the related processes (paragraph 171), while there is high interest and support in the Advisory Board. At the same time its data collection on numeric and qualitative indicator data and evidence on drivers is not sufficiently resourced (paragraph 173) or coordinated between different levels and parts of the CTCN. The monitoring after TA final reports next steps is also case by case and often not conducted.</p> <p>This also means that CTCN internal processes need to support diverse data needs (CTCN/ TEC joint reporting to COP, to UNEP, to Network, to</p>

	<p>donors) and more importantly to be able to capture in a systematic manner what is working and what is not (see paragraph 126-127).</p> <p>To support this, CTCN is encouraged to periodically assess its operations (including substantive post monitoring of TAs, internal assessments, external evaluations and impact assessments), to identify what does and does not work in its TOC. With a suitable combination of inhouse and external resources this is time- energy- and resource-saving practice, to enable constant learning and improvement.</p> <p>The operationalization of this recommendation could include (but is not limited to) following aspects:</p> <ul style="list-style-type: none"> • CTCN to assign a dedicated resource person for rolling out the monitoring framework with required technical knowledge. Build on the well-established elements such as the performance monitoring framework, data collection approaches, baselines, knowledge management and ensure processes for quality assurance and technical advice on data collection (qualitative and quantitative). • CTCN Advisory Board and Secretariat management to support mechanisms for learning and adaptive management in collaboration with a dedicated monitoring resources regional staff and other stakeholders. • CTCN to commit to mechanism for post-monitoring of TA and to conduct external impact assessments, which are sufficiently large in their extent to enable generalizations of a high diversity CTCN portfolio (e.g. large number of country cases with other impact assessment methods). Within in the overall monitoring approach, ensure application of sufficient qualitative approaches to enable analysis of impact drivers and capture lessons. • Establish links and processes between the CTCN monitoring resource, knowledge management, donor relations, management structures (including regional staff) and reporting to meet diverse needs. <p>This recommendation addresses the conclusions in paragraphs 248 and 250.</p>
Priority Level:	Priority Recommendation
Type of Recommendation	Project-level
Responsibility:	CTCN Secretariat; CTCN Advisory Board
Proposed implementation time-frame:	Within 2024.

<p>Recommendation #5:</p> <p>EFFICIENCY</p>	<p>Enhance the efficiency through improved TA processes and their connection to the other outputs and higher-level changes.</p>
<p>Challenge/problem to be addressed by the recommendation, including details of the recommendation</p>	<p>In relation to the findings throughout this report and in cooperation with the recommendation #3 on global-national level cooperation, CTCN is encouraged to support the following processes, that were found to have challenges, to increase its operational efficiency and country needs on the output level:</p>

	<ul style="list-style-type: none"> • To communicate and train country level key actors on the most beneficial order of climate technology transfer steps: 1) From NDC development to TNA development; 2) From TNA development to other TAs; 3) From TAs to the use of other (climate) funds for technology transfer (CTCN catalytic effect and intermediate impact). This is naturally a flexible order in practical level, depending on country needs, but the order structure is considered beneficial to be known in theory to be used to the extends possible, for the benefit of scaling up and TA catalytic effect in line with country priorities. • Update and systematically follow the prioritization criteria, as this makes the approval process more transparent and helps the countries to assess whether to pursue CTCN funding. The Parties are recommended to increase their efforts to cooperate and support their NDEs in a successful and coherent processes. • During periods of conflict, disasters or political upheaval, to develop (and communicate) standard processes in which the implementer is encouraged to focus on those aspects of the TA implementation which do not require in-country presence of the project team (such as desk reviews), in case of international teams. • In line with the recommendation 2 strategic thinking within the CTCN resource mobilization strategy, systematize the existing good practices connecting the TAs to the GCF and GEF resources. In addition, when elaborating concept notes as part of TAs, request and support the implementer to identify and engage with an accredited entity for the targeted funding mechanism at early stages, to strengthen the possibilities of the concept note to evolve into a funding proposal. • To review the guidance, response plan and closure report templates of TA projects to improve the measurement and promotion of transformational change envisioned in the Paris Agreement¹¹⁸. • To connect the capacity strengthening, cooperation and networks more systematically to the TA processes in a region to support the catalytic effect; In this strengthened system, consider and strengthen the role of the piloting of technologies. • To pursue its efforts in building capacity for adaptation¹¹⁹, which is very relevant in the current climate change contexts to vulnerable countries, and in supporting an increase in technical assistance requests for adaptation. • To create a rating system for previously participated implementers, to support the selection of successful implementers, and to avoid awarding projects only based on TOR requirements matching, which may not say anything about the
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¹¹⁸ Supporting and aligning to the recommendation 2 of the Technology Mechanism assessment: UNFCCC (2022). First periodic assessment of the effectiveness and adequacy of the support provided to the Technology Mechanism in supporting the implementation of the Paris Agreement on matters relating to technology development and transfer.

¹¹⁹ Supporting the recommendation 8 of the Technology Mechanism assessment (UNFCCC, 2022) and the COP 28 decisions on adaptation.

	<p>past implementation success. It is important, however, that this rating system takes well into consideration the external matters (adjusted rating scale), such as the country/location context (e.g. security, accessibility), level of capacity, complexity of the TA assignment, responsiveness of the NDE, and other external circumstances that may apply.</p> <ul style="list-style-type: none"> • To enable the TORs to be flexible in regional TAs so that they enable different countries to be in different steps of the same process. • To develop clear communication system towards the countries regarding the 1) modalities and opportunities TA processes bring, and 2) process steps, requirements and timelines in regard to the TA approval and implementation, to enable the countries to better harmonize the steps with their national planning. This communication system is encouraged to provide clear guidance to NDEs on who to involve and how to the TA processes to enable their catalytic effect. <p>The operationalization of this recommendation could include (but is not limited to) following aspects:</p> <ul style="list-style-type: none"> • Conducting a consultation with NDEs on the above mentioned points, to obtain further insights on practical implementation needs. • Elaborating a related action plan. <p>Starting the implementation of the action plan. This recommendation addresses the conclusions in paragraphs 245 and 248.</p>
Priority Level:	Important Recommendation
Type of Recommendation	Project level
Responsibility:	CTCN Secretariat; in collaboration with NDEs, the Parties and the corresponding partners (such as GCF and GEF)
Proposed implementation time-frame:	Within 2024.

<p>Recommendation #6:</p> <p>HUMAN RIGHTS AND GENDER EQUALITY</p>	<p>Integrate the new CTCN Gender Policy into the core of operations, including via systematic gender analysis, capacity strengthening at the country level, gender-sensitive communication, and specific gender targets and indicators in the monitoring & evaluation framework.</p>
<p>Challenge/problem to be addressed by the recommendation, including details of the recommendation</p>	<p>CTCN has recently developed a good-quality gender policy which contributes to greater intersectionality and HRBA. These aspects have been recognized in a good quality manner in the project document, but there are opportunities for improvement in the practical implementation, it is recommended to pay specific attention to the implementation aspect through proper planning, communication and stakeholder engagement (including entities responsible of gender and inclusion at country level). It</p>

	<p>is also connected to recommendation #1 in regard to the suggested new project driver specifying people as the final beneficiaries.</p> <p>The operationalization of this recommendation could include (but is not limited to) following aspects:</p> <ul style="list-style-type: none"> • Integrating the gender policy into work planning and indicators. • Develop a communication roadmap of the new CTCN Gender Policy. • Training a wide variety of partners. • Establishing mandatory gender analysis and country level follow-up. • Periodic measuring the implementation of the new CTCN Gender Policy on yearly basis (in line with the indicators). <p>This recommendation addresses the conclusion in paragraph 247.</p>
Priority Level:	Important Recommendation
Type of Recommendation	Project-level
Responsibility:	CTCN Secretariat; in collaboration with NDEs and country actors.
Proposed implementation time-frame:	Within 2024.

ANNEX I. RESPONSE TO STAKEHOLDER COMMENTS

The Evaluation Office wishes to thank the CTCN Secretariat, members of the Evaluation Reference Group and other key stakeholders for their engagement during the review of the draft evaluation report. Draft versions of the evaluation report were shared with the CTCN Secretariat, and with the Evaluation Reference Group and key stakeholders consulted. All comments were compiled by the Evaluation Office and shared with the Evaluation Team for its consideration and revision of the report. Responses to comments by the Evaluation Team were duly recorded in a comments template. Table 12 lists comments that were not fully accepted.

Table 12. Response to comments received but not fully accepted by the reviewers, where appropriate

Page Ref	Stakeholder comment	Evaluation Teams Response	UNEP Evaluation Office Response
General comment	<p>COP decisions have consistently called for increased coherence and synergy between the TEC and CTCN yet the evaluation hardly touches upon this issue, seems like it deserves more attention. The first Joint Work Programme, bringing the workplans of the TEC and CTCN together in one plan, was approved in September 2022 and received a strong show of support from the Parties in the Sharm el-Sheikh Implementation Plan (COP27 decisions). The evaluations makes some references to the new 2023-2027 Program of Work. The evaluation would increase in relevance if it would devote more attention to the extent to which the 2023-2027 Joint Work Programme of the Technology Mechanism, which includes the CTCN POW and the TEC work plan, is likely to affect CTCN performance and address the findings and recommendations of the evaluation.</p> <p>Can the evaluation draw any conclusions about which types of TA interventions seem to be the most impactful?</p> <p>Could the evaluators track CTCN activities against its original mandate and subsequent COP decisions?</p>	<p>The evaluation has been conducted according to the scope defined in the Evaluation TORs. The elaboration of the Evaluation TOR (in consultation with the ERG prior to the evaluation) is the step when the evaluation relevance is defined. The Evaluation team then implements the evaluation based on the TOR, consults the ERG for further insights on the points defined in the TOR and designs the appropriate methodology.</p> <p>The TORs define the scope of the evaluation to be 2013-2022. The evaluation does recognize TEC and its cooperation with CTCN in sections I and III and more specifically in tables 8 and 10 and in paragraphs 176, 180, as well as in the recommendation 2.</p> <p>The 2023-2027 Programme of Work is not within the scope of the evaluation, however, the evaluation team did reflect on its importance and elaborate the recommendations in light of the future joint CTCN and TEC PoW.</p> <p>Changes:</p> <ul style="list-style-type: none"> - The joint PoW visibility has been strengthened in the Box 1 text to introduce the topic from the start of the evaluation. - The joint PoW has been included into the Recommendation 1 and 2. <p>On most impactful TAs, the diversity of the TAs as well as the limitations in the size of this evaluation, the matter would require an impact assessment, which is recognized in para 44 and 173, 175 and is recommended by the Evaluation Team in the para 261 and in the recommendation 4. Reference is made, however, to the matter particularly in the chapter V.d.</p> <p>In line with the Evaluation TORs, the evaluation team has tracked the CTCN activities against the UNEP ProDoc and EC Grant, while recognizing the original mandate and subsequent COP decision from the start (e.g. chapters III and V).</p>	<p>The Evaluation Team has addressed the comment.</p>

Page Ref	Stakeholder comment	Evaluation Teams Response	UNEP Evaluation Office Response										
General comment	Sparse attention was given to the issue of endogenous technologies (development of technologies), despite being part of the CTCN original mandate, and much more prominently featured in article 10.5 of the Paris Agreement,	While the Evaluation Team agrees on the importance of the topic, this did not come up in the data collection in a way that triangulated findings would be possible. It is also worth noting, that the CTCN complexity goes beyond the evaluation scope of this evaluation, with far more opportunities for analysis than what the data collection allowed; therefore, the evaluation team has focused on an overview with focus on the evaluation TOR topics, and recommended further evaluations to take place to respond to the existing needs.	The Evaluation Team has responded to the comment.										
Summary responses to key strategic questions, para. 21	“No direct connection to actual impact could be drawn yet by the evaluation team, however, there were anticipated impacts. For example, the six country cases all provided connections to the intermediate impact, but none has materialized so far, partially due to six years being a short time since the first technical assistance projects were completed.” This is a substantial negative finding that deserves more attention. How can the activity design and/or implementation be revised to bring about more direct impacts?	The matter is addressed inside the report to some extent. However, for the high diversity of the CTCN operations, the size and scope of this evaluation does not enable robust generalizations on impact. The matter requires an impact assessment, which role is recognized in para 44 and 173, 175 and is recommended by the Evaluation Team in the para 261 and in the recommendation 4. Reference is made, however, to the matter particularly in the chapter V.d.	While the present evaluation format would not allow for ‘impact evaluation’ it can serve as a stepping stone for such in-depth evaluation to take place in the future – provided CTCN and the Secretariat make provisions to meet requirements (resources, data collection, etc.) for such exercise to be carried out.										
Evaluation Methods, para. 51	“2016-2022: Within the overall CTCN context, this period had a specific focus on the EC Grant, which is implemented largely (but not only) during the CTCN Programme Phase II 2018-2022. Documents and key informants were more readily available for this time period.” Why more focus on the EC grant than the UNEP MOU-the UNEP MOU seems more expansive and more relevant overall.	The evaluation TOR explains (TOR footnote 5) “A strong focus of the evaluation will be placed on the work undertaken using EC funding during the period 2016-2022.” Existing evaluation material provided accountability for work undertaken 2013-2015. This focus was endorsed by the ERG, and confirmed during the initial ERG meeting and in the inception report. The evaluation team implements these decisions. The strong focus on the EC grant does not exclude the review of UNEP ProDoc, which was also considered in this evaluation.	The Evaluation Team has clarified and replaced the word “specific” with “strong” for clarification in line with the TOR formulation.										
Completeness of financial information, para. 145	Please consider replacing the first sentence with “The Evaluation Team was unable to establish a full picture of CTCN budget and expenditure by CTCN's Service Areas, as the data from UNEP's legacy system IMIS did not facilitate preparing such a report. The financial reports by CTCN Services Areas along with the official Financial Statements by UNEP's expenditure categories are being provided consistently since 2018. Please remove the phrase might relate to....as the variance is resulting from these 3 reasons, please see below the 2018 reconciliation as example, <table border="1"> <thead> <tr> <th>Year</th> <th>CTCN CA (actual)</th> <th>CTCN SA Financial Statements (as of 31)</th> <th>Variance</th> <th>UNEP Programme x (not added) in the Financial Report by CTCN SA</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>6,077,530.00</td> <td>6,041,139.00</td> <td>-36,391.00</td> <td>36,391.00</td> </tr> </tbody> </table>	Year	CTCN CA (actual)	CTCN SA Financial Statements (as of 31)	Variance	UNEP Programme x (not added) in the Financial Report by CTCN SA	2018	6,077,530.00	6,041,139.00	-36,391.00	36,391.00	The reasons for the variance were given to the evaluation team in writing indicating the reasons were one or more of the reasons listed. Details on IMIS legacy system are added in para. 148).	The Evaluation Team has made a revision so that para. 145 and 148 specify that the differences refer to the period 2016-2018 and reporting has since then been consistent.
Year	CTCN CA (actual)	CTCN SA Financial Statements (as of 31)	Variance	UNEP Programme x (not added) in the Financial Report by CTCN SA									
2018	6,077,530.00	6,041,139.00	-36,391.00	36,391.00									

ANNEX II. PEOPLE CONSULTED DURING THE EVALUATION

Table 13. People consulted during the Evaluation

S/N	Name	Position	Organization	Gender (M/F)
Global level KIIs				
1	Nadege Troceiller	Climate Technology Specialist- Africa, CIS & West Asia	CTCN	F
2	Valentin Rudloff	Consultant Africa Region	CTCN	M
3	Molly Sharone	Consultant Africa Region	CTCN	F
4	Anne Barre	CTCN Advisory Board Member	WGC	F
5	Tambe Honourine	Former AB Board Member	YOUNGO	F
6	Hansol Park	CTCN Advisory Board Member	GCF	M
7	Patricia Marcos	CTCN Advisory Board Member	GEF	F
8	Saliha Dobardzic	Senior Climate Change Specialist	Adaptation Fund	F
9	Bafana Nicholus	NDE	Instruments Engineer Meteorology Department	M
10	Sato Ichiro	CTCN Advisory Board Member (Japan)	Japan, Annex I	M
11	Ramiro Salinas	Regional Advisor	CTCN LAC	M
12	Clara Landeiro	CTCN/Regional manager	CTCN Asia and Pacific	F
13	Cristina Comunian	Communications specialist	CTCN Secretariat	F
14	Maija Bertule	consortium member	DHI	F
15	Aurélien Pillet	Senior Climate Finance Specialist & Team	BASE	M
16	Jal Desai	Researcher, Accelerated Deployment and Decision Support	National Renewable Energy Laboratory (NREL)	M
17	Girish Sethi	Senior Director, Energy	TERI	M
18	Oskar Mokotedi	Senior Researcher in Climate Services	CSIR	M
19	Pascal Venzac	Network member	Weatherforce	M
20	Suil Kang	Coordination Officer	CTCN Korea liaison office	M

S/N	Name	Position	Organization	Gender (M/F)
21	Moon Jung Kang (written input)	Senior researcher	National Institute of Green Technology (NIGT)	F
22	Heeseob Lee (written input)	Researcher	National Institute of Green Technology (NIGT)	M
23	Clarine Tavine Olando	Donor and network Specialist (previous)	CTCN Secretariat	F
24	Daye Eom	Network Specialist	CTCN Secretariat	F
25	Nima Joshi	Finance and Budget	CTCN Secretariat	F
26	Gina Tsarouchi	Principal Engineer, Flood and Water Management	HR Wallingford	
27	Rajiv Garg	various roles, current Director CTCN (a.i.)	CTCN Secretariat	M
28	Rose Mwebasa	Previous CTCN director (2019-2022)	CTCN Secretariat	F
29	Jukka Uosukainen	Previous CTCN Director (2013-2018)	CTCN Secretariat	M
30	Leena Darlington	Administrative Officer	CTCN Secretariat	F
31	Erwin Rose	CTCN Advisory Board Member (Chair)	United States of America, Annex I	M
32	Fred Onduri	CTCN Advisory Board Member (Vice-Chair)	Uganda, Non Annex I	M
33	Ariesta Ningrum	Manager, Climate Technology	UNFCCC Secretariat	F
34	Steven Stone	Deputy Director, Economy Division	UNEP	M
35	Stig Svenningsen	TEC Chair	TEC	M
36	Ambrosio Yobánolo del Real	CTCN Advisory Board Member	Vice-Chair of the Technology Executive Committee	M
37	Valentina Rossi	Programme Officer, Directorate-General for International Partnerships (INTPA)	European Commission	F
38	Christofer AHLGREN	Policy Officer, European Commission Directorate-General for Climate Action CLIMA.D3 – Climate Finance	European Commission, Directorate-General for Climate Action, CLIMA.D3 – Climate Finance	M

S/N	Name	Position	Organization	Gender (M/F)
39	Sigrid Persson	Programme Manager of International Climate Cooperation	Swedish Energy Agency,	F
40	Alois Mhlanga	Chief, Climate Technologies Innovation Unit	UNIDO	M
41	Haruka YOSHIDA	Industrial Development Expert	UNIDO	F
42	Ramiro Salinas	First liaison officer for the LAC region	CTCN Secretariat LAC	M
43	Diana Ramos Perez	Previous CTCN LAC regional office director / Current TEC Liaison Officer	UNIDO	F
44	Justin Perrettson	Head of Sustainability Partnerships,	Novozymes A/S/CTCN AB Board	M
Country level KIs				
Chile Case				
45	Ximena Ruz Espejo	Executive Director and NDE focal point	ASCC (NDE)	F
46	Ambrosio Yobánolo del Real	Deputy Director of Planning and Management Control, NDE operational unit (TNA TA Coordinator)	ASCC	M
47	Johanna Guzman Cerda	APL Senior Coordinator (Refrigerants TA counterpart)	ASCC	F
48	Javier García Monge	Climate Change Advisor (TNA TA Coordinator)	ASCC	M
49	Sebastian Carvallo Albornoz	Deputy Director of Sustainable Production (Los Lagos SME Circular Economy FTA counterpart)	ASCC	M
50	Ismael Díaz Vergara	APL Senior Coordinator and Information Manager (TNA and H2 TA counterpart)	ASCC	M
51	Valeska Torres Cárdenas	APL Coordinator (TNA TA participant)	ASCC	F
52	Daniela Vásquez Sarmiento	APL Coordinator (TNA TA participant)	ASCC	F
53	Jorge Morales Guerrero	APL Senior Coordinator and Clean Production Fund Manager (TNA TA participant)	ASCC	M

S/N	Name	Position	Organization	Gender (M/F)
54	Sandra Carolina Briceño Pérez	Head of Climate Finance and MoI Department of the Climate Change Division (TNA TA Coordinator)	Ministry of Environment	F
55	Bárbara Herrera	Circular Economy and Producer Extended Responsibility Professional Los Lagos Regional Unit (Los Lagos SME Circular Economy FTA counterpart)	Ministry of Environment	F
56	Claudia Paratori Cortés	Montreal Protocol focal point / Coordinator of the National Ozone Unit	Ministry of Environment	F
57	Lorena Alarcón Reyes	Professional of the National Ozone Unit	Ministry of Environment	F
58	Encina Acosta Solange Andrea	Head of Green Finance, New Business Development Management (Financing for circular economy MCTA stakeholder)	Bank of the State of Chile	F
59	Trinidad Lecaros	Deputy Head of Green Finance, New Business Development Management (Financing for circular economy MCTA stakeholder)	Bank of the State of Chile	F
60	Iván Mertens	Coordinator and Deputy Head of the Department of Coordination of the National Cooperation System	Chilean Agency for International Cooperation (AGCI)	M
61	Marco Ibarra	Program Coordinator - Department of International Negotiations and Monitoring Cooperation Division and Adaptation Fund NIE Contact Person	Chilean Agency for International Cooperation (AGCI), Adaptation Fund National Implementing Entity (NIE)	M
62	Patricio Sepulveda	Chief of the Public Debt Office and NDA Focal Point	Ministry of Finance (NDA)	F
63	Martín Lobos Rivero	International Finance Coordination Advisor	Ministry of Finance	M
64	María Soledad Ugarte	Head of the Policy and Coordination Department Public Policy Division (TNA TA Coordinator)	Ministry of Science, Technology, Knowledge and Innovation	F

S/N	Name	Position	Organization	Gender (M/F)
65	Carlos Morales	Executive Secretary of the Scientific Advisory Committee on Climate Change	Ministry of Science, Technology, Knowledge and Innovation	M
66	Diana Ramos Perez	UNIDO & TEC liaison officer (in her capacity as the previous CTCN LAC regional director)		F
67	Helen Ipinza Wolff	Head of the Department of Development and Innovation Initiatives Subdirector of Centers and Associative Research (Circular Economy Roadmap MCTA participant)	National Agency for Research and Development (ANID)	F
68	Jaime Parada	Chief Executive Officer	DEUMAN (one of the implementer partners for the TNA TA)	M
69	Isabel Quiroz	Executive Director	iQconsulting S.A., one of the implementer partners for the Agrifood SME TA	F
70	Ruth Rain	Technological Programs Executive (Agrifood SME TA Participant)	Chilean Development Corporation (CORFO), host of the NDE	F
71	Manuel Muñoz	Investment Management Unit Manager (TNA TA participant)	Undersecretariat of Regional and Administrative Development (SUBDERE)	M
72	Jerson Reyes	Head of the Department of Information, Energy Innovation and Institutional Relations (TNA TA participant)	National Energy Commission (CNE)	M
73	Carlos Descourviers	Chief Development Officer (Refrigerants TA participant)	Chilealimentos (BINGO)	M
74	Claudia Gallejuillos	Sustainable Business Lead (TNA TA participant)	Fundación Chile (FCh) public/private foundation	F
Zambia Case				
75	Ben Makayi	Senior Technology Officer/CTCN Focal Point	Ministry of Technology and Science	M
76	Chongo John Lukonde	Assistant Director-Department of Science and Technology	Ministry of Technology and Science	M

