

IEA Workshop Gaps and Strategic Opportunities in International Collaboration on Low-Carbon Energy Technologies

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The Need for Deployment of Low-Carbon Energy Technologies

- Despite encouraging steps in some countries, global emissions keep rising and the scientific evidence of climate change increases
- Early national action is required while negotiating towards a global deal in Paris in 2015 that then comes into force by 2020
- Measures exist that can stop emissions growth by 2020 and keep the 2° C target alive, without harming economic growth
- There is a need for parallel action to deploy critical lowcarbon technologies at scale after 2020, including CCS





Investment Needs

- Additional investment needs to 2050 estimated at USD 53 trillion
- Current annual investments in low-carbon techologies is USD 0.145 trillion
 - => significant upscaling needed (ten fold)
- A challenge, but also an opportunity for those developing new technologies
- Business will need government support to realise these opportunities

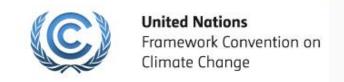




International Collaboration

- ► Thousands of agreements exist
- Well known multilateral arrangements
 - ► IEA Implementing Agreements and their Tasks/Annexes (CTI is part of the IEA and the UNFCCC)
 - ► UN
 - ► IRENA
 - **...**
- UNFCCC has decided in 2010 to establish a Technology Mechanism





The Technology Mechanism (TM) of the UNFCCC

- Overall objective:
 - "To enhance action on the development and transfer of technology to support action on mitigation and adaptation to climate change"
- ► The TM consists of two components
 - ► The Technology Executive Committee (TEC) the **policy component** started its work in September 2011 modalities and procedures approved by the COP in 2011
 - ► The Climate Technology Center (CTC) & its Advisory Board implementation component modalities and procedures approved by the COP in 2013





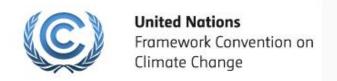
Work of the Technology Executive Committee

- ► TEC Work 2011 2013
 - ► Constitute itself
 - ► Evaluation of the bidding process for the CTC
 - ► Technology needs of developing countries, barriers and enabling environments, RD&D, technology road maps
 - ► Key messages to COP 18 and COP 19 and TEC Briefs
 - ▶ 2013 first joint annual report of TEC and CTCN to COP 19

► Short term outlook

- ▶ Workshop on adaptation, 4 March 2014
- ► TEC 8, 5 7 March 2014
- ▶ Workshop on enabling environments, 2014 (TBD)
- ... TBD



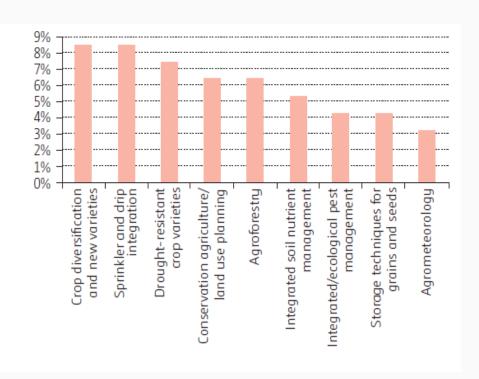


Examples of prioritized technologies in TNA reports from TEC Brief: Results and success factors of TNAs

Energy - energy industries:

Solar photovoltaic Wind turbines (on/offshore) Biomass co-generation Small scale hydro energy Biogas from anaerobic Green gas from biomass Solar Thermal Hydro electricity (different sizes) Thermal power plant with combined cycle Biomass gasification Natural gas combined cycle Supercritical pulverized Combined cycle

<u>Crop management:</u>







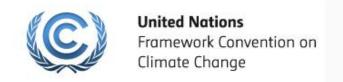
Key messages of the TEC to COP 19

(full text see Joint Report to the COP - FCCC/SB/2013/1)

- The TEC urges the expedited nomination of NDEs by developing country Parties.
- NDEs have the potential to play a key role in establishing strong **linkages** and maintaining coherence at the national and regional levels.
- Strengthening of national capacity and the allocation of resources will ensure and accelerate the effective development and adoption of climate technologies.
- Multi-stakeholder engagement at the regional and national levels is essential to achieving effective international collaborative RD&D

