



Technology Executive Committee

03 September 2024

Twenty-ninth meeting

17–19 September and 20 September 2023 (TEC-CTCN Joint session)

**Background document: Results and Observations from
the Third Technology Mechanism National Designated
Entities (NDEs) Survey**

I. Introduction

A. Background

1. COP 23 requested the Technology Executive Committee (TEC) and the Climate Technology Centre and Network (CTCN) to undertake the monitoring and evaluation of the impacts resulting from the implementation of their respective mandates.¹

2. In 2019, the TEC and CTCN agreed to jointly develop a monitoring and evaluation system (hereinafter referred to as the M&E system) to report on activities conducted under the Technology Mechanism. As a part of this effort, both bodies also agreed to conduct a biennial survey of National Designated Entities (NDEs) and collect ex-post impacts of the support provided, in order to assess the activities and contributions of the TEC and CTCN in facilitating technology development and transfer, as well as addressing transformational changes envisioned in the Paris Agreement.

3. COP 25 welcomed the coherent approach of the TEC and the CTCN in developing and enhancing their M&E system and encouraged them to utilize these systems to improve reporting on the outputs and impacts of their work and facilitate the achievement thereof.²

4. The first NDE survey was jointly conducted in July 2020. The survey results were presented at the respective meetings of each body, namely at TEC 22 and the 21st meeting of the CTCN Advisory Board.

5. The second NDE survey was conducted in 2022, with the survey disseminated between April and July 2022. The results were presented at the joint session of the TEC and CTCN Advisory Board held in conjunction with TEC 25 and the 20th Advisory Board meeting.

6. COP 27 (November 2022) requested the TEC and CTCN continue enhancing their efforts to monitor and evaluate the impacts of their work, including by identifying new ways to invite feedback from NDEs on the impact of the work of the Technology Mechanism.

7. At the joint session of the TEC and CTCN Advisory Board held in conjunction with TEC 28 and the 23rd Advisory Board meeting, the secretariats of the TEC and CTCN presented an enhanced approach for implementing the third NDE survey. This approach included targeting both Non-Annex I and Annex I NDEs, refining the framing and scope of the questions, adopting a more targeted and coordinated

¹ See decision 15/CP.23, paragraph 5.

² See decision 14/CP.25, paragraph 3.

approach to outreach efforts, and enhancing survey dissemination strategies to increase the response rate, including utilizing regional NDE forums for survey distribution.

8. The TEC and CTCN Secretariat conducted the third NDE survey from May to August 2024.

9. The survey part of the TEC included the questions to identify on one hand the level of knowledge is and understanding of NDE's regarding the work of the TEC, including familiarity to its publications, and on the other hand, to identify the needs of the NDEs where TEC could add value, barriers for the NDEs meet to access the information about the TEC and possible ways to overcome these barriers.

10. The survey included closed and open questions, enabling NDEs to provide direct feedback and recommendations to the TEC.

B. Scope of the note

11. The document contains only TEC part of the Technology Mechanism third NDE survey. Full survey results, which includes CTCN, TEC and Joint TEC&CTCN questions are contained in document TEC/2024/29/25.

12. The document includes analysed survey results and responses of the NDEs to the TEC questions, from all closed-ended questions (quantitative information and ratings of issues) and an analysis of open-ended questions. It also includes analyses of responses to questions across the respondent groups (Annex 1 and Non-Annex 1 NDEs), to allow for a deeper understanding of the needs and challenges of different target groups.

13. Finally, the document includes observations to inform the TEC discussions on the next steps.

C. Possible actions by the Technology Executive Committee

14. The TEC will be invited to consider the survey results and analysis and provide guidance to the secretariat.

II. Results of the survey

A. Survey design

15. The survey questionnaires were created in both online (Microsoft forms) and offline formats (i.e., Word document), and translated into English, French and Spanish. Responses were collected from May to August 2024.

16. The survey was structured into three sections:

(a) Awareness of the role of NDEs:

(a) For Non-Annex I NDEs, the survey assessed awareness on their roles and sought to identify gaps and highlight best practices related to the operationalization of the NDE role at country level

(b) For Annex I NDEs, the survey assessed their awareness of their roles and gathered donor perspectives and expectations

(b) Impacts of the CTCN services provided:

(a) For Non-Annex I NDEs, the survey assessed the long-term impacts of CTCN services, across all three areas – technical assistance, capacity building and

knowledge sharing – with a focus on aggregated impact indicators within the CTCN M&E system

(b) For Annex I NDEs, the survey assessed whether their Party’s financial contribution to the CTCN (if applicable) met expectations, addressed priorities, and explored their willingness for future support

(c) Impacts of the TEC services provided:

(a) The same survey questions applied to Annex I and Non-Annex I NDEs which evaluated the long-term impacts of TEC services, including the use of TEC policy briefs in shaping national policy development

17. Key differences between the surveys conducted in 2022 and 2024 include an expanded scope of the questions (See annex 1 for a detailed comparison of the NDE surveys conducted in 2022 and 2024). Indeed, the 2024 survey included self-evaluation by NDEs regarding their roles and potential actions. It used the CTCN document on the ‘Roles and Responsibilities of Annex I and Non-Annex I NDEs’ as a reference for designing the questions.

