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**Subsidiary Body for Scientific and
Technological Advice**

Fifty-first session

Santiago, 2–7 December 2019*

Item X of the provisional agenda

Development and transfer of technologies:

**Joint annual report of the Technology Executive
Committee and the Climate Technology Centre and
Network**

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Summary

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Abbreviations and acronyms

CMA	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
COP	Conference of the Parties
CTC	Climate Technology Centre
CTCN	Climate Technology Centre and Network
DTU	Technical University of Denmark
GCF	Green Climate Fund
GEF	Global Environment Facility
KMS	knowledge management system
NDE	national designated entity
SB	sessions of the subsidiary bodies
SBI	Subsidiary Body for Implementation
SBSTA	Subsidiary Body for Scientific and Technological Advice
TEC	Technology Executive Committee
TEM	technical expert meeting
TNA	technology needs assessment
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization

I. Background

A. Mandate

1. COP 16 established the Technology Mechanism, comprising the TEC and the CTCN, to facilitate the implementation of enhanced action on technology development and transfer to support action on mitigation and adaptation in order to achieve the full implementation of the Convention.¹
2. COP 17 requested the TEC and the CTCN to establish procedures for preparing a joint annual report, and also requested the secretariat to make that joint annual report available for consideration by the COP through the subsidiary bodies.² In response, the TEC and the CTCN established procedures for preparing a joint annual report.³
3. COP 20 decided that the TEC and the CTCN shall continue to prepare a joint annual report to the COP, through the subsidiary bodies, on their respective activities and the performance of their respective functions.⁴
4. COP 21 invited the TEC and the Advisory Board of the CTCN to update the procedures for preparing the joint chapter of the joint annual report of the TEC and the CTCN,⁵ and COP 23 took note of the updated procedures.⁶
5. COP 21 decided that the TEC and the CTCN shall report to the CMA, through the subsidiary bodies, on their activities to support the implementation of the Paris Agreement.⁷
6. COP 23 requested the TEC and the CTCN to include in their joint annual report to the COP, having consulted with the high-level champions thereon, recommendations for Parties and other organizations on ways forward and necessary actions to be taken based on the outcomes of the TEMs.⁸
7. COP 24 encouraged the TEC and the CTCN to:
 - (a) Improve their reporting on challenges and lessons learned in their future joint annual reports, including on their efforts to address the challenges;
 - (b) Continue reporting on the monitoring and evaluation of the impact of their activities and to include information on tracking progress and on methodologies used.⁹
8. CMA 1 adopted the technology framework under Article 10, paragraph 4, of the Paris Agreement and requested the TEC and the CTCN to include information in their joint annual report for 2019 on how they incorporated the guidance contained in the technology framework into their respective workplans and programmes of work as well as on challenges and lessons learned in implementing the technology framework.¹⁰

¹ Decision 1/CP.16, para. 117.

² Decision 2/CP.17, paras. 142 and 143.

³ FCCC/SB/2013/1, para. 3.

⁴ Decision 17/CP.20, para. 4.

⁵ Decision 12/CP.21, para. 2.

⁶ Decision 15/CP.23, para. 4.

⁷ Decision 1/CP.21, para. 68.

⁸ Decision 13/CP.23, para. 4.

⁹ Decision 13/CP.24, paras. 4 and 7.

¹⁰ Decision 15/CMA.1, paras. 1, 3(b) and 5.

B. Scope of the report

9. This joint annual report of the TEC and the CTCN to the COP for 2019 contains:

- (a) A joint chapter of the TEC and the CTCN (chapter II);
- (b) A chapter on the activities and performance of the TEC in 2019, including key messages for COP 25. It covers the outcomes of the 18th and 19th meetings and intersessional work of the TEC with the active engagement of nominated experts from relevant international and observer organizations, and provides information on challenges and lessons learned in implementing its mandates and on the monitoring and evaluation of the impacts thereof (chapter III);
- (c) A chapter on the activities and performance of the CTCN in 2019, including key messages for COP 25. It covers the outcomes of the 13th and 14th meetings and intersessional work of the Advisory Board of the CTCN, and includes information on challenges and lessons learned in implementing CTCN mandates, and information provided by UNEP on matters regarding its role as the host of the CTC (chapter IV).¹¹

C. Possible action by the subsidiary bodies

10. The SBSTA and the SBI may wish to consider the joint annual report of the TEC and the CTCN for 2019 and to recommend a draft decision on the matter for consideration and adoption at COP 25 and CMA 2.

II. Joint chapter of the Technology Executive Committee and the Climate Technology Centre and Network

III. Report on the activities and performance of the Technology Executive Committee in 2019

11. To be inserted....

IV. Report on the activities and performance of the Climate Technology Centre and Network in 2019

A. Advisory Board meetings and membership

12. At its 13th meeting, held from 27 to 29 March 2019 in Copenhagen, the Advisory Board of the CTCN welcomed Board members Pedro Garcia Brito (Dominican Republic), Omedi Moses Jura (Kenya), Seo Gon Ko (Republic of Korea), Meropi Paneli (European Union), Erwin Rose (United States of America), Kenichi Wada (Japan), and Ping Zhong (China).¹² At the beginning of the meeting, the Board elected Orly Jacob (Canada) as the Vice-Chair, and at its conclusion elected Ms. Jacob as its new Chair and Mr. Zhong as its Vice-Chair. The Board thanked Maia Tskhvaradze (Georgia) for her service as Chair of the Advisory Board.

