



**Technology  
Executive  
Committee.  
Performance.  
Activities.**

2017



**United Nations**  
Framework Convention on  
Climate Change

# Technology Executive Committee



The Technology Executive Committee is the policy arm of the UNFCCC Technology Mechanism. It analyses technology policy issues and provides recommendations to support countries in enhancing low-emission and climate-resilient development.

In 2010, countries scaled up efforts on climate technology by establishing the Technology Mechanism, which consists of two complementary bodies: the Technology Executive Committee and the Climate Technology Centre and Network.

# Message of the Chair and Vice-Chair

In 2017, the world witnessed severe weather events with increasing frequency. These events provide us with a tragic reminder of the need to accelerate our global efforts to develop and transfer low-emission and climate-resilient technologies.

The Technology Executive Committee has worked hard in 2017 to achieve this aim. Through our workplan, we have focused on supporting countries to accelerate the implementation of technology policies and projects related to their nationally determined contributions and national adaptation plans. We concentrated our efforts on catalysing action to achieve both the Paris Agreement and the sustainable development goals. We will continue to work until these goals are reached.

In the following pages, you will find information on our key activities and outcomes for 2017. Our work has revolved around six key areas: adaptation technologies; climate technology financing; emerging and cross-cutting issues; innovation and research, development and demonstration; mitigation technologies; and technology needs assessments. Of especial importance are our key messages on policies for accelerating technology efforts. In this publication, you will find our key messages for 2017 on the areas of innovation, industrial energy and material efficiency, and technology needs assessments.

The involvement and support of the global climate technology community in our work has been crucial for achieving meaningful outcomes. Throughout 2017, we strove to work inclusively and to strengthen partnerships. Our key partner is our sister body, the Climate Technology Centre and Network. We worked closely with the centre in 2017 and look forward to continuing such collaboration in the future. We also worked closely with the Green Climate Fund, the Global Environment Facility, UNFCCC constituted bodies, and the high-level climate champions. Furthermore, we have worked throughout the year with United Nations organizations, intergovernmental organizations and non-governmental organizations. We warmly acknowledge their contributions and commitment to the committee's work.

We hope that the information here may provide practical suggestions on how your country or organization can enhance the development and transfer of climate technologies.

We look forward to strengthening our endeavours in 2018 and beyond.



**Michael Rantil**  
Chair  
Technology Executive Committee

*Michael Rantil*



**Duduzile Nhlengethwa-Masina**  
Vice-Chair  
Technology Executive Committee

*Duduzile Nhlengethwa-Masina*

# 2017 in figures

Climate technology website, TT:CLEAR had:



more than  
**17,500**  
unique users  
(from 194 countries)

more than  
**64,000**  
page views

From January to October 2017



**2000**

Twitter interactions



**1200**

Facebook interactions

More than **200** stakeholders engaged in the committee's work and events

More than **6** UNFCCC bodies

engaged in the committee's work, including the Climate Technology Centre and Network, the Green Climate Fund and the Global Environment Facility

**23** countries receiving support to undertake technology needs assessments

**3**

key areas of policy recommendations to COP 23

video productions

**7** years of identifying technology policies for climate change

**7** Sustainable Development Goals that the TEC contributed to achieving

**6** media articles

**5** events

**1** year of the new website TT:CLEAR, UNFCCC's home of technology

**10**

TEC PUBLICATIONS

**3** TEC Briefs

**4** executive summaries

**2** papers

**1** compilation of good practices

#climatetech spreading



Presence in social media  
**BOOSTED**

12 May  
Bonn, Germany

tweet at  
#climatetech

www.unfccc.int  
/ttclear



## Key event: special event on innovation

Climate technology innovation is the foundation on which solutions are built to achieve the goals of the Paris Agreement. To underline the importance of technological innovation, the Technology Executive Committee held a special event on innovation during the United Nations Climate Change Conference in Bonn (8–18 May).

Opened by the Executive Secretary and the French Minister of Environment, the event brought together more than 80 leading experts on climate change and innovation, governments and other key stakeholders to highlight how innovation can support the implementation of nationally determined contributions. Participating experts provided views on how the global community may stimulate such innovation through green finance, policies, leadership, institutions, regulations and incentives. Based on the workshop, the committee identified key policy recommendations on innovation and published a TEC Brief on how innovation can accelerate the implementation of the Paris Agreement.



