### **Technology Executive Committee**

26 September 2019

# Rolling workplan of the Technology Executive Committee for 2019–2022

- 1. The Technology Executive Committee (TEC) is the policy arm of the Technology Mechanism established by the COP at COP16 in Cancun in 2010. The overall mandates of the TEC include the functions of the TEC, the mandate to further implement the technology transfer framework established under the Convention, the consideration of priority areas, and the promotion of coherence and synergy within the Technology Mechanism. Article 10 of the Paris Agreement mandates the Technology Mechanism to serve the Paris Agreement. At CMA 1 in Katowice, Poland, in 2018, Parties gave further guidance to the TEC and CTCN in the form of Technology Framework under Article 10.4 of the Paris Agreement and Scope and Modalities of the periodic assessment of the Technology Mechanism.
- 2. In executing these functions and mandates the TEC agrees on activities for certain duration, captured in a rolling workplan. Since its inception, the TEC has developed and implemented three rolling workplans: 2012–2013, 2014–2015, and 2016–2018.
- 3. The new workplan provides a first opportunity for the TEC to respond to guidance by both COP and CMA in one single workplan. The new workplan will support the implementation of Paris Agreement on technology development and transfer and will continue support enhanced action on technology under the Convention.
- 4. Noting that some activities are common under various COP and CMA decisions, the TEC worked to ensure that efficiency and effectiveness is achieved through avoiding duplication of activities while still being responsive to specific guidance by each governing body. Further, the TEC considered important to have continuity, clarity and coherence of the activities to maximise impacts of the work of the TEC. Finally, to provide flexibility for organizing and sequencing its activities and to synchronize with the duration of programme of work of the CTCN, a four-year workplan period was selected.
- 5. In designing this new rolling workplan the TEC took into account lessons learned from the implementation of previous workplans. The TEC also took into consideration the principles of the Technology framework, namely: coherence, inclusiveness, results-oriented approach, transformational approach and transparency, but more importantly, these principles will also guide the work of the TEC during the implementation of the workplan.
- 6. Against this background, the activities of the rolling workplan of the TEC for 2019–2022 are organised in five thematic 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. The TEC will engage various stakeholders in undertaking its work, including through inviting participations of representatives from observer organisations in the task forces of the TEC.
- 8. The TEC will periodically review the implementation of this rolling workplan and may adjust it, as appropriate, taking into account new mandates and future priorities set by the COP and CMA.

#### Gender consideration

9. The TEC agreed to apply the general approach, as contained in document TEC/2019/19/10,<sup>3</sup> to integrating gender consideration in the implementation of the activities of the rolling workplan to enhance the effectiveness and inclusiveness of the TEC recommendations. Further, the TEC established the role of Gender Focal Point within the TEC as described in the same document.

<sup>&</sup>lt;sup>1</sup> Decision 1/CP.16, paragraphs 121, 119, 120, 127.

<sup>&</sup>lt;sup>2</sup> Decision 15/CMA.1, decision 16/CMA.1.

<sup>&</sup>lt;sup>3</sup> Document available in <u>here</u>

#### Monitoring and evaluation

10. In response to decision 13/CP.24 and paragraph 24 and 25 of the Annex to the decision 15/CMA.1, the TEC developed a monitoring and evaluation system to monitor and evaluate impacts of the activities under this rolling workplan. The system was developed in collaboration with the CTCN to ensure coherence of approach within the Technology Mechanism. The TEC will regularly review the implementation of this system, and revise it as needed.

#### Communication and outreach

11. In response to decision 13/CP.24 and paragraph 16a of the Annex to the decision 15/CMA.1, the TEC will develop communication and outreach strategy to support the implementation of the rolling workplan and to ensure that its products are understood and reach the intended audience. The communication and outreach strategy should also aim to enhance public awareness on climate technologies. The TEC will also undertake communication and outreach activities in collaboration with the CTCN to ensure coherent messaging from the Technology Mechanism.

