

Draft Programme of Work 2019-2022

Climate Technology Centre and Network

Executive Summary

Technology transfer, along with finance and capacity building, is recognized as one of the pillars of implementation for the international climate process coordinated by the UN Framework Convention on Climate Change (UNFCCC). It also supports the development objectives enshrined in the Sustainable Development Goals (SDGs).

Recognizing the need to accelerate and enhance climate technology development and transfer, Parties to the UNFCCC established a Technology Mechanism (TM) in 2010, consisting of two complementary bodies, a Technology Executive Committee (TEC) and the Climate Technology Centre and Network (CTCN). The 2015 Paris Agreement deepened this recognition, creating a Technology Framework which will provide overarching guidance to the work of the TM in promoting and facilitating enhanced action on technology development and transfer.

As a United Nations designated body, the CTCN is a technology neutral body that leverages global expertise on climate technologies. It catalyzes accelerated climate action by helping to create business opportunities for climate technologies in emerging markets and connecting developing countries to appropriate technology solutions through its global network.

During its five years of operation, the CTCN has assisted developing countries with over 50 technical assistance responses and provided tailored capacity building to over 20 least developed countries, while networking 160 institutions and 2400 governmental and other stakeholders. The CTCN leveraged a global pool of experts with skills in areas ranging from flood modelling to inform urban planning in low-lying megacities, to adaptation of agricultural practices that build resilience in water-poor areas, to the development of regional efficiency standards for appliances that enables countries and regions to make better use of finite natural resources and focus on economic growth by providing reliable electricity to its citizens and industry base.

The activities of the CTCN contribute to the objectives and goals of the UN Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, as well as the full spectrum of Agenda 2030 and the Sustainable Development Goals.

The CTCN has recently completed its first five years of operations. This document lays out a vision for how it can build on its successes, adapt to its lessons learned, and deliver on its mandate in a manner that triggers transformative change and places climate technologies as a central element in implementation of the Paris Agreement.

Lessons learned from the first five years

Independent reviews of the CTCN have demonstrated that the partners and customers of the CTCN in general have acknowledged the added value of the CTCN in terms of supporting developing countries in the process of accessing international funds and building enabling environment. The activities of the CTCN have also responded the needs of developing countries, which appreciate its intense groundwork and its reactive and tailored assistance.

Recommendations to the CTCN included enhancing National Designated Entities cooperation with other national focal points of the convention, clarifying roles of developed country NDEs, reinforcing the involvement of Network Members, further collaboration with Financial Mechanism of the convention, and ensuring transformational changes by re-examination of CTCN governance, procedures and monitoring.

Focus for the next four years

The focus for the next four years is to strengthen and scale up CTCN activities by using more effectively additional resources from partner organisations, private sector sources and other international technology and finance initiatives. Also, the CTCN will focus on more impactful technical assistance, which leads to transformational changes in developing countries as guided by the convention decisions.

Summary of the Second POW

The Second Programme of Work is based on new theory of change analysis, which frames the CTCN niche and space of control as well as key activities and outputs. It consists of critical priority elements such as the CTCN's regional approach, implementation of strategic adaptation and mitigation technical assistance tools, engaging in North-South, South-South and Triangle cooperation, intensive private sector engagement, emphasizing the gender dimension of the CTCN's work, and establishing a more robust monitoring and reporting system.

Acronyms

AOP	Annual Operating Plan
COP	Conference of the Parties to the UNFCCC
CTC	Climate Technology Centre
CTCN	Climate Technology Centre and Network
FTA	Fast Technical Assistance
GEF	Global Environment Facility
GCF	Green Climate Fund
GHG	Greenhouse Gas
NDA	National Designated Authority
NDE	National Designated Entity
PoW	Programme of Work
RD&D	Research Development and Deployment
SDG	Sustainable Development Goal
SME	Small-and Medium-sized Enterprise
TA	Technical Assistance
TEC	Technology Executive Committee
TM	Technology Mechanism
UNIDO	United Nations Industrial Development Organization
UNFCCC	UN Framework Convention on Climate Change

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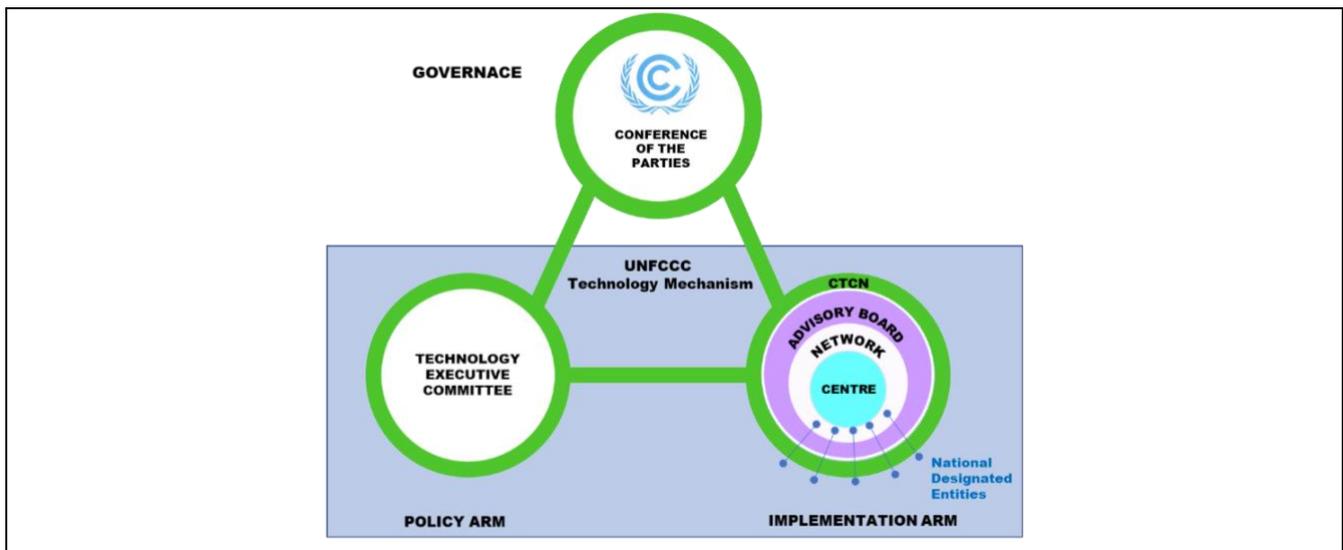
Introduction

1. This document presents the second multi-year Programme of Work (PoW) for the Climate Technology Centre and Network (CTCN) for the period 2019-2022. It builds on successful CTCN partnerships and interventions that have stimulated climate technology implementation during its first five years of operation. It reflects lessons learned and recommendations from independent, third-party reviews to strengthen the transformational impact of the entity's operations.
2. This PoW is based on the UN Framework Convention on Climate Change (UNFCCC) mandate to the CTCN to stimulate technology cooperation, enhance the development and transfer of technologies, and assist developing country Parties at their request. It prioritizes impactful project ideas that address specific country needs and advances networking among a broad range of stakeholders, while leveraging the convening power of the CTC and its hosts, UN Environment and the United Nations Industrial Development Organization (UNIDO), as well as their networks and regional relationships.
3. The PoW serves to frame Annual Operating Plans (AOP) and operational budgets approved annually by the CTCN Advisory Board and can be scaled depending on the level of funding available.

Background

4. The CTCN is a purpose-built body under the UNFCCC, with a mandate to respond to the climate technology needs of countries and foster collaboration, capacity building and access to information and knowledge in order to accelerate climate technology transfer. It is the operational arm of the Technology Mechanism (TM), and complements the Technology Executive Committee (TEC), the policy arm of the TM. The TEC focuses on identifying policies that can accelerate the development and transfer of low-emission and climate resilient technologies. The CTCN complements the TEC, building on its policy recommendations to deliver technology assistance in emerging economies. This balance between operational and policy expertise has produced a solid partnership between the two branches of the TM and led to strong collaboration on issues, including innovation, technology research, development and demonstration, and enhancement of endogenous capacities and technologies. See Figure 1 for an overview of the TM.

Figure 1: Structure of the Climate Technology Centre and Network within the UNFCCC Process



5. The CTCN is guided by the Conference of the Parties to the UNFCCC (COP) through its Advisory Board, comprised of developed and developing countries representatives, as well as business, academia and NGOs. The Advisory Board provides strategic and technical guidance to the CTC, including through their thematic taskforces on research development and deployment (RD&D), finance and operations. The Advisory Board also facilitates coordination with the TEC.
6. The 2015 Paris Agreement recognizes the importance of the TM and its two bodies by having the TM serve under the Agreement and strengthening it by providing guidance to the TM through a Technology Framework. This Framework will provide overarching guidance to the work of the TM in promoting and facilitating enhanced action of climate technologies. The Technology Framework is guided by several principles which the CTCN embraces in actions it undertakes to meet its mandate. These are: coherence, inclusiveness, results-oriented approach, transformational approach and transparency. The Technology Framework will cover a range of issues, for example supporting innovation through collaborative engagement with a broad range of stakeholders, helping countries create enabling environments, and building capacity, including through information sharing and network development.

