

Technology Executive Committee

31 August 2017

Fifteenth meeting

Bonn, Germany, 12-15 September 2017

Draft TEC and CTCN inputs to the forty-seventh session of the Subsidiary Body for Scientific and Technological Advice on activities relevant for the elaboration of the technology framework

Cover note

I. Introduction

A. Mandate

- 1. Article 10 of the Paris Agreement established a 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. By decision 1/CP.21, paragraph 67, the Subsidiary Body for Scientific and Technological Advice (SBSTA) was requested to initiate the elaboration of the technology framework at SBSTA 44. Subsequently SBSTA continued its deliberations on this matter at SBSTA 45 and 46.
- 2. SBSTA 46 (May 2017) noted that the ongoing work of the Technology Executive Committee (TEC) and the Climate Technology Centre and Network (CTCN), including their work with relevant stakeholders, may be relevant for the elaboration of the technology framework and in facilitating enhanced actions on technology development and transfer. In this context, it invited the TEC and the CTCN to provide at SBSTA 46 information on the following:
- (a) Activities that have been or are currently being undertaken, which are relevant for the implementation of the Paris Agreement, taking into account the key themes and their relation to the technology cycle;
- (b) Additional activities that the TEC and the CTCN, subject to available resources, could undertake within their respective mandates and functions, individually or jointly, to implement the Paris Agreement.¹
- 3. Following internal consultation among TEC members, the TEC agreed that the secretariat, under the guidance of the Chair and Vice Chair of the TEC, could be tasked to help the TEC collect the information requested above and to develop a draft information note for SBSTA 47, which will be made available to TEC as a TEC15 meeting document. The TEC further agreed to invite inputs from members regarding the requested information by the end of July 2017. Finally, the TEC also agreed to discuss and finalise its inputs at TEC 15.

B. Scope of the note

4. Annex I to this note presents the draft information note to be submitted as an official document to SBSTA 47. Sections III.A and IV.A of this annex contains information only on <u>TEC activities</u> responding to the two elements of SBSTA 46 invitation referred to in paragraph 2 (a) and 2(b) above. Section III.C contains information on the past and on-going activities undertaken collaboratively by the TEC and CTCN. Section IV.C contains information on the activities of the

¹ FCCC/SBSTA/2017/4 paragraph 34

TEC and CTCN that could be undertaken jointly relevant for the implementation of Paris Agreement, in response to paragraph 2(b) above.

5. This annex does not include CTCN-specific sections as these parts were considered separately at CTCN-AB 10 meeting that took place from 29-31 August 2017.

II. Approach

6. Based on inputs received from TEC members and guidance from the TEC Chair and Vice Chair, the following approaches are applied to present the two set of information above:

For on-going/past activities

- (a) Section III.A Past and on-going TEC activities: the information is organised along the thematic areas of the work of the TEC that it undertook since its inception (2012) to ensure that all relevant TEC activities are covered. These are, in alphabetical orders: adaptation, climate technology finance, emerging and cross-cutting issues, enabling environment and barriers, innovation, research development and demonstration (IRD&D), mitigation, and technology needs assessment. The relevance of each activity to the implementation of the Paris Agreement are highlighted. Further, the relevance of each activity to the key themes of the technology framework² and to technology cycle³ are mapped and presented in tabular format for ease of reading;
- (b) Section III.C Past and on-going collaborative work of TEC and CTCN: the information is taken from past and current joint chapters of the TEC and CTCN joint annual reports. An identical section also was presented and considered by CTCN-AB10;

For additional activities

- (c) Section IV.A Additional TEC activities: the information is organised based on topics identified in the inputs submitted by TEC members, namely: innovation, implementation, enabling environments and capacity building, collaboration and stakeholder involvement, support, global stocktake.
- (d) Section IV.C Additional activities that could be undertaken jointly by TEC and CTCN: the information will be based on discussions at both CTCN-AB10 and TEC15.

III. Expected action by the Technology Executive Committee

- 7. The TEC will be invited to:
 - (a) Consider the draft as contained in Annex I and agree on inputs to SBSTA 47;
- (b) Agree on follow-up actions to finalize this information note for submission to SBSTA 47.

