



Technology Executive Committee

25 August 2026

Thirty-third meeting

15–18 September 2026 (18 September 2026 TEC-CTCN Advisory Board Joint Session)

Results of the Fourth Technology Mechanism Biennial NDE Survey relevant to the TEC

Cover note

A. Background

1. 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 information on 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.
2. The first, second and third Technology Mechanism Biennial NDE surveys were conducted in 2020, 2022 and 2024, respectively. The results were presented at respective meetings of each body.
3. The Fourth Technology Mechanism Biennial NDE survey was conducted between March – July 2026. Out of 166 NDEs a total of 65 NDEs responded to the survey. The survey included closed and open questions, enabling NDEs to provide direct feedback and recommendations to the TEC.

B. Scope of the note

4. The annex to this note contains results of the Fourth Technology Mechanism Biennial NDE Survey that are relevant to the TEC.

C. Possible actions by the Technology Executive Committee

5. The TEC will be invited to provide guidance to the secretariat based on the results of the NDE survey, as relevant to the work of the TEC.

Annex I

Results of the Fourth Technology Mechanism Biennial NDE Survey relevant to the TEC

A. Background

1. The 2026 biennial survey of National Designated Entities (NDEs) was conducted to gather insights, feedback and evidence on the experiences of NDEs in relation to technology development and transfer under the UNFCCC Technology Mechanism. As national focal points for climate technology development and transfer, NDEs play a critical role in identifying national technology needs, facilitating engagement with relevant stakeholders and supporting the uptake of technology-related guidance, knowledge products and technical assistance.
2. The survey seeks to assess the extent to which the work of the TEC and the CTCN has contributed to strengthening support for technology development and transfer, including through policy guidance, knowledge products, technical assistance and stakeholder engagement. It also aims to capture NDE perspectives on the relevance, accessibility and use of TEC and CTCN outputs, as well as their contribution to national climate policy processes, including nationally determined contributions and related implementation frameworks.
3. In addition, the survey provides an opportunity to identify emerging priorities, persistent challenges and opportunities for enhancing the effectiveness of the Technology Mechanism. The findings are intended to inform future work by the TEC and the CTCN, including efforts to improve outreach, strengthen country-level uptake of knowledge products, and ensure that support responds to the evolving needs and circumstances of both Annex I and Non-Annex I Parties.

B. Methodology and limitations

4. The survey was administered through two online questionnaires developed in Microsoft Forms: one tailored to Annex I NDEs and one tailored to Non-Annex I NDEs. The use of separate questionnaires made it possible to reflect the different national circumstances, roles and support needs of the two respondent groups, while maintaining sufficient consistency to enable comparison across key areas of analysis. To facilitate broad participation, the questionnaires were made available in English, French and Spanish. Responses were collected between March and July 2026. In addition to the survey being circulated online, the NDEs were also provided the opportunity to complete the survey during the in-person NDE forums for Africa in March, for Latin America and the Caribbean in May, and for Asia in July 2026.
5. In total, 65 responses were received from NDEs out of 166 recipients circulated, corresponding to an overall response rate of 39 per cent. This result is close to the target response rate of 45 per cent, although it represents a 6 percentage point decrease compared with the response rate achieved in the 2024 survey. The response base includes 5 out of 37 Annex I NDEs and 60 out of 139 Non-Annex I.
6. The findings should be interpreted with some caution when comparing Annex I and Non-Annex I responses. In particular, the Annex I findings are based on only

five respondents and may therefore not be fully representative. They should be considered indicative rather than conclusive.

C. Survey response statistics

NDEs	# of surveys sent	# of survey responses
Annex 1	37	5
Non-Annex 1	139	60
Total	166	65

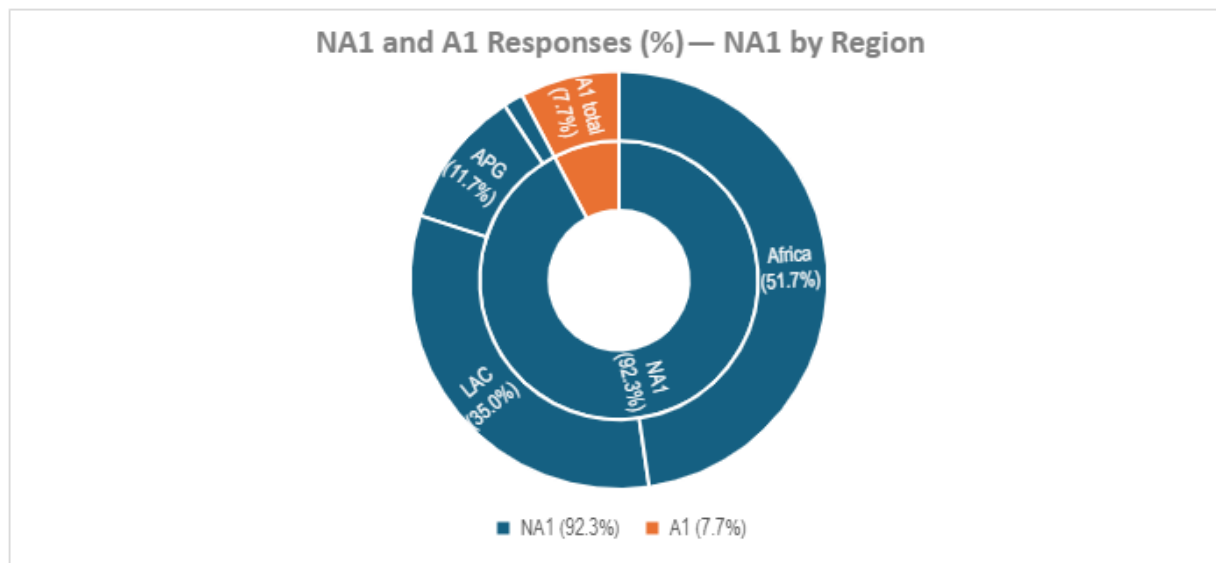
7. The survey was disseminated initially through a mass email sent to all NDEs. This was followed by targeted outreach by the CTCN regional teams, which sent between two and five reminder emails to encourage participation. Where relevant, newly appointed NDEs were encouraged to consult with their predecessors in order to ensure continuity and completeness of responses.

8. Additional support was provided through dedicated sessions organized during NDE forums, where participants were briefed on the purpose of the survey and supported in completing the questionnaire. These efforts were intended to improve the quality and completeness of responses and to ensure that NDEs had the opportunity to provide informed feedback on the work of the TEC and the CTCN.

D. Regional distribution of NDE respondents to the survey

9. The regional distribution of NDE respondents shows that the survey responses were predominantly from Non-Annex I Parties, which accounted for 92.3 per cent of total responses, compared with 7.7 per cent from Annex I Parties. Within the Non-Annex I respondent group, Africa represented the largest share, accounting for 51.7 per cent of responses, followed by Latin America and the Caribbean at 35.0 per cent and Asia-Pacific at 11.7 per cent. The Eastern European Group accounted for a smaller share, at 1.7 per cent. This distribution indicates that the survey findings are strongly informed by the perspectives of Non-Annex I NDEs, particularly from Africa and Latin America and the Caribbean.

Figure 1
NDE respondents to the survey



E. Key findings

10. The survey revealed a clear implementation gap, particularly among Non-Annex I countries. Respondents across both Annex I and Non-Annex I Parties recognize the importance of technology development and transfer, have integrated technology considerations into climate policies and planning processes, and have identified clear technology priorities. However, while Non-Annex I respondents continue to face significant barriers related to finance, technical capacity, data availability and technology deployment, Annex I respondents generally reported fewer implementation barriers and placed greater emphasis on policy coherence, innovation and knowledge exchange. The findings suggest that the TEC can maximize its impact by strengthening country-level uptake of its knowledge products and tailoring its support to the differing needs of developed and developing countries.