The First Programme of Work (2013-2018)

7. The first CTCN PoW, approved by the Advisory Board in 2013, focused on the start-up phase of the CTCN, and on establishing its three core service areas: responding to country requests for technical assistance; building local capacity and networks; and increasing information flows and knowledge-sharing. See Figure 2 below for an outline of the core service areas as operationalized through implementation of the first PoW.

Figure 2: Summary of CTCNs service areas under the first programme of work

Technical Assistance	Capacity Building and Network	Knowledge Management
<ul style="list-style-type: none"> • Responds to country requests on all relevant aspects of climate technology • Selected based on eligibility and prioritization criteria • Reflective of national climate change priorities as expressed in national planning documents • Implemented through the CTC Network 	<ul style="list-style-type: none"> • Supports the transfer of climate technologies through human and technological capacity building • Provides a platform for the global community to identify barriers, share best practices, and identify matchmaking opportunities 	<ul style="list-style-type: none"> • Serves as a gateway to the CTCN's technical assistance, capacity and other services • Provides access to information on opportunities and outcomes of CTCN activities • Facilitates knowledge sharing by offering access to a broad range of curated climate technology information and feature contributions

CTCN Impacts: the first five years

8. The CTCN responds to climate technology needs of developing countries, enhancing their ability to reduce GHG emissions and build resilience, thereby contributing to the long-term objective of the Paris Agreement. Through implementation of the first PoW the CTCN has engaged 450 network members, and the CTC's 158 national climate technology focal points, NDE. NDE are nominated by respective national governments through the UNFCCC climate focal points and are the CTC's in-country partners.

9. The CTCN has completed approximately 40 technical assistance interventions, with approximately one hundred additional interventions underway as of this writing. Box 1 provides an overview of indicative findings for technical assistance interventions totaling US\$ 5 million. These findings reflect the CTCN’s catalytic function; creating environments in which CTCN TA interventions can be scaled up by a range of stakeholders, including bilateral and multilateral financing mechanisms, donor countries, and private sector entities.

Box 1: Selection of Key Indicative Anticipated Quantitative Impacts

A selection of key indicative findings on anticipated quantitative impacts from analysis of 40 completed technical assistance

- 130 workshops building the capacity of 2400 people across 160 institutions.
- Approximately \$700 million in anticipated investment brought about as a result of technical assistance activities.
- 51 projects implemented deploying 100 technology types as a result of 40 CTCN TA interventions completed.
- Estimated GHG emissions likely to be reduced or sequestered as a result of projects supported by technical assistance: 110 million tons of GHG emissions (CO₂e)
- Estimated number of people with improved livelihoods as a co-benefit resulting from technical assistance interventions: 85 million
- Approximately \$40 million in avoided costs.

Lessons learned

10. During its first five years, the CTCN has demonstrated value to emerging economies and project proponents alike by helping de-risk larger-scale investments through the expertise of its partner organizations, local connections, convening power, and credibility with multilateral investment agencies. CTCN host agencies also have deep local knowledge and networks, connections that will be more thoroughly leveraged as it enters its second operational period.
11. Experience during this period has uncovered several key lessons which the second PoW incorporates and will build on over the next four-year period. First, the role of NDE in TA requests is critical. Second, capacity building designed to strengthen, empower and connect remain critical elements of the CTCNs work. Third, with the knowledge management system fully functional, the CTCN must shift its focus to engagement and learning. Communication and transparency will therefore be critical elements to the CTCNs success in this arena. It will also be a determinant in its ability to build a reliable resource base, reach out to additional implementing partners, and raise awareness of its service offerings. This will raise the CTCN’s profile with the full spectrum of stakeholders with which the CTCN interacts. See Box 2 for more details on lessons learned.

Box 2: Lessons Learned from the first five years

Lessons Learned

Technical Assistance

TA interventions can reveal constraints in technology options, where preferred technology choices of a country are found to be unfeasible due to local conditions. This foundational work enables response options to be re-designed to account for constraints and helps guarantee investment in technologies is appropriate to the country context.

Scalability and replicability will be key over the next four years. The CTCN will building on this through development of regional TA requests to multiply the impact of a single intervention across countries facing similar challenges.

Capacity building and Networking

Capacity building designed to strengthen, empower and connect developing country NDEs, and strengthen their relationships with other country focal points, has been key to TA requests that deliver impact and lead to additional external investment. For instance, in those instances where NDEs have a working relationship with the National Designated Authorities (NDA) under the Green Climate Fund (GCF), there is a higher likelihood of leveraging additional financing from the GCF once the TA intervention is completed.

The target audience of capacity building must reach out to a broader audience to ensure human capacity is in place to meet the CTCN's mandate.

Knowledge Management

The CTCN developed a world class knowledge management system throughout its first five years. During the next four years, the focus must shift to engagement and learning, building on its knowledge management experience.

There is a need for more direct and consistent interaction with a wide range of stakeholders within regions and countries, as building strong working relationships requires dedicated teams that provide consistent and predictable service over time.

CTCN Key Assets

12. The CTCN has identified a number of key assets and services that contribute to the success of its operations. Over the course of the next four-year period, these will enable the CTCN to continue building on its successes and further incorporate lessons learned. These assets and services support the CTCN's shift towards transformative, proactive and focused activities, and help define the niche and comparative advantage of the CTCN within a constantly evolving sphere of climate technology.

Convening power

13. The CTCN mandate confers significant convening power. The CTCN utilizes this by assembling experts, climate focal points and technology providers at the local, national (including sub-national), regional and global levels. Additionally, CTCN hosts, UN Environment and UNIDO, are well-respected institutions with experts,

partnerships and existing relationships in regions where the CTCN is most active. This expertise helps guide the ambition and scope of CTCN activities.

Access to global expertise

14. The CTC maintains a growing Network that includes the CTCN host agencies, its founding Consortium Partners, institutions, private sector organizations and NDEs. Together these institutions form a broad community of climate technology stakeholders, including academic, finance, non-government, private sector and public sector entities which exchange knowledge through the CTCN and are eligible to bid for the implementation of CTCN technical assistance requests and capacity building activities. As such, the CTCN can mobilize the skills, knowledge and expertise of some of the world's top entities within the climate technology sphere in order to respond to countries' diverse climate technology needs.
15. In addition to the Network, the CTCN also utilizes a Knowledge Partners network. It supports the CTCN's mandate to foster collaboration and access to information and knowledge. Through this network, the CTCN generates, manages and shares knowledge, experience and good practices at the national, regional and global levels, and traditional knowledge and practices.
16. As a result of implementation of the first PoW, the CTCN has built a network with over 170 private sector members. These members contribute to the CTCN knowledge base, participate in the implementation of Technical Assistance, and participate in regional and global events.

NDE: CTCN In-country partners

17. National Designated Entities play an important role within the CTCN. As UNFCCC technology focal points, NDE are the CTCN's in-country partners in developed and developing countries, serving as links to national institutions. NDE can create areas of opportunity for engagement and collaboration, building on synergies between national priorities and activities, relevant domestic stakeholders and CTCN activities. They contribute to the delivery of CTCN services through information and knowledge sharing, as well as collaboration and networking on climate technologies. Engagement opportunities exist, in cooperation with NDE, for research institutions, public and private sector actors, non-governmental organizations, and climate, legal, engineering and technological service providers, all central figures in the success enjoyed by the CTCN thus far. See Box 3 for further information on NDE roles.

Box 3: NDE roles

NDE vital role in CTCN success

NDEs from emerging economies work with the CTC to ensure requests for technical assistance align with needs and approaches and are aligned with national objectives and strategies. Their local knowledge affirms the appropriateness of in-country activities as well as the capacity to receive, implement and build on the outputs of the work of the CTCN and its partner organizations.

Developed country NDEs provide links to in-country development institutions and advertise opportunities for institutions and organizations based in their countries to engage in support of shared climate and development priorities. Additionally, NDEs can work with their trade and technology officials who have begun accessing local developing country expertise by participating at CTCN regional meetings as well as events co-hosted with other partners.

