United Nations Framework Convention on Climate Change

Compilation of good practices and lessons learned on the setup and implementation of national systems of innovation
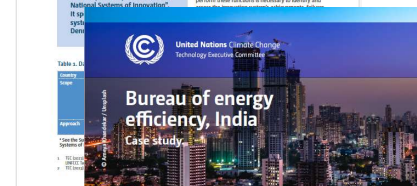
Technology Executive Committee, 27th meeting and TEC-CTCN Joint session

19-21 and 22 September 2023, Bonn, Germany

Erwin Rose, TEC member, Activity group co-lead

TEC 24
- Guidance on the development of the compilation
- Emphasize the importance of building on previous work of the TEC on NSI and incubators and accelerators

TEC 25
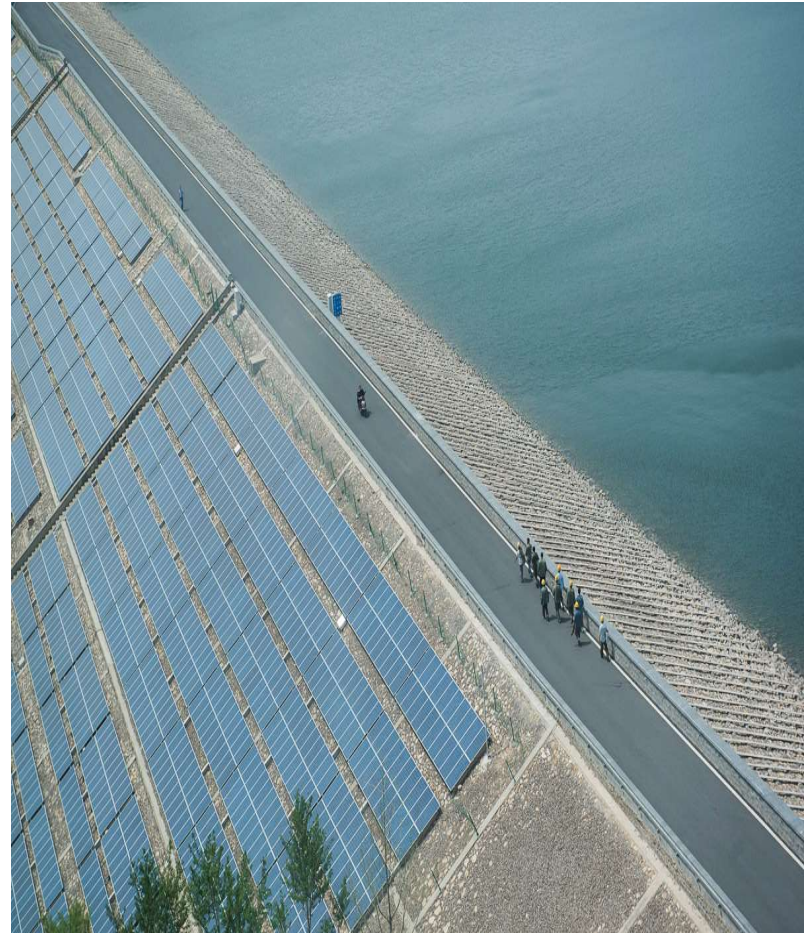- Considered a first draft of the compilation and provided guidance on further work

TEC 26
- Further guidance to the activity group to finalize the case-studies and the Summary for Policymakers

- Responds to guidance by Parties and the latest IPCC findings.

- The TEC has **compiled** good practices and lessons learned on the set-up and implementation of NSIs for developing country policymakers looking to strengthen their NSI in the context of climate action.

- The **Summary for Policymakers**, along with the **six case studies**, aims to:

  - **Deepen the underst**anding of selected parts of the Systems and **identify measures and approaches** that have improved the effectiveness of the national systems in specific cases

  - **Translate** them into good practices that can be replicated in other countries or sectors.