2

² Innovation, Implementation, Enabling environments and capacity building, Collaboration and stakeholder engagement, Support (FCCC/SBSTA/2016/4 paragraph 29).

³ Research and development, demonstration, deployment, diffusion, transfer (decision 1/CP.16 paragraph 115)

Annex I

Draft – Information on Technology Executive Committee and Climate Technology Centre and Network activities relevant for the elaboration of the technology framework

I. Introduction {procedural mandate, scope, approach - to be inserted}

II. Background

A. Technology framework under Article 10, paragraph 4, of the Paris Agreement

- 1. The technology framework referred to in Article 10, paragraph 4, of the Paris Agreement was established 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 in pursuit of the long-term vision referred to in Article 10, paragraph 1.
- 2. In Article 10, paragraph 3, of the Paris Agreement, the Technology Mechanism was assigned to serve the Paris Agreement. The clear link with Article 10, paragraph 4, means that the work of the Technology Mechanism in serving the Paris Agreement will be guided by the technology framework.
- 3. The COP, by decision 1/CP.21, paragraph 67, requested the SBSTA to further elaborate the technology framework and to report its findings to the COP. The COP will then make its recommendation on the framework to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement for consideration and adoption at its first session.

B. Progress to date on the elaboration of the technology framework under the Subsidiary Body for Scientific and Technological Advice

- 4. Parties initiated the elaboration of the technology framework at SBSTA 44. The SBSTA requested the secretariat to prepare an information note on mapping climate technology development and transfer activities and initiatives under and outside the Convention relevant to the implementation of the Paris Agreement and invited Parties to submit their views on the elaboration of the technology framework, including the content, features and characteristics, the purpose and the themes of the technology framework.
- 5. SBSTA 45 continued the deliberations on the elaboration of the technology framework, taking into account the information note and submissions from Parties. The SBSTA agreed that the technology framework should be short, concise, balanced and comprehensive and allow flexibility to respond to changes over time. The SBSTA also agreed on the initial key themes for the framework, namely innovation, enabling environment and capacity-building, implementation, support and collaboration and stakeholder engagement. The SBSTA invited Parties, observers and other stakeholders to submit their views on the principles and structure of the technology framework.
- 6. SBSTA 46 continued the deliberations focusing on the principles and the structure of the technology framework. The SBSTA agreed that the principles of the technology framework, which are coherence, inclusiveness, result-oriented approach, transformational approach and transparency, should guide the Technology Mechanism in implementing the Paris Agreement, and that the possible headings of the technology framework include, inter alia, purpose, principles and key themes. SBSTA 46 invited the TEC and CTCN to provide inputs on their past/ongoing activities and additional activities relevant to the implementation of the Paris Agreement. SBSTA also agreed to continue its consideration of this matter at SBSTA 47, taking into account progress made at SBSTA 45 and 46.

C. Technology Executive Committee

- 7. The COP, by decision 1/CP.16, decided to establish a Technology Mechanism to facilitate the implementation of enhanced action on technology development and transfer in support of action on mitigation and adaptation. The Technology Mechanism consists of two complementary bodies: the TEC and the CTCN.
- 8. The TEC is the policy arm of the Technology Mechanism and analyses technology policy issues and provides recommendations to support countries in enhancing their climate technology efforts. The detailed functions of the TEC are contained in decision 1/CP.16, paragraph 121 and the overall mandate of the TEC is presented in the attachment of this note.
- 9. To fulfil its mandates, the TEC organizes its work through a rolling workplan. Since its first years of operation, the TEC has successfully implemented two rolling workplans: 2012–2013 and 2014–2015 and is currently implementing its 2016-2018 workplan.⁴ Annually the TEC submits to the COP its performance and activities in undertaking the mandates from the COP and subsidiary bodies, through a joint annual report of the TEC and CTCN.⁵ The TEC's key outputs are its key messages and recommendations to the COP. Through these, the TEC highlights measures that countries may take to speed up climate technology action. The TEC also produces policy briefs, called TEC Briefs, and other technical documents to enhance information sharing on climate technology efforts.
- 10. The TEC works closely with key partners and stakeholders to develop inclusive policy recommendations. Under the Convention, the TEC engages with entities including the CTCN, Adaptation Committee (AC), the Global Environmental Facility (GEF), the Green Climate Fund (GCF), the Least Developed Countries Expert Group (LEG), the Paris Committee on Capacity-building, the Standing Committee on Finance (SCF) and the Executive Committee of the Warsaw International Mechanism for Loss and Damage (Executive Committee). The TEC engages with stakeholders through several means including calls for inputs and invitations to take part in TEC meetings, participating as experts in TEC task forces, workshops, thematic dialogues, expert meetings and side events. To reach out to a greater audience and increase stakeholder engagement, TEC meetings are webcast and open to observers, and the use of social media is maintained.

