

**Climate Technology Centre and Network
2018 Annual Report**

***Prepared for the thirteenth Advisory Board meeting of the CTCN
March 2019***

Table of Contents

1. Introduction
2. CTCN Service Lines
 - a. Technical Assistance
 - i. Overview
 - ii. Progress against targets
 - b. Strengthening Networks, Partnerships and Capacity Building
 - i. Overview
 - ii. Progress against targets
 - c. Fostering collaboration through access to information
 - i. Overview
 - ii. Progress against targets
3. Crosscutting themes
 - a. Gender Mainstreaming
 - b. Communications
4. Joint actions with the Technology Executive Committee
5. Financial Update
 - a. Funding overview
 - b. CTCN Financial Statement 2018

1. Introduction

The Climate Technology Centre and Network marked its first five years of operations in 2018. During that time, it has undergone external reviews of its operations commissioned by the UNFCCC (2017), DANIDA (Q1 2018), and the European Commission (Q3 2018). These reviews have affirmed the value-added of the CTCN and provided constructive recommendations to improve its function.

At its twelfth Advisory Board meeting in October 2018 the CTCN provided an update on the actions it has taken in response to the recommendations of its independent review by the UNFCCC. It will further report on an annual basis on these actions to the UNFCCC Conference of the Parties (COP).

This Annual Report presents a more uniform and systematic annual report to the Advisory Board and its donors corresponding to the Annual Operating Plans (AOPs) and the CTCN Programme of Work, and to more systematically report on results in all its three core service areas.

The content is drawn from the report of the CTCN to the COP and supplemented by information from the CTCN knowledge platform, including a report on annual output targets. In future years it can be supplemented with impact data provided by the CTCN's enhanced approach to monitoring and evaluation of the impacts of its activities.

2. CTCN Service Lines

a. Technical Assistance

Overview

As of December 2018, the CTCN engaged with **79 developing country Parties** on a total of 210 requests for technical assistance. The figure below illustrates the progression during 2018 of the requests that have been both deemed eligible and prioritized: **45 requests for technical assistance were completed** in 2018, bringing the CTCN total to 69 overall. The requests which were not reflected were withdrawn by the NDE, deemed ineligible by the CTCN or classified as eligible but not prioritized (owing primarily to CTCN financial constraints).

In mid-2018, the CTCN surveyed technical assistance implementers and National Designated Entities involved in its first 40 completed technical assistance interventions. The survey captured activities undertaken during technical assistance, and enabled the calculation of anticipated impacts of these interventions over a period of approximately ten years. Highlights of this analysis include:

Activities from start-up until mid-2018

- a. 130 workshops building the capacity of **2,400 people** across 160 institutions.
- b. 51 projects implemented, deploying **100 technology types** as a result of 40 CTCN technical assistance interventions completed.

Estimated impacts from start-up until mid-2018

- c. Approximately **\$700 million** in anticipated investment leveraged as a result of technical assistance activities.
- d. Estimated GHG emissions likely to be reduced or sequestered as a result of projects supported by technical assistance: **11 million tons of GHG emissions** (CO₂e) annually over a ten-year period.
- e. Estimated number of anticipated beneficiaries as a result of a mitigation TA and anticipated number of people with increased resilience as co-benefits of the TA: **85 million**

The CTCN has increasingly drawn on the expertise of its Network members to implement requests for technical assistance received from developing countries. Network members now implement approximately two thirds of technical assistance through a competitive bidding process managed by CTCN co-host UNIDO.

Single-country requests have decreased over the last year, while multi-country requests have risen. Seven multi-country requests have been submitted to the CTCN thus far, and a number of additional multi-country requests are currently in the process of being formulated by countries. The CTC encourages the submission of multi-country requests due to their high potential for impact at scale, guided by the experience of the CTCN thus far and the priority themes identified

through the Technology Expert Meeting process. Those themes have been prioritized on the basis of successful past technical assistance and regional trends with high impact.



