



Technology Executive Committee

02 April 2024

Twenty-eighth meeting

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Revising the TEC monitoring and evaluation system to align with TEC rolling work plan for 2023–2027

I. Introduction

A. Background

1. In response to decision 13/CP.24 and paragraphs 24 and 25 of the Annex to decision 15/CMA, the Technology Executive Committee (TEC) at TEC 19 considered the monitoring and evaluation framework¹ (hereinafter referred to as the M&E system) under its 2018–2022 rolling workplan to monitor and evaluate the impacts of its work, and subsequently finalized after the meeting. The M&E system was developed in collaboration with the Climate Technology Centre and Network (CTCN) to ensure a coherent approach within the Technology Mechanism. While the activities and outputs of the TEC and CTCN differ, owing to their respective mandates and functions, the two systems are aligned through common high-level outcomes and overall impact sought by the technology framework.²

2. The TEC implemented its M&E system in 2020 on a trial basis and reviewed experiences and lessons learned from its implementation at TEC 21³ following which adjustments with regards to indicators in the performance measurement framework (PMF), were made by the secretariat.⁴

3. At TEC23, the TEC took note on adding gender-related indicators to its monitoring and evaluation framework and highlighted the potential to more effectively utilize communication tools, including social media.

4. At TEC 25, the TEC agreed on its new rolling workplan for 2023–2027.⁵ While the TEC's previous workplan was structured according to the five key themes of the technology framework, the new rolling workplan introduced four strategic workstreams. Nevertheless, the structure of the new workplan continues to be guided by the principles of the technology framework, and all proposed outputs have been mapped against those of the framework.

5. At the TEC 26, the TEC considered the possible revisions to the TEC monitoring and evaluation systems⁶ and requested the secretariat to explore ways to ensure the sustainability and feasibility of the monitoring and evaluation system while incorporating elements that may reflect transformational impacts and collective progress under the Convention and the Paris Agreement.

¹ TEC Monitoring and Evaluation Framework is available available at [here](#).

² Technology framework under Article 10, paragraph 4, of the Paris Agreement Available at <https://unfccc.int/tclear/tec/documents.html>.

³ Available at <https://bit.ly/37bmF5A>.

⁴ TEC M&E system with revised PMF indicators is available [here](#).

⁵ Available at <https://unfccc.int/tclear/tec/documents.html>.

⁶ See the document: [TEC/2023/26/14](#).

B. Recent mandates

6. Evaluations of the work of the TEC and COP decisions have provided guidance to the TEC to improve its M&E system, namely:

(a) Recommendation 3 of the first periodic assessment of the effectiveness and adequacy of the support provided to the Technology Mechanism⁷ (herewith referred to as the periodic assessment) noted the absence of impact indicators in the TEC's M&E system and recommended that the TEC review it in light of the experiences and lessons learned from its implementation.

(b) The same recommendation noted that, although the TEC and CTCN have already aligned their M&E systems, both bodies could explore the opportunity of developing a common and integrated M&E system considering the development of the first joint work programme of the Technology Mechanism for 2023–2027.⁸ The assessment further noted that such an overarching system would support the reporting on collaboration between the two bodies and the assessment of transformational change that would consider the connections between the activities of both bodies.

(c) Decision 18/CP.27, paragraph 11,⁹ and decision 19/CMA.4, paragraph 10,¹⁰ requested the TEC and CTCN to continue to enhance their efforts to monitor and evaluate the impacts of their work, including by identifying new ways to invite feedback from NDEs on the impact of the work of the Technology Mechanism such as through more practical and effective surveys.

II. Scope of the note

7. This note provides suggestions for possible revisions to the PMF of the TEC's M&E system to align with the structure of the TEC's new rolling workplan for 2023–2027 and to facilitate continuous monitoring and evaluation of TEC activities while responding to recent recommendations and COP decisions.

III. Updating the performance measurement framework

8. Annex I to this document provides suggestions on how the PMF might be revised to enable effective monitoring and reporting of the TEC's activities under its rolling workplan for 2023–2027. The following revisions are suggested:

(a) Adding an **impact indicator** identified as impact from the TEC sphere of influence of the Theory of Change of the TEC M&E system (see annex II);

(b) Adding **intended results** to reflect the expected outcomes as per TEC rolling workplan;

(c) Adapting the indicators to reflect planned outputs under the new rolling workplan;

(d) Introducing **new indicators** to reflect recommendations from recent evaluations and COP decisions, such as:

(i) Indicator on the TEC's engagement with NDEs (see proposed indicator 5.2) to measure and report on progress in response to mandates from decision 18/CP.27¹¹

⁷ Available at <https://unfccc.int/documents/611561>.

