Advisory Board to the CTCN **29-31 August 2017**

Tenth meeting **AB/2017/10/7.5**

Process and procedures for Monitoring & Evaluation of CTCN non-Technical Assistance (NTA) activities

1. Background

The 5th meeting of the CTCN Advisory Board in April 2015 took note of the draft outline provided on the outcomes and intended impacts that the CTCN would Monitor & Evaluate (M&E) as part of its normal operations. The 6th meeting of the CTCN Advisory Board in September 2015 endorsed the process and procedures for the M&E of the CTCN's provision of Technical Assistance (TA) in response to requests and asked for information and detail on the CTCN's M&E of its non-Technical Assistance (NTA) activities, i.e. those based on capacity building and the strengthening of collaboration and fostering of knowledge. A high-level overview and update on the CTCN's M&E framework for its NTA activities was presented at the 9th meeting of the CTCN Advisory Board in April 2017.

This paper responds to the Advisory Board's request for detail on the CTCN's M&E of its NTA activities, building on the related guidance received from the COP and individual Donor Country/ agency requirements:

- Fostering collaboration and access to information and knowledge to accelerate climate technology transfer; in decision 25/CP.19 (document FCCC/CP/2013/10/Add.3).
- Strengthening networks, partnerships and capacity-building for climate technology transfer; in decision 25/CP.19 (document FCCC/CP/2013/10/Add.3).
- Information and knowledge-sharing; in decision 25/CP.19 (document FCCC/CP/2013/10/Add.3).
- Individual donor/ agency requirements (UNEP, UNIDO, etc.)
- UNFCCC reporting requirements.

2. Key M&E elements for CTCN non-Technical Assistance (NTA) activities

All CTCN TA and NTA activities are required to be reported on to the COP. Furthermore, individual donor countries have their own specific requirements and individual objectives that the CTCN must respond to and demonstrate in order that the effectiveness their respective contributions can be established.

In addition to responding to TA requests from developing countries the CTCN is mandated to engage in parallel on collaboration, capacity building and knowledge-based activities. More specifically, these NTA activities consist of:

- Strengthening of collaboration: CTCN stakeholder engagement (including private sector engagement); Networking; and, Outreach.
- Capacity building: CTCN incubator programme; Webinars; Trainings; and, Secondment programme.
- Fostering of knowledge: Engagement with knowledge partners; Development of functional CTCN Knowledge Management System (KMS) to provide access to broad range of climate technology information via external online site and support to CTCN operations via intranet/internal site.

While the CTCN's NTA activities do not have the same explicit requirement/ guidance for M&E from the COP as the CTCN's TA request-response process[1], the CTCN will nonetheless apply a similar concept whereby the CTCN Secretariat and the KMS dashboard functionality will 'signal' whether the NTA activities/outputs have proceeded in a timely and appropriate manner and that the resultant outcomes have the right degree of effectiveness and intended impacts (see Box 1 for description of timeliness, appropriateness, effectiveness and intended impact criteria).

Box 1. Definition of M&E criteria for CTCN NTA delivery, outcomes and intended impact

- Timeliness: relates to efficiency in the sense of whether NTA objective was delivered in a timely fashion and that it was achieved in a time efficient manner.
- Appropriateness: relates to relevance and the extent to which NTA objective is consistent and aligned with the broader objectives of the CTCN (and its wider stakeholders, donors, etc.) and the intended impacts of the CTCN.
- Effectiveness: relates to quality and the extent to which NTA objective has been achieved (or is likely to be achieved) in relation to the needs and requirements of the CTCN (and its wider stakeholders, donors, etc.)
- Intended impact: relates to the real change and lasting effect that that would ultimately be brought about through achievement of NTA objective.

This paper notes that the CTCN through its hosts, UNEP and UNIDO, has access to a considerable body of proven experience and mechanisms for M&E. The CTCN's process and procedures for the M&E of its NTA activities will make use of the existing infrastructure and reporting tools that have been developed by UNEP and UNIDO. The mechanisms that will be used include:

1. Financial reporting against donor country/agencies contributions (including UNEP, UNIDO, UNFCCC).

[1] Process and procedures for the M&E of the CTCN's provision of Technical Assistance (TA) in response to requests, 6th meeting of the CTCN Advisory Board, September 2015.