S/N	Name	Position	Organization	Gender (M/F)
77	Perine Kasonde	Principal Inspector in charge of Hazardous Waste	Zambia Environmental Management Agency (ZEMA)	F
78	Alick Makasa	Senior Inspector of Environmental Assessment	ZEMA	M
79	Morgan Katati	CEO	Zambian Institute for Environmental Management	M
80	Ali Kaunda	Programme Officer	Zambia Climate Change Network	M
81	Nachombe Nangamba	Senior Waste Management Officer	Ministry of Local Government and Rural Development	F
82	Hartman Ngwale	Senior Waste Management Officer	Ministry of Local Government and Rural Development	M
83	Nkomesha Mulawo	Senior Health Inspector	Chilanga Town Council	M
84	Naomi Hamamba	Chief Health Inspector	Kafue Council	F
85	Shupe Mambalakata	Principal Engineer	Zambia Electricity Supply Corporation (ZESCO)	M
86	Steven Mwiinga	Senior Manager-Electricity	Energy Regulation Board	M
87	Banda Kochikoti	Manager in charge of operations	Lusaka City Council Waste Management Company	M
88	Nyambe Akabiwa	Alternate NDA Coordinator/Adaptation Focal Point	Ministry of Green Economy	M
89	Francis Mpampi	National Coordinator	NDA for the Green Climate Fund	M
90	Bridget Bwembya Banda	Project Coordinator	Manja Pamodzi Foundation Limited (MPFL)	F
91	Ephraim Mwepya Shitima	Director Green Economy & Climate Change/UNFCCC Focal Point	Ministry of Green Economy & Environment	M
92	Francis Mueliwa	Active Executive Director	Zambia Compulsory Standard Association	M
93	Mkuzi Banda	Inspector	Zambia Compulsory Standard Association	M
94	Kasuba Kasengele	Quality Inspection Manager	Zambia Compulsory Standard Association	M

S/N	Name	Position	Organization	Gender (M/F)
95	Mitolo Siamontu	Inspector	Zambia Compulsory Standard Association	
Malawi Case				
96	Lyson Kampira	CTCN Focal Point	National Commission for Science and Technology	M
97	Fredrick Munthali	Chief Research Services Officer (Engineering, Design, Industry and Energy)	National Commission for Science and Technology	M
98	Yohane Chimbalinga	Research Services Officer (Agriculture)	National Commission for Science and Technology	M
99	Patrick Nyirenda	Senior Environmental Officer	Department of Environmental Affairs	M
100	Saidi Banda	Deputy Director Responsible for Offgrid	Ministry of Energy	M
101	Gift Chiwayula	Principal Energy Officer	Ministry of Energy	M
102	Shaibu Mludi	Senior Electricity Regulation Specialist	Malawi Energy Regulation Authority (MERA)	M
103	Kaluzi Simekina	Programs Manager	Council for Non-Governmental Organizations in Malawi (CONGOMA)	M
104	Clement Kandodo	Founder	EcoGen	M
105	Mkaka Thokozani	Deputy Director in Charge of Health	Head of Cleansing Division, Lilongwe City Council	M
106	Jane Mpatso	Director of Planning and Research	Ministry of Gender, Community Development and Social Welfare	F
107	Cosmas Ngonndongo	Professor of Hydrology/Executive Dean of the School	University of Malawi	M
108	Joseph Chikaphonya Phiri	Lecturer in Electrical Engineering Department	Malawi University of Business and Applied Sciences	M
109	John Taulo	Senior Lecturer and Head of Department of Energy Resources Management	Malawi University of Science and Technology	M
110	Bishop Hauya	Acting Deputy Director of Standards devt in the Eng field	Malawi Bureau of Standards	M

S/N	Name	Position	Organization	Gender (M/F)
111	Nijakere	Technical Experts in the Engineering and Material Division	Malawi Bureau of Standards	M
112	Gunseyo Dzinjalama	Standards Officer	Malawi Bureau of Standards	M
113	Stephan Chilamba	Standards Officer	Malawi Bureau of Standards	M
Thailand Case				
114	Surachai Sathitkunararat	Vice President /NDE	Office of National Higher Education Science Research and Innovation Policy Council - NXPO	M
115	Saravane Singtong	Division Director	Office of National Higher Education Science Research and Innovation Policy Council - NXPO	F
116	Chanida Sansaard,	Policy Specialist	Office of National Higher Education Science Research and Innovation Policy Council - NXPO	F
117	Doungkamon Phihusut	Policy Developer	Office of National Higher Education Science Research and Innovation Policy Council - NXPO	M
118	Asira Chirawithaya boon	Seniort Policy Specialist	Office of National Higher Education Science Research and Innovation Policy Council - NXPO	M
119	Norachai Rungsvichitp rapa	Policy Developer	Office of National Higher Education Science Research and Innovation Policy Council - NXPO	M
120	Apichit Therdyothin	Associate Professor	King Mongkut’s University of Technology Thonburi (KMUTT)	M
121	Sopin Wachirapuw adon	Senior Project Manager (Building project TA)	International Institute for Energy Conservation (IIEC)	F

S/N	Name	Position	Organization	Gender (M/F)
122	Sran Sribhibhadh	Managing Director	energy IoT Ltd	M
123	Parnleykha Promta		Gigajoule Co. LTD	F
124	Krittaya Chunhaviriya kul	Director of Climate Measure and Mechanism section	Thailand GCF, AF focal point	F
125	Tippamars Taracheewin	Environmentalist, GEF OFF Secretariat, Division of Foreign Affairs, Office of International Cooperation on Natural Resources and Environment	Ministry of Natural Resources and Environment	F
126	Sunsern Rueangrit	Assistant Director of Dusit District	Bangkok Metropolitan Administration (Dusit District and Drainage and Sewerage Department)	M
127	Pavaris Meebangsai	Statistician (Professional Level)	Bangkok Metropolitan Administration (Dusit District and Drainage and Sewerage Department)	M
128	Somchai Chonwattana	Hydraulic Engineer	DHI Thailand	M
129	Varaporn Buranautama	Thailand Office Manager	DHI Thailand	F
130	Sungchan Yeom	Senior Researcher, Director of Center for Data Information	NIGT	M
131	Soeun Kim	Post-doc	Divison of Policy Research, NIGT	F
132	Chakrit Chotamonsak	Lecturer	Chiang Mai University	M
133	Morakot Tanticharoen	Senior Advisor to the President	National Science and Technology Development Agency / KMUTT	F
134	Theerayut Toojinda	Deputy Executive Director, Research and Development Bioscience and Biotechnology for Agriculture	The National Center for Genetic Engineering and Biotechnology (BIOTEC)	M
135	Siriporn Wattanasriru ngkul	Director of Research Management and Biotech Manpower Development Division	BIOTEC	F

S/N	Name	Position	Organization	Gender (M/F)
136	Wongkot Wongsapai	Associate Professor, Energy Policy, Climate Change Expert from Faculty of Engineering, Department of Mechanical Engineering	Chiang Mai University	M
137	Wisaruth Maethasit (written input)		Ministry of Energy	M
138	Lars Yde (written input)	Senior Engineer	DHI	M
139	Sten Lindberg (written input)	Project Manager	DHI	M
Antigua & Barbuda Case				
140	Diann Black-Layne	Ambassador, Department of Environment (NDE)	Department of Environment, Ministry of Health and Environment	F
141	Ezra Richardson	Monitoring & Evaluation Consultant	Department of Environment, Ministry of Health and Environment	F
142	Helena Jeffrey-Brown	Technical Coordinator	Department of Environment, Ministry of Health and Environment	F
143	Jamila Gregory	TNA focal point	Department of Environment, Ministry of Health and Environment	F
144	Christa Joy Burton	Regional Project Coordinator	Department of Environment, Ministry of Health and Environment	F
145	Stacey Mascal	Assistant Director	Ministry of Education	F
146	Dwight Laviscount	Civil Engineer	Ministry of Energy	M
147	Itajah Simmons	Mechanical Engineer	Ministry of Energy	M
148	Andrew Morton	Senior Programme Manager	UNEP	M
149	Gail Imhof Gordon	GCF Build project manager	Ministry of Finance	F

S/N	Name	Position	Organization	Gender (M/F)
Laos Case				
150	Amphayvanh Oudomdeth (Deputy NDE)	Deputy Director General (Deputy NDE)	Department of Climate Change, Ministry of Natural Resources and Environment (MONRE)	M
151	Tavan Kittiphone	Head of Adaption Division	Department of Climate Change, Ministry of Natural Resources and Environment (MONRE)	M
152	Khampasong Khamvene	Deputy Head of Adaptation Division	Department of Climate Change, Ministry of Natural Resources and Environment (MONRE)	M
153	Vanthone Phonnasane	Deputy Head of Adaptation Division	Department of Climate Change, Ministry of Natural Resources and Environment (MONRE)	M
154	Vannavong Manivong	Technical Officer of Adaptation Division	Department of Climate Change, Ministry of Natural Resources and Environment (MONRE)	M
155	Oulaykham Siphandone	Technical Officer of Adaption Division	Department of Climate Change, Ministry of Natural Resources and Environment (MONRE)	F
156	Anousack Maitrychith	Head of Planning Section, Operational focal point for GCF	Department of Planning and Finance, Ministry of Natural Resources and Environment (MONRE)	M
157	Wihane Sibounheuang	Project Coordinator of EbS Project	Provincial Office of Natural Resources	M

S/N	Name	Position	Organization	Gender (M/F)
			and Environment (PONRE) Borikhamxay	
158	Phoumixay Phanthavong	Project Coordinator of EbS Project	Provincial Office of Natural Resources and Environment (PONRE) Savannakhet	M
159	Nalinthone Vilaysane	National Project Coordinator of EbS Project	EbS Project for 4 provinces	F
160	Paz Lopez-Rey	Task Manager for EbS Project	UNEP, Nairobi, Kenya	F
161	Phouthavan h Phommachuk	Technical officer	Department of Transport, Ministry of Public Works and Transportation	M
162	Houmpheng Theuamboun my	Deputy Director General	Department of Energy Efficiency and Promotion (DEEP), Ministry of Energy and Mines	M
163	Phimphone Latsavong	Head of Clean Energy Promotion Division	Department of Energy Efficiency and Promotion (DEEP) Ministry of Energy and Mines	M
164	Mr Sengvisay Khammanivong	Deputy Head of Clean Energy Promotion Division	Department of Energy Efficiency and Promotion (DEEP), Ministry of Energy and Mines	M
165	Devon Farmer	Senior Researcher	Korea National University of Transportation	M
166	Tomoya Motoda	Senior Programme Officer	Global Environmental Centre Foundation (GEC)	M
167	Kaoru Yamaguchi	Assistant Manager	Global Environmental Centre Foundation	F
168	Risa KIKUCHI	-	Global Environmental Centre Foundation	F
169	Peter Hanington	Technical Specialist IWRM and EBA in the Xe Bang Hieng River Basin and Luang Prabang City	UNDP Project Office: Department of Water Resources	M

Figure 17. Total number of KII respondents disaggregated by gender

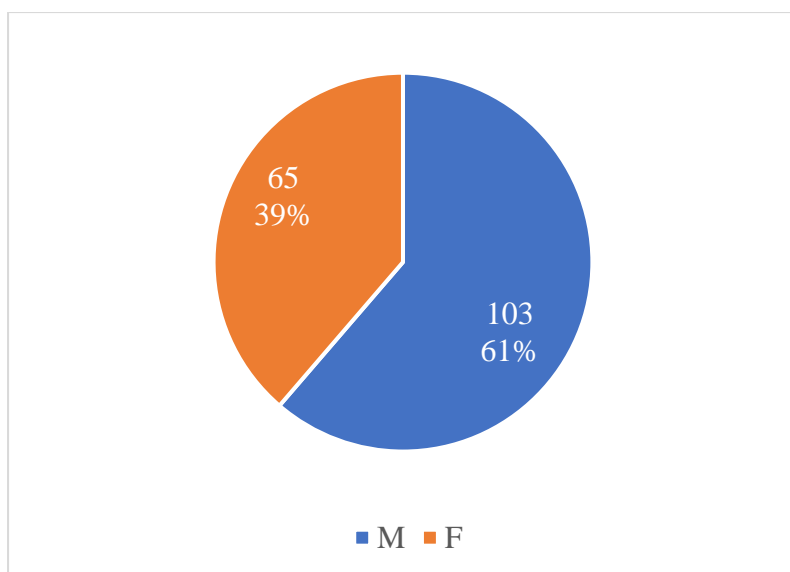
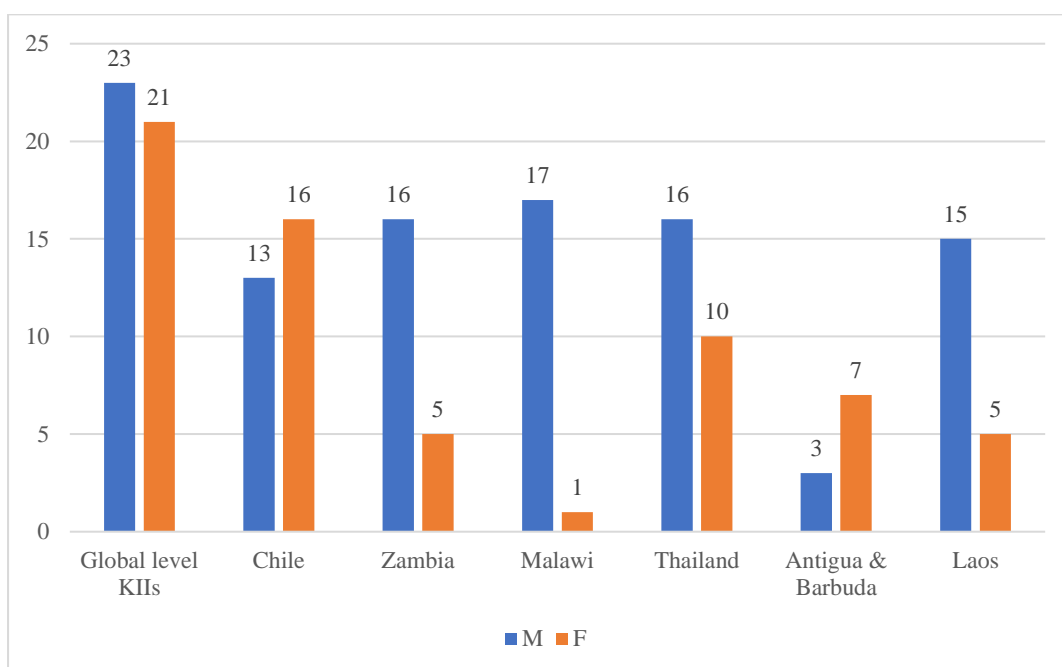


Figure 18. Number of global and country-level KIIs disaggregated by gender



ANNEX III. KEY DOCUMENTS CONSULTED

Project planning and reporting documents

- UNEP (2022). Project Revision #6. 127.1 Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network (CTCN)
- UNEP and UNIDO (2013). Programme Document. Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network (CTCN)
- European Union and United Nations Development Programme (2020). Addendum number 1 to the Delegation Agreement NO DCI-ENV/2016/377-145.
- European Union and United Nations Development Programme (2016). European Union Delegation Agreement DCI-ENV/2016/377-145
- European Union and United Nations Development Programme (2021). Addendum No 2 to the Delegation Agreement NO DCI-ENV/2016/377-145
- European Union. Annex 1 of contract DCI-ENV/2016/377-145
- European Union and United Nations Development Programme (2022). Addendum No 3 to the Delegation Agreement NO DCI-ENV/2016/377-145
- European Union Delegation Agreement NO DCI-ENV/2016/377-145
- UNEP (2023). Memorandum. Re-assessment of the revised Project document after addressing the recommendations made by Project Review Committee Report for the UNEP Programme to host and manage the Climate Technology Centre and Network (CTCN)
- UNEP Programme to host and manage the Climate Technology Centre and Network (CTCN). Project Document. 2023
- Climate Technology Centre and Network 2019 Annual Report. Prepared for the fifteenth Advisory Board meeting of the CTCN March 2020
- Climate Technology Centre and Network. UNFCCC Technology Mechanism. 2021 Annual Operating Plan Report
- Climate Technology Centre and Network. UNFCCC Technology Mechanism. 2022 Annual Operating Plan Report
- Climate Technology Centre and Network. UNFCCC Technology Mechanism. 2020 Annual Operating Plan Report
- Climate Technology Centre and Network 2018 Annual Report. Prepared for the thirteenth Advisory Board meeting of the CTCN March 2020
- Climate Technology Centre and Network 2019 Annual Report. Prepared for the thirteenth Advisory Board meeting of the CTCN March 2020
- Climate Technology Centre and Network. UNFCCC Technology Mechanism. 2020 Annual Report
- Climate Technology Centre and Network (2014). Annual Operating Plan for the period 1st January – 31st December 2015. Climate Technology Centre and Network
- Climate Technology Centre and Network (2015). Annual Operating Plan for the period 1st January – 31st December 2016. Climate Technology Centre and Network.
- Climate Technology Centre and Network (2016). Annual Operating Plan for the period 1st January – 31st December 2017. Climate Technology Centre and Network

- Climate Technology Centre and Network (2017). Annual Operating Plan for the period 1st January – 31st December 2018. Climate Technology Centre and Network
- Climate Technology Centre and Network. Proposed Annual Operating Plan and Budget - 2022
- Climate Technology Centre and Network. Annual Operating Plan and Budget - 2019
- Climate Technology Centre and Network. Annual Operating Plan and Budget - 2020
- Climate Technology Centre and Network. Annual Operating Plan and Budget - 2021
- 2020 final financial report by CTCN service area
- Final statement of income and expenditure for the period 1 January 2020 – 31 December 2020
- 2021 final financial report by CTCN service area
- 2022 Final financial report by CTCN services areas
- Final statement of income and expenditure for the period 1 January 2022 – 31 December 2022
- Final statement of income and expenditure for the period 1 January – 31 December 2019
- Final statement of income and expenditure for the period 1 January 2021 – 31 December 2021
- 2020 final financial report by CTCN service area
- Final certified statement of income and expenditure for the period ended 31 December 2018
- Statement of income and expenditure (preliminary) for the period 1 January 2013 – 31 December 2016
- Statement of income and expenditure for the period ended 31 December 2016
- Statement of income and expenditure for the period ended 31 December 2017
- Statement of income and expenditure for the period ended 31 December 2019. Ministry of the Environment (MoE), Japan Consolidated
- Interim statement of income and expenditure for the period ended 31 December 2019. Ministry of Economy, Trade and Industry, Japan (METI)
- Statement of income and expenditure for the period ended 31 December 2019. The Danish Ministry of Foreign Affairs (Danida)
- Statement of income and expenditure for the period ended 31 December 2021. Ministry of the Environment (MoE), Japan Consolidated
- Statement of income and expenditure for the period ended 31 December 2022. Adaptation Fund
- Statement of income and expenditure for the period ended 31 December 2016. The Danish Ministry of Foreign Affairs (Danida)
- Statement of income and expenditure for the period ended 31 December 2016. Ministry of Economy, Trade and Industry, Japan (METI)
- Statement of income and expenditure for the period ended 31 December 2016. Multi Donor Trust Fund
- Statement of income and expenditure for the period ended 31 December 2017. Multi Donor Trust Fund

- Statement of income and expenditure (preliminary) for the period ended 31 December 2017
- Statement of income and expenditure for the period ended 31 December 2017. The Danish Ministry of Foreign Affairs (Danida)
- Statement of income and expenditure for the period ended 31 December 2021. The Danish Ministry of Foreign Affairs (Danida)
- Final certified financial statement for the period ending 23 July 2022. SIDA contribution to CTCN for the year 2021
- Final statement of income and expenditure for the period 1 January 2022 – 31 December 2022
- Statement of income and expenditure (USD) for the period ending 31 December 2022. Incheon Metropolitan City, Republic of Korea
- Statement of income and expenditure (USD) for the period ending 31 December 2022. Ministry of Science and ICT, Republic of Korea
- Statement of income and expenditure for the period ended 31 December 2022. Federal Ministry of Climate Action, Environment, Energy Mobility, Innovation & Technology, Austria.
- Statement of income and expenditure for the period ended 31 December 2022. The Danish Ministry of Foreign Affairs (Danida)
- Support to the UNFCCC Climate Technology Centre and Network (CTCN+ Part II). Final Narrative Report. Project Implementation: 1 December 2016-31 May 2022
- European Union Delegation to Kenya. Final Certified Financial Statements for the period ended 06 June 2023
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ANNEX IV. COUNTRY CASE SUMMARIES

This table summarizes the key results of the six country cases in terms of contributing outcomes (output level in the TOC), outcomes and impact stories. Both main results and main challenges are included where relevant. As CTCN is a catalytic project, with the aim to catalyze larger impact, the coherence and coordination with key focal points/ partnership arrangements in the country level was considered. It is, however, noted that six countries is a very small sampling size in a Programme where diversity of operations is high; results are to be interpreted as cases, rather than forming patterns.

Table 14. Evaluation country case summaries

Country case 1: Chile			
	Contributing outcome (output level)	Outcome	Impact story ¹²⁰
Result	<p>The specific character of CTCN projects is considered beneficial by all actors (as long as the big picture is maintained).</p> <p>As a highly motivated country and NDE towards climate change ambitions, Chile has reached a top number of Tas.</p> <p>Chile, as a good practice country in CTCN, has the capacity to be a regional accelerator of certain climate technology themes within the CTCN in the region (e.g. circular</p>	<p>The TNA and Technology Action Plan (TAP) has a significant role in improved coherence of national technology needs, and a potential role also in financing.</p> <p>There exist opportunities and challenges for CTCN to contribute in improved capabilities in the country to identify technology needs, and to implement technology projects and strategies.</p>	<p>The CTCN operations in Chile are well aligned and contribute to the national climate change strategies and agreements (including Nationally Determined Contributions [NDC]), the implementation of which will lead to low emissions and climate resilient development.</p>

¹²⁰ a) Has there been accelerated transfer and scale-up deployment of adaptation and mitigation technologies? b) If yes, has it led to low emissions and climate resilient development?

	economy) with contribution to South-South cooperation.		
Main challenge	CTCN visibility and capacity training does not effectively reach other stakeholders apart from NDE and core partners, and CTCN is widely not known in Chile (collaboration).		<p>The impact is hindered by the difficulty of getting from technical assistance to technology transfer, as several internal matters influence this:</p> <ul style="list-style-type: none"> a) Multi-actor institutional collaboration environment to create connections from TAs to larger funding (under other Ministries). b) Continuity/sustainability of the operations. c) Private Sector depends on ASCC to continue / lack of incentive schemes. d) NDE needs higher level support to enable cooperation and continuity.
Country case 2: Thailand			
	Contributing results/factors/outputs ¹²¹	Outcomes	Impact story
Result	<p>CTCN support has been highly aligned with TNA and national priorities.</p> <p>Active NDE with high number of submitted TA requests shows that the NDE has the capacity to identify technology needs.</p> <p>Active NDE that has been involved in South-South cooperation (Bhutan)</p>	<p>CTCN contributed to identification technology solutions within national frameworks and context.</p> <p>The CTCN support has enabled the NDE and some of its partners to establish new networks/partners.</p> <p>Improved capabilities of the NDE and stakeholders (beneficiaries) to promote and apply selected technologies.</p>	<p>The past TAs (building sector, early warning, agriculture) implemented in a context CTCN had had contribution to mechanisms that support technology transfer. The CTCN support has sustained in the system as new skills and know-how.</p>

¹²¹ Summarised statements from the mechanism discussed in the following sections.

