



Technology Executive Committee

07 March 2023

Twenty-sixth meeting

21–23 March and 24 March 2023 (TEC-CTCN Joint session)

Updating the guidance of TNA

Concept note

I. Introduction

A. Background

1. At TEC 25 the TEC considered a background paper on updating the technology needs assessments (TNA) guidelines prepared by the task force on implementation and provided guidance on further work on the matter, including assessing gaps in the existing TNA guidelines with a focus on national stakeholders' ability to access financial resources for conducting TNAs and interlinkages between the TNA and nationally determined contributions (NDC) processes.
2. The TEC agreed to include consideration of how developing countries can be supported in updating their TNAs and implementing their technology action plans (TAPs) and TNA outcomes as part of its rolling workplan for 2023–2027.
3. As per activity B.1.1. i. of the Rolling workplan of the TEC for 2023-2027 the TEC is to prepare a gap assessment of guidance on TNA as the basis for initiating the update of the guidance of TNA.
4. At TEC 26 the Secretariat will deliver a presentation on updating the guidance on TNAs.

B. Scope of the note

5. The annex to this note contains a concept note to update guidance on TNAs.

C. Possible action by the Technology Executive Committee

6. The TEC will be invited to consider the presentation and provide a guidance on further work on this matter.

Annex

Concept note to update guidance of TNA

I. Background

1. The TEC included in its rolling workplan 2019–2022 an activity to consider updating the TNA guidelines, building on previous work of the TEC, with a view to TNAs leading to enhanced implementation. The TEC should consider the need to revise TNA guidelines taking into account COP/CMA guidance on that matter, including 15/CMA.1, Annex paragraph 12 c; 1/CP.21 para 67 a, 67 b, and SBI/2022/L.10 para 4.
2. This work should be undertaken in engagement with the CTCN, the GEF, TNA countries, private sector, and relevant actors, collaboration with BINGO, ENGO, RINGO, YOUNGO and IGOs.

II. Methodology development and update on TNAs since 2009

3. 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** 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.
4. 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 Technology Action Plans, 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).
5. 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 always been developed with the aim of closing the gap between project ideas or action plans and their implementation potential; to build national capacities through national, regional, and global level training workshops; and to mobilize stakeholders, including governments, development organizations, public and private financiers, and private sector actors for TAP implementation.
6. In the table below, an overview is provided of the existing TNA methodology and guidebooks.

Table

Overview of the existing TNA methodology and guidebooks

<i>TNA Process Step</i>	<i>Main Guidance and tools</i>
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 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) - Buildings (2012) - Agriculture (2012) Cross-cutting - Urban contexts (2021) - Indigenous Peoples and Climate Technologies (2021)
Step 2: Barrier Analysis & 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)

III. Possible TNA guidance developments

7. For updated TNA guidance developments, and for possible considerations for inclusion of new and updated TNA guidance in a TNA Phase V, which is under preparation, it could be considered to develop guidance and methodology on the role of TNAs and TAPs in preparing and implementing countries' long-term Strategies.

IV. Sources of inputs

8. 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. 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.

A. COP, CMA decisions and SBI conclusions

9. 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.

10. The COP 21 requested the Subsidiary Body for Scientific and Technological Advice to initiate, at its forty-fourth session (May 2016), the elaboration of the technology framework established under Article 10, paragraph 4, of the Agreement and to report on its findings to the Conference of the Parties, with a view to the Conference of the Parties making a recommendation on the framework to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement for consideration and adoption at its first session, taking into consideration that the framework should facilitate, inter alia: (a) The undertaking and updating of technology needs assessments, as well as the enhanced implementation of their results, particularly technology action plans 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 technology needs assessments.

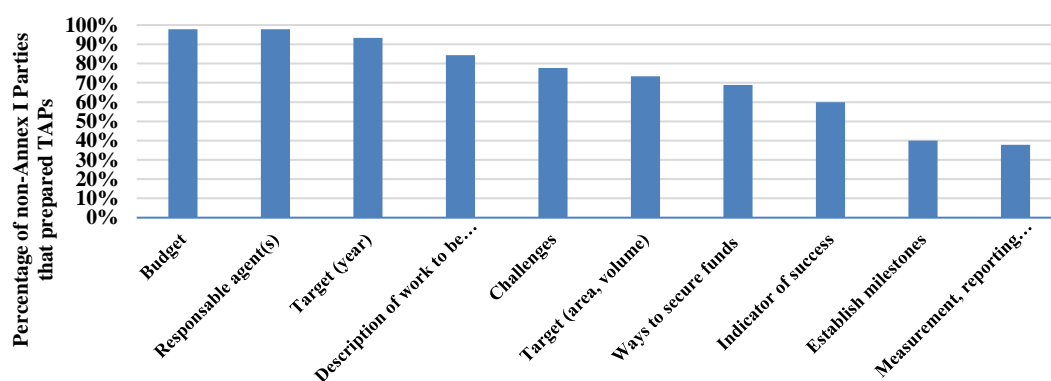
11. SBI 56 invited the TEC, in consultation with the CTCN and the operating entities of the Financial Mechanism to consider, when updating the guidelines for TNAs, how developing countries can be supported in updating their TNAs and implementing their technology action plans and TNA outcomes.

