

**CTCN supporting TNA and catalysing TAP implementation**

**Background**

The provision of support to developing countries in conducting Technology Needs Assessments (TNAs) and enhancing the implementation of TNA outputs in the form of projects, programmes or policy strategies is a relevant task of the CTCN. This is reflected in the modalities and procedures of the CTCN (UNFCCC, 2013) stating that “the CTCN is to support requests that:

- (a) Support countries in developing draft proposals into fully articulated proposals, building on their technology needs assessments (TNAs) [...] to enable implementation and action, also in the form of nationally appropriate mitigation actions and national adaptation plans, in collaboration with the financial mechanism of the Convention, international financial institutions, and the private sector;
- (b) Provide technical support and advice for development of TNAs, national technology road maps and actions plans, planning and implementation of climate technologies, and policies and measures in support of implementation;”

Furthermore, the CTCN can help countries implement their Technology Action Plan (TAP) by:

1. Helping them make stronger business cases for the implementation of their prioritized technology actions;
2. Making available the required expertise (such as financial, sector, legal or technology experts) to fill gaps and remove some of the identified capacity, policy and regulatory barriers, and;
3. Assessing the feasibility of technology choices and investments.

The implementation of TNA results can be technically supported by the CTCN, based on requests received from NDEs. In fact, TNA and TAP reports are a key source of information for NDEs to generate requests to the CTCN.

However, despite their potential, the number of sound project proposals emanating from TNAs is very small compared to the number of project ideas reported by Parties. Despite having complemented the TNA with a TAP, developing countries that carried out their TNAs under TNA Phase I still face challenges in implementing prioritized technology action plans. This implementation challenge has been raised many times by the Parties notably through the COP, the TNA synthesis reports developed by UNFCCC and related recommendations/briefs from the TEC. These discussions have focused on the following issues:

- In many countries, climate change issues are still considered marginal compared to social and economic challenges due, in large part, to the poor communication and documentation of the

impacts of climate change and the social and economic benefits of national climate technology actions.

- Difficulties in engaging high level decision makers, development partners and financiers in the TNA/TAP process which remains a parallel process to national planning.
- The TNA/TAP process, as an enabling activity, provides a broad/high level assessment however, more in depth “technology specific” analysis or roadmapping is generally needed to enable the implementation of identified priority technology actions which do require more specialized experts.

This paper aims to build on the experience and collaboration/coordination between the TNA process and CTCN over the CTCN’s first five years of operations with a view to propose a more structured approach to align CTCN services with TNAs and their results.

## **Current State of Linkages between the TNA process and the CTCN**

### Collaborations, networking, outreach and communication

Over the first five years of operation of the CTCN, a number of synergic activities have been conducted with the TNA programme (Phase I and Phase II<sup>1</sup>), for example:

- The CTCN Incubator Programme provides tailored support to NDEs from Least Developed Countries to strengthen institutional capacities, identify technology priorities and achieve adaptation and mitigation targets while focusing on the analysis of NDCs and the implementation of TAPs.
- Joint events such as TNA experience sharing workshops, side events and CTCN regional NDE forums.
- Linkage between the CTCN’s knowledge management system for technology information and the TNA’s techaction.org.

### Support and advice for development of TNAs

Over the first five years of operation of the CTCN, many countries/NDEs have approached the CTCN to seek technical support for conducting their TNA which, along with TAP reports and project ideas, are seen as a key tool and information source for NDEs when selecting and generating requests to submit to the CTCN. In most cases, the CTCN advised these countries to approach UN Environment and the UN Environment Danish Technical University Partnership (UDP) with a view to join the TNA programme funded by the GEF (as the financial mechanism for TNAs) including TNA Phase III, which was technically cleared for endorsement by the GEF in December 2017 and is expected to start in the coming months. This new phase follows TNA Phase II, endorsed by the GEF in August 2014, and was designed with the intent to collaborate with the CTCN and its NDEs which were encouraged to be nominated as national TNA coordinator.

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<sup>1</sup> Implemented by UN Environment and UDP with financial support from the GEF.