13. The Advisory Board considered and approved the CTCN Programme of Work for 2019–2022¹³, in which the COP-mandated services of the CTCN are aligned with requirements for the implementation of the technology framework under the Paris Agreement. In addition, the Board endorsed the 2018 financial statement of the CTCN and

¹¹ See decision 14/CP.18, para. 10.

¹² A list of the Advisory Board members is available at <https://www.ctc-n.org/about-ctcn/advisory-board>.

¹³ https://www.ctc-n.org/sites/www.ctc-n.org/files/ctcn_programme_of_work_2019-2022.pdf

met in joint session with the TEC to discuss areas of collaboration to strengthen the provision of support to the Technology Mechanism for implementing the technology framework.

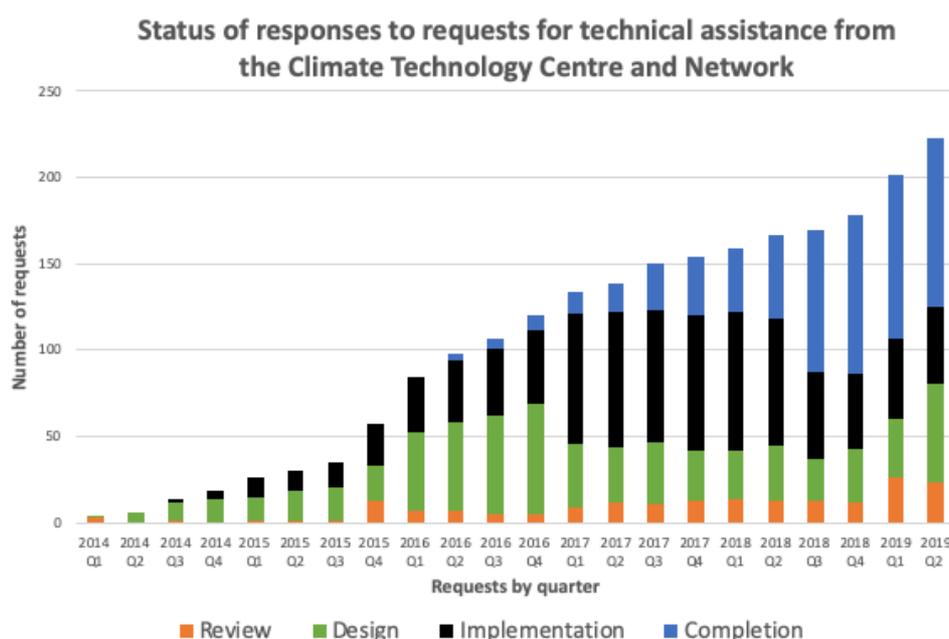
14. At its 14th meeting, held from 11 to 13 September 2019 in Paris, the Advisory Board welcomed its new Secretary and CTCN Director Ms. Rose Mwebaza. It participated in a gender mainstreaming workshop, approved the joint activities to be undertaken by the TEC and the CTCN, and approved the CTCN budget and annual operating plan for 2020. In addition, the Board provided guidance on the engagement of the CTCN with the Financial Mechanism and took note of progress in the development of the monitoring and evaluation system for the activities of the CTCN and how its development will enable more robust reporting and tracking of impact.

15. Parties and observers were invited to participate in both Advisory Board meetings, which were webcast live. All Board meeting documents and presentations are available on the CTCN website.¹⁴

B. Activities of the Climate Technology Centre and Network

1. Function 1: responding to requests for technical assistance from developing countries

16. As of July 2019, the CTCN had engaged with 93 developing country Parties regarding a total of 273 requests for technical assistance, including multi-country requests. Figure 1 below illustrates the progression over time of the 223 requests that have been deemed both eligible and prioritized according to the screening criteria endorsed by the CTCN Advisory Board.



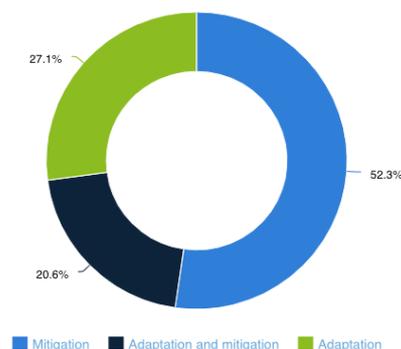
17. As of July 31, the CTCN has completed 99 technical assistance responses to National Designated Entity requests. Forty-five technical assistance cases are under implementation; 57 are in the response plan design phase; and 24 are under review. The CTCN is currently on pace to receive more requests for technical assistance in 2019 than in any previous year.

