



**Technology Executive Committee**

24 August 2021

**Twenty- third meeting**

**Virtual meeting, 7-10 September and 13 September (TEC-CTCN  
joint session)**

**Draft annual report of the Technology Executive Committee for  
2021**

**Cover note**

**I. Introduction**

**A. Background**

1. The Conference of the Parties (COP), by its decision 17/CP.20, paragraph 4, decided that the Technology Executive Committee (TEC) and the Climate Technology Centre and Network (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.
2. In response to decision 2/CP.17, paragraph 142, and decision 14/CP.18, paragraph 11, the TEC and the Advisory Board of the CTCN agreed on procedures for preparing the joint annual reports, as recorded in section B of the “Joint annual report of the Technology Executive Committee and the Climate Technology Centre and Network for 2013”.<sup>1</sup>
3. In response to decision 12/CP.21, paragraph 2, and decision 15/CP.22, paragraph 5, the TEC and the Advisory Board of the CTCN agreed on updated procedures for preparing the joint annual reports, including procedure for preparing the joint chapter of their joint annual report to the COP. Such procedures are contained in Annex I to the “Joint annual report of the Technology Executive Committee and the Climate Technology Centre and Network for 2017”.<sup>2</sup>
4. CMA 1 by decision 15/CMA.1, paragraph 4 took note of the recommendation of the TEC and the CTCN to prepare and submit their joint annual report to both the COP and the CMA.<sup>3</sup>
5. The COP, by decision 14/CP.25, paragraph 3 and 8, encouraged the TEC to improve reporting on the outputs and impacts of its work and its efforts in integrating gender considerations into its rolling workplan for 2019–2022.

**B. Scope of the note**

6. The annex to this note contains an initial draft of the joint annual report of the TEC and the CTCN for 2020, including information on activities and performance of the TEC up to until TEC 23. Placeholders are included for any decisions made at the TEC23.
7. This note does not include the joint chapter of the joint annual report, which will be covered by a separate note,<sup>4</sup> nor does it include the annual report of the CTCN.

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<sup>1</sup> See <https://unfccc.int/resource/docs/2013/sb/eng/01.pdf>.

<sup>2</sup> See <https://unfccc.int/resource/docs/2017/sb/eng/03.pdf>.

<sup>3</sup> Decision 15/CMA.1, para. 4.

<sup>4</sup> TEC/2020/21/13.

**C. Possible action by the Technology Executive Committee**

8. The TEC will be invited to consider the draft annual report, including information on challenges and lessons learned, and authorize the Chair and Vice-Chair of the TEC to finalize the annual report of the TEC for 2021.

## Annex

### Draft joint annual report of the Technology Executive Committee and the Climate Technology Centre and Network for 2021

#### I. Background

##### A. Mandate

1. COP 16 established the Technology Mechanism, comprising the TEC and the CTCN, to facilitate implementation of enhanced action on technology development and transfer to support action on mitigation and adaptation in order to achieve full implementation of the Convention.<sup>1</sup>
2. CMA 1 adopted the technology framework to provide overarching guidance to the work of the Technology Mechanism in promoting and facilitating enhanced action on technology development and transfer in order to support the implementation of the Paris Agreement.<sup>2</sup>
3. In accordance with COP and CMA decisions, the TEC and the CTCN prepare a joint annual report, which includes progress of their work and challenges and lessons learned in implementing mandates from Parties for consideration by the COP and CMA through its subsidiary bodies.<sup>3,4</sup>

##### B. Scope of the report

4. The joint chapter of the TEC and the CTCN is in chapter II II below and outlines activities undertaken jointly by both bodies in 2021, joint recommendations and lessons learned. Chapter III presents the activities and performance of the TEC in 2021, including key messages and recommendations for COP 26 and CMA 3. It covers the outcomes of the 22<sup>nd</sup> and 23<sup>rd</sup> meetings and intersessional work of the TEC and challenges and lessons learned in implementing its mandates. Chapter IV III.D.3.39 below presents the activities and performance of the CTCN in 2021, including key messages for COP 26 and CMA 3. It covers the outcomes of the 17<sup>th</sup> and 18<sup>th</sup> meetings and intersessional work of the Advisory Board of the CTCN and challenges and lessons learned in implementing CTCN mandates, and includes information provided by UNEP on matters regarding its role as host of the CTC.<sup>5</sup>

##### C. Possible action by the subsidiary bodies

5. The subsidiary bodies may wish to consider the joint annual report of the TEC and the CTCN for 2021 and recommend draft decision(s) on the matter for consideration and adoption at COP 26 and CMA 3.

