

DRAFT TEXT

on

SBSTA 48.2 agenda item 5 Development and transfer of technologies: Technology framework under Article 10, paragraph 4, of the Paris Agreement

Version 2 of 9 September 13:00 hrs

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 Agreement¹ 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}.*

¹ 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

This updated draft captures Parties' deliberations on the draft of the technology framework during this session. It is a work in progress and does not represent consensus.

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

- *Brackets are used to indicate alternative words or Parties' diverging views on issues;*
- *Italics in curly brackets are used to indicate proposals related to new subsections or restructuring of subsections/paragraphs;*
- *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.

All paragraphs under the actions part for each key theme containing "enhancement of" or "enhanced" will be reviewed for the appropriate use of this wording at a later stage.

Parties noted that subsection Ibis of section III.A will be taken up during the discussion on the key theme of support and some elements may remain in section III.A.

{Paragraphs 1–4 were proposed to be reformulated as preambular paragraphs}

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 Article 10, paragraph 1, of the Paris Agreement.¹ The long-term vision on 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 to 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 on technology development and transfer.²

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.³ 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 on technology development and transfer and other provisions of the Paris Agreement, [the existing] national plans and strategies under

¹ FCCC/SBSTA/2016/4, paragraph 28.

² FCCC/SBSTA/2016/4, paragraph 28.

³ FCCC/SBSTA/2017/4, paragraph 31.

the UNFCCC and the actions undertaken by relevant institutions of 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 results, costs and the process, such as planning, resource management and reporting of activities and support.

III. Key themes

4. The key themes for the technology framework are focused areas of action to be undertaken within this framework. The initial key themes for the technology framework are:

(a) Innovation;

(b) Implementation;

(c) Enabling environment and capacity-building;

(d) Collaboration and stakeholder engagement;

(e) Support.

5. For each key theme, specific actions and the role of the Technology Mechanism 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 [goals][aims][objective] 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 [in collaborative research, development and demonstration], fosters sustainable development and ensures gender responsiveness.

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

[Actions]

1. [Collaborative research, development and demonstration]

9. [Actions][Activities] in this area of work could include:

(a) Provision of [comprehensive] information on the current and future activities of international technology RD&D partnerships and initiatives to inform and help link countries with these initiatives;

(b) Promotion of collaboration with international technology RD&D partnerships and initiatives to stimulate RD&D of climate technologies, [as well as sharing information in this regard];

Alternative text merging paragraph 9(a) and 9(b):

Promotion of collaboration with international technology RD&D partnerships and initiatives to stimulate RD&D of climate technologies, including through the provision of relevant information to help countries link with these initiatives;

(c) [Provision of technical support to countries to initiate joint RD&D activities on climate technologies;]

(d) Promotion of the development, deployment and dissemination of existing innovative technologies.

10. [The TEC leads the actions referred to in paragraph 9(a) above, and the CTCN leads the actions referred to in paragraph 9(b) and (c) above.]

[1bis. Increasing the effective participation of developing country Parties in collaborative research, development and demonstration]

10bis. Actions in this area of work could include:

(a) Enhancement of the linkage between the Financial Mechanism and the Technology Mechanism with regard to the support for implementation of collaborative RD&D in developing country Parties;

(b) Promotion of financial resources for innovation in developing country Parties;

(c) Development of innovative means and supports of engaging developing country Parties in innovation;

(d) Other possible ways to increase the effective participation of developing country Parties in collaborative RD&D.

10ter. {placeholder for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}

{Sub-section 2 below including paragraphs 11 and 12 was proposed to be moved to before sub-section 1 on Collaborative RD&D}

2. [Promotion of enabling policy and finance for innovation]

11. [Actions][Activities] in this area of work could include:

(a) Supporting countries in improving their policy environments, strategies, legal and regulatory frameworks and institutional arrangements, [for incentivizing innovation, including by promoting] and strengthening their national systems of innovation;

(b) [Sharing information, good practices and lessons learned from countries' climate technology RD&D policies and activities;

(c) Accelerating the scale-up and diffusion of promising technologies;

(d) Identifying and promoting innovative finance and investment [at all stages of the technology cycle];

(e) 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.

