



Technology Executive Committee

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Twenty-third meeting

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Draft concept note on scope and sources of inputs for the global stocktake on matters related to climate technology development and transfer

Concept note

I. Background

1. As per activity 1 under the thematic area of Inputs to UNFCCC process of its workplan for 2019–2022, the TEC is to consider scope and sources of inputs of the TEC for the Global stocktake (GST) on matters related to climate technology development and transfer, taking into consideration guidance by the Chairs of the subsidiary bodies.
2. At TEC 21, the TEC requested its Chair and Vice-Chair, with the support of the secretariat, to undertake intersessional work to elaborate the scope and sources of input for TEC reports to the GST process and present it for consideration at TEC 22.
3. At TEC 22, the TEC agreed to take into account the approaches of other constituted bodies when preparing its own input for the technical assessment phase of the GST, including to consider the guiding questions to be issued by the Chairs of the subsidiary bodies at TEC 23.

II. Scope of the note

4. The annex to this note contains the concept note referred to in paragraph 1 above.

III. Expected action by the Technology Executive Committee

5. The TEC will be invited to consider the concept note and provide guidance on this matter.

Annex

Draft concept note on scope and sources of inputs for the global stocktake on matters related to climate technology development and transfer

I. Background

1. Article 14, paragraph 1, of the Paris Agreement states that the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) shall periodically take stock of the implementation of the Paris Agreement to assess the collective progress towards achieving the purpose of the Agreement and its long-term goals (referred to as the “global stocktake”), and shall do so in a comprehensive and facilitative manner, considering mitigation, adaptation and the means of implementation and support, and in the light of equity and the best available science.¹

2. As per paragraph 2 of the same article, the CMA shall undertake its first GST in 2023 and every five years thereafter unless otherwise decided by the CMA. The outcome of the GST shall inform Parties in updating and enhancing, in a nationally determined manner, their actions and support in accordance with the relevant provisions of the Paris Agreement, as well as in enhancing international cooperation for climate action.²

3. Furthermore, the CMA decided that the GST process will consist of the following components:³

(a) **Information collection and preparation**, focusing on gathering, compiling and synthesizing information and preparing for conducting the technical assessment referred to in paragraph 3(b) below;

(b) **Technical assessment**, focusing on taking stock of the implementation of the Paris Agreement to assess the collective progress towards achieving the purpose and long-term goals of the Paris Agreement, as well as opportunities for enhanced action and support to achieve its purpose and goals;

(c) **Consideration of outputs**, focusing on discussing the implications of the findings of the technical assessment with a view to achieving the outcome of the GST of informing Parties in updating and enhancing, in a nationally determined manner, their actions and support, in accordance with relevant provisions of the Paris Agreement, as well as in enhancing international cooperation for climate action.

4. As part of the information collection and preparation for the GST, the CMA is requesting/inviting the preparation of 13 synthesis reports to be completed in March 2022, three months prior to the commencement of the technical assessment. The scope and types of information for these reports are shown in Annex I. In this context, the CMA invited all relevant constituted bodies and forums under or serving the Paris Agreement and/or the Convention, including the TEC, to prepare for the technical assessment, with the assistance of the secretariat, synthesis reports in their area of expertise.⁴

5. In addition to the synthesis reports from relevant constituted bodies and the secretariat referred to above, the sources of input for the GST include:

(a) Reports and communications from Parties, in particular those submitted under the Paris Agreement and the Convention;

(b) The latest reports of the Intergovernmental Panel on Climate Change;

(c) Reports of the subsidiary bodies;

¹ [Paris Agreement, Article 14, paragraph 1.](#)

² [Paris Agreement, Article 14, paragraph 2 and 3.](#)

³ [Decision 19/CMA.1, paragraph 3.](#)

⁴ [Decision 19/CMA.1, paragraph 24.](#)

- (d) Relevant reports from United Nations agencies and other international organizations, which should be supportive of the UNFCCC process;
- (e) Voluntary submissions from Parties, including on inputs to inform equity considerations under the global stocktake;
- (f) Relevant reports from regional groups and institutions;
- (g) Submissions from non-Party stakeholders and UNFCCC observer organizations.⁵

