## **Technology Executive Committee** Monitoring and Evaluation Framework

November 04, 2019

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# 1. Introduction

## 1.1. Background

### 1.1.1. The Technology Mechanism

1. In 2010 the Conference of the Parties (COP) established the Technology Mechanism with the aim to facilitate enhancement of climate technology development and transfer to developing countries. The Technology Mechanism consists of two bodies: the Technology Executive Committee (TEC) and the Climate Technology Centre and Network (CTCN).

## 1.1.1. The Technology Framework

2. The Technology Framework (TF) of the Paris Agreement was adopted at the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) in December 2018 (Decision 15/CMA.1). It was established to provide overarching guidance to the work of the Technology Mechanism in promoting and facilitating enhanced action on technology development and transfer in order to support the implementation of the Paris Agreement. The TF establishes guiding principles and proposes actions across five key themes: (a) innovation; (b) implementation; (c) enabling environment and capacity-building; (d) collaboration and stakeholder engagement; and (e) support. The CMA decided that TEC and the CTCN shall implement the TF in close collaboration, in accordance with their respective functions, mandates and modalities of work.

## 2.1.1. The Technology Executive Committee

3. The TEC is the policy body of the Technology Mechanism. The TEC analyzes issues and provides policy recommendations that support country efforts to enhance climate technology development and transfer.

- 4. The functions of the TEC were defined at COP 16 as being the following:
  - Provide an overview of countries' climate technology needs and analyze policy and technical issues related to climate technology development and transfer;
  - Recommend actions to promote climate technology development and transfer;
  - Recommend guidance on climate technology policies and programmes;
  - Promote and facilitate collaboration between climate technology stakeholders;
  - Recommend actions to address barriers to climate technology development and transfer;
  - Seek cooperation with climate technology stakeholders and promote coherence across technology activities; and
  - Catalyse the development and use of climate technology road maps and action plans.<sup>1</sup>

5. The TEC delivers on its mandate through its six key modalities: (a) analysis and synthesis; (b) policy recommendations; (c) facilitation and catalyzing; (d) linkage with other institutional arrangements; (e) Engagement of stakeholders, and (f) information and knowledge sharing.

6. The TEC uses a rolling workplan to organize its work. The TEC rolling workplan for 2019-2022 was adopted in September 2019, at the 19<sup>th</sup> meeting of the TEC.<sup>2</sup> Its activities are organized in five thematic

<sup>&</sup>lt;sup>1</sup> Decision 1/CP.16

<sup>&</sup>lt;sup>2</sup> Available at https://bit.ly/2PiU9Hu

areas reflecting the key themes of the Technology framework, namely: Innovation, Implementation, Enabling environment and capacity-building, Collaboration and stakeholder engagement, and Support. Each activity corresponds to workstreams identified by the TEC: Mitigation, Adaptation and Cross-cutting.

7. In response to COP and CMA mandates<sup>3</sup>, the TEC developed its monitoring and evaluation (M&E) framework, in coordination with CTCN, "to report on the activities of the TEC and ensure their contributions to transformational changes envisioned in the Paris Agreement". TEC 19 agreed to implement the M&E system on a trial basis and revise it, as appropriate, at its twenty-first meeting.

8. This document introduces the TEC M&E system developed by the TEC, including its theory of change (ToC), Logical Framework Approach (LFA) and Performance Measurement Framework (PFM).

# 1.2 Scope of M&E system

9. The M&E framework is meant to encompass all key building blocks required for the effective monitoring and evaluation of the work of the TEC and expected impacts of the Technology Mechanism. The term 'monitoring' here refers to the continuous process of reporting to the COP and CMA on its activities, outputs and outcomes. 'Evaluation' refers to the punctual assessment of the outcomes of TEC activities and their contribution to the goals of the Paris Agreement for the purpose of reporting to the COP and CMA. M&E is possible through a manageable and fitting set of indicators, as tracked by the activity reports, training feedback, and other data collection reports reflecting the work plan and TEC high-level objectives.

