## **Technology Executive Committee**

6 April 2018

## Sixteenth meeting

Bonn, Germany, 13-16 March 2018

# Report on the sixteenth meeting of the Technology Executive Committee

# I. Opening of the meeting

- 1. The Chair of the Technology Executive Committee (TEC) for 2017, Mr. Michael Rantil, opened the 16<sup>th</sup> meeting of the TEC (TEC 16) at 2 p.m. on Tuesday, 13 March 2018.
- 2. After the opening of the meeting, the UNFCCC Deputy Executive Secretary, Mr. Ovais Sarmad, and the Director of the Finance, Technology and Capacity-building programme of the UNFCCC Secretariat, Mr. Daniele Violetti, delivered introductory remarks.
- 3. The table below lists the TEC members who attended TEC 16. Observers present at the meeting are listed in annex I.

TEC members attending TEC 16	
Mr. Ayele Anabo	Mr. Ian Lloyd
Ms. Alysha Bagasra	Mr. Naoki Mori
Mr. Robert Berloznik	Ms. Duduzile Nhlengethwa
Mr. Pedro Borges	Ms. Claudia Octaviano Villasana (Chair)
Ms. Gabriela Fischerova	Mr. Igor Onopchuk
Ms. Stella Gama	Mr. Michael Rantil
Ms. Dinara Gershinkova	Mr. Hugh Sealy
Mr. Mareer Mohamed Husny	Ms. Adelle Thomas
Mr. Suil Kang	Ms. Elodie Trauchessec
Mr. Kazem Kashefi	

# II. Organizational matters

#### (a) Election of the Chair and Vice-Chair of the Technology Executive Committee for 2018

4. The TEC elected Ms. Claudia Octaviano Villasana (Mexico) as the Chair of the TEC for 2018. The TEC took note that the election of the Vice-Chair of the TEC for 2018 could not be concluded at this meeting and that the consultations among members will continue intersessionally after TEC 16. The TEC agreed that Mr. Michael Rantil (Sweden) would perform the role of vice-chair at the meeting and until the TEC elects its Vice-Chair for 2018.

#### (b) Adoption of the agenda

5. The TEC adopted the agenda for TEC 16 as contained in document TEC/2018/16/1.

#### (c) Organization of work

- 6. The TEC Chair presented the proposed organization of work for TEC 16, as contained in document TEC/2018/16/3. The organization of work included an update of the work carried out by all TEC task forces since the last TEC meeting.
- 7. The TEC took note of the proposed organization of the work.

### (d) Membership matters

- 8. The Chair of the TEC welcomed the members elected and re-elected at the twenty-third session of the Conference of the Parties (COP), and all members introduced themselves.
- 9. The TEC took note of the membership status.<sup>1</sup>

# III. Update on relevant meetings, events and initiatives

#### (a) Outcomes of the Bonn climate change conference of November 2017

- 10. The TEC took note of the information presented by the secretariat on the outcomes of the Bonn climate change conference, held from 6 to 17 November 2017, on matters relating to technology development and transfer, in particular those that are relevant to the work of the TEC.
- 11. The TEC took note of the oral report by the Chair of the TEC for 2017 on his participation in the second annual meeting of the Green Climate Fund (GCF) with the thematic bodies of the Convention, focusing on enhancing direct access and private-sector involvement, held on 15 November 2017 in conjunction with COP 23.

#### (b) Outlook of the Bonn climate change conference of April-May 2018

- 12. The TEC took note of the information provided by the secretariat regarding the overview of the United Nations Climate Change Conferences in 2018, including an update on the April-May and December sessions. **Technology Facilitation Mechanism**
- 13. The TEC took note of the update provided by Mr. Shantanu Mukherjee, Chief of the Policy and Analysis Branch at the Division for Sustainable Development of the United Nations Department of Economic and Social Affairs, on the progress of the Technology Facilitation Mechanism<sup>2</sup> that are relevant to the work of the Technology Mechanism.