⁸ Available at <https://unfccc.int/ttclear/tec>.

⁹ Available at https://unfccc.int/sites/default/files/resource/cp2022_10a02_adv.pdf#page=30.

¹⁰ Available at https://unfccc.int/sites/default/files/resource/cma2022_10a03_adv.pdf#page=25.

¹¹ Available at: [Report of the Conference of the Parties on its twenty-seventh session, held in Sharm el-Sheikh from 6 to 20 November 2022. Addendum \(unfccc.int\)](#).

paragraphs 6, 7 and 16; decision 19/CMA.4¹² paragraph 16; and decision 19/CMA.4¹³ paragraph 7; and considering the TEC background note on strengthening engagement with NDEs;¹⁴

(ii) Indicator on collaboration and partnerships with a view to report on resource mobilisation efforts for implementation of the TEC rolling workplan (see proposed indicator 5.7) to measure and report progress in response to recommendation 7 of the periodic assessment and decision 19/CMA.4, paragraph 6.

(e) Update the targets for 2027 for the indicators to track the progress of the implementation of the rolling workplan for 2023–2027

IV. Possible actions by the Technology Executive Committee

9. The TEC will be invited to consider and agree on the suggestions for possible revisions to its M&E system.

¹² Available at: https://unfccc.int/sites/default/files/resource/cma2022_10a03_adv.pdf#page=25.

¹³ Available at: https://unfccc.int/sites/default/files/resource/cma2022_10a03_adv.pdf#page=25.

¹⁴ See document TEC/2023/26/04.

4 Annex I

Possible revisions to the Performance Measurement Framework

Impact of the TEC

Indicator	Baseline/ results for 2023	Targets by 2027	Method/Source/ Definition	Frequency	Technology Framework ^a
Impact:¹ Countries have a clear pathways with identified support options to enhance technology development and transfer*					
Number of NDC's that reflect prioritized technologies, including referring to the technology planning tools (TNA, TRM)	N/A	Increased number of NDC's that reflect prioritized technologies, including reference to technology planning tools (TNA, TRM)	NDE feedback form NDC's	Every 5 years	Innovation, Implementation, Collaboration, Enabling Environment, Support

*Proposed change to PMF: Addition of the Impact and relevant indicator

Workstream 1

National Systems of Innovation, Collaborative Research, Development and Demonstration and General-Purpose Technologies

Indicator	Baseline/ results for 2023	Targets by 2027	Method/Source/ Definition	Frequency	Technology Framework ^a	
Intended result 1: Countries have enhanced enabling environments for technological innovation and innovative climate solutions at different stages of the technology cycle through collaborative approaches						
1. Evidence of stakeholders using TEC policy recommendations and publications on technological innovation and innovative climate solutions (% increase)		10 %	NDE feedback form List of examples ^b Total views of publications	Every 2 years	Innovation, Implementation, Collaboration, Enabling Environment, Support	
TEC outputs: Policy recommendations, key messages and knowledge products on technological innovation and innovative solutions for climate change are created						
1.1 Number of sets of policy oriented key messages and recommendations (comprising multiple policy recommendations) developed on technological innovation and innovative climate solutions*	xx	1 ²	TT: CLEAR ^c	Yearly		

¹ Impact has been set as per TEC sphere of influence of the Theory of change.

² Minimum one set of policy oriented key messages and recommendations distributed over the four workstreams

Indicator	Baseline/ results for 2023	Targets by 2027	Method/Source/ Definition	Frequency	Technology Framework ^a
1.2 Number of publications (including policy briefs, executive summaries, papers and compilation of good practices) developed on technological innovation and innovative climate solutions	xx	11	TT:CLEAR ^d	Yearly	
1.3 Number of events (including workshops and webinars) organised by the TEC on technological innovation and innovative climate solutions	xx	5	TT:CLEAR ^e	Yearly	
<u>Activities under workstream 1:</u> A.1. Identify and analyse ways to support countries in establishing and/or strengthening national systems of innovation to incentivise innovation, including by improving enabling environments, capacity building, and access to funding for innovation. A.2. Stimulate climate technology RD&D through partnerships, strengthening the roles of innovators and incubators and accelerators, and the participation of developing country Parties in collaborative approaches to RD&D. A.3. Identify and analyse emerging and transformational adaptation technologies that contribute to reducing vulnerabilities and strengthening resilience. A.4. Explore innovative climate solutions enabled by general-purpose technologies.					

