

## TM Virtual Event “TM ramps up its work to help countries scale up climate action on technology”

8 June 2020, 15:00 – 16:00

### QUESTIONS AND ANSWERS

The present document contains questions submitted by participants that could not be answered during the event due to lack of time. Panelists addressed some of those questions after the event in writing and their answers are provided in this document.

Some questions were combined for brevity and some have not been answered, for example those that inquired about technology solutions to reduce impact of melting glaciers in the Himalayan and Karakorum ranges, the use of country TNA process to push for green recovery, and level of support provided to the TEC and CTCN to implement their mandates. Though they illustrate the diversity of interest in the work of the Technology Mechanism, they are not included in this document on the understanding that even during an extensive live Q&A, not all questions can always be answered. Furthermore, the TEC and the CTCN have not yet explored some of those areas.

**Responses to the questions below reflect the personal views of the panelists and speakers and do not necessarily represent the views of any institutions.**

#### A. Open Questions

No.	Question	Answer
1	What can you do to make technologies be easily accessed by countries who need them?	<p>Technologies are readily available at the moment, the challenge with access is often one of finance, where countries can only access technologies that they can afford. There are many different approaches governments can take to making technologies cost effective, they can be grouped into:</p> <ul style="list-style-type: none"><li>• Grants and funding: Governments and international bodies can help fund the implementation of different technologies for example cooking stoves that don't use wood, or different approaches to keeping people warm. They can also require that certain emissions reductions be achieved in order for the funds to be accessed.</li></ul>

		<ul style="list-style-type: none"> <li>• Incentive schemes: these can be certificate schemes where there is payment for reductions in emissions, or specific to a technology like low flow shower heads, LEDs or behind the meter solar installations. This group includes cases where government departments become the first customer for a technology, such as LEDs, which allows the private sector to build the market off a safe base.</li> <li>• Legislation: you can choose to legislate a minimum requirement for emissions reductions through a project or include a requirement to retrofit existing equipment or technologies to adequate or better performance before projects are allowed to be implemented.</li> </ul> <p>All of these are predicated on skills being available in-country to install and maintain technologies; and the supply chain being in place for the provision of the technologies and spare parts, these supply chains can be domestic, or based on imports.</p> <p>The Technology Mechanism continues to work, according to their functions, ensuring countries can have access to technologies. For example, the TEC policy briefs and publications contain information on numerous existing technologies in different sectors, as well as good practices on cooperation among countries to deploy climate technologies. The CTCN is renowned in providing technical assistance based on countries' specific needs on climate technologies.</p> <p>More information can be found in: <a href="https://unfccc.int/ttclear/tec">https://unfccc.int/ttclear/tec</a>, <a href="https://www.ctc-n.org/">https://www.ctc-n.org/</a></p>
2.	How are countries picking up the technologies especially the third world countries?	<p>There are many instances of developing countries picking up technologies through trials, case studies and demonstrations. The growth of the mobile phone network through Africa is an example – this was driven by a private sector company because there was a business case for its development, the social implications of this network are profound – and far beyond the business case that this represented to the company. This was successful because it made the lives of the people it was serving better.</p>

		<p>One way to accelerate the uptake of technologies is to develop programs that are based on existing infrastructure and consider current circumstances in that country, including in-country skills for implementation. Private sector can be engaged to develop the opportunity.</p> <p>One innovative force is the entrepreneurial nature of the people and whole cultures and society. This could be something the governments could look into and guide in the right direction.</p>
3.	<p>What do you see as some of the key climate technologies in the immediate post-COVID era? And do you think stimulus support from governments that is contingent on more ambitious climate action is critical for uptake?</p>	<p>The key climate technologies are country specific. The focus of the short term post-COVID period (the next 6 to 9 months) can be on policy or technology that is ready to go. There will not be enough time to work through the details of a business case for a technology that has never been implemented in that country before example. NDCs should be a source of focus for policy as these should highlight areas already under consideration and policies already in progress.</p> <p>Stimulus support from governments should definitely include requirements for ambitious climate action, or minimum requirements on emissions reduced per \$ invested.</p> <p>Key climate technologies will be those that generate the most jobs per \$ invested in them. Energy efficiency programs that use local people and locally sourced equipment in their delivery will be a good source of jobs and can deliver significant cost reductions and emissions reductions – programs that address energy use in homes is important in areas where homes are electrified. Areas without electrification would benefit from the implementation of renewable energy, either small or large scale depending on the circumstances.</p>