2. Workshop/ Conference/ Webinar/ Training activity reporting.
3. Stakeholder engagement activity reporting.

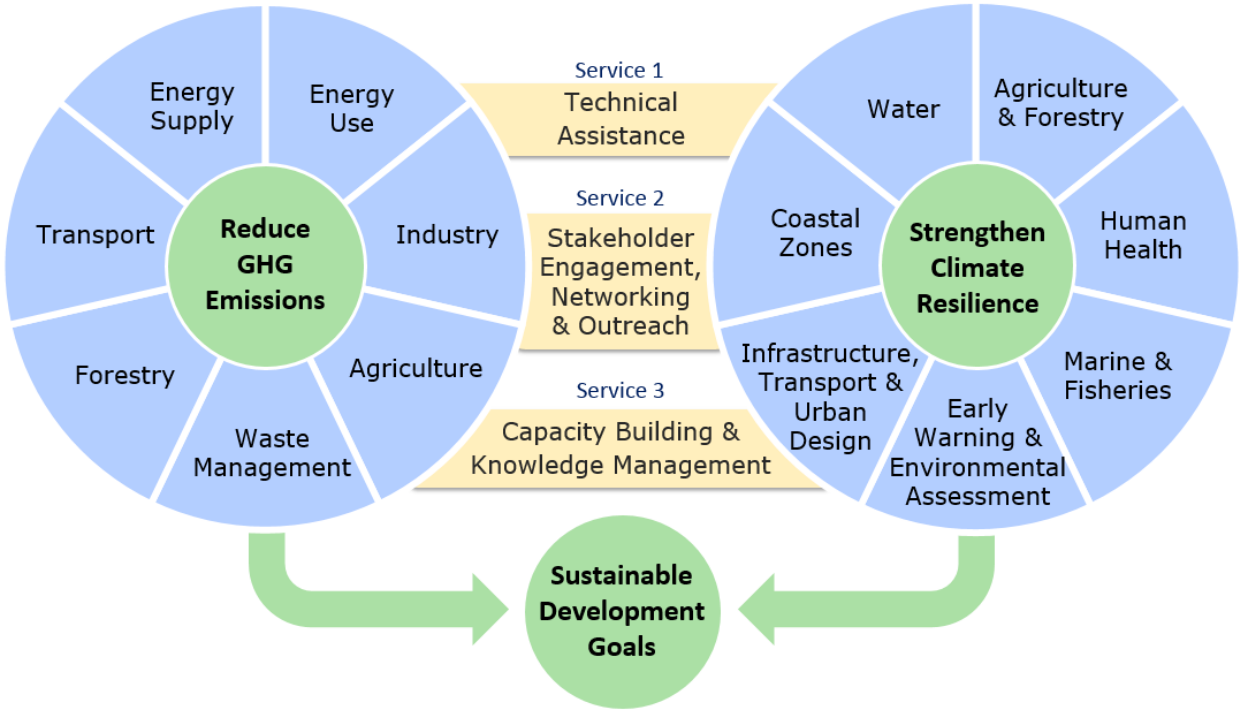
NOTE: This paper will not cover the M&E activities related to the financial performance of the CTCN as this is embedded within the UNEP financial reporting mechanisms adopted by the CTCN Secretariat.

3. CTCN non-Technical Assistance (NTA) M&E framework

The Paris Agreement and the 2030 Agenda for Sustainable Development (and the 17 Sustainable Development Goals) provide the context and framework for the CTCN to define, develop and report on its activities and impacts. The intended 'core' impacts of the CTCN broadly encompass the accelerated transfer and the scaled-up deployment of mitigation and adaptation technologies in developing country Parties to provide energy/carbon intensity and climate vulnerability improvements.

The scope and extent of the CTCN's three key service lines and their sectorally-based outcomes and intended impacts are depicted in Figure 1 (for both the CTCN's TA and NTA-based activities). These set a need to make use of the Sustainable Development Goals (SDG) as a means of drawing together and efficiently framing the overall development effect. The SDGs have been selected as a broader measure of the CTCN's intended impacts because they are action-oriented, aspirational, global in nature, universally applicable to countries while considering differing national realities, capacities and levels of development and that they seek to respect national policies and priorities.