	<p>and knowledge sharing between the countries (e.g. Bangladesh, Korea meeting), while also promoted the CTCN opportunities in line with TNA.</p> <p>MIC country with the capacity to explore advanced technologies.</p>	<p>The delivery of the CTCN Technical Assistance through the NDE /NXPO has positive contribution to the improved coherence of climate technology related collaboration.</p>	
Underlying challenges	<p>Recently submitted fewer TA proposals due to challenges with generating impact. Changed the approach to integrate the GCF funding path from the start.</p>	<p>Funding for piloting and scaling technology transfer has not materialized ,</p>	<p>Factors hindering impact;</p> <ul style="list-style-type: none"> • Further supporting to link with other funding needed • National level funding priorities and budget (e.g. thematic, hardware/software) • Lack of recording the lessons, no systematic way of taking the lessons forward (e.g. through post monitoring)
Country case 3: Antigua and Barbuda			
	Contributing mechanisms/outputs (CTCN related)	Outcomes	Impact story
Result	<p>The CTCN support has responded to the country needs and NDE-led priorities in terms of detailed technology assessment needs (sectors) and filling the data needs.</p> <p>Some new collaboration and links has been established to financing organizations (GCF), and implementers (consultancy firms).</p>	<p>CTCN support has helped to leverage GCF funding addressing climate change adaptation needs in the public buildings (for key services)</p> <p>Access to data and analysis has helped to establish baselines and knowledge base in terms climate proofing of public buildings and workforce needs for just transition (knowledge base)</p>	<p><u>Stronger CTCN contribution:</u></p> <p>There is a slow but ongoing pathway to scaling up the technologies for resilient public building sector (to better adapt to level 5 hurricanes), eventually leading to enhanced climate resilience.</p>

	<p>The quality of outputs have served the needs of data and knowledge needs (in most cases).</p> <p>CTCN TAs have in most cases promoted and supported participation of diverse groups.</p>	<p>CTCN (among other funding sources and actors) is supporting the capability of the NDE to further take action on the identified technology needs</p>	<p><u>Weaker CTCN contribution but with relevance:</u></p> <p>Antigua & Barbuda is promoting just transition and CTCN has had small input to that process through workforce analysis/strategy support (NDC for just transition of workforce). This can be significant direction in terms of broad-based inclusion of vulnerable groups in the clean transition process.</p>
<p>Underlying challenges</p>	<p>The realization of benefits from a TA to visible impact takes time (e.g. the case of climate proofing public buildings, 6 years and counting).</p> <p>no private sector collaboration was present in relation to CTCN TAs – need for market transformation was noted</p> <p>From TA to outcome and impact is challenged by multiple factors.</p> <p>The inability of the national partners to influence the implementer's selection criteria or selection hindered the implementation of one intervention.</p>	<p>Realisation of results from a multi-country CTCN support can demonstrate challenges.</p>	

	<p>CTCN support is not needed to identify tech needs, but in further detailed analysis.</p> <p>CTCN does not have role in building national coherence, it is one funding source/among many and coherence at the national level is mainly for the NDE to build.</p> <p>CTCN is not promoting its network proactively nor visibly enough, nor offering technology options.</p>		
Country case 4: Laos			
	Contributing results/factors/outputs	Outcomes	Impact story
Result	<p>The CTCN support delivered on GCF project development directly (narrow and specific support).</p> <p>CTCN support has been timely and in line with interest in Ecosystem-based Adaptation (EbA), transportation transition and hydrogen technology.</p> <p>CTCN international network was active in linking private, public interest and CTCN network support.</p>	<p>CTCN support enabled additional funding for more systematic application of flood management practices with integrated EbA.</p> <p>The CTCN support has underpinned the establishment of new collaboration and partnerships around new technologies.</p> <p>CTCN support enabled support to environment and sectoral planning integration for transfer of certain new technologies.</p>	<p>EbA in urban context is a story where CTCN has acted as one actor providing critical support to funding application for urban flood management. Paradigm shift is being discussed to bring green solutions together with grey solutions.</p> <p>Accelerated interest in exploration for hydrogen production potential in Lao PDR.</p>

	CTCN has matched international technology expertise for further identification of country potential for new technologies.	Identification of application sectors for new technologies was achieved.	
Underlying challenges	<p>CTCN role is not very visible or known by actors beyond NDE.</p> <p>TNA does not seem to have strong role in identifying or prioritizing the technology transfer for climate change. Funding is missing for implementation.</p> <p>Capacity building was not sufficiently built into design of some CTCN interventions</p>	Capacity building efforts in relation to CTCN have not been sufficient to meet the needs of the national partners (partially due to COVID-19)	
Country case 5: Malawi			
	Contributing outcomes (output level)	Outcomes	Impact story
Result	<p>The CTCN projects contributes to improving the knowledge of national stakeholders on climate technologies.</p> <p>The TAs were perceived to be good by the national stakeholders as they were focussed on issues (waste and energy) which the country seeks to improve.</p>	The CTCN TAs have potentials for enhancing national stakeholders’ capacity to identify technology needs and to implement climate technology initiatives. Stakeholders were able to identify/prioritize the waste type for the elaboration of a circular economy roadmap. For the energy TA, national stakeholders were able to identify/select applicable energy efficiency standards. However, the capacity to implement	The CTCN TAs are important in ensuring coherence of the national climate change and development processes. The TAs speak to national climate change strategic documents such as the NDCs and national development plans (such as Malawi 2063) and involves the participation of institutions and stakeholders engaged in the implementation of the national climate change and development plans.

	<p>The implementation of the TAs saw the participation or involvement of public, private and academic institutions. However, no concrete collaboration was recorded between these actors beyond their representatives participating in events organised within the framework of the TA implementation.</p>	<p>technology initiatives attributable to the TAs or CTCN is yet to materialise.</p> <p>The CTCN TAs are important in ensuring coherence of the national climate change and development processes.</p>	
Main challenge	<p>Low level of awareness among national actors on the CTCN and its operations, and low in-country collaboration between actors.</p> <p>There is a weak collaboration between the academia and the private sector, impeding the uptake of technological innovation from academic institutions by the industry. The weak collaboration also limits the flow of financing from industry to academia for innovation.</p> <p>Access to financing for the rolling out of the TA results or outcomes is a challenge.</p>		<p>A key obstacle impeding the attainment of the impact of the CTCN in Malawi is related to the challenge of the country transitioning from TAs to concrete transfer of climate technology, which can have a substantial impact in terms of strengthening resilience to climate change and reducing of GHG emissions.</p>
Country case 6: Zambia			
	Contributing outcomes (output level)	Outcomes	Impact story

<p>Result</p>	<p>The regional nature of the projects enabled Zambia to benefit from lessons from other countries in the Southern Africa sub-region, thereby fostering potentials for south-south cooperation.</p> <p>While the TAs involved private sector actors, the involvement of academic institutions was weak. Equally, no collaboration happened between public and private institutions beyond their participation in the events organised during the TA implementation.</p> <p>The TAs were considered by stakeholders as important for the country as they were focussed on important sectors (waste and energy) for the country.</p>	<p>The implementation of the TAs of the CTCN positively contributes to enhanced coherence in climate technology and national development.</p> <p>The CTCN has contributed and has potential to further contribute towards improving the capabilities of stakeholders in the country to identify technology needs and implement technology strategies and projects.</p>	<p>The CTCN projects implemented in Zambia aligns well with climate and development strategies such as the 8th National Development Plan, the Green Growth Strategy and the NDC. The operationalization of the elaborated roadmaps will therefore lead to climate resilient and low carbon development.</p>
<p>Main challenges</p>	<p>Adopted CTCN standards/ practices may not fully align with the Zambian context.</p> <p>Low level of engagement of academic and research institutions in the CTCN projects in the country.</p>	<p>Inadequate capacity of local technology producers to fabricate technologies that responds to the specification of local buyers. For instance, it is a challenge for the local manufacturer of transformers in Zambia to produce efficient transformers that fulfils ZESCO’s technical specification</p>	<p>Inadequate access to domestic and international resources for transforming the TA results into projects. While international funding mechanisms exists, scant evidence exist that the country has explored options for mobilizing additional resources from these sources to advance the results of the TAs.</p>

ANNEX VI. INDICATOR REPORTS AND DATA

Table 15. Compilation of UNEP ProDoc and EC Grant results frameworks indicator data

	Result area (as in LogFrames, as reformulated for TOC)	REPORT: Indicator (I) /Target (T) /Result (R) ¹²² (as in final report 2023 and CTCN revision document #6)
	OUTPUTS	
CTCN	Developing country Parties’ needs for technical assistance (i.e., Requests) on climate technology are fulfilled/responded to	<p>I: Number of requests for assistance on climate technology from Parties managed and addressed by the CTC.</p> <p>T: 120 CTCN technical assistance implemented (disaggregated by TA and FTAs)</p> <p>R: On target. 114 technical assistances have completed implementation.</p> <p>I: Number of non-annex 1 countries supported by the CTCN.</p> <p>T: Minimum of 100 non-annex 1 countries supported by CTCN.</p> <p>R: Achieved. 107 non annex I countries supported by the CTCN.</p>
CTCN	The development and transfer of existing and emerging environmentally sound technologies, as well as opportunities for North–South, South–South and triangular technology cooperation, is stimulated and encouraged, through collaboration with the private sector, public institutions, academia and research institutions	<p>I: Number of collaborative initiatives/activities and public-private partnerships for the development and transfer of existing and emerging environmentally sound technologies facilitated by the CTC</p> <p>T: 230 collaborative initiatives/activities and public-private partnerships</p> <p>R: 87 collaborative activities. Not achieved.</p> <p>I: Number of international and (sub)regional, North-South, and South-South technology and knowledge sharing events</p> <p>T: 72 international, regional and subregional, North-South, and South-South technology and knowledge sharing events</p> <p>R: Achieved. 120 international, regional and sub-regional, North-South, and South-South technology and knowledge sharing events.</p> <p>I: CTCN Knowledge Management System and web-based information portal are operational and used by developing countries.</p> <p>T: N/A</p> <p>R: Achieved. CTCN Knowledge Management System developed and used by countries</p>
CTCN	A network of national, regional, sectoral and international technology centres, networks, organization and initiatives is facilitated to support responses to	<p>I: Number of network members (from developing countries)</p> <p>T: 90 network members (from developing countries)</p> <p>R: Achieved. 364 Network Members from developing countries.</p>

¹²² Noting that the indicators and targets have changed during the implementation, the indicators and targets are based on the latest project/grant revisions.

	country requests and capacity building	<p>I: Number of twinning arrangements between technology centres/organizations facilitated by the CTCN. T: 25 twinning arrangements between technology centres/organizations R: Not achieved. 2 twinning arrangements between technology centres/organizations</p> <p>I: Number of international public-private technology partnerships facilitated by the CTCN. T: 25 international public-private technology partnerships R: Not achieved. 11 international public-private technology partnerships</p> <p>I: Number and quality of trainings and capacity strengthening activities conducted by the CTCN. T: 62 trainings and capacity strengthening activities R: On target. 85 trainings and capacity strengthening activities.</p> <p>I: Number of new tools and information material developed by the CTCN. T: 90 new tools and information material R: Achieved. 2151 (251 new since June 2021) new tools and information material</p>
EC	The improvement in the availability and accessibility of knowledge on climate technologies; the provision of knowledge support and technical assistance services to developing countries through the CTCN (response to requests)	<p>I: Number of requests submitted to the CTCN. Baseline-23; Target-400; Result-385. Close to achieved.</p> <p>I: Number of requests submitted to the CTCN that are eligible and prioritised for CTCN technical assistance. Baseline-15; Target-310; Result-270. Close to achieved.</p> <p>I: Number of CTCN response plans finalized by the CTCN as a result of technical assistance requests.</p>
EC	Implemented incentive schemes for companies and entrepreneurs to engage in technology transfer to developing countries.	<p>Baseline-4; Target-200; Result-229. Achieved.</p> <p>I: Number of technical assistance cases completed Baseline-0; Target-130; Result-155. Achieved.</p>
EC	Implementation of three technology partnerships to advance the dissemination of solutions in priority regions and technology areas.	<p>I: Number of stakeholders trained by the CTCN through various capacity building activities Baseline-60; Target-3,000; Result-13,852. Achieved.</p> <p>I: Number of visitors to the CTCN knowledge portal Baseline-465; Target-1 M; Result-1,7 M. Achieved.</p> <p>I: Percentage of developing countries among top 50 users with the highest session duration on the CTCN knowledge portal.</p>

		<p>Baseline-64 per cent ; Target-80 per cent ; Result-92 per cent . Achieved.</p> <p>I: Number of activities implemented by the CTCN to stimulate technology cooperation for companies and entrepreneurs. Baseline-2; Target-50; Result-38. Close to achieved.</p> <p>I: Number of technology partnerships implemented to advance the dissemination of solutions in priority regions and technology areas. Baseline-0; Target-10; Result-17. Achieved.</p>
	OUTCOMES	
CTCN	The capacity and capability of developing countries to identify technology needs and prepare and implement technology projects and strategies to support action on mitigation and adaptation is increased.	<p>I: Number of new national Technology Needs Assessments and Technology Action Plans as a result from CTCN assistance. T: 25-30 new TNAs and TAPs R: On target. A total of 14 Readiness proposals for Technology Needs Assessments (TNAs)</p> <p>I: Number of new country driven technology projects and/or strategies designed, implemented and scaled-up as a result from CTCN assistance. T: 106 new country driven technology projects and/or strategies designed, implemented and scaled-up R: Achieved. 207 country driven technology projects.</p> <p>I: Climate technology investments deriving from CTCN assistance. T: 1 billion USD climate technology investments deriving from CTCN assistance. R: On target. The services provided by the CTCN to date have contributed to leveraging anticipated USD 1,24 billion anticipated funding leveraged for developing countries</p>
EC	Improved access of public and private actors from developing countries to state-of-the-art technologies and services through an enhanced CTCN.	<p>I: Number of technical assistance interventions which support enabling environments for technology development and deployment, disaggregated by type of assistance (in the event that a technical assistance addresses more than one enabler, the primary enabler will be counted) Baseline-15; Target-70; Result-275. Achieved.</p> <p>I: Number of CTCN technical assistance that contributes to the goals of Technology Needs Assessments, Technology Action Plans, and/or Nationally Determined Contributions. Baseline-4; Target-217; Result-255. Achieved.</p>
EC	Better coherence of national development, priorities, technology needs, international project finance and capacity building. EC	<p>I: Number of technology partnerships implemented or triggered through CTCN activities. Baseline-14; Target-750; Result-752. Achieved.</p>

Source: UNEP ProDoc revision 2022 and EC final report.

ANNEX VII. FINANCIAL ANNEX

Table 5 was prepared based on the UNEP evaluation office requirements and reflecting the UNEP evaluation office evaluation criteria ratings matrix (version 12/9/2022).

Table 16. Financial Management Table

NON-GEF AND GEF PROJECTS			
Financial management components:	Rating	Evidence/ Comments	
Adherence to UNEP’s policies and procedures:	S		
Any evidence that indicates shortcomings in the project’s adherence ¹²³ to UNEP or donor policies, procedures or rules		<p>The CTCN financial management approach is established in the UNEP financial management system. UNEP financial reports are presented to the Advisory Board, which endorses the budget and expenditure reports. AB meets twice a year and financial updates are presented in these meetings.</p> <p>UNEP ProDoc, budget revisions are not prepared on the same basis as for a regular UNEP budget. Secured income forms the basis for the budget in the UNEP system. The CTCN expenditure is demand-driven. The UNEP-approved budget is carried over to the following year as required (in line with the CTCN AB-approved work plans and budgets).</p> <p>Donor grants are valid as per the donor agreements. Donor financial reports are prepared and submitted as per donor agreement. This might include consolidated financial reports or donor-specific reports.</p> <p>Technical Assistance projects are processed (including cash disbursements) as per the UN procurement or in the case of consortium members, under another legal arrangement.</p> <p>UNEP FMO is assigned to CTCN to ensure alignment with UNEP financial rules and procedures.</p>	
Completeness of project financial information¹²⁴:	MS		
Provision of key documents to the evaluator (based on the responses to A-H below)			
A.	Co-financing and Project Cost’s tables at design (by budget lines)	YES	The high-level CTCN budget of UNIDO and UNEP is presented in the 2013 ProDoc by budget lines and by outputs. EC budget 2016 available.
B.	Revisions to the budget ¹²⁵	YES	Four revisions were available to the evaluation team. The numbering and approved budget figures indicate that revision documentation is not complete or has issues with the content.

¹²³ If the evaluation raises concerns over adherence with policies or standard procedures, a recommendation maybe given to cover the topic in an upcoming audit, or similar financial oversight exercise.

¹²⁴ See also document ‘Criterion Rating Description’ for reference.

¹²⁵ The evaluation team notes that the CTCN budgets are set as projected basis and actual expenditure will depend on the demand by the countries.

NON-GEF AND GEF PROJECTS			
C.	All relevant project legal agreements (e.g., SSFA, PCA, ICA) ¹²⁶	YES	EC funding agreement available. UNEP /UNIDO co-hosting agreement is available. The evaluation team requested and reviewed a sample of consortium member MoUs and agreements with the implementing partners (network members). The evaluation team had access to other donor agreements that are available online (not the UNIDO-held donor agreements).
D.	Proof of fund transfers (donor fund transfers, as per evaluation office guidelines)	No	However, an example email exchange between the UNEP revenue management unit and the CTCN project team was provided to illustrate the communication on the donor fund transfer process to ensure that funds became available to the CTCN operation.
E.	Proof of co-financing (cash and in-kind)	No	While these were not available, the CTCN Secretariat, in line with current UNEP PPMM ¹²⁷ , reports in-kind contributions in narrative reporting as “Pro-bono”. This is reported as part of the CTCN substantive progress reporting ¹²⁸ .
F.	A summary report on the project’s expenditures during the life of the project (by budget lines, or project components and/or annual level)	YES.	UNEP financial statements are available for 2013-2022. These are presented by UNEP budget lines and endorsed by the AB. (CTCN also has expenditures available by the CTCN service area that are presented to the Advisory Board for 2018-2022) No summary report covering the whole lifespan of the project is available, CTCN Advisory Board deals in annual cycles. Based on the UNEP financial statements Table 18 was prepared by the evaluation team. The figures do not correspond with the expenditure details received from CTCN Secretariat. Expenditure reports submitted to the Advisory Board are available in CTCN service categories since 2018 (not a UNEP requirement but a good CTCN practice). No expenditure report in UNEP outcome/output categories is available.
G.	Copies of any completed audits and management responses (<i>where applicable</i>)	No N/A	CTCN is part of UNEP and is included in the overall annual audit of the organization. No CTCN-specific audits completed. EC funding clause 5.10 of the Donor Agreement indicates that they can conduct an audit as deemed necessary. None has been requested
H.	Any other financial information that was required for this project (list): -Donor financial reporting	Yes	The evaluation team has reviewed a sample of financial reports to the donors, including EC.

¹²⁶ Small-scale funding agreement, Programme Cooperation Agreement, Internal cooperation agreement.

¹²⁷ “Co-financing refers to cash and/or in-kind contributions committed by governments, other multilateral or bilateral sources, the private sector, non-governmental organizations, and project beneficiaries, who are partially contributing to the delivery of project activities or outputs. Co-financing information is important in understanding the overall resources available for project delivery. However, funding administered directly by the partners, and not channelled through UNEP, should not be part of the total project budget calculation. Project Managers are encouraged to provide relevant information in budget tables, project documents and progress reporting. UNEP is increasingly being asked by donors and partners to report co-financing.”

¹²⁸ Evaluation team notes the lack of UNEP guidance regarding the practices of recording of the co-financing.

NON-GEF AND GEF PROJECTS		
Communication between finance and project management staff	HS	
Project Manager and/or Task Manager’s level of awareness of the project’s financial status.	HS	CTCN management is regularly informed about financial and administrative issues. Regular meetings by the CTCN Secretariat contain discussions on administrative and financial issues.
Fund Management Officer’s knowledge of project progress/status when disbursements are done.	S	Regular meetings by the CTCN Secretariat contain discussions on administrative and financial issues.
Level of addressing and resolving financial management issues among Fund Management Officer and Project Manager/Task Manager.	HS	Close collaboration between the (UNEP division) FMO and the CTCN management support financial management.
Contact/communication between the Fund Management Officer and project Manager/Task Manager during the preparation of financial and progress reports.	S	Regular meetings by the CTCN Secretariat contain discussions on administrative and financial issues. The CTCN advisory board offers an arena where CTCN budgets and expenditure reports are presented, discussed, and endorsed by the AB.
Project Manager, Task Manager and Fund Management Officer responsiveness to financial requests during the evaluation process	HS	Prompt responses by the CTCN team. Assessment by the evaluation team.
Overall rating	S	

Table 17. CTCN secured funding sources 2013-2022^{129 130 131}

Source of funding	Details	Total 2013-2022
Cash		
Environment Fund (EF) activity budget		
Regular Budget (RB) activity budget		
TOTAL EF/RB BUDGET		
Extra Budgetary Funding (XB) (posts + non-post + Programme Support Cost (PSC))		
	Austria	581 165
	Canada	4 357 277
	Denmark	11 241 061
	European Commission	14 429 687
	Finland	216 640
	Germany	3 829 384
	Ireland	216 548
	Italy	849 653
	Japan	13 772 844
	Norway	8 499 850
	Republic of Korea	5 587 866
	Spain	394 802
	Sweden	1 118 988
	Switzerland	3 967 071
	UK	1 382 682
	USA	7 930 308
	Adaptation fund	4 089 455
	NDC Partnership	649 793
	UNDP togo	250 000
	PSC (above figures are inclusive of PSC)	
	Unsecured XB funding	
TOTAL XB BUDGET		83 365 075
In-kind		
Environment Fund post costs		
Regular Budget post costs		
UNIDO RB		1 238 817
GCF		9 990 946
GEF		2 740 149
TOTAL IN-KIND BUDGET		13 969 911
Co-financing		
Co-financing cash contribution	<i>[Partner pro bono contributions to the CTCN are not processed in the UNEP administrative system]</i>	
Co-financing in-kind contribution		
TOTAL SECURED BUDGET		97 334 987

Source: CTCN Finance Team.

Table 18. Estimated cost and expenditure as per the CTCN Annual Operational Plan and the related reporting including PSC

Year	Estimated cost at design (Annual Operation Plan) /USD	Actual Cost/Expenditure / USD	Expenditure ratio (actual/planned)
2013		383 674	
2014	6 000 000	5 836 203	97 %
2015	14 500 000	4 155 809	29 %

¹²⁹ The CTCN Trust Fund is valid for the life span of the ongoing PoW.

¹³⁰ Funding was received for CTCN through UNEP and UNIDO until 2022. Since the ProDoc revision of 2022, the CTCN donor agreements with UNIDO were closed, and refunds were made accordingly.

¹³¹ GCF and GEF funds are part of this project, since they fund technical assistance requests (instead of being funded by the CTCN Trust fund, the TA requests are funded by the GCF Readiness and GEF allocations).

2016	18 980 000	6 990 231	37 %
2017	13 700 000	9 614 150	70 %
2018	9 110 000	8 673 263	95 %
2019	9 210 000	6 128 969	67 %
2020	10 000 000	8 590 462	86 %
2021	10 003 800	10 505 432	105 %
2022	10 003 800	11 058 031	111 %

Source: CTCN Finance Team.