4.	How can students and youth increase engagement in building technology solutions?	<p>Young people are a key target group for the implementation of the Paris Agreement. They play an important role as entrepreneurs, in the start-up scene, as scholars, and in the development of new and innovative technologies.</p> <p>The Technology Mechanism offers concrete opportunities for student and youth to contribute. At TEC, youth are engaged through YOUNGO (UNFCCC youth constituency) representatives sitting in each task force of the TEC, allowing them to contribute to the discussion on various technology policies.</p> <p>The CTCN supports youth engagement and contribution to technology solutions through their collaboration with YOUNGO. Through a joint workplan the CTCN has invited youth representatives and entrepreneurs to advocate for their ideas and solutions at various climate conferences and in the CTCN 2019 Progress Report. It has highlighted the role of youth as drivers of innovation, and the importance of strengthening youth engagement in identification, assessments and decision-making for climate technology implementation. In 2020, the CTCN will pilot Climate Innovation Labs where youth participants will be encouraged to develop local climate technology solutions responding to real climate threats and challenges faced by SMEs in their region, using a design thinking process. The CTCN is further exploring possibilities to engage youth on knowledge sharing through webinars, internships, and development of knowledge products. The intention is to provide a platform for youth voices on climate technologies, strengthen capacities, and ensure that CTCN services remain inclusive, relevant and mindful of all stakeholders.</p>
5.	What can be done to cause more awareness and implementation of accelerator and incubator as means of promoting implementation of the PA by the LDCs? very few of them have benefitted from this programme.	<p>The TEC and CTCN, in collaboration with the Green Climate Fund. worked specifically in this area to boost the use of incubators and accelerators in developing countries (<a href="https://unfccc.int/ttclear/incubators/">https://unfccc.int/ttclear/incubators/</a>).</p> <p>As the follow up of this collaboration, the GCF is currently considering the development of a facility to support incubators and accelerators for developing countries.</p>

6.	How do you incentivize the uptake of climate smart technologies in manufacturing and industry run by private sector?	Companies will change when the business case for change is clear, as they need to deal with risks of the uncertainty of a technology they have never managed before with managing a technology they know and understand well. They can be helped by reducing the uncertainty associated with the new technology through different means, for example, tax incentives or seed funding for trialing new technologies.
7.	What is the role of Technology Mechanism in green recovery?	The green recovery can provide an opportunity for countries to rebuild and recover their economy in a manner that creates pathways to transitioning into green, low emission and climate resilient society, consistent with goals of Paris Agreement. Climate technology plays important role in this and the Technology Mechanism can contribute to the green recovery and will continue to facilitate the conversation on this.
8.	Our research has shown that across the 136 countries that make their NDCs conditional upon at least one type of support, 109 nations make their NDCs conditional on technology transfer. What can the Technology Mechanism do to help countries with addressing the gap in ambition and implementation to have more ambitious NDCs?	The Technology Mechanism facilitates action on technology to support implementation of mitigation and adaptation under the Paris Agreement, including those indicated in the NDCs, as guided by Parties. For instance, it has worked to enhance the linkages and alignment of TNAs with NDCs and national adaptation plans in order to increase coherence between the implementation of those national plans with national strategies to achieve climate resilient and low emission development.
9.	Should the focus be only on promoting climate technologies or also on climate best-operating practices?	Anything that reduces emissions is required. Energy and water efficiency programs result in cost reductions which are very important in the recovery from the pandemic, and the roll out of these programs can create many jobs.
10.	What do you think are some of the most important innovations for climate action?	From private sector perspectives, the three key areas are: Innovation in policy that supports private sector entrepreneurship Innovation in business models Innovation in finance structures

		The work of the TEC and CTCN on Innovation has been guided by Technology Framework adopted in Katowice to support the implementation of the Paris Agreement. The areas range from collaborative from RD&D, national system of innovation, and engagement of the private sector in the development of new and innovative climate technologies
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## B. Specific questions for Technology Mechanism

11.	In the context of impacts leading to transformational change, could a TEC/CTCN expert elaborate on the type of indicators which will be used to build a Monitoring and Evaluation framework of this magnitude?	The monitoring and evaluation indicators associated with the TEC activities can be accessed in <a href="#">TEC M&amp;E</a> . The monitoring and evaluation indicators associated with the CTCN activities can be accessed in <a href="#">CTCN M&amp;E</a> .
12.	Given the acknowledged impact of indoor air pollution as risk of vulnerability to COVID-19, what measures will CTCN take to get technologies on reduction of indoor air pollution adopted extensively by vulnerable communities?	CTCN delivers on the technical assistance to the countries based on their request. This is a country driven process. CTCN has supported a few countries with technical assistance on similar topics. More details about the TAs can be accessed at <a href="https://www.ctc-n.org/technical-assistance/data">https://www.ctc-n.org/technical-assistance/data</a>
13.	Does CTCN have enough funding to respond to all technical assistance requests by developing countries?	CTCN delivers on the technical assistance to the countries based on their request. This is a country driven process. CTCN has delivered more than 200 TAs in 100 countries. CTCN also works with countries in accessing funds through the Readiness programme of the Green Climate Fund and other bodies under financial mechanisms.

