Fourteenth meeting of the Technology Executive Committee

United Nations Campus (AHH building), Bonn, Germany
28-31 March 2017

Agenda for the thematic dialogue on industrial energy efficiency and material substitution in carbon intensive sectors

I. Background

1. In response to decision 1/CP.21 paragraph 109(c) and as per activity 6 of its workplan for 2016–2018, the TEC is to take forward the outcomes of the technical examination process (TEP), taking into account the policy options, and identify gaps and replicable best practices or enabling policy conditions. At TEC 13, the TEC agreed to continue its work in the areas of identified gaps, namely industrial energy efficiency and material substitution in carbon-intensive sectors, including financing, training and co-benefit aspects of this sectors. It further requested the task force on mitigation to prepare a technical paper and to hold a thematic dialogue at its first meeting in 2017. As part of TEC 14, the TEC will hold a thematic dialogue on Wednesday 29 March.[1]

II. Scope of the note

2. The annex to this note contains the concept and agenda of the thematic dialogue on industrial energy efficiency and material substitution in carbon intensive sectors of the Technology Executive Committee.

III. Expected action by the Technology Executive Committee

3. The TEC will be invited to consider key findings from the discussions that took place at the dialogue and agree on its further work in this area.

[1] <http://unfccc.int/ttclear/events/2017_event1>.

Annex

1. Background

The Technology Executive Committee (TEC) is the policy component of the Technology Mechanism of the UNFCCC, which was established in 2010 to help countries to enhance technology development and transfer in their mitigation and adaptation action.[2] As per its rolling workplan for 2016–2018, the TEC agreed to take forward the outcomes of the technical examination process (TEP) on mitigation, taking into account the policy options, and identify gaps and replicable best practices or enabling policy conditions for nationally determined contributions (NDCs).

At TEC 13, an analysis of mitigation related TEP policy options, technology actions plans (TAPs) and requests to the CTCN for technical assistance, including possible activities for the TEC to take these options forward was presented.[3] Taking forward these findings and building on previous work within the convention[4], the TEC requested its taskforce on mitigation to prepare a ***technical paper*** and to hold a ***thematic dialogue*** at its first meeting in 2017 on **industrial energy efficiency**[5] **and material substitution in carbon intensive sectors, including financing, training, and co-benefits aspects of this sector**.

To assist the TEC in its work, the technical paper will provide the context and current state of play of the development and transfer of technologies in industrial energy efficiency, as well as the status of policy implementation in this sector.

The thematic dialogue is held in conjunction with TEC 14 on 29 March 2017. As per previous practice, the dialogue is expected to support the acceleration of climate action by bringing together relevant stakeholders and experts from various areas and disciplines. This ensures a diverse input on industrial energy efficiency from different perspectives in order to identify gaps, obstacles, and further needs in the field of industrial energy efficiency. This approach is aligned with the Marrakesh partnership for global climate action to provide a strong foundation for how the UNFCCC process will catalyse and support climate action by Parties and non-Party stakeholders in the period from 2017-2020, giving effect to the existing arrangements as agreed by Parties at COP 21 in Paris. [6]

The overarching goals of addressing this area of work are to:

1. inform and improve awareness among policy and decision-makers to scale up implementation of energy efficiency policies in carbon-intensive sectors,
2. identify and support the development and transfer of innovative technologies, partnerships and programmes with the potential to maximize the impacts of industrial energy efficiency measures.

Desirable, the aspects of financing, training, and co-benefits will be in the centre of the dialogue and discussed in-depth.

[2] Read more about the TEC's work: <http://unfccc.int/ttclear/pages/tec_home.html>
[3] <https://goo.gl/HykhzP>
[4] See for instance outcomes of previous TEMs on energy efficiency:
<http://unfccc.int/files/bodies/awg/application/pdf/tem_on_ee_summary.pdf >
[5] According to the analysis in TEC/2016/13/12, p 9, industrial energy efficiency includes e.g. programs to implement improved electricity generation technologies, industrial boilers, and other industry-specific technologies such as those for brickmaking.
[6] < https://goo.gl/z48KMg >

2. Objectives

Specifically, the objectives of the thematic dialogue are to:

A. Enhance the understanding on measures and technologies for industrial energy efficiency, its potentials and limitations, undertaken by various industries partnerships and programmes;
B. Identify existing policy options, needs, and actions related to the field of industrial energy efficiency, with a focus on financing, training, and co-benefit aspects deriving from these measures;
C. Identify lessons learned and best practices;
D. Identify ways to strengthening energy efficiency measures, to replicate and upscale the implementation of technologies for energy efficiency.

3. Expected outcomes

- Enhanced understanding of industrial energy efficiency measures and technologies;
- Identified best-practices and solutions for financing and training needs, as well as improved the understanding of co-benefits deriving from industrial energy efficiency measures and technologies;
- Identified obstacles and pitfalls for the successful implementation of measures and technologies for industrial energy efficiency;
- Identified potential future fields of work for the TEC.

