

TEC 31 Agenda item 8 (b) i, CTCN AB 26 Agenda item 5.1
Technology Mechanism Initiative on Artificial Intelligence for Climate Action

Update on the implementation of the workplan of the Technology Mechanism Initiative on AI for Climate Action (2024-2027)

TEC - CTCN joint session | 12 September 2025 | UNFCCC, Bonn, Germany



United Nations Climate Change
Technology Executive Committee



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AI Initiative workplan (2024-2027)

Workstream 1: Support the implementation of technology priorities of developing countries & other work of the TEC & CTCN

Workstream 2: Enhance capacities of stakeholders from LDCs and SIDS

Workstream 3: Raise awareness

Activities by the TEC

Activities by the CTCN

Joint Activities by the TEC and CTCN

Activities by the TEC

Activities by the CTCN

Joint Activities by the TEC and CTCN

Activities by the TEC

Activities by the CTCN

Joint Activities by the TEC and CTCN



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1. **TEC Activities under the Initiative: Progress since TEC 30/ CTCN AB 25**

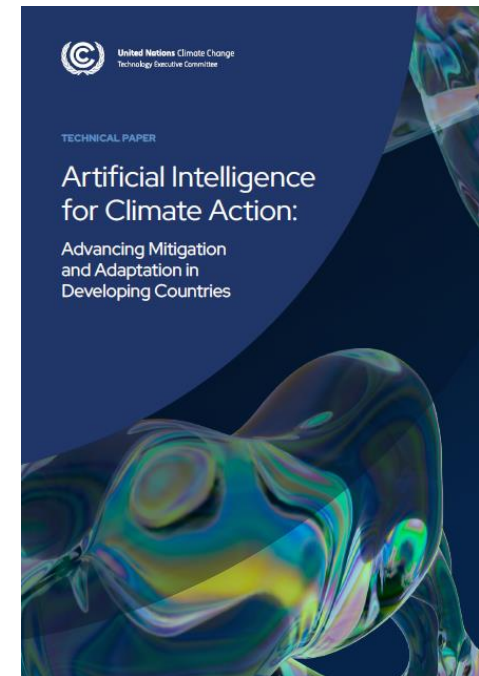
TEC Technical Paper on AI for Climate Action



United Nations Climate Change
Technology Executive Committee



Launched by the TEC Chair at
the AI for Good Summit 2025



Scan the QR code to download the publication



The banner features a dark blue background with a stylized world map composed of small dots. Overlaid on the map are several concentric circles in shades of blue and green. The text 'AI for Climate Action Forum 2025' is prominently displayed in white. At the top left, the 'TT: CLEAR' logo is visible. A navigation menu at the top includes 'TEC', 'Policies', 'TNAs', 'NDCs', 'Support', 'Negotiations', and 'Events & Media'. At the bottom, logos for the United Nations Climate Change Technology Executive Committee, KOICA, and the Government of the United Republic of Tanzania are shown. Below the logos is the tagline 'WHERE ARTIFICIAL INTELLIGENCE MEETS CLIMATE ACTION — LOCALLY DRIVEN, GLOBALLY CONNECTED.' and a short introductory paragraph.

TT: CLEAR

TEC Policies TNAs NDCs Support Negotiations Events & Media

AI for Climate Action Forum 2025

United Nations Climate Change
Technology Executive Committee

KOICA

Government of
the United Republic
of Tanzania

WHERE ARTIFICIAL INTELLIGENCE MEETS CLIMATE
ACTION — LOCALLY DRIVEN, GLOBALLY CONNECTED.

The AI for Climate Action Forum 2025 is the inaugural global gathering by the United Nations Climate Change Technology Executive Committee (TEC) on



Draft Concept Note for the TEC Policy Brief on AI for Climate Action

- The TEC initiated its work on the policy brief on opportunities, risks and challenges of the use of artificial intelligence for climate action and considered the draft concept note (TEC/2025/31/7) at TEC 31.
- The TEC agreed to move forward by preparing a draft policy brief based on the revised concept note that incorporates the comments from TEC 31, to be prepared for consideration at TEC 32.

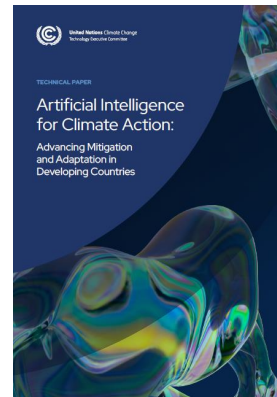


Draft Concept Note on Practical Means to Support AI Implementation

- The TEC initiated its work on the concept note on practical means to support AI implementation
- The TEC agreed to move forward by preparing a draft knowledge product based on the proposed approach and based on the comments from TEC 31, for consideration at TEC 32.