Incubating climate technologies in Chilean SMEs

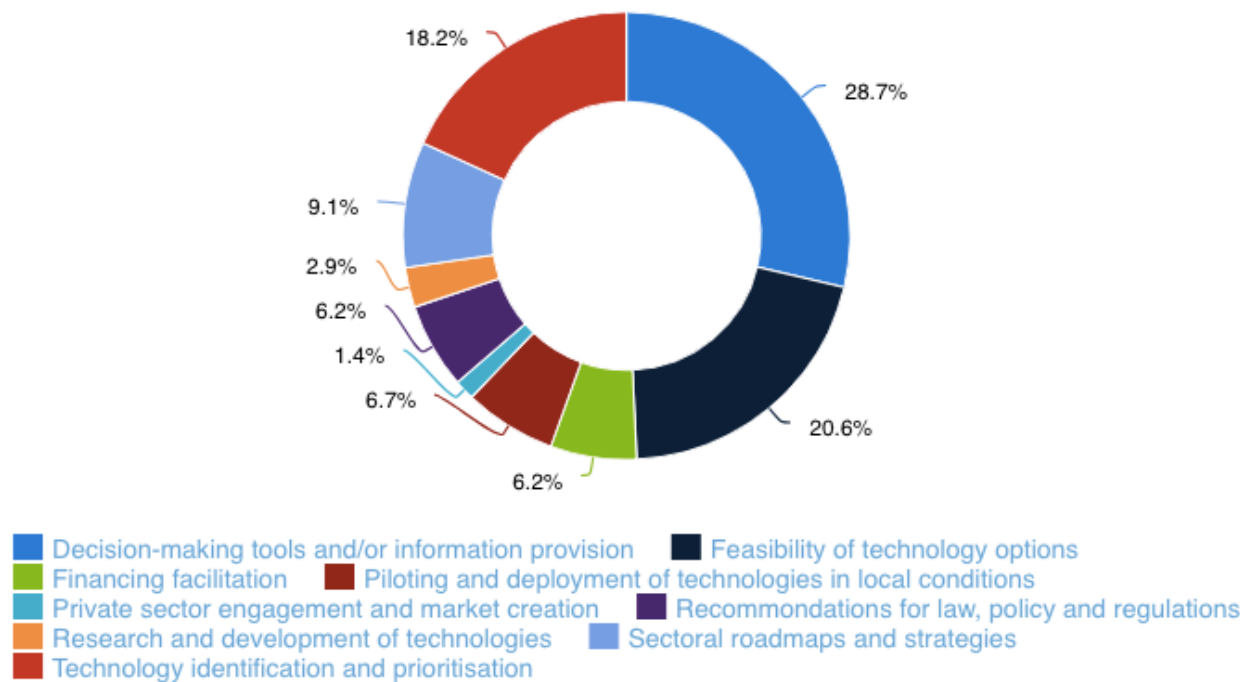
To date, 31 per cent of technical assistance requests have focused on adaptation; 53 per cent on mitigation; and 16 per cent of requests incorporate both mitigation and adaptation objectives, and are well distributed geographically, as noted in the figures on the next page.

Approximately half of all technical assistance requests are directly related to recommendations and priorities identified in countries' **Technology Needs Assessments**. There is also an increasing emphasis by countries on a direct alignment between technical assistance requests and **Nationally Determined Contributions and National Adaptation Plans**.

A complete list of CTCN technical assistance, searchable by country and sector, is available on the CTCN website¹; select highlights of available TA visualizations are available below.

