Framework Convention on Climate Change

Technology Executive Committee

14 April 2022

Twenty-fourth meeting

Hybrid meeting, 22–25 March and 28 March 2022 (TEC-CTCN joint session)

Report on the 24th meeting of the Technology Executive Committee

I. Opening of the meeting

1.   The Chair of the TEC[1] for 2021, Stephen Minas, opened TEC 24 at 2 p.m. Central European Time on Tuesday, 22 March 2022. The meeting was held in a hybrid format.

2.   The TEC commemorated the loss of former TEC members A.K.M. Rafique Ahmmad (Bangladesh) and Hugh Sealy (Barbados). Members expressed their condolences to the bereaved families.

3.   The TEC Chair welcomed all members who had been elected or re-elected at COP26, and new members introduced themselves.

4.   The table below lists the TEC members who attended TEC 24. Observers present at the meeting are listed in the annex.

TEC members attending TEC 24	
Jorge Castro	Hamza Merabet
Kinga Csontos	Stephen Minas
Abdul Hamid	Monique Motty
Mareer Mohamed Husny	Dietram Oppelt
Hassan Jangavar	Erwin Rose
Suil Kang	Stig Svenningsen (Vice-Chair)
Imran Khan	Kenichi Wada
Ladislaus Kyaruzi	Ambrosio Yobanolo del Real (Chair)
Sergio La Motta	

II. Organizational matters

(a)   Election of the Chair and Vice-Chair of the Technology Executive Committee for 2022

5.   The TEC elected Ambrosio Yobanolo del Real (Chile) as Chair and Stig Svenningsen (Norway) as Vice-Chair of the TEC for 2022.

(b)   Adoption of the agenda

6.   The TEC Chair presented the draft provisional agenda and proposed removing the agenda item "Inclusion of explanation to technology transfer in the publications of the Technology Executive Committee". The TEC members adopted the amended agenda as contained in document TEC/2022/24/1 Rev.

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[1] A list of abbreviations and acronyms is available at the end of the document.

(c) Organization of work

7. The Chair presented, and the TEC took note of, the tentative work schedule for the meeting as contained in document TEC/2022/24/3 Rev, including the joint session with the CTCN Advisory Board.

III. Update on relevant meetings, events and initiatives

(a) Outcome of the Glasgow Climate Change Conference

8. The TEC took note of the information presented by the secretariat on the outcomes of the United Nations Climate Change Conference held from 31 October to 13 November 2021 in Glasgow on matters relating to technology development and transfer, in particular as relevant to the work of the TEC.

(b) Outlook for 2022

9. The TEC took note of the overview provided by the secretariat of the intergovernmental work and process planned for 2022.

IV. Implementation of the rolling workplan for 2019–2022

(a) Innovation

i. **National systems of innovation**

10. The task force on innovation, with the support of a consultant, presented a draft outline of the compilation of good practices and lessons learned in establishing and implementing NSIs.

11. The TEC provided guidance on developing the compilation, emphasizing the importance of building on previous work of the TEC on NSIs[2,] as well as on incubators and accelerators.[3] The TEC also underlined the importance of elaborating national and international linkages between the various actors involved in NSIs, including the role of the private sector and education institutions in supporting national innovation efforts, as well as the contribution of NSIs to NDC implementation.

12. The TEC took note that the first draft of the compilation will be submitted for consideration at TEC 25, and agreed that any consideration of increasing the number of case studies to be analysed for the compilation will be made at TEC 25.

ii. **Innovative approaches for adaptation technologies**

13. The secretariat, IUCN FEBA and the NWP expert group on oceans presented the draft policy brief on innovative approaches for strengthening coastal and ocean adaptation, developed on the basis of the outcomes of the Technology Day events and incorporating guidance from the task force on innovation and inputs from expert panellists participating in the events, FEBA network members and the NWP expert group on oceans.

14. The TEC commended the collaborative approach taken to organizing the Technology Day events and preparing the policy brief and suggested that such an approach could also be applied to TEC's work in other thematic areas.