# Abbreviations and acronyms

AC Adaptation Committee

BINGO Business and industry non-governmental organizations

CEM Clean Energy Ministerial

CIGAR Research Programme on Climate Change, Agriculture and Food

Security

CMA Conference of the Parties serving as the meeting of the Parties to the

Paris Agreement

COP Conference of the Parties

CTCN Climate Technology Centre and Network

ENGO Environmental non-governmental organizations

GCF Green Climate Fund

GEF Global Environment Facility

GIC Global Investor Coalition on Climate Change

ICC International Chamber of Commerce

IEA International Energy Agency
IGO Intergovernmental organizations

IPCC Intergovernmental Panel on Climate Change

IRENA International Renewable Energy Agency

MPGCA Marrakesh Partnership on Global Climate Action

NDC Nationally determined contributions

NDE National Designated Entity

N-S North-South

NSI National Systems of Innovation

PCCB Paris Committee on Capacity-building

PSP Poznan strategic programme

RD&D Research Development & Demonstration

RINGO Research and independent non-governmental organizations

SCF Standing Committee on Finance

SSC South-South cooperation

TEC Technology Executive Committee

TEM Technical expert meeting

TEM-M Technical expert meeting on mitigation

TF Technology Framework

TNA Technology Needs Assessment

TrC triangular cooperation

UDP United Nations Environment Programme and Technical University

of Denmark Partnership

YOUNGO Youth non-governmental organizations

WIM-Excom Executive Committee of the Warsaw International Mechanism for

Loss and Damage

#### A. Innovation

- 12. Paragraph 6 of the Annex to the decision 15/CMA.1 on Technology framework stipulates that actions and activities under this key theme should accelerate and scale up innovation at different stages of the technology cycle, addressing both adaptation and mitigation in a balanced manner to help countries to build resilience and reduce their emissions, and be undertaken in a manner that enhances the effective participation of developing country Parties, fosters sustainable development and ensures gender responsiveness.
- 13. To achieve the objective of this thematic area, in this four-year period, the TEC will undertake a number of activities aimed to lay solid ground work in various topics related to innovation, for the TEC to work further in future (see table 1).

**Table 1. Innovation** 

Relevant	Activities		Expected	d outputs/Deliverables		Possible modalities		Workstream	Į.
mandates	Activities	2019	2020	2021	2022	and stakeholders	Mitigation	Adaptation	Cross-cutting
Technology Framework (TF) para 8a, 12e, 16b	1. Building on TEC previous work, explore the setup of National Systems of Innovation in different countries and regions and analyze ways to incentivize innovation of mitigation and adaptation technologies			a. Compilation of good practices and lessons learned of NSI setup and implementation, including on how top-down policies can be combined with bottom up approach	b. Recommendations on how to incentivize innovation and/or Update of TEC Brief on NSI c. Present and discuss recommendations in regional events	Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.  Collaboration and engagement with NDEs and policy makers, IPCC, relevant expert organizations, research and academia, public and private sector, industry			X
TF 8b, 8e, 8f, 8g, 20b, 20d, 25c	2. Building on TEC previous work on Research Development & Demonstration (RD&D) with a focus on incubators, accelerators and entrepreneurship, and taking into consideration South-South, North-South, Triangular and regional cooperation:  - Identify and analyze overview of international RD&D partnerships and initiatives, and approaches for collaborative RD&D available for countries to participate  - Compile countries experiences, good practices and lessons learned, on RD&D policies & activities  - Analyze key emerging climate technologies		a. Compilation of good practices and lessons learned on countries RD&D, including international RD&D partnerships and various approaches for collaborative RD&D  b. Mapping of emerging technologies, including possible scope of TEC work on this matter	c. Executive summaries on RD&D for targeted audience  d. Recommendations to COP/CMA		Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.  Collaboration and engagement with relevant UN organization, IPCC, IEA, CIGAR, IRENA, CEM, research and academia, public and private sector.			X

Relevant	Activities		Expected	d outputs/Deliverables		Possible modalities		Workstream	
mandates	Activities	2019	2020	2021	2022	and stakeholders	Mitigation	Adaptation	Cross-cutting
TF 8c, 20b	3. Promote innovative approaches, including through development of scalable business cases, local community participation, gender and cultural sensitive approaches, to deploy, disseminate, and scale up adaptation technologies		a. In-session dialogue/workshop/ Technology Day event to discuss innovative approaches for adaptation technologies, including co- benefits	b. Policy brief/ Recommendation on innovative approaches		Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.  Collaboration and engagement with IPCC, public and private sector, communities, Adaptation Committee in their work on private sector adaptation  Promotion of cooperation on adaptation technologies (public-private partnership, N-S, SSC, TrC and regional cooperation)  Sharing of information to NDEs, policy makers		X	