10. The two central building blocks upon which this TEC M&E framework rests are:

- The ToC and LFA together provide a strategic overview of the TEC and support decision-making by illustrating the main results to be achieved by the TEC at various levels (ToC), and their corresponding indicators (logframe). They provide a structure for monitoring and evaluation efforts.
- The Performance Measurement Framework, which is based on the LFA, is the key internal management tool to be used to collect, analyze, and report on its activities and outputs/outcomes data that forms the basis for monitoring and evaluation functions. It captures key elements of expected results by outlining proposed indicators for each results level, as well as targets, baselines, frequency of data collection, data sources and methods, and finally responsibilities for data collection and consolidation.

11. Reporting templates are developed to ensure that M&E is efficient, consistent and helps TEC learn from its experience and account for its achievements.

12. The figure below presents the building blocks of the M&E Framework with the LFA and the PMF at its center.

<sup>&</sup>lt;sup>3</sup> Decision 13/CP.24 and decision 15/CMA.1, para 25

#### Figure 1. Building blocks of the M&E Framework



# 2. Presentation of the Theory of Change

# 2.1 From the Technology Framework and the rolling work plan to the Theory of Change of the TEC

13. The ToC below consists of a visual model of the TEC at a strategic level. It presents logical pathways that capture actions and results likely to lead to transformational change, and illustrates how the expected activities, outputs, and outcomes interact in order to achieve the TF impacts. It aims to provide clarity about what the TEC wants to achieve and how, and enables evidence-based reflection on how services should be designed.

14. The ToC is designed so as to acknowledge that the process of change starts from what the TEC can control – the "Sphere of Control", which comprises broadly speaking its activities and its outputs. The Sphere of Influence represents where change starts materializing beyond TEC direct action and corresponds to the outcomes. The Sphere of Interest represents impacts that consist of changes that the TEC wants to achieve but that are beyond its control of even its influence. The ToC therefore represents the different levels of control or influence of the TEC on the stakeholder groups and on national policies, strategies and processes.

#### High-level outcomes and impacts

15. The ToC is based on the TF and on the TEC rolling work plan for 2019-2022. It is organized around the five themes of the TF. The high-level outcomes under the TEC sphere of influence for each of the themes are the following and reflect the TF in that it describes the main change sought under each theme:

- Innovation: Various actors develop, deploy, diffuse and transfer new and existing climate technologies
- **Implementation:** Countries have clear pathways with identified support options to enhance technology development and transfer
- **Collaboration and stakeholder engagement:** A broad range of stakeholders collaborate in promoting climate technology development and transfer
- **Enabling environment and capacity-building:** A broad range of stakeholders have the resources and means to deploy climate technologies
- **Support:** Financial and technical resources identified and available to support climate technology development and transfer

16. These outcomes represent the extent of the reach of TEC's influence. Given the structure of the TF, these outcomes are not only the result of the TEC activities, but also of its joint efforts with CTCN, as illustrated by the outcome drivers and discussed below. The assumption for the realization of these outcomes is that the international and national level political will for RD&D and incentives supporting tech transfer is maintained (A4).

17. The outcomes in turn feed into the overall impact sought by the TF in Article 10, paragraph 1 of the Paris Agreement:

"Parties share a 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"

18. This impact is broken down in two sub-impacts to reflect how climate technology can achieve impact directly or through existing UNFCCC mechanisms, namely: 1) climate change resilient

development and reduction of GHG emissions in developing countries; and 2) deployment and diffusion of new and existing technologies in developing countries for NDC and NAP implementation. Impacts are aligned with the TF and as such are the same for both TEC and CTCN. The assumption for the realization of this impact is that the UNFCCC remains a key body for facilitating and supporting global climate change technology development and transfer (A5).

#### **Activities and Outputs**

19. Whereas the outcomes reflect the TF expected changes, the activities and outputs reflect the rolling workplan of the TEC for 2019-2022. These activities and outputs intend to generate the conditions that will lead to the changes observed in the outcomes, for each of the TF themes. They fall within the sphere of control of the TEC and are thus the building blocks of desired change.

20. Across the five themes, the activities of the TEC consist of the six key modalities introduced previously, namely:

- (a) analysis and synthesis;
- (b) policy recommendations;
- (c) facilitation and catalyzing;
- (d) linkage with other institutional arrangements;
- (e) Engagement of stakeholders, and
- (f) information and knowledge sharing.