15. The TEC provided suggestions for improving the policy brief, highlighting the monitoring and evaluation programmes and standardized reporting frameworks for integrated adaptation solutions as key findings. The TEC noted the importance of adaptation technologies in the context of disaster prevention, and plans to explore opportunities with the Santiago network for averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, the Sendai Framework for Disaster Risk Reduction 2015–2030 and the global goal on adaptation.

16. The TEC requested the task force on innovation to finalize the policy brief after TEC 24 with a view to circulating it among TEC members by electronic means for final approval.

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[2] See https://bit.ly/3tPu5Ys.

[3] See https://unfccc.int/ttclear/incubators and https://unfccc.int/ttclear/tec/brief12.html.

(b) **Implementation**

i. **Linkages between the technology needs assessment and nationally determined contribution processes**

17. The task force on implementation presented a policy brief on linkages between the TNA and NDC processes.

18. The TEC took note of the policy brief presented by the task force, welcomed it and provided suggestions for improving it.

19. The TEC requested the task force to finalize the policy brief taking into account the comments and guidance provided by the TEC at the meeting.

(c) **Enabling environment and capacity-building**

i. **Thematic dialogue on enabling environments to incentivize the private and public sector in the development and transfer of technologies**

20. The TEC held, a thematic dialogue on enabling environments to incentivize the private and public sectors in the development and transfer of technologies during TEC 24.

21. The thematic dialogue was based on a paper on enabling environments and challenges to technology development and transfer identified in TNAs, NDCs and CTCN technical assistance[4] that was endorsed by the TEC 23.

22. The aim of the dialogue was also to identify the role that enabling environments play in supporting countries in achieving the purpose and goals of the Paris Agreement by considering success stories, good practices and lessons learned, and to discuss how to unlock financing for enabling environments in developing countries.

23. The dialogue convened seven expert speakers from developing countries that have undertaken TNAs, the private sector, multilateral development banks and the NDC Partnership. The TEC Chair delivered closing remarks.

24. The TEC considered the findings from the thematic dialogue and agreed to continue discussions on incentivizing the private and public sectors in the development and transfer of technologies.

25. Building on the outcomes of the paper and the thematic dialogue, the TEC will produce a policy brief containing recommendations for enhancing enabling environments and addressing challenges to technology development and transfer.

ii. **Enabling environment to enhance replicability and scalability of technologies for sustainable transport**

26. The task force on enabling environment and capacity-building, with the support of a consultant, presented a background paper on decarbonization technologies for sustainable road mobility, and the secretariat presented additional information, including the organization of a thematic dialogue.

27. The TEC noted that the analysis in the background paper contains important information for both policymakers and the private sector. The TEC provided guidance on the paper, including exploring decarbonization potential in the sector in the Global South through examples from different regions, lessons learned from CTCN mobility projects where applicable, more elaboration on barriers and challenges, and a consideration of the outcomes of the upcoming IPCC Working Group III report related to transport.

28. With regard to the thematic dialogue, the TEC noted the importance of engaging stakeholders and organizations already working in the area and the need to consider the timing and impact of organizing such a dialogue.

29. The TEC requested the task force on enabling environment and capacity-building to:

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[4] TEC document TEC/2021/23/9.

(a)   Continue working on the paper, with the support of the consultant, taking into account comments provided by members, and prepare a revised paper for consideration at TEC 25;

(b)   Initiate the organization of the thematic dialogue, including identifying opportunities for collaboration with relevant stakeholders and organizations, with a view to holding the dialogue at COP 27.

30.   The TEC took note that transport could be considered as a potential area for inclusion in its next rolling workplan.