Independent Review and other inputs

18. Guidance provided by the COP calls for periodic independent reviews of the effectiveness of the CTCN. The reviews are to occur every four years and are carried out under the authority of the UNFCCC secretariat. The first UNFCCC review was conducted in 2017 and highlighted the CTCN's ability to foster synergies with financial institutions and technical partners to avoid redundancies and increase the leverage of its activities. Its findings were complemented by additional reviews and inputs from the Advisory Board and donors.
19. The review also provided recommendations for improving the efficiency and efficacy of the CTCN and covered a range of issues relevant to the CTC, the co-hosts of the CTCN and countries with NDEs. Regarding countries with NDE, the review highlighted the need for countries to provide support and recognition at the national level in order to better familiarize national institutions with the work of the CTCN. As noted in lessons learned, it is the CTCN's experience that NDE cooperation with other UNFCCC focal points increases the success of TA. It also should reduce duplication of ideas with similar initiatives in the same country. The CTCN and its co-hosts have and will continue to create opportunities for UNFCCC focal point interaction.
20. A related recommendation focuses on continued exploration of provision of funding for CTCN activities through entities under the Financial Mechanisms, namely the Global Environment Facility (GEF) and the Green Climate Fund (GCF). Enhancing operational linkages between the three organizations was also pointed to as an important element. Linkages between the CTCN and the GEF and GCF is important as the CTCN supports countries in accessing finance for deploying climate technologies through provision of targeted information, and through its partnerships with the GEF and GCF. This strengthens the ability of the CTCN to advise countries as they move from the development of policies to support climate technology to their full-scale deployment.
21. A need to increase efficiency of the CTCN's provision of technical assistance was also identified. The CTC's experience highlights a need to increase the quality of TA requests in order to reduce delays. It has also been noted that there is uneven distribution among developing countries submitting requests. In recognition of this need, the CTC has developed guidelines for Fast Technical Assistance (FTA). The purpose of FTA is to enable TA to be developed that are strategic, time-sensitive, and smaller in scope and shorter in duration. FTA would also enable the CTC to increase the number of requests to which it can respond, thereby increasing the number of countries it can serve. FTA could also in some cases lead to subsequent requests for larger, including regional, efforts which would be of higher quality and could be processed quickly on the basis of work already undertaken.
22. Communication and engagement are another key theme of the recommendations. These include raising awareness of its services in developing countries, reinforcing involvement of CTC Network members in its activities, and increasing collaboration and outreach with the private sector, in particular. Engagement and learning are high priorities for the CTC as it is critical to its success in meeting its mandate. A related recommendation is gaining clarity on the role of developed country NDE.

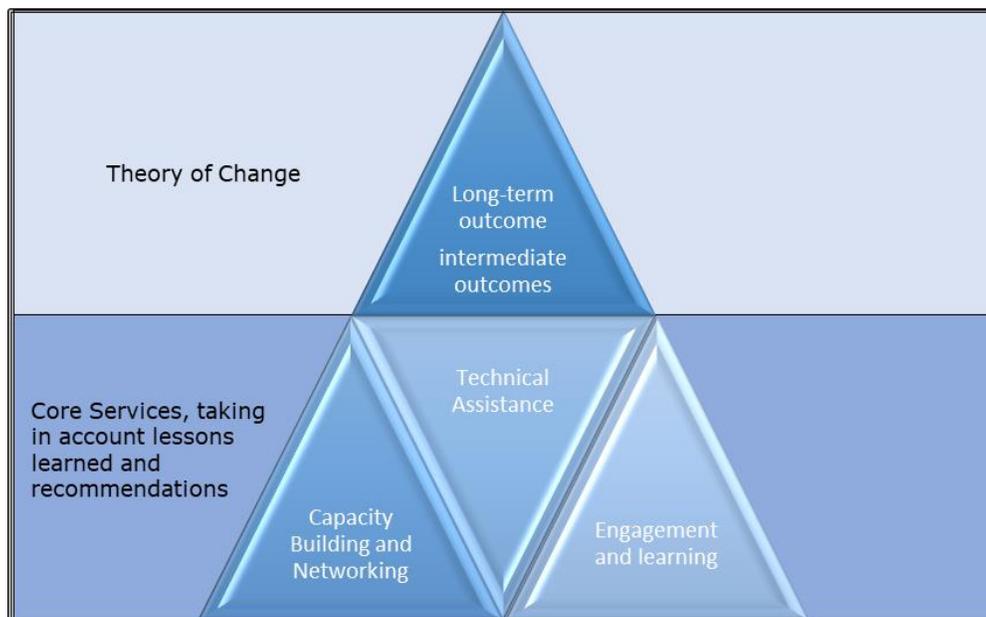
Theory of Change

23. Strengthening and scaling up CTCN core activities, in line with the above recommendations, is a priority for the CTCN. As the climate process evolves, so must the CTCN. The framework under which the CTCN began operation has expanded. The Financial Mechanism is fully operational. The Paris Agreement is in place and elements of the Technology Framework are beginning to take shape. It is also clear from the lessons learned and the independent review that the focus of the CTCN must reorient to recognize both financial and political

realities. While the mandate of the CTCN is broad, casting a wide net of activities across all levels of engagements will not produce transformative impact.

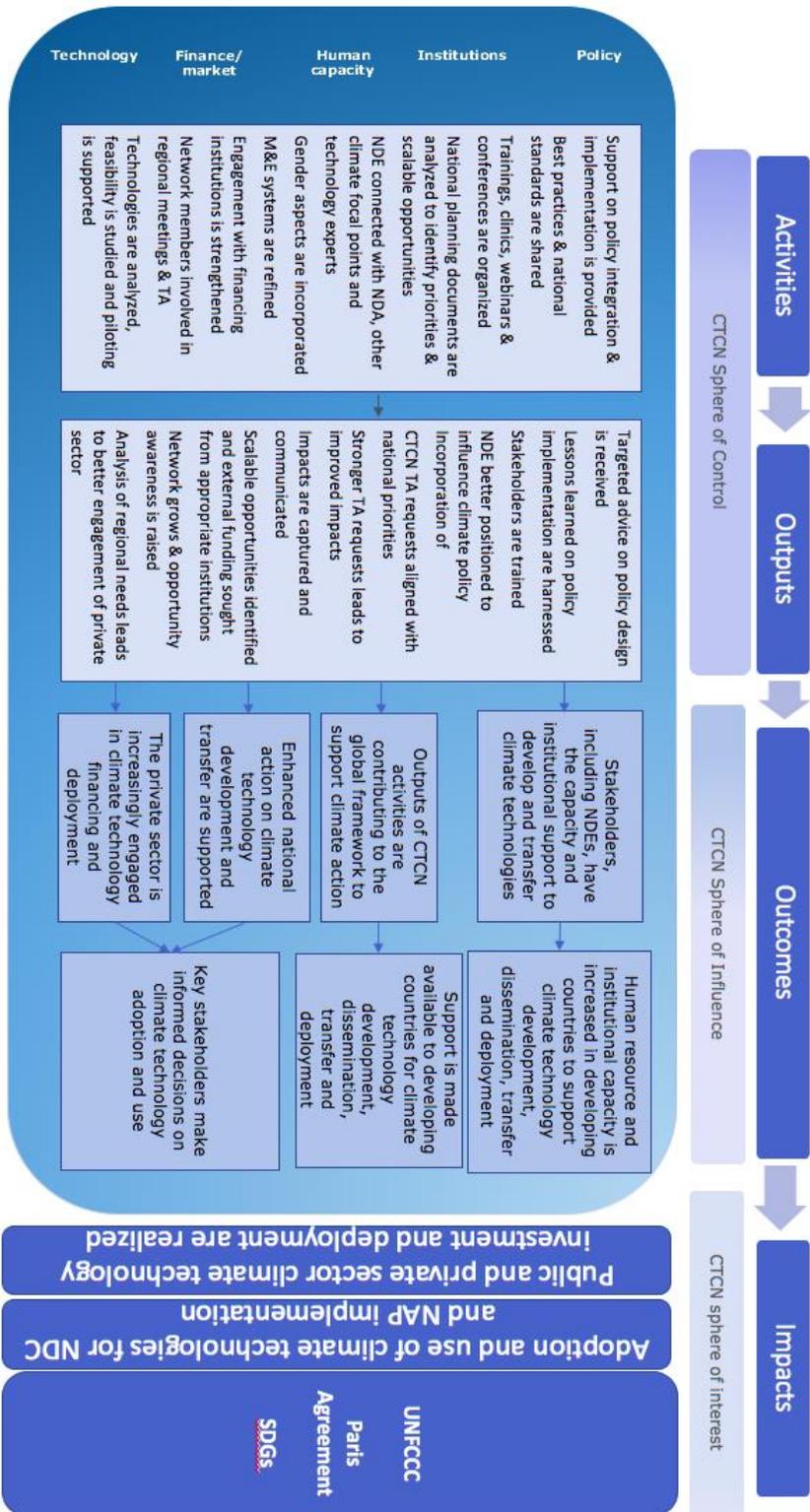
24. Recognizing the need for a strategic and impactful outcome of the CTCNs work, the CTC undertook a theory of change (TOC) exercise to ensure the CTCN delivers on its mandate. The TOC identifies the conditions that have to unfold for its long-term goal to be met. The TOC helps provide clearer focus on the activities and areas in which the CTCN can have the greatest impact, working with in-country partners and its expanded network, as well as increasing collaboration with stakeholders, including the private sector.
25. The CTCN seeks to accelerate the transfer of climate technologies in support of the implementation of national planning documents by developing countries. To contribute to this goal, the CTCN will serve as a catalyst between supply and demand of climate technologies, providing a focused set of activities at the regional, national (including sub-national) and local levels that enable developing countries to access appropriate support while, at the global level, helping ensure the support needed by developing countries is available. In order to achieve this, the CTC will rely on its regional approach. This approach enables closer cooperation, not only with NDE but with the full range stakeholders within countries and regions. Figure 3 shows the interaction of the TOC with the three core service areas.