11. Overall, Annex I and Non-Annex I NDEs are both familiar with the work of the TEC though to varying degrees. Most respondents reported being only slightly or somewhat familiar with the TEC's work, although Annex I respondents generally demonstrated greater familiarity with specific TEC products and tools. TEC products are recognized, particularly policy briefs, recommendations and technical publications, but their use at country level is not consistently visible, especially among Non-Annex I respondents, many of whom reported limited information on national uptake.

12. Technology development and transfer is strongly reflected in national climate priorities. Most Non-Annex I respondents indicated that technology is explicitly reflected in their NDCs, while Annex I respondents also recognized its importance within broader national climate policy frameworks. Some NDEs (NAI NDEs 17%/AI NDEs 40%) reported that TEC publications had informed the update of their countries' NDCs, while others were unsure (NAI NDEs 33%/AI NDEs 40%) or said that this was not the case (NAI NDEs 39%/AI NDEs 40%).

F. Key Commonalities and distinctions between Annex I and Non-Annex I NDEs

Topic	Commonalities	Key Differences
Familiarity with the work of the TEC	Both groups are familiar with the work of the TEC, particularly with TEC policy briefs and recommendations.	Non-Annex I respondents demonstrate broad awareness of the work of the TEC, although familiarity with specific products and tools was less reported. Annex I respondents showed relatively stronger familiarity with selected TEC products and tools.
Use of TEC products	In both groups, TEC products are mainly used as reference materials for policy discussions, planning and awareness-raising.	Non-Annex I respondents frequently reported having no information on country-level use, whereas Annex I respondents reported somewhat greater visibility of product use within government processes.
Participation in TEC activities	TEC events are an important engagement channel for both groups.	Participation rates were higher among Annex I respondents (80%) than among Non-Annex I respondents (54%).
Contribution to TEC products	Contribution to TEC publications remains limited across both groups.	Annex I respondents reported a considerably higher rate of contribution to TEC products (40%) than Non-Annex I respondents (6%). Noting that the total number responses on this question, was 5 for Annex I NDEs and 54 for Non-Annex I NDEs.
Technology in NDCs and policies	Both groups acknowledge the importance of technology development and transfer in climate action.	Technology is almost universally reflected in Non-Annex I NDCs (89%), while Annex I responses show a more mixed picture, reflecting different national circumstances and policy frameworks.
Impact of TEC outputs on NDCs and policies	Both groups reported limited or uncertain impact of TEC outputs on national planning and policy processes.	Annex I respondents were somewhat more likely to report influence on NDC updates, while Non-Annex I respondents more frequently reported uncertainty or lack of information.
Information channels	CTCN newsletters, COPs and LinkedIn are important channels for both groups.	Non-Annex I respondents rely predominantly on the CTCN newsletter and COPs, whereas Annex I respondents reported more balanced use of LinkedIn, COPs and newsletters.
Priority technology themes	Adaptation and mitigation technologies are important priorities for both groups.	Non-Annex I respondents place overall more emphasis on adaptation technologies, while Annex I respondents highlighted more mitigation technologies, digital technologies/AI and circular economy approaches.
Sector priorities	Energy is a leading priority sector for both groups.	Non-Annex I respondents prioritize energy, agriculture, water and early warning systems, whereas Annex I respondents focus on energy, industry and transport.
Technology cycle support needs	Both groups identify scaling up and deployment of climate technologies as important needs.	Non-Annex I respondents require support across the entire technology cycle, especially RD&D and deployment. Annex I respondents report more targeted support needs, primarily related to deployment and scaling.

Barriers to technology development and transfer	Finance and capacity constraints are identified by both groups.	Non-Annex I respondents face significant barriers related to finance, technical capacity, data and coordination. Annex I respondents reported few major barriers, reflecting higher levels of technological and institutional capacity.
Preferred TEC support	Both groups value policy guidance, knowledge-sharing and collaboration.	Non-Annex I respondents overwhelmingly prioritize linking technology needs with finance opportunities, while Annex I respondents place greater emphasis on policy guidance and coherence with other UNFCCC processes.

G. Summary of key issues

13. **Limited awareness and understanding of TEC products.** Respondents in both groups reported varying levels of familiarity with the work of the TEC, with many indicating that they are slightly or somewhat familiar. This points to an opportunity to further strengthen understanding of the TEC's mandate, products and practical value.
14. **Weak visibility of country-level uptake and impact of TEC products.** Many respondents, particularly from Non-Annex I countries, were unable to confirm whether TEC products have been used nationally. This indicates that information on uptake and impacts may not yet be consistently tracked or communicated.
15. **High participation in TEC events and low participation in developing TEC knowledge products.** Participation in TEC events is relatively high, while reported contributions to TEC publications and knowledge products remain less frequent across both groups.
16. **Strong demand for implementation-focused support.** Non-Annex I respondents placed particular emphasis on support for piloting, testing, deployment and scaling-up of technologies.
17. **Financing remains the most significant challenge for many countries.** Access to finance was identified as a key barrier, particularly among Non-Annex I respondents, and was also among the most frequently requested areas of support.
18. **Capacity constraints continue to hinder technology deployment.** Technical capacity was identified as an important challenge, particularly for Non-Annex I countries.
19. **Diverging technology priorities require differentiated support.** Respondents identified different areas of emphasis: Non-Annex I respondents highlighted adaptation technologies, energy, Water-Energy-Food systems and resilience-related sectors, while Annex I respondents noted digital technologies, AI, circular economy and industrial innovation.
20. **Need for stronger international collaboration and knowledge exchange.** Respondents from both groups indicated that access to best practices, lessons learned and international cooperation remains valuable.
21. **Limited information on influence of TEC outputs on national policies and NDC processes.** Respondents from both groups reported varying levels of influence of TEC products on NDC updates and policy development, with several indicating uncertainty or limited information.
22. **Different expectations of TEC support across Annex I and Non-Annex I countries.** Non-Annex I respondents more often identified support related to finance and implementation, while Annex I respondents placed greater emphasis on policy guidance, coherence with other UNFCCC processes and knowledge exchange.

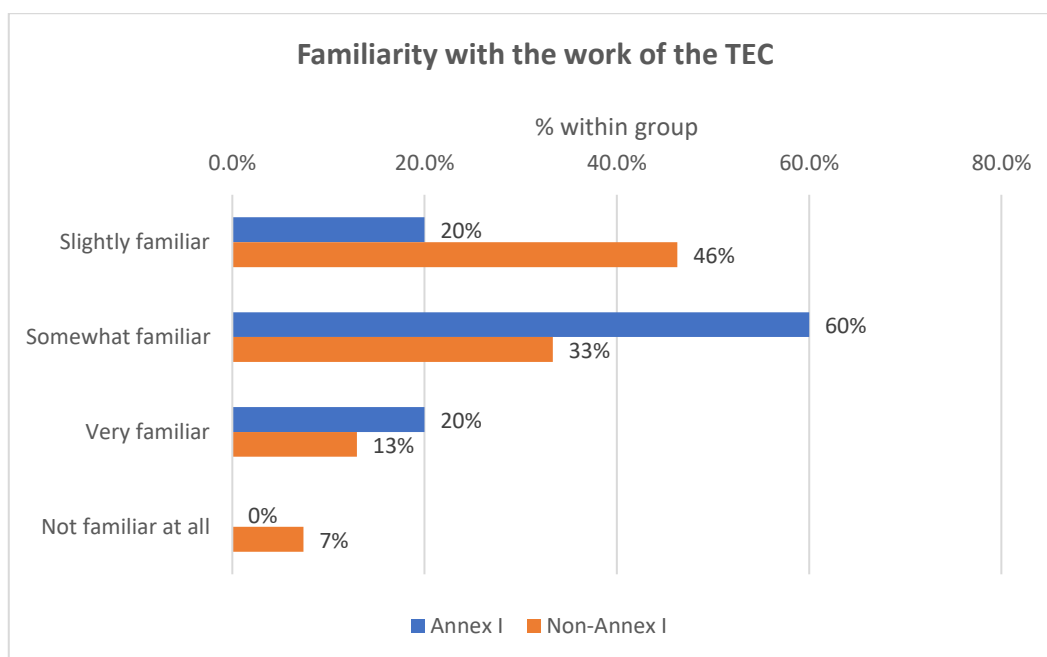
H. Statistical analyses of the survey questions