In some exceptional cases, the CTCN has supported countries to engage with the TNA process. For example:

- Afghanistan requested support for TNA with a focus on 3 sectors. The CTCN is responding with preliminary assistance to make the case for climate technologies by mainstreaming climate technology issues in the Afghanistan National Development Strategy and strengthening capacities for TNA to prepare the country to join TNA Phase III which will be funded under GEF 6.
- Pakistan requested support from UN Environment to conduct their TNA process and develop their TAP according to the current best practice. The CTCN agreed to complement the \$100,000 (GEF 4 funds) Pakistan has available for their TNA with CTCN Technical Assistance linking the support to TNA Phase II.

#### Technical assistance linked to TNAs

During its first five years of operation, the CTCN supported several technical assistance requests linked to TNA outputs/results. For example:

- Mauritius submitted two requests that are in line with their TAP. Both requests focus on the Energy Sector. One request focuses on capacity building to identify, assess and recommend the most appropriate technologies, practices and process for existing coal power plants operating in the country (i.e. more in depth analysis of technology needs) and the second one focuses on assessing a technology for a new coal power plant.
- Bhutan submitted a request for improvement of the public transport, one of the sectors prioritized by Bhutan in the TNA project.

#### **How the three core functions of the CTCN can support the TNA process and TAP implementation**

The CTCN aims to establish a clear link between the TNA process outcomes and its three core work functions.

- a) Function 1: Provide technical assistance to developing countries to enhance transfer of climate technologies

The implementation of TNA results can be technically supported by the CTCN, in conjunction with the role of NDEs. TNA reports, TAP reports and project ideas are a key source of information for NDEs to generate requests for CTCN. Building on the TNA/TAP priorities, the CTCN can provide countries with technical assistance services to:

- Explore how TNAs can support implementation of NDCs and prepare targeted policy briefs and advocacy papers to increase awareness at a local/national level, including for potential funders and investors.
- Include additional technologies in their TNAs, beyond the limitation of 2-3 technologies per sector.

- Conduct feasibility studies on prioritized technologies to provide more in-depth analyses of costs and benefits of the specific technologies in the local/national context.
  - Support development of 'bankable' technology programmes and projects and advise countries on potential bilateral and multilateral funding sources (matchmaking).
  - Help address identified policy and regulatory barriers and/or improve institutional processes for climate technology deployment.
  - Support integration of climate technology priorities into national/sectoral plans, including NAPs, to attract public funding for technology actions.
  - Support elaboration of initiatives to de-risk private sector investments in technologies with the objective to increase private sector involvement in technology transfer and in the implementation of TAPs.
  - Update old TNAs.
- b) Function 2: Provide and share information and knowledge on climate technologies
- Facilitate access to information and knowledge on climate technologies to inform/support countries in conducting their TNA process.
  - Prepare and disseminate best practice case studies for replication and upscaling of technology transfer and implementation including developing Technology Compendiums for common technologies prioritized by countries in TNAs.
  - Identify and deliver regional trainings and joint activities with the GEF on common capacity building needs emanating from TNAs.
  - Provide information on TNA processes (e.g. by disseminating TNA newsletter to all NDEs and CTCN partners) in developing countries including supporting the dissemination of tools, knowledge and experience sharing on TNA, technology planning and roadmapping processes and TAP implementation.
- c) Function 3: Foster collaboration and networking of stakeholders on climate technologies
- Identify opportunities for multi-country requests emanating from TNAs.
  - Support countries to better communicate/disseminate TNA results ('sell' prioritised technologies) to decision makers, private sector, donors and financiers
  - Build a Network of TNA practitioners/experts.
  - Strengthen the linkage between NDEs and TNA focal points.

In order to deliver on the above, the CTCN proposes the following key activities:



- Through regional NDE forums and its Incubator Programme, the CTCN will strengthen institutional capacities that will enable countries to conduct in-country consultations, identify concrete priority technologies and implement TAPs.
- In collaboration with UDP, review TNAs/TAPs to identify sound project proposals that could benefit from CTCN support. Focus will be placed on Phase II TNAs which were designed with the intent of close coordination with the CTCN and the regional Climate Technology Transfer and Financing projects funded by the GEF in Asia, Africa, Europe and Latin America.
- Provide input to Phase III TNAs so that outcomes can be considered early and strategically during the design of TNAs and TAPs.
- Support the organization of TNA workshops that will build the capacity of countries to identify prioritized technologies that can be supported by CTCN technical assistance.