Agenda item 5.(b)i.

# Background paper on updating the guidelines on TNAs

TEC/2023/26/09

Technology Executive Committee, 26<sup>th</sup> meeting and TEC-CTCN Joint session 21-24 March 2023, Songdo, Korea



#### COP, CMA decisions and SBI conclusions

- 1/CMA.15, Annex, paragraph 12 c technology framework, thematic area implementation, actions include activity to review the TNA guidelines and updating them as necessary with a view to TNAs leading to plans and implementation that are aligned with the transformational changes envisioned in the Paris Agreement.
- The COP 21 requested the SBSTA-40 (May 2016), to initiate the elaboration of the **technology framework** established under Article 10, paragraph 4..... taking into consideration that the framework should facilitate, inter alia:
  - (a) The undertaking and updating of TNAs, as well as the enhanced implementation of their results, particularly TAPs and project ideas, through the preparation of bankable projects;
  - (b) The provision of **enhanced financial and technical support** for the implementation of the results of the TNAs.
- **SBI 56** invited the TEC, in consultation with the CTCN and the operating entities of the Financial Mechanism to consider, **when updating the guidelines for TNAs**, how developing countries can be supported in updating their TNAs and implementing their TAP and TNA outcomes.



## Methodology

- Since the inception of the GEF-funded Global TNA project in 2009, the methodology for undertaking a
  TNA and preparing TAPs has been continuously updated and enhanced, also by the Implementing
  Agency UNEP and its Executing Agency UNEP-CCC (Former UNEP DTU Partnership) in close
  collaboration with the UNFCCC Secretariat and the TEC.
- The methodology has evolved from the original three TNA Handbooks prepared in 2001–2009,
  which mainly focused on technology prioritization, stakeholder engagement, and project ideas, to a
  methodology that provides in-depth guidance on how to identify barriers and enablers for technology
  transfer and diffusion, the development of TAPs, and the preparation of project concept notes (2020).
- The TNA Step-by-Step guidance, which is the main handbook used by national TNA teams through all the steps in the TNA process, includes guidance on how TNAs take starting points in national development and climate objectives, including Nationally Determined Contributions (NDCs).



## Methodology

- The methodology has continuously been developed in response to regular feedback from countries, and recommendations from terminal evaluations of TNA Phase I and II.
- It has been developed with the aims of:
  - Provide options to overcome barriers and challenges;
  - · building national capacities;
  - mobilizing stakeholders, including governments, development organizations, public and private financiers, and in some cases also private sector actors;
  - closing the gap between project ideas or action plans and their implementation potential;





• In the table below, an overview is provided of the existing TNA methodology and

guidebooks.

| TNA Process Step   | Main Guidance and tools  |
|--|--|
| Cross-cutting guidance                                   | TNA Step by Step (2019)  |
|  | Guidance for a gender-responsive Technology Needs Assessment (2018)  |
|  | Transformational Change Guidance for technology Needs assessment (2022)                                    |
| Step 1: Technology<br>Prioritisation                     | Identifying and prioritising technologies for climate change adaptation (2015)                             |
|  | Identifying and prioritising technologies for mitigation (2015)  |
|  | TNA Sector Technology Guidebooks:  |
|  | Adaptation   |
|  | - Water (2011)   |
|  | - Agriculture (2011)   |
|  | - Coastal zone (2010)  |
|  | Mitigation   |
|  | - Transport (2011)<br>- Buildings (2012)   |
|  | - Agriculture (2012)   |
|  | Cross-cutting  |
|  | - Urban contexts (2021)  |
|  | <ul> <li>Indigenous Peoples and Climate Technologies (2021)</li> </ul>                                     |
| Step 2: Barrier Analysis &<br>Enabling Frameworks        | Overcoming Barriers to the Transfer and Diffusion of Climate Technologies (2015)                           |
| Step 3: Technology Action Plan (including project ideas) | Enhancing Implementation of Technology Needs Assessments – preparing Technology Action Plans (TAPs) (2017) |
| Step 4: Project Concept note                             | Finance Guide for Implementation of Technology Action Plans (2020)   |



## Possible TNA guidance developments

For updated TNA guidance developments, and for possible considerations for inclusion
of new and updated TNA guidance in a TNA Phase V of the Global TNA project and
any other TNA sources, it could be considered to develop guidance and
methodology on the role of TNAs and TAPs in preparing and implementing
countries' long-term Strategies.