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

- **Non-Annex I:** Awareness of the work of the TEC is relatively broad but remains limited. 13 per cent reported being very familiar, 33 per cent – familiar and 46 per cent somewhat familiar. This suggests that the TEC has achieved visibility among NDEs, but that further effort is needed to deepen understanding of its mandate, products and value proposition.
- **Annex I:** Annex I respondents also reported moderate familiarity with the TEC, with “somewhat familiar” being the most common response. Given the small number of responses, the result should be treated as indicative, but it suggests a somewhat higher level of familiarity among Annex I respondents than among the broader Non-Annex I group.

Figure 2

Familiarity with the work of the TEC

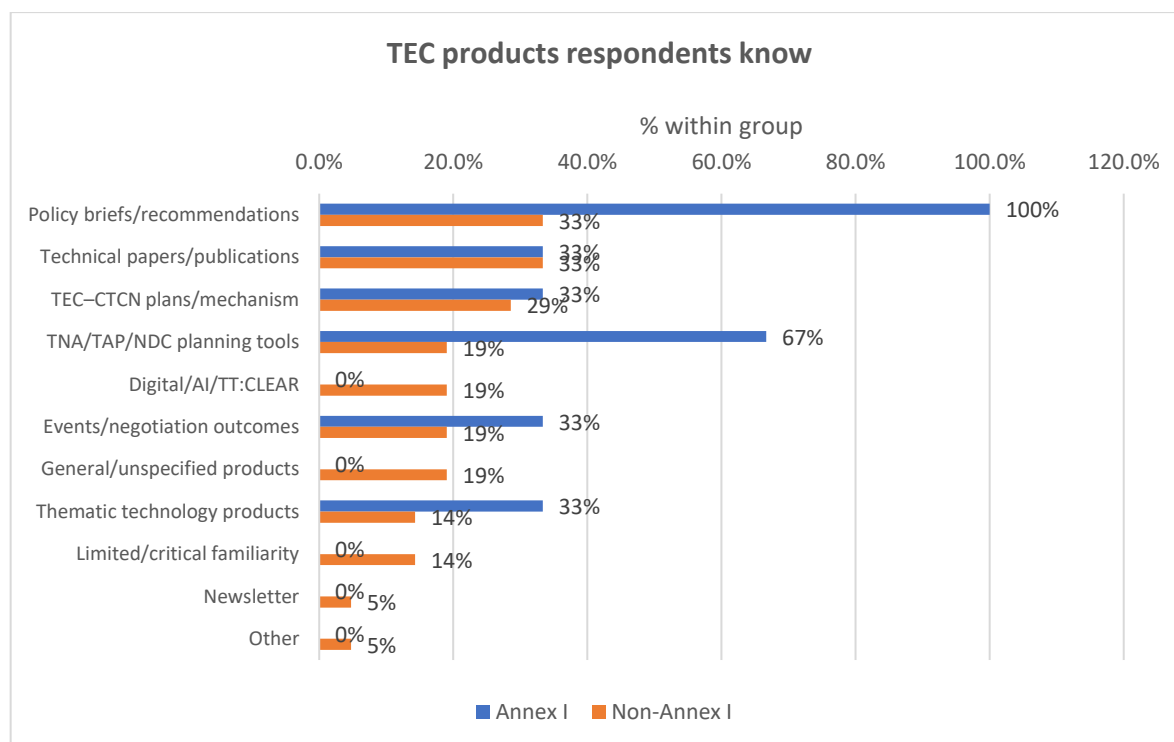


Question 1.1 - If you ticked the boxes somewhat or very familiar in question, please specify the products you are familiar with and the degree of the familiarity.

- **Non-Annex I:** Respondents were most familiar with policy briefs, recommendations, technical publications and TEC-CTCN collaboration products. Familiarity was concentrated around knowledge products.
- **Annex I:** Annex I respondents showed strong familiarity with policy briefs and recommendations, while some also indicated familiarity with TNA, TAP and NDC planning

tools. This suggests that awareness among Annex I respondents is concentrated around strategic policy products and selected planning-related tools.