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

6. **To be inserted...**

<sup>1</sup> Decision 1/CP.16, paragraph 117.

<sup>2</sup> Decision 13/CMA.1.

<sup>3</sup> FCCC/SB/2013/1, paragraph 3.

<sup>4</sup> Decision 2/CP.17, paragraphs 142 and 143; decision 14/CP.18 paragraph 11; decision 1/CP.21, paragraph 68; decision 12/CP.21, paragraph 2; decision 15/CP.22, paragraph 6; decision 15/CP.23, paragraphs 4 and 5; decision 15/CMA.1, paragraphs 4 and 5; decision 14/CP.25, paragraph 8; decision 8/CMA.2, paragraph 4.

### III. Report on the activities and performance of the Technology Executive Committee in 2021

#### A. Meetings and membership

7. The TEC convened its 22<sup>nd</sup> meeting from 20 to 26 April and 23<sup>rd</sup> meeting from 7 to 13 September 2021.
8. At its 22<sup>nd</sup> meeting, the TEC elected Stephen Minas (Greece) as its Chair and Mareer Mohamed Husny (Maldives) as its Vice-Chair for 2021.
9. A list of TEC members indicating their terms of office is available on the UNFCCC website.<sup>6</sup>
10. The meetings of the TEC were webcast live and attended by observers, including representatives of Parties and observer organizations, who actively engaged in addressing the issues under consideration. All meeting documents, presentations, webcasts, lists of participants and reports are available on TT:CLEAR.<sup>7</sup>

#### B. Rolling workplan for 2019–2022: implementation in 2021

11. Despite the COVID-19 pandemic, the TEC continued its intersessional work through its thematic task forces, supported by the secretariat, making progress in the implementation of its rolling workplan for 2019–2022 in five areas: innovation, implementation, enabling environment and capacity-building, collaboration and stakeholder engagement, and support, in line with guidance by Parties as contained in the technology framework.<sup>8</sup>
12. The TEC wishes to express its appreciation for the financial contributions provided by Parties and for the active participation and support of organizations and other stakeholders, including representatives of observer organizations engaged in the work of the TEC task forces in 2021. Information on the composition of the TEC task forces is available on TT:CLEAR.<sup>9</sup>

##### 1. Innovation

###### (a) Research, development and demonstration

13. The TEC organized a virtual event to present the main findings of the compilation of good practices and lessons learned in international collaborative research, development and demonstration (RD&D) of climate technologies prepared in 2020.<sup>10</sup> Expert panellists representing national government, research organizations, and private sectors shared their experience on the roles key stakeholders can play in supporting and promoting international RD&D of climate technologies.
14. The TEC prepared draft executive summaries on international collaborative RD&D of climate technologies for targeted audience.<sup>11</sup>
15. On the basis of the publications mentioned above, the TEC also prepared relevant key messages and recommendations for COP 26 and CMA 3 (see chap. III.D below).

###### (b) Emerging climate technologies

16. The TEC prepared a technical paper on emerging climate technologies in the energy supply sector. *+ place holder for further information to be added resulting from information collection for TEC23*
17. The TEC, in collaboration with, the high-level climate champions, IRENA, the Marrakesh Partnership on Global Climate Action, RCC of Bangkok and UNEP, organised three events during

<sup>6</sup> <https://unfccc.int/process-and-meetings/bodies/election-and-membership>.

<sup>7</sup> <http://unfccc.int/ttclear/tec/meetings.html>.

<sup>8</sup> Available at <https://bit.ly/33ASbc1>.

<sup>9</sup> <http://unfccc.int/ttclear/tec/members.html#Task>.

<sup>10</sup> See [https://unfccc.int/ttclear/events/2021/2021\\_event01](https://unfccc.int/ttclear/events/2021/2021_event01).

<sup>11</sup> <https://unfccc.int/ttclear/tec/rdandr>.

the Asia-Pacific Climate Week 2021 to discuss the role of emerging decarbonization technologies in enabling a sustainable transition of the energy supply sector in the region and contributing to reach net-zero emission by 2050.<sup>12</sup> The outcomes of these events contributed to the development of the technical paper mentioned above.