Figure 3: Interaction between the TOC and Core Services



26. Supporting integration of climate technologies into policies and operations within both the public and private sector is another focus of the TOC. This is expected to increasing stakeholder participation and, over time, create greater penetration of investments by the private sector.
27. Intermediate changes are designed to create enabling environments, with an emphasis on capacity built being sustained and maintained over time, and that a broader range of stakeholders engaged within climate technology processes. Achieving this will require activities in support of policies, institutions, human capacity, finance/investments and technology development, transfer, dissemination and deployment.

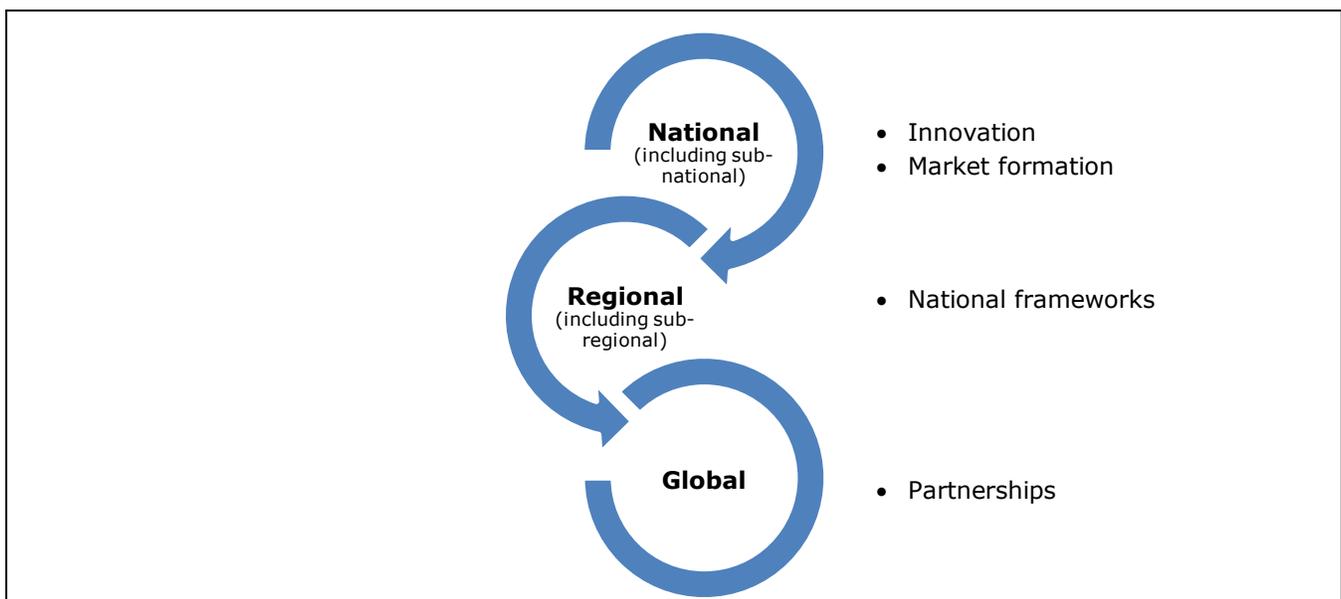
Figure 4 : Overview of Theory of Change



The Second Programme of Work 2019-2022

28. The second PoW reflects lessons learned and recommendations from the reviews in order to effectively mobilize assets in a targeted manner and reflective of the CTCNs niche. This PoW is designed to provided clearer focus on the activities and areas in which the CTCN can have the greatest impact by working with its in-country partners and expanded network, as well as increasing collaboration with stakeholders, including the private sector. Detailed activities will be contained in the Annual Operating Plan.
29. As a trusted, technology neutral partner, the CTCN will utilize resources from markets, and engage in interventions and activities at early stages where there is greater risk, providing effective due diligence work. This in turn will provide targeted interventions with transformational, scalable impacts.
30. The objective of the CTCN’s second multi-year PoW is to catalyse accelerated climate action by building business opportunities for climate technologies in emerging markets and connecting countries to the best technology solutions through the CTCN global network of climate technology experts.
31. The broad mandate of the CTCN requires that activities are tailored to outcomes at the appropriate level (see Figure 5). Focusing activities at all levels risks thinning out the CTCN’s potential impacts. CTCN activities during the second PoW will broadly occur at:
 - The local or sub-regional level where activities directly support stakeholders in technology innovation systems. Activities at this level can impact the entire technology cycle as well as market formation, endogenous technologies and private sector behaviours.
 - National (including sub-national) and regional (including sub-regional) activities supporting a government or group of governments’ technology related activities. These actions focus on strengthening technology related policy frameworks, including industry and innovation systems, and research and learning.
 - The global level aims to inform or strengthen support for collaboration across governments and stakeholders. This includes global or regional efforts aimed at engaging, informing or strengthening support for climate technology across governments and stakeholders.

Figure 5: Levels of CTCN Engagement



32. Each level noted above requires varying approaches, content focus, and target groups. Regional teams will work at the local, national (including sub-national) and regional levels and feed this into the global level. The second PoW is designed to increase the CTCNs impact in line with its goals and mandate, and at appropriate levels of engagement.

Adopting a Regional Approach to deliver the Second Programme of Work

33. To help focus its operations and deliver the transformative impact requested by donor and recipient countries alike, in 2018 the CTCN reorganized its operations along a regional model. This approach enables the CTCN to deepen its engagement through a more integrated approach to service delivery, and better leverage common solutions to mutual challenges faced within regions. From an operational standpoint, each NDE will have a single point of contact rather than – as in the past – multiple points of contact based on type of core activity (e.g. technical assistance, capacity building, network outreach). This will strengthen coordination within a given region and help the CTCN to replicate proven solutions that have been deployed under similar national circumstances.
34. Regional teams will be better positioned to foster greater cooperation and collaboration with local, national (including sub-national) and regional entities including the private sector and private sector associations that often cooperate on a regional basis. The structure will facilitate access to and relationships with UN Environment's and UNIDO's regional resources, experts with established contacts in the region that are more familiar with local customs and reduce the risk of overlap or duplication with similar initiatives.

Linking the PoW and TOC

35. The outcomes identified through the Theory of Change exercise undertaken in 2018 reflect the crosscutting nature of the CTCN's work. This PoW represents a concerted effort to capture guidance, recommendations and lessons learned while fulfilling the mandate by the COP to accelerate technology transfer. The PoW translates the key assets and strengths of the organization and reframes them in a more logical and interconnected manner, drawing clear linkages between the outputs generated by its activities and their contribution to the needs of developing countries for climate technology captured by the outcomes explained below.
36. Under the first outcome, building and sustaining human and institutional capacity is a key requirement for creating innovation systems at the national and regional levels. This also enables institutions to support efforts to scale up climate technologies. As part of this process the CTCN will identify and cooperate with regional focal points to coordinate regional activities. This outcome is designed to raise awareness of climate technology needs and opportunities, provide targeted training, workshops and other learning engagements as well as build a body of best practices, case studies and data. Activities based on this outcome will also facilitate stronger south-south cooperation, foster innovation and focus on identifying and supporting TA interventions with transformation impact. The geographic focus of the outcome is at the national (sub-national), regional and local levels.
37. The second outcome focuses on global mechanisms for supporting climate technology development, dissemination, transfer and deployment, necessary for meeting the objectives of the Paris Agreement. The CTCN will continue to strengthen its partnership with NDEs under this outcome. It will also provide focus on closer collaboration between the Technology and Finance Mechanisms. Activities based on this outcome will build on engagement and learning activities of the first outcome and seek to ensure that investment communities and governments develop effective mechanisms to increase the availability of funding for climate technologies. The geographic focus of this outcomes is primarily at the global and regional levels.