Table 19. Project expenditure by UNEP expense categories 2013–2022

CTCN expenditure compiled based on the FINAL STATEMENTS OF INCOME AND EXPENDITURE (in USD)												
	2013	2014	2015	Adjustments	2016	2017	2018	2019	2020	2021	2022	Total 2013-2022
EXPENDITURE												
Staff and Personnel Costs	258 483	588 119	601 000	-30 128	828 678	1 313 703	1 514 822	2 261 129	1 789 993	1 834 755	2 050 461	13 011 015
Consultants		212 700	360 942	-59 919	281 736	0	0	0	0	0	0	795 459
Contractual Services (Implementing Partners)	107 496	4 596 659	2 781 712	5 469 980	4 288 669	5 409 661	1 918 415	2 867 512	6 049 015	8 340 507	8 245 917	50 075 543
Contractual Services (Commercial)		10 000		224	68 735	145 833	82 886	61 044	153 546	1 596	28 189	552 053
Travel		248 992	271 195	-41 174	191 473	301 184	178 572	474 256	1 040	17 087	548 688	2 191 313
Meetings and Conferences	3 089	43 052	33 453	45 368	168 584	0	0	204 141	21 364	(17 550)	0	519 051
Acquisitions		44 505		6 989	21 081	16 931	11 306	10 462	8 748	24 455	43 233	187 710
Rentals		64 002		384	18 000	0	0	0	0	0	0	82 386
Operating Expenses	1 695	14 277	106 880	5 941	126 495	256 124	90 226	250 426	566 756	304 581	141 542	1 864 943
Reporting Costs	0	0	0	0	0	0	0	0	0	0	0	0
Sundry	143	5 135	626	-143	0	0	0	0	0	0	0	5 761
Foreign Exchange Loss	12 768	8 762	0	-202	0	0	0	0	0	0	0	21 328
TOTAL EXPENDITURE excluding PSC	383 674	5 836 203	4 155 809	5 397 320	5 993 451	7 443 436	3 796 227	6 128 969	8 590 462	10 505 432	11 058 031	69 289 014
PSC	23 111	522 652	377 183	507 644	561 102	655 909	244 963	530 542	541 587	787 990	977 661	5 730 344
TOTAL	406 785	6 358 855	4 532 992	5 904 964	6 554 553	8 099 345	4 041 190	6 659 511	9 132 049	11 293 421	12 035 693	75 019 358
2018 refund USD 101 643 2020, 2021 and 2021 present the total including UNIDO and UNEP inline with the financial statements. UNIDO expense categories adjusted with UNEP's 2018 statement specifies UNIDO expenses and income separately 2013 – 2016 figures have been compiled based on STATEMENT OF INCOME AND EXPENDITURE (PRELIMINARY), FOR THE PERIOD 1 January 2013 - 31 December 2016												

Source: Prepared by the Evaluation Team based on financial statements available.

Table 20. Project budget and expenditure by CTCN service categories 2018–2022 in USD

	2018		2019		2020		2021		2022		2018-2022		
	Budget	Exp	Budget	Exp	Budget	Exp	Budget	Exp	Budget	Exp	Budget	TOTAL EXP	
Requests coordination, refinement, support	540 000	48 039	590 000	256 683	540 000	626 138	550 000	734 367	550 000	597 645	2 770 000	2 262 872	
Requests implementation	4 360 000	4 970 128	4 460 000	2 368 023	4 300 000	5 388 772	4 800 000	6 814 272	4 800 000	6 716 207	22 720 000	26 257 402	
TOTAL - Technical Assistance total	4 900 000	5 018 167	5 050 000	2 624 706	4 840 000	6 014 910	5 350 000	7 548 639	5 350 000	7 313 852	25 490 000	28 520 274	112 %
Outreach and Communication	120 000	224 735	200 000	158 534	170 000	173 301	240 800	262 028	240 800	186 667	971 600	1 005 265	
CTCN NDEs and Networking Engagement	410 000	500 459	550 000	397 867	1 000 000	298 306	480 000	83 933	480 000	412 224	2 920 000	1 692 789	
Stakeholder Engagement	180 000	79 253	180 000	130 854	330 000	-349	600 000	248 072	600 000	530 194	1 890 000	988 024	
TOTAL - Outreach, Networking & Stakeholder Eng.	710 000	804 447	930 000	687 255	1 500 000	471 258	1 320 800	594 033	1 320 800	1 129 085	5 781 600	3 686 078	64 %
KMS Technical Development (covers all KM after 2020)	180 000	-6 021	300 000	109 132	290 000	76 273	453 000	180 842	453 000	256 220	1 676 000	616 446	
KMS Content Development	290 000	225 344	0	64 054	0	278 424	0	0	0	0	290 000	567 822	
Capacity Building activities and materials	470 000	765 212	470 000	472 121	900 000	651 678	450 000	424 321	450 000	461 784	2 740 000	2 775 116	
Monitor and Evaluation	60 000	0	60 000	35 802	70 000	65 087	30 000	6 033	30 000	101 925	250 000	208 847	
TOTAL - KMS, peer learning and capacity building	1 000 000	984 535	830 000	681 109	1 260 000	1 071 462	933 000	611 196	933 000	819 929	4 956 000	4 168 231	84 %
CTCN operations	2 300 000	1 699 121	2 200 000	1 954 168	2 200 000	1 027 937	2 200 000	1 636 088	2 200 000	1 637 583	11 100 000	7 954 897	
AB Meetings and other UN meetings	200 000	166 993	200 000	181 731	200 000	4 895	200 000	115 476	200 000	157 582	1 000 000	626 677	
TOTAL - CTCN Operations	2 500 000	1 866 114	2 400 000	2 135 899	2 400 000	1 032 832	2 400 000	1 751 564	2 400 000	1 795 165	12 100 000	8 581 574	71 %
TOTAL	9 110 000	8 673 263	9 210 000	6 128 969	10 000 000	8 590 462	10 003 800	10 505 432	10 003 800	11 058 031	39 217 600	44 956 157	115 %
		95 %		67 %		86 %		105 %		111 %			
Probono contributions				419 948		719 190		378 000		819 000		2 336 138	

Source: Prepared by the Evaluation Team based on CTCN/ Advisory Board documentation.

Table 21. Copy of the table for EC grant as per the revised budget and expenditure by expense categories

Annex 3: Budget for the Action

Annex III UNEP Budget Categories : EURO	Total (EUR) + Proposed Addendum III			Total (USD)			Final Expenses (USD)	Variance (USD)	Notes	
	Addendum II	Variance	Revised	Addendum II	Variance	Revised				
10 PERSONNEL COMPONENT										
1,100 Project personnel										
1,101 Capacity building and Knowledge Manager (P4)	657,871	- 103,170	554,700	718,529	- 112,683	605,846				
1,102 Climate Technology Manager (P4)	650,535	127,278	777,813	710,516	139,014	849,530				
1,199 Sub-total	1,308,405	24,108	1,332,513	1,429,045	26,331	1,455,376				
1,200 Consultants	-			-		-				
1,201 Consultants	27,710	37,571	65,281	30,265	41,035	71,300				
1,299 Sub-total	27,710	37,571	65,281	30,265	41,035	71,300	1,946,598.72	-113,598.12	the difference of \$99,999 vis a vis the Official Financial Statement has been added against the budget for Evaluation	
1,300 Administrative support	-			-		-				
1,301 Administrative (GS)	277,852	2,612	280,465	303,471	2,853	306,325				
1,399 Sub-total	277,852	2,612	280,465	303,471	2,853	306,325				
1,600 Travel on official business	-			-		-				
1,601 12 mission/year	39,413	- 12,485	26,928	43,047	- 13,636	29,411	30,852.02	-1,441.02		
1,699 Sub-total	39,413	- 12,485	26,928	43,047	- 13,636	29,411				
Component total	1,653,381	51,806	1,705,187	1,805,829	56,583	1,862,412				
20 SUB-CONTRACT COMPONENT										
2,200 Sub-contracts (SSFAs/PCAs)										
2,201 Sub-contracts with technology centres/organisations	4,439,322	- 6,290	4,433,032	4,848,645	- 6,870	4,841,774	4,801,752.80	40,021.40		
2,299 Sub-total	4,439,322	- 6,290	4,433,032	4,848,645	- 6,870	4,841,774				
2,999 Component total	4,439,322	- 6,290	4,433,032	4,848,645	- 6,870	4,841,774				
30 TRAINING COMPONENT										
3,300 Meetings/Conferences										
3301 Sub-contracts for conferences & 2200 travel for meeting participants	244,601	- 34,429	210,172	267,154	- 37,604	229,550	234,689.36	-5,139.23		
3,399 Sub-total	244,601	- 34,429	210,172	267,154	- 37,604	229,550				
3,999 Component total	244,601	- 34,429	210,172	267,154	- 37,604	229,550				
50 MISCELLANEOUS COMPONENT										
5,300 Communications										
5,301 Communications	104,753	- 11,086	93,666	114,411	- 12,109	102,303	23,184.08	79,118.49		
5,399 Sub-total	104,753	- 11,086	93,666	114,411	- 12,109	102,303				
5,500 Evaluation										
5,501 Evaluation	100,000	-	100,000	109,220	-	109,220	99,999.00	9,221.38		
5,599 Sub-total	100,000	-	100,000	109,220	-	109,220				
5,999 Component total	204,753	- 11,086	193,666	223,632	- 12,109	211,523				
Sub-total	6,542,056	0	6,542,056	7,145,259	0	7,145,259	7,137,075.98			
PSC	0	457,944	457,944	500,168		500,168	499,595.32			
99 GRAND TOTAL	7,000,000		7,000,000	7,645,427		7,645,427	7,636,671.30	8,755.71	To be refunded to EC	

Annex 3 of contract DCI-ENV/2016/377-145

Source: Annex to final reporting to the EC.

ANNEX VIII. EVALUATION MATRIX

The evaluation followed the evaluation matrix. This matrix was designed to reflect UNEP guidance, evaluation criteria and key strategic questions (KSQ) as reflected in the Evaluation ToR, ERG and Evaluation Team meetings, initial KIIs and initial desk study. The evaluation criteria marked with alphabets and roman numbers are subject to the UNEP rating (UNEP tools 1-4). **Red color reflects key strategic questions (KSQ) of the TOR and green reflects priorities from the UNEP tools, Evaluation Reference Group (ERG) meetings and initial Key Informant Interviews (KIIs).** The matrix presents all the aspects needed to be covered, but it may be further adjusted to fit to the evaluation needs and own working style by the criteria responsible, as long as the key information needs are respected.

Table 22. Evaluation matrix

Evaluation Criteria (to which rating applies)	Evaluation sub-questions	Judgement criteria / Indicators	Data sources
A. Strategic Relevance: Is CTCN doing the right things?			
i. Alignment to the UNEP Medium Term Strategy (MTS), Programme of Work (PoW) and Strategic Priorities	A1. How well aligned was CTCN to the UNEP strategies and priorities?	Degree of alignment with the MTS and PoW, under which the Programme was approved, including: <ul style="list-style-type: none"> The scale and scope of any contributions made to the planned results reflected in the relevant MTS and PoW. Degree of alignment with UNEP strategic priorities, including the Bali Strategic Plan for Technology Support and Capacity Building (BSP) and South-South Cooperation (S-SC).	Desk study; KIIs
ii. Alignment to Donor/Partner Strategic Priorities	A2. How well aligned was CTCN to the Donor/Partner Strategic Priorities?	The degree to which CTCN was suited to, or responded to the EC as expressed in the funding agreement and other donor priorities. KSQ.a. What has been the added value of the EC grant in achieving CTCN's objectives?	Desk study; KIIs
iii. Relevance to UNFCCC Mandate and the Technology Mechanisms of the UNFCCC	A3. How well aligned CTCN was to UNFCCC Mandate and the Technology Mechanisms	Degree of alignment of the UNEP ProDoc and the EC funding agreement to:	Desk study; KIIs;

Evaluation Criteria (to which rating applies)	Evaluation sub-questions	Judgement criteria / Indicators	Data sources
and Other Environmental Priorities	of the UNFCCC and Other Environmental Priorities?	<ul style="list-style-type: none"> The CTCN mandate under the UNFCCC and 1/CP.16 (with focus on paragraph 123). The Technology mechanism of the UNFCCC The SDGs and Agenda 2030 Degree to which CTCN is suited, or responding to <ul style="list-style-type: none"> Environmental concerns Needs of the countries. <p>KSQ.c. To what extent do the operations of the CTCN and activities implemented under the UNEP programme and EC funding agreement reflect the UNFCCC mandate?</p>	Sub-project sampling; Field visits
iv. Complementarity with Relevant Existing Interventions/Coherence	A4. How coherent CTCN was with the other relevant interventions?	Degree of how well the activities under the UNEP ProDoc and EC grant took account of ongoing and planned initiatives that address similar needs of the same target groups, including optimizing synergies and avoiding duplication of effort: <ul style="list-style-type: none"> Under the Climate Action sub-programme; Other UNEP sub-programmes; Or being implemented by other agencies within the same country, sector or institution. 	Desk study; KIIs Sub-project sampling; Field visits
	A5. Did CTCN include human rights and gender considerations?	Degree to which CTCN has applied the UN Common Understanding on the human rights-based approach (HRBA) and the UN Declaration on the Rights of Indigenous People. <ul style="list-style-type: none"> Within these human rights context; degree to which CTCN adheres to UNEP’s Policy and Strategy for Gender Equality and the Environment. Degree to which CTCN background/ context included a discussion of appropriate gender-related processes (policies, plans) or trends and links with the programme theme;	Desk study; KIIs

Evaluation Criteria (to which rating applies)	Evaluation sub-questions	Judgement criteria / Indicators	Data sources
		<p>Whether the programme consulted with gender or marginalized groups in design, implementation, etc. as appropriate;</p> <p>Existence of budget lines for gender related activities or specialists; The extent to which gender-related challenges and entry-points were addressed.</p>	
	<p>A6. Were there any significant changes and was CTCN flexible in those changes?</p>	<p>Existence and reasons for changes; Extent of its influence on relevance and effectiveness.</p> <p>What was the role of UNIDO in CTCN? Why and how did it change over time? Extent of its influence on relevance and effectiveness.</p> <p>KSQ.d. What changes were made to adapt to the effects of COVID-19 and how might these changes have affected the programme’s performance? Were there any opportunities the pandemic enabled?</p>	<p>Desk study;</p> <p>KIIs;</p> <p>Sub-project sampling;</p> <p>Field visits</p>
<p>B. Quality of Programme Design: How well was the Programme designed?</p>			
	<p>B1. To what extent was CTCN design suitable for achieving the envisaged outcomes in its timeframe?</p>	<p>Follows indicators/criteria and assessment from the Programme Design Quality Assessment (PDQA): Final evaluation ratings table (as item B) in the Main Evaluation Report.</p>	<p>Desk study;</p> <p>KIIs</p>
<p>C. Nature of External Context: How did the nature of external context influence CTCN?</p>			
	<p>C1. How did the nature of external context influence CTCN?</p>	<p>Follows indicators/criteria and assessment from the PDQA: Final evaluation ratings table as item C: Rating is established for the programme’s external operating context considering</p> <ul style="list-style-type: none"> - the prevalence of conflict, - natural disasters and - political upheaval 	<p>Desk study;</p> <p>KIIs;</p> <p>Sub-project sampling;</p>

Evaluation Criteria (to which rating applies)	Evaluation sub-questions	Judgement criteria / Indicators	Data sources
		Existence and usability of risk register for CTCN.	Field visits
D. Effectiveness: Did CTCN achieve its results?			
i. Availability of Outputs	D1. Did CTCN deliver its programmed outputs and milestones towards the intended beneficiaries?	<p>Degree of success in producing the programmed outputs (both quantity and quality); Degree of success in achieving milestones as per the programme design document and the UNEP/EC project/grant document to fund the CTCN.</p> <p>Extent to which outputs were made available to the intended beneficiaries (ownership by, and usefulness to, intended beneficiaries and the timeliness of their provision);</p> <p>The reasons behind the success or shortcomings of the Programme in delivering its programmed outputs and meeting expected quality standards.</p>	<p>Desk study;</p> <p>KIIs;</p> <p>Sub-project sampling;</p> <p>Field visits</p>
ii. Achievement of Programme Outcomes	D2. Did CTCN deliver its outcomes?	<p>Degree of success in meeting the programmed outcomes;</p> <p>Degree of meeting the outcomes that are most important for attaining intermediate states; Performance against the Programme outcomes.</p> <p><i>(Or, in cases of normative work or where several actors are collaborating to achieve common outcomes:)</i></p> <p>The nature and magnitude of UNEP’s substantive contribution’ and/or ‘credible association’ established between Programme efforts and the Programme outcomes.</p> <p>Whether the results were scaled up or replicated.</p>	<p>Desk study;</p> <p>KIIs;</p> <p>Sub-project sampling;</p> <p>Field visits</p>

Evaluation Criteria (to which rating applies)	Evaluation sub-questions	Judgement criteria / Indicators	Data sources
		<p>The degree to which the model projects were programmed to be replicated.</p> <p>Substantive amendments to the formulation of Programme outcomes for an assessment of performance.</p>	
iii. Likelihood of Impact	D3. What difference did CTCN make?	<p>The degree or likelihood of the intended, positive impacts becoming a reality;</p> <p>Existence of unintended positive effects; Degree of their causal linkages to the intended impact described.</p> <p>Existence of catalytic actions triggered at national, regional, and global levels.</p> <p>The degree or likelihood that CTCN operations may lead, or contribute to, unintended negative effects (e.g., will vulnerable groups such as those living with disabilities and/or women and children, be disproportionately affected by the Programme/ projects).</p> <p>The likelihood of the CTCN making a substantive contribution to the long-lasting changes.</p> <p>KSQ.d. Are there examples of estimates of actual impacts (as opposed to anticipated impacts) and socioeconomic co-benefits of CTCN's technical assistance and what is the feasibility of and resources needed to provide such impact assessments and ex-post evaluations in the future?</p>	<p>Desk study;</p> <p>KIIs;</p> <p>Sub-project sampling;</p> <p>Field visits</p>
E. Financial Management: Was the programme's financial management functional?			

Evaluation Criteria (to which rating applies)	Evaluation sub-questions	Judgement criteria / Indicators	Data sources
	E1. Was CTCN adherent to UNEP’s financial policies and procedures?	The degree of adherence to UNEP’s financial policies and procedures (programme and grant managed by UNEP); Degree of the application of proper financial management standards and adherence to UNEP’s financial management policies.	Desk study; KIIs;
	E2. Was CTCN’s financial information complete?	The actual spend across the life of the programme of funds secured from all donors; Whether standard financial documentation is missing, inaccurate, incomplete or unavailable in a timely manner.	Desk study; KIIs;
	E3. Was the communication between financial and programme management staff adequate?	The degree of communication between the Programme Manager and the Fund Management Officer as it relates to the effective delivery of the planned Programme and the needs of a responsive, adaptive management approach.	Desk study; KIIs;
	E4. Were there any constrains in the financial management?	Any financial management issues that have affected the timely delivery of the Programme or the quality of its performance.	Desk study; KIIs;
F. Efficiency: Did CTCN conduct its operations in the right (cost-effective) way?			
	F1. Was CTCN implemented in the most cost-efficient way?	The degree to which the activities under the UNEP ProDoc and EC funding agreement delivered maximum results from the given resources; The cost-effectiveness and timeliness of execution; Whether the Programme was implemented in the most efficient way compared to alternative interventions or approaches. Degree of efforts made by the Programme/project teams during implementation to make use of/build upon pre-existing work to increase efficiency.	Desk study; KIIs; Sub-project sampling; Field visits

Evaluation Criteria (to which rating applies)	Evaluation sub-questions	Judgement criteria / Indicators	Data sources
	F2. Were the Programme extensions necessary and cost-efficient?	<p>The factors underpinning the need for any Programme extensions;</p> <p>Advantages and disadvantages of cost extensions; Degree to which any Programme extension could have been avoided through stronger Programme management;</p> <p>Existence of any negative impacts caused by Programme delays or extensions.</p>	Desk study; KIIs
	F3. Did CTCN successfully apply preparation and readiness in its operations? <i>(from criteria I)</i>	<p>Degree to which appropriate measures were taken to either address weaknesses in the Programme design or respond to changes that took place between Programme approval, the securing of funds and mobilization;</p> <p>The nature and quality of engagement with stakeholder groups by the Programme Team;</p> <p>The confirmation of partner capacity and development of partnership agreements as well as initial staffing and financing arrangements.</p>	Desk study; KIIs; Sub-project sampling; Field visits
	KSQ.b. To what extent is the Advisory Board, NDEs and Network members engaged in planning and implementation to ensure the efficient delivery of CTCN's services?		
	KSQ.f. How are members' sector and geographical expertise engaged in the Network to ensure the efficient delivery of CTCN's services?		Desk study; KIIs; Sub-project sampling; Field visits
G. Monitoring and Reporting: Did the Programme succeed in its monitoring and reporting?			
i. Monitoring Design and Budgeting	G1. Did CTCN succeed in monitoring design and budgeting?	The existence of a sound monitoring plan, including:	Desk study; KIIs

Evaluation Criteria (to which rating applies)	Evaluation sub-questions	Judgement criteria / Indicators	Data sources
		<ul style="list-style-type: none"> • Degree of design to track progress against SMART results towards the provision of the Programme’s outputs and achievement of Programme outcomes, • Degree of inclusion of a level disaggregated by gender, marginalization or vulnerability, including those living with disabilities. <p>The degree of relevance and appropriateness of the Programme indicators used in the project document and grant; The methods used for tracking progress against them as part of conscious results-based management;</p> <p>The degree of quality of the design of the monitoring plan; The funds allocated for its implementation.</p>	
ii. Monitoring of Programme Implementation	G2. Did CTCN succeed in monitoring of implementation?	<p>Assessment of the quality of the monitoring design against the TOC and the implementation of the project’s monitoring system.</p> <p>Degree of the monitoring system’s operational level, including;</p> <ul style="list-style-type: none"> • Degree to which it facilitated the timely tracking of results and progress towards Programme objectives throughout the Programme implementation period; • Degree to which the Programme gathered relevant and good quality baseline data that is accurately and appropriately documented. <p>The quality of the information generated by the monitoring system during Programme implementation, including;</p> <ul style="list-style-type: none"> • How it was used to adapt and improve Programme execution, achievement of outcomes and ensure sustainability. <p>Degree to which the funds allocated for monitoring were used to support this activity.</p>	Desk study; KIIs; Sub-project sampling; Field visits

Evaluation Criteria (to which rating applies)	Evaluation sub-questions	Judgement criteria / Indicators	Data sources
		<p>Degree to which the previous evaluations’ and assessments recommendations were effectively monitored and implemented;</p> <p>Degree to which the CTCN incorporate feedback from beneficiaries and stakeholders to improve its services.</p>	
iii. Programme Reporting	G3. Did CTCN succeed in reporting?	<p>The degree to which reporting commitments to UNEP and the EC have been fulfilled.</p> <p>Degree to which reporting has been carried out with respect to the effects of CTCN on disaggregated groups; Whether monitoring and reporting reflected gender-differentiated achievements/challenges; Whether the intentions assessed with the gender marker score were, in fact, included in monitoring practices and implemented.</p> <p>Whether additional requirements to report regularly to funding partners were required and met by the Programme team.</p>	Desk study; KIIs
H. Sustainability: Are the changes estimated to last?			
i. Socio-political Sustainability	H1. Did CTCN achieve socio-political sustainability?	<p>The degree to which social or political factors support the continuation and further development of the benefits derived from Programme outcomes;</p> <p>The degree of ownership, interest and commitment among government and other stakeholders to take the Programme achievements forwards.</p> <p>Whether capacity development efforts are likely to be sustained (priority interest).</p>	Desk study; KIIs; Sub-project sampling; Field visits