#### (d) Others

- 14. The TEC took note of the oral report of the Chair of the TEC for 2017, on his participation in:
  - (a) The 18<sup>th</sup> meeting of the Board of the GCF, held from 30 September to 2 October 2017 in Cairo, Arab Republic of Egypt, where he was invited to make a presentation on the work of the TEC on innovation, and research, development and demonstration (RD&D) to the GCF Board;
  - (b) The Asia-Pacific Climate Week, held from 13 to 15 December 2017 in Bangkok, Thailand, where he was invited to make a presentation on the work of the TEC on industrial energy and material efficiency;
  - (c) The 11<sup>th</sup> meeting of the Advisory Board of the Climate Technology Centre and Network (CTCN), held from 7 to 9 March 2018, in Copenhagen, Denmark, where he updated the CTCN Advisory Board on progress of the work of the TEC.
- 15. The TEC took note of the oral report of Ms. Stella Gama, who presented the findings of the paper "Least Developed Countries' experiences with the UNFCCC Technology Mechanism". Ms. Gama also sought possible support to translate this document into French.

2

<sup>&</sup>lt;sup>1</sup> More information on the TEC members for 2018 is available at <a href="http://unfccc.int/ttclear/tec/members.html">http://unfccc.int/ttclear/tec/members.html</a>.

<sup>&</sup>lt;sup>2</sup> Further information is available at <a href="https://sustainabledevelopment.un.org/tfm">https://sustainabledevelopment.un.org/tfm</a>.

<sup>&</sup>lt;sup>3</sup> http://pubs.iied.org/10189IIED/.

- 16. The TEC also took note of the oral report of Mr. Robert Berloznik, on his participation in:
  - (a) The side event "Technology RD&D cooperation for new climate regime: from bilateral and multilateral perspectives" organized by the Green Technology Center of the Republic of Korea on 16 November 2017 on the margins of COP 23;
  - (b) The "Experts meeting on National Systems of Innovation" organized by CTCN and the United Nations Environment Programme from 21 to 23 February 2018, in Paris, France, where he was invited to make a presentation on the innovation and RD&D activities of the TEC.

# IV. Matters relating to the Climate Technology Centre and Network

- 17. The Director of the CTCN, Mr. Jukka Uosukainen, provided a summary of the outcomes of the 11<sup>th</sup> meeting of the CTCN Advisory Board and an update on the operations and progress of the work of the CTCN, including: an overview of the COP 23 outcomes that are relevant to the work of the CTCN; an overview of the activities of the CTCN since the 15<sup>th</sup> meeting of the TEC; the collaboration between CTCN and the GCF and its work related to the GCF activities on collaborative RD&D; and CTCN's financial resources mobilization strategy.
- 18. The TEC welcomed the information provided by the Director of the CTCN and looked forward to enhancing its collaboration with the CTCN to ensure the coherent delivery of the Technology Mechanism.

# V. Implementation of the remaining activities in the current rolling workplan for 2016-2018

#### (a) Technology needs assessments

- (i) Overview of new technology needs assessment and technology action plan reports of the phase II of the global TNA Project
  - 19. The TEC took note of the presentation by the secretariat on information contained in the new technology needs assessment (TNA) reports made available in the framework of the global TNA Project, phase II, as of 31 January 2018.
  - 20. The TEC welcomed the information provided and asked the secretariat to present the final overview of new TNA and technology action plan reports at TEC 17, including regional analysis, and comparing the findings with the previous TNA synthesis report.
- (ii) Alignment of the technology needs assessment process and the process to formulate and implement national adaptation plans
  - 21. The TEC considered the update provided by the secretariat on progress regarding the preparation of the "Draft paper on aligning the technology needs assessments process with the national adaptation plans process", as jointly developed by the Adaptation Committee, the Least Developed Countries Expert Group (LEG), the CTCN and the TEC.
  - 22. The TEC agreed to continue its work on the paper, with a view to finalizing it at TEC 17.
- (iii) Paper on linkages between the technology needs assessment process and the nationally determined contribution process
  - 23. The TEC took note of the information provided by the task force on TNA regarding the updated paper on linkages between the TNA and the nationally determined contributions (NDC) process, and also took note of the review of the updated paper provided by the NDC community.
  - 24. The TEC agreed to undertake its further work on this matter in 2019, when more information from the NDC community will be available.