(d)   Collaboration and stakeholder engagement

i.   **Session at** G-STIC 2022 in collaboration with YOUNGO

31.   The TEC took note of the oral report by the representative of the YOUNGO constituency on the event[5] on youth-led innovative approaches to adaptation technology, organized in collaboration with the constituency, held at the 5th Global Sustainable Technology and Innovation Community conference in 2022, in Dubai.

ii.   **Experience and lessons learned from TEC collaboration and stakeholder engagement**

32.   The secretariat presented an overview of the current approaches of the TEC to collaboration and stakeholder engagement, including challenges and lessons learned from implementing the current TEC workplan and guiding questions to strengthen collaboration and engagement with TEC stakeholders.

33.   The TEC concluded that its work could have more impact if it were focused on a specific work area where the contribution of the TEC is unique. The TEC noted that active consultation with stakeholders and identifying and engaging stakeholders while developing the workplan would contribute to meaningful collaboration in the longer term.

34.   The TEC requested the task force on collaboration and stakeholder engagement to initiate work on a strategy for collaboration and stakeholder engagement by identifying guiding principles, which will be developed in conjunction with the new TEC workplan.

iii.   **Further collaboration with IUCN, FEBA and NWP**

35.   The secretariat, IUCN FEBA and the NWP expert group on oceans presented a proposal for continuing collaboration in the area of ocean and coastal adaptation. Further, a representative of NWP presented a potential collaboration between the NWP and the TEC on the nexus between agriculture, food security, water and climate. A representative of IUCN presented information on potential collaboration in the areas of knowledge generation and sharing, synergies between nature-based solutions and adaptation and mitigation technologies, and mainstreaming and scaling-up of green-grey infrastructure and renewable energy technologies.

36.   The TEC agreed to continue its collaboration with IUCN FEBA and the NWP expert group on oceans throughout 2022, in particular with regard to finalizing the policy brief on innovative approaches for strengthening coastal and ocean adaptation (see 4(a) ii. above), introducing the brief during the ocean dialogue in June 2022, promoting awareness and disseminating the findings of the brief, and seeking further feedback from participants at the ocean dialogue, the NWP expert group on oceans and relevant groups of practitioners, on further specific actions on the topic.

37.   The TEC took note that the potential collaboration on topics as proposed by IUCN and the secretariat under the NWP could be considered in its next rolling workplan.

(e)   Support

i.   **Experience, lessons learned and good practices from GCF and GEF's support for technology**

38.   The TEC took note with appreciation of the information provided by the GCF and the GEF on the support provided by them for technology to developing country Parties.

39.   The task force on support, with the support of a consultant, presented the draft technical paper on experience and lessons learned from support for climate technologies provided by the operating entities of the Financial Mechanism.

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[5]   See https://unfccc.int/ttclear/events/2020/2020_event10.

40.   The TEC provided suggestions for improving the paper and highlighted issues for further consideration that could be taken up as part of any future work on the matter, including on collaboration between the TEC, the CTCN and the operating entities of the Financial Mechanism, the role of the private sector in leveraging private sector funding and the challenges of attracting private sector funding for supporting adaptation technologies. The TEC also provided suggestions for recommendations that could be included in the TEC policy brief on the matter, including on possible actions to be taken by relevant stakeholders, sectoral technology benchmarks and support for TNAs.

41.   The TEC requested the task force on support to finalize the draft technical paper after TEC24, with a view to circulating it to members by electronic means for final approval.

V.   Synthesis report of the Technology Executive Committee on matters related to technology development and transfer as input to the global stocktake under the Paris Agreement

42.   The ad hoc task force on the global stocktake, with the support of the secretariat and a consultant, presented a draft synthesis report on technology development and transfer for the global stocktake.

43.   The TEC welcomed the comprehensive information provided in the synthesis report on TEC achievements to promote and facilitate enhanced action on technology development and transfer, the challenges faced and solutions provided for technology development and transfer, and opportunities for enhanced international cooperation between countries on technology development and transfer. The TEC noted that the synthesis report served its purpose as an input to the global stocktake.