### B. Implementation

- Paragraph 10 and 11 of the Annex to the decision 15/CMA.1 on Technology framework stipulates that actions and activities under this theme should facilitate the implementation of collaborative technology development and transfer, build on the past and ongoing work of the Technology Mechanism and take into account the role of North–South, South–South, triangular and regional collaboration in facilitating implementation. They also should facilitate the implementation of mitigation and adaptation action 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, and facilitate overcoming challenges by implementing such action, as appropriate
- 15. To achieve the objective of this thematic area, in this four-year period, the TEC will undertake a number of activities aimed to help countries in enhancing the implementation of technology actions identified under TNA process, and in scaling the uptake of existing technological solutions (see table 2).

**Table 2. Implementation** 

Relevant mandates	Activities		Outputs/	Deliverables		Possible modalities		Workstrean	1
Relevant mandates	Activities	2019	2020	2021	2022	and stakeholders Mitigation Adaptation		Cross-cutting	
TF 12b	1. Continue work on linkages between TNA process and NDC process			a. Paper (needs to be specified during further discussion)	b. Policy brief  c. Recommendations to COP/CMA	Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.  Collaboration and engagement with NDC partnership and NDC regional dialogues and relevant actors	X	Х	
TF 12a, 25c	2. Analyze experiences, lessons learned and good practices in conducting TNAs and implementing their results	a. Paper on good practices in conducting TNA	b. Policy brief c. Recommendations to COP/CMA			Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.  Collaboration and engagement with NDEs, private sector, financing community, support providers and relevant actors	X	X	
TF 12c	3. Update the TNA guidelines, building on previous work of the TEC, with a view to				a. Consider the need to revise TNA guidelines taking into account COP/CMA guidance on that matter	Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.	X	Х	

Relevant mandates	A -41141		Outputs/	Deliverables		Possible modalities		Workstream		
Relevant mandates	Activities	2019	2020	2021	2022	and stakeholders	Mitigation	Adaptation	Cross-cutting	
	TNAs leading to enhanced implementation.					Engagement with CTCN, UDP, GEF, TNA countries, private sector, and relevant actors				
TF 8h, 12d, 12e, 20a, 20b	4. Identify innovative approaches to stimulate uptake of existing clean technology solutions.	a. Concept note for the TEC to consider and decide on scope of the issues and possible activities	b. Paper	c. Policy brief d. Recommendations to COP/CMA		Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs. Information and input can be also sourced from UN Global Compact, IPCC, CTCN	X	X		
Decision 13/CP.23, TF 8c, 12e, 16d, 16e, 20c	5. Take forward outcomes of the Technical Examination Process on mitigation and identify way forward and actions to be taken based on the outcomes of the TEMs on mitigation	a. Analysis of outcomes of technical expert meetings on mitigation (TEM-M) in 2019 on topic: off-grid and decentralized energy solutions for smart energy and water use and circular economy in the agrifood chain.  b. Recommendations to COP	c. Analysis of outcomes of TEM-M in 2020 on topic: sustainable low-emission housing and building solutions d. Recommendations to COP			Recommendation in consultation with the high-level champions	X			

### C. Enabling environment and capacity-building

- 16. Paragraph 15 of the Annex to the decision 15/CMA.1 on Technology framework stipulates that actions and activities under this theme should foster the creation and enhancement of an enabling environment, including policy and regulatory environments for technology development and transfer, and strengthen the capacity of countries to effectively address various challenges.
- 17. To achieve the objective of this thematic area, in this four-year period, the TEC will undertake a number of activities aimed to highlight to countries ways to enable the policy environment and strengthen their capacity in addressing challenges they may face in the context of technology development and transfer, including through the building endogenous capacities and technologies (see table 3).