**(c) Innovative approaches to adaptation technologies**

18. As a part of the Technology Day series of events, the TEC, in collaboration with the Expert Group on Oceans of the Nairobi Work Programme (NWP), Friends of Ecosystem-based Adaptation (FEBA), International Union for Conservation of Nature (IUCN) organized a deep dive session<sup>13</sup> on “Innovative approaches to strengthening coastal and ocean adaptation” in conjunction with the IUCN World Conservation Congress. *+ place holder for further information to be added resulting from the deliberations at TEC23.*

**2. Implementation**

**(a) Innovative approaches to stimulating uptake of existing clean technology solutions**

19. The TEC prepared a policy brief on innovative approaches to accelerating and scaling up implementation of mature climate technologies,<sup>14</sup> on the basis of a TEC 2020 publication on innovative approaches.<sup>15</sup> The policy brief was presented at various meetings and events in 2021.

20. On the basis of the policy brief, the TEC prepared relevant key messages and recommendations for COP 26 and CMA 3 (see chap. III.D below).

**(b) Linkages between Technology Needs Assessment process and Nationally Determined Contribution process**

21. The TEC continued its work on linkages between Technology Needs Assessment process and Nationally Determined Contribution process. The TEC prepared a paper on linkages between the technology needs assessment (TNA) process and the nationally determined contributions (NDC) process, based on its previous work and other relevant documents and literature. The paper was prepared in collaboration and engagement with NDC partnership and other relevant actors. *+ place holder for further information to be added resulting from the deliberations at TEC23.*

**3. Enabling environment and capacity-building**

**(a) Enabling environments to incentivize the private and public sector in the development and transfer of technologies**

22. The TEC continued its work to examine enabling environments, including challenges and opportunities, to incentivize the private and public sector in the development and transfer of technologies. In this regard, building on previous work of the TEC as well as information from TNAs, NDCs and CTCN technical assistance activities, it prepared a paper on enabling environments and challenges, including barriers, related to technology development and transfer.<sup>16</sup> The paper was prepared in collaboration with the CTCN, NDC partnership, NDEs and other relevant organizations. The TEC also organized a thematic dialogue on this matter.<sup>17</sup> *+ place holder for further information to be added resulting from the deliberations at TEC23.*

**(b) Endogenous capacities and technologies**

23. The TEC completed and published its work in identifying and analysing relevant needs, gaps, challenges and enabling environments to build countries capacities in climate technologies, which was based on a survey of three stakeholder groups undertaken in 2020.<sup>18</sup> The TEC also shared the key findings of this work, which includes issues such as capacity-building, local communities and

<sup>12</sup> [https://unfccc.int/ttclear/events/2021/2021\\_event03](https://unfccc.int/ttclear/events/2021/2021_event03).

<sup>13</sup> [https://unfccc.int/ttclear/events/2020/2020\\_event07](https://unfccc.int/ttclear/events/2020/2020_event07)

<sup>14</sup> <https://unfccc.int/ttclear/tec/brief14.html>.

<sup>15</sup> <https://unfccc.int/ttclear/tec/innovativeapproaches>.

<sup>16</sup> Paper link place holder

<sup>17</sup> Event link place holder

<sup>18</sup> <https://unfccc.int/ttclear/endogenous/index.html>.

indigenous people, gender, finance and national reporting, to relevant UNFCCC bodies and processes. It noted that while the work to date has improved the understanding of many aspects of endogenous capacities and technologies, other issues remain. The TEC looks forward to working with the CTCN and other UNFCCC bodies, Parties and stakeholders to conduct further work on this topic.

24. On the basis of the publication, executive summary, the TEC prepared relevant key messages and recommendations for COP 26 and CMA 3 (see chap. III.D below).

#### 4. Collaboration and stakeholder engagement

25. Through the implementation of its activities and the work of its task forces, the TEC engaged over 50 organizations and institutions, including government representatives, observer organizations, NDEs, private sector, academia, financing institutions, and international organizations and initiatives, such as IRENA and Mission Innovation.

26. The TEC also reflected on its engagement and contribution to technical examination processes on mitigation and adaptation during the period 2016-2020. It noted that these processes have been useful in bringing Parties and non-Parties stakeholders to identify ways to scale up the uptake of climate technologies to support countries actions on mitigation and adaptation. *+ place holder for further information to be added resulting from information collection for TEC23.*

#### 5. Support

27. The TEC workplan contains a number of activities in the area of support for strengthening the linkages between the Technology Mechanism and the Financial Mechanism, notably by enhancing collaboration with the Green Climate Fund (GCF), the Global Environment Facility (GEF) and the Standing Committee on Finance (SCF).<sup>19</sup>

##### (a) Experiences, lessons learned and good practices from GCF and GEF's support for technology

28. Based upon an analysis of experiences, lessons learned and good practises from the support provided by the operating entities of the Financial Mechanism for climate technologies, the TEC prepared a technical paper on this matter with a view to enhancing collaboration with the Financial Mechanism. *+ place holder for further information to be added resulting from information collection for TEC23*

29. The TEC Chair and Vice-Chair also participated in the 5th annual meeting of the GCF with UNFCCC constituted bodies in November 2020, which focused on enhancing cooperation and coherence of engagement between the GCF and constituted bodies as to better support developing countries to meet their commitments under the Convention and the Paris Agreement including as they cope with the pandemic.