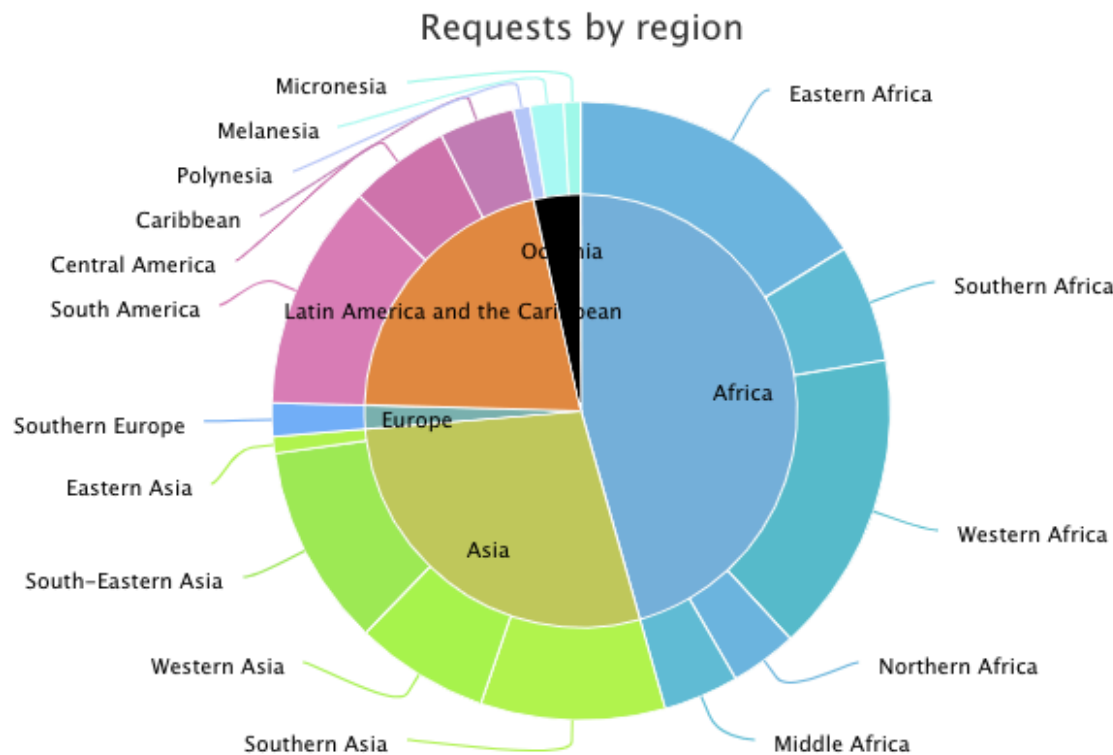
¹ <https://www.ctc-n.org/technical-assistance/data>

Distribution of requests by type of assistance



*Figures are cumulative

Requests by region



*Figures are cumulative

Progress against targets

Annual Operating Plan 2018 targets and achievements are reflected in the table below.

Outputs	Output Target	Output Achieved	Notes
Technical assistance in response to country requests			
TA requests with response plans under design (as of December 31, 2018)	50-70	51	
TA requests under implementation and concluded (as of December 31, 2018)	30-50	78	Under implementation:33 Concluded: 45



Supporting Mauritius' NDC to "improve awareness, enhance rehabilitation and strengthen regulatory frameworks for protection of beaches, dunes and vegetation."

b. Strengthening Networks, Partnerships and Capacity Building

Overview

In 2018, the CTCN collaborated with the UNFCCC to organize **Climate Weeks** in Latin America, Africa, and Asia Pacific and convened **Regional Forums** for interested Network members and NDEs on their margins. In each case, the principal objectives of the Regional NDE Forums were to: present the latest development of CTCN services in the region; share national and regional experiences and best practices from CTCN technical assistance in the region; strengthen linkages between CTCN support and actions identified through Technology Needs Assessment (TNA) and Technology Action Plans (TAPs); and provide inputs to the Technical Examination Process and Talanoa Dialogue.

The CTCN also convened a regional NDE forum in Seoul, Korea. Participants shared best practices related to collaboration with the Green Climate Fund, discussed opportunities arising from the provision of pro-bono support, and shared updates and lessons learned from TA interventions in the region.

The CTCN continued its outreach to the **Green Climate Fund (GCF)** and **Global Environment Facility (GEF)** focal points, and in some cases was able to organize complementary meetings in order to enable participants to meet and begin to develop working relationships or to further partnerships already underway.

CTCN Capacity Building activities - 2018



The CTCN was invited by the GCF Secretariat to organize a session during the **GCF Structured Dialogue** for Asia as well as its Central Asia and Eastern Europe meetings. During the sessions, the CTCN highlighted efforts toward enhancing linkages between the

Technology and Finance Mechanisms and presented work undertaken through GCF Readiness support. The CTCN has also provided capacity building on developing climate finance concept notes aimed at GCF funding through its “Vision to Concept” modules. This was undertaken in six countries and led to development of concepts which are being pursued by other GCF accredited entities for submission.

The CTCN has started to collaborate with other **regional and global technology initiatives** like the Least Developed Country Technology Bank and the UN Economic and Social Commission for Western Asia Technology Center. Joint capacity building activities on climate finance have also been undertaken with regional development banks in the African region.