D. Climate technology Centre and Network

The CTCN is the implementation arm of the Technology Mechanism { *To be inserted by the CTCN.*}

III. Past and on-going activities by the Technology Mechanism relevant for the implementation of Paris Agreement

A. Undertaken by TEC

12. The past and on-going work of the TEC that are relevant for the implementation of the Paris Agreement is explained in this section, grouped in accordance with thematic areas that have been identified by the TEC. Detailed information about each work can be found in TT:CLEAR.⁶

Adaptation

13. All the work under this thematic area may be relevant or contribute to the implementation of Article 7 of the Paris Agreement.

Technologies for adaptation, in collaboration with the Adaptation Committee (2014)

⁴ https://goo.gl/C2BSVN.

⁵ All reports are available in: http://unfccc.int/ttclear/tec/documents.html

⁶ http://unfccc.int/ttclear/tec.

14. The TEC has promoted the development and transfer of technologies for adaptation, in collaboration with the AC, by holding a workshop, publishing two TEC Briefs on technologies for adaptation in the agriculture sector and the water sector, and developing key messages for COP 20.

South-South cooperation and triangular cooperation on technologies for adaptation (2015-)

15. The TEC highlighted the potential and promoted South-South cooperation and triangular cooperation on technologies for adaptation by holding a thematic dialogue on enablers and barriers to South-South cooperation, exploring the collaboration with the United Nations Office for South-South Cooperation, delivering the key messages for COP 22 and publishing a TEC Brief on South-South Cooperation and triangular cooperation on technologies for adaptation in the water and agriculture sectors. Currently the TEC is developing a compilation of good practices on information sharing and practical learning on adaptation technologies, aimed to assist countries in implementing their NAPs and adaptation components of their NDCs. + place holder for further information to be added resulting from the deliberations at TEC15. This work is also relevant for the implementation of Article 10, paragraphs 2 and 5, of the Paris Agreement.

Engagement and contribution to the work of the Adaptation Committee in the preparation of the technical expert meetings on adaptation (2016-)

16. The TEC has been engaging and contributing to the work of the AC in preparing technical expert meetings (TEMs) on adaptation through the participation of a TEC member in the AC technical examination process on adaptation Working Group and the provision of relevant inputs. + place holder for further information to be added resulting from the deliberations at TEC15

Climate technology finance

17. All the work under this thematic area may be relevant or contribute to the implementation of Article 9 and Article 10, paragraph 6, of the Paris Agreement.

Evaluation of the Poznan strategic programme on technology transfer (2014-)

18. In response to the invitation⁷ from SBI 41 to evaluate the Poznan strategic programme on technology transfer (PSP) with the aim of enhancing the effectiveness of the Technology Mechanism, the TEC undertook the evaluation and submitted a final report on the evaluation of the PSP to COP 21. In response to the invitation⁸ from SBI 43 to update the evaluation report, the TEC initiated its work and agreed to complete its updated evaluation report in 2018. This work is also relevant for Article 10, paragraph 3, of the Paris Agreement.

Challenges of, best practices in and lessons learned from climate technology financing (2014-2015)

19. The TEC has made an analysis of issues surrounding climate technology financing, including challenges and opportunities, good practices and lessons learned from financing climate technologies, and opportunities for enhancing the implementation of TNAs, by holding an in-session thematic dialogue on climate technology financing. The findings of the analysis were delivered to Parties, policy makers and other stakeholders through the TEC Brief and key messages to COP 21 on climate technology financing.