#### (b) Climate technology financing

- (i) Update by the Green Climate Fund on the outcomes of the 18th meeting of the GCF Board and outlook of its 20th meeting
  - 25. The TEC welcomed the information provided by Mr. Juan Hoffmaister from the secretariat of the GCF on the outcomes of the 18<sup>th</sup> meeting of the GCF Board relevant to the work of the TEC and on technology-related matters, including the status of developing terms of reference for a request for proposals on climate technology incubators and accelerators scheduled to be considered by the GCF Board at its 20<sup>th</sup> meeting.
- (ii) Update by the Global Environmental Facility on technology support
  - 26. The TEC welcomed the information provided by Ms. Katya Kuang-Idba and Mr. David Rodgers from the secretariat of the Global Environmental Facility (GEF) regarding its plan to support climate technology innovation as part of the seventh replenishment of resources of the GEF Trust Fund and on the status of the projects supported by the GEF under the Poznan strategic programme on technology transfer. The TEC invited the GEF to update the TEC on the progress of these projects at TEC 17, because this information is relevant for the TEC when updating the evaluation of this programme, as mandated by the forty-third session of the Subsidiary Body for Implementation.
- (iii) Update by the Standing Committee on Finance on the draft guidance to the operating entities of the Financial Mechanism
  - 27. The TEC took note of the information provided by the secretariat on the process for providing inputs for the Standing Committee on Finance in preparing its draft guidance to the operating entities of the Financial Mechanism for consideration by the COP. The TEC mandated its task force on climate technology financing to prepare such inputs for consideration by the TEC at TEC 17.

# (c) Technologies for mitigation

- (i) Technical expert meeting on mitigation
  - 28. The TEC took note of the information provided by the secretariat. It also welcomed the information provided by Ms. Christine Fung, Special Adviser to the high-level climate champion, Mr. Inia B. Seruiratu. The TEC suggested to Ms. Fung that the high-level climate champions organize a meeting with the Chairs of the subsidiary bodies, the TEC, the CTCN and Adaptation Committee during the Bonn Climate Change Conference of April-May 2018 for further discussion on the technical examination process (TEP).
  - 29. The TEC provided guidance on how to enhance its engagement in the TEP on mitigation in response to decision 13/CP.23, and requested its task force on mitigation, taking into account the deliberations and guidance provided by the TEC at this meeting, to follow up the work on this matter, including:
    - (a) The organization, in collaboration with the CTCN, of the regional technical expert meeting (TEM) on efficiency in the industry sector, to be held on 13 April 2018, in Nairobi, Kenya, on the margins of the Africa Climate Week 2018;<sup>4</sup>
    - (b) The participation of the TEC in the TEM on the implementation of circular economies and industrial waste reuse and prevention solutions, to be held from 1 to 2 May 2018, in Bonn, Germany;<sup>5</sup>
    - (c) The preparation of TEC inputs to the Talanoa Dialogue, to be undertaken jointly with the task force on adaptation;<sup>6</sup>

4

<sup>&</sup>lt;sup>4</sup> Ms. Duduzile Nhlengethwa and Ms. Stella Gama will represent the TEC at this event. Information on the Africa Climate Week 2018 is available at <a href="http://africacarbonforum.com/">http://africacarbonforum.com/</a>.

<sup>&</sup>lt;sup>5</sup> http://unfccc.int/resource/climateaction2020/tep/technical-expert-meetings/.