18. Figure two illustrates the split between requests for technical assistance received to date according to their objective (adaptation, mitigation, both). It demonstrates that nearly three-quarters of the requests received by the CTCN have a mitigation component. CTCN data¹⁵ related to requests for technical assistance indicates that two-thirds of mitigation

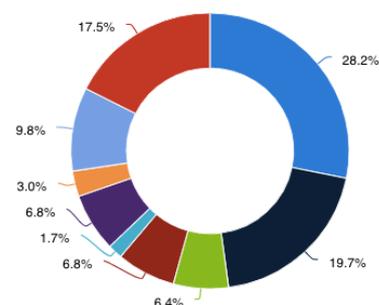
¹⁴ <https://www.ctc-n.org/>.

¹⁵ <https://www.ctc-n.org/technical-assistance/request-visualizations>

requests are related either to Renewable Energy or Energy Efficiency, and that the two largest categories of adaptation requests are Agriculture & Forestry (28%) and Infrastructure and Urban Planning (19%).

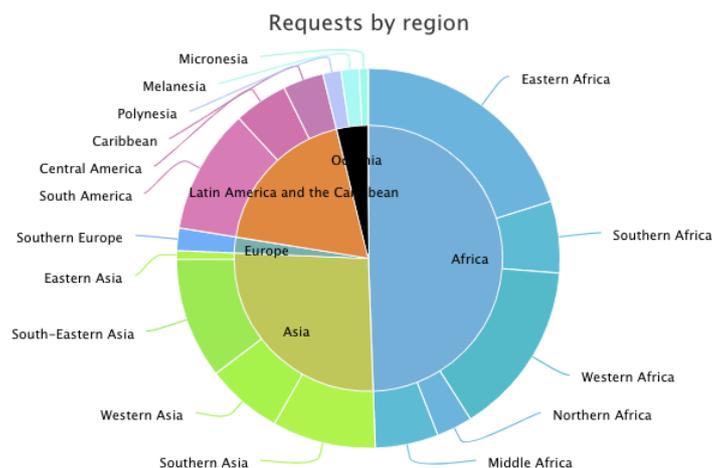


19. Figure 3 shows the type of requests received by the CTCN. Requests for Decision-making or Information Tools (28%) are the most frequent, followed by Technology Feasibility Studies (20%) and Technology Identification and Prioritisation (18%).



Decision-making tools and/or information provision Feasibility of technology options Financing facilitation
 Piloting and deployment of technologies in local conditions Private sector engagement and market creation
 Recommendations for law, policy and regulations Research and development of technologies Sectoral roadmaps and strategies
 Technology identification and prioritisation

20. Figure 4 (to be updated – legibility) presents an illustration of the geographic allocation of requests received: half originate from Africa, 30% from Asia-Pacific, and 19% from Latin America and the Caribbean. Additional data visualisations are available on ctc-n.org¹⁶.



21. The CTCN is updating its monitoring and evaluation system¹⁷ to facilitate capturing the impacts of its operations, in particular technical assistance. Detailed methodologies will

¹⁶ <https://www.ctc-n.org/technical-assistance/request-visualizations>

¹⁷ See <https://www.ctc-n.org/about-ctcn/monitoring-evaluation>.

be provided for guiding CTCN implementing partners and country focal points for climate technology in completing the technical assistance closure reports that form the backbone of the CTCN reporting system, thus enabling robust reporting on the activities of the CTCN from 2020 onward.

22. Data drawn from completed technical assistance indicate that the services provided by the CTCN to date are anticipated to have:

- (a) Leveraged USD 922 million in additional investment from public and private sources;
- (b) Contributed to emission reductions of 11.8 million tonnes of carbon dioxide equivalent per year;
- (c) Benefited 90 million people.

23. The figures above are cumulative and have been provided by implementing partners upon the completion of each technical assistance intervention using their preferred methodology for each indicator. Following the implementation of the updated CTCN monitoring and evaluation system, methodologies will be standardized to allow for more consistent reporting. Figures are subject to adjustments as a result of potential ex-post follow-up reporting by the CTCN, implementing partner, proponent or Nationally Designated Entity.

24. The CTCN online technical assistance dashboard provides aggregated data visualizations of its technical assistance portfolio,¹⁸ including technical assistance distribution by adaptation and mitigation sector, region, and the partners involved in the responses. Information on individual technical assistance requests¹⁹ are provide technical assistance summaries, response plans, outputs and other key information.

2. Function 2: strengthening networks, partnerships and capacity-building

25. In 2019, the CTCN organized regional NDE forums for all regions except the Pacific, to present the latest developments in CTCN services in the regions, to share national and regional experience and best practices from the implementation of CTCN technical assistance, and to strengthen linkages between the support provided by the CTCN and measures identified through TNAs and TAPs. The CTCN continued its outreach to GCF and GEF focal points, and in some cases was able to organize complementary meetings to enable focal points to begin to develop working relationships or to intensify existing partnerships.