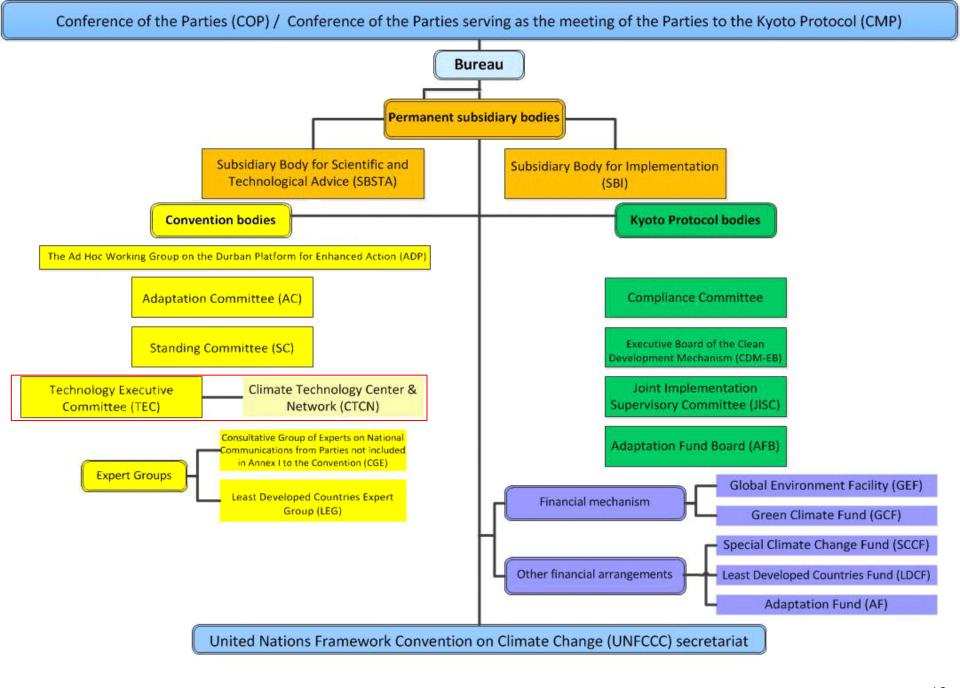
- ► **High-level governmental support** is key
- TNAs should be referred to by all financial entities.
- TNAs and other studies of technology needs, are **rich sources of information**.
- In the TNA process, early engagement of the national and international financial and business communities is essential.
- Parties, when identifying and preparing mitigation and adaptation actions, could ensure **coherence** with the methodology and results of their TNA processes.
- ▶ **Roadmapping** may help to improve planning processes and help Parties to transform the results of their TNAs into actions.



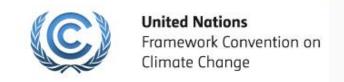


Climate Technology Center and Network (CTCN)

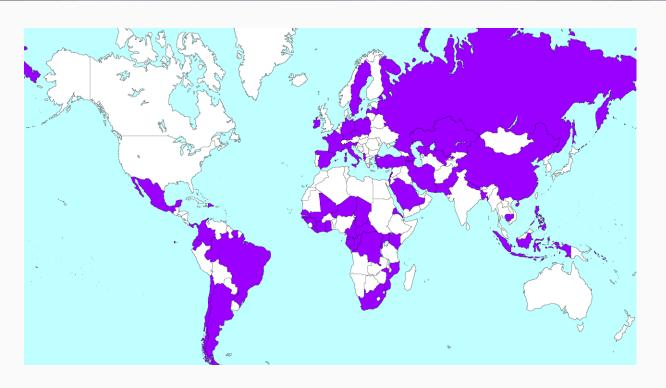
- Commenced its activities in May 2013; hosted by the United Nations Environment Programme (UNEP); based in Copenhagen
- Primarily responds to developing country Parties' requests, submitted through their National Designated Entities (NDEs)
- CTCN Advisory Board constituted in 2013; it decided on
 - ▶ Work programme for 2013/2014
 - ► Criteria to deal with enquiries from developing countries
 - ► Criteria for network-membership (all NDEs are members)







National Designated Entities (NDEs)



43 countries represented by 34 NDEs in November 2013

68 countries represented by 59 NDEs in February 2014 (12 Annex I countries)

Complete list see TT:Clear

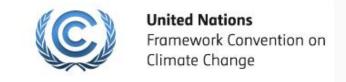




Conclusions

- ▶ 2 ½ years for the establishment of the new Technology Mechanism under the UNFCCC
- Inclusive and open operation
- Provided analysis resulting in TEC Briefs and key messages to the COP
- ► Focus moving from organisation towards substance addressing key issues to enhance collaboration
- CTCN starts working on projects





For further information see

TT:CLEAR (Google)