Technology Executive Committee

19 October 2017

Fifteenth meeting

Bonn, Germany, 12–15 September 2017

Report on the fifteenth 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 15th meeting of the TEC at 2 p.m. on Tuesday, 12 September 2017.
- 2. The table below lists the TEC members who attended TEC 15. Observers present at the meeting are listed in annex I.

TEC members attending TEC 15				
Mr. Ayele Hegena Anabo	Mr. Ian Lloyd			
Mr. Robert Berloznik	Ms. Elfriede-Anna More			
Mr. Pedro Borges	Mr. Naoki Mori			
Mr. Birama Diarra	Ms. Claudia Alejandra Octaviano Villasana			
Ms. Gabriela Fischerova	Mr. Michael Rantil (Chair)			
Ms. Stella Gama	Mr. Hugh Sealy			
Mr. Mareer Mohamed Husny	Mr. Changmo Sung			
Mr. Kashefi Kazem	Mr. Stig Svenningsen			

II. Organizational matters

(a) Adoption of the agenda

3. The TEC adopted the agenda for TEC 15 as contained in document TEC/2017/15/1.

(b) Organization of work

- 4. The TEC agreed to designate Ms. Claudia Octaviano Villasana to temporarily serve as the vice-chair of the meeting, due to the absence of the TEC Vice-Chair Ms. Duduzile Nhlengethwa-Masina.
- 5. The TEC Chair presented the proposed organization of work for TEC 15, as contained in document TEC/2017/15/3. The organization of work included an update on the work carried out by all TEC task forces since the last TEC meeting.
- 6. The TEC took note of the proposed organization of work.

(c) Membership matters

7. The Chair of the TEC informed members that there had been no changes in membership since the 14th meeting of the TEC and thanked the new members for their active participation in the work of the TEC thus far in 2017.

8. The TEC took note of the membership status.¹

III. Update on relevant meetings, events and initiatives

(a) Outcomes of the Bonn climate change conference in May 2017

- 9. The TEC took note of the information presented by the secretariat on the outcomes of the Bonn climate change conference, held from 8 to 18 May 2017, on matters relating to technology development and transfer, in particular those that are relevant to the work of the TEC.
- 10. The TEC took note of the oral report by Mr. Naoki Mori and Mr. Birama Diarra on the 1st meeting of the Paris Committee on Capacity-Building held in May 2017 in conjunction with the forty-sixth sessions of the subsidiary bodies (SB 46) and thanked them for representing the TEC at the meeting.
- 11. The TEC took note of the oral report by Ms. Stella Gama about the thematic session on "Innovative policy and technology solutions for sustainable urban development" hosted by the TEC as part of the technical expert meeting held in May 2017 in conjunction with SB 46 and thanked her for facilitating the session.

(b) Outlook of the Bonn climate change conference in November 2017

12. The TEC took note of the information provided by the secretariat in an overview of the preparation for the United Nations Climate Change Conference in Bonn, to be held from 6 to 17 November, with regards to events that are relevant to the work of the TEC.

(c) Technology Facilitation Mechanism

13. The TEC took note of the update provided by Mr. Zitouni Ould-Dada, Head of the Technology Unit at the Economy Division of the United Nations Environment Programme, on the progress of the Technology Facilitation Mechanism that is relevant to the work of the TEC, including the main outcomes of the second annual multi-stakeholder forum on science, technology and innovation for sustainable development goals held from 15 to 16 May 2017, in New York.

(d) Others

14. No information was reported about TEC members' participation in other events or activities.

IV. Matters relating to the Climate Technology Centre and Network

- 15. The Chair of the Advisory Board of the Climate Technology Centre and Network (CTCN), Ms. Mette Moglestue, provided an update on CTCN matters, including the outcomes of the 10th meeting of the Advisory Board, its technology framework submission to the Subsidiary Body for Scientific and Technological Advice (SBSTA), work on innovation and research, development and demonstration (RD&D) and elements of collaboration between the CTCN and the TEC.
- 16. The Director of the CTCN, Mr. Jukka Uosukainen, also provided an update on the operations and progress of work of the CTCN, including an overview of the technical assistance of the CTCN in 2017, status of collaboration with the Green Climate Fund (GCF) on technical assistance, pro bono technical assistance, network status, budget matters and the path forward for the CTCN.