Evaluation Criteria (to which rating applies)	Evaluation sub-questions	Judgement criteria / Indicators	Data sources
ii. Financial Sustainability	H2. Did CTCN achieve financial sustainability?	The degree to which both Programme outcomes and the outcomes specified in the EC grant are dependent on future funding for the benefits they bring to be sustained.	Desk study; KIIs
iii. Institutional Sustainability	H3. Did CTCN achieve institutional sustainability?	<p>The degree to which the sustainability of Programme outcomes (especially those relating to policies and laws) is dependent on issues relating to institutional frameworks and governance;</p> <p>Whether institutional achievements* are robust enough to continue delivering the benefits associated with the Programme outcomes after Programme closure;</p> <p>Whether institutional capacity development efforts are likely to be sustained.</p>	Desk study; KIIs; Sub-project sampling; Field visits
I. Factors Affecting Programme Performance and Cross-Cutting Issues (only those which are not addressed in earlier criteria)			
ii. Quality of Programme Management and Supervision	I1. Did the Programme successfully apply Quality of Programme Management and Supervision in its operations?	<p>The effectiveness of Programme management with regards to:</p> <ul style="list-style-type: none"> - providing leadership towards achieving the planned outcomes; - managing team structures; - maintaining productive partner relationships (including Steering Groups, etc.); - maintaining Programme relevance within changing external and strategic contexts; - communication and collaboration with UNEP colleagues; - risk management; - use of problem-solving; - Programme adaptation and overall execution. <p>Evidence of adaptive management should be highlighted.</p>	Desk study; KIIs

Evaluation Criteria (to which rating applies)	Evaluation sub-questions	Judgement criteria / Indicators	Data sources
iii. Stakeholder Participation and Cooperation	I2. Did the Programme successfully apply Stakeholder Participation and Cooperation in its operations?	<p>The quality and effectiveness of all forms of communication and consultation with stakeholders throughout the Programme life;</p> <p>The support given to maximize collaboration and coherence between various stakeholders, including sharing plans, pooling resources and exchanging learning and expertise;</p> <p>The inclusion and participation of all differentiated groups, including gender groups; <i>Analysis of the indirect beneficiaries of the programme (incl. gender and marginalized groups).</i></p>	<p>Desk study;</p> <p>KIIs;</p> <p>Sub-project sampling;</p> <p>Field visits</p>
v. Environmental and Social Safeguards	I3. Did CTCN successfully apply Environmental and Social Safeguards in its operations?	<p>Whether UNEP requirements were met to:</p> <ul style="list-style-type: none"> - review risk ratings on a regular basis; - monitor Programme implementation for possible safeguard issues; - respond (where relevant) to safeguard issues through risk avoidance, minimization, mitigation or offsetting and report on the implementation of safeguard management measures taken. <p><i>Degree to which any issues arising from the Programme environmental/ risk assessment impact in relation to gender and marginalized groups were integrated.</i></p> <p>The extent to which the management of the Programme minimized UNEP’s environmental footprint.</p>	<p>Desk study;</p> <p>KIIs;</p> <p>Sub-project sampling;</p> <p>Field visits</p>
vi. Country Ownership and Driven-ness	I4. Did CTCN successfully apply Country Ownership and Driven-ness in its operations?	<p>The quality and degree of engagement over outputs and outcomes and that is necessary for long-lasting impact to be realized:</p> <ul style="list-style-type: none"> • Of the NDEs and Network members who are directly involved in Programme implementation and execution of CTCN Programme activities, • Of those official representatives whose cooperation is needed for change to be embedded in their respective institutions and offices (e.g., representatives from multiple 	<p>Desk study;</p> <p>KIIs;</p> <p>Sub-project sampling;</p> <p>Field visits</p>

Evaluation Criteria (to which rating applies)	Evaluation sub-questions	Judgement criteria / Indicators	Data sources
		<p>sectors or relevant ministries beyond Ministry of Environment).</p> <ul style="list-style-type: none"> All gender and marginalized groups. <p>Whether capacity (logistics, skills and connectivity) of NDEs exists to access information and data from the Knowledge Management system for appropriate dissemination; Whether they are facilitated to enhance communication and outreach.</p>	
vii. Communication and Public Awareness	15. Did CTCN successfully apply Communication and Public Awareness in its operations?	<p>The degree of effectiveness of:</p> <ul style="list-style-type: none"> Communication of learning and experience sharing between Programme partners and interested groups arising from the Programme during its life and Public awareness activities that were undertaken during the implementation of the Programme to influence attitudes or shape behavior among wider communities and civil society at large. <p>Degree to which existing communication channels and networks were used effectively, including</p> <ul style="list-style-type: none"> Meeting the differentiated needs of gendered or marginalized groups, Whether any feedback channels were established. <p>Degree to which knowledge sharing platforms have been established under the Programme, and if so, the sustainability of the communication channel under either socio-political, institutional or financial sustainability, as appropriate.</p>	<p>Desk study;</p> <p>KIIs;</p> <p>Sub-project sampling;</p> <p>Field visits</p>

Evaluation Criteria (to which rating applies)	Evaluation sub-questions	Judgement criteria / Indicators	Data sources
		Degree to which the EU communication requirements were achieved for the EC Grant in light of the Annex IV ¹³² .	
Conclusions, lessons learned and recommendations			
Conclusions, lessons learned and recommendations	What are the key conclusions, lessons learned and recommendations arising from the evaluation?	Identify the key conclusions. Identify the key lessons learned. Identify the key recommendations.	

¹³² The “Annex VI: Communication and Visibility Plan” is integral part of the EC grant agreement (building on the requirements of the “Communication and Visibility Requirements for EU External Actions”).

ANNEX IX. BRIEF CV OF EVALUATION TEAM

Maria Kontro

Profession	Evaluation Consultant
Nationality	Finnish
Country experience	<ul style="list-style-type: none"> • Europe: Finland, Italy • Africa: Mozambique, Tanzania • Americas: Nicaragua, Honduras, Panama, Ecuador, Chile, the Caribbean Region • Asia: Nepal, Bangladesh
Education	<ul style="list-style-type: none"> • Master of Science in Development Geography, University of Helsinki, Finland

Short biography

Maria Kontro holds a MSc in Development Geography and Global Political Economy, as well as over 30 specialization courses on evaluations and her thematic areas of work. She has close to 15 years of professional experience in working as an advisor, project manager and a consultant for companies and international organizations, including several UN offices, European Commission and the World Bank. Maria’s experience as a researcher and her on-site work in four different continents has enabled her to find context-specific solutions for complex phenomena. Maria speaks fluent English, Spanish and Finnish.

Key specialties and capabilities:

Maria’s main thematic focus areas are within the interconnections between disaster risk reduction, climate change and sustainable development, and she excels in combining them with people-centered methodologies on gender and inclusion to enable more meaningful results. Maria has also worked with several large projects and global initiatives related to the private sector role in development and climate risk. Her strong thematic background combined with experience in evaluations and monitoring systems supports her view on the importance of research-oriented approaches to address the goals of the Agenda 2030.

Selected assignments and experiences

- **UNDRR.** Disaster Risk Reduction Advisor for the Caribbean Region. 2018-2020.
- **The World Bank Group.** Climate Risk and Early Warning Systems (CREWS) Consultant. 2020-2021.
- **OCHA-UNDP Connecting Business initiative.** Development of a new rising field of the triangular interconnection between gender, private sector and disaster management through research and international dialogues. 2020-2021.
- **WFP.** Coordination of an UN inter-agency Team, Nicaragua. 2011-2013.

Independent evaluations (only selected ones):

- UNDRR – Principal Evaluator for the Caribbean report and two thematic reports. Mid-Term Review of the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 (2022).
- United Nations Global Compact – Principal Evaluator. Evaluation of the Target Gender Equality Accelerator Programme (2023).
- Ministry for Foreign Affairs (MFA) of Finland (2009). Evaluation of Natural Disasters and Climate Change in Finnish Aid from the Perspective of Poverty Reduction (2009).
- MFA Finland (2021). Evaluation of Climate-focused Institutional Cooperation Instrument (ICI) Projects in Afghanistan, Bhutan, India, and Nepal (2021).
- MFA Finland. Evaluation of the Finnish Development Policy Influencing in the European Union (2022).

Saila Toikka

Profession	Independent consultant
Nationality	Finland
Country experience	<ul style="list-style-type: none"> • Europe: Finland, Netherlands • Africa: Kenya, Tanzania • Asia: Uzbekistan, Afghanistan
Education	<ul style="list-style-type: none"> • Master’s Degree in Public Administration, University of Tampere, Finland

Short biography

Saila Toikka has over 13 years of professional experience, mainly as a monitoring and evaluation specialist in international development working for UNEP, UNDP and the Non-governmental sector and as a consultant in the donor interface. As an Evaluation Officer with UNEP, she managed altogether 15 UNEP evaluations focusing on the GEF- portfolio relating to climate change and the energy sector as well as chemicals and waste programming. In addition, she has been an evaluation team member in multiple in-depth evaluations, including the evaluation of the International Resource Panel hosted by UNEP; Finland’s International Climate Finance, and other strategic evaluations of Finland’s development policy and programming. She also worked as an M&E specialist for UN programmes in Uzbekistan and Afghanistan and for Finland’s largest development cooperation NGO head office advising in monitoring and data collection approaches for in resilience, governance, and development programming in fragile contexts.

Key specialties and capabilities:

- Theory-based evaluation approaches; qualitative evaluation methods; Monitoring and evaluation systems; climate change adaptation metrics; climate finance.

Selected assignments and experiences:

- UNDP Afghanistan, 2019 – 2020
- UNEP environment and security unit, 2018-2020
- UNEP Evaluation Office, 2015-2018
- UNDP Uzbekistan, 2013-2015

Independent evaluations:

- Evaluation of Finland’s International Climate Finance 2016-2022, Ministry for Foreign Affairs of Finland, Helsinki, Finland - Evaluation Team Member (2023)
- Evaluation of Finnish Humanitarian Assistance 2016–2022. Ministry for Foreign Affairs of Finland, Helsinki, Finland - Evaluation Team Member (2022)
- Assessment of the Response of Finnish Development Policy and Cooperation to the COVID-19 Pandemic. Ministry for Foreign Affairs of Finland, Helsinki, Finland - Evaluation Team Member (2022)
- Evaluation of Development Cooperation carried out by the Department for Russia, Eastern Europe, and Central Asia, including the Wider Europe Initiative. Ministry for Foreign Affairs of Finland, Helsinki, Finland - Evaluation Team Member (2021)
- Evaluation of the UNEP Project: Science-policy interface in support of Resource Efficiency (International resource panel evaluation) UNEP Evaluation Office, Nairobi, Kenya - Evaluation Team Member (2016).

Kevin Enongene

Profession	Associate Partner at FOKABS INC
Nationality	Cameroonian
Country experience	<ul style="list-style-type: none"> • Europe: Germany • Africa: South Africa, Central Africa Republic (CAR), Chad, Democratic Republic of Congo (DRC), Djibouti, Ethiopia, Malawi, Mauritania, Nigeria, Guinea, Ghana, Cote d’Ivoire, Togo, and Uganda. • Americas: Canada, Caribbean (Grenada, Dominica, Jamaica, Belize, Barbados and Guyana) • Oceania: Australia, New Zealand
Education	<ul style="list-style-type: none"> • MSc. In Carbon Management (University of Edinburgh, UK) • MSc in Environmental Management (Massey University, New Zealand) • MSc. In Natural Resources Management (University of Buea, Cameroon)

Short biography

Kevin Enongene is an Associate Partner at FOKABS, a Canadian-based climate change consulting firm. He has 12+ years of professional experience spanning Africa, Europe, Australasia, and the Americas in the areas of climate change vulnerability, adaptation, mitigation, renewable energy, natural resource, climate finance, GCF and GEF projects development and evaluation. He has led and provided climate change advisory services in 50+ countries to organizations such as the World Bank, World Economic Forum, African Development Bank, Caribbean Development Bank, GCF, and United Nation agencies (UNDP, UNIDO, UNICEF, UNOPS, FAO).

Key specialties and capabilities:

- Climate finance – GCF and GEF project development
- Project monitoring and evaluations
- Climate vulnerability assessments

Selected assignments and experiences (selected):

- **GWP:** Team Leader: Development of two GCF concept notes for CAR (2023)
- **ADES:** Team Leader: Training on Green Climate Fund (GCF) procedures (2023)
- **UNDP:** Project Manager: Elaboration of GEF-CEO Endorsement Package for Niger (2022-23)
- **UNDP:** International Environmental & Social Safeguards; GEF Project Elaboration (2022-23)
- **Caribbean Development Bank:** Key Expert: Development of a full GCF proposal on Energy (2022-2023)
- **UNDP: International Consultant:** Climate finance for NDC implement. in Mauritania (2022-23)
- **AfDB:** Project Manager: Development of GCF proposal on climate-smart, Cameroon (2021-22)

Independent evaluations (selected):

UNDP: Team Leader: Final evaluation of a forestry GEF-funded project in Ethiopia (2023)
UNDP: International Consultant: Final evaluation of a renewable energy project in Malawi (2023)
UNDP: Team Leader: Interim evaluation of a UNDP-GCF financed project in Mauritius (2022-2023)
Conservation International: Team Leader – Terminal evaluation of the GEF-funded SBT project (2022)
DBSA: Team Leader: Interim Evaluation of the climate finance facility – GCF financed project (2023)
Conservation International: Team Leader: Terminal evaluation of a GEF-funded project, Ecuador (2022)
UNDP: Team Leader: Terminal evaluation, GEF-funded project implemented by UNDP Djibouti (2022)
UNESCO: Project Manager: Terminal evaluation of a European Union funded project, 9 countries (2021)
Conservation International: Project Manager: Terminal evaluation of a GEF-funded project (2022)
UNDP: Team Leader: Mid-term evaluation of the National Adaptation Plan project of Chad (2021)
WWF Sweden: Team Member: Our City 2030 Project Final Evaluation (2021)
WWF Africa: Mid-term evaluation of leading the change project: Africa Youth Thematic Hub (2021)
Green Climate Fund: Project Coordinator: Review of GCF concept notes & full proposals (2019-2022)
CIDT: Project Coordinator: Monitoring and evaluation of the Citizen Voices for Change project (2017-2021).

ANNEX X. EVALUATION TORS (WITHOUT ANNEXES)

Section 1: PROJECT BACKGROUND AND OVERVIEW

1. Project General Information

Table 1. Project summary

UNEP PIMS ID:	01626		
UNEP UMOJA ID:	SB-000900		
Implementing Partners	UNEP, Consortium Partners and Network Members		
Relevant SDG(s) and indicator(s):	<p>SDG 7, Target 7.3: by 2030, double the global rate of improvement in energy efficiency; target 7.2: by 2030, increase substantially the share of renewable energy in the global energy mix;</p> <p>SDG 1, Target 1.5: by 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events;</p> <p>SDG 13, Target 13.3: improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning and targets 13.1, 13.2;</p> <p>SDGs 6 clean water and sanitation, 12 responsible consumption and production.</p> <p><u>SDGs relevant to EC grant:</u></p> <p>SDG13, Target 13.b: raising capacities for climate-related planning and management</p> <p>SDG 9, Target 9.b support domestic technology development, research and innovation</p> <p>SDG 12, Target 12.a Support to strengthen scientific and technological capacities on sustainable consumption and production</p> <p>SDG 6 Water/ sanitation</p> <p>SDG 7 energy</p> <p>SDG 8 Sustainable economic growth</p> <p>To a lesser extent, SDGs 10 and 11 reduce inequality between countries and resilient cities.</p>		
Sub-programme:	Climate Change	Expected Accomplishment(s):	
UNEP approval date:	27 June 2013	Programme of Work Output(s): [Outcome]	<p>Outcome 1A: Decision-makers at all levels adopt decarbonization, dematerialization and resilience pathways.</p> <p>Outcome 1B: Countries and stakeholders have increased capacity, finance and access to technologies to deliver on the adaptation and mitigation goals of</p>

			the Paris Agreement.
Expected start date:	27 June 2013 EC grant: Start date: 30 November 2016	Actual start date:	27 June 2013
Planned operational completion date:	31 December 2022 EC grant: End date: 31 July 2022	Actual operational completion date:	31 December 2022 EC grant end date: 31 July 2022
Planned total project budget at approval:	USD 114,562,367 EC grant: (EUR 7,000,000) USD 7,645,427	Actual total expenditures reported as of July 2022:	USD 71,131,956 EC grant: USD 7,422,653
Planned Environment Fund allocation:	N/A	Actual Environment Fund expenditures reported as of [date]:	N/A
Planned Extra-Budgetary Financing:	USD 92,254,061	Secured Extra-Budgetary Financing:	USD 83,254,061
		Actual Extra-Budgetary Financing expenditures reported as of 31 July 2022:	USD 74,801,728
First disbursement:	March 2013	Planned date of financial closure:	N/A (request for 3 rd PoW phase is in the process)
No. of formal project revisions:	6 EC grant: 3	Date of last approved project revision:	1 February 2022
No. of Steering Committee meetings:	N/A	Date of last/next Steering Committee meeting:	Last: Next:
Mid-term Review/ Evaluation¹³³ (planned date):	N/A	Mid-term Review/ Evaluation (actual date):	Case study evaluation June 2016
Terminal Evaluation (planned date):	October 2022	Terminal Evaluation (actual date):	November 2022
Coverage - Country(ies):	Global	Coverage - Region(s):	Africa, Asia Pacific, Europe, Latin America & Caribbean, North America, West Asia
Dates of previous project phases:	CTCN formal start June 2013	Status of future project phases:	Request for 3 rd PoW phase is in the process

2. Project Rationale

¹³³ UNEP policies require projects with planned implementation periods of 4 or more years to have a mid-point assessment of performance. For projects under 4 years, this should be marked as N/A.

Mandate

In 2010, the Conference of the Parties decided (Decision 1/CP.16¹³⁴) to establish a Technology Mechanism, under the guidance of, and accountable to, the Conference of the Parties (COP), that included the establishment of a Climate Technology Centre and Network (CTCN).¹³⁵ The Technology Executive Committee (TEC) and the CTCN form the Technology Mechanism of the United Nations Framework Convention on Climate Change (UNFCCC). The TEC is the policy arm of the Technology Mechanism. It focuses on identifying policies that can accelerate the development and transfer of low-emission and climate resilient technologies. The CTCN is the implementation arm of the Technology Mechanism and promotes the accelerated transfer of environmentally sound technologies for low carbon and climate resilient development at the request of developing countries. The CTCN provides technology solutions, capacity building and advice on policy, legal and regulatory frameworks tailored to the needs of individual countries by harnessing the expertise of a global network of technology companies and institutions.

The establishment of the CTCN was aligned to an acknowledgement by Parties *that climate action should follow a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate.*

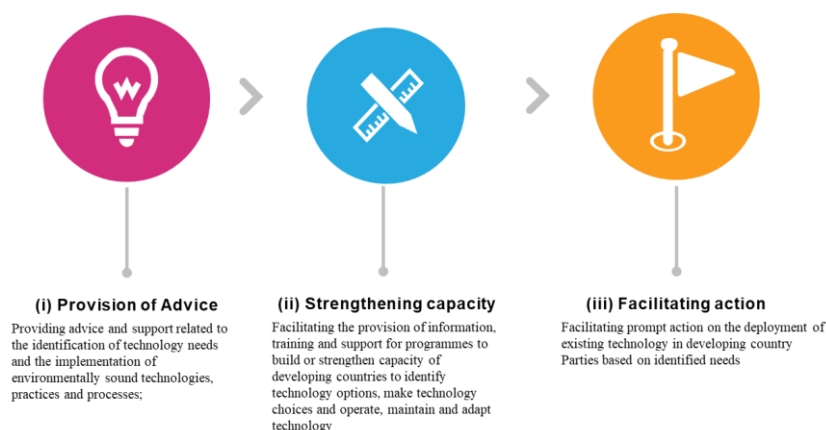
In 2010, following competitive selection process, the COP decided that the CTCN would be hosted by UNEP through a memorandum of understanding with the UNFCCC, with the support of a consortium of 11 organizations including United Nations Industrial Development Organization (UNIDO). In becoming operational the CTCN developed its mission: *to stimulate technology cooperation and to enhance the development and transfer of technologies and to assist developing country Parties at their request, consistent with their respective capabilities and national circumstances and priorities: to build or strengthen their capacity to identify technology needs, to facilitate the preparation and implementation of technology projects and strategies taking into account gender considerations to support action on mitigation and adaptation and enhance low emissions and climate-resilient development.*¹³⁶ Consistent with the COP decisions, the CTCN serves three main functions:

Figure 1: CTCN Mandate as reflected in Decision 1/CP.16, paragraph 123.

¹³⁴ Decision 1/CP.16, para. 117. All relevant decisions are available at: <https://unfccc.int/ttclear/negotiations/decisions.html>

¹³⁵ All decisions relating to technology transfer are available at <https://unfccc.int/ttclear/negotiations/decisions.html>. CTCN founding documents available at <https://www.ctc-n.org/about-ctcn/founding-documents>

¹³⁶ Decision 1/CP.16, page 20, para. 123.



Decision 1/CP.16, paragraph 123 decided that the CTCN ‘shall facilitate a network of national, regional, sectoral and international technology networks, organizations and initiatives with a view to engaging the participants of the Network effectively in the following functions:

(a) At the request of a developing country Party:

(i) Providing advice and support related to the identification of technology needs and the implementation of environmentally sound technologies, practices and processes;

(ii) Facilitating the provision of information, training and support for programmes to build or strengthen capacity of developing countries to identify technology options, make technology choices and operate, maintain and adapt technology;

(iii) Facilitating prompt action on the deployment of existing technology in developing country Parties based on identified needs;

(b) Stimulating and encouraging, through collaboration with the private sector, public institutions, academia and research institutions, the development and transfer of existing and emerging environmentally sound technologies, as well as opportunities for North–South, South–South and triangular technology cooperation;

(c) Facilitating a network of national, regional, sectoral and international technology centers, networks, organization and initiatives with a view to:

(i) Enhancing cooperation with national, regional and international technology centers and relevant national institutions;

(ii) Facilitating international partnerships among public and private stakeholders to accelerate the innovation and diffusion of environmentally sound technologies to developing country Parties; FCCC/CP/2010/7/Add.1 21

(iii) Providing, at the request of a developing country Party, in-country technical assistance and training to support identified technology actions in developing country Parties;

(iv) Stimulating the establishment of twinning center arrangements to promote North–South, South–South and triangular partnerships, with a view to encouraging cooperative research and development;

(v) Identifying, disseminating and assisting with developing analytical tools, policies and best practices for country-driven planning to support the dissemination of environmentally sound technologies;

(d) Performing other such activities as may be necessary to carry out its functions.

UNEP Project Document¹³⁷

The project document, covering activities from June 2013 to December 2022, follow-on the mandate given to CTCN and the three main functions of:

- 1) Managing requests and responses in the technology cycle;
- 2) Fostering collaboration to accelerate technology transfer;
- 3) Strengthening networks, partnerships and capacity building for technology development and transfer, and fostering collaboration to accelerate technology transfer.

These core functions of the CTCN were to be supported by broader outreach and awareness activities and a knowledge management system that enables learning and enhanced response quality over the life of the CTCN, reflecting the two other functions.

A consortium consisting of UNEP, UNIDO and leading institutions located in both developing and developed countries was created. At the 18th session of the COP in Doha in December 2012, this consortium was selected as host of the CTCN and at the 27th session of UNEP’s Governing Council in February 2013, a host agreement was signed in the form of a Memorandum of Understanding (MoU) between the United Nations Framework Convention on Climate Change (UNFCCC) and UNEP as lead partner of the consortium.

The expected outcome of the CTCN, according to the UNEP project document, was to accelerate, diversify and scale-up, including through increased investment, the transfer of environmentally sound technologies (ESTs) for climate mitigation and adaptation, consistent with their national socio-economic and sustainable development priorities. This would require the building and strengthening of developing countries’ capacity to identify technology needs to facilitate the preparation and implementation of technology projects and strategies, taking into account gender considerations to support action on adaptation and mitigation and enhance low emissions and climate-resilient development.