18. NDEs were asked to evaluate their environment across four dimensions: 1) capabilities and skills; 2) resources; 3) awareness and information; and 4) political influence. Furthermore, the expanded scope of the survey also included additional questions specifically relevant to the CTCN. For Non-Annex I Parties, the survey covered CTCN capacity building and knowledge sharing activities, in addition to technical assistance. For Annex I countries, the survey included questions about financial, in-kind and pro-bono contributions.

B. Target Respondents

19. In addition to targeting Non-Annex I NDEs, the survey introduced a new feature which was to also include questions targeting Annex I NDEs. Survey responses from Annex I NDEs indicate that the majority of responses came from NDEs already engaged with CTCN activities, either as Advisory Board members or as donors to the CTCN.

20. Contact information for NDEs was obtained from the list maintained by the CTCN secretariat, which can be accessed on the CTCN website.³ Additionally, the CTCN Technical Assistance teams provided updated contact details for newly nominated NDEs.

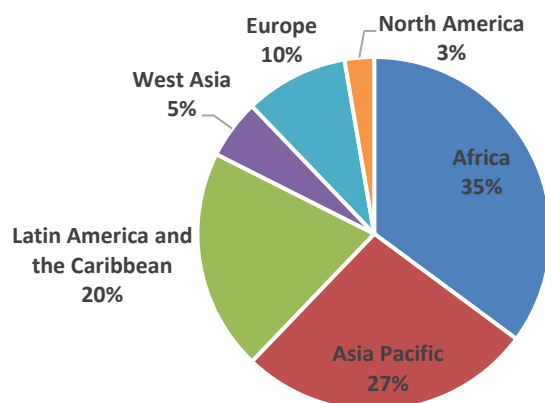
21. Survey responses were collected from a total 74 NDEs (out of 166 NDEs total), resulting in a response rate of 46%. This is close to the target response rate of 50% and represents an 18% increase compared to the survey conducted in 2022.

Table 1
Survey response statistics (as of 7 August 2024)

NDEs	# of surveys sent	# of survey responses	# of online responses	# of offline responses
Annex 1	28	11	8	3
Non-Annex 1	138	63	47	16
Total	166	74	Response rate: 45%	

³ <https://www.ctc-n.org/about-ctcn/nde>.

Figure 1
Regional distribution of NDE respondents to the survey



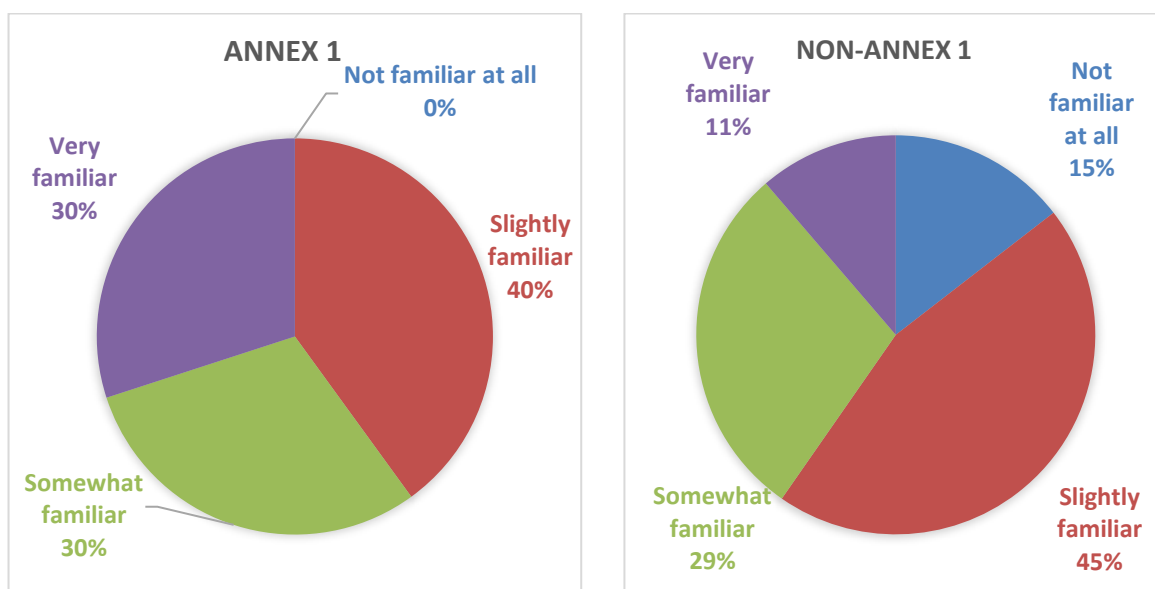
C. Distribution of survey

22. An initial email blast was sent to all NDEs. Following this, CTCN's regional teams sent 2-3 reminder emails, encouraging new NDEs to consult with their predecessors if necessary.