21. Two assumptions underpin all the activities: the need for TEC task forces to be provided with sufficient time, human and financial resources (A1), and the willingness of relevant stakeholders to collaborate with the TEC (A2). Furthermore, under the collaboration and stakeholder engagement theme, a crucial assumption is that communications with respective institutions and private sector partners must be effective for activities to achieve their outputs (A6).

22. The outputs following from activities are the ultimate tangible materials, content or organizations engaged on specific tasks or actions, and constitute intermediate steps toward outcomes. Key outputs usually reflect the means by and extent to which initial needs and demands of specific actors are expected to be met. For each theme, a single main output has been formulated that summarizes what is expected from the activities. As anticipated in the TEC functions and modalities, its outputs consist mostly of policy recommendations and facilitated collaboration between stakeholders. Detailed outputs are expected to be measured on a yearly basis in the rolling work plan. The main assumption at the output level is that the recommendations and key messages must be disseminated (A<sub>3</sub>), for these outputs to start generating the expected outcomes.

#### Drivers

23. Drivers are factors that contribute to change along the sequential pathways of the TF, and over which the TEC has a certain level of control or influence through its expected outputs and outcomes. They are noted in arrows with descriptive text. They describe what needs to happen, including TEC's role, to move beyond the sphere of control and of influence and interest. Given the main types of outputs delivered by the TEC, it relies on other actors, such as CTCN, countries and other partners to make good use of its policy recommendations and collaboration networks built. As an example, TEC can produce policy recommendations on innovative climate technologies (output), but to achieve use of this policy to deploy new technologies (outcome) it must count on a favorable context which its policy document influences only partially. Drivers thus reflect TEC's positioning in its environment and the different factors to mobilize and leverage in its pathway towards impacts.

- 24. The drivers between outputs and outcomes for each theme are the following:
  - Innovation: Incentives and favorable conditions to access and use climate technologies
  - Implementation: Adequate human, financial, and institutional capacities for implementation
  - Collaboration and stakeholder engagement: Critical mass of partners seeking cooperative relationships
  - Enabling environment and capacity-building: Continuity of actors engaged on climate technology RD&D and transfer
  - **Support:** NDC country focal points engage with NDE to support technology priorities in NDCs

25. The arrow "collaboration with CTCN" represents the synergetic collaboration between TEC and CTCN as CTCN's operations are a key driver for the use of TEC's outputs across all themes.

26. The drivers between outcomes and impacts are:

- Innovation: Technology innovation is accelerated and scaled up at different stages of the technology cycle
- Implementation: Technology development and transfer delivers transformational change across sectors and countries
- **Collaboration and stakeholder engagement:** Knowledge and support from multi-level stakeholders is leveraged by TEC and CTCN
- Enabling environment and capacity-building: Human resources and national enabling environments support large scale climate technology development and transfer
- **Support:** Increasing number of developing countries access technical and financial support for climate technology development and transfer

27. At this level, the drivers are closely aligned with the descriptions of each theme in the TF, including their implicit objectives, and as such are in symbiosis with those of the CTCN.

28. Assumptions, which are described earlier, are elements of the context that are required for the expected changes to happen, but over which TEC has no control.

#### • Figure 2. TEC 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

# 2.2 The logical framework of the TEC – Basis for Performance and Impact Measurement

29. The next component of the M&E framework is the LFA, which presents the intervention logic of the TOC in a sequential way with corresponding indicators for tracking progress. It serves as reference for operational planning, monitoring activities and results of the TEC, as well as for evaluation of its overall performance and impacts. The LFA further outlines how the TEC's expected results will be monitored using the specified indicators by noting data sources and targets that will be used to measure progress against each impact, outcome and outputs. The proposed data sources, or means of verification, are used to gather evidence and the ToC assumptions and drivers underpinning TEC's results – as discussed above - are also named.