Since the launch of the **CTCN Request Incubator Programme for Least Developed Countries** (LDCs) during COP20 in Lima, it has enhanced the capacity of participating LDCs to develop high quality requests for technical assistance that have strong potential for technology deployment and transfer on the ground and also to attract investments; strengthen institutional capacities related to climate technologies; and reinforce national efforts on technology transfer in line with their national development objectives. The Incubator Programme, now expanded to include Small Island Developing States, includes a stronger emphasis on NDC priorities as a basis for the identification and prioritization of CTCN technology interventions.

The CTCN's **Secondment Programme** has brought participants from the CTCN Network, NDE and Consortium Partner institutions to work at CTCN headquarters in Copenhagen, Denmark for a period of 4-12 months. These visiting early- and mid-career professionals contributed to the strategic and operational work of the CTCN, while enhancing their understanding of climate technology implementation and knowledge transfer. A new round of programme participants started in August 2018 for a period of 6 to 12 months and represent CTCN Consortium Partner TERI and Korea's Green Technology Centre.

The CTCN continued its series of **technology webinars** in 2018, primarily delivered by Network. The webinars introduce climate technologies, methods, and sectors, as well as their contribution to increased resilience and/or reduced GHG emissions. Webinar participants also learned about sectoral policy and regulatory interventions that helped to create more enabling environments and can be replicated in other regions. Since its inception, over **3,500 participants** have participated in 46 CTCN-hosted webinars and nearly 50 partner-hosted webinars that have been promoted by the CTCN.

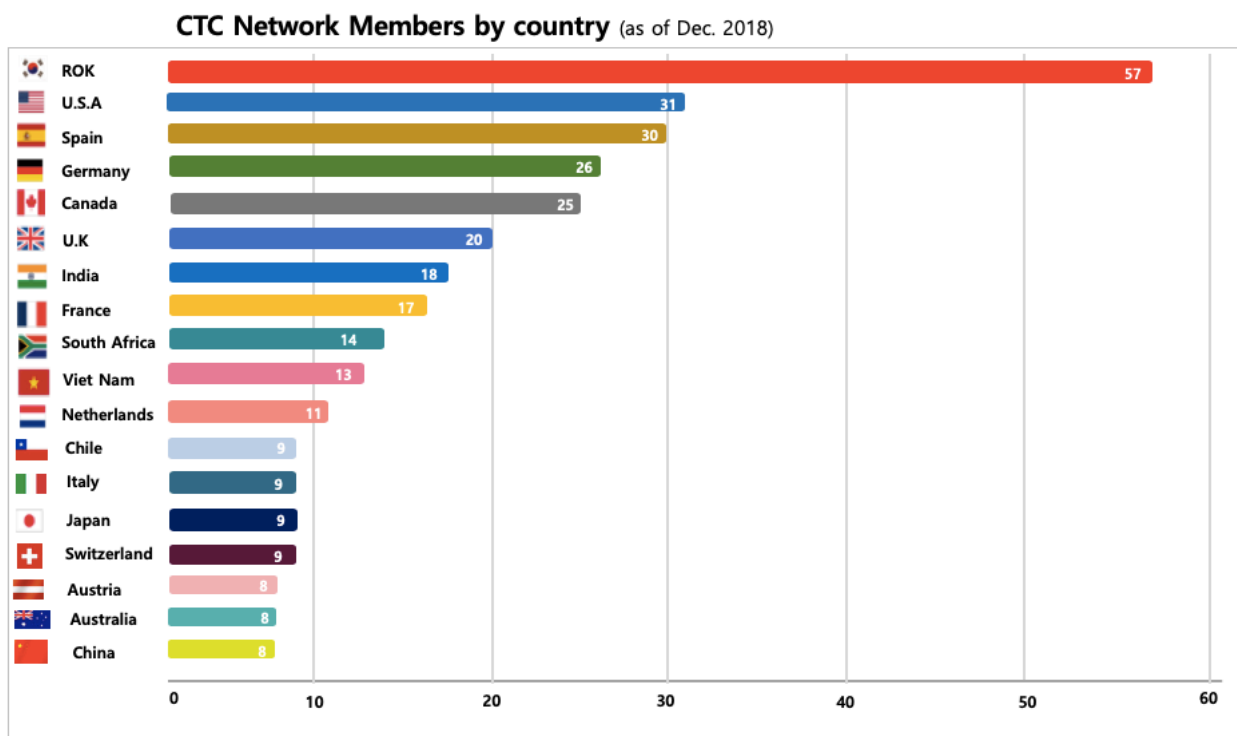
For the second year, the CTCN supported LDCs through the organization of a week-long summer course at Radboud University designed specifically for junior professionals and Doctorate students from

