

**DRAFT TEXT**

**on**

**SBSTA 49 agenda item 5(a)**

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

**Version1 of 4 December 2018 17:30**

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**Elements of a draft CMA decision on the technology framework under Article 10, paragraph 4, of the Paris Agreement**

1. *{placeholder for the adoption of the technology framework as contained in the annex};*
2. *Decides* that the Technology Executive Committee and the Climate Technology Centre and Network, consistent with their respective functions and mandates, shall implement the technology framework, under the guidance of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement;
3. *Requests* the Technology Executive Committee and the Climate Technology Centre and Network to incorporate the guidance contained in the technology framework into their workplans and programme of work, respectively, in accordance with their respective existing modalities of work;
4. *Also requests* the Technology Executive Committee and the Climate Technology Centre and Network to include information on how they have responded to the request referred to in paragraph 3 above in their joint annual report to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement<sup>1</sup> for 2019 or XXX;
5. *Further requests* the Technology Executive Committee and the Climate Technology Centre and Network to report on the progress of their work in implementing the technology framework in their joint annual reports to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement;
6. *{placeholder for guidance to other UNFCCC bodies in relation to the operationalisation of the technology framework};*
7. *{placeholder for linkages to other process/mechanism, e.g. periodic assessment of the Technology Mechanism}.*

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<sup>1</sup> In accordance with decision 1/CP.21, paragraph 68.

## Annex

### Updated draft of the technology framework under Article 10, paragraph 4, of the Paris Agreement

The approach used to reflect Parties' deliberations in the updated draft is as follows:

- o Brackets are used to indicate alternative words or Parties' diverging views on issues;
- o Option is used to indicate alternative text.

All subheadings are currently maintained to assist in navigating the content of the document.

All paragraphs containing placeholders for the role of the Technology Mechanism and other stakeholders will be discussed in the context of the draft decision.

*Option 1:*

#### **I. Purpose**

1. The purpose of the technology framework under the Paris Agreement is 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 its Article 10, paragraph 1. The long-term vision for technology development and transfer shared by Parties relates to the importance of fully realizing technology development and transfer in order to improve resilience to climate change and reduce greenhouse gas emissions.
2. The technology framework can play a strategic role in improving the effectiveness and efficiency of the work of the Technology Mechanism, which consists of the Technology Executive Committee (TEC) and the Climate Technology Centre and Network (CTCN), by addressing the transformational changes envisioned in the Paris Agreement and the long-term vision for technology development and transfer.

#### **II. Principles**

3. The principles of the technology framework, which are coherence, inclusiveness, results-oriented approach, transformational approach and transparency, should guide the Technology Mechanism in implementing the Paris Agreement. Applying them requires [the actions and technology-related] activities [undertaken by the Technology Mechanism] under the framework, respectively:
  - (a) To align with the long-term vision for technology development and transfer and other provisions of the Paris Agreement, national plans and strategies under the Convention and actions undertaken by relevant institutions in the international climate regime and beyond;
  - (b) To be designed and implemented in a manner that [facilitates the active participation of all relevant stakeholders and] takes into account sustainable development, gender, global action, nationally determined needs of countries, the special circumstances of the least developed countries [and small island developing States], and the enhancement of indigenous capacities and endogenous technologies in developing countries;
  - (c) To be results-oriented in terms of output, outcome and impact;
  - (d) To [deliver] [support the delivery of] transformational changes towards a climate-resilient and low greenhouse gas emission society as envisioned in the Paris Agreement;

- (e) To be designed and implemented in a manner that enhances the transparency of the results, costs and process, such as through planning, resource management and reporting on activities and support.

### III. Key themes

4. The following key themes for the technology framework represent focused areas of action to be undertaken under the framework:

- (a) Innovation;
- (b) Implementation;
- (c) Enabling environment and capacity-building;
- (d) Collaboration and stakeholder engagement;
- (e) Support.

*Option 2: Paragraphs 1–4 above are to be reformulated as preambular paragraphs.*

5. Specific actions and the role of the Technology Mechanism in relation to each key theme have been identified and elaborated below.

#### A. Innovation

##### [Context]

6. As stipulated in Article 10, paragraph 5, of the Paris Agreement, accelerating, encouraging and enabling innovation is critical for an effective, long-term global response to climate change and promoting economic growth and sustainable development. To achieve the purpose and 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.

7. [Actions][Activities] under this key theme should therefore accelerate and scale up innovation at different stages of the technology cycle, addressing both adaptation and mitigation in a balanced manner to help countries to build resilience and reduce their emissions, and be undertaken in a manner that enhances the effective participation of developing country Parties, fosters sustainable development and ensures gender responsiveness.