38. Private sector engagement is a heavy focus of this the third outcome, where mechanisms and policies needed to create enabling environments as well as the creation and operation of robust national markets for climate technologies are featured. This outcome also focuses on adoption of climate technologies by the private sector. Addressing barriers to adoption of climate technologies and low-emissions policies and standards, and sharing guidance on climate technology-supportive policy and regulations based upon TEC findings are some of the activities that will be examined.
39. Additionally, this outcome will focus on enabling developing country stakeholders to produce higher quality, investible proposals for technology adoption; sharing best practice on de-risking climate technologies for sub-regional markets; and technical assistance interventions that test the feasibility and appropriateness of specific climate technologies. The geographic focus of this Outcome is primarily at the regional and national (including sub-national) levels. See Table 1 for a summary of the TOC outcomes.

Table 1: TOC Outcomes

Outcome	Intermediate Outcome	Key Elements
Human resource and institutional capacity are increased in developing countries to support climate technology development, dissemination, transfer and deployment	Stakeholders, including NDEs, have the capacity and institutional support to develop and transfer climate technologies	Facilitating stronger south-south cooperation and fostering innovation Technical Assistance interventions that identifying and supporting climate technologies with transformational impact Regional focal points drawn from stakeholders in the region to coordinate regional activities Appropriate training and learning systems are in place
Support is made available to developing countries for climate technology development, dissemination, transfer and deployment	Outputs of CTCN activities are contributing to the global framework to support climate action	Strengthening NDE partnership with the CTCN Engagement regionally and domestically, ensuring best practices and lessons learned are shared Closer collaboration between the Technology and Finance Mechanisms Investment communities and governments develop effective mechanisms to increase the availability of funding for climate technologies
Key stakeholders make informed decisions on climate technology adoption and use	Enhanced national action on climate technology development and transfer are supported	Private sector engagement Enabling environments created High quality, investible proposals for technology adoption Sharing best practice on de-risking climate technologies for sub-national markets Private sector can quantify financial benefits of climate adaptation and mitigation action
	The private sector is increasingly engaged in climate technology financing and deployment	

40. The regional approach will better position the CTCN to achieve progress towards the outcomes identified in the TOC exercise, through the coordinated delivery of its three key service areas (TA, Capacity Building and Networking, and Engagement and Learning). Gender and Private Sector Engagement are also incorporated as crosscutting themes.

41. Over the next four-year period, the CTCN will:
- Deliver faster targeted TA linked to key priorities and the availability of additional financial resources
 - Strengthen the contribution of climate technology to the main national climate processes
 - Enhance opportunities for transformational multi-country Technical Assistance
 - Reinforce network engagement
 - Mobilize in-kind support and additional financial resources through aligning with bilateral and multilateral funding institutions, including the Green Climate Fund and the Global Environment Facility.
42. It should be noted that while the CTCN is pivoting towards a regional approach to enhance its effectiveness, it will continue to deliver the key core services in use in 80+ countries and outlined in its COP mandate.

Technical Assistance

43. In order to make more efficient use of core resources, the CTCN has been moving towards swifter, more targeted responses designed to respond in a timely manner to requests that are smaller in scale but clearly address a barrier impeding effective technology transfer. The CTCN will also increase its delivery of smaller-scale and Fast Technical Assistance (<\$20K), targeting larger implementation for funding by partner institutions, including the Financial Mechanism of the Convention. FTA requests will allow the CTC to increase the number of requests to which it can respond as well as the number of countries it can serve.
44. This approach may also reduce the amount of time the CTC spends in refining requests and can lead to subsequent requests for CTCN support for larger efforts – including regional efforts – that increase the leverage ratio of the initial investment and deliver more clearly defined impact. Based on its lessons learned and enhanced through the regional TEMs process, the CTCN has identified key opportunities for adaptation and mitigation technologies for implementation to 2020, noted in Box 4 below. This focus on impact will be supported by enhanced monitoring and evaluation, as noted in the Annual Operating Plan for 2019, including scheduled follow-up in 2-4 years to ensure anticipated impacts are reflected through the appropriate implementation of the technical assistance.
45. The CTCN has identified key opportunities for adaptation and mitigation technologies which may be appropriate for TA/FTA, these are contained in Box 4.

Box 4: Opportunities for Adaptation and Mitigation Technologies

Opportunities to define and extend priority adaptation and mitigation technologies	
Priority Adaptation Actions¹	Priority Mitigation Actions²
<ul style="list-style-type: none"> • Agro-meteorological forecasting systems for farmers and local decision-makers • Small scale water delivery technologies for irrigation and domestic use • Urban adaptation planning tools • Hydro-dynamic modelling merging user need projections • Data systems development in support of integrated coastal zone management for adaptation measures • Monitoring systems and indicators for adaptation planning (local and national) • GIS-based tools for water management 	<p>2018: Industry: municipal and industrial waste-to-energy technologies</p> <ul style="list-style-type: none"> a. Landfill gas recovery and utilisation, mass burn, pyrolysis and gasification, tire-derived fuel, refuse-derived fuel; technologies that can be scaled down to small city/town levels b. Best practices for the contractual arrangements between the governments/municipalities and the technology providers <p>2019: Energy: innovative storage technologies for decentralised and centralised electricity generation</p> <ul style="list-style-type: none"> a. Including links with the water nexus (e.g. pumped storage, desalination, making ice) <p>2020: Human settlements: Zero-emissions/energy positive buildings</p> <ul style="list-style-type: none"> a. Including use of indigenous and local knowledge, techniques and resources

Capacity Building and Networking

46. The regional approach under adoption by the CTCN in 2018 will be particularly beneficial to the separate but interlinked objectives of increasing domestic capacity to create necessary enabling environments for technology transfer and to tap into the expert organizations best-positioned to implement solutions that will deliver on the objectives of the project proponent. CTCN experience has demonstrated that its key TA services are most effectively implemented with done in conjunction with a well-positioned local partner. Additionally, CTCN engagement via events including the regional climate weeks organized by the UNFCCC or at events such as GLOBE in Vancouver, Canada target a wide range of stakeholders with common regional interests that are well placed to partner, share information, and collaborate.
47. Additionally, the CTCN has enjoyed great results in convening regional focal points – not just for technology transfer, but for climate change, GEF, and GCF as well. These officials often play many roles within their national governments and creating opportunities not just for the sharing of common experience but to build relationships and brainstorm has led to more active focal points and higher quality requests for technical assistance.

¹ Taken from the CTCN’s initial proposal on priority adaption actions shared with the adaptation committee.

² Taken from the CTCN submission on specific technology themes and priority areas for near-term action to the UNFCCC High Level Champions.

Engagement and Learning

48. Strategic engagement and outreach are critical to raising the CTCN's service profile, not only with NDEs but with the broader range of stakeholders that the CTCN must reach over the next several years. Sharing technology knowledge with a broader community; and demonstrate the value the CTC delivers to existing and potential future donors and partners whose support enables the operational budget of the organization.
49. Going forward, the CTC will expand its efforts to deepen awareness of its services at the national level through direct outreach to academic and innovation centres as well as non-governmental organizations and municipal governments. It will continue its efforts to reach out to Least Developed Countries and Small Island Developing States through its incubator programme, with a particular focus on those most vulnerable countries³ with little awareness or engagement thus far with its services. In addition, the CTCN will begin to extract and aggregate information from its technology assistance and capacity building work with the TEC to better highlight the informative outputs to a broader stakeholder group. In this way, CTCN will be able to derive a secondary and unique value from its original investment and multiply its utility including through enabling South-South, North-South and triangular cooperation when strong successes emerge.

Cross-cutting themes

50. Incorporation of private sector engagement and gender issues are crosscutting themes across all activities of the CTCN.

Private Sector Engagement

51. Throughout the first five-year period, private sector engagement focused on building Network membership, attracting knowledge partners, and interactions related to TA interventions. The "Private Sector" is synonymous with business and industry, including SMEs, large corporations, banks and financial institutions as well as for-and not-for-profit businesses. In addition, this definition encompasses non-profit private sector organizations and associations that represent the (profit-based) interests of specific business sectors.
52. Prior to adopting a regional model, private sector engagement was predominantly achieved through interaction with NDE. Over the next four-year period, however, private sector engagement will be achieved through the regional teams. As part of the CTCNs approach, regional teams will develop and maintain relationships with private sector associations in countries under their purview. Engagement will occur directly with business and industry in order to respond to challenges in overcoming technology barriers and getting new technologies to market. This will be accomplished through to two key business lines: (1) Supporting climate technology markets, and (2) Facilitating the integration of climate technologies into business operations. In addition, the teams will develop and maintain relationships with regional development banks to ensure closer coordination with other ongoing sub-national and regional programmes/projects.
53. Private sector engagement will align with the outcomes and activities identified in the Theory of Change, where the private sector will play a critical role over the next four years.