Watch video!

Find out more: [http://unfccc.int/ttclear/events/2017\\_event2](http://unfccc.int/ttclear/events/2017_event2)



## Key event: thematic dialogue on industrial energy efficiency

On 29 March 2017, the Technology Executive Committee brought together experts from around the world to identify ways to scale up industrial energy efficiency in developing countries.

Through the dialogue, country practitioners and global experts shared good practices and lesson learned from partnerships and programmes on technology solutions for industrial energy efficiency. They also considered policy options which could incentive efforts, especially those related to financing, training and co-benefits. Based on the dialogue, the committee identified ways to strengthen the replication and scaling-up of the implementation of technologies for industrial energy efficiency. Find out more by reading the committee's key policy recommendations and TEC Brief on industrial energy efficiency

Find out more: [http://unfccc.int/ttclear/events/2017\\_event1](http://unfccc.int/ttclear/events/2017_event1)

# Key publication: TEC Briefs

As a policy body, the Technology Executive Committee seeks to communicate effectively the key findings of its work to the global climate technology community. One of the ways that it achieves this is through its policy briefs called TEC Briefs. Through these publications, the committee periodically publishes its key policy messages and findings in clear non-technical language. In 2017, it published three such briefs.



## TEC Brief #9

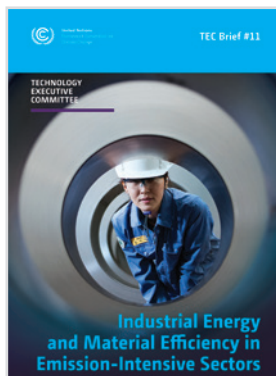
### South-South cooperation and triangular cooperation

Read how countries can harness south-south and triangular cooperation to accelerate the exchange of adaptation technologies, knowledge and practices in the water and agriculture sectors.

## TEC Brief #10

### Technological innovation for the Paris Agreement

Get insights into how the power of innovation can accelerate the implementation of nationally determined contributions and national adaptation plans.



## TEC Brief #11

### Industrial energy and material efficiency

Explore policy options for scaling-up the use of energy-efficient technologies in the industrial sector.

Download these publications or read them online at <http://unfccc.int/tclear/tec/documents.html>

# Other key publications

**Technical paper and executive summaries on industrial energy and material efficiency**

These publications identify how to accelerate the development and transfer of technologies for industrial energy and material efficiency. The executive summaries are specifically tailored to the needs of domestic policymakers, industry, financial institutions and international organizations.



**Compilation: Best practices for South–South cooperation on adaptation technologies**

The publication compiles good practices for knowledge-sharing and practical learning on adaptation technologies through South–South and triangular cooperation.

**Working paper: Enhancing financing for research, development and demonstration of climate technologies**

This publication analyses trends and patterns in financing the research, development and demonstration of climate technologies. It also identifies ways to enhance such financing.



Download these publications or read them online at [www.unfccc.int/tclear/tec/documents.html](http://www.unfccc.int/tclear/tec/documents.html)



# Other key work



## Technology needs assessments

The committee continued to work with country practitioners and partners to enhance the effectiveness of technology needs assessments. A key focus of its work with the UNEP DTU (UN Environment–Technical University of Denmark) Partnership was the accelerating of the implementation of technology action plans emanating from the assessments. This led to guidance that 23 countries are currently using to develop bankable technology action plans. The committee is also working with the Adaptation Committee, the Climate Technology Centre and Network, and the Least Developed Countries Expert Group to explore how countries could align their national adaptation plans with their technology needs assessments.



## Climate technology financing

The committee continued to strengthen linkages between the Technology Mechanism and the Financial Mechanism. It worked with the Green Climate Fund to explore how to enhance financing for collaborative research and development, including through participating in a board meeting of the fund. It also worked with the Standing Committee on Finance to provide input into the sixth review of the Financial Mechanism and the draft guidance to the operating entities of the Financial Mechanism. It furthermore began work to update its evaluation of the Global Environment Facility's Poznan Strategic Programme.