Webinars. In 2018, 9 webinars engaged a total of 386 participants from 114 countries. Webinars included:

- *China's Carbon Market and Green Finance Development;*
- *Potential for climate technology transfer through cooperation with Annex-I NDEs;*
- *Agricultural Carbon Markets – Building the Biological Bridge;*
- *BD3 CCS Integrated Facility – Technical Capabilities;*
- *Vulnerability Reduction Credits (VRCs™): enabling better adaptation to climate change;*
- *Business Model Canvas;*
- *CTCN Technical Assistance Bidding – Practical Guidance to Climate Technology Network members;*
- *Wastewater Management in Developing Countries;*
- *CCS Takes the Biggest Bite Out of CO2*

LDC countries. The course brought together 28 participants from 23 countries including those from LDCs nominated by their respective NDEs. Participants presented **technologies that could be relevant for implementation based on their countries' NDC commitments**. The participants also created action plans for the scaling up of the selected technologies in their respective countries.

The CTC **Network** continued to grow steadily in 2018, climbing from just over 400 to 484 members in 2018. The national breakdown of countries represented in the Network is captured below.



*Capacity building on design thinking for national climate technology innovation
(Dar es Salaam, Tanzania Nov. 2018)*

Progress against targets





















Annual Operating Plan 2018 targets and achievements are reflected in the table below.

Outputs	Output Target	Output Achieved	Notes
Fostering collaboration & access to information			
Regional Forums organized	6 – 9*	3	Regional Forum for Asia-Pacific, Africa and Latin America and Caribbean
Thematic programme training sessions	5 – 10*	4	1.Zambia Vision to Concept 2.GCF training with AfDB 3.Agricultural Soils Carbon Workshop 4. Innovation Workshop in Tanzania
National events supported	5 – 10*	4	1. Regional Launch of IPCC Report and Donor Coordination meeting for Vietnam 2. Korea Climate Technology Expo 3. Tunisia incubator 4. Malawi Incubator
Number of trained CTCN NDEs	100	118	
Number of trained CTCN clients	500	445	1. Regional Forum 2.Vision to Concept (Myanmar) 3.Vision to Concept (Nepal) 4. Energy Auditor (Bangladesh) 5. Incubator (Timor Leste) 6. CTCN Clinic at the GCF Asia Structured Dialogue 7. Pilot Training Programme in Flood and Drought Management Tools for Climate Resilience and GCF Concept Note Development
Number of new countries enrolled in the Incubator Programme	4 - 6	5	Timor Leste, Malawi, Zambia, Equatorial Guinea, Mauritania
Number of partnerships and twinning arrangements	4-6	3	1. MOU with the Republic of Korea 2. Adaptation Fund Innovation Micro-Grant Implementing Agency
Total Number of Network institutions	300	470	
Number of TA requests implemented by Network members	20-30	19	NEDO, SNV, GTC-K, Econoler (3), EHA, Logios, Pfl, ECMC, INA ,Carbon Trust, Oikologica, CIMNE, Alterra, Cantabria(2), AAE ,University of Florence.

c. Fostering collaboration through access to information

The CTCN's Knowledge Management System (KMS) continues to support the delivery of the CTCN's core functions to developing country NDEs, government officials, and other climate technology practitioners, and is also used by NDE and Network members to communicate and respond to opportunities to bid on the implementation of technical assistance. The online presence of the CTCN is creating greater visibility for the impacts resulting from its responses to technical assistance requests and to the wealth of technology information provided by Consortium Partners and Network members. Over the course of 2018, the CTCN website registered **increases of 40 per cent in site visits** and **53 per cent in the number of users**, compared to the same time period in 2017. The amount of **time users spent viewing specific pages on the knowledge platform increased by 8%**, indicating a greater willingness to stay and explore the climate information provided.