More information on the TEC members for 2017 is available at http://unfccc.int/ttclear/tec/members.html.

17. The TEC took note of the information provided by the Chair of the Advisory Board of the CTCN and the Director of the CTCN.

V. Implementation of the rolling workplan for 2016–2018

(a) Technology needs assessments

- (i) Methodology on monitoring the technology needs assessment results
 - 18. The secretariat presented a draft methodology for monitoring the implementation of technology action plans and the key findings from testing such methodology with 14 African countries during a technology needs assessment (TNA) training workshop in June 2017 in Cotonou, Benin.
 - 19. The TEC took note of the draft methodology and the findings presented and agreed to finalize the methodology by the end of 2017, with the aim to turn it into technology action plan guidance for inclusion in the TEC guidance for preparing a technology action plan.²
- (ii) Alignment of the technology needs assessment process and the process to formulate and implement national adaptation plans
 - 20. The secretariat presented the draft paper "Aligning technology needs assessments with the process to formulate and implement national adaptation plans", as jointly developed by the Adaptation Committee, the Least Developed Countries Expert Group, the CTCN and the TEC, including recommendations to assist Parties on this matter.
 - 21. The TEC welcomed the draft paper and agreed to continue working on it in collaboration with the Adaptation Committee and the Least Developed Countries Expert Group during 2018.
- (iii) Linkages between the technology needs assessment process and the nationally determined contribution process
 - 22. The task force on TNA provided an updated paper on linkages between the TNA and the nationally determined contributions process, with a focus on good practices of countries.
 - 23. The TEC took note of the information provided and agreed to finalize the paper in 2018, taking into account the comments provided by TEC members at this meeting.

(b) Climate technology financing

- (i) Input to the Standing Committee on Finance into the draft guidance to the operating entities of the Financial Mechanism
 - 24. The task force on climate technology financing presented the draft inputs into the draft guidance to the operating entities of the Financial Mechanism. The TEC provided comments on the draft inputs and requested the task force to address them.
 - 25. The TEC considered the revised draft inputs prepared by the task force and agreed to provide inputs to the SCF for the draft guidance to the operating entities of the Financial Mechanism, as presented in annex II.
- (ii) Inputs to present the outcomes of the work by the Technology Executive Committee on innovation and research, development and demonstration to the Green Climate Fund Board
 - 26. Mr. Juan Hoffmaister from the secretariat of the GCF provided information on technology-related matters that will be considered at the 18th meeting of the GCF Board from 30 September to 2 October in Cairo, Egypt, and that may be of relevance to the TEC,

http://unfccc.int/ttclear/misc /StaticFiles/gnwoerk static/TEC column M/33933c6ccb7744bc8f d643feb0f8032a/82af010d04f14a84b9d24c5379514053.pdf.

including elements to enhance cooperation and coherence of engagement with the TEC and the CTCN and options and modalities for supporting collaborative RD&D within the GCF business model.