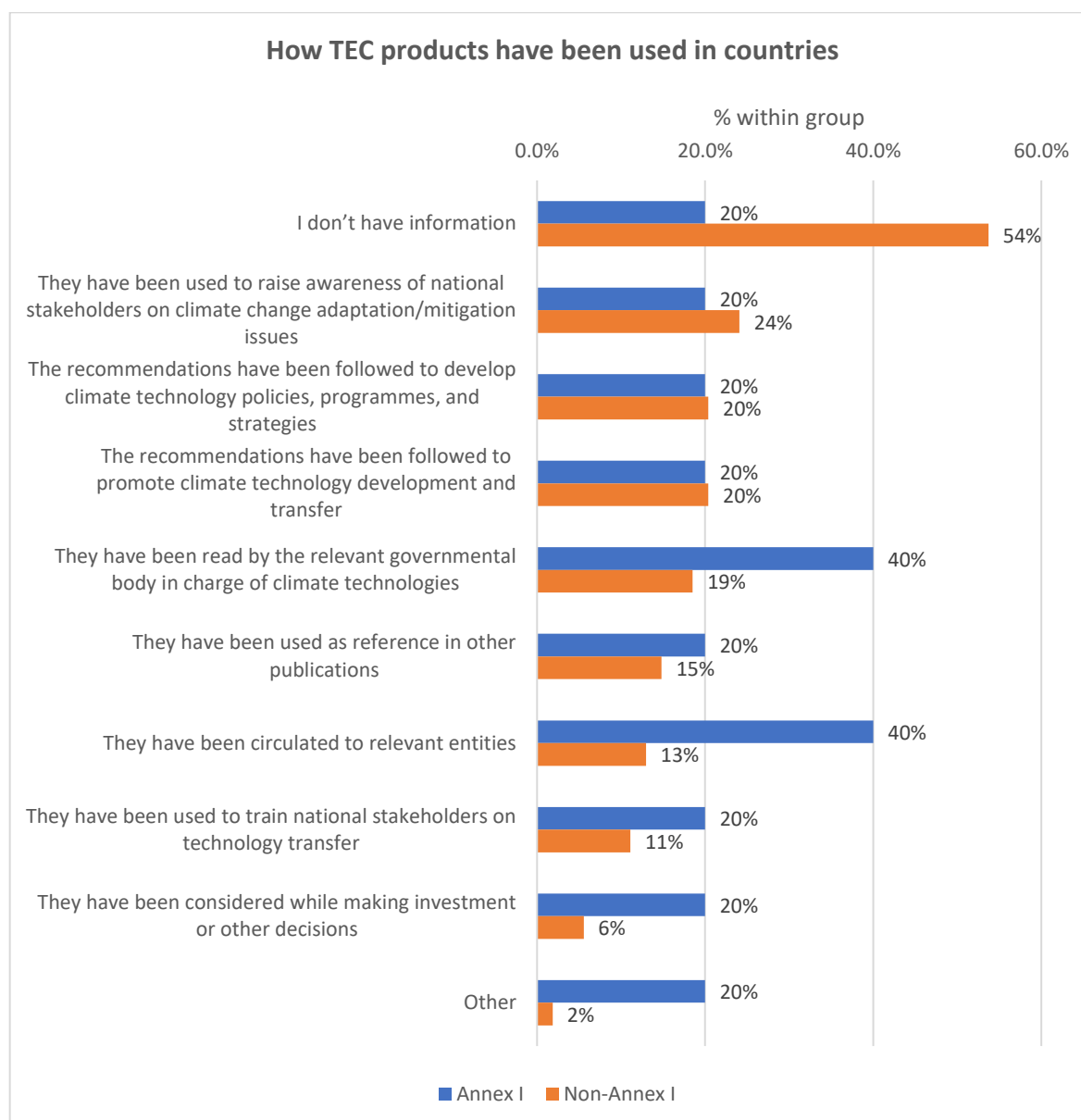
Figure 3
TEC products respondents know



Question 2 - To the best of your knowledge, have the TEC products been used in your country? And how they been used? You may choose several answers.

- **Non-Annex I:** More than half of respondents could not confirm whether TEC products had been used nationally. Where use was identified, products were mainly used for awareness-raising, policy development and technology planning, indicating that TEC products are contributing more to agenda-setting than to measurable implementation outcomes.
- **Annex I:** Annex I responses suggest somewhat greater visibility of TEC product use within relevant government processes, including circulation and review by responsible bodies. However, the limited number of responses and the presence of “no information” and “other” responses indicate that evidence of systematic uptake remains limited.

Figure 4
How TEC products have been used in countries



Question 2.1. If you answered “other”, please specify. Please explain your answers by providing concrete examples of products used (Open question).

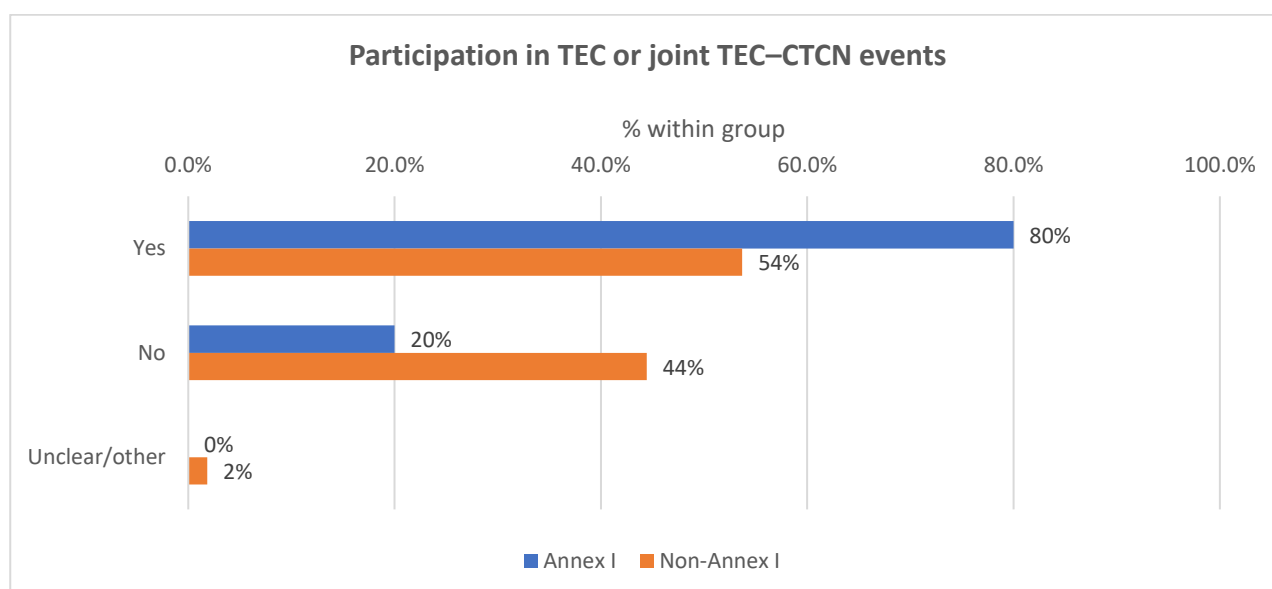
- **Non-Annex I:** Substantive examples indicate that TEC publications are mainly used as reference materials in climate planning, NDC implementation, technology prioritization and policy discussions. Examples related to AI, early warning systems and technology needs assessments suggest that thematic products are reaching some countries and informing technical discussions, although evidence of widespread application remains limited.
- **Annex I:** Relevant responses are reflected under Question 2.

Question 3 - Have you participated in an event organized by the TEC, either standalone TEC events or joint TEC-CTCN events, over the past two years (including those during the COPs, the SBs, climate weeks and etc.)

- **Non-Annex I:** Participation in TEC and TEC-CTCN events is relatively strong, with more than half of respondents having attended an event during the past two years. This indicates that TEC events remain an important entry point for engagement and outreach, although a substantial share of the NDE community remains unreached.
- **Annex I:** Event participation was high among Annex I respondents, indicating that TEC and joint TEC-CTCN events are an important channel for engagement with this group. The result may also reflect the higher familiarity of some Annex I respondents with the Technology Mechanism.

Figure 5

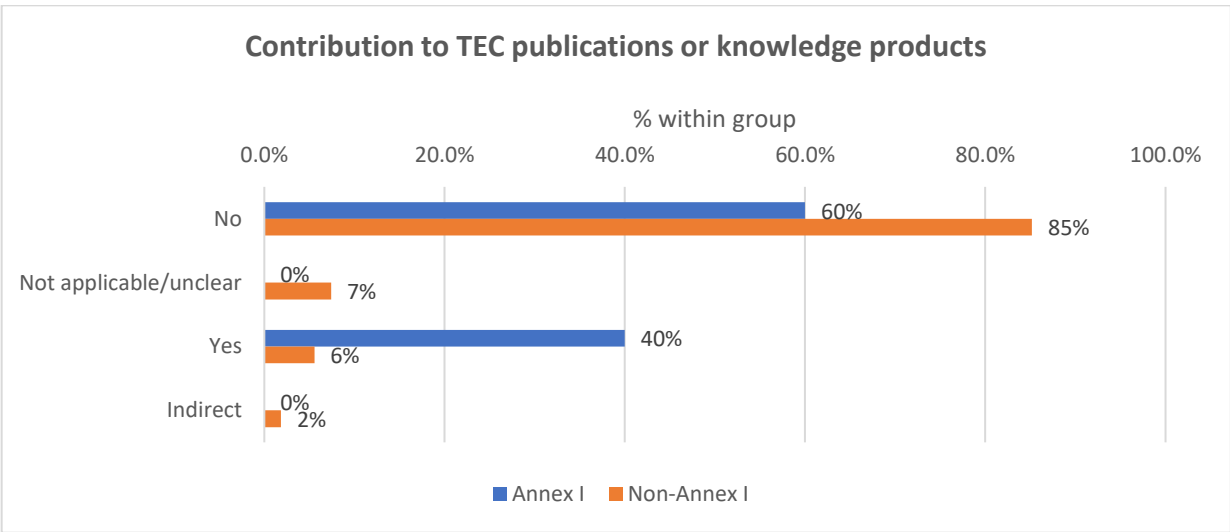
Participation in TEC or joint TEC-CTCN events



Question 4 - 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)?