In addition to its home page, the most visited pages on ctc-n.org are for technical assistance requests, the Network, and sectoral technology information. As of December, 2018, **more than 17,000 knowledge resources are available** in the KMS including climate technology publications, case studies, tools, national planning documents, climate technology descriptions and webinars. The climate information is accessed by countries from all over the world. Users spending most time on the knowledge platform are often from SIDS or LDCs.

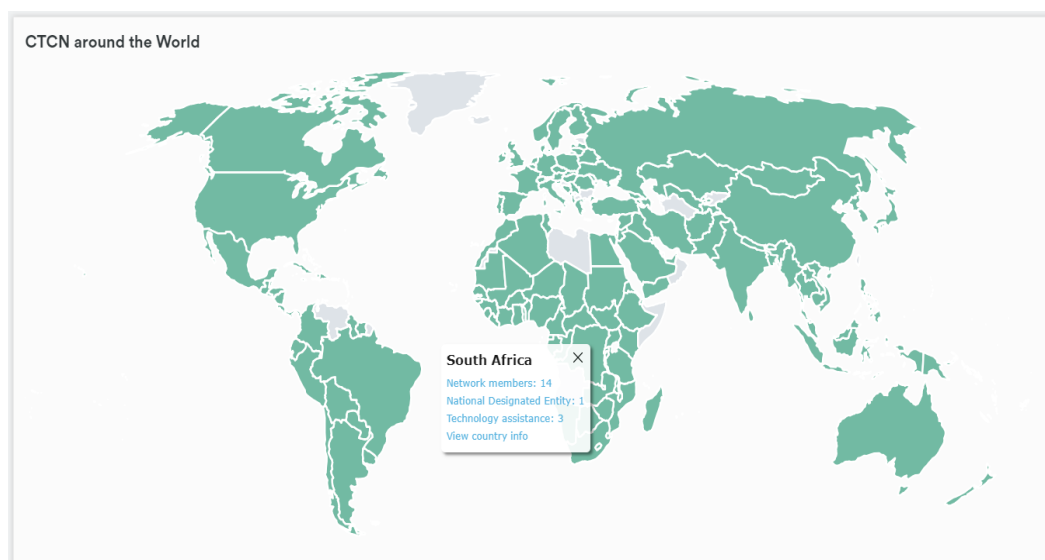
<i>No. of Users</i>	<i>Average Session Duration</i>
1.  United States	1.  Curaçao
2.  India	2.  Denmark
3.  United Kingdom	3.  Aruba
4.  Germany	4.  Belarus
5.  Canada	5.  Kiribati
6.  South Korea	6.  Maldives
7.  Philippines	7.  Sudan
8.  Nigeria	8.  Eritrea
9.  Kenya	9.  Nicaragua
10.  France	10.  Gibraltar

The CTCN Technical Assistance dashboard continues to provide public visualizations on the site, which provide **aggregated data on technical assistance such as their distribution by sector, region, and implementing partner**. Individual TA pages² have been continually developed and updated, providing **technical assistance summaries, complete documentation, impact briefs, TA deliverables** and other key information such as contribution to

the Sustainable Development Goals. The Technical Assistance dashboard is also being enhanced to include a monitoring & evaluation section for capturing impact data for completed technical assistance.

² <https://www.ctc-n.org/technical-assistance/data>

The home page now features a global map **which provides NDE, technical assistance, Network members, and technology info by country** (see image below). The Network page continues to provide information on current **technical assistance bidding opportunities, information on events, webinars**, membership criteria, visualizations and lists of Network members and their sector experience. The capacity building page has been further developed provides information on the Incubator programme, Regional Forums and readiness support.



A page displaying **CTCN Monitoring & Evaluation (M&E)** information has been created which includes links to documents such as COP decisions on M&E, results of the independent review of the effective implementation of the CTCN, the TA and non-TA M&E frameworks of CTCN as well as other external reviews and recommendations of CTCN operations.³

Progress against targets

Annual Operating Plan 2018 targets and achievements are reflected in the table below.