8. Fostering innovation could be done through new collaborative approaches to climate technology research, development and demonstration (RD&D); the creation and promotion of relevant enabling policy and finance to incentivize and nurture a supportive environment for innovation; and the productive engagement of the private sector and closer collaboration between the public and private sector.

##### [Actions]

#### 1. [Promotion of enabling policy and finance for innovation]

9. [Actions][Activities] in this area of work include, but not limited to:

- (a) Supporting countries in improving their policy environments, strategies, legal and regulatory frameworks and institutional arrangements and in strengthening their national systems of innovation [to incentivize innovation];

- (b) Providing information and facilitating the sharing of information on international technology RD&D partnerships and initiatives, good practices and lessons learned from countries' climate technology RD&D policies and activities;

- (c) Promoting the development, deployment and dissemination of existing innovative technologies and accelerating the scale-up and diffusion of promising technologies;

(d) Supporting countries in the development of long-term technological transition pathways towards the widespread uptake of climate technologies, in the context of climate resilience and low greenhouse gas emission development.

10. [The TEC leads the actions referred to in paragraph 9(b) above. {placeholder for 9(a), 9(c), 9(d) for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}]

## **2. [Collaborative research, development and demonstration]**

11. [Actions][Activities] in this area of work include, but not limited to:

(a) Promoting collaboration with international technology RD&D partnerships and initiatives to stimulate climate technology RD&D;

(b) [Providing technical support to countries for initiating joint climate technology RD&D activities;]

(c) Identifying ways to increase the effective participation of developing country Parties in collaborative RD&D.

12. [The TEC leads the actions referred to in paragraph 11(a) above, and the CTCN leads the actions referred to in paragraph 11(b) and (c) above. {placeholder for 11(d) for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}]

## **3. [Engagement of private sector and public-private partnerships]**

13. [Actions][Activities] in this area of work include, but not limited to:

(a) Promoting the engagement of the private sector in the development of new and innovative climate technologies, including through:

(i) Raising awareness of future market opportunities in [innovation-led transformation] [climate technology innovation];

(ii) Identifying ways to incentivize their participation;

(b) Utilizing the CTCN network, including the national designated entities (NDEs), to facilitate the engagement of the private sector and [academic and] research institutions and to strengthen partnerships between the public and private sector.

14. [The CTCN leads the actions referred to in paragraph 13(b) above. {placeholder for 13(a) for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}]

## **B. Implementation**

### ***[Context]***

15. The Paris Agreement highlights the importance of technology for the implementation of mitigation and adaptation actions under the Agreement. The Technology Mechanism should facilitate and promote enhanced action on technology to help countries achieve the purpose and goals of the Paris Agreement, while at the same time recognizing the importance of rapidly accelerating the transformational changes towards climate resilience and low greenhouse gas emission development.

16. [Actions][Activities] under this key theme should therefore facilitate the implementation of collaborative technology development and transfer, build on the past and ongoing work of the Technology Mechanism and take into account [the specific needs and special circumstances of [developing] countries, particularly [developing countries] the least developed countries and small island developing States][country-driven strategies], and the role of North-South, South-South, triangular and regional collaboration in facilitating implementation. [The provision of information regarding actions under this key theme may be useful to the global stocktake referred to in Article 14 of the Paris Agreement.]

17. [Actions][Activities] under this key theme should also facilitate the implementation of the mitigation and adaptation actions identified using planning tools and processes such as nationally

determined contributions, long-term low greenhouse gas emission development strategies, technology needs assessments (TNAs), national adaptation plans, technology road maps and other relevant policies, as appropriate. [Further, countries need to be made aware of barriers that they may encounter during the implementation of their contributions and be supported in addressing those barriers.] In addition, the successful implementation of mitigation and adaptation actions would require [scalable,] safe, [economically,] socially and environmentally sound technologies, including endogenous technologies, and private sector engagement may help to accelerate this process.

**[Actions]**

**1. [Technology needs assessments]**

18. [Actions][Activities] in this area of work include, but not limited to:

(a) Facilitating the undertaking and updating of TNAs, as well as enhancing the implementation of their results, particularly technology action plans and project ideas, and capacity-building related to TNAs;

(b) Promoting the link or alignment of TNAs with nationally determined contributions and national adaptation plans[ and adaptation communications, as applicable,] in order to increase coherence between the implementation of these national plans with national strategies to achieve climate-resilient and low-emission development;

(c) [Reviewing the TNA guidelines and updating them as necessary with a view that the TNA will lead to plans and implementation which are aligned with the transformational changes envisioned in the Agreement].]