Linkages between the Technology Mechanism and the Financial Mechanism (2014-2017)

20. The TEC has elaborated and enhanced the linkages between the Technology Mechanism and the Financial Mechanism of the Convention, including by delivering recommendations for COP 20, initiating consultations with the CTCN and the operating entities of the Financial Mechanism, and holding an in-session workshop at SB 44. This work is also relevant for the implementation of Article 10, paragraph 5, of the Paris Agreement.

Collaboration with the Standing Committee on Finance (2014-)

21. The TEC has been collaborating with the SCF by providing inputs on draft guidance for the operating entities of the Financial Mechanism, inputs to in-session workshops on long-term climate finance, and inputs into the review of the Financial Mechanism.

⁷ FCCC/SBI/2014/8, paragraph 142.

⁸ FCCC/SBI/2015/22, paragraph 79.

Collaboration with the Green Climate Fund (2016-)

22. The TEC has been collaborating with the GCF through the participation of the Chair of the TEC in the GCF Board meetings and the annual meeting of the GCF with the UNFCCC Thematic Bodies. + place holder for further information to be added resulting from the deliberations at TEC15

Emerging and cross-cutting issues

Engagement with the Executive Committee of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts (2016-)

23. The TEC has been engaging with the Executive Committee to exchange views and explore areas of common interest relevant to the work of both bodies, and provided the recommendations for the collaboration of both bodies. This work may be relevant for the implementation of Articles 8 and 10 of the Paris Agreement.

Development and enhancement of endogenous capacities and technologies (2017-)

24. In response to decision 1/CP.21, paragraph 66(b), the TEC agreed to ensure that this matter is taken into consideration in all areas of work. The current work in this area includes reviewing concept and scope of endogenous capacity and technologies, examples, and requirements in various processes under the Convention. + place holder for further information to be added resulting from the deliberations at TEC15. This work is highly relevant for the implementation of Articles 7, 8, 10 and 11 of the Paris Agreement.

Enabling environments and barriers

25. All the work under this thematic area are related to decision 1/CP.21, paragraph 67(d), and may be relevant or contribute to the implementation of Article 10, paragraph 4, of the Paris Agreement.

<u>Various issues relating to enabling environments for and barriers to technology development and transfer (2012-2013)</u>

26. The TEC discussed and analysed various issues relating to enabling environments and barriers based upon the information provided at the thematic dialogue organized in conjunction with its 3rd and 4th meetings and submissions from observer organizations, and delivered key messages to COP 18.

Policies and strategies to improve enabling environments and address barriers (2017-)

27. The TEC has continued considering issues related to enabling environments and barriers, by identifying policies and strategies to improve enabling environments and to address barriers. + place holder for further information to be added resulting from the deliberations at TEC15.

Innovation and research, development and demonstration

28. The TEC worked closely with the Advisory Board of the CTCN in implementing its activities on research, development and demonstration (RD&D). All the work under this thematic area is related to decision 1/CP.21, paragraph 66(a) and may be relevant or contribute to the implementation of Article 10, paragraph 5, of the Paris Agreement.

Research, development and demonstration of climate technologies (2013)

29. The TEC held a thematic dialogue which highlighted issues related to the RD&D of climate technologies and identified challenges and opportunities, good practices and lessons learned from RD&D model. The findings were delivered through key messages to COP 19.

National systems of innovation (2014-2015)

30. The TEC has promoted enhanced understanding among Parties and stakeholders on how national systems of innovation (NSIs) could play an important role in addressing barriers and serving as enabling environments to technology development and transfer, by organising a workshop on strengthening NSIs, delivering a TEC Brief and key messages to COP 21. This work may also be relevant to decision 1/CP.21, paragraph 67(d).

Assessment of the global technology research, development and demonstration financing needs (2016-2017)

31. The TEC assessed the global climate technology RD&D financing needs, including options for stimulating private sector investment in RD&D and deploying climate technologies. Based on this assessment, the TEC published a working paper on enhancing climate technology RD&D financing.