^a Activities under this workstream feed into all five key themes of the Technology Framework.

^b Anecdotal evidence collected through an internet search and through TEC members themselves as valuable sources of information on publications in which the TECs work is referred to including reference to the TEC publications used to inform CTCN TA's.

^c Policy recommendations can be found [here](#).

^c TEC publications can be found [here](#).

^e A full list of events organised by the TEC can be found [here](#).

* Proposed change to the PMF: Current indicator 1.1 combines the former indicators 1.1 and 1.2

Workstream 2

Technology needs assessments and technology planning tools to support NDC implementation

Indicator	Baseline/ results for 2023	Targets by 2027	Method/ Source/ Definition	Frequency	Technology Framework ^a
Intended result 2: Countries have clear pathways and options to enhance technology development and transfer through the integration of technology planning tools and the application of their results (TNAs, TAPs, long-term technological transition strategies) in national climate plans (NDCs, LET-LEDS and NAPs)					
2. Evidence of stakeholders using TEC policy recommendations and publications on TNA and technology planning tools (% increase)	(N/A)	10	NDE feedback form List of examples Total views of publications	Every 2 years	Innovation, Implementation, Collaboration, Enabling Environment, Support
TEC outputs: Policy recommendations, key messages and knowledge products on technology planning tools and the implementation of their results are created					
2.1 Number of sets of policy oriented key messages and recommendations (comprising multiple policy recommendations) on TNAs and technology planning tools*	xx	1 ³	TT:CLEAR	Yearly	
2.2 Number of publications (including policy briefs, executive summaries, papers and compilation of good practices) developed on TNAs and technology planning tools	xx	4	TT:CLEAR	Yearly	
2.3 Number of events (including workshops and webinars) organised by the TEC on TNAs and technology planning tools	xx	2	TT:CLEAR	Yearly	
<u>Activities under workstream 2:</u> B.1. Facilitate the undertaking and updating of TNAs, as well as enhancing the implementation of their results, and promote the links between TNAs and NDCs and NAPs and LT-LEDS. B.2. Promote the role of long-term technological pathways in order to implement countries' NDC actions on mitigation and adaptation.					

^a Activities under this workstream feed into all five key themes of the Technology Framework.

* Proposed change to the PMF: Current indicator 2.1 combines the former indicators 2.1 and 2.2

³ Minimum one set of policy oriented key messages and recommendations distributed over the four workstreams

Workstream 3
Transformative and innovative solutions

Indicator	Baseline/ results for 2023	Targets by 2027	Method/ Source/ Definition	Frequency	Technology Framework ^a
Intended results 3: Countries have enhanced enabling environments to develop, transfer and deploy transformative and innovative technological solutions in key sectors to implement NDCs in these sectors					
3. Evidence of stakeholders using TEC policy recommendations and publications on transformative and innovative technological solutions in key sectors	(N/A)	10	NDE feedback form List of examples Total views of publications	Every 2 years	Innovation, Implementation, Collaboration, Enabling Environment
TEC outputs: Policy recommendations, key messages and knowledge products on transformative and innovative technological solutions in key sectors are created					
3.1 Number of sets of policy oriented key messages and recommendations (comprising multiple policy recommendations) developed on transformative and innovative technological solutions in key sectors*	xx	1 ⁴	TT:CLEAR	Yearly	
3.2 Number of publications (including policy briefs, executive summaries, papers and compilation of good practices) developed on transformative and innovative technological solutions in key sectors	xx	6	TT:CLEAR	Yearly	
3.3 Number of events (including workshops and webinars) organised by the TEC on transformative and innovative technological solutions in key sectors	xx	5	TT:CLEAR	Yearly	
<u>Activities under workstream 3:</u> C.1. Promote innovative technology practices and solutions related to water-energy-food systems to support countries in the implementation of their NDCs in these sectors, to build inclusive agrifood systems and achieve food security. C.2. Promote innovative technology practices and solutions related to sustainable buildings and infrastructure to strengthen resilience and support countries in the implementation of their NDCs in these sectors. C.3. Promote innovative technology practices and solutions related to hard-to-abate industrial sectors to support countries in the implementation of their NDCs in these sectors. C.4. Promote innovative technology solutions related to nature and ecosystems.					