- 27. The task force on climate technology financing presented a draft presentation on the outcomes of the work of the TEC on innovation and RD&D to be presented by the TEC Chair at the 18th meeting of the GCF Board.
- 28. Following an exchange of views on the draft presentation referred to in paragraph 27 above, the TEC agreed on the main elements for the presentation to the GCF Board. It further mandated the TEC Chair and Vice-Chair to work with the secretariat to finalize the presentation.
- (iii) Inputs for the annual meeting of the Green Climate Fund with the UNFCCC thematic bodies to be organised in conjunction with the Conference of the Parties
 - 29. Mr. Juan Hoffmaister from the secretariat of the GCF provided information about the focus of the second annual meeting of the GCF with the thematic bodies of the UNFCCC to be held in conjunction with the twenty-third session of the Conference of the Parties (COP).
 - 30. The proposed objective of the second annual meeting will be to exchange views and share relevant updates on experience with regards to enhancing direct access and private sector involvement in the least developed countries and small island developing States, which may include challenges and lessons learned based on relevant work and mandates.
 - 31. The TEC exchanged views on the strategic issues that the TEC may wish to discuss at the second annual meeting of the GCF with the UNFCCC thematic bodies. The TEC requested its Chair and Vice-Chair to work with the secretariat to prepare inputs for the second annual meeting.
- (iv) Update of the Poznan strategic programme evaluation report
 - 32. The secretariat presented the progress made on updating the evaluation of the Poznan strategic programme on technology transfer (PSP).
 - 33. The TEC took note of the progress made and agreed to continue its work in 2018. It agreed to wait for further midterm evaluation reports to be made available as part of the Global Environmental Facility (GEF) report to COP 24, with a view to completing its updated report in a timely manner following the reception of the GEF report. It also agreed to consult the GEF on the progress of the PSP projects. Furthermore, it agreed to inform the COP of its progress on this task, through its annual report.

(c) Technologies for mitigation

- (i) TEC brief on industrial energy efficiency and material substitution in carbon-intensive sectors
 - 34. The task force on mitigation presented the draft TEC brief on industrial energy efficiency and material substitution in emission-intensive sectors as well as the draft executive summaries to target groups such as domestic policymakers, industry actors, financial institutions and international organisations.
 - 35. The TEC requested the task force on mitigation to finalize the TEC Brief and the executive summaries taking into account the comments provided by TEC members at this meeting, with an aim to make it available at COP 23.
- (ii) Inputs to the assessment of the technical examination process on mitigation to improve its effectiveness
 - 36. The task force on mitigation presented the draft inputs to the assessment of the technical examination process (TEP) to improve its effectiveness, as formulated in decision 1/CP.21, paragraph 113.

37. The TEC agreed on the inputs to the assessment of the TEP and will include them in its annual report to the COP for 2017 (see annex III).

(d) Technologies for adaptation

- (i) Guidance on good practices on South–South cooperation practical learning
 - 38. The task force on adaptation presented the draft compilation paper of good practices on effective information sharing and practical learning from South–South cooperation and triangular cooperation on technologies for adaptation.
 - 39. The TEC requested the taskforce on adaptation to finalise the paper and take into account the comments provided by TEC members at this meeting, with an aim to make it available at COP 23.
- (ii) Technical expert meeting on adaptation
 - 40. Mr. Mareer Mohamed Husny, a representative of the TEC in the Adaptation Committee working group on the technical examination process on adaptation, presented an update on the work on the technical expert meetings on adaptation and the engagement of the TEC on this matter.
 - 41. The TEC took note of the update and looked forward to providing inputs to the organisation of technical expert meetings on adaptation in 2018.

(e) Innovation and research, development and demonstration

- (i) Outcomes from special event and the Technology Executive Committee brief on innovation
 - 42. The task force on innovation and RD&D presented an overview of the special event on how innovation can support the implementation of nationally determined contributions and mid-century strategies"³ organised during the Bonn climate change conference in May 2017 and the draft TEC brief on innovation.
 - 43. The TEC took note of the information and requested the task force to finalize the TEC brief, while taking into account the comments provided by TEC members at this TEC meeting, with an aim to make it available at COP 23.
- (ii) Mapping enabling environments and barriers
 - 44. The task force on innovation and RD&D presented an update on its work of mapping TNAs, nationally determined contributions and the requests for technical assistance submitted to the CTCN regarding enabling environments and barriers.
 - 45. The TEC took note of the information provided and requested the task force on enabling environments and barriers to continue its work on this matter during the intersessional period. The TEC also agreed to consider at TEC 16 further updates by the task force, including initial findings and a proposal to convene an event relating to this mapping.