Analysis of how innovation can support implementation of the technology elements of nationally determined contributions and Paris Agreement mid-century strategies (2017)

32. The TEC analysed how technological innovation can support implementation of nationally determined contributions (NDCs) and the Paris Agreement mid-century strategies and hold a special event on this theme. + place holder for further information to be added resulting from the deliberations at TEC15. This work contributes to the implementation of Article 3 and Article 4, paragraph 19, of the Paris Agreement.

Mitigation

33. All the work under this thematic area may be relevant or contribute to the implementation of Article 4 of the Paris Agreement.

Engagement in the technical examination process on mitigation (2014-)

34. The TEC has been engaged in the technical examination process (TEP) on mitigation and contributed to Parties' work on enhanced action prior to 2020, including by sharing relevant work in various TEMs on mitigation, analysing mitigation policy options with high potential, suggesting future topics of TEMs, and hosting a thematic session on innovative policy and technology solutions for sustainable urban development during TEM on mitigation. + place holder for further information to be added resulting from the deliberations at TEC15

Distributed renewable electricity generation (2015)

35. The TEC has worked on distributed renewable electricity generation and provided policy recommendations on options, mechanisms and measures to enhance the technology deployment for this area, by holding a thematic dialogue, delivering a TEC Brief on technology deployment in distributed renewable electricity generation and key messages to COP 21 as well as presenting its findings at the TEM on renewable energy.

Industrial energy efficiency and material substitution in carbon-intensive sectors (2017)

36. The TEC has worked on the issue of industrial energy efficiency and material substitution in carbon-intensive sectors, highlighting the high potential for emission reductions from these sectors, by holding a thematic dialogue, + place holder for further information to be added resulting from the deliberations at TEC15

Engagement with High-Level Champions on Climate Action (2016-)

37. The TEC has been engaging with the High-Level Champions on Climate Action, by providing inputs on potential collaboration that are mutually beneficial to work of the TEC and Marrakesh Partnership for Global Climate Action.

Technology needs assessment

38. All the work under this thematic area are related to decision 1/CP.21, paragraph 67(a) and (b) and may be relevant or contribute to the implementation of Article 10, paragraph 4, of the Paris Agreement.

Enhancing the implementation of the results of technology needs assessments (2014-)

39. The TEC has provided analyses of how the implementation of the results of TNAs can be accelerated, by conducting a synthesis of TNAs, technology action plans (TAPs), project ideas and progress in the implementation of the results of TNAs, developing a paper on good practices on TNAs, and publishing guidance for preparing a TAP in close collaboration with the UNEP DTU Partnership and the CTCN. These activities are important inputs to Parties in implementing their NDCs. The TEC is also preparing a methodology on monitoring (tracking) of TAP implementation.

This may also feed into the global stocktake in Article 14 of the Paris Agreement. + place holder for further information to be added resulting from the deliberations at TEC15.

Linkages between technology needs assessment and nationally determined contribution (2016-)

40. The TEC is in the process of analysing the linkages between the TNA process and NDC process, with a view to identifying opportunities for, inter alia, minimizing duplication and leveraging the TNA/TAP process to enhance NDC implementation. + place holder for further information to be added resulting from the deliberations at TEC15 This work can also contribute to the implementation of Article 3 of the Paris Agreement.

Alignment of technology needs assessments and process to formulate and implement national adaptation plans (2016-)

41. The TEC has been considering, in collaboration with the CTCN, AC and LEG, how Parties could be helped to align their TNAs with the process to formulate and implement national adaptation plans (NAPs). + place holder for further information to be added resulting from the deliberations at TEC15. This work can also contribute to the implementation of Article 7 of the Paris Agreement.

Overview of new technology needs assessment and technology action plan reports of the Phase II technology needs assessment project (2017-)

42. The TEC is in the process of providing an overview of new TNA and TAP reports of the Phase II TNA project.

Others

Technology road map as facilitative tools for action on mitigation and adaptation (2012-2013)

43. The TEC held an expert meeting and developed a TEC Brief on using road mapping to facilitate the planning and implementation of technologies for mitigation and adaptation, to promote the use of technology road map. This work can contribute to the implementation of Articles 4 and 7 of the Paris Agreement.