³ <http://pubs.iied.org/10189IIED/>

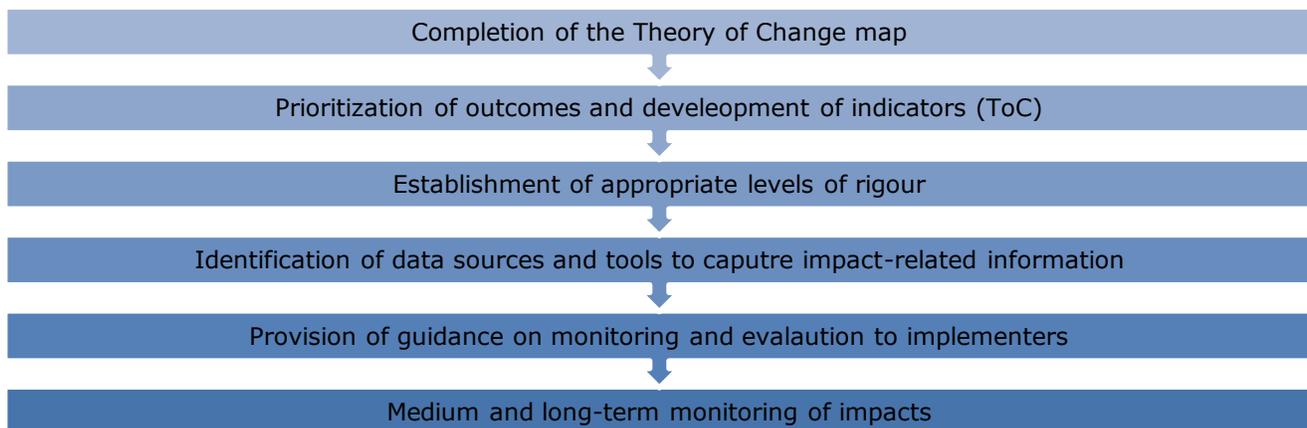
Gender

54. Gender cuts across all three core service areas and is at the heart of each outcome. The importance of gender considerations in technology transfer is included in the CTCN's mission as well as in numerous Conference of Parties decisions referring to the CTCN and its Advisory Board.
55. To address these considerations, a gender coordinator was established within the CTCN Secretariat, together with a Gender Policy and Gender Action Plan during the first few years of operations. Since that time, gender has begun to be incorporated internally via staff trainings on gender, as well as through CTCN services, through technical assistance, knowledge sharing, capacity building and outreach activities.
56. In the coming years, the Centre will continue to update and implement its Gender Action Plan, aiming to engage organizations with gender experience to assist in ensuring that CTCN technology services create outcomes that benefit a broad range of stakeholders and are thus more impactful and sustainable. The CTCN's Gender Action Plan is presented in Annex I.

Monitoring, Evaluation and Reporting

57. The CTCN continues to refine the procedures in place to monitor and evaluate the effectiveness of its operations in order to ensure that support is targeted towards activities that demonstrate concrete quantitative impact or new and transformative policies and measures. As such, the CTCN will engage in a six-step process to enhance monitoring and evaluation based heavily on verification through Technical Assistance closure reports as illustrated in Figure 6, below.

Figure 6: Steps to enhance monitoring and evaluation



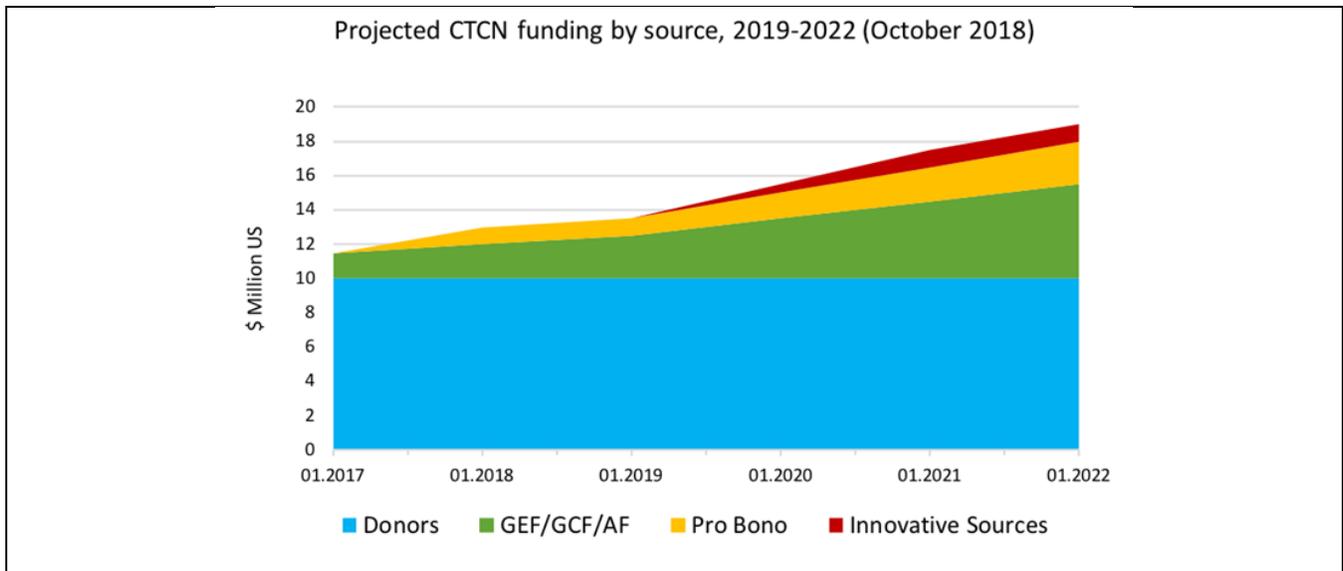
58. To continue to strengthen the effectiveness of its TA service offering, CTC officials will continue to:
 - Work with project proponents to ensure not only strict adherence to the TA impact description, detailed workplan and monitoring and evaluation plan, but also that their relationship to the closure report is understood and how required indicators need to be accounted for up front if they are to be measured and reported upon closure.
 - Enforce the agreed and standardized methodologies applied by the implementer to estimate impact.
 - Agree on key elements of monitoring and evaluation including:
 - CTCN definition of emissions (direct, indirect), beneficiaries (direct, indirect), and how they should be consistently classified.

- How and where to set the boundaries for data capturing including a list of approximate lifespans of various technologies.
- Protocols for following up on technical assistance to ensure consistency in estimated intended impacts and for broader calculation of progress at an aggregated level.
- Explore the development of a centralized database for entering, maintaining and analyzing M&E data covering technical assistance, capacity building and knowledge management.
- Continue to develop the CTCN web portal on outcomes and impacts⁴ including by adding aggregated recently gathered impact data as well as further developed visualizations.

Financing the Second Programme of Work

59. In its first five years of operation the CTCN was funded primarily through voluntary contributions from developed country Parties and regional organizations. A small percentage of the overall funding was also received from multilateral institutions such as the GCF and the GEF (in support of specific country interventions), as well as from the CTCN’s host agencies, UN Environment and UNIDO.
60. For the period 2019 – 2022, the CTC will strengthen cooperation with bilateral and multilateral organizations that can contribute in-kind and pro-bono resources to CTCN activities. The CTC, in collaboration with its host agencies, will work to ensure predictable pooled unearmarked funding for CTCN’s multi-donor trust fund from bilateral donors covering core functions. Additionally, the CTC will work to operationalize the modalities for collaboration with the GCF and increase its collaboration with the GEF, scaling-up the scope and impact of its activities. See Figure 7 for project funding for the period 2019-2022

Figure 7: Projected CTCN funding by source



61. The CTCN currently accepts contributions towards its core operational budget as well as targeted support intended for specific activities or in certain regions. The CTCN understands that targeted (including earmarked) funding can be an effective approach to ensure resources complement domestic objectives and priorities – a role the CTCN is well positioned to take on.

⁴ <https://www.ctc-n.org/about-ctcn/monitoring-evaluation>

62. The CTCN Advisory Board took note of the revised Draft Resource Mobilisation Strategy of the CTCN at its eleventh meeting. The CTCN will be undertaking outreach along new and existing lines to ensure its ability to deliver on key services outlined in this PoW. Pending its approval, the CTCN will present a plan to finance the second PoW at its 13th meeting in early 2019. The newly created position of CTCN Deputy Director will manage donor relations and resource mobilisation in coordination with a CTC focal point for resource mobilisation.