- **Non-Annex I:** Direct engagement in developing TEC publications is low. While many respondents attend events, very few contribute case studies, reviews or inputs to TEC products.
- **Annex I:** Annex I respondents reported a higher level of contribution to TEC publications and knowledge products than Non-Annex I respondents. Two out of five respondents, representing 40 per cent, confirmed that they had contributed, although the majority had still not been involved in developing these products.

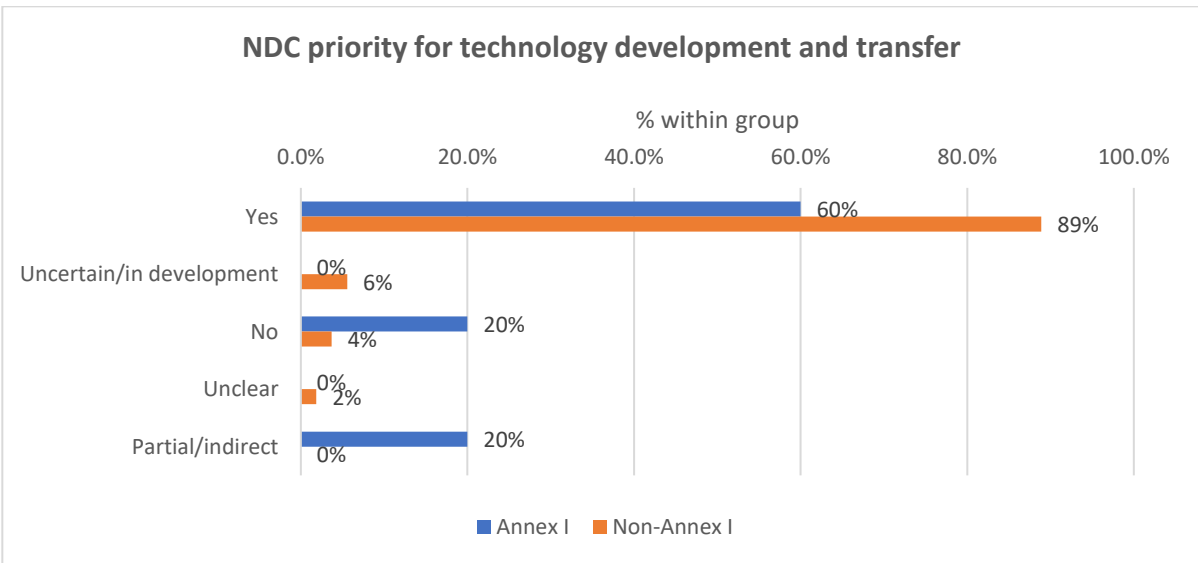
Figure 6
Contribution to TEC publications or knowledge products



Question 5 - Does your country's NDC prioritizes/reflects technology development and transfer?

- **Non-Annex I:** Technology development and transfer are strongly embedded in national climate priorities. Nearly all respondents indicated that technology is reflected in their NDCs, demonstrating that technology has become a mainstream component of climate planning and implementation strategies.
- **Annex I:** Annex I responses show a more mixed picture, with technology reflected either explicitly or indirectly in most responses, but not in all cases. This may reflect differences in national policy frameworks and the way technology development and transfer are incorporated into broader climate policy processes.

Figure 7
NDC priority for technology development and transfer

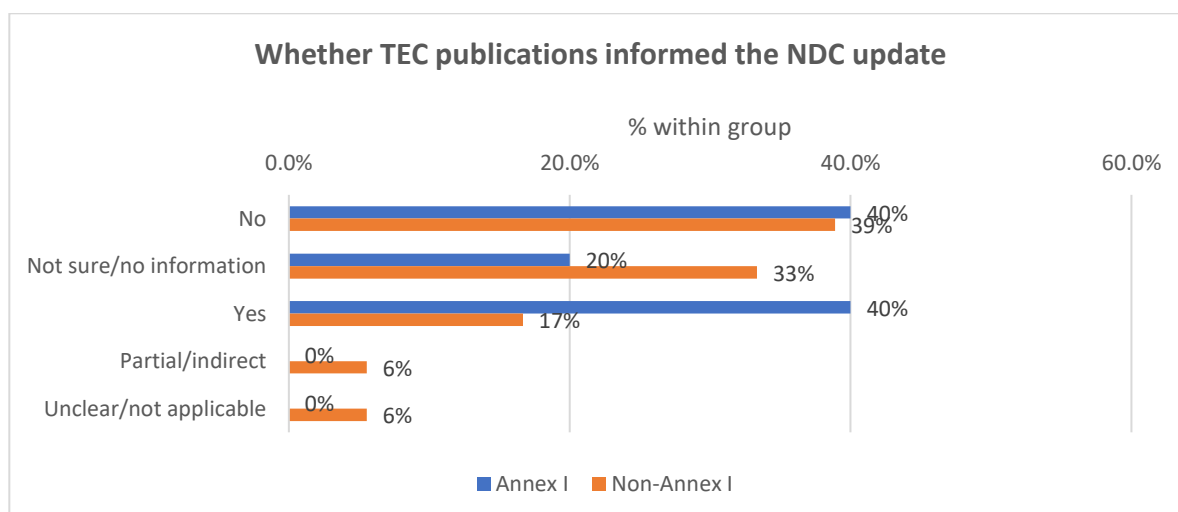


Question 5.1 Have TEC publications informed the NDC update in your country? Please specify how

- **Non-Annex I:** While TEC publications do not yet appear to be systematically informing NDC updates across Non-Annex I respondents, 17 per cent indicated that TEC publications had informed the NDC update in their country, and a further 33 per cent were not sure. This suggests that TEC outputs may already be contributing to some national processes, while also pointing to a need to improve visibility and tracking of how TEC publications are used in NDC update processes.
- **Annex I:** Annex I responses were evenly split between those, two response indicating that TEC publications had informed NDC updates and two indicating that they had not, with one respondent unsure. This suggests that TEC outputs may influence some national processes, but their contribution is not yet consistent or clearly visible across the Annex I respondent group.

Figure 8

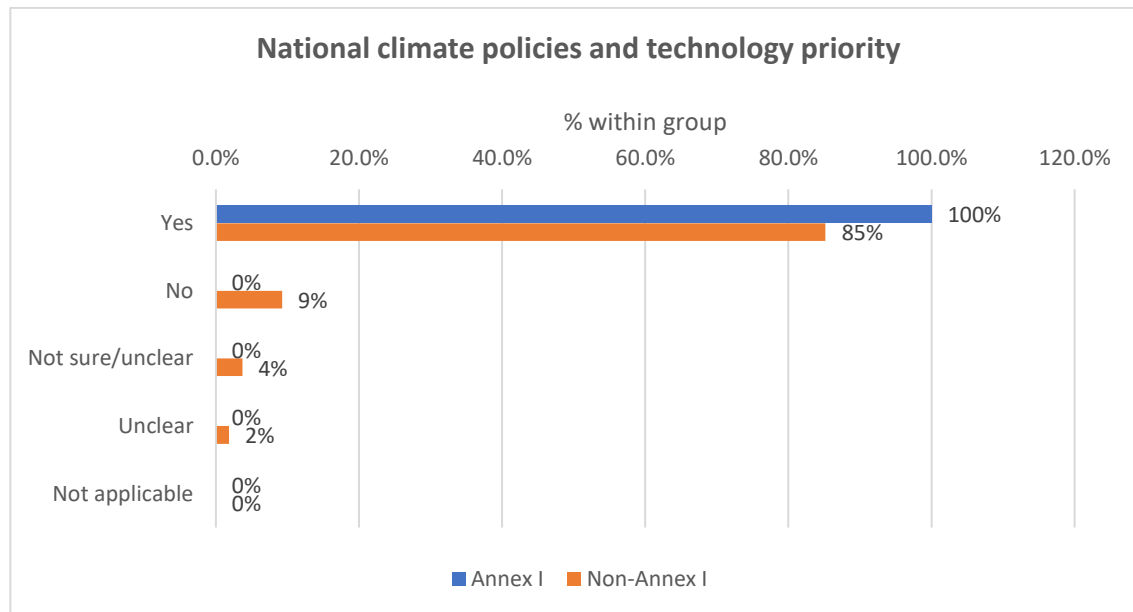
Whether TEC publications informed the NDC update



Question 6 - Does your country have national policies to implement climate action?