TEC activities in relation to key themes of the technology framework and technology cycle

44. The relevance of TEC activities to the five key themes of the technology framework and to the technology cycle are mapped and presented in Table 1 below.

Table 1

TEC past and on-going activities relevant for the implementation of Paris Agreement mapped along technology cycle and key themes of

technology framework

	TEC past and on-going activities	Relevance to the initial key themes					Relevance to the technology cycle					
Thematic area of the TEC		Innovation	Enabling environment and capacity- building	Implementation	Support	Collaboration and stakeholder engagement	Research and development	Demonstration	Deployment	Diffusion	Transfer	
Adaptation	Technologies for adaptation, in collaboration with the Adaptation Committee (2014)			✓		✓			✓	✓	✓	
	South-South cooperation and triangular cooperation on technologies for adaptation (2015-)			✓		✓	✓	✓	✓	✓	✓	
	Engagement and contribution to the work of the Adaptation Committee in the preparation of the technical expert meetings on adaptation (2016-)			✓		√			✓	✓	✓	
Climate technology finance	Evaluation of the Poznan strategic programme on technology transfer (2014-)			✓	✓	✓	✓	✓	✓	✓	✓	
	Challenges of, best practices in and lessons learned from climate technology financing (2014-2015)				✓	✓	✓	✓	✓	✓	✓	
	Linkages between the Technology Mechanism and the Financial Mechanism (2014-2017)				✓	✓	✓	✓	✓	✓	✓	
	Collaboration with the Standing Committee on Finance (2014-)				✓	✓	✓	✓	✓	✓	✓	
	Collaboration with the Green Climate Fund (2016-)	✓			✓	✓	✓	✓	✓	✓	✓	
Emerging and cross-cutting issues	Engagement with the Executive Committee of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts (2016-)					✓			√	✓	√	
	Development and enhancement of endogenous capacities and technologies (2017-)		✓			✓	✓	✓	✓	✓	✓	
Enabling environments and barriers	Various issues relating to enabling environments for and barriers to technology development and transfer (2012-2013)		✓			✓	✓	✓	✓	✓	✓	
	Policies and strategies to improve enabling environments and address barriers (2017-)	√	√	✓	√	√	✓	✓	✓	✓	✓	

Thematic area of the TEC	TEC past and on-going activities	Relevan	ce to the in	nitial key the	Relevance to the technology cycle						
		Innovation	Enabling environment and capacity- building	Implementation	Support	Collaboration and stakeholder engagement	Research and development	Demonstration	Deployment	Diffusion	Transfer
Innovation and research, development and demonstration	Research, development and demonstration of climate technologies (2013)	√	✓			✓	√	√			
	National systems of innovation (2014-2015)	✓	✓			✓	✓	✓	✓	✓	✓
	Assessment of the global technology research, development and demonstration financing needs (2016-2017)	✓	✓		✓	✓	✓	✓	✓		
	Analysis of how innovation can support implementation of the technology elements of nationally determined contributions and Paris Agreement mid-century strategies (2016-2017)	✓	✓	✓		✓	✓	✓	✓	✓	✓
	Engagement in the technical examination process on mitigation (2014-)			✓		✓			✓	✓	√
	Distributed renewable electricity generation (2015)		✓	✓		✓			✓		
Mitigation	Industrial energy efficiency and material substitution in carbon-intensive sectors (2017-)		✓	✓		✓			✓	✓	✓
	Engagement with High-Level Champions and provide inputs on potential collaboration (2017-)					✓			✓	✓	✓
Technology needs assessment	Enhancing the implementation of the results of technology needs assessments (2014-)		✓	✓	✓	✓			✓	✓	✓
	Linkages between the technology needs assessment and the nationally determined contribution (2016-)			✓	✓	✓			✓	✓	✓
	Alignment of technology needs assessments and the process to formulate and implement national adaptation plans (2016-)			✓	✓	✓			✓	√	✓
	Overview of new technology needs assessment and technology action plan reports of the Phase II technology needs assessment project (2017-)		✓	√	✓	✓	√	√	✓	√	✓
Others	Technology road map as facilitative tools for action on mitigation and adaptation (2012-2013)	✓	√	✓		✓	✓	✓	✓	✓	✓