26. The CTCN Secondment Programme provides early- and mid-career professionals with the opportunity to contribute to the strategic and operational work of the CTCN while enhancing their understanding of climate technology implementation and knowledge transfer. In 2019, the tenth participant in the programme since 2015 was welcomed.

27. CTCN webinars, delivered in collaboration with Network members and other partners, present new and innovative approaches to implementing technology-related solutions to climate change issues. Recent webinars have presented on such varied themes as blockchain technology innovation for the power sector; and how climate technologies are supporting National Adaptation Plan (NAP) implementation in coastal zones. To date, over 4,500 participants have benefited from the 46 CTCN webinars delivered and the almost 50 partner webinars promoted by the CTCN.

3. Function 3: fostering collaboration and access to information

28. The CTCN web portal²⁰ currently contains over 17,000 information resources, making it one of the largest online sources of climate technology information in the world. Visitors to the site can access climate technology descriptions, publications, case studies, tools, national planning documents, and webinars. The site also provides up-to-date information on CTCN services, searchable by country and theme. The number of visitors to the CTCN

¹⁸ See <https://www.ctc-n.org/technical-assistance/request-visualizations>.

¹⁹ <https://www.ctc-n.org/technical-assistance/data>.

²⁰ www.ctc-n.org.

website has increased by 63 per cent over the previous year. In addition to the home page, the most visited web portal pages are those related to technical assistance requests, the Network and technology sectors.

29. The CTCN aims to provide transparent information on its operations, and therefore displays funding and donor agreements online²¹. The web portal also provides access to documents such as COP decisions on monitoring and evaluation, independent CTCN reviews and associated recommendations, and the monitoring and evaluation frameworks that guide CTCN operations²².

30. The CTCN has collected, curated and shared best practices and case studies on the CTCN web portal in collaboration with its knowledge partners; for example, more than 100 descriptions of gender-just climate initiatives were recently shared by knowledge partner, the UNFCCC Women and Gender Constituency.²³ The CTCN has also cooperated with partners on updating the climate technology taxonomy that serves as the basis of the Centre's knowledge management system and enables the tagging of pages with relevant keywords in order to automatically integrate relevant information (such as publications, technologies, webinars and CTCN technical assistance related to the theme of transportation, for example).

31. The CTCN is continuously enhancing the user-friendliness of its website, through such improvements as online maps displaying CTCN activities and partners; a better search engine; and the development of a monitoring and evaluation dashboard for tracking impact data. Recent efforts have also been made to update the content management framework of the website to ensure its long-term sustainability and functionality.

C. Organizational structure of the Climate Technology Centre and Network

1. Climate Technology Centre

32. In 2019, the Climate Technology Centre thanked Mr. Jukka Uosukainen of Finland for his service as CTCN Director from 2014-2019 and welcomed Dr. Rose Mwebaza as his successor. Dr. Mwebaza of Uganda joins the CTCN from the African Development Bank and in her capacity as CTCN Director will also serve as Secretary to the Advisory Board.

33. In addition to the Director, the CTC employs six professional staff, two administrative staff and 10 consultants. The CTC continues to be supported by a consortium of partner organizations whose geographic diversity and expertise remain invaluable to the fulfilment of its mandate, particularly in relation to the design and delivery of technical assistance.

2. Climate Technology Network

34. The Network welcomed its 500th member in June 2019 and by July 2019 had approximately 520 partners eligible to contribute to the knowledge platform, deliver training sessions and webinars, and bid on the delivery of technical assistance.

35. The CTC, with its Advisory Board, is actively examining strategies to increase the size of and engagement with the Network and will report on additional strategies implemented and their results in its report to COP26.

3. National Designated Entities (NDE)

36. NDEs are critical to the success of the CTCN as it is through them that countries engage with the Centre and benefit from its services. NDEs serve as national focal points for technology development and transfer and are considered *de facto* members of the Network. Developing country NDEs coordinate and submit requests related to their countries' technology needs to the CTCN, whereas developed country NDEs coordinate the provision

²¹ <https://www.ctc-n.org/about-ctcn/donors>

²² <https://www.ctc-n.org/about-ctcn/monitoring-evaluation>.

²³ <https://www.ctc-n.org/about-ctcn/organisations/women-and-gender-constituency>.

of technical knowledge and in-country (including pro bono) support to enhance the ability of the CTCN to respond to those requests.

37. As at July 2019, 161 countries, 134 of which are Parties not included in Annex I to the Convention, had nominated their NDEs.²⁴ The CTCN and its Advisory Board encourage all Parties to nominate a focal point for climate technology and begin engaging in the provision or receipt of climate technology expertise via the CTCN and its implementing partners.

4. Update from UNEP as host of CTCN

38. UNEP is pleased with the extension of the hosting agreement with the UNFCCC and looks forward to continuing to support the CTCN as it implements its Programme of Work (2019-2022). The many reviews that have been undertaken have rightly praised the achievements of the CTCN during its first five years of operations and made actionable recommendations to address areas of concern that are actively being addressed.