44.   The TEC provided suggestions for improving the synthesis report, including collaboration between the TEC, the CTCN and the GCF in operationalizing support for climate technology incubators and accelerators, experience and lessons learned from the pilot projects of the Poznan strategic programme on technology transfer, and possible solutions for reducing the risk-weighted cost of capital in developing countries for investments in emerging climate technologies.

45.   The TEC requested the secretariat to finalize the draft synthesis report after TEC 24 and circulate it to TEC members with a view to obtaining final approval before 1 April 2022, noting that an updated version of the synthesis report on issues not taken into account in the current version could be included in possible future versions of the synthesis report that could be submitted after the first Technical Dialogue of the global stocktake process.

VI.   Gender mainstreaming

46.   The TEC took note of the report by its gender focal point on progress in mainstreaming gender in the work of the TEC and provided guidance on the preparation of the publication on gender and technology, which will be discussed further in the context of the consideration at TEC 25 of the new rolling workplan.

47.   The TEC agreed on enabling a turnover of its gender focal points for a two-year period and to elect new gender focal point(s) for 2023–2024 at TEC 25.

48.   The TEC expressed concerns regarding its current composition, which reflects a decrease in gender balance. The TEC looked forward to redressing the gender imbalance in its composition, recognizing that it is the prerogative of Parties to nominate representatives to the TEC.

VII.   Joint session of the Technology Executive Committee and the Climate Technology Centre and Network

49.   At the joint session on 28 March 2022, the TEC and the CTCN Advisory Board took stock of current joint activities and considered potential joint activities for 2022–2023. In her opening remarks, the UNFCCC Executive Secretary recalled that the Glasgow Climate Pact calls upon

Parties to accelerate the development, deployment and dissemination of technologies and to transition towards low-emission energy systems.

(a)   Matters related to the TEC and CTCN

50.   The TEC and the CTCN Advisory Board took note of the information provided by the Chairs of the TEC and the CTCN Advisory Board on the progress of the work of the respective bodies since TEC 23 and the 18th meeting of the CTCN Advisory Board and on possibilities to enhance coherence and synergy between the policy work of the TEC and the implementation support provided by the CTCN, including by enhancing the provision of systematic, relevant feedback between the two bodies.

51.   Members of the TEC and the CTCN Advisory Board welcomed the opportunity to interact with each other to provide systematic feedback on issues of common interest and would welcome having such interactions on a more regular basis to enhance coherence and synergy.

(b)   Ongoing joint activities: gender and technology

52.   The TEC and the CTCN Advisory Board took note of the progress in developing a global roster of experts, including proposals for its design, sign-up criteria and categories, options for online hosting and the plan for its finalization by October 2022. The two bodies provided further guidance for developing the roster, including on broadening the sign-up criteria to include those with hands-on experience and giving due consideration to the treatment of personal data and privacy.

(c)   Proposed new joint activities

53.   The TEC and the CTCN Advisory Board considered a note containing proposed joint activities for the two bodies and a comparison of the TEC rolling workplan and the CTCN programme of work. Members noted that:

(a)   The work undertaken by the TEC and the CTCN has so far generated a significant amount of knowledge and now needs to shift towards implementation of climate action, taking into consideration the priorities of developing countries;

(b)   The TEC and the CTCN should enhance collaboration to scale up the deployment of technologies already available in the market, in particular in developing countries to support the implementation of their NDCs, and to facilitate access to the market for emerging technologies;

(c)   With regard to gender and technology, guidance could be developed on the basis of the identification of technical assistance of the CTCN containing elements of gender empowerment;

(d)   With regard to NDCs and technology, collaboration should be encouraged with the NDC Partnership, a technology road map could be developed in a specific sector as a pilot, guidelines could be prepared to integrate technology into NDCs;

(e)   With regard to systematic feedback, it should be encouraged as a tool to enhance coherence and synergy of the work of the two bodies and provide greater opportunities for them to leverage from each other's work;

(f)   Capacity-building for young people and indigenous peoples should be considered, including holding a dialogue in exploring issues surrounding indigenous technology and the role of the Technology Mechanism in engaging relevant experts.