Outputs	Output Target	Output Achieved
Fostering collaboration & access to information		
Online tools and information materials	11,500	17,100
Number of knowledge partners contributing to KMS	20-30	25
Number of social media followers	2,400	4,700
Annual number of KMS site visits	100,000	112,000

³ <https://www.ctc-n.org/about-ctcn/monitoring-evaluation>

3. Crosscutting Themes

Gender mainstreaming and Communications are the two principal crosscutting activities engaged in by the CTCN that support and are measured across the full scope of its operations.

a. Gender mainstreaming

The UNFCCC Gender Action Plan adopted at COP23 requested the CTCN to facilitate knowledge sharing on gender, and to conduct a workshop on gender and Technology Needs Assessments which the CTCN organized at COP24 with the UNEP-DTU Partnership and the Women and Gender Constituency. The Action Plan also asks the CTCN to track and report how it was taking into account gender considerations in fulfilling its mandate.

The CTCN increases access to knowledge and information on gender and climate change action via collaboration with Network members and Knowledge partners on gathering, generating and disseminating relevant information resources, tool, webinars and best-practice examples through the CTCN Gender Hub on the website⁴, which currently contains more than 400 resources. The CTCN has grown its network of organizations with gender expertise and is actively seeking partnerships with organizations experienced in gender and climate, and to grow its number of Network members with demonstrated gender expertise.

In order to highlight climate change solutions that incorporate strong gender considerations and/or gender mainstreaming, the CTCN partnered with the Women and Gender Constituency to support the Gender-Just Climate Change Solutions awards and workshop on Up-Scaling Gender-Just Climate Change Solutions.

Gender case study: Mainstreaming gender for a climate-resilient energy system in the Economic Community of West African States (ECOWAS).



In partnership with the Private Financing Advisory Network and the ECOWAS Centre for Renewable Energy and Energy Efficiency, women-led sustainable energy enterprises from West Africa received coaching for the development of financially, socially and environmentally sustainable business plans. A business plan competition led to four submissions with a total investment request in excess of USD 30 million. Proposals ranged from rural electrification in Senegal to a waste-to-energy solution in Sierra Leone. The technical assistance also supported a training workshop for organisations as well as gender focal points within relevant Ministries in the ECOWAS countries focused on the integration of gender dimensions in all phases of energy projects in order to strengthen local capacity.

⁴ <https://www.ctc-n.org/technology-sectors/gender>

b. Communications

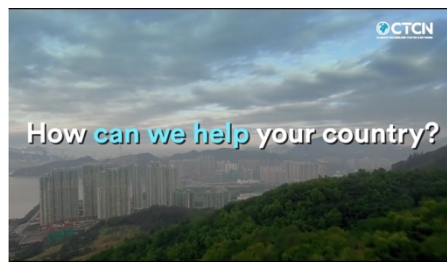
The CTCN utilizes communications to generate further awareness of CTCN services, provide access to technology information, and demonstrate the results of its work. The CTCN's communication strategy is implemented through a variety of means. Below is an overview of the Centre's 2018 communication activities.

CTCN 5-year Progress Report: The Climate Technology Centre and Network (CTCN) develops annual progress to provide more detailed information on the Centre's technology transfer activities, partners and leadership. The 2018 Progress report focused on the Centre's achievements during its first 5 years of its operations. <https://www.ctc-n.org/news/ctcn-marks-first-5-years-progress-report-launched>



CTCN videos: The Centre produced videos demonstrating how CTCN facilitates access to practical expertise on climate technologies through its worldwide network of technology experts:

- CTCN technology collaboration with Indonesia. Can technology help us prepare for flooding? (10,519 views, 35,706 reach)
- How can CTCN help your country? 6 steps to successful clean-tech transfer (44,515 views, 97,412 reach)
- 15 West African countries build a gender-just energy system (40,000 views on Facebook)
- 5 years of global climate technology matchmaking (10,000 views, 8,000 reached)



Media coverage: The CTCN prepared press releases and communicated with international media in order to raise awareness about the Centre and its activities. More than 60 articles were published in the international press and country/region-specific media. For example:

- UN says Africa is embracing technology in managing climate change
http://www.xinhuanet.com/english/2018-04/09/c_137098514.htm
- Deeman radio, Benin: Les producteurs bientôt informés de prévisions météorologiques
<https://www.ctc-n.org/news/deeman-radio-benin-les-producteurs-bient-t-inform-s-de-pr-visions-m-t-rologiques>

COP24: The CTCN organized 10 events, engaging 750 participants. The CTCN also hosted the UNFCCC Technology Mechanism exhibition space.