39. UNEP will continue to work in particular with UNIDO to leverage in-house and geographically dispersed expertise in support of the CTCN and its activities, and to ensure the implementation of the technology framework of the Paris Agreement.

40. A successful example of strengthened intra-Agency engagement has been between CTC and adaptation experts within UNEP. This engagement has enabled UNEP to provide guidance to strengthen links between the CTCN and the Adaptation Fund through the partnership for innovation for adaptation. Beginning in 2020, the CTCN will act as a grant aggregator for the Adaptation Fund financed Innovation Micro-Grants mechanism.

5. Incorporating guidance from the technology framework into the CTCN Programme of Work (2019-2022)

41. The thirteenth meeting of the CTCN Advisory Board in March 2019 considered, revised and approved a four-year Programme of Work to guide the activities of the CTCN.

42. The PoW was modelled directly on the technology framework of the Paris Agreement: each of the actions associated with each theme were mapped out according to how the CTCN could best act within its mandate and on a country-driven basis, to deliver the desired outcome, and activities and indicative indicators identified for each activity that would enable target-setting by the CTC in its Annual Operating Plans on the basis of the budget available for the coming year.

43. The Programme of Work will be lightly revised at the fifteenth meeting of the Advisory Board in April 2020 in order to ensure proper alignment with the monitoring & evaluation system developed in the second half of 2019.

6. Information on how the CTCN will address the key messages and relevant recommendations contained in the evaluation of the Poznan strategic programme on technology transfer

44. The CTCN welcomes the report of the TEC on the Poznan strategic programme on technology transfer (PSP) considered by Parties at SB50 and supports its key messages and recommendations. The CTCN has found its work to strengthen enabling environments and promote access to finance to be one of its most impactful services; that project origination and development are resource-intensive and require significant capacity-building and support; and that effective modalities take time to develop and benefit from long-term engagement in particular with government officials to build required capacity.

45. The CTCN will continue to work to capture the lessons learned and capacity building materials from its operations, develop new knowledge products as appropriate, and share those findings with its stakeholders and partners both directly and via its knowledge portal.

46. The recommendations from the report contain significant direct guidance to the CTCN and to the GEF relating to scaling-up investment in climate technologies, providing

²⁴ See <http://unfccc.int/ttclear/support/national-designated-entity.html>.

enhanced technical assistance, and to consider options for enhanced cooperation with the CTCN on the activities undertaken by regional centres. The CTCN supports all of these recommendations, and looks forward to, as also recommended, organizing a dialogue with the GEF and the regional centres to identify lessons learned and options for continuing the work of the centres in a collaborative manner.

7. Funding

47. COP 18 decided that the CTC and the mobilization of the services of the Network should be funded from various sources, ranging from the Financial Mechanism to philanthropic and private sector sources, as well as by financial and in-kind contributions from the co-hosts of the CTCN and from participants in the Network.²⁵ Parties in a position to do so were invited to support the CTCN by providing financial and other resources,²⁶ and the CTCN has also been supported by in-kind resources from its co-hosts UNEP and UNIDO.

48. The CTCN ensures its Advisory Board remains apprised of its financial status and projections, as well as steps undertaken to engage the Financial Mechanism, regional development banks and other potential funding partners. Ensuring sufficient funds are available to be disbursed by the CTCN in order to deliver on its programme of work and to support the implementation of the technology framework of the Paris Agreement is an ongoing priority.

49. The CTCN carried over USD 10.3 million into 2019. As at July 31, in 2019 the CTCN had received cash totalling USD 3,062,996 against an approved annual operating budget of USD 9.1 million and a projected expenditure by the CTCN of USD 7.7 million. The projected fund balance of the CTCN at the end of 2019 is USD 5.6 million.

50. Part of the projected underspend this fiscal year is a natural challenge of coordinating budgets across separate organisations and dozens of implementing partners. This gap also reflects the additional time and resources expended in developing important partnerships with and securing resources from development finance institutions, including the Green Climate Fund.

51. An additional factor is the predominance of earmarked or targeted funding conditions on the resources available to the CTCN. The review undertaken by Danish aid agency DANIDA in 2018 expressed concern at the time that earmarked funds constituted 53% of total funding and 72% of remaining funding. It further noted that unless a higher share of unearmarked funding is secured, it could be difficult for the CTCN to maintain its demand-based approach and satisfy an equal distribution of funds in relation to mitigation/adaptation, partner country level of income and geography.²⁷

52. Of the remaining resources at the disposal of the CTCN, 70% are earmarked. The consequences are gaps in service, prioritised but unimplemented TA requests, enhanced reporting obligations and discrete funding windows available for programming that is part of the CTCN business model and mandate to be demand-driven from the COP. This also risks the full implementation of the technology framework of the Paris Agreement.

53. The CTCN anticipates full implementation of its allocated budget in 2020. It does not have sufficient operational, unearmarked resources to maintain a functional secretariat beyond 2020.