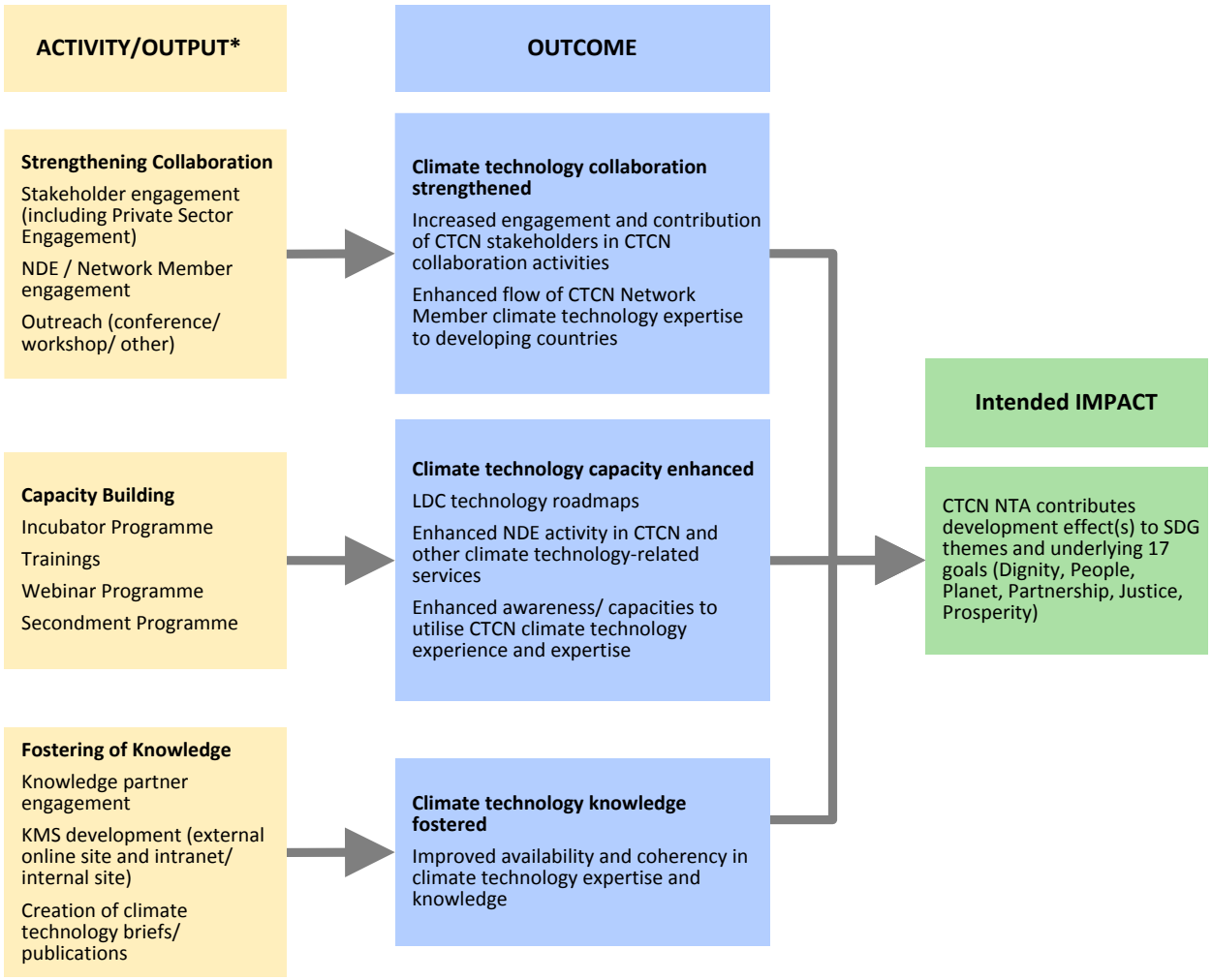
Figure 1. Overview of CTCN key services in relation to sectoral scope of outcomes along with their high-level impact and overall development effect towards SDGs



The scope and extent of the CTCN's NTA is considered to encompass (in broad terms) a facilitation effect towards mitigation and climate resilient technology transfer within and across multiple developing country geographies and stakeholders under a range of stakeholder engagement, networking, outreach, capacity building and knowledge management activities. The narrative with respect to the CTCN's NTA (and indeed, TA) can be thought to centre on a broad range of activities/outputs which provide a set of outcomes that would align with, and ultimately contribute a broad impact and development effect towards the SDGs (as set out in

Figure **2**). The demonstration of a contribution to the SDGs (e.g. where SDG 5, 7, 9, 12 and 13 would be the most appropriate ones to focus on) will be underpinned with plausible assumptions and indicators aligned to the developing SDG indicators (see section 3.3).