Annex I: CTCN Gender Action Plan 2019-2022

A. Governance and institutional structure

1. Gender parity in CTCN Governance

COP decision 25/CP.19 - Modalities and procedures of the Climate Technology Centre and Network and its Advisory Board (Annex II Rules of procedure of the Advisory Board of the Climate Technology Centre and Network):

Groups or constituencies are encouraged to nominate the government representatives to the Board, with a view to achieving an appropriate balance of expertise relevant to the development and transfer of technologies for adaptation and mitigation, taking into account the need to achieve gender balance in accordance with decisions 36/CP.7 and 23/CP.18).

- a. The CTCN will strive to achieve gender parity in the appointment of its management and staff, including at top managerial levels.⁵
- b. The CTCN will encourage and generate awareness among CTCN NDE's and Advisory Board members of the COP guidance on the need to achieve gender balance in their Boards in accordance with decisions 36/CP.7 and 23/CP.18 and will report annually on the gender distribution of both the Board and CTCN Secretariat.
- c. The Secretariat also will maintain a gender focal point with competencies in gender and social development in order to lead the implementation of the policy. The gender focal point will report to the Director of the Secretariat and will perform their role alongside other responsibilities they are hired to perform. In addition, the Secretariat strives for the relevant gender and climate change competencies to be included among the Secretariat, the NDEs and among the Network at global, regional and national levels.

B. CTCN operations

1. Technical Assistance

Requests

- a. CTCN's criteria for prioritization of technical assistance's will continue to reflect if the request for technical assistance promotes and demonstrates gender equality, and empowerment of vulnerable groups, including women and youth.⁶
- b. Requests will include a description of anticipated gender and other co-benefits (e.g. biodiversity, economic, social, cultural, etc.) that are likely to be generated as a result of the technical assistance.
- c. Requests will also include a description of activities with targeted gender components as well as potential gender considerations of other activities.
- d. CTCN Secretariat will make available best practise examples of how gender integration at the request stage could look like.

⁵ UN System wide strategy on gender parity launched September 2017: https://www.un.int/sites/www.un.int/files/Permanent%20Missions/delegate/17-00102b_gender_strategy_report_13_sept_2017.pdf

⁶ <https://www.ctc-n.org/file/114>

Implementation

- a. The CTCN will allocate at least 1% of the budget and resources for technical assistances to explicitly target gender mainstreaming.
- b. All technical assistance's will consult CTCN gender mainstreaming guidelines during response plan development.
- c. CTCN will develop sector specific gender mainstreaming guidelines for sectors such as energy, water, agriculture and waste management.
- d. Response plan developers will utilize the guidance of a qualified gender expert to perform a mandatory gender mainstreaming analysis and assessment. If needed, the CTCN will support identification of gender expertise, in consultation with Network members.
- e. Response plans will include a description of how gender equality is integrated into the assistance and why or why not.
- f. Response plans will include a description of anticipated gender and other co-benefits (e.g. biodiversity, economic, social, cultural, etc.) that are likely to be generated as a result of the technical assistance.
- g. CTCN Secretariat will make available best practise examples of how gender integration at the implementation stage could look like.

Monitoring & evaluation

- a. Technical assistance implementers will report on gender indicators, outcomes and impacts as well as provide relevant sex-disaggregated data through the CTCN closure reports.
- b. CTCN Secretariat will assess projects on gender integration upon completion using the UN Environment Gender Marker Tool and the UNIDO Gender Categorization Tool and Gender Marker.⁷
- c. CTCN Secretariat will make available best practise examples of how gender integration at the monitoring & evaluation stage could look like.

2. Capacity Building

- a. CTCN will facilitate the provision of training and support to build and/or strengthen the capacity of developing countries to identify gender-responsive technology options, make technology choices and operate, maintain and adapt technologies that increase the adaptation and mitigation capacity of both women and men. This support will take the form of:
 - i. Webinars on gender and climate technologies (1-2 per year)
 - ii. Training sessions on specific gender and climate technology issues at regional forums, focal point workshops, COP's and other related events
 - iii. Encouraging the participation of UNFCCC national gender focal points to participate in regional forums to facilitate connections between ministries
- b. The CTC Network will provide a basis of expertise and resources for capacity building. The CTCN will further increase the number of Network members with specific gender and climate expertise.
- c. CTCN will provide targeted support for capacity building of women professionals, policy-makers, researchers and entrepreneurs in climate technology sectors such as energy, transport and agriculture to take climate action and take part in decision-making. Support can for example be coordinated with Network members and UNFCCC national gender focal points.
- d. CTCN gender focal point will coordinate the internal capacity building of the CTCN Secretariat and Advisory Board to create a conducive environment for gender equality and support the Secretariats gender mainstreaming efforts.

⁷ https://www.unido.org/sites/default/files/2015-09/GENDER_CATEGORIZATION_TOOL_FINAL_0.pdf

https://www.unido.org/sites/default/files/2015-09/Gender_Marker_User_Guide_-_FINAL_0.pdf

3. Network and Knowledge Sharing

Network

- a. New Network members will be encouraged to refer to the CTCN Gender Policy to guide their engagement with the Centre. After accreditation, and at the project/programme level, the Network member will be responsible for implementing the Gender Action Plan as it relates to its work with the CTCN.
- b. CTCN will integrate gender equality guidelines into the Network Code of Conduct.⁸ The Network accreditation process recognizes that there is a wide range of types of organizations and institutional capacities.
- c. CTCN will encourage women-led technology companies and gender and climate technology organizations to join the Network in order to engage with CTCN activities such as implementing technical assistance to developing countries; network with national decision-makers, thought leaders, and other relevant stakeholders; provide capacity building; and gain greater visibility for events, reports and tools.
- d. The CTCN will keep a roster of gender experts to utilize at various gender-related events, workshops, activities and for consultation during technical assistance gender mainstreaming implementation.

Knowledge Sharing

- a. CTCN will facilitate the provision of information to build and/or strengthen the capacity of developing countries to identify gender-responsive technology options, make technology choices and operate, maintain and adapt technologies that increase the adaptation and mitigation capacity of both women and men. This support will take the form of:
 - i. Gathering, managing and sharing an updated set of online tools and publications on gender and climate via the CTCN web platform
 - ii. Identification and sharing of best practice examples through CTCN web platform, social media, and events
 - iii. Development of fact sheets, guidelines, manuals, tools and sectoral overviews of gender in climate technology sectors such as renewable energy, energy efficiency, agriculture, water etc.
- b. CTCN will identify gender and climate knowledge gaps and develop content in collaboration with its Knowledge partners, Network members and other experts.
- c. Organizations with expertise in gender and climate technology will be encouraged to share their expertise with the Network through the CTCN website, webinars and other capacity development activities.
- d. CTCN will make available useful resources developed by its hosting organizations UN Environment and UNIDO.
- e. CTCN will host and co-host events with a targeted gender and climate technology component as well as integrate gender awareness into various regional forums, NDE trainings and other events.
- f. CTCN will develop its taxonomy to include more gender-related terms.

4. Monitoring & evaluation

- a. In order to measure its outcomes and impact related to gender equality and gender mainstreaming the CTCN endeavors to monitor:
 - i. The status of equal participation of men and women in CTCN activities as well as special measures taken to incentivize gender parity

⁸ <https://www.ctc-n.org/network/code-conduct>

- ii. Gender integration in knowledge generation, management and dissemination
- iii. Gender mainstreaming of technical assistance design, implementation, budget, monitoring and capacity building using the UN Environment Gender Marker Tool and the UNIDO Gender Categorization Tool and Gender Marker.

Annex II: Financing the Second Programme of Work

Financing the CTCN Programme of Work 2019-2022

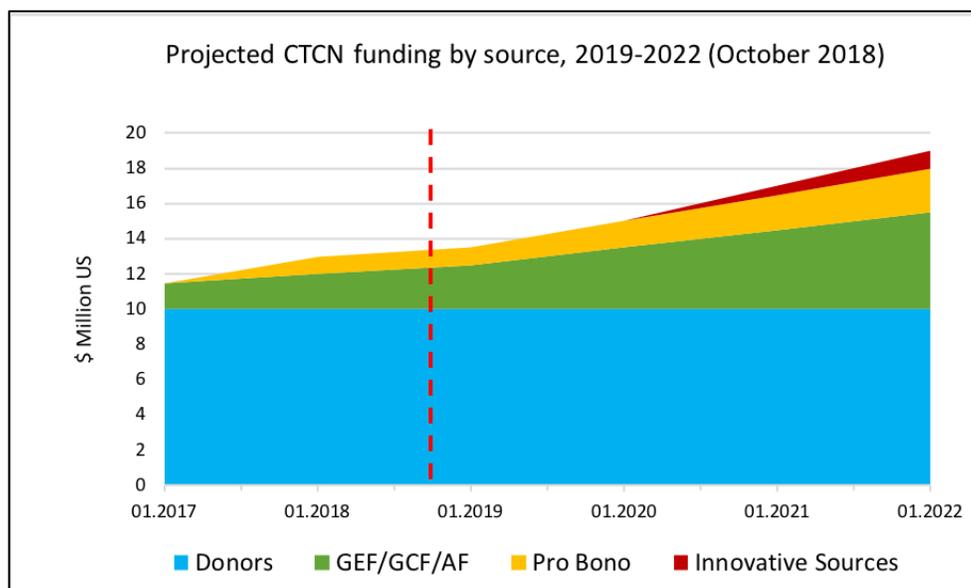
Summary

The Climate Technology Centre and Network (CTCN) developed a strategy⁹ to finance its Second Programme of work (PoW2) in early 2018. The Strategy establishes the rationale and approach to be adopted by the organization across primary target groups. This document summarizes the key elements and targets and identifies select actions to be taken to mobilize the required resources to deliver on the mandate of the CTCN. It also adjusts the timeline of the Strategy to the period 01/2019-01/2022 to align with PoW2.