II. Role of the TEC

6. At TEC 21, the TEC agreed to discuss the preparation of its inputs in 2021, and requested its Chair and Vice-Chair, with the support of the secretariat, to undertake intersessional work to elaborate the scope and sources of input for TEC reports to the GST process and present it for consideration at TEC 22.
7. At TEC 22, the TEC took note of the information provided by the secretariat on the scope of and modalities for the GST, and the invitation extended to relevant UNFCCC constituted bodies to provide inputs for the technical assessment phase of the GST.
8. At TEC 22, the TEC agreed to take into account the approaches of other constituted bodies when preparing its own input for the technical assessment phase of the GST, including to consider the guiding questions to be issued by the Chairs of the subsidiary bodies at TEC 23.
9. This concept note provides an overview of the scope and possible sources of inputs for the synthesis report that the TEC could provide as an input to the technical assessment phase of the GST, including an annotated outline of the synthesis report. The concept note was prepared by the secretariat, under the guidance of the TEC Chairs, to facilitate the discussion about the scope and sources of inputs of the synthesis report of the TEC for the technical assessment phase of the GST.

III. Guidance by the SB Chairs

10. CMA 1 requested the Chairs of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation (SB Chairs) to develop guiding questions for all components of the GST, including specific thematic and cross-cutting questions, one session of the subsidiary bodies prior to the relevant activities under the GST being carried out.⁶ In response to this request, the SB Chairs prepared a non-paper to prepare for the first GST, including guiding questions for all components of the GST.⁷
11. The guiding questions contained in the non-paper referred to above are meant to:
- (a) guide the collection and preparation of information for the GST;
 - (b) inform the technical assessment of the GST; and
 - (c) facilitate the identification of key aspects for the high-level consideration of the outputs that will summarize key political messages of the GST.
12. One of the issues raised in the non-paper relates to the scope of the synthesis reports by constituted bodies and forums – should a synthesis report cover the products prepared by the respective body or should it cover reports prepared by other contributors to GST and/or national reports submitted by Parties? On this, constituted bodies were encouraged to focus on synthesizing the outcomes of their work (e.g., analysis, reports, events), bearing in mind that there will be contributions by others (e.g., IPCC, UN agencies, regional agencies and the secretariat). Furthermore, this approach will allow the representatives of the bodies to explain effectively their contribution at the technical dialogue. In this context, those preparing inputs for the GST1 are also

⁵ Decision 19/CMA.1, para. 37.

⁶ Decision 19/CMA.1, para. 7.

⁷ Available at https://unfccc.int/sites/default/files/resource/Non-paper%20on%20Preparing%20for%20GST1_0.pdf.

encouraged to organize webinars, as appropriate, and address any questions for clarification relating to their contribution before the relevant meetings of the technical dialogue.

IV. Possible scope and sources of input for the synthesis report

13. On the basis of the information provided in decision 19/CMA.1, para. 36, regarding the scope and types of information for the synthesis reports of the constituted bodies (see also Annex I) and the guidance provided by the SB Chairs, including the guiding questions, the possible scope and sources of inputs for the synthesis report of the TEC could be further elaborated.

A. Possible scope of the synthesis report

14. Table 1 in Annex I provides an overview of the types of information that will be considered by the GST at a collective level.⁸ This is also reflected in the non-paper by the SB chairs referred to above. From the types of information referred to in Annex I, table 1, items (d), (f) and (g) include matters related to technology development and transfer, and as such are within the area of expertise of the TEC. These items are the following:

(a) The finance flows, including the information referred to in Article 2, para 1(c), and means of implementation and support and mobilization and provision of support, including the information referred to in Article 9, paras 4 and 6, Article 10, para 6, Article 11, para 3, and Article 13, in particular paras 9 and 10, of the Paris Agreement. This should include information from the latest biennial assessment and overview of climate finance flows of the Standing Committee on Finance.

(b) Barriers and challenges, including finance, technology and capacity building gaps, faced by developing countries

(c) Good practices, experience and potential opportunities to enhance international cooperation on mitigation and adaptation and to increase support under Article 13, para 5, of the Paris Agreement

B. Guiding questions by SB chairs

15. The guiding questions prepared by the SB Chairs for the information collection and preparation component of the GST address aspects relating to taking stock of the implementation of the Paris Agreement, as well as to assessing the collective progress towards achieving its purpose and long-term goals.