12. [The TEC leads the actions referred to in paragraph 11(b) above. {placeholder for 11(a), 11(c), 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 could include:

(a) Promotion of private sector engagement in the development of new climate technologies, including the identification of ways to incentivize their participation:

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

(ii) In the development of innovative climate technologies, including the identification of ways to incentivize their participation;

(b) Effective use of 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 [strengthen the transition] [promote enhanced action] to help countries][this by helping countries] to achieve the aim of the Paris Agreement, especially [by] recognizing the importance of rapidly accelerating the [transformational changes to] shift towards climate resilience and low greenhouse gas emission development.

16. [Actions][Activities] under this key theme should facilitate the implementation of collaborative technology development and transfer, building on the past and ongoing work of the Technology Mechanism and taking 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 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 these barriers.] In addition, the successful implementation of mitigation and adaptation actions would require [mature][scalable and market-ready][tested, safe and socially accepted] 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 could include:

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

(b) Provision of enhanced technical support and facilitation of financial support for the implementation of the results of TNAs;

(c) Promotion of linking or aligning TNAs with nationally determined contributions and national adaptation plans[and adaptation communications, as applicable,] to facilitate coherence between the implementation of these national plans and strategies to achieve climate-resilient and low-emission development;

(d) [Review of the TNA guidelines and [update if necessary to align them with the Paris Agreement][enhance them to align the planning and implementation of the transformational changes envisioned in the Agreement].]

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

{Sub-section 1bis below including paragraph 19bis was proposed to be merged into paragraph 18(d)}

1bis. Assessment of technologies that are ready to transfer

19bis. Actions in this area of work could include:

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

(b) Identification of technologies that are ready to transfer;

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

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

2. [Addressing barriers to implementation]

{Option 1: Sub-paragraphs 20(a) and 20(b) were proposed to be merged into paragraph 18(b)}

{Option 2: Sub-paragraphs 20(a) and 20(b) were proposed to be moved as sub-paragraphs in paragraph 28}

20. [Actions][Activities] in this area of work could include:

(a) Identification of and recommendations for addressing financial, technical and capacity barriers;

(b) Consideration of social appropriateness and cultural barriers to implementation that may be specific to certain countries.

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

{Sub-section 3 below including paragraphs 22 and 23 was proposed to be moved to section D}

3. [Private sector engagement] move to section collaboration and stakeholder engagement

22. [Actions][Activities] in this area of work could include:

(a) Enhancement of partnerships between the public and private sector;

(b) Promotion of private sector engagement, [particularly in developing countries].

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

C. Enabling environment and capacity-building

[Context]

24. [In the context of technology development and transfer, countries may face challenges in, for example, economic and financial aspects, market conditions, legal and regulatory frameworks, network structures, institutional and organizational capacity, and human resource capacities, as well as social, cultural and behavioural aspects. The special needs of developing country Parties in overcoming such challenges need to be considered and supported.]

26. [Creating] and enhancing an enabling environment should take into consideration various elements[, including what challenges need to be addressed, what should be undertaken and who should be enabled].

Alternative text merging paragraph 24 and 26:

Creating and enhancing enabling environments should consider various challenges in the development and transfer of socially and environmentally sound technologies faced by countries, and the different needs of the countries in overcoming such challenges.

{Paragraph 25 was proposed to be moved after paragraph 27. Original numbering is currently maintained and will be revised at later stage}

27. 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][activities] in this area [are needed] [can help] 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 foster the creation and enhancement of an enabling environment and strengthen the capacity of countries to effectively address such challenges.

[Actions]

1. [Enabling environment]

28. [Actions][Activities] in this area of work could include:

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

(b) Facilitation of 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) Promotion of an investment-friendly environment, including national strategies and action plans, policy environment, legal and regulatory frameworks and institutional arrangements;

(d) [*Option 1:* Enabling access to climate technologies in the private sector through incentives for technology providers [and through public financial resources];

Option 2: Enabling the private sector access to climate technologies through incentives for technology providers and through public financial resources;]

{Sub-paragraph 28(e) was proposed to be moved in the context part above.}

(e) [Strengthening of the enabling policy and regulatory environment [and cooperative actions] for technology development and transfer[to climate-resilient and low-emission development];]

(f) [Promotion of endogenous technologies to help mitigation and adaptation actions;]

(g) [Development of 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.]