#### 법 Table 1. TEC Logical Framework

Level	Results	Indicators	Targets by 2022	Means of Verification	Assumptions and drivers				
Impact	<u>Transformational changes envisioned in Article 10, paragraph 1 of the Paris Agreement:</u> Parties share a 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								
	Climate change resilient development and reduction of GHG emissions in developing countries.								
Sub-impacts	Deployment and diffusion of new and existing technologies in developing countries for NDC and NAP implementation								
Outcome 1 - Innovation	Various actors develop, deploy, and diffuse new and existing climate technologies	1. Evidence of stakeholders using TEC policy recommendations and publications on innovative climate technologies and RD&D when developing, deploying or diffusing new and existing climate technologies		NDE feedback form List of examples	Impact Driver (ID) 1: Technology innovation is accelerated and scaled up at different stages of the technology cycle				
Output 1	Policy recommendations, key messages and knowledge on innovative climate tech and RD&D	1.1. Number of sets of policy recommendations (comprising multiple policy recommendations) developed on innovative climate technologies and RD&D	3	List of policy recommendations on innovative climate technologies and RD&D	Outcome Driver (OD)1: Incentives and favorable conditions to access and use climate				
		1.2. Number of publications (including policy briefs, executive summaries, papers and compilation of good practices) developed on innovative climate technologies and RD&D	5	TT:CLEAR	technology A3: Recommendations and key messages are disseminated				

Results	Indicators	Targets by 2022	Means of Verification	Assumptions and drivers			
	1.3. Number of events organised by TEC on innovative climate technologies and RD&D	1	TT:CLEAR				
<ul> <li>Explore the setup of National Systems of Innovation in different countries and regions and analyse ways of incentivising innovation</li> <li>Promote collaboration and information sharing on international technology RD&amp;D and analyse key emerging climate technologies</li> <li>Promote innovative technologies and approaches for to deploying, disseminating, and scaling up adaptation technologies</li> </ul>							
Countries have clear pathways with identified support options to enhance technology development and transfer	2. Evidence of stakeholders using TEC recommendations and publications to enhance technology development and transfer		NDE feedback form	ID2: Technology development and transfer delivers transformational change across sectors and countries			
Policy recommendations, key messages and knowledge on TNA and uptake of existing technologies	2.1 Number of sets of policy recommendations (comprising multiple policy recommendations) on TNA and uptake of existing technologies	5	List of recommendations on TNA and TEM-M	OD2: Adequate human, financial, and institutional capacities for implementation			
	2.2 Number of publications developed by TEC on TNA and existing technologies	6	TT:CLEAR				
<ul> <li>Promote links or alignment of TNAs with NDCs</li> <li>Analyse and enhance TNA's implementation</li> <li>Update TNA guidelines as needed</li> <li>Identify innovative approaches to stimulate uptake of existing clean technology solutions</li> </ul>							
	Results         • Explore the setup of National         • Promote collaboration and i         • Promote innovative technol         Countries have clear         pathways with identified         support options to enhance         technology development         and transfer         Policy recommendations,         key messages and         knowledge on TNA and         uptake of existing         technologies	ResultsIndicators1.3. Number of events organised by TEC on innovative climate technologies and RD&D• Explore the setup of National Systems of Innovation in different count • Promote collaboration and information sharing on international tech • Promote innovative technologies and approaches for to deploying, diCountries have clear pathways with identified support options to enhance technology development and transfer2. Evidence of stakeholders using TEC recommendations and publications to enhance technology development and transferPolicy recommendations, key messages and knowledge on TNA and uptake of existing technologies2.1 Number of sets of policy recommendations (comprising multiple policy recommendations) on TNA and uptake of existing technologies2.2 Number of publications developed by TEC on TNA and existing technologiesPromote links or alignment of TNAs with NDCs• Analyse and enhance TNA's implementation • Update TNA guidelines as needed• Identify innovative approaches to stimulate uptake of existing clean to • Identify way forward and actions to be taken based on the outcomes	Results       Indicators       Targets by 2022         1.3. Number of events organised by TEC on innovative climate technologies and RD&D       1         • Explore the setup of National Systems of Innovation in different countries and regions and a Promote collaboration and information sharing on international technology RD&D and and Promote innovative technologies and approaches for to deploying, disseminating, and scaling technology development and transfer       2. Evidence of stakeholders using TEC recommendations and publications to enhance technology development and transfer       5         Policy recommendations, key messages and knowledge on TNA and uptake of existing technologies       2.1 Number of sets of policy recommendations (comprising multiple policy recommendations) on TNA and uptake of existing technologies       5         • Promote links or alignment of TNAs with NDCs       6         • Promote links or alignment of TNAs with NDCs       4         • Analyse and enhance TNA's implementation       • Update TNA guidelines as needed         • Identify innovative approaches to stimulate uptake of existing clean technology solutions	Results       Indicators       Targets by 2022       Means of Verification         1.3. Number of events organised by TEC on innovative climate technologies and RD&D       1       TT:CLEAR         • Explore the setup of National Systems of Innovation in different countries and regions and analyse ways of incentive Promote collaboration and information sharing on international technology RD&D and analyse key emerging clime Promote innovative technologies and approaches for to deploying, disseminating, and scaling up adaptation technology pathways with identified support options to enhance technology development and transfer       2. Evidence of stakeholders using TEC recommendations and publications to enhance technology development and transfer       NDE feedback form         Policy recommendations, key messages and knowledge on TNA and uptake of existing technologies       2.1 Number of sets of policy recommendations (comprising multiple policy recommendations) on TNA and uptake of existing technologies       5       List of recommendations on TNA and TEM-M         • Promote links or alignment of TNAs with NDCs       6       TT:CLEAR         • Analyse and enhance TNA's implementation       Update TNA guidelines as needed       Identify innovative approaches to stimulate uptake of existing clean technology solutions         • Update TNA guidelines as needed       Identify way forward and actions to be taken based on the outcomes of the TEMs on mitigation			