23. Furthermore, the CTCN NDE forums organized dedicated sessions to assist NDEs in completing the survey. These combined online and in-person follow-up strategies significantly boosted the survey response rate.

D. Survey Results Related to the Work of the TEC

Question 1. How would you describe your level of familiarity with the work of the TEC?



24. Overview of the responses: Majority of the respondents indicated that they are slightly familiar (*I have heard of the TEC, but I do not know exactly what it does*), or somewhat familiar (*I know the TEC and I have a good understanding of its work*), with the work of the TEC. High level of the familiarity (*I have extensive knowledge of the TEC products and/or I have already used TEC products*), was amongst 30% of Annex 1 and 11% of Non-annex 1 NDEs. Only 15% of the Non-annex 1 NDEs marked

non familiarity (*I have never heard of the TEC nor of its work*) with the work of the TEC.

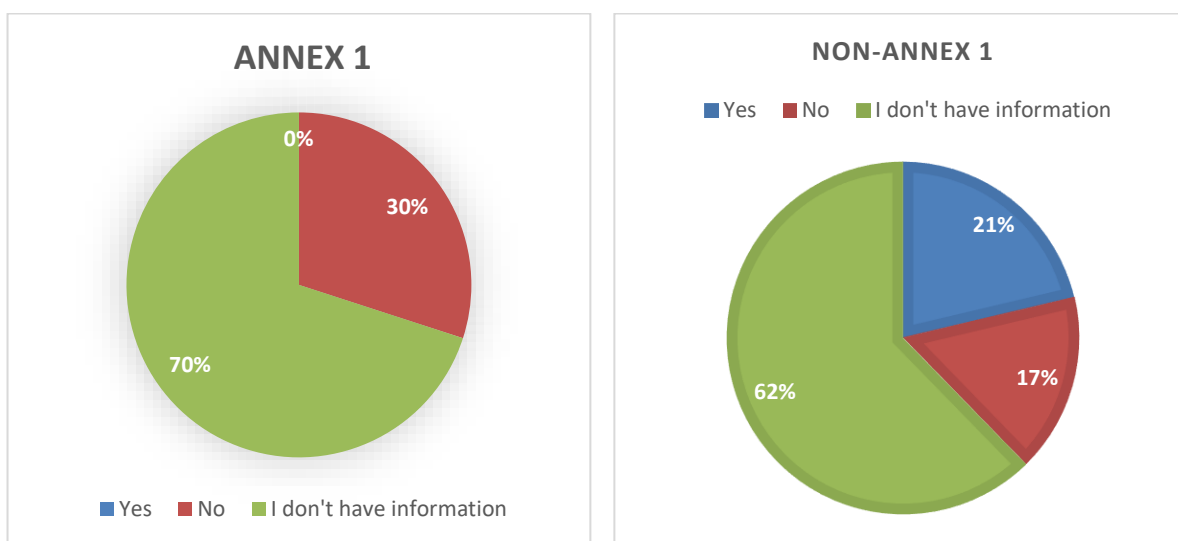
25. With regards to the follow up question on specific TEC product NDE's are familiar with, the following answers are listed based on frequency of responses:

- (a) TEC Policy briefs
- (b) Climate Technology Progress Reports
- (c) The Technology Mechanism Joint Programme of Work (2023-2027)
- (d) TNA Step by Step: A guidebook for countries conducting a Technology Needs Assessment and Action Plan
- (e) TEC key messages and recommendations

26. Only 4%⁴ of the NDE's provided information if they could name the product they are familiar with, namely:

- (a) Technology and National Determined Contributions- Stimulating the Uptake of Technologies in Support of Nationally Determined Contribution Implementation
- (b) Good Practices and Lessons Learned on the Setup and Implementation of National Systems for Innovation.
- (c) Compilation of good practices and lessons learned on International collaborative research development and demonstration (RD&D) initiatives of climate technology.
- (d) Future needs in Research Development and Demonstration Report.

Q2. To the best of your knowledge, have the TEC products been used in your country?