54. The funding secured by the CTCN from its inception in 2013 until July 2019 is presented in the table below.

Financial support secured for the Climate Technology Centre and Network as at July 31, 2019

<i>Donor</i>	<i>Total contribution secured (USD)</i>
European Union	14 429 688

²⁵ Decision 14/CP.18, annex I, paras. 22 and 23.

²⁶ Decision 2/CP.17, para. 141.

²⁷ https://www.ctc-n.org/sites/www.ctc-n.org/files/ctcn_danida_review_report_2018.pdf, section 9.1, page 14.

<i>Donor</i>	<i>Total contribution secured (USD)</i>
Japan	8 560 449
Norway	8 499 850
Denmark	7 225 293
United States of America	4 930 308
Canada	4 357 277
Switzerland	4 296 515
Germany	1 158 207
Republic of Korea	885 128
Italy	849 653
Sweden	479 574
Finland	216 640
Ireland	216 548
Spain	116 620
Subtotal	56 221 750
GEF	1 971 000
GCF	1 415 534
UNIDO	1 247 665
Total	60 855 949

55. Decisions from COPs 21, 22 and 24 have provided increasingly specific guidance as to how the Financial and Technology Mechanisms of the Convention should collaborate to deliver solutions that address the climate technology-related needs of developing countries as articulated in their Nationally Determined Contributions.

56. The GCF and the CTCN are currently partnering under the GCF Readiness Programme through which the CTCN provides services and expertise in response to developing countries' requests using GCF country resources. So far, the CTCN has accessed USD 1.8 million for the implementation of six GCF Readiness projects. The CTCN contributed to the development of 16 additional Readiness proposals by countries for the GCF in 2019, with five more pending approval. Pending full approval of all submissions, the CTCN will access approximately USD 5.5 million for their implementation.

57. The CTCN continues to work with countries on the pilot projects developed under the medium-sized project approved under GEF-5 in 2013. In April 2019 the CTCN submitted a proposal for funding from the global set-aside of the seventh replenishment of the GEF (GEF-7) that was unsuccessful. The CTCN believes that using country allocations to scale up successful mitigation-related technical assistance could be a promising way to partner with the GEF in support of country climate technology priorities. The CTCN also welcomes the invitation from the SBI at its 50th meeting to facilitate the collaboration between its country focal points and those of the GEF and looks forward to working with the GEF to do so.

8. Other activities

(a) Gender mainstreaming

58. In accordance with the UNFCCC Gender Action Plan,²⁸ the CTCN and UNEP DTU Partnership organized a workshop on gender mainstreaming in TNAs during Gender Day at COP 24, where guidance for a gender-responsive TNA was launched. The CTCN also reported at SB 50 on how it has responded to the gender action plan while contributing to the acceleration of technology development and transfer.

²⁸ Decision 3/CP.23, annex.

59. Gender mainstreaming in CTCN operations is supported and guided by the CTCN Gender Policy and Action Plan as well as by an increased number of gender-related indicators in the CTCN monitoring and evaluation system. Established procedures include an allocation of not less than one per cent of programme and operations funds to gender mainstreaming actions; and reference to gender and endogenous capacities being included in the technical assistance eligibility and prioritization criteria.

60. The CTCN also supports gender mainstreaming in climate action by providing access to information via the gender hub²⁹ on the CTCN website, which contains more than 630 knowledge resources related to gender and climate. Gender is being increasingly incorporated throughout other CTCN activities, as well. For example, a study on gender considerations in coastal risk planning and management in West Africa and Cameroon was conducted as part of technical assistance in the region.³⁰

61. The CTCN is collaborating with a growing network of stakeholders with climate and gender expertise for knowledge-sharing and capacity-building. The CTC supported the Gender-Just Climate Solutions Award and publication and hosted a capacity-building workshop in collaboration with the Women and Gender Constituency at COP 24. Other examples include the development of best practice examples of women's empowerment in decentralized and centralized energy systems in South Asia, and the development of a resource guide on upscaling gender-just climate initiatives.

(b) Communications and outreach

62. The CTCN implemented its international communications strategy with the aim of expanding awareness of available technology services and sharing information on adaptation and mitigation technologies. In view of the shift in CTCN operations to a geographical approach, its 2019 communications strategy included regionally tailored communication. Stakeholders were engaged through email newsletters, web and social media content, video shorts and numerous events. To mark its first five years of operation, the CTC produced a five-year CTCN Progress Report³¹ and video.³² The CTCN and the Technology Mechanism jointly hosted a Technology Mechanism booth and held side events and bilateral meetings at COP 24 and SB 50.

D. Action taken in response to the independent review of the Climate Technology Centre and Network

63. Decision 12/CP.24 requested the CTCN to provide information on plans and actions undertaken in response to recommendations from the independent review of the effective implementation of the CTCN.³³ Actions taken in response to the recommendations relevant to the CTCN are summarized below.