## Working with the UNFCCC multilateral process

The Technology Executive Committee continued to work closely with the intergovernmental process to ensure it responded to the needs of UNFCCC Parties. It contributed to the technical expert meetings on adaptation and mitigation and identified opportunities for enhancing the mitigation technical examination process. It also hosted a session on innovative policy and technology solutions for sustainable urban development during a technical expert meeting. Furthermore, the committee prepared an information note for the Subsidiary Body for Scientific and Technological Advice on its activities relevant to the elaboration of the technology framework.

## Working with the global climate technology community

Throughout 2017, the Technology Executive Committee strove to work collaboratively with the global climate technology community to achieve its aims. Its key partner is the Climate Technology Centre and Network, its sister body of the Technology Mechanism. The committee worked closely with the centre in 2017 on many of its work areas. The committee also worked closely with the Green Climate Fund, the Global Environment Facility and UNFCCC constituted bodies. Furthermore, it worked throughout the year with United Nations organizations, intergovernmental organizations and non-governmental organizations representing business, environmental and research stakeholders. The Technology Executive Committee looks forward to continuing to work with the global climate technology community in 2017 and beyond.

## Working to achieve the Sustainable Development Goals

Enhancing technology development and transfer for low-emission and climate-resilient development also contributes to achieving the UN Sustainable Development Goals. In 2017 the work of the Technology Executive Committee supported efforts to achieve goals 2, 6, 7, 9, 11, 13 and 17. The committee also engaged with the Technology Facilitation Mechanism established under the 2030 Agenda for Sustainable Development to strengthen ties between technology bodies supporting climate and sustainable development efforts.



## Climate technology online

Want to stay up-to-date on the committee's work, find out about new events, and read its latest publications? The UNFCCC climate technology website TT:CLEAR provides a home for all information on the Technology Executive Committee.

Visit now! [www.unfccc.int/ttclear](http://www.unfccc.int/ttclear)



# Key messages for 2017

Each year, the Technology Executive Committee provides key messages to the Conference of the Parties (COP) on policies that may support countries in accelerating climate technology development and transfer. The committee is proud to present the following key messages and recommendations for 2017. Read these online at: <http://unfccc.int/ttclear/policies>



## Innovation

To achieve the goals of the Paris Agreement, there is a pressing need to accelerate and strengthen technological innovation so that it can deliver environmentally and socially sound, cost-effective and better-performing climate technologies on a larger and more widespread scale. But there is no 'one size fits all' approach. Different innovation approaches are needed.

To enhance the implementation of nationally determined contributions, national adaptation plans and mid-century strategies, the Technology Executive Committee recommends that the COP encourage Parties:

- (a) To prioritize resources (human, institutional and financial) for such innovation efforts, in accordance with their needs, priorities and capacities;
- (b) To enhance public and private partnership in the research, development and demonstration of climate technologies by increasing expenditure for it and providing a clear policy signal of a long-term commitment to act on climate change;
- (c) To strengthen national systems of innovation and enabling environments, including through market creation and expansion and capacity-building;
- (d) To enhance existing and build new collaborative initiatives for climate technology innovation, including for sharing expertise, good practices and lessons learned;
- (e) To create an inclusive innovation process that involves all key stakeholders, facilitating the incorporation of diverse and relevant expertise, knowledge and views and generating awareness of the benefits and impacts;
- (f) To acknowledge and protect indigenous and local knowledge and technologies and incorporate them in their national innovation systems.