27. Overview of the responses: with regards to the use of the TEC products in countries NDE represent, most of the Annex 1 NDEs responded that, either it has not been used, or they don't have information. In case on Non-Annex 1 NDEs, 79% responded that TEC products have not been used or they don't have information and 21% responded that TEC products have been used namely:⁵

- (a) To raise awareness of national stakeholders on climate change adaptation/mitigation issues;

⁴ In terms of the absolute numbers 3 NDE provided the information.

⁵ Note: answers are listed based on the frequencies of responses.

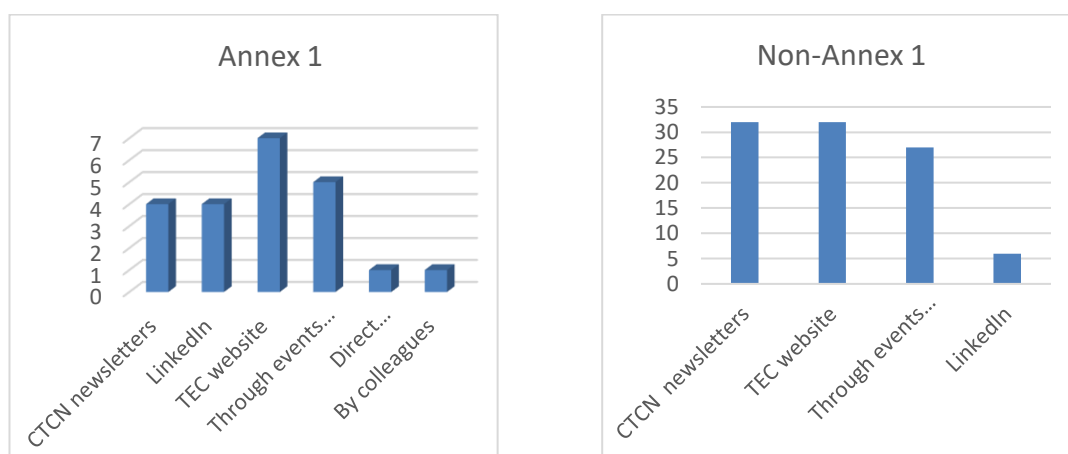
- (b) The recommendations have been followed to promote climate technology development and transfer, and develop technology policies;
- (c) They have been considered while making investment or other decisions;
- (d) Circulated with relevant entities;
- (e) They have been used as reference in other publications;
- (f) They have been read by the relevant governmental body in charge of climate technologies.

28. With regards to the follow-up question that allows NDEs to provide more details on the publication used and the type of actors involved, only 2% of the NDE's provided information on the concrete examples as follows*

- (a) Publication on Technology and National Determined Contributions;
- (b) TEC Brief #15 - Linkages between technology needs assessment process and nationally determined contributions process;
- (c) TEC Brief #13 - Enhancing Implementation of the Results of Technology Needs Assessments;
- (d) TEC publications used while developing Technology Needs Assessment and Technology Action Plans;
- (e) Technology and NDC publication for the relevant stakeholder to consider while developing and implementing NDC;
- (f) Information material presented at regional NDE forums.

29. In terms of the actors involved, NDE's named national climate coordination platforms and line ministries.

Q3. How do you access or receive information on TEC publications and knowledge products?

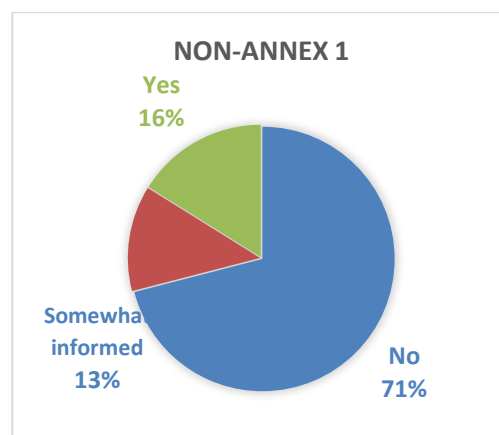
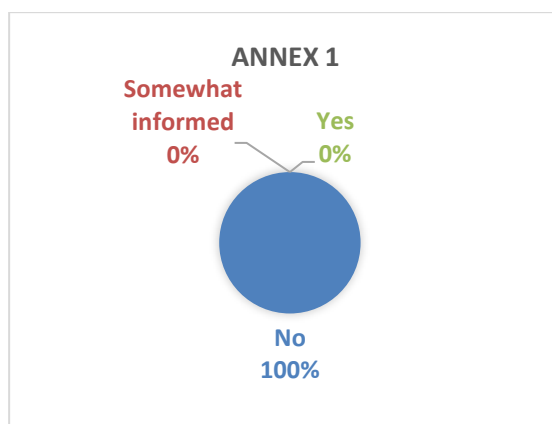


30. Overview of the responses: Most of the NDEs responded that they obtain information from TEC website,⁶ followed by the CTCN newsletter and events (such as COP, regional forums etc.). Some NDEs also receive information from LinkedIn. Few Annex 1 NDEs responded that they got information through direct communication with the secretariat, as well as from their own colleagues.