Information sources

- TEC and CTCN knowledge products, other UN reports and academic research
- Insights from TEC and CTCN events
- Online surveys





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2. CTCN Activities under the Initiative: Progress since TEC 30/CTCN AB 25

New Technical Assistances on Digitalization and AI

Asia-Pacific

- Reducing smallholder vegetable farmers' vulnerability to climate change impacts including water scarcity in **Mongolia** through EbA and digitalized risk mitigation insurance solutions
- **Vietnam**: Strengthening Hai Phong City's climate adaptation and disaster prevention: a pilot for localized early warning system

LAC

- Enhance the resilience of **Suriname's** water supply system by modelling drought risks and developing a roadmap of prioritized alternatives for aquifer recharge

Africa

- Resilient Karusi: Smart Irrigation & Rainwater Harvesting in **Burundi**

Mobile technology-enabled Climate Observations in Malawi



Capacity Building

1.2.3. Online to reach more NDEs

Dissemination of AI online materials

- Youtube CTCN channel with membership function
- Sent out to 162 NDEs in early September

2.2. Strengthening Enabling environment

Capacitating network members

- 17 April 2025 - Webinar: Leveraging Artificial Intelligence to Advance the Renewable Energy Sector in Asia-Pacific (in collaboration with UNEP ROAP)
- 30 October 2025 - Calling for prospective Network members with AI to the pool (with support from TEC)

Insight sharing

Summary Note on Capacity Building Programme on AI4ClimateAction

- Summary of programmes delivered across 4 region-specific-groups of NDEs
- To be considered for TEC knowledge products

Knowledge Products

Network-led publication (NIGT), 2024

Case studies in Asia

- India: Optimizing Household Energy Consumption - India's Tata Power EZ Home
- Singapore: Optimizing Water Management - PUB leverages AI to enhance water resource management and conservation
- Korea: Optimizing Urban Mobility - TOPIS uses AI to revolutionize traffic management and reduce emissions

Case studies in the Pacific

- Fiji, the Maldives, Palau, Solomon Islands, and Vanuatu: Optimizing Marine Ecosystem - Five Pacific nations leverage AI for real-time coral reef monitoring and conservation
- Solomon Islands: Safeguarding Coastal Ecosystems: Solomon Islands' ICZM with AMAP

Complemented by a Social Media Campaign:

- Sharing examples as references for NDEs to inform future technical assistance development
- Promoted through #DidYouKnow SNS campaign and Newsletter

Progress Update

2025 AI cases in LAC: Invitation to the TEC (to be published before and distributed at COP30)

2026 AI cases in Africa: Invitation to the TEC





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3.

**TEC-CTCN Joint Activities
under the Initiative:
Progress since TEC 30/CTCN
AB 25**

Deliverable 1.4.2.
Framework for developing an
alliance of public and private
sector stakeholders worldwide
active in this space

Framework for Developing an Alliance of Public and Private Sector Stakeholders in this Space

Approach

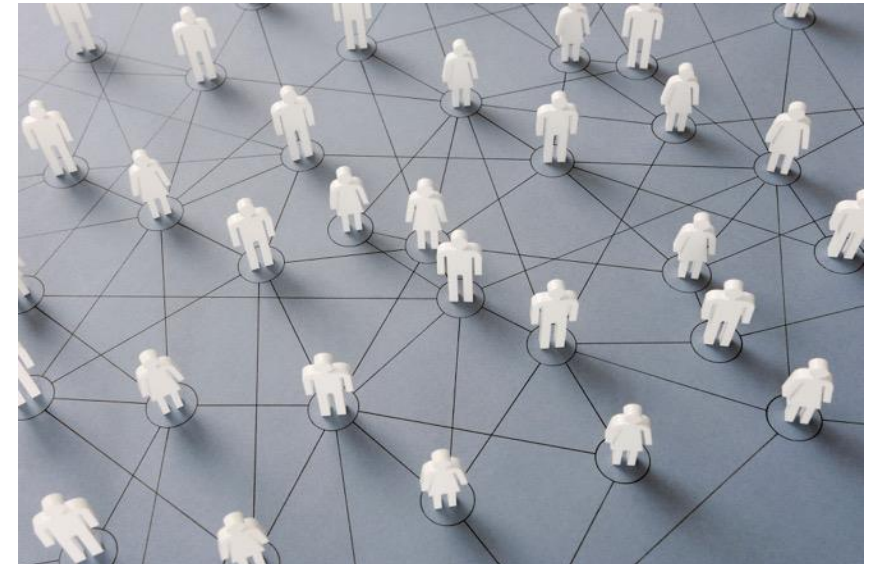
Calling for prospective Network members with AI to the existing Network pool

Support from NDEs

- 1st batch with 23 organizations/entities invited to CTCN membership

Support from TEC Members

- 2nd batch invitation to be sent 30 October



**Deliverable 1.3.1.
Knowledge product/event
on use of AI for improving
energy systems**

Event on the use of AI for improving energy systems

- **Title:** COP 30 Masterclass on AI for Climate Action: Energy Systems
- **Partners:** TEC, CTCN and PCCB
- **Objective:** To enhance awareness and capacities on the application of AI for efficient, resilient, and low-emission energy systems.
- **Format:** Keynote speaker and panelists
- **Venue:** PCCB Capacity-building Hub at COP 30