- **Non-Annex I:** Most countries have national climate policies in place, indicating a generally supportive policy environment for climate action. This provides a strong foundation for technology development and transfer activities and suggests that the challenge lies less in policy existence and more in implementation effectiveness.
- **Annex I:** All Annex I respondents indicated that national climate policies addressing technology are in place. This points to a strong enabling policy environment, although the small sample means the finding should be interpreted as indicative rather than representative of all Annex I NDEs.

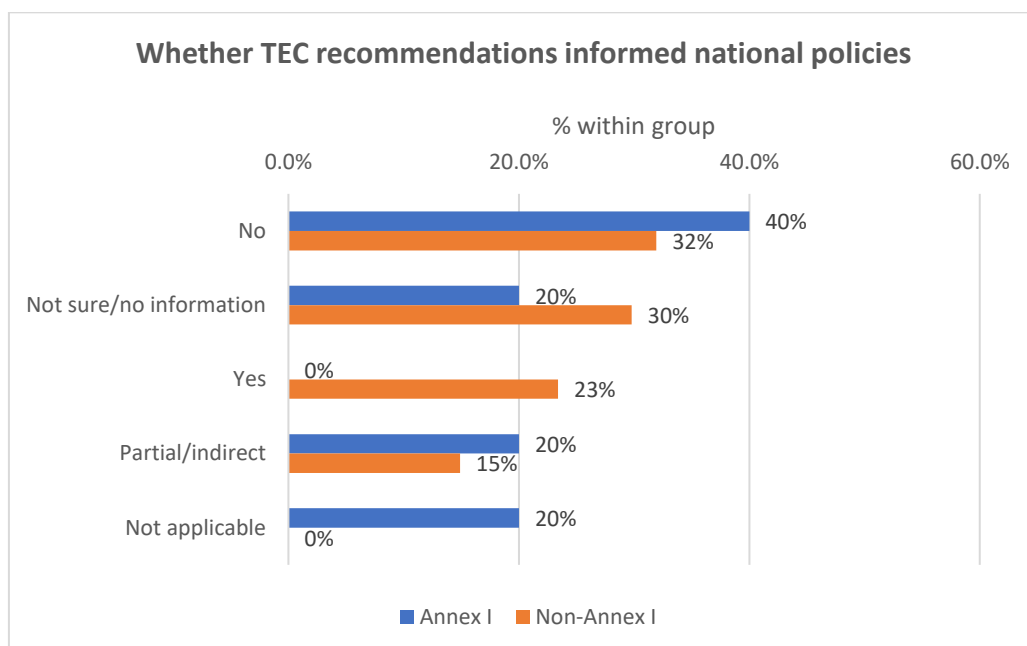
Figure 9
National climate policies and technology priority



Question 6.1 - If policies have prioritized technology development and transfer, to your best knowledge, have TEC policy recommendations informed the policies?

- **Non-Annex I:** Responses are mixed regarding whether TEC recommendations have informed national policies. 38% respondents reported direct or partial influence, the 62% either reported no influence or lacked information. This suggests that TEC policy guidance may be reaching some countries but is not yet consistently translated into national policy frameworks.
- **Annex I:** Annex I respondents did not report direct influence of TEC policy recommendations on national policies. This suggests that, despite the existence of national climate policy frameworks, TEC recommendations may not yet be clearly reflected or recognized in Annex I policy development processes.

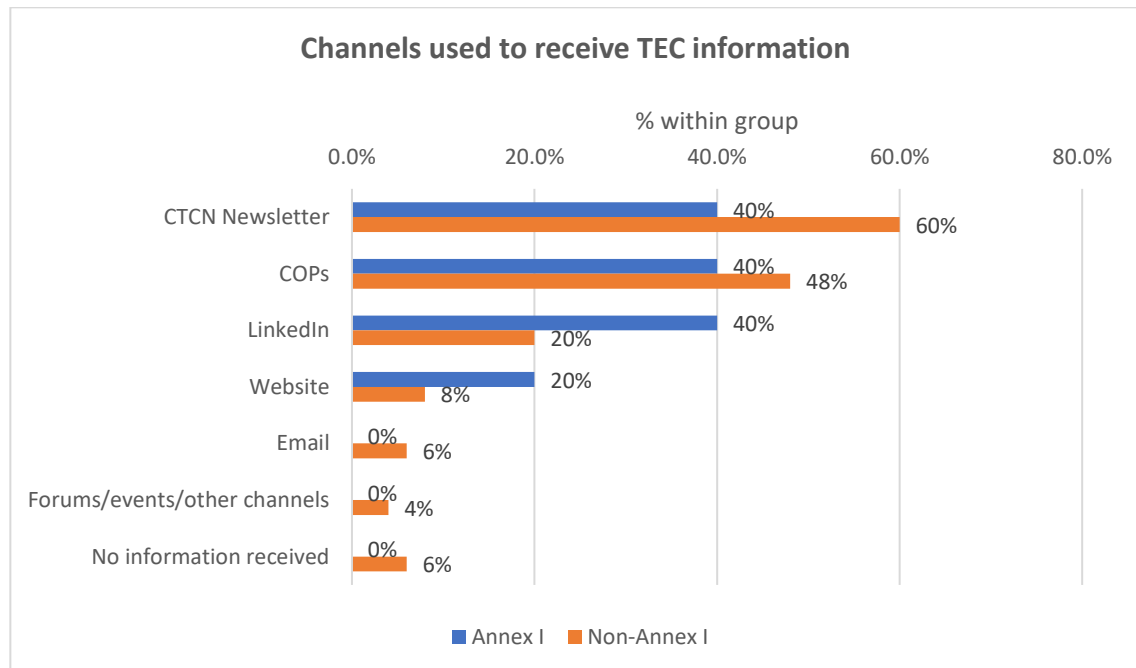
Figure 10
Whether TEC recommendations informed national policies



Question 7 - How do you access or receive information and update related to TEC and its work?

- **Non-Annex I:** The CTCN newsletter and COP-related activities are the primary channels through which respondents receive TEC information. The relatively low use of the TEC website and direct email suggests that respondents access TEC information mainly through broader UNFCCC and CTCN communication channels rather than through dedicated TEC platforms.
- **Annex I:** Annex I respondents reported a more balanced use of communication channels, including LinkedIn, the CTCN newsletter, COPs and the TEC website. This suggests that outreach to Annex I NDEs may benefit from maintaining multiple information channels rather than relying on a single platform.