Figure 2. Overview of specific CTCN NTA activities/outputs and their outcomes in relation to intended impact and broad development effect towards SDGs



* where the outputs are some function of the activities.

The CTCN NTA M&E Framework will operate in a three-step approach, as shown in Figure 3, through the CTCN Secretariat and the KMS dashboard functionality, whereby:

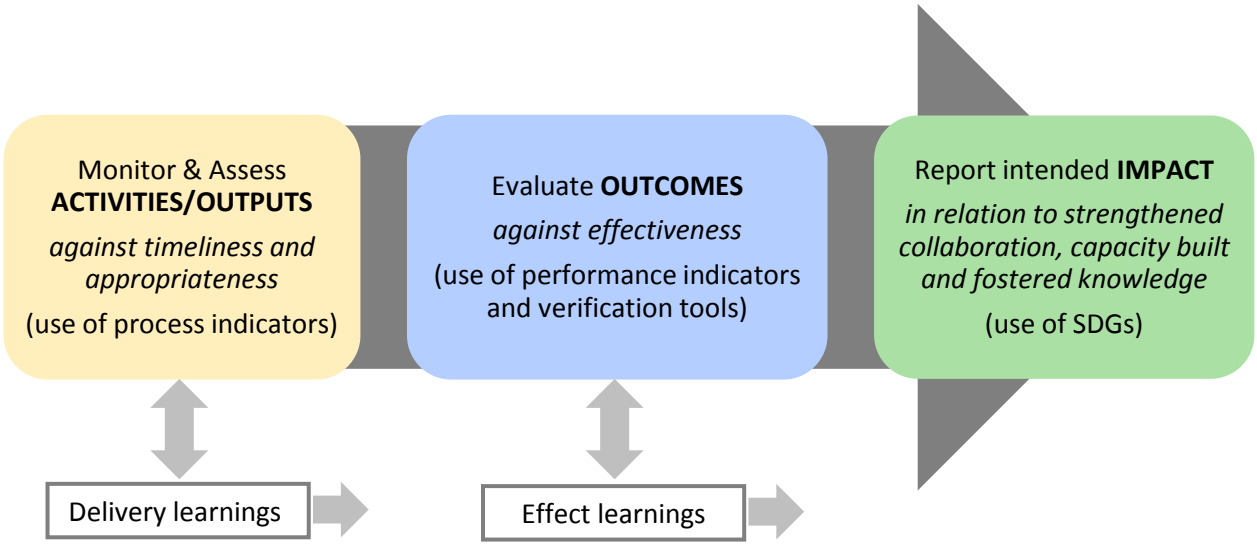
1. the delivery of the NTA activities/outputs will be monitored and assessed against their timeliness and appropriateness through a set of process indicators.

2. the outcomes of the NTA activities/outputs will be evaluated against their effectiveness through a set of performance indicators and verification tools.

3. the overall intended impacts of the NTA outcomes will be reported on to stakeholders at appropriate intervals by the CTCN Secretariat (e.g. CTCN Annual Report and to the COP, Advisory Board, donors, etc.) by making use of the SDGs to highlight the broad development effect provided by the CTCN's strengthening of collaboration, capacity building and fostering of knowledge.

Delivery and effect learning opportunities (with respect to both the operation of the NTA M&E framework and the NTA activities themselves) will be captured throughout the process and fed back into and out of the framework as appropriate.

Figure 3. Overview of CTCN NTA Framework



The underlying mechanics of the CTCN NTA M&E Framework and its three-step approach is set out below.