## **Sources of inputs**

- There are several sources of inputs to update the TNA guidelines.
- The latest two TNA synthesis reports are synthesizing and compiling the TNA reports of countries and indicate several success stories, lessons learned, and challenges.
- After the global TNA project phases I-II were completed, they undertook terminal evaluations, which also highlighted possible areas for consideration regarding enhancing the effectiveness of the TNA process.



#### **Sources of inputs**

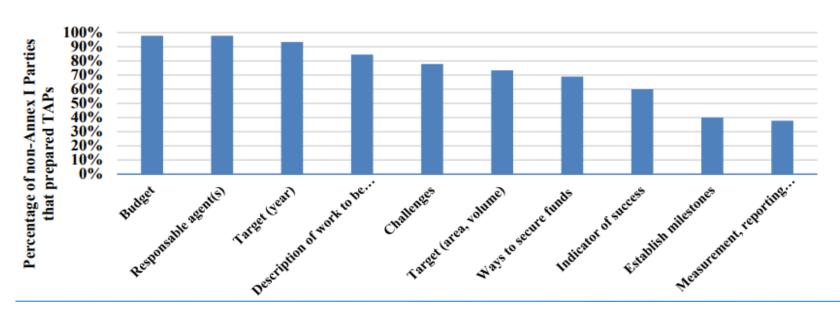
- The UNEP-DTU partnership (UDP) developed a series of success stories brochures
  which highlighted successful implementations of dozens of climate technology projects
  in developing countries. They are also a good example of how the countries were
  guided when going through the TNA exercise, and they indicate some benefits and
  potential gaps in the guidance.
- The transformational change process may also have an influence on future TNA guidance. Below, a draft of more concrete elaborations of these elements is provided for your consideration.



#### TNA 3rd and 4th synthesis reports

Most of the TAPs included key information necessary for transferring project ideas into implementation. Some of the information was not always covered by the TAPs, such as challenges, sources of funding, success indicators, etc. The new guidance could reflect these levels of coverage and help to **enhance the completeness of the TAPs.** 

Levels of reported elements in technology action plans of non-Annex I Parties





#### Terminal evaluations of TNA Phase I and Phase II projects

- It was recognized that TNAs, if properly developed, had a great added value for strengthening national strategies, supporting countries in the formulation and implementation of their NDCs, and supporting the formulation of planning and reporting documents, including for the revised NDCs.
- In the global TNA project, established capacity building activities proved to be highly appreciated if the approach incorporated substantial hands-on exercises that properly addressed ways to apply the method to the local conditions.
- With some exceptions, it appears that accurate involvement and getting commitment from the private sector is challenging. Accurate timing and managing expectations in involving the private sector appear to be the keys to success.
- A guidebook on accessing international funding is available and it could be made practical on how to prepare effective proposals.



## Success stories (brochures) of TNA implementation

 More than forty implemented TNA-based projects were presented in four brochures of the UDP – "From needs to implementation". The new guidance could help to identify common elements that contributed to the implementation and include these elements.

## **Transformational change**

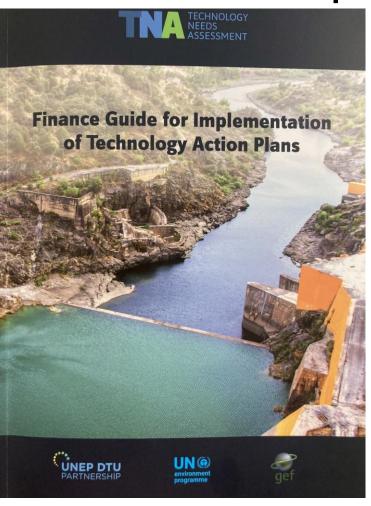
 Regarding the TNA guidance, issues from the TNA transformation change such as long-term strategies could be considered.

## Possible next steps

- The TEC implementation task force may wish to build on this information when considering updating the TNA guidelines and agree on a process to update these guidelines.
- Comments received by the TEC members are provided in the Appendix of the paper.



## Finance Guide for Implementation of TAPs.



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Proposals on updating the guidance for consideration by the TEC:

- Guidance on further strengthening the private sector engagement, could be done by updating TNA guidebook;
- Guidance on strengthening NSIs, building on tech report on NSIs and existing TNA barrier handbook;
- Guidance on updating TNAs (as mentioned, for TNA V the majority will update former TNA);
- Concept note development for funding. Under TNA III, it was introduced that countries develop, based on their TAPs, concept notes such as for GCF, GEF, or other funding mechanisms. The work of the TEC could further explore on how such component could be expanded, supporting building of more developed proposals.



## Thank you for your attention.