16. Under Means of Implementation and support the following guiding questions were identified by the SB Chairs:

(a) What are the barriers and challenges, including finance, technology development and transfer and capacity-building gaps, faced by developing countries (§36(f))?

(b) What is the state of progress on provision of means of implementation and support and mobilization and provision of support, including the information referred to in Article 9, paragraphs 4 and 6, Article 10, paragraph 6, Article 11, paragraph 3, and Article 13, in particular paragraphs 9 and 10, of the Paris Agreement (§36(d))?

(c) What is the overall progress made towards achieving the long-term vision on the importance of fully realizing technology development and transfer in order to improve resilience to climate change and to reduce greenhouse gas emissions referred in Article 10.1? What is the state of cooperative action on technology development and transfer (Article 10.2)?

(d) To what extent has progress been made on enhancing the capacity of developing country Parties to implement the Paris Agreement (Article 11.3)?

17. Of these guiding questions, the first three questions, a) – c), include information on matters related to technology development and transfer, and as such are within the area of expertise of the

⁸ [Decision 19/CMA.1, paragraph 36.](#)

TEC. In addition, the following question identified by the SB Chairs under ‘cross-cutting’, might be of relevance to the TEC as well:

(a) What are good practices, experience and potential opportunities to enhance climate action, including international cooperation, on mitigation and adaptation and to increase support under Article 13, paragraph 5, of the Paris Agreement ((§36(g)). Which of these can be transferable or replicated by others?

18. These questions, along with the information provided in Annex I, could support the TEC in further elaborating the scope and information to be provided in its synthesis report, as an input for the GST.

C. Annotated outline and possible sources of information

19. The SB Chairs encouraged the constituted bodies to focus on synthesizing the outcomes of their own work. As such, TEC reports and documents, such as technical papers, TEC briefs and reports of events that the TEC produced in its own capacity can be used as possible sources of information for its synthesis report as an input for the GST.

20. On the basis of the scope and types of information of the synthesis report and the guiding questions, a possible outline of the synthesis report could be first to provide an overview of the current state and progress made in climate technology development and transfer, followed by a chapter on challenges and good practices, building on experiences and supported by examples. The last chapter could be more forward looking by providing information about potential opportunities to enhance international cooperation.

21. Taking into account its expertise and previous work⁹ as well as the need to ensure complementarity with other synthesis reports, the TEC may wish to include in its synthesis report the following information:

(a) Introduction and mandate;

(b) Current state of and progress made in climate technology development and transfer, drawing on the joint annual reports of the TEC and the CTCN and its work on monitoring and evaluation of the work of the TEC;

(c) Experience: Challenges and good practices (examples), drawing on the analytical work of the TEC under the various themes of the technology framework, including innovation, implementation, enabling environments and capacity building and support;

(d) Potential opportunities to enhance international cooperation, drawing on the joint annual reports of the TEC and the CTCN, as well as the analytical work of the TEC under the various themes of the technology framework.

22. Annex II provides an overview of the possible scope and sources of inputs for TECs synthesis report for the GST, following the annotated outline described above. The first column of the table refers to the respective chapter of the annotated outline. The second and the third columns, reflect the types of information (as referred to in decision 19/CMA.1, para 36), and the four guiding questions by the SB chairs that are within the area of expertise of the TEC. Column four lists examples of possible TEC sources of information based on its previous work, that could be used within the scope of its synthesis report for the GST on matters related to technology development and transfer.

V. Possible next steps

#	Activities	Timeline
1	Prepare TEC synthesis report as input to the technical assessment phase of the GST	Prepare intersessionally for

⁹ For example, the TEC provided input to the Talanoa Dialogue in 2018, which is available at: <https://bit.ly/3yZm2In>.