<sup>6</sup> https://talanoadialogue.com/.

- (d) The identification of activities on mitigation for the year 2019 and 2020, in alignment with the topics identified by the high-level climate champions for the TEP on mitigation for the period until 2020;
- (e) The preparation, in consultation with the high-level climate champions, of recommendations to Parties on ways forward and actions to be taken based on the outcomes of the TEMs on mitigation.
- (ii) Further study the potential application of South–South cooperation on adaptation and mitigation technologies to assist countries in implementing their nationally determined contributions and national adaptation plans
  - 30. The TEC considered the report provided orally by the task forces on adaptation and mitigation on the progress of work on this matter. The TEC requested the task forces to continue the work, taking into account the deliberations and guidance provided by the TEC at this meeting.
  - 31. In undertaking the work, the TEC also requested the taskforces to explore possible collaboration with the United Nations Office for South-South Cooperation on areas of common interest, including the possible preparation of a joint publication and engagement in regional events to raise awareness and seek feedback on South-South cooperation.

#### (d) Technologies for adaptation

- (i) Further study the potential application of South–South cooperation on adaptation and mitigation technologies to assist countries in implementing their nationally determined contributions and national adaptation plans
  - 32. This task is to be undertaken jointly by the adaptation and mitigation taskforces (see paragraphs (c)30 and (c)31 above).
- (ii) Technical expert meeting on adaptation
  - 33. The TEC took note of the update provided by Mr. Mareer Mohamed Husny, the TEC representative in the Adaptation Committee working group on the TEP on adaptation, regarding the preparatory work for the TEMs on adaptation to be held in May.
  - 34. The TEC agreed on its further inputs with regard to further engagement of the TEC on the TEP on adaptation which are to be provided to the Adaptation Committee working group.

#### (e) Innovation and research, development and demonstration

- (i) Thematic dialogue on incubators and accelerators
  - 35. The TEC held, in conjunction with TEC 16, a thematic dialogue on climate technology incubators and accelerators. The purpose of the dialogue was to, inter alia, inform the secretariat of the GCF as it develops a request for proposals on climate technology incubators and accelerators for consideration by the GCF Board. The dialogue was co-hosted by the TEC, the GCF and the CTCN, and convened 16 expert speakers from around the world. The UNFCCC Executive Secretary, Ms. Patricia Espinosa, gave closing remarks at the dialogue and expressed her full support for the continued collaboration between the TEC, GCF and CTCN in enhancing technology action and support on the ground.<sup>7</sup>
  - 36. The TEC considered the findings which emerged from the dialogue and agreed to develop the following products with the help of the task force on innovation and RD&D: 8
    - (a) A two-page brief, to inform the GCF Board of the outcomes of work by the TEC on incubators and accelerators, which may be relevant to its related work on the topic;
    - (b) A paper on incubators and accelerators, which summarizes discussions that took place at the thematic dialogue referred to in paragraph 35 above and draws on other related work of the taskforce, to inform the GCF secretariat as it prepares the terms of reference for a

<sup>&</sup>lt;sup>7</sup> Further information is available at <a href="http://unfccc.int/ttclear/events/2018">http://unfccc.int/ttclear/events/2018</a> event2.

<sup>&</sup>lt;sup>8</sup> The taskforce will work with the GCF secretariat and the CTCN to develop tasks (a) and (b).

- call for proposals on climate technology incubators and accelerators for consideration by the GCF Board; 9
- (c) A TEC brief and recommendations to COP 24, to inform policymakers on ways to enhance the effectiveness of climate technology incubators and accelerators.
- (ii) Further work on innovation and mapping of enabling environments and barriers
  - 37. The task force on innovation and RD&D presented an update on its work on innovation and mapping of enabling environments and barriers.
  - 38. The TEC requested its task force on TNAs to take on the work on mapping of enabling environment and barriers by: beginning to map barriers and enablers in NDCs and CTCN requests in 2018; presenting a concept note on a possible event on this mapping to TEC 17 for its consideration; and mapping barriers and enablers in TNAs in the first half of 2019, with a view to preparing and delivering recommendations and a TEC brief on this issue to COP 25.
  - 39. The TEC requested its task force on innovation and RD&D to prepare a background paper on possible work by the TEC on innovation of emerging climate technologies, including zero-emission and negative-emission technologies for consideration at TEC 17.