3.1 Monitoring and assessing delivery of CTCN NTA activities and outputs: process indicators

A set of activity/output process indicators will be used to monitor and assess the delivery of the CTCN's NTA against timeliness and appropriateness criteria (as defined in Box 1). These process indicators are set out below in Table 1 by main activity and sub-activity. Note that the output indicators will be some

qualitative and/or quantitative function of an activity indictor set. A representative set of quantitative NTA output indicators is shown for completeness in Annex 1. The activity/output process indicators will be monitored and assessed against both timeliness and appropriateness through the KMS and by the CTCN Secretariat.

Table 1. Process indicators for monitoring and assessing timeliness and appropriateness of CTCN NTA activities and outputs (*where the outputs are some function of an activity indicator set)

Activity	sub-Activity	Activity/Output* process indicators
Strengthening of collaboration	BINGO/ RINGO/ ENGO stakeholder engagement (including Private Sector Engagement)	• Participant (number/ gender/ job function/ sector/ regional distribution) • Activity (technology type/ focal sector/ delivery modality/ start&delivery point/ delivery org) • Objective (engagement partnerships/ fora/ networking/ outreach/ Network Member expertise)
	NDE/ Network Member engagement	
	Outreach (conference/ workshop/ other)	
Capacity building	Incubator Programme	• Participant (number/ gender/ job function/ sector/ regional distribution) • Activity (technology type/ focal sector/ delivery modality/ number of trainings/webinars organised / start&delivery point/ delivery org) • Objective (awareness/ learning/ development/ training goal)
	Trainings	
	Webinar Programme	
	Secondment Programme	
Fostering of knowledge	Knowledge partner engagement	• Number of knowledge partners • Number of visits; Time spent on site; Country origin of users • Available content (technology type/ country information/ solution/ sector/ regional focus)
	KMS development (external online site and intranet/ internal site)	
	Creation of climate technology briefs/ publications	

The capture and utilisation of the activity/output process indicators is dependent upon several assumptions, including: there being no resourcing/capacity constraints to hinder an efficient monitoring process and that timely and effective information would be made available to the CTCN by its Consortium Partners and Network Members as well as other wider stakeholders.

3.2 Evaluating CTCN NTA outcomes: performance indicators and Means-of-Verification

A set of outcome-based performance indicators and a suite of verification tools will be used to evaluate the CTCN NTA outcomes against effectiveness criteria (as described in Box 1). These performance indicators are elaborated on below in Table 2 under the NTA activities (i.e. collaboration, capacity

building and knowledge management) and their associated outcomes along with the Means-of-Verification (MoV)[2].

The capturing and utilisation of the outcome performance indicators will be dependent upon several assumptions, including: survey and feedback forms being completed sufficiently and in a timely manner, that the information provided will be able to effectively demonstrate the required objective and that no resourcing/capacity constraints will hinder the evaluation process.

Table 2. Performance indicators for evaluating effectiveness of outcomes of CTCN NTA process

Activity	Outcome	Performance indicator
Strengthening of Collaboration	Increased engagement and contribution of CTCN stakeholders(NDEs, Network Member and BINGO/ RINGO/ ENGO constituencies) in CTCN collaboration activities	Question: What is CTCN added value to (and from) NDEs and Network Members and to (and from) BINGO/ RINGO/ ENGO constituencies? Judgement criterion/criteria: Effectiveness of stakeholder interventions in CTCN collaboration-based activities Indicator(s): Stakeholder/ CTCN levels-of-satisfaction; Number/Type/Timing of engagement activities/ partnerships/ fora implemented by CTCN in relation to extent of stakeholder participation and contribution MoV: KMS-based performance indicators (participation and contribution-based); NDE, Network Member and BINGO/ RINGO/ ENGO-based Effectiveness Feedback/ Survey Forms
	Enhanced flow of CTCN Network Member climate technology expertise to developing countries	Question: What is Network Member added value to (and from) CTCN TA process? Judgement criterion/criteria: Effectiveness of Network Member interventions in CTCN TA activities Indicator(s): Network Member/ CTCN levels-of-satisfaction; Increase (annual) in TA under implementation by Network Members MoV: KMS-based performance indicators (in relation to volume and monetary value of Network Member TA delivery); Network Member Effectiveness Feedback/ Survey Forms
Capacity building	LDC technology roadmaps	Question: To what extent has the CTCN LDC Incubator Programme produced effective technology roadmaps? Judgement criterion/criteria: Effectiveness of technology roadmaps Indicator(s): Number of technology roadmaps; NDE/ CTCN/

[2] CTCN Secretariat/ Consortium Partner/ Network Member responsible.