(iii) Further activities on RD&D

- 46. The secretariat presented an overview of the work conducted on RD&D. The TEC agreed to continue its work on innovation and RD&D in 2018, noting that this work may be related to a conceptual consideration of the role of innovation and the innovation of emerging climate technologies such as zero-emission and negative-emission technologies.
- 47. The TEC also considered the invitation extended to the TEC by TEC member Mr. Robert Berloznik to participate in the Global Science, Technology and Innovation Conference⁴ to be held in Brussels, Belgium, from 23 to 25 October 2017. The TEC requested

³ http://unfccc.int/ttclear/events/2017_event2.

⁴ whttps://www.gstic.org.

its task force on innovation and RD&D to nominate members of the task force on RD&D who are available to participate in this conference.

(f) Emerging and cross-cutting issues

- (i) Development and enhancement of endogenous capacities and technologies
 - 48. The task force on emerging and cross-cutting issues provided an oral report on its work to define the concept and scope of endogenous capacities and technologies.
 - 49. The TEC considered the report and requested the task force to work on this issue further by identifying elements and features that could be used to indicate endogenous capacities and technologies and the ways they could be developed or enhanced. The TEC also requested the task force to reach out to other Convention bodies, such as the CTCN, the Paris Committee on Capacity-Building, the Adaptation Committee, and the Least Developed Countries Expert Group, to seek relevant information in their respective area of work.
 - 50. The TEC noted an invitation by the University of Colorado at Boulder, an observer organisation, for the TEC to participate and engage in the Capacity-Building Day⁵ that will be held during COP 23. The TEC requested its task force on emerging and cross-cutting issues to consider the engagement of the TEC in this event.

VI. Provision of information to the forty-seventh session of the Subsidiary Body for Scientific and Technological Advice on activities relevant for the elaboration of the technology framework

- 51. The TEC invited the secretariat to present a draft information note prepared under the guidance of the TEC Chair and Vice-Chair, taking into account inputs provided by the TEC on activities of the TEC that are relevant for the elaboration of the technology framework, including information on past and ongoing activities as well as additional activities that can be undertaken individually and in collaboration with the CTCN, in response to an invitation by SBSTA 46.6
- 52. The TEC agreed on the information note to be submitted for consideration by SBSTA 47 and requested the Chair and Vice-Chair to finalize the joint section of the information note together with the Chair and Vice-Chair of the CTCN Advisory Board, with the assistance of the UNFCCC and CTCN secretariats, following the conclusion of TEC 15.

VII. Joint annual report of the Technology Executive Committee and the Climate Technology Centre and Network for 2017

(a) Key messages of the Technology Executive Committee to the Conference of the Parties

- 53. The TEC considered draft key messages on innovation, industrial energy and material efficiency in emission-intensive sectors and TNAs that were developed based on relevant work undertaken in 2017.
- 54. The TEC agreed on its key messages for COP 23, to be part of its annual report for 2017, as presented in annex IV.

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⁵ The event will be organized by the International Centre for Climate Change and Development, United Nations University – Institute for Environment and Human Security and other organizations.

⁶ FCCC/SBSTA/2017/4, paragraph 34.

(b) Report on activities and performance of the Technology Executive Committee

- 55. The secretariat presented a draft annual report of the TEC for 2017 and informed the TEC that this year the report will contain a new section on challenges and lessons learned, in response to the invitation by COP 22.⁷
- 56. The TEC considered the draft report and agreed on its key messages to COP 23. The TEC requested its Chair and Vice-Chair to finalize the report, with the support of the secretariat, following the conclusion of TEC 15.

(c) Joint chapter of the joint annual report

57. The TEC considered the draft joint chapter prepared by the Chairs and Vice-Chairs of the TEC and the CTCN Advisory Board and provided inputs for them to finalize this chapter.

VIII. Communications and outreach activities

58. 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, articles and the technology information clearing house (TT:CLEAR).8

IX. Date and venue of the next meeting

59. The TEC took note that its 16th and 17th meetings are tentatively scheduled to take place on 13-16 March 2018 and 25-28 September 2018, respectively, in Bonn, Germany.