B. TNA 3rd and 4th synthesis reports

12. Most of the technology action plans included key information necessary for transferring project ideas into implementation. Some of the information which would be useful 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 level of the TAPs.

Figure

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



C. Terminal evaluations of TNA Phase I and Phase II projects

13. The needs and capacities of participating countries invariably vary, which results in various velocities of proceeding by different countries. Hence, mechanisms where countries can learn from each other were encouraged and provided.

14. 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.

15. 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.

16. 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.

17. A guidebook on accessing international funding is available and it could be made practical on how to prepare effective proposals.

D. Success stories (brochures) of TNA implementation

18. 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.

E. Transformational change

19. The methodology defines transformational change as a fundamental, sustained change of a system that disrupts established high-carbon practices and contributes to a low-carbon society in line with the Paris Agreement goal to limit global warming to 1.5–2°C and the United Nations Sustainable Development Goals.

20. Fundamental change in systems relevant to climate action with large-scale positive impacts that shift and accelerate the trajectory of progress towards climate neutral, inclusive, resilient, and sustainable development pathways. Regarding the TNA guidance, issues from the TNA transformation change such as long-term strategies could be considered.

V. Possible next steps

21. The TEC may wish to build on this information when considering updating the TNA guidelines and agree on a process to update these guidelines.

Appendix

Summary of comments received by the TEC prior to its 25th meeting

TNA guidance – possible next steps

1. In terms of procedure, the TEC should decide at its next meeting whether the TNA guidelines should be updated, or will the task force develop possible areas of update?
2. Regarding the part about updating TNAs, development of a new guidebook is a possible option. In that guidebook we could explore the different venues for TNA funding, and, in the most optimistic scenario, include some prefilled general templates for the different funding windows or at least successful examples of recent proposals that got funded so countries can use as a basis for proposals by other countries. The important approach here may be to start at the different funding windows requirements and then go backwards on how to fulfil those requirements, so we get a very practical guidebook (handbook).

TNA and NDCs

3. With regard to updating the TNA guidelines, there is a suggestion to strengthen the linkage with the countries' NDCs. This might enhance the relevance and visibility of TNAs, create coherence of both processes and facilitate funding and PA implementation.
4. For the attached paper adding another source of input may be considered (point 4 of the paper): papers on linkages of TNA and NDC processes developed by the TEC.
5. There updates might include regarding closer links with the countries' NDCs. This could include:
 - sectors and categories, which are prioritized in the NDC;
 - adding "relevance for the NDC implementation" (not necessarily such a name, but just as an idea) as a criterion when estimating selected technologies;
 - possible impact on NDC implementation.
6. Active communication and information sharing among NDE, NDA and GEF focal points and other focal points including AF is critical. The knowledge and capacities of those focal points are also very critical for the implementation of TNA outputs. The GCF allocates the Readiness Budget of 1 M USD per year to each developing country. In this respect, communication and knowledge and capacity issues are very critical. The TEC's recent work on the linkage of TNA process with NDC process may be considered as a source of inputs.

Engaging finance community and funding issues

7. Involve the financial experts who can give guidance or comments on the useful projects ideas of each country is important for the successful technology scale-up. We may highlight how such factors affect the successful implementation of TNA results.
8. At the SBI 56 session two relevant mandates were provided: one about support for updating TNA's, and another on the implementation of the TAPs and TNA outcomes.
9. We also got some guidance regarding who to consult: CTCN and operating entities of the financial mechanism. The GEF introduced some practical ideas on how to do a realistic analysis on the fundability of the TAPs.
10. Maybe include some decision tree to help decide which funding options are more available depending on the country or the TNA purpose. Also, in this new guidebook, guidance regarding the Choice of TNA coordinator and local consultants should be included, in line with the lesson learned in the Terminal evaluation of the UNEP/GEF Project Technology Needs Assessment Phase II.

11. In the case of the implementation of the TAPs and TNA outcomes we have already 3 guides that seem to be a bit overlapping, so maybe have a consolidated one.

12. The "TNA Step by Step" guidebook could benefit from further guidance going from the sector level to the specific challenges on those sectors that parties want to solve with technology. Also, in this guidebook the governance part is tailored specifically to the GEF TNA process, so some form of generalization might be needed. Regarding some of the key findings of the 4th synthesis report, there seems to be a gap regarding involving stakeholders from the finance community, and this should probably need to be stressed out in this guidebook.

Other issues

13. Gender should be an integral part of all the guidebooks instead of a separate guidebook. The approach we have now makes it easier to be overlooked.

14. Finally, there are some minor elements to be mentioned such as lack coherence between guidebooks due to their time of publication, for example between "Identification and Engagement of Stakeholders in the TNA Process" and "TNA Step by Step", so with this update we should aim to make the guidebooks be consistent with each other.