64. In response to the encouragement to clarify the role of developed country NDEs, the CTC:

(a) Developed a paper, endorsed by the CTCN Advisory Board, in which possible roles of developed countries NDEs are elaborated;

(b) Has worked with donor partners, particularly Korea and Japan, to implement modalities for pro bono support for CTCN activities and would like to engage other donor countries and organizations towards realizing pro bono modalities with a focus on technical assistance provided through developed country NDEs.

²⁹ <https://www.ctc-n.org/technology-sectors/gender>.

³⁰ See <https://www.ctc-n.org/technical-assistance/projects/west-african-coastal-classification-hazard-management-and-standardized>.

³¹ https://www.ctc-n.org/sites/www.ctc-n.org/files/resources/ctcn_report_2018.pdf.

³² Available at <https://www.ctc-n.org/file/23159>.

³³ Decision 12/CP.24, para. 6.

65. In response to the recommendation to invite the co-hosts of the CTCN to identify potential sources of additional financial resources to support its operations, the CTCN engaged a deputy director in February 2019 to lead resource mobilization efforts.

66. The CTCN, the GEF and the GCF continue to explore how to further facilitate the provision of sustained funding for CTCN activities and enhance operational linkages between them, in line with their respective mandates, CTCN–GCF engagement is steadily increasing with respect to providing technical assistance via the GCF Readiness and Preparatory Support Programme in response to country requests.

67. Following the encouragement of the CTCN, its Advisory Board and NDEs to increase the efficiency of the provision of technical assistance by the CTCN, the latter developed a streamlined fast technical assistance process, which has since been implemented in nine countries.

68. Following the encouragement to continue raising awareness of its services in developing countries, the CTCN transitioned to a geographic approach to service delivery and managers are now able to interact more consistently with NDEs and other stakeholders in their regions.

69. Following the encouragement to reinforce the involvement of Network members in CTCN activities:

(a) Each Network member has been granted log-in access to enable them to share their information resources on the CTCN website;

(b) Efforts have been made to increase engagement with the CTCN web portal by improving its user-friendliness, simplifying the search, filter and menu structures, and increasing transparency of funding and monitoring and evaluation information;

(c) Further efforts will be focused on outreach, particularly to academia and research institutions, and raising awareness of the climate technology resources available via the CTCN web portal. The CTCN has engaged its Advisory Board in this process and will report on progress to COP26.

In response to the recommendation on transparency of funding, enhanced reporting, and monitoring and evaluation:

(a) Transparency of CTCN funding arrangements has been enhanced by making information on donor agreements publicly available on the CTCN website;³⁴

(b) The CTCN, in collaboration with the TEC, has engaged a monitoring and evaluation specialist to further develop a monitoring and evaluation framework to better capture the impacts of its activities in support of the objectives of the technology framework, and to satisfy the additional reporting requirements established in decision 13/CP.24 on technology transfer;

(c) The CTCN has developed an internal monitoring and evaluation dashboard on its website for storing, aggregating and disseminating data on the impact of technical assistance. Next steps include operationalizing the monitoring and evaluation dashboard and making more impact data available online.

E. Challenges & Lessons learned

70. Decision 15/CP.22 invites the CTCN to include information on challenges and lessons learned in implementing its mandate. Decision 13/CP.24 invites that reporting to be strengthened, and decision 15/CMA.1 invites the CTCN to report on progress³⁵, challenges

³⁴ <https://www.ctc-n.org/about-ctcn/donors>.

³⁵ 15/CMA.1 para. 5 invites reporting on “progress, challenges and lessons learned” in implementing the technology framework. The ‘progress’ element is embedded the reporting in section B under the activities of the CTCN in 2019. This section will be more explicitly defined in 2020 once the CTCN begins to implement its Annual Operating Plan according to the themes of the technology framework.

and lessons learned in implementing the technology framework of the Paris Agreement. Because the activities undertaken by the CTCN in 2019 are in line with its mandate and in support of the technology framework, these are reported jointly in the following paragraphs.

Technical Assistance

71. A focus on increased efficiency and transformational impact has led to an increased number of multi-country requests, including those supported by GCF Readiness financing, being implemented by the CTCN. Multi-country requests have proven to be a resource-efficient way to address shared challenges across countries with similar national circumstances. Multi-country requests are currently under development in support of a biomass to energy project in central Africa, development of a circular economy model in South America and an intervention in the Pacific islands of Kiribati, Solomon Islands, Palau and Marshall Islands do address coastal zone risks.

72. Partnering with GCF country focal points provides an opportunity to implement guidance contained in many technology and linkages decisions to better engage NDEs and GCF Nationally Designated Authorities (NDA) in support of scaled-up action on climate technology.

73. By leveraging GCF Readiness support, the CTCN will be able to develop TNAs and TAPs to support the implementation of country NDCs; promote in-country collaboration and linkages between the Financial and Technology Mechanisms; and act in support of the Implementation theme of the technology framework. Seven countries have now sought implementation assistance for the development of Phase III TNA through the CTCN.