14.	Demand of CTCN technical assistance is driving up. How is the CTCN creating that demand and especially for the private sector?	CTCN does not create demand or project proposals for the countries. CTCN delivers on the technical assistance to the countries based on their request which is a country driven process.
15.	Should the TEC focus more on mature technologies ready to be replicated and scaled up or on emerging technologies, that though may have bigger mitigation and adaption impact, still need time before commercial use?	As part of its <a href="#">rolling workplan for 2019-2022</a> the TEC will work on the issue of emerging technologies starting in the second half of 2020.
16.	It seems that several barriers to climate technologies exist, such as fossil fuel subsidies and the lack of green finance/entrepreneurship market. This suggests national policy and regulatory environment and market structure should be addressed at the country level to stimulate climate actions. What kind of cross-cutting activities (finance, technology and capacity building) and support to the Parties has the TEC lead in this kind of efforts?	The TEC acknowledges the important role of entrepreneurs in developing technologies, business models and services that society can use to achieve low-emission and climate-resilient sustainable development. The TEC has produced a policy brief containing recommendations including on actions by various stakeholders to encourage, guide and support entrepreneurs in their efforts to innovate climate technologies. More info is available on: <a href="https://unfccc.int/ttclear/tec/brief12.html">https://unfccc.int/ttclear/tec/brief12.html</a>

### C. Specific questions for individual panelist

17.	<b>To Mary Stewart:</b> Considering the differences in developed and developing countries, are their low hanging fruits for climate technology deployment in developing countries, what role will TEC and CTCN have in facilitating such efforts?	<p>Low hanging fruit is always country specific, low hanging fruit is usually an opportunity with a clear business case for implementation in that location. The TEC and the CTCN might consider building a framework for assessing opportunities which enable countries to discover their own low hanging fruit. The framework could consider</p> <ul style="list-style-type: none"> <li>• The country's emissions profile and most significant contributors to these emissions</li> <li>• Key aspects of the NDC, what are the focus areas and themes</li> <li>• What is already being done that supports societal well-being or environmental protection (build on what you are good at)</li> </ul>
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18.	<p><b>To Anand Tsog:</b> What part of the service from the CTCN and TEC are most helpful to the implementation of the NDC efforts in Mongolia?</p>	<ul style="list-style-type: none"> <li>- <u>Efficiency:</u> Relatively simple request procedure with active support. Technical assistance of the Technology Mechanism are generally very efficient and fast compared to the complex big mechanisms.</li> <li>- <u>Wide-range of expertise:</u> Number of professional partners of the Mechanisms offer useful tools. Currently, Mongolia is striving to define its baseline in each sector at the national and subnational level, especially in the prioritized sectors identified in the NDC, which require experienced experts with different backgrounds.</li> <li>- <u>Match-making &amp; networking:</u> It is very useful in engaging and mobilizing private sector. Green private sector investors, entrepreneurs, and project developers appreciate such events.</li> <li>- <u>Piloting projects:</u> At the implementation level, duplicable piloting projects are the most preferred, especially when it comes to technology. In general, technical assistance rarely includes piloting options, but recently the CTCN started actively support this idea, which is crucial for introducing new climate technology in the country.</li> </ul>
19.	<p><b>To Anand Tsog:</b> What affordable technologies are being adopted by Mongolia?</p>	<ul style="list-style-type: none"> <li>- Household level solar-panel generated electricity usage</li> <li>- High-efficient heat only boiler</li> <li>- Energy efficient traditional furnace</li> <li>- Small-size solar plant for farming</li> <li>- Solar commercial refrigerator (currently under testing)</li> <li>- Electric vehicle production</li> </ul>



		- Off-grid energy generator using waste and sullage, etc.
20.	<b>To Henrique Schneider:</b> Are there structures in Brasil for consulting free of charge individual farmers or farmer cooperatives how to reduce CO2 emissions from their agriculture/livestock production?	Yes, in Brazil, there is a program called ABC-Cerrado. Farmers get initial consulting free of charge on how to make their land-use more intensive, how to adapt their husbandry of animals and integration of forests or biodiversity. They are also coached on how to produce biofuels or biomass with their natural trash. This program aims at both mitigation and adaptation.