* Responses to follow up questions occur only from Non-Annex 1 NDE's

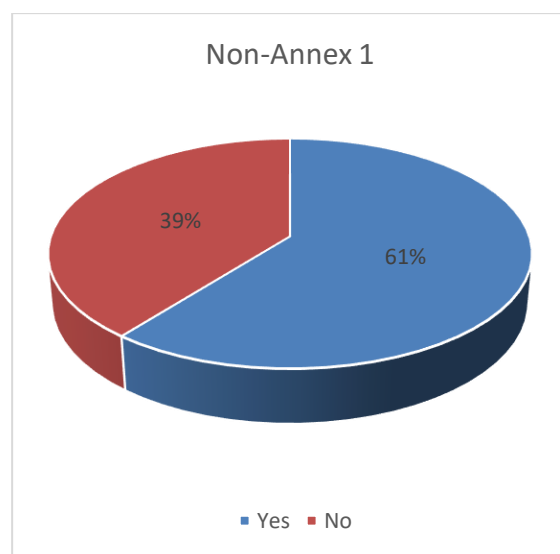
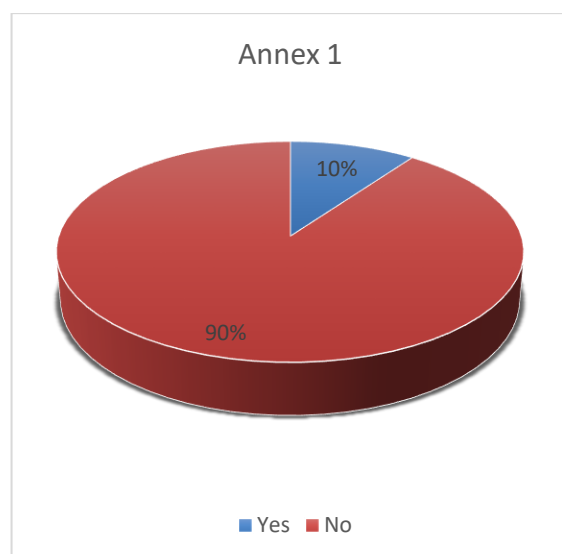
⁶ TT: CLEAR: <https://unfccc.int/tclear/>.

Q4. Have TEC publications informed the NDC update in your country?



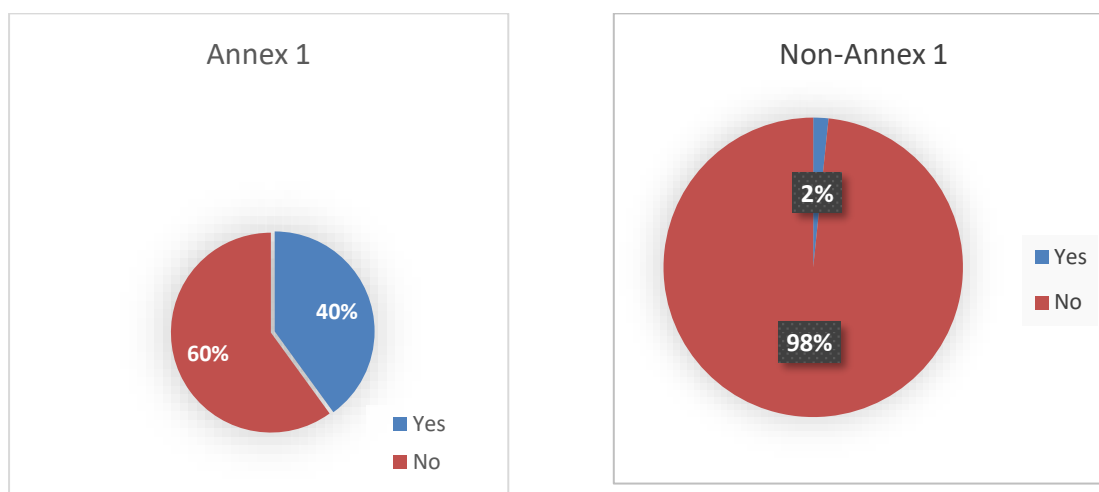
31. Overview of the responses: NDE 100% of the NDE's from Annex 1 responded that TEC publications have not informed their NDC update. In case on Non-Annex 1 NDEs 71% responded negatively, 13% responded that TEC publications have somewhat informed the NDC update and 16% of NDEs responded positively. NDEs highlighted TEC publications such as Technology and NDC, TEC briefs, as well as Technology Needs Assessment which informed the NDCs.