74. The introduction of Fast Technical Assistance (FTA) has proven popular among those requesting countries requiring small-scale, targeted intervention to address a particular issue including to support countries in accessing resources for larger projects. The CTCN believes that the swift timeframe and minimal investment of effort and resources makes these interventions particularly valuable. The CTCN similarly acknowledges that FTA interventions are not well-captured by M&E statistics due to the size of the intervention, but remain a worthwhile investment to meet the needs of developing countries.

Networks, Partnerships and Capacity Building

75. The principal appeal for many CTC Network members is the ability to bid on technical assistance implementation. The system in use by the CTCN assures maximal integrity but is also lengthy and technically demanding, both of which can be burdensome for smaller or less-experienced firms to navigate. On the opposite side, the time invested can discourage more established institutions from submitting bids due to the associated opportunity cost.

76. Additionally, as the Network now exceeds 500 institutions, the value added in applying for Network membership must be more closely considered and enhanced where possible as there is more competition for TA implementation. The relatively small value of CTCN TA attracts little interest from private sector investors and makes the CTCN more reliant on grant funding from donor countries.

77. The geographic, institutional and sectoral diversity that is a strength of the Network is also a challenge in that many organizations have different issues in mind and are interested in varied opportunities. The CTCN has responded by increasing its outreach to Network members and potentially interested parties during regional climate weeks and is seeking regional partnerships that enable more efficient engagement with key stakeholders.

78. The CTCN undertook a survey of its Network in August/September 2019 and its findings will inform the Network strategy presented to the 15th meeting of the Advisory Board in early 2020 that will address these challenges.

79. Much of the most effective capacity provided by the implementing partners of the CTCN building takes place via the provision of technical assistance. However, not all of this information is extracted and made easily available via the CTCN website and directly with interested partner organizations.

80. The programmatic approach to delivering technical assistance is also presenting increased opportunities for capacity building as it allows for a standardised approach to be

replicated in countries with similar national circumstances. Local experts are generally involved at this stage, which also is an opportunity to enable South-South cooperation and knowledge exchange on key programmatic topics.

Fostering collaboration and information-sharing

81. As the number of CTCN Network members continually grows, the CTCN is in need of an efficient approach towards Network engagement for the knowledge management system. Of the Network member website login accounts created for uploading knowledge resources to CTCN KMS, few are currently actively utilized.

82. The first five years of CTCN operations focused on developing a robust internal and external website structure and populating the knowledge portal with a wealth of climate technology information. Next steps will focus on further outreach and dissemination of the climate mitigation and adaptation knowledge resources in the KMS, for example by providing tailored access to relevant content based on users' thematic and regional areas of interest.

Gender mainstreaming

83. Systematic and effective gender mainstreaming of CTCN operations is dependent on good knowledge and awareness of gender in the context of climate change, as well as a shared recognition of its relevance and importance. As such, the CTCN will continue efforts to build internal and external capacity to enhance gender mainstreaming efforts in its core service areas.

Resource Mobilisation

84. The country-driven approach of the CTCN can be difficult to reconcile with the conditions that are attached to much of its available funding. This particularly impacts the funding available for the CTCN to respond to technical assistance requests related to adaptation. Recipient countries are aware of this funding uncertainty, and in some cases it has impacted the number of requests submitted as well as the targeted objective of the assistance. The CTCN is renewing its engagement with potential financing partners and stressing the need for unearmarked funding where possible and appropriate.

85. The CTCN has also had some initial success in working with its donor partners to adjust the terms and conditions associated with earmarking of resources in a manner that enables resources to still be targeted in an appropriate manner but balanced against the limitations of its operational model. The CTCN remains open to working with donors such that their priorities are reflected while meeting the needs of recipient countries for climate technologies, particularly for adaptation, and will work with the governments of Korea and Japan to extract best practice associated with their provision of pro bono support and make this information available on the CTCN website.

F. Key Messages

86. The CTCN has used the USD 60 million secured since its inception to leverage USD 922 million in additional investment from various sources for climate technology projects in developing countries.

87. More long-term finance that is unrestricted would ensure the sustainability of the CTCN and enable it to leverage the resources required to deliver on its mandate and support the implementation of the technology framework of the Paris Agreement.

88. A multi-country programmatic approach to implementation modalities for CTCN technical assistance will enhance its long-term resource mobilisation strategy and support an enhanced results and impact framework.

89. The CTCN has partnered successfully with both the GEF and GCF. It collaborated with the GEF to deliver climate technology support in 8 countries, and with countries on 27 GCF Readiness proposals. Potential remains for enhanced collaboration among both

Mechanisms to leverage additional finance and deliver climate technology solutions, particularly for LDCs and Small Island Developing States. Stronger collaboration between national focal points for the Technology and Finance Mechanisms has the potential to strengthen relationships, create greater synergies, and facilitate swifter processing and implementation of technical assistance at national level.

90. The CTCN will continue to enhance its regional approach to country support as a means of being more responsive to its clients. It will also pursue greater collaboration and engagement with its Network members and other partners, including UN agencies, and will pursue South-South and triangular collaboration to enhance its reach and impact.