EC funding agreement and grant rationale (2016-2022)

Based on the evolving UNFCCC negotiations, the initial operational experiences of the CTCN and building on the implementation of the ongoing European Commission (EC)-funded project, more support for the generation of adequate requests through National Designated Entities (NDEs) and CTCN’s responding capacity was needed. Furthermore, the transfer of responses into mitigation and adaptation projects would require further support towards partnerships of public and private actors.

The grant (implemented from November 2016 to July 2022) from the EC aimed to strengthen the CTCN and its linkages to relevant financial institutions in line with the EU position on technology transfer in the UNFCCC negotiations. The role of the CTCN would be to provide technical advice and capacity building to developing countries.

3. Project Results Framework

The UNEP project document entitled “Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network” (PIMS 01626) provides a logical framework with project objective, project outcome, project outputs and indicators and milestones aligned towards each of these.¹³⁸ It

¹³⁷ Whilst the UNEP Project Document was first approved in 2013 there have been numerous evaluations, reviews and assessments. This material will be largely utilized to provide accountability for the work undertaken 2013 – 2015. A strong focus of the evaluation will be placed on the work undertaken using EC funding during the period 2016-2022.

¹³⁸ The title “Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network” (PIMS project 1626) is not accurate. The decision by the COP (14/CP.18) on arrangements to make the Climate Technology Centre and Network fully operational, selected UNEP as the sole host. This decision resulted in a MoU between UNFCCC and UNEP for the initial phase and subsequent renewals, whereby UNEP is referred to as the host of CTCN. Link to COP decision: <https://unfccc.int/resource/docs/2012/cop18/eng/08a02.pdf#page=8> Article V of the MoU stipulates the role of the Consortium

specifies that the overarching objective is “to support action on climate mitigation and adaptation and thus enhance low emissions and climate-resilient development.” This objective is to be reached by promoting the transfer and scaling up of the deployment of adaptation and mitigation technologies in developing countries, and it links to the higher-level overall objective (impact) of the EC project of “Developing countries in Africa, Asia and Latin America, the Pacific, and the Caribbean and least developed countries in particular will emit less greenhouse gases per unit of GDP and have a higher resilience to climate change.”

The aim of the EC grant was to improve the access of public and private actors from developing countries to state of the art technologies and services through an enhanced CTCN, in particular: i) Increase the capacities of climate technology stakeholders in developing countries, ii) Provide technical assistance services to support developing countries in removing technology barriers and creating an enabling environment for effective deployment of technologies; iii) The identification and inauguration of technology partnerships to advance the dissemination of solutions in priority regions and technology areas, and iv) The development and implementation of incentive schemes for companies and entrepreneurs to engage in technology transfer to developing countries. The indicative logframe matrix of Annex 1 of Contract DCI-ENV/2016/377-145 lists objective, outcomes and outputs with indicators.

At the outcome level, the focus is on increasing capacity and capabilities of developing countries through development of national climate relevant documents, initiatives/projects/ programmes with the UNEP project emphasizing new investments and the EC project policy coherence and partnerships.

At the output level, there is some overlap between the EC grant and the overarching joint programme focusing on technical assistance, building of partnerships/ networks and measure number of requests and responses to assistance.

Table 2 shows the results table of the UNEP and EC grant with defined outcome targets and output targets. The targets were updated in revisions of the UNEP project document.

Table 2: Comparison of CTCN Results Tables

UNEP project: Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network (PIMS 01626)		EC grant: Support to Climate Technology Transfer Services and Partnerships	
Objective: To support action on climate mitigation and adaptation and thus enhance low emissions and climate-resilient development		Objective: Developing countries in Africa, Asia and Latin America, the Pacific, and the Caribbean and least developed countries in particular will emit less greenhouse gases per unit of GDP and have a higher resilience to climate change	
Project Outcome	Indicators	Outcome	Indicators
The capacity and capabilities of developing countries to identify technology needs; prepare and implement technology projects and strategies to support action on mitigation and adaptation; and to enhance low emission and climate-resilient development is increased	<ul style="list-style-type: none"> -Number of new national Technology Needs Assessments (TNAs) and Technology Action Plans (TAPs) -Number of new country driven technology projects, strategies, and/or actions designed, implemented and scaled-up -Climate technology investments mobilized 	<ul style="list-style-type: none"> i) Improved access of public and private actors from developing countries to state of the art technologies and services through an enhanced CTCN. ii) Better coherence of national development priorities, technology needs, international 	<ul style="list-style-type: none"> -Number of national climate policy documents of developing countries (LEDS, NAMAs, NAPs INDCs, etc. recognizing technology transfer and development. -Number of technology-based programme and initiatives implemented by developing countries.

Partners. Any collaboration with UNIDO, as a Consortium Partner, is executed through an UN-to-UN Agreement. With other non-UN Consortium Partners, appropriate legal Instruments (PCAs, SSFAs) are signed.

		project finance and capacity building.	-Number of countries that have social, environmental and economic projects resulting from Technology Needs Assessments (TNAs) and Technology Action Plans (TAPs), in relation to CTCN assistance. -Number of technology partnerships implemented or triggered through CTCN activities.
Outputs	Indicators	Outputs	Indicators
<p>A) Developing country Parties' needs for technical assistance (i.e., Requests) on climate technology are fulfilled/ responded to.</p> <p>B) The development and transfer of existing and emerging environmentally sound technologies, as well as opportunities for North-South, South-South and triangular technology cooperation, is stimulated and encouraged, through collaboration with the private sector, public institutions, academia and research institutions.</p> <p>C) A network of national, regional, sectoral and international technology centers, networks, organization and initiatives is facilitated to support responses to country requests and capacity building.</p>	<p>No. of requests for assistance on climate technology for Parties managed and addressed by the CTC;</p> <p>No. of non-annex 1 countries supported by the CTCN</p> <p>No. of collaborative initiatives/ activities and public-private partnerships for the development and transfer of existing and emerging environmentally sound technologies facilitated by the CTC;</p> <p>No. of international, regional and (sub)regional, North-South, and South-South technology and knowledge sharing events;</p> <p>CTCN Knowledge Management System and web-based information portal are operational and used by developing countries;</p> <p>No. of network members (from developing countries);</p> <p>No. of twinning arrangements between technology centers/ organizations facilitated by the CTCN;</p> <p>No. of international public-private technology partnerships facilitated by the CTCN;</p> <p>No. and quality of trainings and capacity strengthening activities conducted by the CTCN;</p> <p>No. of new tools and information material developed by the CTCN.</p>	<p>i) The improvement in the availability and accessibility of knowledge on climate technologies; the provision of knowledge support and technical assistance services to developing countries through the CTCN (response to requests).</p> <p>ii) Implementation of incentive schemes for companies and entrepreneurs to engage in technology transfer to developing countries;</p> <p>iii) Implementation of three technology partnerships to advance the dissemination of solutions in priority regions and technology areas.</p>	<p>No. requests have been submitted to the CTCN;</p> <p>No. requests that originate from TNA process;</p> <p>No. are eligible for CTCN assistance;</p> <p>No. responses finalized by the CTCN, and 35 response implementation concluded;</p> <p>No. activities or incentive mechanisms are developed by the CTCN to stimulate technology cooperation for private sector.</p>

Sources: (see footnote)¹³⁹

4. Executing Arrangements

The CTCN consists of a Climate Technology Centre located in Copenhagen, Denmark, and a Network with participation of institutions responding to request from developing country Parties related to technology development and transfer; national technology centers and institutions; regional climate technology centers and networks; intergovernmental, international, regional and sectoral organizations, partnerships and initiatives; and research, academic, financial, non-governmental, private sector and public sector organizations.

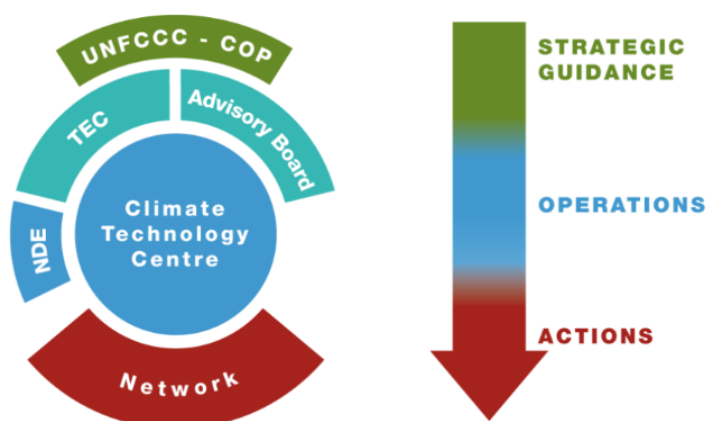
The CTCN operates under the guidance of the Conference of Parties, through an advisory board.¹⁴⁰ The advisory board, among other things, provides guidance and approve prioritization criteria for responding to requests from developing country Parties, and approves the Programme of Work (PoW) (e.g., business plan and annual operating plan).

The initial term of agreement to host the Climate Technology Centre (CTC) is for five years with two four-year renewal periods. It is to operate for initial terms until 2026, at which the COP will review its functions and decide whether to extend its term.

The Centre is hosted and managed by UNEP. UNEP also manages the CTC and provides administrative and infrastructural support for a Secretariat with a small core staff contingent of seven full time staff and a Director.

Figure 2 below provides an overview of the functioning of the CTCN.

Figure 2: Functioning of CTCN



UNEP staff in the Energy and Climate Branch of the Economy Division provide additional support¹⁴¹ to the Centre in Copenhagen.

Cooperation between UNEP and its consortium partners, including UNIDO, aims to increase synergy and complementarity and draw on comparative strengths and technical capacities by optimizing the mobilization and utilization of resources, enhancing the effectiveness and impact of services to Members States; and developing new cooperative arrangements and activities with business and industry. It is expected to include, but not limited to, exchange of information, joint studies, research

¹³⁹ UNEP (2022), Project Revision #6 127.1 Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network (CTCN), EU (2016), Annex 1 of Contract DCI-ENV/2016/377-145, CTCN+ Support to Climate Technology Transfer Services and Partnerships.

¹⁴⁰ <https://www.ctc-n.org/about-ctcn/advisory-board#:~:text=The%20Advisory%20Board%20of%20the,and%20amended%20at%20COP%2026>

¹⁴¹ Oversight and guidance by Senior Management; 50% of time of a Finance Management Officer (FMO).

and publications, joint workshops, fora and meetings, joint fund-raising, costs-sharing and pooling of resources, trainings of government officials, national experts, consultants and technicians, joint pilot, demonstration and capacity building projects, and participation in the meetings of their respective governing bodies.¹⁴²

5. Project Cost and Financing

The project has recorded as actual expenditure (by July 2022) of USD 74,801,728.

Table 3 provides the budget summary after revision 6 of the UNEP project document.

Table 3: Budget Summary as per UNEP ProDoc Revision 6

Overall Budget	Amount
A: Previously approved planned budget (from the last revision)	65,090,109 USD
B: Previously secured budget – CTCN	65,090,109 USD
C: Total change of secured budget [sum of (i) to viii]	18,163,952 USD
i) Japan	1,172,318 USD (including PSC 13%)
ii) Denmark	4,452,605 USD (including PSC 7%)
iii) Republic of Korea	10,000,000 USD (including PSC 13%)
iv) Sweden	229,249 USD (including PSC 13 %)
v) Spain	65,900 USD (including PSC 10 %)
vi) Austria	597,232 USD (including PSC 13%)
vii) United Kingdom	1,396,648 (including PSC 10%)
viii) UNDP Togo	250,000 USD (including PSC 7%)
D: Total revised secured budget (B+C)	83,254,061 USD
E: Unsecured budget (F-D)	9,000,000 USD
F: New total for proposed planned budget	92,254,061 USD
G: In Kind contributions- Previously Secured	8,988,389 USD
H: Revised total in kind secured contributions	22,308,306 USD
I: Total revised planned budget: Planned + In Kind (F+H)	114,562,367 USD

Table 4 provides the actual secured income per year of total USD 83,254,061 after revision 6 of the UNEP project document.

Table 4: Actual Secured Income by Year (to date)

Year 1 - 2013	Year 2 - 2014	Year 3 - 2015	Year 4 - 2016	Year 5 - 2017
USD 15,415,535	USD 4,298,884	USD 7,833,811	USD 7,874,020	USD 6,114,003
Year 6 - 2018	Year 7 - 2019	Year 8 - 2020	Year 9 - 2021	Year 10 - 2022
USD 7,254,606	USD 3,623,447	USD 8,060,965	USD 8,137,053	USD 4,583,111
Year 2023+				
USD 10,058,625				

The EC funding agreement and grant was to be managed as a seamless extension of the action under the EU Thematic Programme for Environment and Sustainable Management of Natural Resources including Energy (ENRTP) “Support to Climate Technology Transfer and Networking” (CRIS 2010/258-800) and support the CTCN through UNEP. Table 5 provides an indicative budget per objective and table 6 indicative EC budget by UMOJA budget category. Table 7 and table 8 show EC budget actual expenditures and total expenditures per year.

Table 5: Indicative budget per objective

	EU contribution (amount in EUR)
Indirect management with UNEP	
Objective 1: Capacity building to climate technology stakeholders in developing countries	1,380,00
Objective 2: Support developing countries in removing technology barriers and creating enabling environment for effective deployment of technologies	2,020,000
Objective 3: Establish and encourage technology partnerships in priority regions	2,020,000
Objective 4: Offering incentive schemes for companies and entrepreneurs from developed and developing countries	1,380,000
Evaluation, Audit	100,000
Communication, visibility and outreach	100,000
Total	7,000,000

Source: Annex 1 of Contract DCI-ENV/2016/377-145, CTCN+ Support to Climate Technology Transfer Services and Partnerships.

Table 6: Indicative EC Budget by UMOJA Budget Category (converted from EUR to USD)

EC Approved budget	USD
1101 Capacity Building & Knowledge Manager	605,846
1102 Climate Technology Manager	849,530
1301 Administrative (GC)	306,324

EC Approved budget	USD
1201 Consultants	71,300
2201 Contractual Services (Implementing Partners)	4,841,775
2202 Contractual Services (Commercial)	109,220
1601 Travel	29,411
3301 Meeting/Conferences	229,550
5301 Communications	102,303
PSC (7%)	500,168
TOTAL approved budget	7,645,427

Table 7: EC Budget actual expenditures (provisional)

Expenditures (USDs)	2017	2018	2019	2020	2021	2022	2023
1011 Capacity Building & Knowledge Manager	63,734	233	159,007	272,649	108,353	43,380	647,356
1102 Climate Technology Manager	-	-	159,003	225,713	305,091	153,611	843,418
1301 Administrative (GC)	-	-	111,003	119,665	75,656	51,222	357,546
1201 Consultants	-	-	30,000	265	35	-	30,300
2201 Contractual Services (Implementing Partners)	906,421	17,563	864,573	1,672,118	1,416,011	108,642	4,732,918
2202 Contractual Services (Commercial)							
1601 Travel	-	-	14,109	1,061	16,364	2,229	31,640
3301 Meeting/Conferences	-	-	119,929	3,182	112,803	-	229,550
5301 Communications	8,911	-	-	9,996	65,016	-	83,923
PSC (7%)							466,002
Total Expenses							7,422,653

Table 8: Actual expenditures/ disbursements per year.

Financial Year	USD
2013-2015	16,899,507
2016	6,974,474
2017	9,614,150
2018	5,972,138
2019	6,548,917
2020	9,942,985
2021	10,883,432
2022 (31.7.2022)	4,296,353
TOTAL expenses as on 31 July 2022 (net of PSC)	71,131,956

6. Implementation Issues

The CTCN has been a subject to several evaluations. In February 2016, the CTCN was evaluated upon request of the European Union by the Evaluation Office of UNEP.¹⁴³ The evaluation was conducted as a case study and presented recommendations to address the lean staffing structure, which was found to be good for financial efficiency but posed significant risks for the effectiveness of the mechanism. Further it was recommended that: 1.) the technical assistance components should be developed further and the ubiquitous “request length creep” that would plague all UNFCCC mechanisms requires active counter-strategies; 2.) A clarification of the role of developed countries and their NDEs was thought necessary and could contribute to more active collaboration, better functioning of the Mechanism and higher sustainability of the Mechanism itself and its products; 3.) In order to clarify the expectations of the private sector a differentiated Private Sector Strategy should be developed that could be the basis for designing targeted and appropriate means for engaging the private sector in Technology Transfer; 4.) The multi-donor structure and administrative challenges were found to be a risk to the efficiency of the Network and should be simplified, and lastly, it was recommended that the CTCN and UNFCCC should strive to make funding of CTCN more secure, e.g., by moving towards more institutionalized forms of contributions.

In 2017, an independent review of the effective implementation of the CTCN, commissioned by the UNFCCC secretariat, was conducted by Ernst and Young. It was followed by a DANIDA review of the CTCN in the first half of 2018 and carried out by a review team led by the Department of Quality Support of the Ministry of Foreign Affairs of Denmark. In 2021, a second independent review again, conducted by Ernst and Young, was completed of the effective implementation of the Climate Technology Centre and Network commissioned by the UNFCCC Secretariat as requested by the COP.

The latter second independent review found that stakeholders recognized the added value of the demand-driven mechanism and there had been continuous improvement in its programme of work,

¹⁴³ Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network (CTCN), Case Study contributing to Terminal Evaluation of Project 12/3-P2 – Support for Integrated Analysis and Development of Framework Policies for Greenhouse Gas Mitigation and Project 12/3-P2 – Support for the Deployment of Renewable Energy and Energy-efficient Technologies in Developing Countries.

including improvement in communication and outreach services. Strategic collaboration between the CTCN and the CTCN Advisory Board, the operating entities of the Financial Mechanism, and the Technology Executive Committee had improved. The CTCN was considered to be cost effective given the type of services it provided (small-scale tailored services based on country-driven demand).

The CTCN was found to make likely sustainable contributions to transformational change, with expected positive impacts in terms of adaptation and mitigation despite it not being possible to estimate actual impacts because of the nature of services and limited ex post evaluation resources. Stakeholders observed or anticipated socioeconomic co-benefits such as economic well-being, gender equality and human rights.

A main challenge was the limited financial resources available to the CTCN considering the broad scope of its services mandate by the COP. Resource mobilization remained a challenge as financial resources were not fully meeting initial targets. Resources were found to be allocated pragmatically, but the budget was constrained owing to a lack of predictability and high proportion of conditioned and earmarked funds.

While CTCN largely benefitted from being hosted by UNEP, the management structure faced administrative and communication challenges.

National Designated Entities (NDEs) stated that they faced a lack of resources to engage with the CTCN, in addition collaboration was limited among NDEs, Network members, GEF operational focal points and GCF NDAs, and the Climate Technology Centre (CTC) was not taking full advantage of its extensive Network, and synergies among the Network’s members were limited.

Section 2. OBJECTIVE AND SCOPE OF THE EVALUATION

7. Objective of the Evaluation

In line with the UNEP Evaluation Policy¹⁴⁴ and the UNEP Programme Manual¹⁴⁵, the Evaluation is undertaken at operational completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The Evaluation will cover activities of the UNEP ProDoc and EC funding agreement covering the period up to 2022 as formulated in the UNEP project (PIMS 01626) and the EC project grant towards “Support to Climate Change Technology Transfer Services and Partnerships” (please see footnote 6 above).¹⁴⁶

The Evaluation has three purposes set out in UNEP’s Evaluation Policy (2022) of supporting evidence-based decision making, learning and accountability and complimenting the purposes specified in section 5.9 of the funding agreement between the EC and UNEP: (i) For accountability (ii) learning purposes at various levels including policy (iii) CTCN operations reflect UNFCCC’s mandate.

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 UNEP and CTCN, the European Commission and other donors as well as UNFCCC, Network members and partners of CTCN. Therefore, the Evaluation will identify lessons of operational relevance for future project formulation and implementation, and for a new phase of the project. Recommendations relevant to UNEP generally may also be identified during the evaluation process.

8. Key Evaluation Principles

Evaluation findings and judgements will be based on **sound evidence and analysis**, clearly documented in the form of a short and concise 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

¹⁴⁴ <https://www.unenvironment.org/about-un-environment/evaluation-office/policies-and-strategies>

¹⁴⁵ <https://wecollaborate.unep.org>

¹⁴⁶ The scope of the evaluation covers the period 2013-2022 – note that period prior to November 2016 will largely be covered by existing evaluation reports whereas the period onwards will receive greater emphasis and additional primary data collection.

mentioned (whilst anonymity is still protected). Analysis leading to evaluative judgements should always be clearly spelled out.

The “Why?” Question. As this is a Terminal Evaluation and follow-on activities are envisaged for the future with preparations for the development of a new joint CTCN and TEC PoW and UNEP ProDoc, particular attention will be given to learning from the experience to present recommendations for the future PoW. 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 performance was and make a serious effort to provide a deeper understanding of “why” the performance was as it was (i.e., what contributed to the achievement of the project’s results). This should provide the basis for the lessons that can be drawn from the project.

Attribution, Contribution and Credible Association. In order to *attribute* any outcomes and impacts to a project intervention, one needs to consider the difference between what has happened with, and what would have happened without, the activities supported under the UNEP ProDoc and EC funding agreement (i.e., take account of changes over time and between contexts in order to isolate the effects of an intervention). This requires appropriate baseline data and the identification of a relevant counterfactual, both of which are frequently not available for evaluations. Establishing the *contribution* made in a complex change process relies heavily on prior intentionality (e.g., approved project design documentation, logical framework, as well as demand and of support by the countries) and the articulation of causality (e.g., the Theory of Change). Robust evidence that a project was delivered as designed and that the expected causal pathways developed supports claims of contribution and this is strengthened where an alternative theory of change can be excluded. A *credible association* between the implementation of a project and observed positive effects can be made where a strong causal narrative, although not explicitly articulated, can be inferred by the chronological sequence of events, active involvement of key actors and engagement in critical processes.

Communicating evaluation results. A key aim of the Evaluation is to encourage reflection and learning by CTCN, UNEP, EC and other key project stakeholders, especially in light of the future joint CTCN and TEC PoW. The consultants 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, including CTCN, UNEP and the EC, by the UNEP Evaluation Manager. There may, however, be several intended audiences, each with different interests and needs regarding the report. The consultants will plan with the Evaluation Manager 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.

9. Key Strategic Questions

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 UNEP and the EC to which the project is believed to be able to make a substantive contribution: The key strategic questions take into consideration the objectives of the terminal evaluation set out in section 5.9 of the agreement between UNEP and the EC.

- (a) What has been the added value of the EC grant in achieving CTCN’s objectives?
- (b) To what extent is the Advisory Board, NDEs and Network members engaged in planning and implementation to ensure the efficient delivery of CTCN’s services?
- (c) To what extent do the operations of the CTCN and activities implemented under the UNEP project and EC funding agreement reflect the UNFCCC mandate?
- (d) What changes were made to adapt to the effects of COVID-19 and how might these changes have affected the project’s performance?
- (e) Are there examples of estimates of actual impacts (as opposed to anticipated impacts) and socio-economic co-benefits of CTCN’s technical assistance and what is the feasibility of and resources needed to provide such impact assessments and ex-post evaluations in the future?
- (f) How are members’ sector and geographical expertise engaged in the Network to ensure the efficient delivery of CTCN’s services?