^a Activities under this workstream feed into four key themes of the Technology Framework. No activities directly related to the support theme are envisioned.

* Proposed change to the PMF: Current indicator 3.1 combines the former indicators 3.1 and 3.2

⁴ Minimum one set of policy oriented key messages and recommendations distributed over the four workstreams.

Workstream 4

Collaboration and engagement with other UNFCCC processes and constituted bodies and other UN agencies

Indicator	Baseline/ results for 2023	Targets by 2027	Method/ Source/ Definition	Frequency	Technology Framework ^{ai}	
Intended results 4: UN constituted bodies and UN agencies collaborate in promoting climate technology development and transfer						
4. Evidence of other stakeholders using TEC policy recommendations and publications on technology development and transfer (% increase)	(N/A)	10	GCF, GEF, and SCF annual reports to the COP List of examples	Every 2 years	Collaboration, Enabling Environment, Support	
TEC outputs: Inputs are provided to inform UNFCCC processes, and the work of other UNFCCC bodies and UN agencies and knowledge products are jointly produced.						
4.1 Number of inputs and recommendations provided to inform UNFCCC processes and the work of other UNFCCC bodies and UN agencies	xx	34	List of inputs and recommendations to GCF, GEF, SCF and PCCB, as well as inputs into the GST process	Yearly		
4.2 Number of joint publications (including policy briefs, executive summaries, papers and compilation of good practices) developed with other UNFCCC bodies and UN agencies	xx	6	TT:CLEAR	Yearly		
4.3 Number of joint events (including workshops and webinars) organized with other UNFCCC bodies and UN agencies	xx	1	TT:CLEAR	Yearly		
<u>Activities under workstream 4:</u> D.1. Collaborate and engage with the Standing Committee on Finance and the operating entities of the Financial Mechanism. D.2. Collaborate and engage with the Adaptation Committee and LDC Expert Group. D.3. Collaborate and engage with the Paris Committee on Capacity Building. D.4. Collaborate and engage with the UNFCCC Gender Team. D.5. Provide input to the Global Stocktake of the Paris Agreement. D.6. Collaborate and engage with the UNEP-Copenhagen Climate Centre.						

^a Activities under this workstream feed into three key themes of the Technology Framework. No activities directly related to the innovation and implementation theme are envisioned.