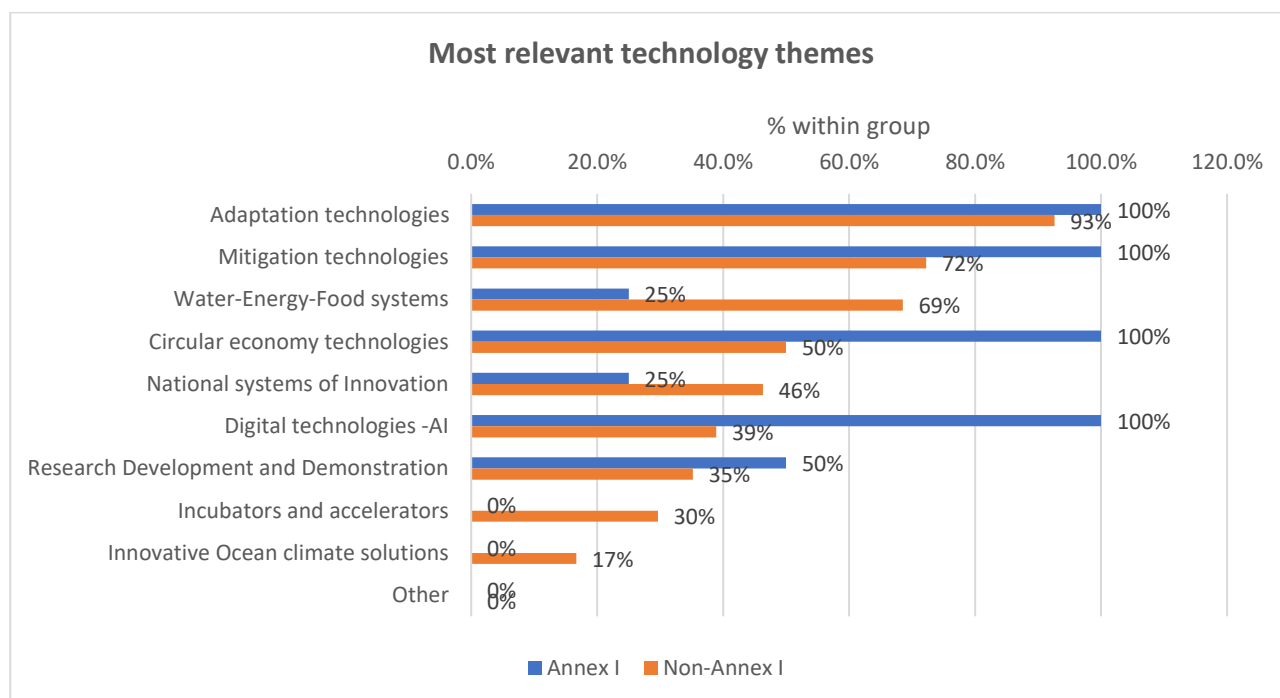
Figure 11
Channels used to receive TEC information



Question 8 - Which technology themes are most relevant for your country's needs? (Select up to 5)

- **Non-Annex I:** Adaptation technologies emerged as the overwhelming priority, followed by mitigation technologies and Water-Energy-Food systems. This indicates strong demand for technologies that strengthen climate resilience while also supporting development objectives.
- **Annex I:** Annex I respondents identified a broader mix of priority themes, with mitigation, adaptation, circular economy and digital and AI technologies all featuring strongly. This suggests interest in both established climate technology areas and emerging innovation themes.

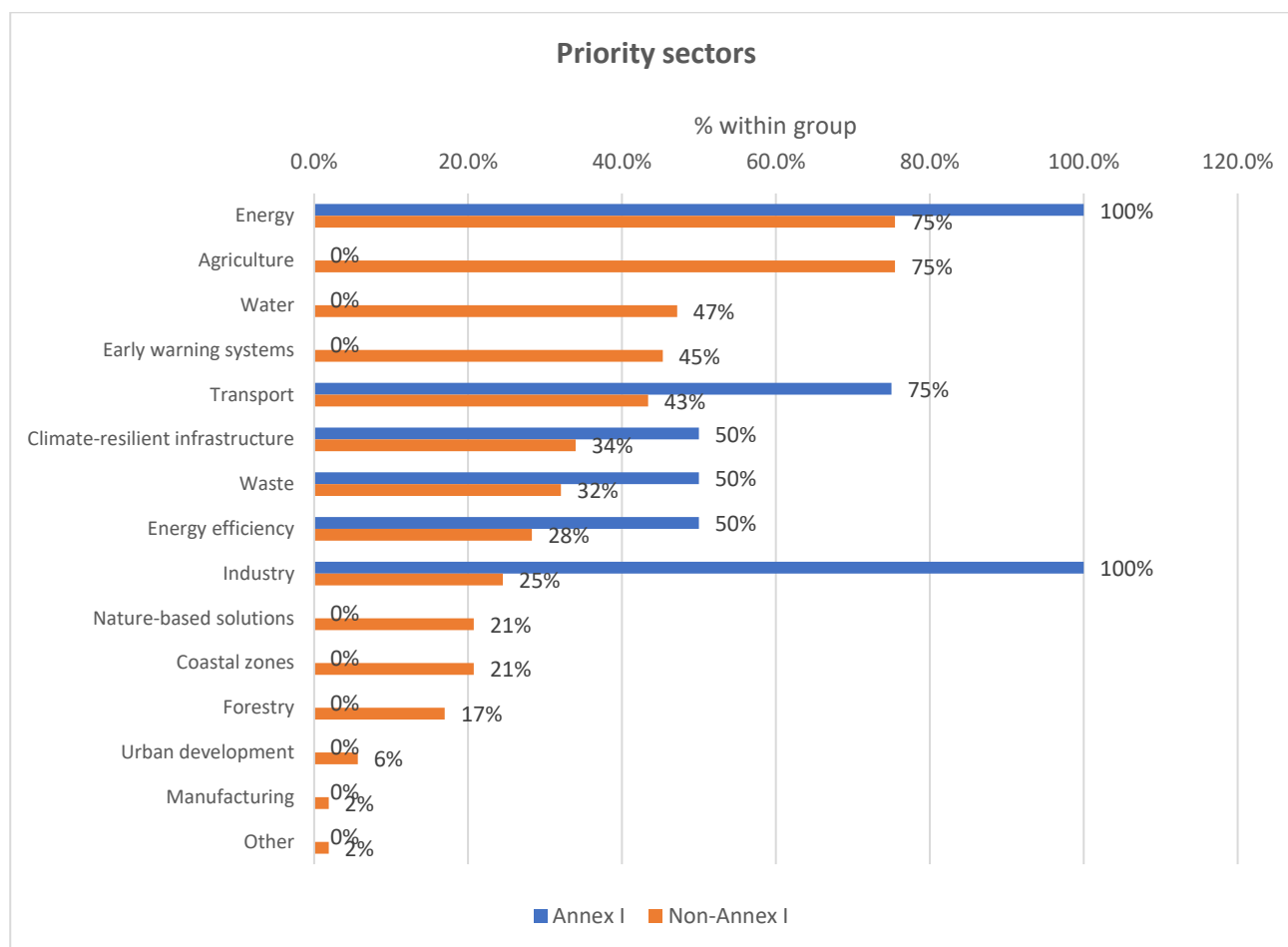
Figure 12
Most relevant technology themes



Question 9 - Which sectors are the highest priority for technology development and transfer in your country? (Select up to 5)

- **Non-Annex I:** Energy and agriculture clearly dominate sectoral priorities, reflecting their central role in both mitigation and adaptation efforts. Water, early warning systems and transport also feature prominently, highlighting countries' increasing concern with climate resilience, disaster preparedness and sustainable infrastructure.
- **Annex I:** Annex I respondents prioritized energy, industry and transport, reflecting a stronger focus on mitigation-intensive sectors and industrial transformation.