Q5. Does your country's NDC refer to technology planning tools such as Technology Needs Assessment (TNA) and Technology Roadmaps (TRM)?



32. Overview of the responses: on the question if NDC is referring to the technology planning tools, 10% of Annex 1 NDE's responded positively that their NDCs refer to the Technology Planning tools such as TNAs and TRMs, 90% responded that their NDCs do not refer to the Technology Planning tools such as TNAs and TRMs. For Non-Annex 1 NDEs, 61% responded that their NDCs refer to the Technology Planning tools such as TNAs and TRMs and 39% their NDC's does not refer to the Technology Planning tools such as TNAs and TRMs.

Q6. Have you contributed to the development of TEC publications and/or knowledge products over the past two years (such as contributing through case studies and/or reviewing them)?

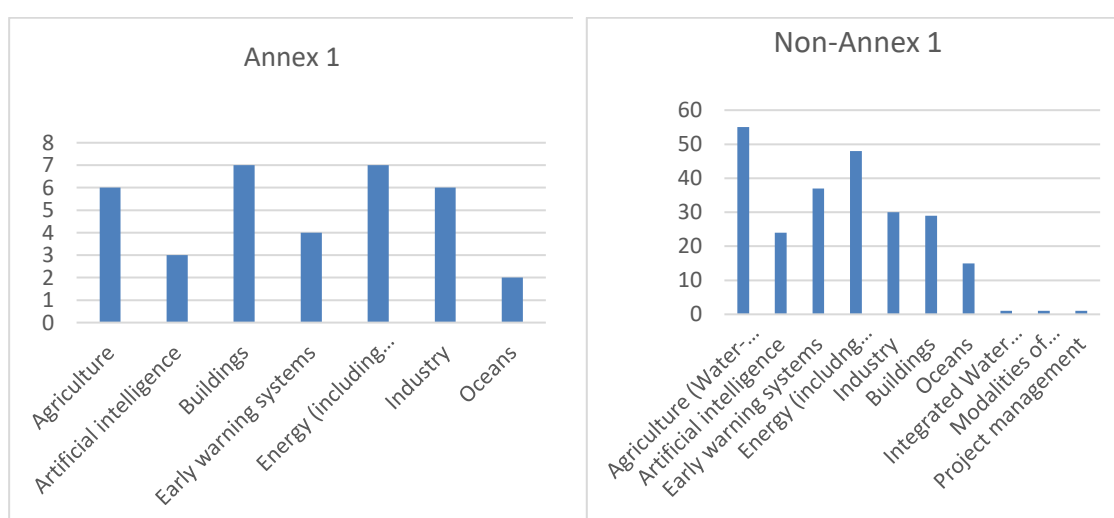


33. Overview of the responses: 40 % of the Annex 1 NDE's responded that they have contributed to the development of the TEC publications and knowledge products, and 60% responded negatively. While in case of Non-Annex 1 NDEs, only 2% responded that they have contributed to the development of the TEC publications and knowledge products and 98% responded negatively.

34. With regards to the follow up question to specify the type of contribution provided to the development of TEC publications and knowledge products, NDEs responded as follows*:

- (a) Review of TEC documents;
- (b) Development of several TEC products;
- (c) Provided financial support for development of the report;
- (d) As interviewee.

Q7. In which sectors or areas of work would your priorities lie, where the work of the TEC could be most beneficial?

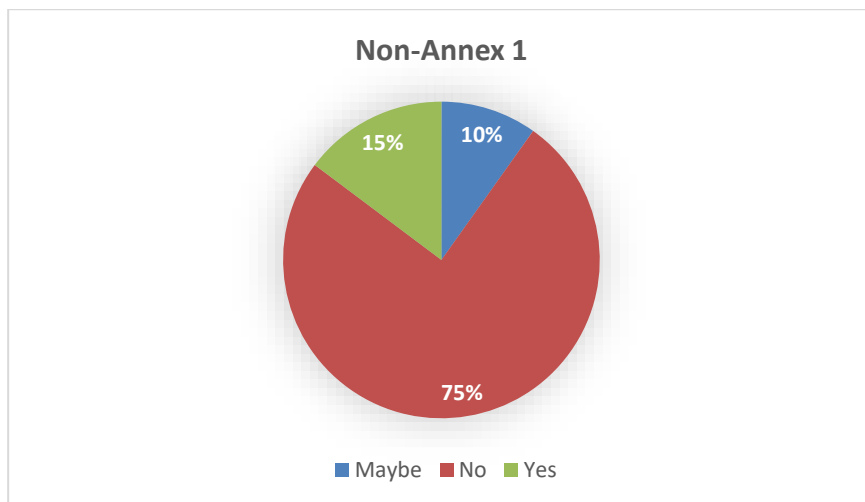


35. Overview of the responses: Overall responses show that top three areas for Annex 1 and Non-Annex 1 NDEs are agriculture, energy (including storage) and