		Other levels-of-satisfaction with roadmap(s) output; Training hrs by gender MoV: KMS-based performance indicators; NDE Effectiveness Feedback/ Survey Forms; Incubator Programme reports
	Enhanced NDE activity in CTCN and other climate technology-related services	Question: To what extent has output of CTCN training(s) provided NDE with additional expertise that could facilitate the delivery of CTCN and/or other climate technology-related services? Judgement criterion/criteria: Effectiveness of CTCN training(s) output against NDE activity expectation Indicator(s): NDE/ CTCN/ Other levels-of-satisfaction with training(s) output; Number of NDEs actively engaged in CTCN services in relation to previous year (by region, service type); Number of NDEs that collaborate with other focal points; Training hrs by gender MoV: KMS-based performance indicators; NDE Effectiveness Feedback/ Survey Forms; NDE regional fora reports
	Enhanced awareness/ capacities to utilise CTCN climate technology experience and expertise	Question: To what extent have the CTCN's webinar and secondment programmes provided participants with additional expertise that they could use towards the delivery of CTCN and/or other climate technology-related services? Judgement criterion/criteria: Effectiveness of CTCN webinar(s) output against participant expectation; Effectiveness of Network Member contributions; Effectiveness of CTCN secondee(s) input and subsequent output against participant's organization's expectation and that of CTCN Indicator(s): Participant level-of-satisfaction with webinar programme output; Network Member webinar participation (number organised /year by topic); Secondee/ CTCN levels-of-satisfaction with secondment programme input and output; Webinar hrs by gender MoV: KMS-based performance indicators; CTCN Webinar/ Secondee Effectiveness Feedback/ Survey Forms
Fostering of Knowledge	Improved availability and coherency in climate technology expertise and knowledge	Question: To what extent has the KMS provided external/internal users with relevant and valuable climate technology information? Judgement criterion/criteria: Effectiveness of KMS in providing users with coherent and up-to-date climate technology knowledge; Effectiveness of Network Member

		contributions Indicator(s): KMS internal and external user activity; Network Member and knowledge partner contributions; Number and type of knowledge products; User feedback MoV: KMS-based performance indicators; google analytics; User surveys and user testing

3.3 Reporting CTCN NTA intended impacts:

As stated earlier in this section, the scope of the CTCN's NTA encompasses mitigation and climate resilient technology transfer within and across multiple geographies and stakeholders under a wide range of networking, stakeholder engagement, outreach, capacity building and knowledge management activities. As a consequence of this the impacts of the NTA will be rather broad in their scope and extent. Furthermore, there is an underlying need for the collection/measurement of information and data to stop at some point in the NTA M&E process and for the procedures to not be open-ended (i.e. due to resource constraints).

The SDGs and their developing indicators are seen to offer a very useful and appropriate means of drawing together and efficiently framing the intended impacts of the NTA outcomes (the CTCN TA M&E process and procedures also make use of the SDGs as part of its impact reporting). Table 3 indicates the SDGs that would be used to frame the intended impacts of the CTCN's NTA with respect to capacity built, strengthened collaboration and fostered knowledge, where SDG 5, 7, 9, 12 and 13 are noted as being the most appropriate goals to focus on.

The framing and actual alignment of the intended impacts of the CTCN's NTA to the SDGs will be underpinned by plausible assumptions based on the specific outcomes provided through the strengthening of collaboration, fostering of knowledge and capacity built during the delivery of the NTA (i.e. as set out in Table 2). As part of this, the ongoing development of the SDG indicators will help inform the definition and development of the specific indicators that will help demonstrate the NTA impacts.