19. [{placeholder for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}].]

**2. [Assessment of technologies that are ready to transfer]**

20. [Actions][Activities] in this area of work include, but not limited to:

(a) Developing methodology to define technologies that are ready to transfer;

(b) Identifying technologies that are ready to transfer;

(c) Establishing an online platform to serve as the clearing house for transferable technologies;

(d) Developing a draft workplan to promote the transfer of technologies identified as ready to transfer.

**3. [Addressing barriers to implementation]**

21. [Actions][Activities] in this area of work include, but not limited to:

(a) Identifying and developing recommendations for addressing financial, technical and capacity barriers to the implementation of mitigation and adaptation actions, taking into consideration social appropriateness and cultural barriers to implementation that may be specific to certain countries;

22. [{placeholder for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}].]

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

**[Context]**

23. In the context of technology development and transfer, countries may face various challenges. Creating and enhancing enabling environments for the development and transfer of socially and environmentally sound technologies should consider the challenges faced by countries, and the different needs of the countries in overcoming such challenges.

24. Capacity-building for technology development and transfer is a cross-cutting and comprehensive issue. Although initiatives and activities on capacity-building for technology development and transfer are already being undertaken, further measures in this area are needed to develop, strengthen and enhance countries' capabilities to take effective climate action in the context of the Paris Agreement.

25. [Actions][Activities] under this key theme should therefore foster the creation and enhancement of an enabling environment, including policy and regulatory environment for technology development and transfer, and strengthen the capacity of countries to effectively address various challenges.

**[Actions]**

**1. [Enabling environment]**

26. [Actions][Activities] in this area of work include, but not limited to:

(a) Enhancing public awareness of the issues of technology development and transfer in relation to climate change;

(b) Facilitating information sharing and networking among relevant organizations and institutions to create synergies and to enable the exchange of best practices, experience and knowledge on technology development and transfer among relevant players;

(c) Supporting countries in developing or enhancing an investment-friendly environment, including national strategies and action plans, policy environment, legal and regulatory frameworks and institutional arrangements;

(d) [Option 1: Supporting countries in enabling access to climate technologies in the private sector including through identification of incentives for technology providers [and through public financial resources];

Option 2: Supporting countries in enabling the private sector access to climate technologies including through identification of incentives for technology providers and through public financial resources;]

(e) [Supporting countries in enhancing enabling environment to promote endogenous technologies for mitigation and adaptation actions;]

(f) [Developing guidance on how to improve the economic prospects of climate-resilient and low-emission technologies through market [and non-market] conditions, including regulatory and fiscal measures.]

27. [{placeholder for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}.]

**2. [Capacity-building]**

28. [Actions][Activities] in this area of work include, but not limited to:

(a) Formulating and analysing information on capacity-building activities at different stages of the technology cycle;

(b) Catalysing development and enhancement of endogenous capacities for climate-related technologies and harnessing indigenous knowledge;

(c) Enhancing collaboration with existing capacity-building organizations and institutions, including those under the Convention, to create synergies in a manner that enhances efficiency and avoids duplication of work;

(d) Enhancing the capacity of NDEs[, especially those in developing countries] [to fulfil their roles];

(e) [Developing and enhancing the capacities and tools to ensure that countries can plan, monitor and achieve technological transformation in accordance with the purpose and goals of the Paris Agreement.]

29. [The TEC leads the actions referred to in paragraph 28(a) above. The TEC and the CTCN jointly undertake the actions referred to in paragraph 28(c) above. {placeholder for paragraph 28(b), (d) and (e) for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}.]

## **D. Collaboration and stakeholder engagement**

### ***[Context]***

30. Collaboration with and engagement of stakeholders will enhance interaction between those involved in the development and transfer of climate technology [and help bridge knowledge and financial gaps between developed and developing countries and among developing countries]. In this context, stakeholders will provide important inputs to the work of the Technology Mechanism.

31. Therefore, the Technology Mechanism shall work in an open and inclusive, including gender-inclusive, manner whereby stakeholders are invited to participate and actively engage. Collaboration with and engagement of stakeholders should take place at different stages of the technology cycle.

32. Enhanced engagement of stakeholders [, in particular the private sector,] at the local, regional, national and global level will be beneficial for the Technology Mechanism. Further, activities for cooperation on technology development and transfer across relevant organizations, institutions and initiatives should be harmonized and synergized to avoid duplication and ensure consistency and coherence.

### ***[Actions]***

#### **1. [Engagement with key stakeholders]**

33. [Actions][Activities] in this area of work include, but not limited to:

(a) Enhancing engagement and collaboration with relevant stakeholders, including local communities and authorities, national planners, the private sector and civil society organizations in the planning and implementation of Technology Mechanism activities;

(b) Supporting NDEs to strengthen their links with relevant stakeholders.