Table 3. Enabling Environment and Capacity-building

Dalamant manudatas	A -41141		Outputs/Deli	verables		Possible modalities		Workstream	Vorkstream	
Relevant mandates	Activities	2019	2020	2021	2022	and stakeholders	Mitigation	Adaptation	Cross-cutting	
TF 12e, 16b, 16d, 2016–2018 workplan	1. Examine enabling environments, including challenges and opportunities to incentivize the private and public sector in the development and transfer of technologies, building on TEC previous work on adaptation and mitigation technologies		a. Paper examining enabling environments and challenges, including barriers based on TNA, NDC, CTCN technical assistance, and relevant TEC Briefs	b. Thematic dialogue c. Policy Brief containing recommendation for enhancement of enabling environments and addressing various challenges to technology development and transfer, including those related to capacity building		Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.  Collaboration and engagement with CTCN, NDC partnership, NDEs, UDP	X	X		
Decision 1/CP21, TF 16c, 16g, 16h, 16i, 2016–2018 workplan	2. Analyze measures that facilitate countries in enhancing enabling environment to promote endogenous capacities and technologies: - Share previous TEC findings on endogenous capacities and technologies and collect feedback from other bodies and stakeholders - Promote shared understanding of endogenous capacities and technologies - Identify and analyze including from CTCN	a. Feedback from other constituted bodies b. Findings communicated to promote shared understanding of endogenous capacities and technologies	c. Working paper/product related to needs, challenges and gaps and measures to develop and enhance endogenous capacities and technologies	d. Recommendations to COP/CMA		Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.  Collaboration and engagement with PCCB during PCCB meeting in June 2019 and other event  Engagement of NDEs and CTCN (e.g. through regional forums  Inputs may be sourced from relevant reports, CTCN work, ENGO	X	X		

Delevent mendetes	Activities		Outputs/Deli	verables		Possible modalities		Workstream	ı
TF 16d, 16e, 12e, 8c op st en fa	Activities	2019	2020	2021	2022	and stakeholders	Mitigation	Adaptation	Cross-cutting
	work, needs, challenges and gaps and enabling environments to promote endogenous capacities and technologies					working on endogenous issues			
	3. Identify challenges and opportunities to strengthen enabling environments, including favorable market conditions, to enhance replicability and scalability of technologies for sustainable transport, including fostering public and private sector involvement				a. Back- ground paper b. Thematic dialogue	Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.  Collaboration and engagement with MPGCA, and relevant expert organizations	X		

### D. Collaboration and stakeholders engagement

- 18. Paragraph 18 of the Annex to the decision 15/CMA.1 on Technology framework stipulates that Technology Mechanism shall work in an open and inclusive, including gender-responsive, manner whereby stakeholders are invited to participate and actively engage. Collaboration with and engagement of stakeholders should take place at different stages of the technology cycle.
- 19. To achieve the objective of this thematic area, in this four-year period, the TEC will undertake a number of activities building from its on-going work, ranging from continuing collaboration with constituted bodies and engaging in relevant Convention processes, and embed the collaboration with various stakeholders in all activities in other thematic areas (see table 4).

Table 4. Collaboration & Stakeholder Engagement

Dalamant man datas	Activities		Outputs/Deliverables	1		Possible modalities		Workstream	n
Relevant mandates	Activities	2019	2020	2021	2022	and stakeholders	Mitigation	Adaptation	Cross-cutting
Decision 15/CP23, 2016–2018 workplan TF 20d	1. Develop a joint policy brief on technologies for averting, minimizing, and addressing loss and damage in coastal zones, in collaboration with WIM-Excom	a. Expert dialogue (SB50 June 2019)	b. Joint policy brief c. Recommendations to the COP/CMA			Engagement of relevant experts and organizations to provide inputs during expert dialogue and in the drafting of the joint policy brief	X	X	
Decision 13/CP.23, TF 12e, 16d, 16e, 20a, 20c, 2016–2018 workplan	2. Engage stakeholders in the identification of options for enhancing replicability and scalability of mature climate technologies, in the context of Technical examination process on Mitigation	a. Co-organization with CTCN of regional technical expert meetings (TEM-M) in 2019, held in conjunction with climate weeks or other regional events  b. TEC members participation in in-session and regional TEM-Ms and provision of inputs on technology issues  c. TEC members engagement in other relevant events	d. Co-organization with CTCN of regional TEM- Ms in 2020, held in conjunction with climate weeks or other regional events  e. TEC members participation in in-session and regional TEM-Ms and provision of inputs on technology issues  f. TEC members engagement in other relevant events			Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.  Collaboration with CTCN, with the support of the UNFCCC secretariat, MPGCA, and relevant expert organizations  Targeted stakeholders: NDEs, domestic policy makers, private sectors, practitioners, and other relevant stakeholders	X		
Decision 13/CP.23, TF 12e, 16d, 16e, 20a, 2016–2018 workplan	3. Engage and contribute to the work of the Adaptation Committee core working group in	a. Input to the AC on technology issues relevant to TEMs on adaptation	b. Input to the AC on technology issues relevant to TEMs on adaptation			Collaboration and engagement with the Adaptation Committee		X	