##### (b) Inputs to Standing Committee on Finance

30. In response to an invitation from the SCF, the TEC provided its input to the draft guidance for the operating entities of the Financial Mechanism prepared by the SCF, to be considered at COP 26 and CMA 3.

#### 6. Inputs to technical phase of the Global Stocktake

31. In response to an invitation extended to relevant UNFCCC constituted bodies to provide inputs for the technical phase of the Global stocktake process, the TEC prepared a concept note on the scope and sources of input for providing its inputs on matters related to climate technology development and transfer. On the basis of the concept note, the TEC will prepare a synthesis report as input to the technical phase of the Global stocktake scheduled for 2022. *+ place holder for further information to be added resulting from information collection for TEC23*

<sup>19</sup> In response to decision 14/CP.22, para. 9.

## 7. Monitoring and evaluating impacts

32. The TEC continued to monitor and evaluate the impacts of its work and implemented a revised version of its monitoring and evaluation system, based upon experiences and lessons learned from a trial period that took place in 2020. The revised version includes additional indicators for monitoring gender considerations and communication and outreach activities. *+ place holder for further information to be added resulting from the deliberations at TEC23.*

## 8. Communications and outreach

33. The TEC continued to implement communication and outreach activities, as outlined in its communication and outreach strategy adopted at TEC20. *+ place holder for further information to be added resulting from information collection for TEC23*

## 9. Gender mainstreaming

34. The TEC continued working on mainstreaming gender consideration into its work in all thematic areas. The TEC gender focal points regularly presented the progress in gender mainstreaming at each TEC meeting and solicited that the gender balance is observed in all events of the TEC. *+ place holder for further information to be added resulting from information collection for TEC23*

## C. Challenges and lessons learned

35. In the second year of ongoing global pandemic, the TEC reflected on lessons learned and challenges in implementing its mandates and the technology framework:

(a) The TEC swiftly adjusted its workplan to accommodate new activities to be undertaken in this year, such as joint activities with the CTCN and preparation of inputs to GST, by re-distributing some activities and deliverables into the next year;

(b) TEC members and stakeholders continued demonstrating their flexibility in working using virtual platforms for meetings and events in 2021 allowing the TEC to progress in implementing the activities planned for this year, while noting the technical difficulties faced by some members in participating effectively in this format;

(c) To reach broader audience, the TEC has diversified its outputs by publishing executive summaries for targeted audience, held launching events, and regularly published TEC products and events using UNFCCC media platforms. Nevertheless, the TEC recognizes the need to engage with a wider range of stakeholders for enhancing its communication and outreach, including making its publications available in other official United Nations languages;

(d) While entry points for gender mainstreaming into TEC's rolling work-plan items have been identified, there is still considerable room for improvement in integrating gender-responsiveness into the TEC's activities;

(e) *+ place holder for further information to be added resulting from the deliberations at TEC23.*

## D. Key messages and recommendations for the Conference of the Parties and the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement

36. Building on work carried out in 2021, the TEC wishes to deliver the following key messages and recommendations to COP 26 and CMA 3.<sup>20</sup>

### 1. International collaborative research, development and demonstration

37. *To be inserted...*

<sup>20</sup> Also available at <http://unfccc.int/ttclear/policies>.

**2. Innovative approaches to stimulate uptake of existing clean technology solutions**

38. To be inserted...

**3. Endogenous capacities and technologies**

39. To be inserted...

**IV. Report on the activities and performance of the Climate Technology Centre and Network in 2021**

40. To be inserted ...

**A. Activities of the Climate Technology Centre and Network**

41. To be inserted ...

**B. Organizational structure of the Climate Technology Centre and Network**

42. To be inserted ...

**C. Challenges and lessons learned**

43. To be inserted ...

**D. Key messages for the Conference of the Parties and the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement**

44. To be inserted ...



## **Annex**

### **Recommendation of the Technology Executive Committee and the Climate Technology Center and Network on how to stimulate the uptake of climate technology solutions to support the implementation of national determined contributions**

[English only]

To be inserted...