54.   The TEC and the CTCN Advisory Board requested the joint task force to finalize the proposed joint activities above, taking into account suggestions made by members and budgetary and resource implications, for endorsement by the TEC and the CTCN Advisory Board intersessionally via electronic means.

55.   The TEC and the CTCN Advisory Board also initiated the discussion regarding the development of a joint work programme for the Technology Mechanism, including consideration of the different mandates and functions of the TEC and the CTCN, a focus on priority areas, a joint work programme in the format of a joint chapter addressing common issues followed by a separate section for the work plan of each body, budget implications and difference in the ways of budgeting the work of the two bodies.

56.   The TEC and the CTCN Advisory Board requested the joint task force to continue its work on developing a joint work programme, taking into account comments made by members, with a view to presenting a proposal at the next joint session of the TEC and the CTCN Advisory Board.

VIII.   Preparation of next rolling workplan of the Technology Executive Committee for 2023–2026

57.   The TEC initiated its consideration of possible approaches for the next rolling workplan. Suggestions were made by members, including on possible focus areas of work, format and the option to expand the period of the workplan to cover five years to align with the next CTCN programme of work.

58.   Further, members suggested developing a joint work programme for the Technology Mechanism to enhance the coherence and synergy of the work under the Technology Mechanism. A consolidated work programme document would show how activities, whether conducted separately or jointly by the two bodies, address common themes and would include separate sections for each body.

59.   The TEC agreed to establish an ad hoc task force to take forward the preparation of the new TEC rolling workplan taking into account the suggestions made by members. Observers were invited to join the ad hoc task force. This ad-hoc taskforce will liaise closely and coordinate with the joint TEC–CTCN task force.

60.   The TEC requested the ad hoc task force to present a draft rolling workplan for consideration at TEC 25.

61.   The TEC agreed to launch a call for submissions, inviting observers (Parties, non-governmental organizations, intergovernmental organizations and United Nations agencies) to provide inputs to develop the new rolling workplan and requested the secretariat to facilitate the launch of the call for submissions, which will remain open until 15 May 2022.

62.   The TEC also agreed to invite representatives of the IPCC to TEC 25 to provide an update on its work relevant to technology development and transfer in order to inform the preparation of the new rolling workplan.

63.   The TEC took note of an invitation from a representative of the UNEP Copenhagen Climate Centre to participate as a member of a steering committee in the preparation of a new global technology report series.

IX.   Other matters

(a)   Conflict of interest

64.   The TEC continued to consider the inclusion of a provision for safeguarding against potential conflicts of interest in its rules of procedure and agreed to revise such rules to include a provision for its members to disclose, and recuse themselves from any deliberations or decision-making, as applicable, where their personal or financial interests may be affected. The TEC also agreed to continue its consideration of transparent participation of stakeholder representatives in TEC task forces at TEC 25.

(b)   Invitation from the Chair of the Subsidiary Body for Scientific and Technology Advice

65.   The TEC considered an invitation from the Chair of the SBSTA for the TEC to prepare a submission to inform the NWP stocktake at SBSTA 56 and prepare information on opportunities for long-term collaboration with the TEC under the NWP as a result of relevant outcomes of SBSTA 52–55.

66.   The TEC requested the secretariat, under the guidance of the TEC Chair and Vice-Chair, to prepare a submission based on the work undertaken in collaboration with the NWP and to submit it through the UNFCCC submission portal.

(c) **Letter from the Co-Chairs of the Paris Committee on Capacity-building**

67.   The TEC considered a letter from the Co-Chairs of the PCCB inviting the TEC to nominate one or two representative(s) to engage in the work of the PCCB in 2022.

68.   The TEC agreed to continue consultations on the nomination intersessionally.

X.   Date and venue of the next meeting

69.   The TEC took note that TEC 25 is tentatively scheduled to take place in the week of 5–9 September 2022.

XI.   Closure of the meeting

70.   The TEC Chair summarized the key outcomes of the meeting and closed it at 5 p.m. Central European Summer Time on Monday, 28 March 2022.