10. Evaluation Criteria

All evaluation criteria will be rated on a six-point scale. Sections A-I below, outline the scope of the criteria. A weightings table in excel format will be provided by the Evaluation Manager 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 availability 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

The Evaluation will assess the extent to which the activity is suited to the priorities and policies of the donors, including the EC, implementing regions/ countries and beneficiary countries. The Evaluation will include an assessment of the project’s relevance in relation to CTCNs mandate under the UNFCCC and its alignment to COP decisions and guidance from the Advisory Board. Under strategic relevance an assessment of the complementarity of the project with UNEPs mandate and its policies and strategies will be undertaken. This criterion comprises four elements:

i. Alignment to the UNEP Medium Term Strategy¹⁴⁷ (MTS), Programme of Work (PoW) and Strategic Priorities

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. UNEP strategic priorities include the Bali Strategic Plan for Technology Support and Capacity Building¹⁴⁸ (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.

The evaluation will also take into account the alignment of the project in UNEPs new MTS including the Climate Action Pillar under which the CTCN is anchored and its reporting requirements under UNEP are located.

ii. Alignment to Donor/Partner Strategic Priorities

Donor strategic priorities will vary across interventions. The Evaluation will assess the extent to which the project is suited to, or responding to the EC as expressed in the funding agreement and other donor priorities. Alignment with EC priorities is a key part of project design and grant approval process while for other donors there may be instances of ‘softly-earmarked’ funding and such their alignment may be more of an assumption that should be assessed.

iii. Relevance to UNFCCC Mandate and the Technology Mechanisms of the UNFCCC and Other Environmental Priorities

The Evaluation will assess the alignment of the UNEP ProDoc and the EC funding agreement to the CTCN mandate under the UNFCCC and the Technology mechanism of the UNFCCC and other global priorities such as the SDGs and Agenda 2030. The extent to which the intervention is suited, or responding to, the stated mandate under the UNFCCC and environmental concerns and needs of the countries. Complementarity with Relevant Existing Interventions/Coherence¹⁴⁹

¹⁴⁷ UNEP’s Medium-Term Strategy (MTS) is a document that guides UNEP’s programme planning over a four-year period. It identifies UNEP’s thematic priorities, known as Sub-programmes (SP), and sets out the desired outcomes, known as Expected Accomplishments (EAs), of the Sub-programmes. <https://www.unenvironment.org/about-un-environment/evaluation-office/our-evaluation-approach/un-environment-documents>

¹⁴⁸ <http://www.unep.fr/ozonaction/about/bsp.htm>

¹⁴⁹ This sub-category is consistent with the new criterion of ‘Coherence’ introduced by the OECD-DAC in 2019.

An assessment will be made of how well the activities under the UNEP ProDoc and EC grant, either at design stage or during the project inception or mobilization¹⁵⁰, took account of ongoing and planned initiatives (under the Climate Action sub-programme, other UNEP sub-programmes, or being implemented by other agencies within the same country, sector or institution) that address similar needs of the same target groups. The Evaluation will consider if the CTCN programme, was complementary to other interventions, optimized any synergies and avoided duplication of effort. Examples may include United Nations Development Assistance Framework (UNDAFs)/ United Nations Sustainable Development Cooperation Framework (UNSCDFs) or One UN programming. Linkages with other interventions should be described and instances where UNEP’s and UNIDO’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 equality
- Country ownership and driven-ness

B. Quality of Project Design

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. The complete Project Design Quality template should be annexed in the Evaluation Inception Report. Later, the overall Project Design Quality rating¹⁵¹ should be entered in the final evaluation ratings table (as item B) in the Main Evaluation Report and a summary of the project’s strengths and weaknesses at design stage should be included within the body of the report.

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

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

C. Nature of External Context

At evaluation inception stage a rating is established for the project’s external operating context (considering the prevalence of conflict, natural disasters and political upheaval¹⁵²). This rating is entered in the final evaluation ratings table as item C. Where a project has been rated as facing either an Unfavorable or Highly Unfavorable 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 Consultants and Evaluation Manager together. A justification for such an increase must be given.

D. Effectiveness

i. Availability of Outputs¹⁵³

The Evaluation will assess the project’s success in producing the programmed outputs and making them available to the intended beneficiaries as well as its success in achieving milestones as per the project design document and the UNEP/EC project grant document to fund the CTCN. 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 and EC project grant, reformulations may be necessary in the reconstruction of the Theory of Change (TOC). In such cases a table should be provided showing the original and the reformulation of the outputs for

¹⁵⁰ 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.

¹⁵¹ In some instances, based on data collected during the evaluation process, the assessment of the project’s design quality may change from Inception Report to Main Evaluation Report.

¹⁵² 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 by the project team. From March 2020 this should include the effects of COVID-19.

¹⁵³ 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 (UNEP, 2019)

transparency. The availability 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 provision. It is noted that emphasis is placed on the performance of those outputs that are most important to achieve outcomes. 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 supervision¹⁵⁴

ii. Achievement of Project Outcomes¹⁵⁵

The achievement of project outcomes is assessed as performance against the project outcomes as defined in the reconstructed¹⁵⁶ Theory of Change that will incorporate the outcomes of the UNEP ProDoc and EC funding agreement. These are outcomes that are intended to be achieved by the end of the project timeframe and within the project’s resource envelope. Emphasis is placed on the achievement of project outcomes that are most important for attaining intermediate states. As with outputs, a table can be used where substantive amendments to the formulation of project outcomes is necessary to allow for an assessment of performance. The Evaluation should report evidence of attribution between the project’s intervention and the project outcomes. In cases of normative work or where several actors are collaborating to achieve common outcomes, evidence of the nature and magnitude of UNEP’s substantive contribution’ should be included and/or ‘credible association’ established between project efforts and the project outcomes realized.

Factors affecting this criterion may include:

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

iii. Likelihood of Impact

Based on the articulation of long-lasting effects in the reconstructed TOC (*i.e. from project outcomes, via intermediate states, to impact*), the Evaluation will assess the likelihood of the intended, positive impacts becoming a reality. Project objectives or goals should be incorporated in the TOC, possibly as intermediate states or long-lasting impacts. The UNEP Evaluation Office’s approach to the use of TOC in project evaluations is outlined in a guidance note available and is supported by an excel-based flow chart, ‘Likelihood of Impact Assessment Decision Tree’. Essentially the approach follows a ‘likelihood tree’ from project 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.

The Evaluation will also consider the likelihood that the intervention may lead, or contribute to, unintended negative effects (e.g., will vulnerable groups such as those living with disabilities and/or women and children, be disproportionately affected by the project?). Some of these potential negative effects may have been identified in the project design as risks or as part of the analysis of Environmental and Social Safeguards.

¹⁵⁴ ‘Project management and supervision’ refers to the supervision and guidance provided by UNEP to implementing partners and national governments.

¹⁵⁵ Outcomes are the use (*i.e. uptake, adoption, application*) of an output by intended beneficiaries, observed as changes in institutions or behavior, attitude or condition (UNEP, 2019)

¹⁵⁶ All submitted UNEP project documents are required to present a Theory of Change. 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 formal changes made to the project design.

1) The Evaluation will consider the extent to which CTCN has played a catalytic role¹⁵⁷ or has promoted scaling up and/or replication as part of the Theory of Change UNEP based on the UNEP ProDoc and EC funding agreement (either explicitly as in a project with a demonstration component or implicitly as expressed in the drivers required to move to outcome levels) and as factors that are likely to contribute to greater or long-lasting impact.

Ultimately, CTCN aims to bring about benefits to the environment and human well-being as expressed in the UNFCCC mandate on Technology Transfer. Few projects are likely to have impact statements that reflect such long-lasting or broad-based changes. However, the Evaluation will assess the likelihood of the CTCN to make a substantive contribution to the long-lasting changes.

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 equality
- Country ownership and driven-ness
- Communication and public awareness

E. Financial Management

Financial management will be assessed under three themes: *adherence* to UNEP’s financial policies and procedures (project and grant managed by UNEP), *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/component level¹⁵⁸ and will be compared with the approved budget. The Evaluation will verify the application of proper financial management standards and adherence to UNEP’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. The Evaluation will record where standard financial documentation is missing, inaccurate, incomplete or unavailable in a timely manner. The Evaluation will assess the level of communication between the Project Manager and the Fund Management Officer as it relates to the effective delivery of the planned project and the needs of a responsive, adaptive management approach.

Factors affecting this criterion may include:

- Preparation and readiness
- Quality of project management and supervision

F. Efficiency

Under the efficiency criterion, the Evaluation will assess the extent to which the activities under the UNEP ProDoc and EC funding agreement 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*

¹⁵⁷ The terms catalytic effect, scaling up and replication are inter-related and generally refer to extending the coverage or magnitude of the effects of a project. *Catalytic effect* is associated with triggering additional actions that are not directly funded by the project – these effects can be both concrete or less tangible, can be intentionally caused by the project or implied in the design and reflected in the TOC drivers, or can be unintentional and can rely on funding from another source or have no financial requirements. *Scaling up and Replication* require more intentionality for projects, or individual components and approaches, to be reproduced in other similar contexts. *Scaling up* suggests a substantive increase in the number of new beneficiaries reached/involved and may require adapted delivery mechanisms while *Replication* suggests the repetition of an approach or component at a similar scale but among different beneficiaries. Even with highly technical work, where scaling up or replication involves working with a new community, some consideration of the new context should take place and adjustments made as necessary.

¹⁵⁸ Expenditures have been recorded and reported against UMOJA categories as approved in the budget.

In addition, expenditures have been recorded against four CTCN service areas: Technical Assistance, Communication and Stakeholder Engagement, KMS and Capacity Building and CTCN Operations.

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 maximize 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.

The Evaluation will give special attention to efforts made by the project teams during project implementation to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities¹⁵⁹ with other initiatives, programmes and projects, etc. to increase project efficiency.

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

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

Each project should be supported by a sound monitoring plan that is designed to track progress against SMART¹⁶⁰ results towards the provision of the project’s outputs and achievement of project outcomes, including at a level disaggregated by gender, marginalization or vulnerability, including those living with disabilities. In particular, the Evaluation will assess the relevance and appropriateness of the project indicators used in the project document and grant as well as the methods used for tracking progress against them as part of conscious results-based management. The Evaluation will assess the quality of the design of the monitoring plan as well as the funds allocated for its implementation.

ii. Monitoring of Project Implementation

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 assessment will include consideration of whether the project gathered relevant and good quality baseline data that is accurately and appropriately documented. This should include monitoring the representation and participation of disaggregated groups, including gendered, marginalized or vulnerable groups, such as those living with disabilities, in project activities. It will also consider the quality of the information generated by the monitoring system during project implementation and how it 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

UNEP has a centralized Project Information Management System (PIMS) in which project managers upload six-monthly progress reports against agreed project milestones. This information will be provided to the Evaluation Consultants by the Evaluation Manager. Some projects have additional requirements to report regularly to funding partners, which will be supplied by the project team. The Evaluation will assess the extent commitments to UNEP and the EC have been fulfilled. Consideration

¹⁵⁹ Complementarity with other interventions during project design, inception or mobilization is considered under Strategic Relevance above.

¹⁶⁰ SMART refers to results that are specific, measurable, achievable, relevant and time-oriented. Indicators help to make results measurable.

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 equality (e.g., disaggregated indicators and data)

H. Sustainability

Sustainability¹⁶¹ is understood as the probability of the benefits derived from the achievement of project 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 endurance of achieved project 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 project outcomes may also be included.

i. Socio-political Sustainability

The Evaluation will assess the extent to which social or political factors support the continuation and further development of the benefits derived from project 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 capacity development efforts are likely to be sustained.

ii. Financial Sustainability

The Evaluation will assess the extent to which both project outcomes and the outcomes specified in the EC grant are dependent on future funding for the benefits they bring to be sustained. Secured future funding is only relevant to financial sustainability where a project’s outcomes 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. Some project 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 project 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 natural resource management approach.

iii. Institutional Sustainability

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 equality (e.g. where interventions are not inclusive, their sustainability may be undermined)
- Communication and public awareness
- Country ownership and driven-ness

¹⁶¹ As used here, ‘sustainability’ means the long-lasting maintenance of outcomes and consequent impacts, whether environmental or not. This is distinct from the concept of sustainability in the terms ‘environmental sustainability’ or ‘sustainable development’, which imply ‘not living beyond our means’ or ‘not diminishing global environmental benefits’ (GEF STAP Paper, 2019, *Achieving More Enduring Outcomes from GEF Investment*)

I. Factors Affecting Project Performance and Cross-Cutting Issues

(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. If these issues have not been addressed under the evaluation criteria above, then independent summaries of their status within the evaluated project should be given.)

i. Preparation and Readiness

This criterion focuses on the inception or mobilization 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 mobilization. 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

‘Project management and supervision’ refers to the supervision and guidance provided by UNEP and CTCN. The performance of parties playing different roles should be discussed and a rating provided for both types of supervision (UNEP and CTCN/Executing Agency) and the overall rating for this sub-category established as a simple average of the two.

The CTCN’s project management and supervision is provided by UNEP under a host agreement signed between UNEP and the UNFCCC. Therefore, UNEP, as host, provides institutional support and guidance, leadership and enhanced synergies between the programme and other initiatives across climate change within UNEP and other partners.

The Advisory Board of the CTCN determines its operational modalities and rules of procedure based on the functions as per decision 2/CP.17, annex VII, and decision 14/CP.18, annex II, regarding the constitution of the Advisory Board of the Climate Technology Centre and Network. The constitution of the Advisory Board was amended at COP 26.

The CTCN Advisory Board has 30 members meeting every six months for 2-3 days and guides CTCN, approves procedures and the annual operating plans including annual budgets, endorses financial statements, and monitors CTCN activities and results.

Additional details on the CTCN and its Advisory Board is available at <https://www.ctc-n.org/about-ctcn/advisory-board>

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.); maintaining project relevance within changing external and strategic contexts; communication and collaboration with UNEP 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

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 UNEP. Key among these will be the CTCN Advisory Board, NDEs consortium partners and Network members. 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 maximize 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 Equality

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 UNEP’s Policy and Strategy for Gender Equality and the Environment¹⁶².

In particular the Evaluation will consider to what extent project implementation and monitoring have taken into consideration: (i) possible inequalities (especially those related to gender) in access to, and the control over, natural resources; (ii) specific vulnerabilities of disadvantaged groups (especially women, youth and children and those living with disabilities) to environmental degradation or disasters; and (iii) the role of disadvantaged groups (especially those related to gender) in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

Note that the project’s effect on equality (i.e., promoting human rights, gender equality and inclusion of those living with disabilities and/or belonging to marginalized/vulnerable groups) should be included within the TOC as a general driver or assumption where there is no dedicated result within the results framework. If an explicit commitment on this topic is made within the project document and EC grant then the driver/assumption should also be specific to the described intentions.

v. Environmental and Social Safeguards

UNEP projects address environmental and social safeguards primarily through the process of environmental and social screening at the project approval stage, risk assessment and management (avoidance, minimization, mitigation or, in exceptional cases, offsetting) of potential environmental and social risks and impacts associated with project and programme activities. The Evaluation will confirm whether UNEP requirements¹⁶³ were met to: *review* risk ratings on a regular basis; *monitor* project implementation for possible safeguard issues; *respond* (where relevant) to safeguard issues through risk avoidance, minimization, mitigation or offsetting and *report* on the implementation of safeguard management measures taken. UNEP requirements for proposed projects to be screened for any safeguarding issues; for sound environmental and social risk assessments to be conducted and initial risk ratings to be assigned, are evaluated above under Quality of Project Design).

The Evaluation will also consider the extent to which the management of the project minimized UNEP’s environmental footprint.

vi. Country Ownership and Driven-ness

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 project outcomes or b) moving forward from project outcomes towards intermediate states. The Evaluation will consider the engagement not only of the NDEs and Network members who are directly involved in project implementation and execution of CTCN project activities, but also those official representatives whose cooperation is needed for change to be embedded in their respective institutions and offices (e.g., representatives from multiple sectors or relevant ministries beyond Ministry of Environment). This factor is concerned with the level of ownership generated by the project over outputs and outcomes and that is necessary for long-lasting impact to be realized. Ownership should extend to all gender and marginalized groups.

vii. Communication and Public Awareness

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

¹⁶² The Evaluation Office notes that Gender Equality was first introduced in the Project Review Committee Checklist in 2010 and, therefore, provides a criterion rating on gender for projects approved from 2010 onwards. Equally, it is noted that policy documents, operational guidelines and other capacity building efforts have only been developed since then and have evolved over time. https://wedocs.unep.org/bitstream/handle/20.500.11822/7655/-Gender_equality_and_the_environment_Policy_and_strategy-2015Gender_equality_and_the_environment_policy_and_strategy.pdf.pdf?sequence=3&isAllowed=y

¹⁶³ For the review of project concepts and proposals, the Safeguard Risk Identification Form (SRIF) was introduced in 2019 and replaced the Environmental, Social and Economic Review note (ESERN), which had been in place since 2016. In GEF projects safeguards have been considered in project design since 2011.

awareness activities that were undertaken during the implementation of the project to influence attitudes or shape behavior 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 marginalized 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

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 consultants maintains close communication with CTCN Secretariat, and focal points in UNEP and promotes information exchange throughout the Evaluation implementation phase in order to increase their (and other stakeholder) ownership of the evaluation findings.

The findings of the Evaluation will be based on the following:

- (a) A desk review of:
 - Relevant background documentation, inter alia ToR, Letter of Agreement, project document and revisions, EC contract and its amendments;
 - Project design documents (including minutes of the project design review meeting at approval); Annual Work Plans and Budgets or equivalent, revisions to the project (UNEP ProDoc and EC Funding Agreement), 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, etc.;
 - Project deliverables: [list];
 - Review or Evaluation of the CTCN by UNEP, the UNFCCC and other donors;

- (b) **Interviews** (individual or in group) with:
 - CTCN Secretariat;
 - UNEP staff;
 - UNEP Fund Management Officers (FMO);
 - European Union represented by EC Directorate-General for International Partnerships (DG INTPA)
 - Representatives from the Advisory Board, TEC, NDE and the Network;
 - UNEP Climate Action Sub-Programme Coordinator;
 - Other relevant resource persons;
 - Representatives from private sector, academia, research and civil society and specialist groups;

- (c) **Specialized surveys** for different stakeholder groups (proponents requesting technical assistance, government counterparts, network members, involved staff, beneficiaries, CTCN network members), in particular with a focus on assessing the relevance, effectiveness and results of the CTCN’s knowledge access and networking functions.

- (d) **Field visits** to countries with selection to be determined following the inception phase of the evaluation process with consideration of CTCN’s activities in countries. The selection will include, among others, specific activities funded by the EC grant. A visit to the CTCN Secretariat in Copenhagen is anticipated.

- (e) **Other data collection tools** such as **sampling of sub-projects** and **portfolio review** of the Technical Assistance, networking, information and capacity building services provided (using a template to assess elements such as design quality, available information on progress and results from reports, etc. A sample of 10 sub-projects is suggested. This sample can be distributed geographically to represent the regions and factor in types of countries (LDCs, MICs, SIDS) and regions, types of services provided and sectors.

An **Evaluation Reference Group (ERG)** will be established. The ERG will provide strategic direction to the Evaluation - based on the members’ own experiences and contextual knowledge - and boost buy-in to, and the credibility and legitimacy of, the evaluation process across the range of evaluation stakeholders.

The ERG will be comprised of representatives of UNEP, EC, and possibly other donors, the Advisory Board, TEC, NDE, Network and the CTCN Secretariat (ex officio).

The ERG will discuss and provide comments on:

- the demand for the Evaluation – to ensure the Evaluation will meet the needs of its intended users (through a review of the evaluation terms of reference);
- the overall evaluation approach and the reconstructed Theory of Change of the project to help shape the Evaluation;
- the preliminary findings and recommendations of the Evaluation; and
- the Draft Evaluation Report, including the evaluation recommendations.

The ERG will appoint one of their members as the Chair. The Evaluation Office of UNEP will provide the secretariat to the ERG. ERG feedback and comments at different stages of the evaluation process will be collated by the Evaluation Manager during planned discussion meetings. The Evaluation Manager will, in consultation with the Chair and other ERG members, set the agenda for the discussion meetings and support these meetings logistically. It is expected that at least three such meetings will be held during the evaluation process, as shown in Table 6.

Table 9: Evaluation Reference Group meetings

Meeting	Purpose	Location	Tentative date
1 st	Introduce the ERG members Elect the Chair Discuss the TORs	Virtual	TBD
2 nd	Discuss the inception report of the Evaluation including Theory of Change and evaluation framework	Virtual	TBD
3 rd	Discuss the preliminary findings of the Evaluation	Virtual	TBD

11. Evaluation Deliverables and Review Procedures

The Evaluation Team will prepare:

Inception Report: (see Annex 1 for a list of 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.

Preliminary Findings: typically in the form of a PowerPoint presentation, 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. In the case of highly strategic project/portfolio evaluations or evaluations with an Evaluation Reference Group, the preliminary findings may be presented as a word document for review and comment.

Draft and Final Evaluation Report: containing an executive summary that can act as a stand-alone document; detailed analysis of the evaluation findings organized by evaluation criteria and supported with evidence; lessons learned and recommendations and an annotated ratings table. The report should aim to be concise and to the point.

An **Evaluation Brief** (a 2-page overview of the evaluation and evaluation findings) for wider dissemination through the UNEP website may be required. This will be discussed with the Evaluation

Manager no later than during the finalization of the Inception Report. Other communication products e.g. for social media to be considered.

Review of the Draft Evaluation Report. The Evaluation Consultants 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 CTCN Secretariat and UNEP focal points, who will alert the Evaluation Manager in case the report contains any blatant factual errors. The Evaluation Manager will then forward the revised draft report (corrected by the Evaluation Consultants 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 Consultants for consideration in preparing the final report, along with guidance on areas of contradiction or issues requiring an institutional response.

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 Main 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.

The Evaluation Manager will prepare a **quality assessment** of the first draft of the Main Evaluation Report, which acts as a tool for providing structured feedback to the Evaluation Consultants. The quality of the final 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.

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 Project Manager. The Evaluation Office will track compliance against this plan on a six-monthly basis for a maximum of 12 months.

12. The Evaluation Team

For this Evaluation, the Evaluation Team will consist of a Principal Evaluator and two Evaluation Specialists who will work under the overall responsibility of the Evaluation Office of UNEP represented by an Evaluation Manager, Susanne Bech, in consultation with the Director of the CTCN Secretariat, Rose Mwebaza, UNEP focal point [tba], Fund Management Officers, Leena Darlington and Amanda Lees and the Sub-programme Coordinator of the Climate Action Sub-programme, Niklas Hagelberg. The UNEP Evaluation Office, which is leading the evaluation exercise will keep the focal points from UNEP continuously updated on the progress of the evaluation.

The consultants will liaise with the Evaluation Manager on any procedural and methodological matters related to the Evaluation, including travel. It is, however, each consultants' individual responsibility (where applicable) 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 CTCN Secretariat will, where possible, provide logistical support (introductions, meetings, etc.) allowing the consultants to conduct the Evaluation as efficiently and independently as possible.

The **Principal Evaluator** will be hired over a period of 9 months (January 2023 to September 2023) and should have the following: a university degree in environmental sciences, international development or other relevant political or social sciences area is required and an advanced degree in the same areas is desirable; a minimum of 10 years of technical / evaluation experience is required, preferably including evaluating large, regional or global programmes and using a Theory of Change approach; and a good/broad understanding UNFCCC processes and climate convention in general is desired. English and French are the working languages of the United Nations Secretariat. For this consultancy, fluency in oral and written English is a requirement. Proficiency in another UN language (Arabic, Chinese, French, Russian, Spanish) is desirable. Working knowledge of the UN system and specifically the work of UNEP is an added advantage. The work will be home-based with visit to the CTCN Secretariat and possible field visits.