Level	Results	Indicators	Targets by 2022	Means of Verification	Assumptions and drivers
Outcome 3 - Collaboration and stakeholder engagement	A broad range of stakeholders collaborate in promoting climate technology development and transfer	3. Number of stakeholders engaged in the implementation of the TEC workplan		Lists of participants to events TT:CLEAR	ID3: Knowledge and support from multi-level stakeholders is leveraged by TEC and CTCN
Output 3	Facilitated knowledge transfer and collaboration	3.1 Number of events organised by TEC	6	TT:CLEAR	OD3: Critical mass of partners
	with key stakeholders through events	3.2 Number of participants (men, women) to the events organised	300	Lists of participants to events	seeking cooperative relationships
		3.3 Number of events where TEC members (men, women) provided inputs on TEC-related topics	8	List of events TEC meetings' reports	A3: Recommendations and key messages
		3.4 Number of publications developed by the TEC in collaboration with stakeholders	2	TT:CLEAR	
		3.5 Number of sets of policy recommendations developed on technologies for coastal zones	1	List of recommendations on technologies for coastal zones	
Activities under	• Develop a policy brief on teo	chnologies for coastal zones in collaborat	ion with the WIM Exco	om	
Output 3	• Engage stakeholders in the context of TEMs on mitigati	identification of options for enhancing re on	plicability and scalabil	ity of mature climate to	echnologies in the
	• Engage and contribute to the	ne work of the Adaptation Committee cor	e working group in the	e preparation of TEMs o	on and adaptation
	Engage and collaborate with	h relevant stakeholders in the planning ar	nd implementation of	Technology Mechanisn	n activities

Level	Results	Indicators	Targets by 2022	Means of Verification	Assumptions and drivers
Outcome 4 - Enabling environment and capacity- building	A broad range of stakeholders have the resources and means to deploy climate technologies	4. Evidence of stakeholders using TEC policy recommendations and publications on enabling environments and capacity building		NDE Feedback form	ID4: Human resources and national enabling environments support large scale climate technology development and transfer
Output 4	Policy recommendations, key messages and knowledge for enhancing enabling environments for technology development and transfer	4.1 Number of sets of policy recommendations (comprising multiple policy recommendations) on enabling environments and barriers, and on development and enhancement of endogenous capacities and technologies	2	List of policy recommendations on enabling environment and barriers, and on development and enhancement of endogenous capacities and technologies	OD4: Continuity of actors engaged on climate tech RD&D and transfer OD6: Mutual interests and synergies among wide range of stakeholders
		4.2. Number of publications developed by TEC on enabling environments and barriers, and on enhancement of endogenous capacities and technologies	4	TT:CLEAR	Recommendations and key messages are disseminated
		4.3. Number of events organised by TEC on enabling environments and barriers, and on enhancement of endogenous capacities and technologies	2	TT:CLEAR	