Annex

Observers registered to participate in the 24th meeting of the Technology Executive Committee

Party observers

Tomás Ainchil (Argentina)
Md. Mahmud Hossain (Bangladesh)
Md. Mizanul Hoque Chowdhury (Bangladesh)
Sonia Regina Mudrovitsch de Bittencourt (Brazil)
Andrea Bedon (Ecuador)
Cris-Tiina Pärn (Estonia)
Namitha Vivek (Germany)
Reina Baah Sackey (Ghana)
Claudia Samayoa Muñoz (Guatemala)
Jenny Vásquez Palacios (Guatemala)
Crista Pricila Villatoro Delgado (Guatemala)
Adiola Walcott (Guyana)
Mandeep Kaur (India)
Ashok Kumar (India)
Mohammad Azimzadeh Arani (Islamic Republic of Iran)
Kaoru Yamaguchi (Japan)
Maqhanolle Tsekoa (Lesotho)
John C. L. Mayson II (Liberia)
Claudia Alejandra Octaviano Villasana (Mexico)
Carlos Gil Picón (Netherlands)
Juan Lucero Acosta (Panama)
Mabel Zúñiga (Panama)
Zenaida Andrade (Philippines)
Taeyoon Kim (Republic of Korea)
Agrafena Kotova (Russian Federation)
Shize Meng (Singapore)
Shufen Angeline Ong (Singapore)
Goran Križ (Slovenia)
Dumisani Emmanuel Mthembu (South Africa)
Cedric Earl Nelom (Suriname)
Seetala Chantes (Thailand)
Gareth Gorst (United Kingdom of Great Britain and Northern Ireland)

Observers from United Nations organizations and specialized agencies

Omedi Moses Jura (Vice-Chair, CTCN Advisory Board)
Emerson Resende (GCF)
Patricia Marcos Huidobro (GEF)
Sara Trærup (UNEP)
Peter Oksen (World Intellectual Property Organization)

Intergovernmental organization observers

Maged Mahmoud (Regional Center for Renewable Energy and Energy Efficiency)

Non-governmental organization observers

Fabio Andrés Salgado Torres (Environmental Business Corporation – BINGO)
John Scowcroft (Global CCS Institute – BINGO)
Emmanuela Leal (Global International P&R of Colombia S.A.S – BINGO)
Derek Myers (West London Business – BINGO)
Cathy Yitong Li (CliMates – women and gender)

Resource persons

Jonn Axsen (independent consultant)
Joyce Miller (independent consultant)
Dian Phylipsen (independent consultant)
Ambuj Sagar (independent consultant)
Wytze van der Gaast (consultant – JIN Climate and Sustainability)
Emily Goodwin (IUCN)
Annika Min (IUCN)
Ali Raza Rizvi (IUCN)
Romeo Bertolini (resource person – thematic dialogue)
Alexander Hadzhiivanov (resource person – thematic dialogue)
Surachai Sathitkunarat (resource person – thematic dialogue)
Michael Schneider (resource person – thematic dialogue)
Krystyna Springer (resource person – thematic dialogue)
Tenesee Wilson (resource person – thematic dialogue)

Abbreviations and acronyms

BINGO	business and industry non-governmental organizations
COP	Conference of the Parties
CTCN	Climate Technology Centre and Network
FEBA	Friends of Ecosystem-based Adaptation
GCF	Green Climate Fund
GEF	Global Environment Facility
IUCN	International Union for Conservation of Nature
NDC	nationally determined contribution
NSI	national system of innovation
NWP	Nairobi work programme on impacts, vulnerability and adaptation to climate change
PCCB	Paris Committee on Capacity-building
SBSTA	Subsidiary Body for Scientific and Technological Advice
TEC	Technology Executive Committee
TNA	technology needs assessment
UNEP	United Nations Environment Programme
YOUNGO	youth non-governmental organization