* Note: answers are listed based on general responses, not frequency of responds

buildings. Further analysis into priorities of the groups, Annex 1 NDE's top 3 areas are buildings, energy (including storage) and agriculture and industry with the same number of responses, whereas Non-Annex 1 NDE's top 3 priority areas are agriculture, followed by energy (including storage) and early warning systems.

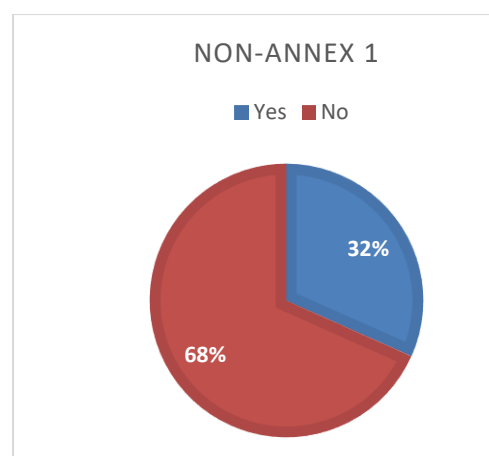
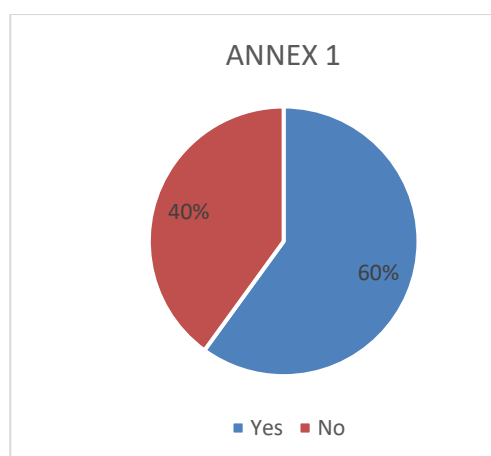
Q8. Have you used the TEC products to prepare technical assistance requests for the CTCN?

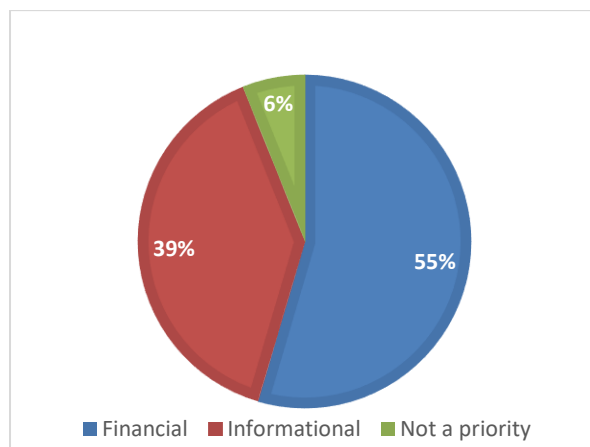


36. Overview of the responses: Responses were received only from Non-Annex 1 NDEs, most of the Annex 1 NDEs marked question as non relevant. In terms of the responses, 15% of the NDE's responded that they have used TEC products to prepare CTCN technical assistance requests, 75% responded negatively, while 10% do not have information.

37. With regards to specifying the TEC products used to prepare CTCN technical assistance requests, few NDEs mentioned TEC brief #13 Enhancing Implementation of the Results of Technology Needs Assessments and Technology and NDC. Majority of the NDEs did not have information on the TEC products or TEC publications to be used for CTCN TA.

Q9. Have you participated TEC events, either standalone TEC events or joint TEC-CTCN events, over the past two years





38. Overview of the responses: 40% of the Annex 1 NDEs responded that they have participated at the TEC events and 60% responded negatively. In case on Non-Annex 1 NDEs, 32% responded that they have participated at the TEC events and 68% responded negatively.

39. Non-Annex 1 NDEs provided reasons for not participating at the TEC events. Majority (55%) of NDEs mentioned financial barriers for participating, 39% highlighted lack of information and 6% responded that issue is not a priority in their country.

40. The events NDEs participated the most are:

- (a) COP and SB side events (including SBI 60 in-session workshop: Linkages between the Technology Mechanism and the Financial Mechanism);
- (b) NDE regional forums;
- (c) Climate weeks.

