



Technology Executive Committee

03 November 2020

Twenty-first meeting

Bonn, Germany, 17–20 November 2020

Draft recommendations of the Technology Executive Committee on ways forward and actions to be taken based on the outcomes of the regional virtual technical expert meetings on mitigation organized in 2020.

I. Introduction

A. Background

1. At its twenty-third session, the Conference of the Parties (COP) conducted an assessment of the technical examination process (TEP) on mitigation and adaptation so as to improve its effectiveness and adopted decision 13/CP.23.
2. Paragraph 4 of the decision requests the Technology Executive Committee (TEC) to include in the joint annual report to the COP of the TEC and the Climate Technology Centre and Network (CTCN), having consulted with the high-level champions thereon, recommendations for Parties and other organizations on ways forward and necessary actions to be taken based on the outcomes of the technical expert meetings (TEM). The topics of the technical examination process on mitigation for the period of 2018–2020 were identified by the High-level Champions, in consultation with the TEC and CTCN.¹
3. In 2020, the TEC participated in four regional virtual TEM-Ms and one global TEM-M on Climate smart cooling solutions for sustainable buildings²:
 - (a) The regional virtual TEM-M on Climate smart cooling solutions for sustainable buildings for Africa (19 August 2020);
 - (b) The regional virtual TEM-M on Climate smart cooling solutions for sustainable buildings for Latin America and the Caribbean (20 August 2020);
 - (c) The regional virtual TEM-M on Climate smart cooling solutions for sustainable buildings for Asia and the Pacific (25 August 2020);
 - (d) The regional virtual TEM-M on Climate smart cooling solutions for sustainable buildings for Eastern Europe and West Asia (27 August 2020);
 - (e) The global virtual TEM-M on Climate smart cooling solutions for sustainable buildings (30 September 2020)
4. At the TEC-21, the chair of the TEC will be invited to present the draft recommendations to COP 26.
5. This activity is listed as activity 5 under the area of work Implementation in the rolling workplan of the Technology Executive Committee for 2019–2022.

¹[TEP-M topics 2018-2020](#)

²<https://unfccc.int/ttclear/events/index.html>

B. Scope of the note

6. The annex to this note contains the draft recommendations of the TEC to COP 26 on ways forward and actions to be taken, based on the outcomes of the four-regional virtual TEM-Ms organized in 2020.

C. Possible action by the Technology Executive Committee

7. The TEC will be invited to consider and agree on these recommendations, which will be submitted to the high-level champions, the chairs of the subsidiary bodies, the co-chairs of the adaptation committee, the director of the CTCN, and included as annex in the joint annual report of the TEC and the CTCN for 2020.

Annex

Draft recommendations of the Technology Executive Committee on ways forward and actions to be taken based on the outcomes of the regional virtual technical expert meetings on mitigation organized in 2020.

1. Building on the outcomes of the discussions that took place during the four-regional virtual TEM-Ms in 2020 on the topic of Climate smart cooling solutions for sustainable buildings, the TEC highlights to Parties that:

(a) The buildings sector represents one of the largest energy consuming sector in most of the regional economies, it often consumes over one third of final energy in countries, which results in significant greenhouse gas (GHG) emissions. A wide and accelerated implementation of climate smart cooling solutions for sustainable buildings can achieve significant GHG emission reductions and contribute to meeting the 1.5°C target of the Paris Agreement as well as provide additional economic, social and environmental benefits to the regions and their communities, such as affordable and reliable access to energy efficient cooling, increased investment opportunities, additional sources of income and improved quality of life.

(b) The benefits of climate smart cooling solutions for sustainable buildings go beyond the emission reductions from fossil-fuel consumption, as demonstrated in some regions applying local knowledge and techniques. They also produce other benefits, such as usage of locally produced green building materials, reducing electricity loads on often fragile grid systems, transforming the roles of small and medium enterprises, and ensuring sustainable cooling production;

(c) Governments roles may range from leading in policy making, planning and consultation processes – creating action plans, setting policies, regulations and standards that may incentivise sustainable financing, to supporting R&D of promising cooling technologies through partnership and collaboration. Governments can develop and put in place minimum energy performance standards and labelling schemes for cooling equipment. Appropriate policies and efficient governance tools often drive the required change on the ground. Policy tools and incentives may address broader issues such as urban planning, building design and interest in using energy efficient appliances, which often leads to more demand for high quality cooling systems and less use of energy for cooling.

(d) Access to finance was identified as one of the main challenges to implementation of climate technologies, including smart cooling. Support for smart cooling technologies can play a vital role in the implementation and success of climate technologies. The building sector could have a significant return on investment due to its potential role in offering energy efficient solutions. Enhanced access to financial tools can accelerate the implementation of sustainable cooling solutions and strengthen the markets. A wide variety of financial instruments is readily available to support climate smart cooling, such as green loans and sustainable bonds. A noteworthy development from the regions is the emergence of sustainable finance taxonomies which apply not only in the energy sector, but also in other sectors beyond the production and use of energy.

(e) Awareness raising, capacity building and technical field support are essential to ensure the successful replication of climate smart cooling solutions for sustainable buildings as well as their long-term operation and maintenance. Awareness raising and capacity building programmes on a long-term basis may stimulate actions on both supply and demand side leading to enhanced cooling efficiency by producers, and consumers including industrial and household.

(f) Climate cooling innovations that build on local knowledge and techniques can, in addition to GHG emission reductions, deliver multiple benefits including enhancing the usage of locally produced green building materials, reducing electricity loads on often fragile grids, and reduce amount of cooling production by usage of taking advantage of materials that prevent collar heat gains. A significant progress was reached in all four regions in terms of implementation, not only by employing the technological solutions, but also by addressing broader issues such as job creation, building indigenous and endogenous capacities, collaboration among stakeholders, and access to cooling equality.

(g) The private sector is becoming more actively engaged to support climate smart cooling solutions for sustainable buildings. However, additional incentives may be required for private investors to engage in this sector, specifically in rural areas where local communities have limited ability to pay for cooling products.

2. Based on the above the TEC recommends that the COP encourage Parties:

(a) To introduce policies, schemes and programmes that promote climate smart cooling solutions for sustainable buildings;

(b) To introduce financial incentives schemes that encourage and facilitate stakeholders to shift to innovative climate smart cooling solutions for sustainable buildings;

(c) To promote initiatives on capacity building and awareness raising on climate smart cooling solutions for sustainable buildings for both the supply and the demand side - covering producers and consumers of cooling services;

(d) To stimulate usage of climate smart cooling innovations that build on local knowledge and techniques and deliver environmental, economic and social benefits to the regions;

(e) To incentivise participation of private sector in supporting climate smart cooling solutions for sustainable buildings.