The **Evaluation Specialists** will be hired over a period of 9 months (January 2023 to September 2023) and should have the following: an undergraduate university degree in environmental sciences, international development or other relevant political or social sciences area is required; a minimum of 8 years of technical/monitoring/evaluation/statistics experience is required and a broad understanding of UNFCCC processes and climate convention in general is required. English and French are the working languages of the United Nations Secretariat. For this consultancy fluency in oral and written English is a requirement. Proficiency or knowledge of another UN language (Arabic, Chinese, French, Russian, Spanish) is desirable. Working knowledge of the UN system and specifically the work of UNEP is an added advantage. The work will be home-based with visit to the CTCN Secretariat and possible field visits.

The Principal Evaluator will be responsible, in close consultation with the Evaluation Office of UNEP for overall management of the Evaluation and timely provision of its outputs, described above in Section 11 Evaluation Deliverables. The two Evaluation Specialists will make substantive and high- quality contributions to the evaluation process and outputs. The Principal Evaluator and Evaluation Specialists will ensure together that all evaluation criteria and questions are adequately covered.

Specifically, Evaluation Team members will undertake the following:

Specific Responsibilities for Principal Evaluator:

The Principal Evaluator will be responsible, in close consultation with the Evaluation Manager, for overall management of the Evaluation and timely provision of its outputs, described above in Section 11 Evaluation Deliverables.

The Principal Evaluator will manage the inception phase of the evaluation, coordinate the data collection and analysis phase of the evaluation, coordinate the reporting phase, and manage internal and external relations of the evaluation team.

Specific Responsibilities for the Evaluation Specialists:

The Evaluation Specialists will make substantive and high-quality contributions to the evaluation process and outputs.

The Evaluation Specialists will provide substantive contributions to the inception phase of the evaluation, substantive contributions to the data collection and analysis, substantive contributions to the mains report and ensure good teamwork and external relations.

The three consultants will ensure together that all evaluation criteria and questions are adequately covered.

Specifically, the Evaluation Team members will undertake the following:

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;
- 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;
- (where appropriate and agreed) 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 CTCN Secretariat informed of the evaluation progress.

Reporting phase, including:

- draft the Main Evaluation Report, ensuring that the evaluation report is complete, coherent and consistent with the Evaluation Manager 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
- (where agreed with the Evaluation Manager) prepare an Evaluation Brief (2-page summary of the evaluand and the key evaluation findings and lessons)

Managing relations, including:

- maintain a positive relationship with evaluation stakeholders, ensuring 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.

13. Schedule of the Evaluation

The table below presents the tentative schedule for the Evaluation.

Table 7. Tentative schedule for the Evaluation

<i>Milestone</i>	<i>Tentative Dates</i>
Evaluation Kick-off Meeting	January 2023
Draft Inception Report to Evaluation Manager	February 2023
Draft Inception Report shared with Evaluation Reference Group	February 2023
E-based interviews, surveys etc.	February 2022-April 2023
Country Missions (if Covid-19 situation allows international travel)	February 2023-April 2023
Draft report to Evaluation Manager (and internal Peer Reviewer), including PowerPoint/presentation on findings and recommendations	June 2023
Draft Report shared with CTCN Secretariat, UNIDO and UNEP focal points	June-July 2023
Draft Report shared with Evaluation Reference Group	June-July 2023
Draft Report shared with wider group of stakeholders	July-August 2023
Final Report	August 2023
Final Report shared with all respondents	September 2023

14. Contractual Arrangements

Evaluation Consultants will be selected and recruited by the Evaluation Office of UNEP under an individual Special Service Agreement (SSA) on a “fees only” basis (see below). By signing the service

contract with UNEP/UNON, the consultants 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.

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:

Schedule of Payment for the Principal Evaluator:

Deliverable	Percentage Payment
Approved Inception Report (as per annex document #9)	30%
Approved Draft Main Evaluation Report (as per annex document #10)	30%
Approved Final Main Evaluation Report	40%

Schedule of Payment for the Evaluation Specialists:

Deliverable	Percentage Payment
Approved Inception Report (as per annex document #9)	30%
Approved Draft Main Evaluation Report (as per annex document #10)	30%
Approved Final Main Evaluation Report	40%

Fees only contracts: Where applicable, air tickets will be purchased by UNEP and 75% of the Daily Subsistence Allowance for each authorized 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.

The consultants may be provided with access to UNEP’s information management systems (e.g., PIMS, Anubis, SharePoint, etc.) 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.

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 UNEP 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 UNEP’s quality standards.

If the consultants fail to submit a satisfactory final product to UNEP 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 XI. QUALITY ASSESSMENT OF THE EVALUATION REPORT

Quality Assessment of the Evaluation Report

Evaluand Title:

Terminal Evaluation: “Terminal Evaluation of the UNEP Project “Joint UNEP-UNIDO Programme to host and manage the Climate Technology Centre and Network” (PIMS 01626) and “Support to Climate Technology Transfer Services and Partnership (EU Contract DCI-ENV/2016/377-145) 11/2023

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
Report Quality Criteria		
<p>Quality of the Executive Summary <u>Purpose:</u> acts as a stand alone and accurate <u>summary</u> of the main evaluation product, especially for senior management. To include:</p> <ul style="list-style-type: none"> • 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 • reference to where the evaluation ratings table can be found within the report • summary response to key strategic evaluation questions • summary of the main findings of the exercise/synthesis of main conclusions • summary of lessons learned and recommendations. 	<p>Final report (coverage/omissions):</p> <p>All required elements are addressed including evaluation approach and key findings and conclusions on achievement of outcome and sustainability, summary of performance rating awards, responses to strategic questions of the evaluation and summary of lessons and recommendations.</p> <p>Final report (strengths/weaknesses):</p> <p>Summary of overall performance, key findings and conclusions on achievement of outcome and sustainability, areas that worked well and areas that would have benefited from further attention.</p>	6
<p>Quality of the 'Introduction' Section <u>Purpose:</u> introduces/<u>situates</u> the evaluand in its institutional context, establishes its main parameters (time, value, results, geography) and the purpose of the evaluation itself. To include:</p> <ul style="list-style-type: none"> • institutional context of the project (sub-programme, Division, Branch etc) • date of PRC approval, project duration and start/end dates • number of project phases (where appropriate) • results frameworks to which it contributes (e.g. POW Direct Outcome) • coverage of the evaluation (regions/countries where implemented) 	<p>Final report (coverage/omissions):</p> <p>Section covers required elements.</p> <p>Final report (strengths/weaknesses):</p> <p>Concise section.</p>	5

<ul style="list-style-type: none"> • implementing and funding partners • total secured budget • whether the project has been evaluated in the past (e.g. mid-term, external agency etc.) • concise statement of the purpose of the evaluation and the key intended audience for the findings. 		
<p>Quality of the 'Evaluation Methods' Section</p> <p><u>Purpose:</u> provides reader with clear and comprehensive description of evaluation methods, demonstrates the <u>credibility</u> of the findings and performance ratings.</p> <p>To include:</p> <ul style="list-style-type: none"> • description of evaluation data collection methods and information sources • justification for methods used (e.g. qualitative/ quantitative; electronic/face-to-face) • number and type of respondents (<i>see table template</i>) • selection criteria used to identify respondents, case studies or sites/countries visited • strategies used to increase stakeholder engagement and consultation • methods to include the voices/experiences of different and potentially excluded groups (e.g. vulnerable, gender, marginalised etc) • details of how data were verified (e.g. triangulation, review by stakeholders etc.) • methods used to analyse data (scoring, coding, thematic analysis etc) • evaluation limitations (e.g. low/ imbalanced response rates across different groups; gaps in documentation; language barriers etc) • ethics and human rights issues should be highlighted including: how anonymity and confidentiality were protected. Is there an ethics statement? E.g. <i>'Throughout the evaluation process and in the compilation of the Final Evaluation Report efforts have been made to represent the views of both mainstream and more marginalised groups. All efforts to provide respondents with anonymity have been made.'</i> 	<p>Final report (coverage/omissions)::</p> <p>The section covers elements required and describes the two approaches used: Theory based evaluation and outcome harvesting and methods used.</p> <p>Final report (strengths/weaknesses):</p> <p>Detailed overview of evaluation methods used including criteria for country selection and limitations to the evaluation and mitigation measures.</p> <p>Ethics and human rights issues considered in methods.</p>	5
<p>Quality of the 'Project' Section</p> <p><u>Purpose:</u> describes and <u>verifies</u> key dimensions of the evaluand relevant to assessing its performance.</p> <p>To 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> 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 	<p>Final report (coverage/omissions):</p> <p>Section covers elements required.</p> <p>Final report (strengths/weaknesses):</p> <p>Box 1 serves provides explanations of key terms related to the CTCN Secretariat; distinctions between CTCN UNEP ProDoc, EC Grant, CTCN PoW and Technology framework.</p>	5

<p>parameters should be described in brief in chronological order</p> <ul style="list-style-type: none"> • <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>Quality of the Theory of Change</p> <p><u>Purpose</u>: to set out the TOC at Evaluation in diagrammatic and narrative forms to support consistent project performance; to articulate the causal pathways with drivers and assumptions and justify any reconstruction necessary to assess the project’s performance.</p> <p>To include:</p> <ul style="list-style-type: none"> • description of how the <i>TOC at Evaluation</i>¹⁶⁴ was designed (who was involved etc) • confirmation/reconstruction of results in accordance with UNEP definitions • articulation of causal pathways • identification of drivers and assumptions • identification of key actors in the change process • summary of the reconstruction/results re-formulation in tabular form. <i>The two results hierarchies (original/formal revision and reconstructed) 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> This table may have initially been presented in the Inception Report and should appear somewhere in the Main Evaluation report. 	<p>Final report (coverage/omissions):</p> <p>Section provides a graphic overview of TOC and narrative of pathways.</p> <p>Final report (strengths/weaknesses):</p> <p>TOC at evaluation figure includes dynamic review of assumption and drivers that were found to hold/ did not hold in practice for case countries, as well as new drivers and the differences of TOC Technology framework, UNEP ProDoc and EC Grant.</p>	6
<p>Quality of Key Findings within the Report</p> <p><u>Presentation of evidence</u>: nature of evidence should be clear (interview, document, survey, observation, online resources etc) and evidence should be explicitly triangulated unless noted as having a single source.</p> <p><u>Consistency within the report</u>: all parts of the report should form consistent support for findings and performance ratings, which should be in line with UNEP’s Criteria Ratings Matrix.</p> <p><u>Findings Statements (where applicable)</u>: The frame of reference for a finding should be an individual evaluation criterion or a strategic question from the TOR. A finding should go beyond description and uses analysis to provide insights that aid learning</p>	<p>Final report (coverage/omissions):</p> <p>Findings presented according to guidelines for criteria and sub-criteria with ratings.</p> <p>Final report (strengths/weaknesses):</p> <p>Detailed analysis of gender considerations based on UNDP gender equality scale.</p>	5

¹⁶⁴ 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*.

<p>specific to the evaluand. In some cases a findings statement may articulate a key element that has determined the performance rating of a criterion. Findings will frequently provide insight into ‘how’ and/or ‘why’ questions.</p>		
<p>Quality of ‘Strategic Relevance’ Section</p> <p><u>Purpose:</u> to present evidence and analysis of project strategic relevance with respect to UNEP, partner and geographic policies and strategies at the time of project approval.</p> <p>To include:</p> <p>Assessment of the evaluand’s relevance vis-à-vis:</p> <ul style="list-style-type: none"> • Alignment to the UNEP Medium Term Strategy (MTS), Programme of Work (POW) and Strategic Priorities • Alignment to Donor/GEF/Partners Strategic Priorities • Relevance to Regional, Sub-regional and National Environmental Priorities • Complementarity with Existing Interventions: complementarity of the project at design (or during inception/mobilisation¹⁶⁵), with other interventions addressing the needs of the same target groups. 	<p><i>Final report (coverage/omissions):</i></p> <p>Covers elements required.</p> <p><i>Final report (strengths/weaknesses):</i></p> <p>Each sub-criteria is assessed with ratings and one overall rating.</p>	5
<p>Quality of the ‘Quality of Project Design’ Section</p> <p><u>Purpose:</u> to present a summary of the strengths and weaknesses of the project design, on the basis that the detailed assessment was presented in the Inception Report.</p>	<p><i>Final report (coverage/omissions):</i></p> <p>Covers elements required with ratings of UNEP ProDoc and EC Grant document.</p> <p><i>Final report (strengths/weaknesses):</i></p> <p>Assessment refers to key strengths and elements assessed as slightly weaker.</p>	5
<p>Quality of the ‘Nature of the External Context’ Section</p> <p><u>Purpose:</u> to describe and recognise, when appropriate, key <u>external</u> features of the project’s implementing context that limited the project’s performance (e.g. conflict, natural disaster, political upheaval¹⁶⁶), and how they affected performance.</p>	<p><i>Final report (coverage/omissions):</i></p> <p>Covers elements required.</p> <p><i>Final report (strengths/weaknesses):</i></p> <p>Covid-10 pandemic effects covered.</p>	5

¹⁶⁵ 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.

¹⁶⁶ 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.

<p>While additional details of the implementing context may be informative, this section should clearly record whether or not a major and unexpected disrupting event took place during the project's life in the implementing sites.</p>		
<p>Quality of ‘Effectiveness’ Section</p> <p>(i) Availability of Outputs:</p> <p><u>Purpose:</u> to present a well-reasoned, complete and evidence-based assessment of the outputs made available to the intended beneficiaries.</p> <p>To include:</p> <ul style="list-style-type: none"> • a convincing, evidence-supported and clear presentation of the outputs made available by the project compared to its approved plans and budget • assessment of the nature and scale of outputs versus the project indicators and targets • assessment of the timeliness, quality and utility of outputs to intended beneficiaries • identification of positive or negative effects of the project on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability). 	<p>Final report (coverage/omissions):</p> <p>Covers elements required based on portfolio analysis.</p> <p>Final report (strengths/weaknesses):</p> <p>Figures 9 and 10 provide an overview of CTCN geography and TAs with footnotes. Figure 11 shows expenditure by CTCN service areas.</p>	5
<p>ii) Achievement of Project Outcomes:</p> <p><u>Purpose:</u> to present a well-reasoned, complete and evidence-based assessment of the uptake, adoption and/or implementation of outputs by the intended beneficiaries. This may include behaviour changes at an individual or collective level.</p> <p>To include:</p> <ul style="list-style-type: none"> • a convincing and evidence-supported analysis of the uptake of outputs by intended beneficiaries • assessment of the nature, depth and scale of outcomes versus the project indicators and targets • discussion of the contribution, credible association and/or attribution of outcome level changes to the work of the project itself • any constraints to attributing effects to the projects’ work • identification of positive or negative effects of the project on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability). 	<p>Final report (coverage/omissions):</p> <p>Covers elements required.</p> <p>Final report (strengths/weaknesses):</p> <p>Outcome assessment incorporating ToC analysis and review of assumptions and drivers.</p> <p>Box 2 on UNEP-UNIDO partnership.</p>	5
<p>(iii) Likelihood of Impact:</p> <p><u>Purpose:</u> to present an integrated analysis, guided by the causal pathways represented by the TOC, of all evidence relating to likelihood of impact, including an assessment of the extent to which drivers and assumptions necessary for change to happen, were seen to be holding.</p> <p>To include:</p> <ul style="list-style-type: none"> • an explanation of how causal pathways emerged and change processes can be shown 	<p>Final report (coverage/omissions):</p> <p>Covers elements required.</p> <p>Includes gender equality assessment.</p> <p>Final report (strengths/weaknesses):</p>	6

<ul style="list-style-type: none"> • an explanation of the roles played by key actors and change agents • explicit discussion of how drivers and assumptions played out • identification of any unintended negative effects of the project, especially on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability). 	<p>Assessment build on ToC analysis and review of assumptions, drivers and influencing factors.</p> <p>Inclusion of human rights and gender considerations assessed in detail.</p>	
<p>Quality of ‘Financial Management’ Section</p> <p><u>Purpose:</u> to present an integrated analysis of all dimensions evaluated under financial management and include a completed ‘financial management’ table (may be annexed).</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 	<p>Final report (coverage/omissions):</p> <p>Covers elements required.</p> <p>Final report (strengths/weaknesses):</p> <p>Financial data made available to the Evaluation Team over the period of 2019-2022 improved compared to the period 2016-2018.</p>	5
<p>Quality of ‘Efficiency’ Section</p> <p><u>Purpose:</u> to present an integrated analysis of all dimensions evaluated under efficiency (i.e. the primary categories of cost-effectiveness and timeliness).</p> <p>To include:</p> <ul style="list-style-type: none"> • 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. • implications of any delays and no cost extensions • the extent to which the management of the project minimised UNEP’s environmental footprint. 	<p>Final report (coverage/omissions):</p> <p>Section assesses strengths and challenges to cost-effectiveness.</p> <p>Final report (strengths/weaknesses):</p> <p>Focus on Technical Assistance projects and timelines.</p>	5
<p>Quality of ‘Monitoring and Reporting’ Section</p> <p><u>Purpose:</u> to present well-reasoned, complete and evidence-based assessment of the evaluand’s monitoring and reporting.</p> <p>Consider how well the report addresses the following:</p> <ul style="list-style-type: none"> • quality of the monitoring design and budgeting (<i>including SMART results with measurable indicators, resources for MTE/R etc.</i>) • quality of monitoring of project implementation (<i>including use of monitoring data for adaptive management</i>) • quality of project reporting (<i>e.g. PIMS and donor reports</i>) \ 	<p>Final report (coverage/omissions):</p> <p>Section covers all elements for the three sub-criteria.</p> <p>Project reporting to UNEP ProDoc and ED Grant rated.</p> <p>Final report (strengths/weaknesses):</p> <p>Details of systemic/ structural challenges in reporting and monitoring provided.</p> <p>Overview of responses to previous evaluations and reviews of CTCN.</p>	5

<p>Quality of ‘Sustainability’ Section</p> <p><u>Purpose:</u> to present an integrated analysis of all dimensions evaluated under sustainability (i.e. the endurance of benefits achieved at outcome level). Consider how well the report addresses the following:</p> <ul style="list-style-type: none"> • socio-political sustainability • financial sustainability • institutional sustainability 	<p>Final report (coverage/omissions):</p> <p>Section covers all three sub-criteria of sustainability.</p> <p>Final report (strengths/weaknesses):</p> <p>Assessment of socio-political sustainability incorporates findings from country case studies carried by the evaluation team.</p>	<p>5</p>
<p>Quality of Factors Affecting Performance Section</p> <p><u>Purpose:</u> These factors are not always discussed in stand-alone sections and may be integrated in the other performance criteria as appropriate. However, if not addressed substantively in this section, a cross reference must be given to where the topic is addressed and that entry must be sufficient to justify the performance rating for these factors. Consider how well the evaluation report, either in this section or in cross-referenced sections, covers the following cross-cutting themes:</p> <ul style="list-style-type: none"> • preparation and readiness • quality of project management and supervision¹⁶⁷ • stakeholder participation and co-operation • responsiveness to human rights and gender equality • environmental and social safeguards • country ownership and driven-ness • communication and public awareness 	<p>Final report (coverage/omissions):</p> <p>Section covers all factors affecting performance.</p> <p>Final report (strengths/weaknesses):</p> <p>Detailed assessments of quality of project management and supervision, stakeholder participation and cooperation, communication and awareness.</p>	<p>5</p>
<p>Quality of the Conclusions Section</p> <p>(i) Conclusions Narrative:</p> <p><u>Purpose:</u> to present summative statements reflecting on prominent aspects of the <u>performance of the evaluand as a whole</u>, they should be derived from the synthesized analysis of evidence gathered during the evaluation process. To include:</p> <ul style="list-style-type: none"> • compelling narrative providing an integrated summary of the strengths and weakness in overall performance (achievements and limitations) of the project • clear and succinct response to the key strategic questions • human rights and gender dimensions of the intervention should be discussed explicitly (e.g. how these dimensions were considered, addressed or impacted on) 	<p>Final report (coverage/omissions):</p> <p>Section covers strengths to leverage further, less successful aspects with potential for improvement, responses to the key strategic questions and summary of project findings and ratings.</p> <p>Final report (strengths/weaknesses):</p>	<p>5</p>

¹⁶⁷ 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. This includes providing the answers to the questions on Core Indicator Targets, stakeholder engagement, gender responsiveness, safeguards and knowledge management, required for the GEF portal.

<p>ii) Utility of the Lessons:</p> <p><u>Purpose:</u> to present both positive and negative lessons that have potential for wider application and use (replication and generalization)</p> <p>Consider how well the lessons achieve the following:</p> <ul style="list-style-type: none"> are rooted in real project experiences (i.e. derived from explicit evaluation findings or from problems encountered and mistakes made that should be avoided in the future) briefly describe the context from which they are derived and those contexts in which they may be useful do not duplicate recommendations 	<p><i>Final report (coverage/omissions):</i></p> <p>Four lessons presented in format according to guidelines.</p> <p><i>Final report (strengths/weaknesses):</i></p> <p>Lessons linked to analysis in main text of report.</p>	<p>5</p>
<p>(iii) Utility and Actionability of the Recommendations:</p> <p><u>Purpose:</u> to present 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.</p> <p>Consider how well the lessons achieve the following:</p> <ul style="list-style-type: none"> are feasible to implement within the timeframe and resources available (including local capacities) and specific in terms of who would do what and when include at least one recommendation relating to strengthening the human rights and gender dimensions of UNEP interventions represent a measurable performance target in order that the Evaluation Office can monitor and assess compliance with the recommendations. <p>NOTES:</p> <p>(i) In cases where the recommendation is addressed to a third party, compliance can only be monitored and assessed where a contractual/legal agreement remains in place. Without such an agreement, the recommendation should be formulated to say that UNEP project staff should pass on the recommendation to the relevant third party in an effective or substantive manner. The effective transmission by UNEP of the recommendation will then be monitored for compliance.</p> <p>(ii) Where a new project phase is already under discussion or in preparation with the same third party, a recommendation can be made to address the issue in the next phase.</p>	<p><i>Final report (coverage/omissions):</i></p> <p>Six recommendations presented in format according to guidelines.</p> <p><i>Final report (strengths/weaknesses):</i></p> <p>Recommendations draws on findings of the evaluation.</p> <p>Each recommendation is operationalized with proposed action presented as aspects for implementation.</p> <p>Rec. 6 focuses on human rights and gender quality.</p>	<p>5</p>
<p>Quality of Report Structure and Presentation</p> <p>(i) Structure and completeness of the report:</p> <p>To what extent does the report follow the Evaluation Office structure and formatting guidelines?</p> <p>Are all requested Annexes included and complete?</p>	<p><i>Final report (coverage/omissions):</i></p> <p>Complete report, drafted in line with formatting guidelines.</p> <p><i>Final report (strengths/weaknesses):</i></p> <p>All required annexes included.</p> <p>Annex IV contains country case summaries.</p>	<p>6</p>

	Annex VI provides an overview of indicator reports and data.	
<p>(ii) 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?</p>	<p><i>Final report (coverage/omissions):</i> Adequate quality and tone of English language.</p> <p><i>Final report (strengths/weaknesses):</i> Good use of boxes, tables and figures.</p> <p>Photos from field missions (case studies) included.</p>	5
OVERALL REPORT QUALITY RATING		5.2

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. Were the evaluators contracted directly by the Evaluation Office?	X	
5. Were the Evaluation Consultants given direct access to identified external stakeholders in order to adequately present and discuss the findings, as appropriate?	X	
6. Did the Evaluation Consultants 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. Were the project team, Sub-Programme Coordinator and identified project stakeholders given an opportunity to 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 and conducting evaluation missions?	X	
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. Were the project team, Sub-Programme Coordinator and any identified project stakeholders given an opportunity to 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>
11	Evaluation planning process took long due to the complexity of the evaluand and to fully engage the Evaluation Reference Group.