X. Other matters

60. The TEC considered a letter from the Chair of the CTCN Advisory Board on the participation of the Advisory Board in the TEC task force on innovation and RD&D. It welcomed the ongoing participation of the Advisory Board in the task force and invited the Advisory Board to nominate two to three permanent members to participate in the TEC task force on innovation and RD&D. Such participation will support the TEC implementing its RD&D activities agreed upon in the current rolling workplan of the TEC. The TEC also noted that it may, as needed, invite the CTCN Advisory Board and CTCN secretariat to participate in other TEC task forces.

XI. Closure of the meeting

61. The TEC Chair summarized the key outcomes of the meeting and officially closed it at 12:40 p.m. on Friday, 15 September 2017.

⁷ Decision 15/CP.22, paragraph 6.

⁸ http://unfccc.int/ttclear/.

Annex I

List of observers attending the fifteenth meeting of the Technology Executive Committee

Party observers

- Mr. Karsten Krause (European Union)
- Ms. Julia Both (Germany)
- Mr. Tiziano Pignatelli (Italy)
- Mr. Takahiro Murayama (Japan)
- Mr. Kenichi Wada (Japan)
- Ms. Chae Woon Oh (Republic of Korea)
- Ms. Ji-Hee Son (Republic of Korea)
- Ms. Briana Craft (Malawi)
- Mr. Daniel Serafin Gonzalez Sosa (Paraguay)
- Ms. Ana Belen Ramirez Rojas (Paraguay)

United Nations organizations and specialized agencies

- Mr. Jukka Uosukainen (Climate Technology Centre and Network)
- Ms. Mette Moglestue (Chair, Advisory Board of the Climate Technology Centre and Network)
- Mr. Juan P. Hoffmaister (Green Climate Fund)
- Ms. Sara Traerup (United Nations Environment Programme-Technical University of Denmark Partnership)
- Mr. Zitouni Ould-Dada (United Nations Environment Programme)
- Mr. Victor Low (United Nations Environment Programme)
- Mr. Victor Owade (World Intellectual Property Organization)

Non-governmental organizations

- Mr. John Frederick Scowcroft (Global CCS Institute)
- Mr. Abdessalem Rabhi (The Institute for Global Environmental Strategies (IGES))
- Ms. Janice Meier (Climate Network Action)
- Mr. Jonas Mirko Tobias Knapp (Conference of Youth 13 Team)
- Ms. Stacey Evitts Kimmig (Federation of American Women's Clubs Overseas)
- Mr. Stephen Matthew Minas (King's College, School of Law)
- Mr. Astrid Walker Bourne (Practical Action)
- Ms. Marilyn Averill (University of Colorado at Boulder)

Resource person

Mr. Moritz Weigel (The China Africa Advisory)

Annex II

Inputs for the draft guidance to the operating entities of the Financial Mechanism

Annotated suggestions for elements of draft decision on the guidance to the Global Environment Facility

Elements	Sub-elements	Sources of information for accountability	Proposed inputs and rationale	Comments by TEC members
Policies	Private sector engagement	GEF annual report, Annex 12 (b)	Notes that a longer term perspective to engage private sectors in GEF technology projects is required.	
Programme priorities	Innovation	GEF annual report, Part III, section 4	Encourages the GEF to continue sharing information in its annual report on projects it approved that support the innovation and/or scaling up of climate technologies, with the aim of informing the Technology Mechanism as it undertakes further work on climate technology innovation.	
	Technology transfer	GEF annual report, Part III, section 4	Encourages the GEF to report on the outcomes of the collaboration with the CTCN with respect to exploring new ways of supporting climate-technology-related requests for technical assistance as referred to in decisions 11/CP.22 and 15/CP.22.	
	Communication strategy among project stakeholders	GEF annual report, Annex 13 (c)	Encourages the GEF to promote enhanced communication between executing agency, technology provider and technology recipient.	
Eligibility criteria				
Others				

Annotated suggestions for elements of draft decision on the guidance to the Green Climate Fund