Publications

Arabic, English, French, and Spanish

Link to download digital publications: https://unfccc.int/ttclear/tec/NSI.html
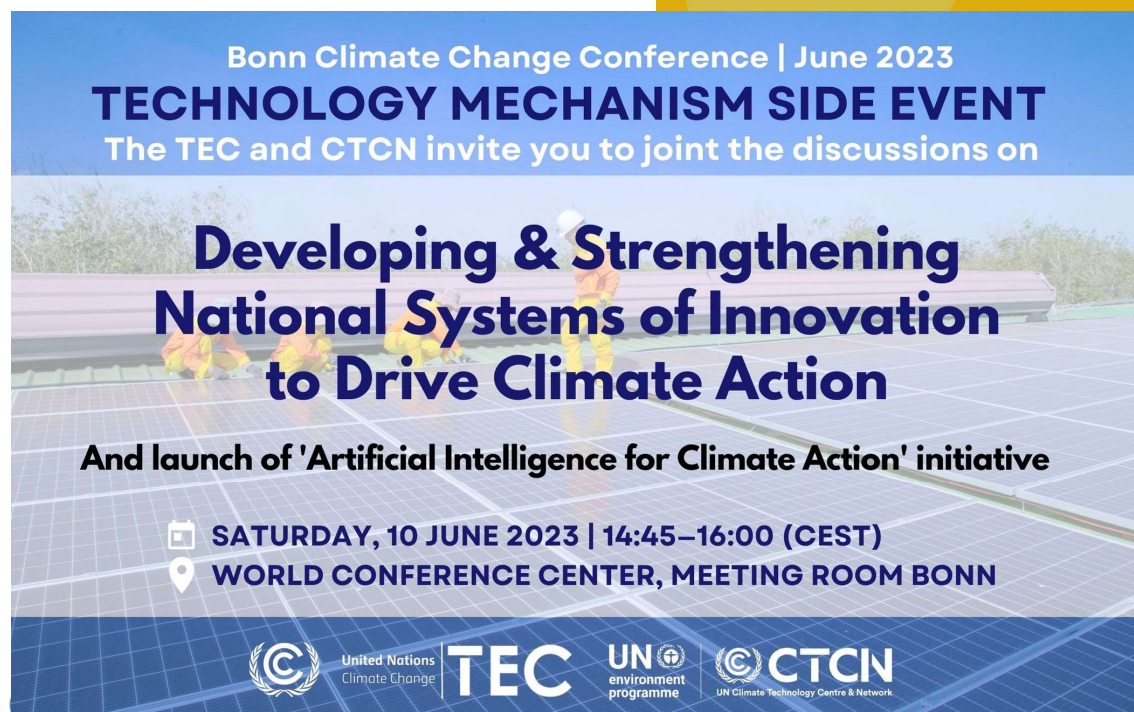
Two events organized:
1. June 2023 (SBs)
2. Africa Climate week

Planned event at Asia-Pacific Climate Week

Key Messages and Recommendations

1. The TEC compiled good practices and lessons learned on the set-up and implementation of NSIs for developing country policymakers aiming to strengthen NSIs in the context of climate action. The compilation and its summary for policymakers, aimed at deepening understanding of selected parts of the systems, identifies measures and approaches that have improved their effectiveness.

2. The TEC highlights the following good practices presented in the summary for policymakers:
    a. **Taking a systemic approach** to establishing and/or strengthening the NSI, which is aligned with host country development objectives;
    b. **Tailoring approaches** to bridging gaps in the innovation process given that innovation needs vary by phase and sector;
    c. **Understanding the local context** so as to engage relevant actors, mobilizing the required resources, identifying and addressing gaps in the innovation process, and tapping into the complementary structures and processes of the overall innovation system to advance climate initiatives;
    d. **Promoting participation of and interaction among local actors** to facilitate innovation and alignment of NSI with country development objectives. Local actors have the best understanding of local context and institutions, as well as often having the largest stake in the outcome, and are therefore best placed to help to fill gaps in and advance the functions of the NSI;

e. **Engaging with international institutions** to help to build local institutions and networks as they can play an important role, by introducing global best practices, assisting with the development, adaptation and diffusion of new technologies, helping to mobilize financial and technical resources and building the capacity of local actors and institutions in strengthening NSIs;

f. **Ensuring that innovation and organizations**, developing NSIs, evolve and are able to adapt to new circumstances through continuous monitoring and review;

g. **Identifying a portfolio of solutions to strengthen** functions across the innovation cycle and to build the capacity of a variety of actors to address the scale and complexity of climate change adaptation and mitigation challenges;

h. **Dealing with structural problems**, since in some cases the underlying problems of poverty, lack of influence and voice, and environmental or social challenges are not acknowledged when designing and only become clear during the intervention of the NSI.

The TEC recommends that the COP and the CMA encourage Parties, **in implementing NSIs to advance climate action**, to **take a systematic approach** to **using NSI functions**, such as **knowledge development and diffusion; entrepreneurial experimentation; market formation; influence on the direction of search; resource mobilization; legitimation; and development of positive externalities**. This approach should help to **ensure that the NSI is performing** the **relevant functions**, which may require the **strengthening of such functions, mobilization of resources, and addressing weaknesses or gaps** in structural elements of the NSI. However, as **these are sector specific**, it is recommended that the **NSI builds on an initial identification of sectoral priorities**, aligned with national policy goals, socioeconomic objectives and climate action. If implemented (and sufficiently resourced), the NSI would provide a signal from the political or policy domain to the NSI about both the direction and ambition.

Thank you!

Bhava Dhungana, Team Lead, Policy and Strategy Unit