Level	Results	Indicators	Targets by 2022	Means of Verification	Assumptions and drivers			
Activities under Output 4	<ul> <li>Examine enabling environments, including challenges and opportunities to incentivize the private and public sector development and transfer of technologies, and recommend guidance on policies and programme priorities</li> <li>Analyze measures that facilitate countries in enhancing enabling environment to promote endogenous capacities and technologies</li> <li>Identify challenges and opportunities to strengthen the enabling environment for replicability and scalability of sustainable transport technologies</li> </ul>							
Outcome 5 - Support	Financial and technical resources identified and available to support climate technology development and transfer	5. Evidence of stakeholders using TEC policy recommendations on support for technology development an transfer		GCF, GEF, and SCF annual reports to the COP	ID5: Increasing number of developing countries access technical and financial support for climate technology dev. and transfer			
Output 5	Policy recommendations on support for technology development and transfer	5.1 Number of sets of policy recommendations (comprising multiple policy recommendations) on support for technology development and transfer	1	List of policy recommendations on support for technology development and transfer	OD5: Country focal points engage with NDE to support tech priorities in NDCs OD6: Mutual			
		5.2 Number of publications developed on support for technology development and transfer	3	TT:CLEAR	interests and synergies among wide range of stakeholders			
	Collaboration with GCF / GEF / SCF strengthened	5.3 Number of inputs and recommendations provided to GCF, GEF, and SCF	8	List of inputs and recommendations to GCF, GEF and SCF	A3: Recommendations and key messages are disseminated			

16	Level	Results	Indicators	Targets by 2022	Means of Verification	Assumptions and drivers			
	Activities under								
	Output 5	Update the PSP evaluation report							
<ul> <li>Follow up relevant recommendations emerging from the updated evaluation of the PSP</li> <li>Provide inputs to SCF on draft guidance for the operating entities of the Financial Mechanism</li> <li>Analyse experiences, lessons learned and good practices from GCF/GEF's support for technology</li> </ul>									

# 3. The Performance Measurement Framework

30. The PMF below is aligned with the above LFA but includes additional elements to collect, analyze, and report on its activities and outputs/outcomes data. It is structured in two levels:

- 1) **Monitoring of outputs**: This should be performed on a yearly basis. Data to be collected pertains only to TEC's outputs and should therefore be readily available internally. It includes mostly lists and types of policy recommendations, lists of participants to events and data from TT:CLEAR. It can be collected by the UNFCCC Secretariat and compiled in a monitoring dashboard.
- 2) Assessment of outcomes: This should be performed every five years, before the TF periodic assessment, so that recent data for this assessment is made available. Some of the data required to assess the level of achievement of the expected outcomes is also from TEC internal dashboard data (TT:CLEAR or lists of outputs), but some indicators require seeking external information to assess the extent to which TEC has contributed to generate change for external stakeholders. To this end, a survey of NDEs should be conducted, as detailed in the PMF.

#### Tools

31. Two tools are developed to ensure that M&E is efficient, consistent and helps TEC learn from its experience and account for its achievements:

- Monitoring dashboard: A simple Excel file is developed to act as data repository for all the monitoring indicators. It is based on the PMF table and include a column to input each year's data. The targets are stated as a reference. The format of the Excel table is such that it can easily be printed out to constitute a monitoring report.
- 2) NDE Feedback form: This short survey will target all NDEs with a few specific questions about their experience with the TEC. The purpose of the survey is to identify whether and how countries are using TEC outputs in their countries. It can collect quantitative information about the number of countries or stakeholders using TEC information, and it can also collect qualitative examples of uses made of this information.

#### Additional recommendations

- 1) The TEC should ensure that its systems currently allow collecting the information requested in the PMF;
- 2) The TEC should test the M&E system before using it in practice, to identify any challenges in implementing the system;
- 3) No evaluations are scheduled in this PMF, but data for outcome monitoring data would be essential for the five year TM periodic assessment;
- 4) It may become necessary to update the PMF to adjust it to the requirements of the Paris Agreement Global Stocktake or to those of the TM periodic assessment.