Dalamant mandatas	Activities		Outputs/Deliverables	S		Possible modalities		Workstream	n
Relevant mandates	Activities	2019	2020	2021	2022	and stakeholders	Mitigation	Adaptation	Cross-cutting
	the preparation of <b>TEMs on</b> adaptation								
TF 20	4. Engage and collaborate with relevant stakeholders in the planning and implementation of Technology Mechanism activities				a. Summary paper on TEC collaborations and stakeholder engagement over the period 2019-2022	Collaboration and engagement with CTCN, BINGO, ENGO, RINGO, YOUNGO and IGOs, and other relevant stakeholders			X

# E. Support

- 20. Paragraph 21 and 22 of the Annex to the decision 15/CMA.1 on Technology framework stipulate 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. The understanding of support under this key theme is broader than just financial support, as it may include all aspects of support for the implementation of Article 10 of the Paris Agreement. The support should be provided for all key themes of the technology framework, taking into account the gender perspective and endogenous and indigenous aspects.
- 21. To achieve the objective of this thematic area, in this four-year period, the TEC will undertake a number of activities <u>aimed to</u> continue the work of the TEC on climate technology financing to assist countries on various recommendations on support related to technology development and transfer (see table 5).

Table 5. Support

Delevent mendeter	Activities		Outputs/l	Deliverables		Possible modalities	1 ossible mounties		Workstream	
Relevant mandates	Activities	2019	2020	2021	2022	and stakeholders	Mitigation	Adaptation	Cross-cutting	
TF 25a, 2016–2018 workplan	1. Continue collaboration with GCF on support for climate technologies, including through continuing work on climate technology incubators and accelerators and participation in GCF annual meeting with UNFCCC constituted bodies to enhance collaboration	a. Inputs for the GCF annual meeting	b. Inputs for the GCF annual meeting c. Technical advice on climate technology incubators and accelerators	d. Inputs for the GCF annual meeting	e. Inputs for the GCF annual meeting	Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs. Collaboration and engagement with GCF	X	X		
TF 25a, 2016–2018 workplan	2. Update the PSP evaluation report to include experiences and lessons learned from PSP climate technology transfer and finance centers and pilot projects of the fourth replenishment of the GEF	a. Updated PSP evaluation report				Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.  Collaboration and engagement with GEF, CTCN, regional development banks	X	X		
TF 25a	3. Follow up relevant recommendations emerging from the updated evaluation of the PSP to enhance the effectiveness of the Technology Mechanism	a. Proposal on how to address the key messages and relevant recommendatio ns from the updated evaluation of the PSP	b. Participate in a dialogue organized between the GEF, regional centers and the CTCN to share experiences and lessons learned from the PSP evaluation			Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.  Collaboration and engagement with CTCN, GEF and regional development banks	X	X		

Delevent mendetes	Activities		Outputs/	Deliverables		Possible modalities		Workstream	
Relevant mandates	Activities	2019	2020	2021	2022	and stakeholders	Mitigation	Adaptation	Cross-cutting
TF 25a, 2016–2018 workplan	4. Provide inputs to SCF on draft guidance for the operating entities of the Financial Mechanism	a. Inputs to SCF	b. Inputs to SCF	c. Inputs to SCF	d. Inputs to SCF	Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs. Collaboration and engagement with SCF, GCF, GEF	X	Х	
TF 25a, 25c	5. Undertake Analysis on the experiences, lessons learned and good practices from GCF/GEF's support for technology with a view to enhancing collaboration with the Financial Mechanism <sup>4</sup>			a. Technical Paper on experiences and lessons learned from support for climate technologies	b. Policy Brief c. Recommendations to COP/CMA	Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.  Collaboration and engagement with GCF, GEF; CTCN	X	X	
TF 25b	6. Prepare concept note, including mapping, on innovative financing and investment options at different stages of the technology cycle <sup>5</sup>			a. Concept note for the TEC to consider and decide on scope of the issues		Collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.  Collaboration and engagement with regional development banks, and other relevant stakeholders	X	X	

<sup>&</sup>lt;sup>4</sup> Including analytical work on elements that emerged from the key messages of the PSP evaluation. <sup>5</sup> As in footnote 4 above.