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

2. [Capacity-building]

30. [Actions][Activities] in this area of work could include:

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

(b) Enhanced collaboration with existing capacity-building organizations and institutions playing an intermediary role to form a linkage between recipients and suppliers of capacity-building support;

(c) Development and enhancement of endogenous capacities for climate-related technologies and harnessing indigenous knowledge;

(d) [Coordination and collaboration with [the Paris Committee on Capacity-building] [existing capacity-building organizations and institutions] [to create synergies] [in a manner that enhances efficiency] and avoid duplication of work;]

Alternative text merging (b) and (d)

Enhanced 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;

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

(f) [Development and enhancement of the capacities and tools to ensure that countries can plan, monitor and achieve technological transformation in accordance with the long-term objectives of the Paris Agreement.]

31. [The TEC leads the actions referred to in paragraph 30(a) above, and the CTCN leads the actions referred to in paragraph 30(b) above. The TEC and the CTCN jointly undertake the actions referred to in paragraph 30(d) above. {placeholder for paragraph 30(c), 30(e) for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}.]

D. Collaboration and stakeholder engagement

[Context]

32. 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.

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

34. 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.

{Paragraphs which contain actions/activities related to support were proposed to be moved to section E}

[Actions]

1. [Engagement with key stakeholders]

35. [Actions][Activities] in this area of work could include:

(a) Enhanced engagement with local communities and authorities, national planners, the private sector and civil society organizations;

(b) *Option 1:* Enhanced Support for NDEs, in particular NDEs of developing countries, to establish links with relevant stakeholders;

Option 2: Encouragement of NDEs to establish links with relevant stakeholders;

(c) [Enhanced][Promotion of][Encouraged][Increased] involvement and participation of relevant stakeholders in the planning and implementation of Technology Mechanism activities to leverage their specific expertise, knowledge and experience;

(d) *Option 1:* Enhanced provision or mobilization of support by developed countries [and others] to ensure collaboration and engagement of stakeholders;

Option 2: Enhanced collaboration with and engagement of stakeholders should be supported in accordance with Article 10, paragraphs 4, 5 and 6, of the Paris Agreement.

36. [The CTCN leads the actions referred to in paragraph 35(b) above. The TEC and the CTCN jointly undertake the actions referred to in paragraph 35(c) above. {placeholder for paragraph 35(a) for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}.]

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

37. [Actions][Activities] in this area of work could include:

(a) [Enhanced] collaboration and synergy with [other][relevant] international organizations, institutions and initiatives, including academia and the scientific community, to leverage relevant knowledge and information, particularly on future technological solutions and transformational technologies needed;

(b) [Enhanced] collaboration with the private sector and strengthened partnerships between the public and private sector.

38. [The TEC and the CTCN jointly undertake the actions referred to in paragraph 37(a) above. {placeholder for paragraph 37(b) for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}.]

E. Support

{Some paragraphs in this section may need to be adjusted taking into consideration that this framework provides guidance for the Technology Mechanism.}

[Context]

39. 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.

40. *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][the technology framework], taking into account [the needs and priorities of Parties][national circumstances, the gender perspective and endogenous and indigenous aspects].

41. [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].]

42. [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]

43. [Actions][Activities] in this area of work could include:

(a) *Option 1:* [Enhancement of the] [Development of 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) [Development and dissemination of innovative means of engaging the private sector in technology development and transfer to promote private sector investment;]

(c) 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];

(d) *Option 1:* [Provision of enhanced] [Enhancing the mobilization of] financial and technical support for developing and implementing the results of TNAs, including technology action plans, in a country-driven manner, and/or other planning exercises compatible with the achievement of the transformative vision and ambitious targets of the Paris Agreement;

Option 2: Provision of enhanced financial and technical support activities, particularly the implementation of the results of TNAs, under all key themes;

(e) [Provision of capacity-building support and organizational and institutional support;]

(f) [Development of innovative means of and support for engaging developing country Parties in innovation;]

(g) [Provision of enhanced financial and technical support for enabling environments and capacity-building to developing country Parties in a country-driven manner;]

(h) [Development of innovative means of and support for engaging developing country Parties in collaboration;]

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

44. [{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]

45. [[Actions][Activities] in this area of work could include:

(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 targets and transformational vision 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.]

46. [The TEC and the CTCN jointly undertake the actions referred to in paragraph 45(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 45(a) for the role of the Technology Mechanism and other stakeholders, as appropriate and where relevant}.]