#### Table 2. TEC Performance Measurement Framework

Indicator	Baseline	Targets by 2022	Method/Sources/ Definition	Frequency	Responsibility	
Outcome 1 – Innovation: Various actors develop, de	ploy, and diffus	se new and exist	ting climate technologi	es		
1. Evidence of stakeholders using TEC policy recommendations and publications on innovative climate technologies and RD&D when developing, deploying or diffusing new and existing climate technologies		N/A	NDE feedback form List of examples	Every 5 years (before periodic assessment)		
1.1. Number of sets of policy recommendations (comprising multiple policy recommendations) developed on innovative climate technologies and RD&D		3	List of policy recommendations on innovative climate technologies and RD&D	Yearly	UNFCCC secretariat	
1.2. Number of publications (including policy briefs, executive summaries, papers and compilation of good practices) developed on innovative climate technologies and RD&D		5	TT:CLEAR	Yearly		
1.3. Number of events organised by TEC on innovative climate technologies and RD&D		1	TT:CLEAR	Yearly		
Outcome 2 – Implementation: Countries have clear	pathways with i	identified suppo	ort options to enhance t	echnology develo	opment and transfer	
2. Evidence of stakeholders using TEC recommendations and publications to enhance technology development and transfer		N/A	NDE feedback form	Every 5 years (before periodic assessment)	UNFCCC secretariat	
2.1 Number of sets of policy recommendations (comprising multiple policy recommendations) on TNA and uptake of existing technologies		5	List of recommendations on TNA and TEM-M	Yearly		

Indicator	Baseline	Targets by 2022	Method/Sources/ Definition	Frequency	Responsibility	
2.2 Number of publications developed by TEC on TNA and existing technologies		6	TT:CLEAR	Yearly		
Outcome 3 - Collaboration and stakeholder engager and transfer	ment: A broad r	ange of stakeho	lders collaborate in pro	omoting climate to	echnology development	
3. Number of stakeholders engaged in the implementation of the TEC workplan		N/A	Lists of participants to events TT:CLEAR	Every 5 years (before periodic assessment)		
3.1 Number of events organised by TEC		6	TT:CLEAR	Yearly		
3.2 Number of participants to the events organised		300	Lists of participants to events	Yearly		
3.3 Number of events where TEC members (men, women) provided inputs on TEC-related topics		8	List of events TEC meetings' reports	Yearly	UNFCCC secretariat	
3.4 Number of publications developed by the TEC in collaboration with stakeholders		2	TT:CLEAR	Yearly		
3.5 Number of sets of policy recommendations developed on technologies for coastal zones		1	List of recommendations on technologies for coastal zones	Yearly		
Outcome 4 - Enabling environment and capacity-building: A broad range of stakeholders have the resources and means to deploy climate technologies						
4. Evidence of stakeholders using TEC policy recommendations and publications on enabling environments and capacity building		N/A	NDE Feedback form	Every 5 years (before periodic assessment)	UNFCCC secretariat	

Indicator	Baseline	Targets by 2022	Method/Sources/ Definition	Frequency	Responsibility
4.1 Number of sets of policy recommendations (comprising multiple policy recommendations) on enabling environments and barriers, and on development and enhancement of endogenous capacities and technologies		2	List of policy recommendations on enabling environment and barriers, and on development and enhancement of endogenous capacities and technologies	Yearly	
4.2. Number of publications developed by TEC on enabling environments and barriers, and on enhancement of endogenous capacities and technologies		4	TT:CLEAR	Yearly	
4.3. Number of events organised by TEC on enabling environments and barriers, and on enhancement of endogenous capacities and technologies		2	TT:CLEAR	Yearly	
Outcome 5 – Support: Financial and technical resour	rces identified a	nd available to	support climate techno	logy developmen	t and transfer
5. Evidence of stakeholders using TEC policy recommendations on support for technology development an transfer		N/A	GCF, GEF, and SCF annual reports to the COP	Every 5 years (before periodic assessment)	
5.1 Number of sets of policy recommendations (comprising multiple policy recommendations) on support for technology development and transfer		1	List of policy recommendations on support for technology development and transfer	Yearly	UNFCCC secretariat

Indicator	Baseline	Targets by 2022	Method/Sources/ Definition	Frequency	Responsibility
5.2 Number of publications developed on support for technology development and transfer		3	TT:CLEAR	Yearly	
5.3 Number of inputs and recommendations provided to GCF, GEF, and SCF		8	List of inputs and recommendations to GCF, GEF and SCF	Yearly	