B. Undertaken by the Climate Technology Centre and Network

45. To be inserted by the CTCN.

C. Undertaken collaboratively by the TEC and CTCN

- 46. In the spirit of enhancing coherence and synergy in the work of the Technology Mechanism, the TEC and the CTCN have closely worked together in various ways since the full operationalization of the two bodies in 2013 in responding to tasks mandated to them by Parties.
- 47. In addition to preparing the joint annual report and updated the procedures for preparing the joint chapter, the TEC and the CTCN have been collaborating closely on a number of activities and maintaining regular communication, including the participation of the Chair and Vice-Chair of the Advisory Board of the CTCN to the meetings of the TEC, which complements the membership of the Chair and Vice-Chair of the TEC in the Advisory Board of the CTCN. The TEC and the CTCN have regularly co-organized side events during SB sessions and COPs on various thematic areas.
- 48. The two bodies initiated collaboration on technology needs assessments (TNAs) with the organization of an in-session workshop on TNA during the 7th meeting of TEC and continued to collaborate in this are with the aim of facilitating the preparation and implementation of technology action plans and exploring options for the alignment of TNA process with the process to formulate and implement national climate action plans.
- 49. The TEC and the CTCN worked together to strengthen the linkages between the Technology Mechanism and the Financial Mechanism, including through consultation with the operating entities of the Financial Mechanism and an in-session workshop at SB44 in 2016.
- 50. In the context of enhancing pre-2020 action, both TEC and the CTCN engaged in and provided inputs to the technical examination processes on mitigation and adaptation to facilitate the implementation of policies, practices and actions.
- 51. In addition, the TEC and the CTCN explored opportunities to promote South-South cooperation and triangular cooperation on technologies for adaptation, in collaboration with relevant stakeholders.
- 52. In supporting the implementation of the Paris Agreement, the TEC and the CTCN collaborated in the area of climate technology innovation, research, development and demonstration, including through the organization of events on innovation in May 2017 and the participation of the Chair and Vice-Chair of the CTCN Advisory Board in the TEC task force on innovation and research, development and demonstration.
- 53. The TEC and the CTCN conducted joint communication and outreach activities, including through the work of the knowledge management system of the CTCN, TT:CLEAR and social media.

IV. Additional activities by the Technology Mechanism to implement the Paris Agreement

A. Additional activities by the TEC to implement the Paris Agreement

- 54. Regarding additional activities to implement the Paris Agreement, at the onset the TEC is of the view that:
- a) Its mandates are quite flexible and it has showed both flexibility and speed in responding to request and guidance from Parties. This practice should be continued going forward. Parties may not need to amend its mandates to fit with the implementation of the Paris Agreement. The TEC can respond to future guidance from the new framework without changing its mandates;
- Its future work needs to be aligned with the Paris Agreement and the new technology framework, guided by transformational changes as envisioned in Paris agreement and the principles of technology framework;

- In this context, additional activities may include enhancing the policy functions of the TEC and strengthening the implementation of current activities to contribute to achieving the goals of the Paris Agreement;
- d) The use of already existing tools such as TEC Briefs, thematic dialogues, special events, TEC recommendations, etc. should continue and be enhanced;
- e) Climate technologies will play important role in the implementation of NDCs of all countries to realize the transformational changes envisioned in the Paris Agreement. In this regard, the future work of the TEC, in addition to focus on the technologies for the developing countries will also need to consider technology changes in developed countries to tap potential through better use of available technologies to further reduce emissions in these countries.
- 55. Regarding specific activities, the TEC views that the following activities could be undertaken, subject to availability of resources, to support the implementation of the Paris Agreement:

Innovation

- a) Collect and provide information on national & international RD&D partnerships/initiatives;
 - b) Further investigate the role of RD&D for technology innovation;
- c) Focus on market uptake of promising climate technologies, tap the potential of climate technologies, successful business models;

Implementation

- a) Continue its work to enhance implementation of TNA results, through further facilitating the implementation of the guidance on Preparing a technology action plan;
- b) Continue its work to facilitate the alignment and enhance the linkages of TNAs, TAPs and also NAPs with NDCs to bridge the gap between planning of climate technology actions and implementation. This would also require the taking stock of, and disseminate adaptation technologies for NAPs and NDC;