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The Technology Executive Committee further recommends that the COP encourage:

- (a) The Technology Executive Committee, the Climate Technology Centre and Network, the Global Environment Facility, the Green Climate Fund and other stakeholders to collaborate in identifying effective policies, instruments and collaboration forms that support Parties, particularly developing country Parties, and other partners in their innovation efforts;
  - (b) The Green Climate Fund to include information in its annual report to the COP on projects it has approved that support the innovation in and/or scaling-up of climate technologies, with the aim of informing the further work of the Technology Mechanism on climate technology innovation;
  - (c) The Global Environment Facility to continue including information in its annual report to the COP on projects it has approved that support the innovation and/or scaling-up of climate technologies, with the aim of informing the further work of the Technology Mechanism on climate technology innovation.
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## Industrial energy and material efficiency in emission-intensive sectors

The Technology Executive Committee highlights to Parties that the implementation of industrial energy efficiency, including material efficiency, measures in emission-intensive sectors can, inter alia:

- (a) Achieve significant greenhouse gas emission reductions and contribute to the implementation of nationally determined contributions;
- (b) Offer significant cost-saving opportunities for enterprises;
- (c) Provide additional economic, social and environmental benefits, such as increased energy security, improved working conditions and health benefits, better reputation for enterprises and new employment opportunities.

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The Technology Executive Committee underlines that:

- (a) There is a need to raise the awareness and build the capacity of various actors, from technical personnel to the top management of enterprises, as well as financial institutions and policymakers, to enable the implementation of energy efficiency measures in industry;
- (b) Facilitating access to financing for small and medium-sized enterprises to effectively implement energy efficiency measures is important.

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As policymakers have a critical role to play in setting standards, policies and laws, addressing barriers and incentivizing various actors, the Technology Executive Committee recommends that the COP encourage Parties:

- (a) To promote policies and programmes on industrial energy efficiency, which may include:
    - (i) Incorporating aspects of industrial energy efficiency into national energy and climate change policies;
    - (ii) Setting long-term strategies and targets;
    - (iii) Implementing a package of aligned policies that address energy efficiency potential;
    - (iv) Introducing incentive programmes for energy efficiency measures, including economic instruments and certification standards for energy management, that stimulate investment from industry actors and financial institutions;
  - (b) To raise awareness about the potential, costs and benefits of industrial energy efficiency;
  - (c) To enhance the capacities of various actors, including by contributing to better accessibility of data and knowledge, and establishing or supporting industrial energy efficiency networks to exchange experience and provide specific training and education.
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## Technology needs assessments

The technology action plans are comprehensive sets of nationally endorsed implementation plans that should be further used by Parties and other relevant stakeholders to bridge the gap between planning and implementation and to contribute to the enhancement of the implementation of nationally determined contributions and national adaptation plans.

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Disseminating information on technology action plan implementation is instrumental in sharing experience and lessons learned from the process of implementing technology-inclusive projects. Such dissemination informs Parties and other national and international decision makers and may facilitate further replication and scale-up.



# Members for 2017



The committee consists of 20 technology experts from all corners of the globe.

**Mr. Ayele Anabo**  
Ethiopia

**Ms. Elfriede More**  
Austria

**Mr. Robert Berloznik**  
Belgium

**Mr. Naoki Mori**  
Japan

**Mr. Pedro Borges**  
Bolivarian Republic of Venezuela

**Ms. Duduzile Nhlengethwa**  
Swaziland

**Mr. Birama Diarra**  
Mali

**Ms. Claudia Octaviano**  
Mexico

**Ms. Gabriela Fischerova**  
Slovakia

**Mr. Michael Rantil**  
Sweden

**Ms. Stella Gama**  
Malawi

**Mr. Hugh Sealy**  
Federated States of Micronesia

**Mr. Jürg Grütter**  
Switzerland

**Ms. Viktoriia Shtets**  
Ukraine

**Mr. Mareer Mohamed Husny**  
Maldives

**Mr. Changmo Sung**  
Republic of Korea

**Mr. Kazem Kashefi**  
Islamic Republic of Iran

**Mr. Stig Svenningsen**  
Norway

**Mr. Ian Lloyd**  
United States of America

**Ms. Adelle Thomas**  
Bahamas



# 2017

This brochure summarizes the activities of the Technology Executive Committee in 2017. It highlights the committee's key publications, events and messages. Comprehensive information may be found in the joint annual report of the Technology Executive Committee and the Climate Technology Centre and Network for 2017. See document FCCC/SB/2017/3.

## Contact Details

The Technology Executive Committee may be contacted through the United Nations Climate Change Secretariat  
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<http://unfccc.int/ttclear/tec/impact.html#Impact2017>



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