Elements	Sub-elements	Sources of information for accountability	Proposed inputs and rationale	Comments by TEC members
Policies				
Programme priorities	Collaborative research and development	Sixth Report of the Green Climate Fund to the Conference of the Parties to the United Nations Framework Convention on Climate Change, p 25.	Welcomes the GCF Board's decision to invite the Chairs of the TEC and the Advisory Board of the CTCN to present to the Board on options for supporting collaborative research and development and encourages the GCF to further engage with the TEC and the CTCN on support for collaborative research and development.	
	Innovation	Sixth Report of the Green Climate Fund to the Conference of the Parties to the United Nations Framework Convention on Climate Change, p 25.	Encourages the GCF to share information in its annual report on projects it approved that support the innovation and/or scaling up of climate technologies, with the aim of informing the Technology Mechanism as it undertakes further work on climate technology innovation.	
Eligibility criteria				
Others				

Annex III

TEC inputs to the assessment of the technical examination process on mitigation

Considering the call to enhance mitigation efforts in the pre-2020 period, the views expressed by Parties as well as the inputs provided by intergovernmental organizations, the following areas and options could be considered for improving the technical examination process on mitigation (TEP-M):

- (a) Refocusing the work of the technical examination process (TEP) in the context of enhanced action prior to 2020 and beyond:
 - (i) A long-term vision for the TEP-M should be defined, with the aim of enhancing mitigation ambition prior to 2020 and beyond;
 - (ii) A long-term workplan for TEP-M activities should be defined that reflects the iterative nature of the TEP, including through the setting of indicators to measure the contribution of the TEP to the enhancement of mitigation ambition prior to 2020 and beyond;
 - (iii) A system should be introduced for monitoring TEP performance and achievements against the objective of enhanced action prior to 2020. The system should track the implementation of policy options and mitigation technologies as a result of TEP activities as well as collaboration and initiatives established by technical expert meeting (TEM) participants afterwards. In this regard, synergies with platforms such as the Non-state Actor Zone for Climate Action (NAZCA) may be considered;
 - (b) Effective and broader participation:
 - (i) The profile of speakers at the TEMs should continue to be the same, that is experts that are involved in the field;
 - (ii) Events should target those that are involved directly in the implementation of policies and technologies with high mitigation potential in their respective countries;
 - (iii) Organization of events should follow more region-wide settings and consider synergies with other regional and thematic meetings, including the Technology Executive Committee thematic dialogues;
 - (iv) Sessions of the Conference of the Parties are proven to attract, together with negotiators, a high number of researchers, technology developers and practitioners from all countries. They should be regarded as a place that could give high-level coverage to the outcomes of the TEP, particularly to the summary for policymakers;
 - (v) Events and meetings should be structured to allow interaction and discussion between participants;
 - (vi) The use of streaming media technology (e.g. webcasts, YouTube Live, Skype, etc.) should be considered to allow virtual participation and enable broader dissemination of the TEM outcomes;
 - (c) Stakeholder engagement:
 - (i) Stakeholders should be more involved in the organization and management of the TEP. They should be given opportunities to contribute to the definition of the TEM agendas, to the discussions during the meetings and to the drafting of technical papers and summaries for policymakers;
 - (ii) Feedback from stakeholders should be sought regularly to enable the TEP to identify and track technological needs and expectations as well as to evaluate the efficiency and effectiveness of TEP activities;
 - (d) Linking the TEP to the global climate action initiative and relevant institutions:

Links between the TEMs and the global climate action initiatives and other partnerships as well as the activities related to nationally determined contributions should be strengthened in order to trigger a mutual reinforcing dynamic where efforts are aligned towards ensuring the highest possible mitigation efforts in the pre-2020 period and beyond.