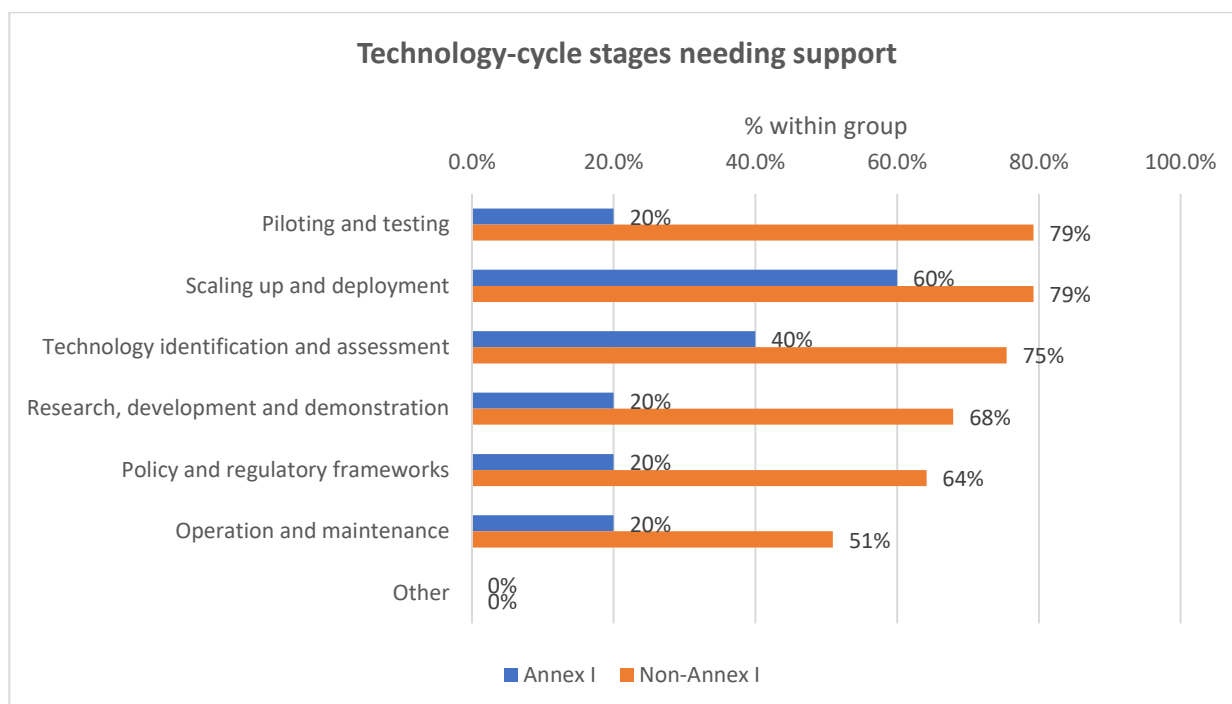
Figure 13
Priority sectors



Question 10 - At which stage(s) of the technology cycle does your country need the most support? (Select up to 5)

- **Non-Annex I:** Countries expressed demand for support across the entire technology cycle, particularly in piloting, testing, scaling up and deployment. This indicates that many countries have moved beyond identifying technology needs and are now seeking support to implement, demonstrate and expand climate technologies in practice.
- **Annex I:** Annex I respondents placed greatest emphasis on scaling up and deployment, with some also identifying technology identification and assessment. This points to more targeted support needs, focused mainly on expanding and applying technologies rather than support across the full technology cycle.

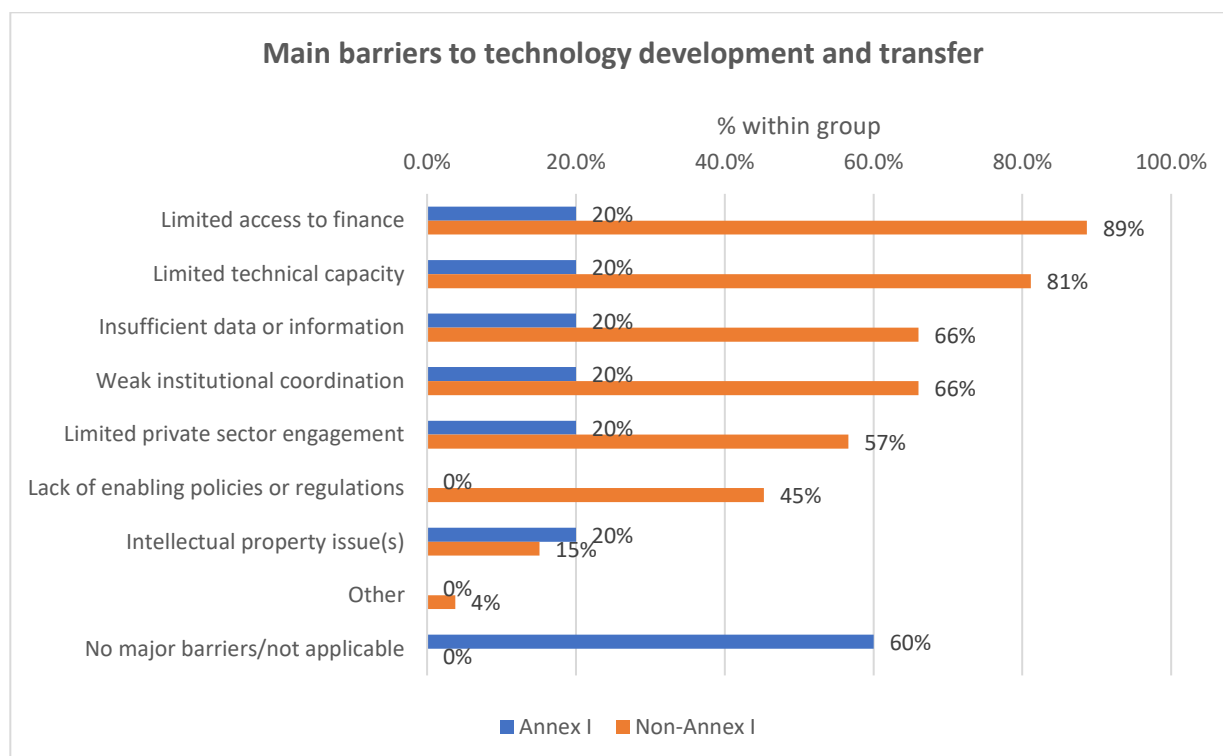
Figure 14
Technology-cycle stages needing support



Question 11 - What are the main barriers to technology development and transfer in your country? (Select up to 5)

- **Non-Annex I:** Financial and capacity constraints are the most significant obstacles to technology development and transfer. Limited access to finance and technical capacity far exceed other barriers, while institutional coordination and data gaps also remain important challenges. This suggests that implementation barriers are primarily systemic rather than technological.
- **Annex I:** Annex I respondents generally reported fewer major barriers, with several indicating that barriers were not applicable or not significant. Where barriers were identified, they appeared more limited and varied, reflecting the small sample and potentially stronger institutional and technological capacities.

Figure 15
Main barriers to technology development and transfer



Question 12 - Which types of support from the Technology Executive Committee (TEC) would be most valuable to your country? (Select up to 3)

- **Non-Annex I:** The strongest demand is for support that links technology needs with financing opportunities. Respondents also value access to best practices, lessons learned and international collaboration. This indicates that countries increasingly seek practical, implementation-oriented support that can help translate technology priorities into funded and scalable actions.
- **Annex I:** Annex I respondents placed strongest emphasis on policy guidance, recommendations and coherence with other UNFCCC processes. This indicates demand for strategic and policy-oriented support that helps align technology work with broader climate policy processes.

Figure 16
Most valuable types of TEC support