#### (f) Emerging and cross-cutting issues

- (i) Collaboration with the Executive Committee of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts
  - 40. The TEC and the Executive Committee of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts (Executive Committee) held a joint session on 16 March 2018 to discuss specific actions for collaboration between the two bodies.
  - 41. The TEC and the Executive Committee agreed to jointly develop a policy brief as an activity of the long-term collaboration between the two bodies. The two bodies also agreed to establish an intersessional working group to elaborate terms of reference for the development of the policy brief, including its scope, with a view to demonstrating progress of work at COP 24. The two committees further agreed to establish focal points who will jointly coordinate the intersessional work.
  - 42. The TEC agreed to assign the intersessional work to the task force on emerging and cross-cutting issues and encouraged the participation of other members to contribute to the work. The TEC also agreed to nominate Ms. Adelle Thomas as the TEC focal point for the intersessional work with the Executive Committee.
- (ii) Development and enhancement of endogenous capacities and technologies
  - 43. The TEC took note of the interim report on the development and enhancement of endogenous capacities and technologies provided by the task force on emerging and crosscutting issues. The TEC provided guidance regarding the methodology of the survey and requested the task force to continue working on this issue, with the aim to submit its recommendations at TEC17.

# VI. Update of the rolling workplan 2016-2018

- (i) Monitoring and evaluation of the impacts of the implementation of the TEC mandates
  - 44. The TEC initiated a discussion on the monitoring and evaluation of the impacts of its work in response to decision 15/CP.23. The TEC requested each of its task forces to consider how relevant mandates of the TEC have been fulfilled and what impacts have been generated through the implementation of activities in each thematic area, and report back at TEC 17.

<sup>&</sup>lt;sup>9</sup> See GCF decision B.18/03, paragraph d, available at <a href="https://goo.gl/cacUu2.">https://goo.gl/cacUu2.</a>

- (ii) Enhancement of the communication and outreach strategy of the TEC
  - 45. The TEC considered the background information provided by the secretariat on the enhancement of the communication and outreach strategy in response to decision 15/CP.23. The TEC agreed to create an ad hoc working group for the development of a proposal on how to enhance the communication and outreach strategy of the TEC, taking into account guidance provided by the TEC, for consideration at TEC 17.
  - 46. The TEC requested the secretariat to update the TEC rolling workplan for 2016–2018 to incorporate further activities in various thematic areas discussed and agreed at this meeting.

## VII. Communication and outreach activities

47. The TEC took note of the information provided by the secretariat on recent communication and outreach activities, including the secretariat's work through social media, publication of articles and the management of the UNFCCC climate technology website, TT:CLEAR.<sup>10</sup>

# VIII. Date and venue of the next meetings

48. The TEC took note that its 17<sup>th</sup> meeting is scheduled to take place on 25–28 September 2018, in Bonn, Germany.

## IX. Other matters

- 49. The TEC considered a letter from the LEG inviting the TEC to take part in the "NAP Expo 2018: Advancing National Adaptation Plans", to be held from 4 to 6 April 2018, in Sharm El Sheikh, Arab Republic of Egypt. The TEC agreed to nominate Mr. Mareer Mohamed Husny to represent the TEC at the NAP Expo 2018.
- 50. The TEC requested the secretariat to consider the TEC modalities for engaging observer organizations and relevant experiences of other constituted bodies, and to propose recommendations to enhance these modalities for consideration at a future meeting.