Q10. Do you have any suggestions on how the TEC could better engage with you to ensure that the knowledge products reach you and those who would benefit the most from the work

41. Overview of the responses: Question was open ended which gave NDEs flexibility to express their ideas how TEC could better engage with them. In total 67% of the NDE's responded to the question, suggesting ways to improving engagement, including as follows:

- (a) Recommending the TEC to engage with the NDEs directly and more often, including through sharing important update via direct channels (for example WhatsApp channel, mailing list, LinkedIn) and through webinars;
- (b) Enhancing active engagement of regional TEC members as they are important actors for disseminating information to their NDEs while representing TEC;
- (c) Inviting NDEs to the TEC events as TEC events were highlighted as good source of information;
- (d) Translating TEC products to different UN languages, and potentially at national languages, as well as providing information in various formats (infographics, videos) to enhance accessibility;
- (e) Enhancing more dissemination to NDEs of various TEC decisions, publications, and successful case studies.
- (f) Providing training and capacity building workshops to help stakeholders understand and use TEC knowledge products effectively;
- (g) Involving NDEs in the development of knowledge products to ensure that their perspectives and needs are incorporated;

- (h) Including information on access to funding for the technologies covered in the knowledge products to make the products more attractive for NDEs;
- (i) Partnering with regional organizations that have strong relationships with NDEs to facilitate the dissemination of TEC knowledge products through existing networks.

III. Observations

42. Based on the responses received to the third NDE survey, some common issues were observed:

(a) **Varying degree among NDEs of overall awareness about the work of the TEC:** The survey results indicated that both Annex I and Non-Annex I NDEs have a relatively similar general understanding of the TEC work. This suggests that the overall awareness of the TEC work and objectives is comparable across these groups. However, when the survey delved into more detailed questions requiring specific information about the TEC, a notable difference emerged. The majority of Non-Annex I NDEs were unable to provide specific details or insights about TEC's activities, publications, or initiatives. In addition, a number of NDEs suggested the TEC to provide logistical and financial support to them to participate in the events, provide technical assistance and etc. which reveals the lack of awareness of the functions and mandates of the TEC and lack of information on the TEC areas of work.

(b) **Limited awareness of the TEC publications:** In general, there is limited awareness and knowledge among NDEs about sector-specific publications produced by the TEC. Only a few TEC products were specified by NDEs as being that were used for guiding the development of Nationally Determined Contributions (NDCs) or Technology Needs Assessments (TNAs). This lack of recognition indicates that TEC publications could benefit from clearer, more focused communication. By creating more explicit and targeted messaging, the TEC can help NDEs better understand the relevance and practical application of these publications, thereby enhancing their effectiveness in supporting their climate policy development.

(c) **Increased outreach and dissemination of the TEC work:** NDEs indicated that increasing direct communication would enhance their awareness and understanding of the work of the TEC. They suggested using methods such as WhatsApp channels, direct email updates, webinars, and training sessions to facilitate this communication and ensure they are well-informed about TEC activities and publications.

(d) **More accessibility to TEC publications through translation to different languages:** Several NDEs noted that the accessibility of TEC publications could be significantly improved by translating these documents into other UN languages and local languages. This would make the content easier to read and understand for a broader audience, particularly for policymakers and stakeholders who are more comfortable in languages other than English. Enhanced accessibility through translation would likely increase the use of TEC publications during policy planning and development, as it would allow NDEs to consider and incorporate the insights and recommendations provided in these documents into their national strategies and action plans more effectively.

(e) **Participation of the NDEs in development of the TEC publications:** The survey showed a disparity in the participation of NDEs from Annex I and Non-Annex I countries in the development of TEC publications. NDEs from Annex I countries have been more actively involved in providing input and contributing to the creation of these publications, while participation from Non-Annex I countries has been comparatively lower. Several Non-Annex I NDEs highlighted to be keen to engage more with the TEC during the development of the publications.

(f) **Stronger TEC engagement in NDE forums and climate events:** TEC participation in external events was highlighted as a crucial strategy for enhancing the visibility and outreach of its work, as well as promoting the various publications developed by TEC. By actively engaging in a wide range of events – NDE forums, regional workshops, and sector-specific forums the TEC can effectively share knowledge and raise awareness about its role in supporting climate technology efforts. This participation not only increases the recognition of TEC’s contributions among a broader audience, including policymakers, industry leaders, and researchers, but also facilitates networking opportunities that can lead to valuable partnerships and collaborations.

(g) **Importance of role of the TEC members in the regions:** Several NDEs emphasized the importance of the role played by TEC members from the regions in effectively disseminating information among NDEs. The feedback from the NDEs suggested that having TEC members from the regions could significantly enhance communication and information sharing.