Annex IV

Key messages of the Technology Executive Committee for the Conference of the Parties at its twenty-third session

1. Building on the work carried out in 2017, the TEC wishes to deliver the following key messages to COP 23.

Innovation

- 2. To achieve the goals of the Paris Agreement, there is a pressing need to accelerate and strengthen technological innovation so that it can deliver environmentally and socially sound, cost-effective and better-performing climate technologies on a larger and more widespread scale. But there is no 'one size fits all' approach. Different innovation approaches are needed.
- 3. To enhance the implementation of NDCs, NAPs and mid-century strategies, the TEC recommends that the COP encourage Parties:
- (a) To prioritize resources (human, institutional and financial) for such innovation efforts, in accordance with their needs, priorities and capacities;
- (b) To enhance public and private partnership in the RD&D of climate technologies by increasing expenditure for it and providing a clear policy signal of a long-term commitment to act on climate change;
- (c) To strengthen national systems of innovation and enabling environments, including through market creation and expansion and capacity-building;
- (d) To enhance existing and build new collaborative initiatives for climate technology innovation, including for sharing expertise, good practices and lessons learned;
- (e) To create an inclusive innovation process that involves all key stakeholders, facilitating the incorporation of diverse and relevant expertise, knowledge and views and generating awareness of the benefits and impacts;
- (f) To acknowledge and protect indigenous and local knowledge and technologies and incorporate them in their national innovation systems.
- 4. The TEC further recommends that the COP encourage:
- (a) The TEC, the CTCN, the GEF, the GCF and other stakeholders to collaborate in identifying effective policies, instruments and collaboration forms that support Parties, particularly developing country Parties, and other partners in their innovation efforts;
- (b) The GCF to include information in its annual report to the COP on projects it has approved that support the innovation in and/or scaling-up of climate technologies, with the aim of informing the further work of the Technology Mechanism on climate technology innovation.
- (c) The GEF to continue including information in its annual report to the COP on projects it has approved that support the innovation and/or scaling-up of climate technologies, with the aim of informing the further work of the Technology Mechanism on climate technology innovation.

Industrial energy and material efficiency in emission-intensive sectors

- 5. The TEC highlights to Parties that the implementation of industrial energy efficiency, including material efficiency, measures in emission-intensive sectors can, inter alia:
- (a) Achieve significant greenhouse gas emission reductions and contribute to the implementation of NDCs;
 - (b) Offer significant cost-saving opportunities for enterprises;
- (c) Provide additional economic, social and environmental benefits, such as increased energy security, improved working conditions and health benefits, better reputation for enterprises and new employment opportunities.
- 6. The TEC underlines that:

- (a) There is a need to raise the awareness and build the capacity of various actors, from technical personnel to the top management of enterprises, as well as financial institutions and policymakers, to enable the implementation of energy efficiency measures in industry;
- (b) Facilitating access to financing for small and medium-sized enterprises to effectively implement energy efficiency measures is important.
- 7. As policymakers have a critical role to play in setting standards, policies and laws, addressing barriers and incentivizing various actors, the TEC recommends that the COP encourage Parties:
- (a) To promote policies and programmes on industrial energy efficiency, which may include:
 - (i) Incorporating aspects of industrial energy efficiency into national energy and climate change policies;
 - (ii) Setting long-term strategies and targets;
 - (iii) Implementing a package of aligned policies that address energy efficiency potential;
 - (iv) Introducing incentive programmes for energy efficiency measures, including economic instruments and certification standards for energy management, that stimulate investment from industry actors and financial institutions;
- (b) To raise awareness about the potential, costs and benefits of industrial energy efficiency;
- (c) To enhance the capacities of various actors, including by contributing to better accessibility of data and knowledge and establishing or supporting industrial energy efficiency networks to exchange experience and provide specific training and education.

Technology needs assessments

- 8. The TAPs are comprehensive sets of nationally endorsed implementation plans that should be further used by Parties and other relevant stakeholders to bridge the gap between planning and implementation and to contribute to the enhancement of the implementation of NDCs and NAPs.
- 9. Disseminating information on TAP implementation is instrumental in sharing experience and lessons learned from the process of implementing technology-inclusive projects. Such dissemination informs Parties and other national and international decision makers and may facilitate further replication and scale-up.

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