# X. Closure of the meeting

51. The TEC Chair summarized the key outcomes of the meeting and officially closed it at 2:50 p.m. on Friday, 16 March 2018.

<sup>10</sup> http://unfccc.int/ttclear/

### Annex I

# List of observers attending the sixteenth meeting of the Technology Executive Committee

#### Party observers

- Mr. Laurent Caillierez (France)
- Ms. Julia Both (Germany)
- Mr. Elmar Schuppe (Germany)
- Mr. Takahiro Murayama (Japan)
- Mr. Kenichi Wada (Japan)
- Ms. Briana Craft (Malawi)
- Mr. Jacek Trzosowski (Poland)
- Ms. Izabela Jagus (Poland)
- Ms. Chae Woon Oh (Republic of Korea)
- Ms. Sueyon Kim (Republic of Korea)
- Mr. Dumisani Mthembu (South Africa)
- Mr. Surachai Sathitkunarat (Thailand)
- Ms. Juliet Meredith (United Kingdom of Great Britain and Northern Ireland)

### United Nations organizations and specialized agencies

- Mr. Jukka Uosukainen (Climate Technology Centre and Network)
- Ms. Carolina Fuentes (Green Climate Fund)
- Mr. Jonathan Duwyn (United Nations Environment Programme)
- Mr. Victor Low (United Nations Environment Programme)
- Mr. Manfredi Caltagirone (United Nations Environment Programme)
- Ms. Sara Traerup (United Nations Environment Programme; UNEP DTU Partnership)
- Mr. Victor Owade (World Intellectual Property Organization)

#### **Intergovernmental organizations**

Roland Roesch (International Renewable Energy Agency)

#### Non-governmental organizations

- Mr. Côme Girschig (CliMates)
- Ms. Ayuska Mara Motha (Federation of American Women's Clubs Overseas)
- Mr. Stephen Matthew Minas (King's College London, School of Law)
- Ms. Yugratna Srivastava (Plant-for-the-planet Foundation)
- Ms. Astrid Walker Bourne (Practical Action)
- Ms. Heleen De Coninck (Radboud University, Nijmegen, Netherlands)
- Mr. Hans-Jörn Weddige (thyssenkrupp AG)
- Ms. Luja Myriam Sophie Von Köckritz (Youth Alliance for Future Energies)

## Thematic dialogue - invited participants

- Ms. Patricia Espinosa (UNFCCC secretariat)
- Mr. Daniel Hersson (Asian Development Bank)
- Mr. Fernando Hentzschel (Chilean Economic Development Agency (CORFO))
- Ms. Andrea Karpati (Climate-KIC)
- Ms. Rukayatu Sanusi (Ghana Climate Innovation Centre)
- Mr. Ambuj D. Sagar (Indian Institute of Technology)
- Mr. Willem Adriaan Naude (Maastricht University)
- Mr. Kitipong Promwong (National Science Technology Innovation Policy Office, Thailand)
- Mr. Harish Hande (SELCO-India)
- Mr. Jean-Louis Racine (World Bank)
- Mr. Alois Mhlanga (United Nations Industrial Development Organization)
- Mr. Christoph Jungfleisch (YAPU Solutions)

## Thematic dialogue - observers

- Mr. Wim Goris (AgriProFocus)
- Ms. Julia Panny (Climate-KIC)
- Mr. Kofi Adow Obeng (Ghana Climate Innovation Centre)
- Mr. Duncan J Gromko (UNIQUE forestry and land use)

## Virtual participants

- Ms. Christine Fung, Special Adviser to Mr. Inia B. Seruiratu (high-level climate champion)
- Mr. David Rodgers (Global Environment Facility)
- Ms. Katya Yuh Kuang-Idba (Global Environment Facility)
- Mr. Juan P. Hoffmaister (Green Climate Fund)
- Mr. Shantanu Mukherjee (United Nations Department of Economic and Social Affairs)