34. [{placeholder for paragraph 33(a) for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}.]

#### **2. [Collaboration with other organizations, institutions and initiatives]**

35. [Actions][Activities] in this area of work include, but not limited to:

(a) Enhancing collaboration and synergy with relevant international organizations, institutions and initiatives, including academia and the scientific community, to leverage their specific expertise, experience, knowledge and information, particularly on future technological solutions and transformational technologies needed;

36. [The TEC and the CTCN jointly undertake the actions referred to in paragraph 35(a) above.]

## **E. Support**

### ***[Context]***

37. Article 10, paragraph 6, of the Paris Agreement provides that support, including financial support, shall be provided to developing country Parties for the implementation of that Article, including for strengthening cooperative action on technology development and transfer at different stages of the technology cycle, with a view to achieving a balance between support for mitigation and adaptation.

38. *Option 1:* The understanding of support under this key theme is broader than just financial support, as it may include all aspects of support to implement Article 10 of the Paris Agreement. The support should be new and additional, adequate and predictable in a transparent manner and

provided for all the key themes of the technology framework, taking into account national circumstances, the gender perspective and endogenous and indigenous aspects.

*Option 2:* Support under this key theme may include all aspects of support to implement Article 10 of the Paris Agreement, taking into account [the needs and priorities of Parties] [national circumstances, the gender perspective and endogenous and indigenous aspects].

39. [The provision and mobilization of various types of support corresponding to the different needs of countries, taking into account the specific needs and special circumstances of [countries, particularly] the least developed countries and small island developing States, [are crucial to implementing Article 10 of the Paris Agreement] [can enhance cooperative action on technology development and transfer].]

40. [Further, cooperative action on technology development and transfer can be [stimulated][enhanced] by systematic monitoring and evaluation of the support and provision of relevant information.] [In this context, the provision of information regarding actions under this key theme may be useful to inform other processes under the Paris Agreement, such as the transparency framework referred to in Article 13 and the global stocktake referred to in Article 14.]

### **[Actions]**

## **1. [Provision of support]**

41. [Actions][Activities] in this area of work include, but not limited to:

(a) *Option 1:* [Enhancing the] [Developing clear] linkages between the Technology Mechanism and the Financial Mechanism for enhanced financial support for technology development and transfer, including synergistic collaboration on developing planning tools for the elaboration of long-term technology strategies;

*Option 2:* {Placeholder for the outcome of the deliberation on the COP agenda item on linkages between the Technology Mechanism and the Financial Mechanism of the Convention}

(b) Identifying and promoting innovative finance and investment at different stages of the technology cycle;

(c) [Promoting means to support innovation in developing countries and to engage developing country Parties in innovation and collaborative RD&D;]

(d) *Option 1:* [Providing enhanced technical support and facilitating access to financial support] for developing and implementing the results of TNAs, including technology action plans, in a country-driven manner, and/or other planning exercises;

*Option 2:* [Providing enhanced technical support and facilitating access to financial support], particularly the implementation of the results of TNAs, under all key themes;

(e) [[Providing enhanced technical support and facilitating access to financial support] for enabling environments and capacity-building, including organizational and institutional support, to developing country Parties in a country-driven manner;]

(f) [Promoting means to support engagement and collaboration between developing country Parties, including NDEs of developing country Parties, and relevant stakeholders;]

(g) [Promoting means to support engagement of the private sector to promote private sector investment in technology development and transfer;]

(h) Enhancing the mobilization of [support, including] pro bono and in-kind support, from various sources for the support activities of the Technology Mechanism [in a systematic manner];

(i) [Provision of support to enable the Technology Mechanism to assess the impacts of its actions;]

42. [{placeholder for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}].]

## **2. [Monitoring and provision of the information on support]**

43. [[Actions][Activities] in this area of work include, but not limited to:



(a) [Development of systematic monitoring and evaluation methodology on support provided for technology development and transfer[, taking into account possible links with the periodic assessment of the Technology Mechanism in supporting the implementation of the Paris Agreement, with a view to achieving the purpose and goals of the Paris Agreement];]

(b) [Preparation of information on efforts related to support for technology development and transfer for developing country Parties for the global stocktake.]

44. [The TEC and the CTCN jointly undertake the actions referred to in paragraph 43(b) above[, ensuring they procure the necessary resources to perform the tasks in a manner commensurate with the ambition of the Paris Agreement or notify the COP if such resources are not obtained in a timely manner]. {placeholder for paragraph 43(a) for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}.]

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