Enabling environments and capacity-building

- a) Enhance coordination among existing capacity-building organizations, institutions, and initiatives;
- b) Enhance the affordability and applicability of climate technology for developing countries, including information on available technologies, training on how to utilize and apply these technologies and how they can access them at a minimum or no cost;
- c) Increase access to finances and capacity building of developing countries and LDCs to technologies for TNA/TAPs, NDCs and NAPs implementation.
- d) Formulate and analyse comprehensive information on national and international capacity-building activities on climate technology development and transfer, which are of relevant to Article 11 of the Paris Agreement capacity building;

Collaboration and stakeholder engagement

- a) Facilitate voluntary assessment and information-sharing of technologies that are ready for transfer by stakeholders, including Parties;
- b) Facilitate provision of tailor-made information on climate technologies (e.g., definition, criteria, types, and current development status of climate technologies);
- Improve coordination among relevant bodies under the Convention to create synergies and avoid duplication of work;

<u>Support</u>

a) Facilitate enhanced financial and technical support for the implementation of TNA results;

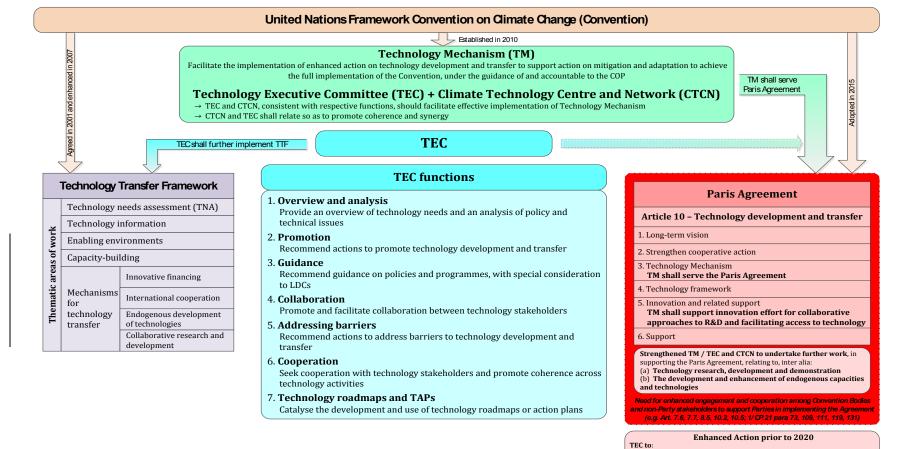
- b) Provide guidance on how developing countries can access climate funds for technology development and transfer;
- Facilitate the development and update of systematic reporting methodology on support for technology development and transfer, which are of relevant to Article 13 of the Paris Agreement on transparency;

Global stocktake

- a) Contribute to the assessment indicators for TDT based on long term vision, NDC and NAPs implementation;
- 56. + place holder for further information to be added resulting from the deliberations at TEC15
- B. Additional activities by the CTCN to implement the Paris Agreement
 - 57. To be inserted by the CTCN
- C. Additional activities that the TEC and CTCN could undertake jointly to implement the Paris Agreement
 - 58. place holder for further information to be added resulting from the deliberations at CTCN-AB 10 and TEC15

Attachment 1

TEC overall mandate



Priority areas that could be considered under the Convention may include

cooperative RD&D programmes

(b) Deployment and diffusion of environmentally sound technologies and knowhow in developing country Parties

(a) Development and enhancement of the endogenous capacities and technologies of developing country Parties, including

- (c) Increased public and private investment in technology development, deployment, diffusion and transfe
- (d) Deployment of soft and hard technologies for the implementation of adaptation and mitigation actions

Enhance its efforts to facilitate and support Parties in scaling up the implementation of policies, practices and actions identified in the technical

Engage in, be consulted in organization of technical expert meetings (TEMs)

examination process on mitigation (M-TEP)

- (e) Improved climate change observation systems and related information management (f) Strengthening of national systems of innovation and technology innovation centres
- (g) Development and implementation of national technology plans for mitigation and adaptation