1. Updated Targets

In its first five years of operations the CTCN has been funded primarily through voluntary contributions from developed country parties and regional organizations. It has also received targeted project support from the Global Environment Facility and the Green Climate Fund, from three national governments on a pro bono basis, and from its co-hosts UN Environment and UNIDO. These updated projections better reflect the experience and lessons learned of the CTCN. Historical and projected funding levels are presented in Figure 1, below.

Figure 1: Financing CTCN PoW2



2. Shifting to a Regional Approach

In 2018 the CTCN adopted a regional strategy designed to streamline its operations by offering countries a single point of contact, deepening country- and regional-level relationships, and making more active use of regional requests for technical assistance. This approach will also enable the CTCN to more easily collaborate

⁹ [AB/2018/11/11.1](#)

with existing and future bilateral donors, building on existing initiatives and better positioning itself to deliver region- or outcome-specific activities earmarked for these purposes. The CTCN will develop donor-specific approaches for primary countries active in a region, and increase its outreach with region-specific multilateral investment facilities such as the Inter-American, African and Asian Development Banks focused on providing country-specific climate technology expertise.

3. Overview

The CTCN strategy to finance PoW2 will be systematically applied to engage with all donors and potential funding sources for each of the CTCN's core services: Technical Assistance, Knowledge sharing, and Collaboration and Networking. It is based on the development of an approach that balances the priorities of donor countries and retains the country-driven nature of the CTCN. The CTCN will encourage domestic NDE engagement in both developed (priority sectors, countries, export development and business and industry associations) and developing (active donors, NDC priorities, opportunities to build on and avoid repetition of ongoing projects) countries. CTCN Regional managers will make sure to periodically exchange info with donors' focal points as soon as new potentially transformational climate opportunities arise in order to keep the process up to date.

This renewed resource mobilisation strategy will entail also a mapping of all other potential funding sources: multi-lateral, philanthropic and other innovative sources to be identified. At the same time match-making initiatives to spur south-south cooperation and also to continuously share opportunities for pro-bono financing will be sought.

The private sector will be a much more prominent area of focus, enabled both by the regional approach and the impacts associated with the fifty projects the CTCN has completed as of October 2018. Through the triangulation with regional banks and their networks, CTCN will work to position itself as a de-risking factor for private sector finance by providing due diligence to investment in regional markets that can be scaled up by regional banks through facilities designed specifically for Small- and Medium-Sized Enterprises (SMEs). The proven experience of CTCN and the initial positive impacts of its activities can be used as points of entry to help develop markets for proven and emerging climate technologies that are largely developed and exported by SMEs.

A reinforced monitoring and evaluation (M&E) system will complement the process to guarantee transparency and accurate accounting of project-specific and aggregated indicators, enabling a sharp explanation of climate benefits and narratives prepared in cooperation with financial counterparts, and better reflecting the impact of the interventions. This strengthened M&E process will be embedded into donor reporting documentation.

A professional fund raiser will then complement this new strategy and will contribute to its refinement and operationalization. After his/her contribution is concluded (2019), the CTC resource management process will constitute an asset of the secretariat to be proactively applied and replicated in all regions.

4. Bilateral Donors: \$10M annually

Bilateral donors and regional organizations have provided the majority of the funding entrusted to the Climate Technology Centre (94%), with the European Commission contributing almost one third of that amount. Grant funding from bilateral donors will remain an important source of funding for the CTCN during the period from 2019-2022 but cannot remain the dominant source over the longer term if the CTCN is to have the catalytic, transformational impact envisioned by Parties to the UNFCCC. As noted in section 2 above, the CTCN will seek to strengthen its engagement through targeted country-by-country engagement, reaching outside UNFCCC channels to raise awareness of CTCN operations, potential benefits and impacts with development and trade

ministries as well as business and industry associations to ensure a two-way relationship with clear benefits to each side. These engagement strategies will be further elaborated on a regional basis in 2019.

5. Multilateral Institutions: \$2M/2018 → \$5M/2022

The Climate Technology Centre will build on the relationships of its host agencies as well as on the strong COP guidance on linkages between the Financial and Technology Mechanisms of the Convention to increase the resources channeled to developing countries through the Climate Technology Centre. These efforts will also support the submission of more robust and technically sound proposals to the Green Climate Fund, Global Environment Facility, Adaptation Fund and other regional institutions, supported by the regional approach of the CTCN towards its operations. This approach will be replicated to build working relationships with the Regional Climate Technology Centres operated by the Multilateral Development Banks and the climate technology support programs of the banks themselves.

6. Bilateral in-kind / pro-bono support: \$1M/2019 → \$2.5M/2022

As a United Nations organization, UN Environment is bound by a definition of 'contributions in kind'. The CTCN has received in-kind support in the form of professional services and support staff from host UN Environment and UNIDO, as well as from its Consortium Partners. Some so-called 'in-kind' resources received from Network members do not necessarily meet the criteria for recognized contributions in kind under the UN Policy Framework.

The CTCN introduced the category of pro bono support in 2017 and has worked with three developed country governments to support interventions at various stages of the CTCN TA process. The CTCN Donor Engagement Strategy will highlight how partnering with the CTCN and country technology focal points can be mutually beneficial for both the CTCN and the donor country. It will demonstrate how such a partnership can align development and trade priorities, and showcase opportunities for SME to engage with the CTCN and leverage domestic funding for innovation and clean technology piloting in developing countries.

7. Private sector, philanthropic, and innovative sources of finance: \$.5M/2020 → \$1M/2022

Private Sector and philanthropic sources can be engaged through 'CTCN Champions', high-profile individuals that raise awareness of the CTCN value proposition globally with stakeholders as-yet unengaged by the CTCN. Specific events in partnership with Network members could be targeted, as well as through leadership of UNFCCC and co-hosts UN Environment/UNIDO. These channels present an opportunity to engage outside of the CTCN ecosystem, raise awareness of our activities, and partner on special events/meetings/workshops.

8. New and innovative funding possibilities

The CTCN should invest in continued exploration of new and innovative funding mechanisms as much can be learned from sister agencies and other organizations in this area. The funds generated would focus on specific areas of CTCN work and complement the core funding secured from more traditional channels. A few examples of opportunities to explore include:

- **Environmental Impact Bonds / Loans:** This is an emerging financing mechanism whereby investors front capital for public projects that deliver environmental outcomes. If the project succeeds, the investors are repaid with capital plus interest. This approach has been used to great effect by municipalities to raise capital for environmental initiatives (Green Bonds), and is being explored by the UN-REDD programme who are developing a \$100+ million proposal with BNP Paribas for investment in

sustainable management of forests and forest carbon stocks. The CTCN currently only accepts grant financing, and exploring the bond concept may be worthwhile.

- **Crowd-funding:** Crowdfunding is an approach whereby an individual or organization interested in promoting an idea or implementing a project seeks support from a broad range of stakeholders, reaching out and building momentum through social media. As the contributor base is large, even modest contributions can aggregate into significant amounts. The global crowdfunding market is now valued above 9 billion US dollars and has doubled each of the past four years. CTCN, through UN Environment, could receive funding for campaigns via the UN Foundation. Other ways to engage the public will also be explored.
- **Investment packages, or the 'Menu approach':** The relevance of in-kind contributions to reducing CTCN direct financial needs could be increased by more aggressive creation of "investment packages" wherein a partner may commit a specified amount of funding in exchange for a pre-defined output, e.g. organizing a capacity building workshop in a developing country, and pay for it directly. This would provide certainty for the donor and communicate the activities and/or outputs that can be expected in return.