4. Structure

Tentatively split into multiple (5) sessions, with different focus:

I. **Setting the stage**: Overview of state of play;
II. **Case studies:** Sharing experiences and lessons learned;
III. **Panel discussion:** Upscaling of industrial energy efficiency to meet the demand of a low carbon future;
IV. **Break-out groups**: Implications and potentials for the work of the TEC;
V. **Follow-up plenary**: Conclusion and wrap up.

5. Timing

- To take place during TEC 14 on 29 March 2017
- 1-day event, 09:00 – 17:30

6. Guiding questions

Session II: Sharing experiences and lessons learned - What are the **enablers and challenges** for measures in industrial energy efficiency? - How do **different policies** apply for **different regions/markets**?	**Session III**: Promoting and upscaling industrial energy efficiency - What are the factors for a **successful upscaling**? - What kind of **capacity building and training** is needed on all levels, including institutional, to develop, absorb, deploy and implement industrial energy efficiency measures? - What can be done to make successful industrial energy efficiency measures **more visible and replicable**?
Guiding questions for break-out groups: - What **specific role can the TEC play** to enhance the development and transfer of technologies for energy efficiency in industries? - What can be **relevant policy work and recommendation areas for the TEC**, in accordance with its functions, to bring added-value to this specific sector?	

7. Agenda

	Welcome and opening
09:00 -	Introduction and expected outcomes: *Mr. Michael Rantil, TEC Chair*
Session I: Setting the scene **-Current state of play, issues and fundamentals of industrial energy efficiency-** ***Moderator: Mr. Antonio Pflüger***	
This session will give participants a comprehensive overview and current state of industrial energy efficiency measures and technologies as well as the potential for material substitution in carbon-intensive industry sectors.	
	Industrial energy efficiency in the context of the technical examination process *Mr. Benoit Lebot, International Partnership for Energy Efficiency Cooperation*
	Decarbonising the energy intensive basic materials industry *Mr. Lars Nilsson, Lund University*
	Discussion
	Presentation of technical paper *Mr. Mikael Henzler, adelphi consult*
10:30	Discussion
Coffee break	
Session II: Sharing experiences and lessons learned **-Enablers and challenges from innovative business models-** ***Moderator: Mr. Eric Masanet***	
Session with case studies from industries with full project cycle (planning, implementation, impacts, including co-benefits) from sectors like steel and power generation. A regional and national component will enhance the insights with hands-on experiences. The speakers will report on enablers and challenges from their specific perspective.	
10:45 -	**Case study I**: National industry example: Steel *Mr. Hiroyuki Tezuka, in capacity as member of the Japan Iron and Steel Federation*
	Case study II: National industry example: Power generation Ms. *Jing Ding, International Cooperation and Overseas Business Development China*
	Discussion
	Case study III: South Africa's Industrial Energy Efficiency Programmes - Impacts and Outcomes Mr. *Alfred Hartzenburg, Government of South Africa*
	Case study IV: Regional experiences in industrial energy efficiency *Mr. Marco Matteini, UNIDO*
- 12:30	Discussion
Lunch	

Session III: Promoting and upscaling industrial energy efficiency **-Meeting the demand of a low carbon future-** ***Moderator: Mr. Benoît Lebot***	
Panel discussion on how to catalyse innovative approaches, partnerships and initiatives to successfully upscale industrial energy efficiency measures and policy options to enhance technology development and transfer, with a special focus on financing and training options.	
13:30 –	**Panel discussion: Innovative policy instruments and capacity-building for stakeholders** Capacity building and non-technical barriers *Mr. Eric Masanet, International Energy Agency* Design and evaluation of technologies and policies *Ms. Kanako Tanaka, Center for Low Carbon Society Strategy Japan* CB experiences in energy efficiency from the Caribbean *Mr. Devon Gardner, Caribbean Community Secretariat* Training experiences in industrial energy efficiency *Mr. Peter Therkelsen, Energy Management Working Group*
– 16:00	**Panel discussion: Innovative financing** Enabling private sector finance: *Mr. Hiroyuki Tezuka, in capacity as member of the Green Climate Fund Private Sector Advisory Group* The potential role of existing financing mechanisms: *Ms. Masako Ogawa, Global Environment Facility* *Mr. Jan-Willem van de Ven, European Bank for Reconstruction and Development*
Coffee break	
Session IV: Break-out groups	
Parallel break-out groups will discuss the potential role the TEC can play to enhance the development and transfer of technologies for energy efficiency in industries and to identify relevant policy work and recommendation areas for the TEC, in accordance with its functions, to bring added-value to this sector.	
16:15 -	**Work in break-out groups:** *3 parallel break-out groups, facilitated by:* Ms. Claudia Octaviano, Mr. Ian Lloyd
Session V: Conclusion and wrap up	
General concluding discussion with all panelists, TEC members and observers on the whole subject. This session will wrap up the previous discussions and try to identify potential recommendations/further work for the TEC.	
	Report back from break-out groups
– 17:30	**Wrap Up** Conclusion and take away messages *Ms. Duduzile Nhlengethwa-Masina, TEC Vice Chair*