CTCN Newsletters: CTCN distributed 28 e-newsletters to relevant stakeholders (totaling a list of over 11,000 subscribers). E-newsletters contain information on relevant climate technology events, trainings, technology information resources, and technical assistance.

Social media: Daily posts on social media (Facebook likes: from 2,167 to 2,453, 11,7% increase; Twitter followers: from 1,672 to 2,270, 26,3% increase)

4. Joint action with the Technology Executive Committee

The TEC and the CTCN further intensified their collaboration in 2018 in order to enhance the work of the Technology Mechanism and catalyze action by the international community to achieve the objectives of the Convention and the Paris Agreement. This collaboration will continue to help Parties to scale up their actions on technology development and transfer, in particular by promoting technology cooperation and partnerships.

The TEC and the CTCN helped to advance research, development and demonstration (RD&D) work on climate technologies. Together with the Green Climate Fund (GCF), they organized a thematic dialogue on the promotion of climate technology incubators and accelerators in developing countries and prepared a policy brief on that topic. These initiatives assisted the GCF in identifying ways of financing such incubators and accelerators with the ultimate aim of improving those countries' ability to innovate climate technologies. The Technology Mechanism bodies and the GCF also participated in a CTCN expert meeting on national systems of innovation and a TEC task force on innovation and RD&D.

The TEC and the CTCN continued to support activities related to TNAs including by working together with the Adaptation Committee and the Least Developed Countries Expert Group to consider how countries can align TNAs with national adaptation plans (NAPs). The TEC also cooperated with the CTCN and UNEP DTU Partnership to organize a workshop on TNAs in conjunction with the CTCN Regional Forum for NDEs in Africa.

5. Financial Update

As of December 2018, the CTCN had secured a total of USD 54.5 million from bilateral sources and a further USD 1.4 million from the GCF and USD 2.0 million from the Global Environmental Facility for the project “Promoting Accelerated Transfer and Scaled up Deployment of Mitigation Technologies through the Climate Technology Centre & Network (CTCN)”. The CTCN also received USD 1.125 million from co-host UNIDO. Total of the above contributions to the CTCN amount to USD 59 million.

In addition to contributions from bilateral donors, the CTCN continues to explore other financing scenarios to diversify its sources of funding and to ensure the sustainability, adequacy and predictability of funding for CTCN operations. UNEP and UNIDO, as the co-leads of the CTCN consortium, continue to engage with current and other potential donors to secure additional funds.

The CTCN is also engaging Network members, including NDEs and their governments, as a means to provide and/or fund CTCN services through in-kind and voluntary contributions as well as pro bono support, either partially or wholly contributing technical expertise to respond to CTCN requests from developing countries. The CTCN is in the process of implementing several responses to technical assistance via voluntary partnerships with the governments of Korea and Japan. The value of this support is estimated at USD 1.0 million for 2018 with the potential for additional contributions as the procedure for providing in-kind / pro bono assistance is further refined and promoted.

The CTCN continues to explore linkages between the Technology Mechanism and the Financial Mechanism. It is engaging with both the Green Climate Fund and the Global Environment Facility, the operative bodies of the Financial Mechanism, on approaches refine the collaborative modalities to scale-up requests for technical assistance to the CTCN.

The GCF and CTCN are partnering on an approach wherein CTCN services and expertise strengthen proposals seeking GCF Readiness Programme and Project Preparation Facility support, and has developed and presented capacity building modules to assist in the implementation of this approach. The CTCN will have completed 2 GCF Readiness-funded proposals by the end of 2018 and expects that, through collaboration with NDEs and NDAs, it will access close to USD 2 million of GCF Readiness Programme funding in 2018. The CTCN continues to explore modalities to access funds through the GCF’s Project Preparation Facility.

The CTCN is actively engaging with multilateral development banks (MDBs) and their GEF-funded regional climate technology transfer and finance centres. Collaborative activities with MDBs include the implementation of technical assistance requests with scalable investment potential, participation in relevant Regional NDE Forums, and the organization of joint meetings to promote knowledge-sharing and the strengthening of networks.

<placeholder financial statement>