#	<i>Activities</i>	<i>Timeline</i>
		consideration at TEC24 (2022)
2	Organize a webinar prior to the start of the technical assessment phase of the GST to clarify assumptions and methodology applied for preparing TECs synthesis report	Before the start of the technical assessment phase of the GST (2022)
3	Consider need for updating the TEC synthesis report in case new or updated information becomes available	Before the end of the technical assessment phase of the GST (2023)

Annex I

Synthesis reports to be prepared for the global stocktake

Table 1
Synthesis reports prepared by the constituted bodies

Author	Mandate for report(s)	Scope of report(s)	Types of information for report(s) (19/CMA.1, para 36)							
Constituted bodies and forums and other institutional arrangements ^a , with the assistance of the secretariat are invited to prepare SYRs on:	19/CMA.1, para 24	The information identified in para 36 in their areas of expertise	(a) The state of greenhouse gas emissions by sources and removals by sinks and mitigation efforts undertaken by Parties, including the information referred to in Article 13, para 7(a), and Article 4, paras 7, 15 and 19, of the Paris Agreement	(b) The overall effect of Parties' NDCs and overall progress made by Parties towards the implementation of their NDCs, including the information referred to in Article 13, para 7(b), of the Paris Agreement	(c) The state of adaptation efforts, support, experience and priorities, including the information referred to in Article 7, paras 2, 10, 11 and 14, of the Paris Agreement, and the reports referred to in Article 13, para 8, of the Paris Agreement	(d) The finance flows, including the information referred to in Article 2, para 1(c), and means of implementation and support and mobilization and provision of support, including the information referred to in Article 9, paras 4 and 6, Article 10, para 6, Article 11, para 3, and Article 13, in particular paras 9 and 10, of the Paris Agreement. This should include information from the latest biennial assessment and overview of climate finance flows of the Standing Committee on Finance	(e) Efforts to enhance understanding, action and support, on a cooperative and facilitative basis, related to averting, minimizing and addressing loss and damage associated with the adverse effects of climate change	(f) Barriers and challenges, including finance, technology ^b , and capacity-building gaps, faced by developing countries	(g) Good practices, experience and potential opportunities to enhance international cooperation on mitigation and adaptation and to increase support under Article 13, para 5, of the Paris Agreement	(h) Fairness considerations, including equity, as communicated by Parties in their nationally determined contributions

^a Currently Adaptation Committee, the Least Developed Countries Expert Group, the Technology Executive Committee, the Standing Committee on Finance, the Paris Committee on Capacity-building, the Executive Committee of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts, the Consultative Group of Experts, the forum on the impact of the implementation of response measures, and the Local Communities and Indigenous Peoples Platform Facilitative Working Group.

^b Including based on the outputs of the periodic assessment of the Technology Mechanism (16/CMA.1).

^c The forum on the impact of the implementation of response measures will summarize its outcome in accordance with the relevant elements of its modalities, work programme and functions pursuant to decision 1/CP.21, paragraph 34.

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Table 2
Synthesis reports prepared by the secretariat

Author	Mandate for report(s)	Scope of report(s)	Types of information for report(s) (19/CMA.1, para 36 and 4/CP.24, para 13)	
Secretariat, under the guidance of the co-facilitators of the technical dialogue, is requested to prepare SYRs on:	19/CMA.1, para 23(a)	The information identified in para 36(a), taking into account previous experience in preparing such reports	(a) The state of greenhouse gas emissions by sources and removals by sinks and mitigation efforts undertaken by Parties, including the information referred to in Article 13, para 7(a), and Article 4, paras 7, 15 and 19, of the Paris Agreement	
	19/CMA.1, para 23(b) 11/CMA.1, paras 9 and 31	The state of adaptation efforts, experience and priorities, summarizing the most recent information identified in para 36(b) Information on the adaptation efforts of developing country Parties An assessment of the support needs for adaptation of developing country Parties	(c) The state of adaptation efforts, support, experience and priorities, including the information referred to in Article 7, paras 2, 10, 11 and 14, of the Paris Agreement, and the reports referred to in Article 13, para 8, of the Paris Agreement	The most recent documents that may contain adaptation information, which may include adaptation communications, national adaptation plans, national communications, nationally determined contributions, other relevant reports prepared under the transparency framework, reports of the Intergovernmental Panel on Climate Change and other relevant scientific bodies as well as the report referred to in paragraph 13 of decision 4/CP.24
	19/CMA.1, para 23(c)	The overall effect of nationally determined contributions communicated by Parties, summarizing the most recent information identified in para 36(b)	(b) The overall effect of Parties' NDCs and overall progress made by Parties towards the implementation of their NDCs, including the information referred to in Article 13, para 7(b), of the Paris Agreement	
	19/CMA.1, para 23(d)	The information identified in para 36(d)	(d) The finance flows, including the information referred to in Article 2, para 1(c), and means of implementation and support and mobilization and provision of support, including the information referred to in Article 9, paras 4 and 6, Article 10, para 6, Article 11, para 3, and Article 13, in particular paras 9 and 10, of the Paris Agreement. This should include information from the latest biennial assessment and overview of climate finance flows of the Standing Committee on Finance;	