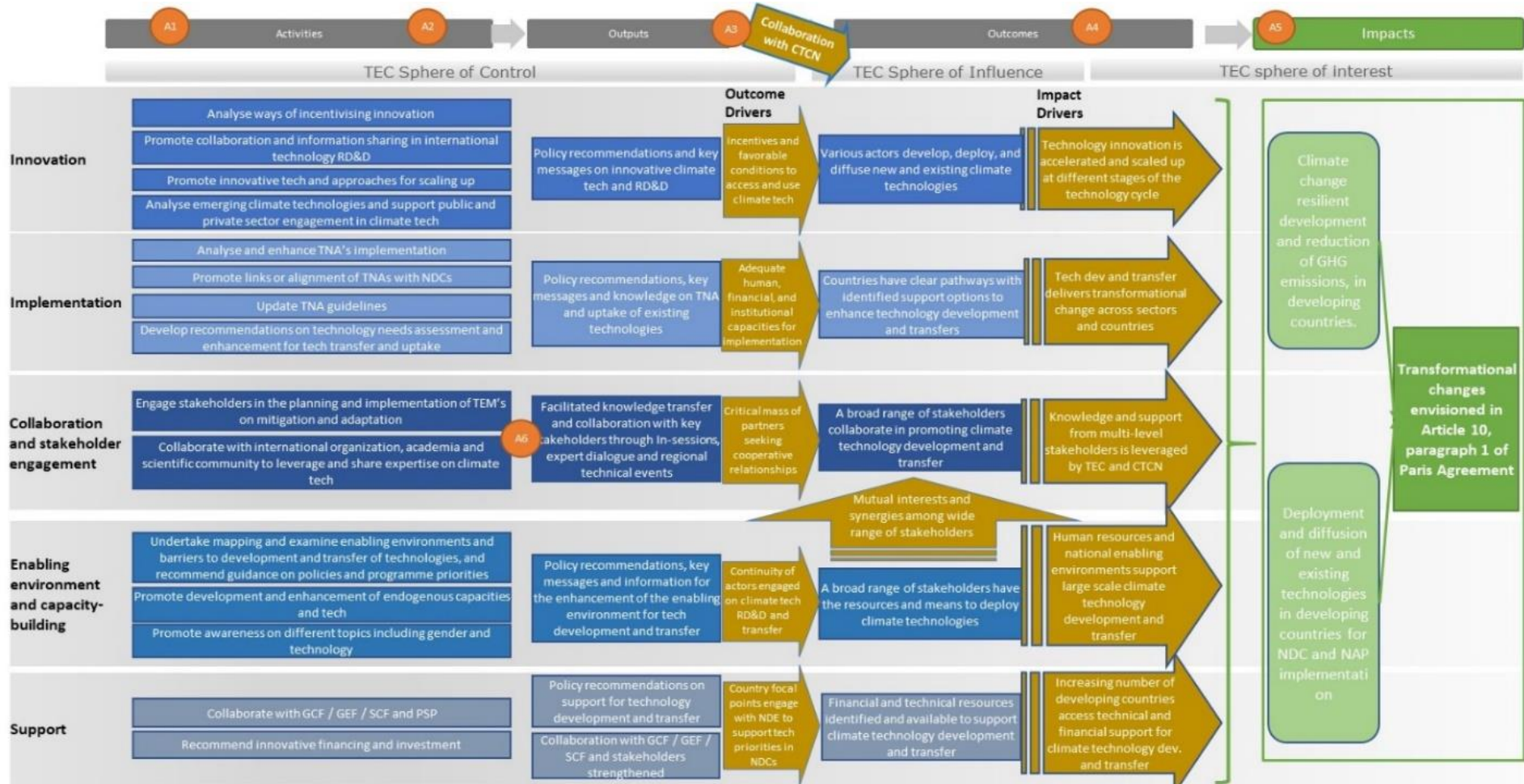
Cross-Cutting

Indicator	Baseline/ results for 2023	Targets by 2027	Method/Source/ Definition	Frequency
5. Evidence of the reach of the TEC				
5.1 Number of stakeholders ⁵ engaged in the implementation of the TEC workplan (disaggregated by type of stakeholder)	xx	22	List of partners on TEC activities TT: CLEAR	Every 2 years
5.2 Number of NDEs engaged in TEC activities (includes NDEs participating in TEC events and contributing to TEC knowledge products) (% increase)	xx	10	Lists of NDE participants to events and NDE contributions to TEC knowledge products	Yearly
5.3 Number of people who follow TEC events (virtual and in-person) (men, women) (% increase)	xx	10	Lists of participants to events	Yearly
5.5 Google Analytics (pageviews) for the TECs content posted in UNFCCC newsroom (% increase)	xx	10	Google Analytics	Yearly
5.6 Google Analytics (pageviews) for the TEC's content posted on TT:Clear pages (% increase)	xx	10	Google Analytics	Yearly
5.7 Number of activities of the TEC rolling workplan 2023-2027 implemented through collaboration and partnership support (in kind, pro-bono and grant financing)*	xx	16	TT: CLEAR Rolling workplan document of the TEC	Yearly
6. Gender considerations				
6.1 Number of policy recommendations containing gender considerations (in %)	xx	70	Lists of recommendations	Yearly
6.2 Distribution of invited female speakers to TEC events disaggregated by gender (in %)	xx	50	TT: CLEAR	Yearly

* Proposed change to the PMF: reformulating the indicator to reflect TEC collaboration and partnership support

⁵ Stakeholders are considered as: lead partners; observers/activity group; organizations as a resource persons

Annex II – Theory of change



Assumption 1: TEC task forces are provided with enough time and human resources; A2: Relevant stakeholders willing to collaborate; A3: Recommendations and key messages are disseminated; A4: International and national level political will for RD&D and incentives supporting tech transfer; A5: The UNFCCC remains a key body for facilitating and supporting global CC tech development and transfer; A6: Communication with respective institutions and private sector partners is effective