Table 3. Indicative NTA impacts

Outcome	Indicative NTA impacts (alignment/contribution to SDG)
Climate technology collaboration strengthened	SDG 5 (Dignity) Achieve gender equality and empower all women and girls SDG 7 (Prosperity) Ensure access to affordable, reliable, sustainable and modern energy for all SDG 9 (Prosperity) Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation SDG 12 (Planet) Ensure sustainable consumption and production patterns SDG 13 (Planet) Take urgent action to combat climate change and its
Climate technology capacity enhanced	

Climate technology knowledge fostered	impacts SDG 17 (Partnership) Strengthen the means of implementation and revitalize the global partnership for sustainable development

4. Periodic Assessment of M&E process and procedures

In addition to the ongoing M&E of the CTCN's NTA activities as described above, a periodic assessment of the CTCN's overall process and procedures for its NTA activities shall be performed. This periodic assessment will be undertaken on a 6-monthly basis with additional assessment(s) being subject to the status and proper functioning of the CTCN's NTA and any requirement for corrective action.

The assessments will determine whether the current priorities given to the CTCN's NTA activities are appropriately positioned and balanced to bring about an equitable achievement of the CTCN's mandate as well as a corresponding appreciation of the overall needs and interests of the CTCN's stakeholders whilst assuring its technology neutrality.

5. Corrective Actions

As described in section 2 and 3, the CTCN's KMS dashboard functionality will support some of the NTA monitoring, assessment, evaluation and reporting procedures. This will be done through, e.g. the input of a set of process indicator-based information and data entry forms for the assessment of the NTA activities and outputs; and, through, e.g. the input of performance indicator-based information and data verification tools for the evaluation of the NTA outcomes.

The KMS dashboard functionality will alert the responsible CTCN Secretariat staff to possible issues that relate to whether the NTA activities have progressed in an appropriate manner with the right degree of quality and effectiveness (e.g. appropriate level of gender or geographic balance, technology or sector representation, etc.) If an NTA activity has not proceeded in line with expectation, then corrective action would be assumed to be taken as appropriate by the CTCN. Any such action would be recorded within the KMS to allow further assessment as part of the periodic assessment of the NTA. Corrective actions could include, among others, the following:

- Develop specific campaigns to strengthen representation of specific groups, sectors, geographies, etc.
- Re-allocate resources and priorities to stimulate a more equal distribution of CTCN NTA services and activities.
- Restructure NTA activities to mitigate any technology bias.

6. Reference documents

- Network Member Application Procedure
- NDE training programme

- Incubator programme
- Secondment programme
- Webinar programme
- KMS Dashboard (NTA process indicators)
- NTA survey forms (performance indicators)
- NTA feedback forms (performance indicators)
- CTCN-Donor country/agency agreements
- CTCN Annual Operating Plan for the period 1st Jan - 31st Dec 2017 (fourth year of operations).

7. CTCN NTA target outputs for 2017

A set of CTCN NTA target outputs (and TA for completeness) are shown below for the fourth year of CTCN operations[3] to illustrate the range and extent of quantitative output indicators that could be expected in the near term for the CTCN's NTA activities (i.e. through stakeholder engagement, networking, outreach, capacity building and knowledge management activities).

NOTE the target outputs have been extracted from the draft CTCN Annual Operating Plan[4] for the period 1st Jan - 31st Dec 2017 (fourth year of operations).

Outputs	Year 4
Service: Technical assistance in response to country requests	
TA requests with response plans under design	**50-70**
TA requests under implementation and concluded	**40-60**
Service: Outreach, networking and stakeholder engagement	
Number of thematic events	**4-6**
Number of Private Sector Engagement Events	**3 - 4**
Number of social media followers	**2400**
Number of partnerships and twinning arrangement	**4-6**
Total Number of Network institutions	**300**
Number of TA requests implemented by Network members	**20-30**
Number of SME clinics	**10 - 15**
Service: Knowledge Management, peer learning and capacity building	
Regional Forums organized	**6 - 8**
Thematic programme trainings	**5 - 10**
National events supported	**5 - 10**
Online tools and information materials, including coverage of lessons and best practices	**11,500**

[3] NOTE that the achievement of these outputs is caveated as being subject to the availability of funds for the CTCN's operation and to the number of requests received from developing countries.
[4] AB/2017/9/8.2

Number of Network members contributing to KMS	**20 - 30**
Number of trained CTCN NDEs	**100**
Number of trained CTCN clients	**500**
Annual number of KMS site visits	**80,000**
Webinars organized	**10 - 15**
CTCN produced materials on technical assistance	**30**
Number of new countries enrolled in the Incubator Programme	**4 - 6**
Number of Secondees	**4 - 6**