Overview of possible scope and sources of information for the synthesis report of the TEC

Chapter of annotated outline	Types of information to be considered in the report (19/CMA.1 Para. 36)	Guiding Questions by SB Chairs	Possible TEC sources of information
b) Current state of and progress made in climate technology development and transfer	(d) The finance flows, including the information referred to in Article 2, paragraph 1(c), and means of implementation and support and mobilization and provision of support, including the information referred to in Article 9, paragraphs 4 and 6, Article 10, paragraph 6, Article 11, paragraph 3, and Article 13, in particular paragraphs 9 and 10, of the Paris Agreement. This should include information from the latest biennial assessment and overview of climate finance flows of the Standing Committee on Finance;	<p>12. What is the state of progress on provision of means of implementation and support and mobilization and provision of support, including the information referred to in Article 9, paragraphs 4 and 6, Article 10, paragraph 6, Article 11, paragraph 3, and Article 13, in particular paragraphs 9 and 10, of the Paris Agreement (§36(d))?</p> <p>13. What is the overall progress made towards achieving the long-term vision on the importance of fully realizing technology development and transfer in order to improve resilience to climate change and to reduce greenhouse gas emissions referred in Article 10.1? What is the state of cooperative action on technology development and transfer (Article 10.2)?</p>	<p>Joint annual reports of the TEC and the CTCN</p> <p>Monitoring and Evaluation of the work of the TEC</p>
c) Experience: Challenges and good practices	(f) Barriers and challenges, including finance, technology and capacity-building gaps, faced by developing countries;	11. What are the barriers and challenges, including finance, technology development and transfer and capacity-building gaps, faced by developing countries (§36(f))?	<p>Innovation</p> <p>Compilation of good practices and lessons learned on international collaborative research, development and demonstration initiatives of climate technology</p> <p>TEC Brief #12 - Energizing entrepreneurs to tackle climate change</p> <p>Catalysing Finance for Incubators and Accelerators</p> <p>Climate Technology Incubators and Accelerators</p> <p>Working paper on enhancing financing for RD&D</p> <p>TEC Brief #10 - Technological innovation for Paris Agreement</p> <p>TEC Brief #7 – National systems of innovation</p> <p>Implementation</p> <p>Innovative approaches to accelerating and scaling up climate technology implementation for mitigation and adaptation</p>

Chapter of annotated outline	Types of information to be considered in the report (19/CMA.1 Para. 36)	Guiding Questions by SB Chairs	Possible TEC sources of information
			<p>Potential of South-South and triangular cooperation on climate technologies for advancing implementation of NDCs and NAPs</p> <p>Report: South-South compilation of good practices</p> <p>Paper on good practices of technology needs assessments</p> <p>Enabling environment and capacity building</p> <p>Developing and enhancing endogenous capacities and technologies: technology stakeholder's perspectives</p> <p>Support</p> <p>Updated evaluation of the Poznan strategic programme on technology transfer</p> <p>TEC Brief #6 – Climate technology financing</p>
d) Potential opportunities to enhance international cooperation	(g) Good practices, experience and potential opportunities to enhance international cooperation on mitigation and adaptation and to increase support under Article 13, paragraph 5, of the Paris Agreement;	18. What are good practices, experience and potential opportunities to enhance climate action, including international cooperation, on mitigation and adaptation and to increase support under Article 13, paragraph 5, of the Paris Agreement ((§36(g)). Which of these can be transferable or replicated by others?	<p>Joint annual reports of the TEC and the CTCN</p> <p>TEC progress and activities in 2017</p> <p>TEC progress and activities in 2016</p> <p>Additional sources similar to those under c)</p>