AI for Climate Action Award 2025

Introduction



- Builds on the success of the TEC AI Innovation Grand Challenge 2024
- Launched at the Panama Climate Week in May 2025
- Seeks open-source AI-powered solution that accelerate climate change adaptation and mitigation action in LDCs and SIDS



- ✓ **1st Round: Written Submission by 31 Jul 2025**
 - Semifinalist Announcement: 22 Aug 2025
 - Training for semifinalists: 25 Aug 2025
 - Training on Digital Public Goods by DPGA
 - Training on video production by professional videographer

- ✓ **2nd Round: Video Submissions by 10 Sep 2025**
 - Training for Finalists: 19 Sep 2025
 - Training on delivering a live pitch

- ❑ **3rd Round: Live Pitch on 25 Sep 2025**
 - Award Winner Announcement on 9 Oct 2025

Semi-finalists



The graphic features a dark blue background with a stylized globe on the left and right sides. At the top left is the AI for Climate Action Award logo, which consists of a circular emblem with a 'C' and the text 'AI for Climate Action Award'. To the right of the logo, the word 'Semi-finalists' is written in a large, bold, yellow font. Below this, there are ten circular portraits of women, arranged in two rows of five. Each portrait is framed by a yellow and green border. Below each portrait is the name of the individual in white capital letters.

AI for Climate Action Award

Semi-finalists

ALISA LUANGRATH

CAREEN JOEL

DEYSI QUISPE QUISPE

EDITHA MSHIU

FATOU SARR

HANNAH RHODAH

ISATU TABITHA KAMARA

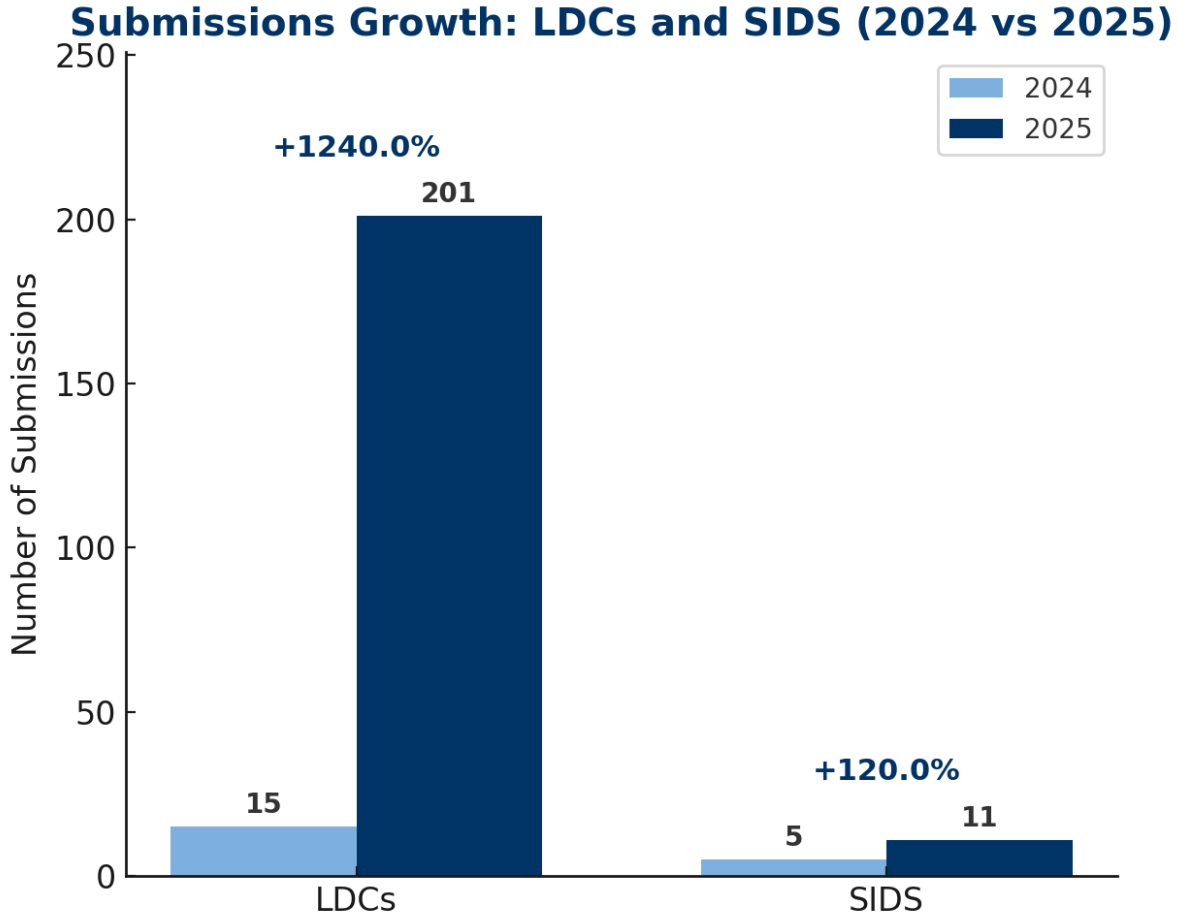
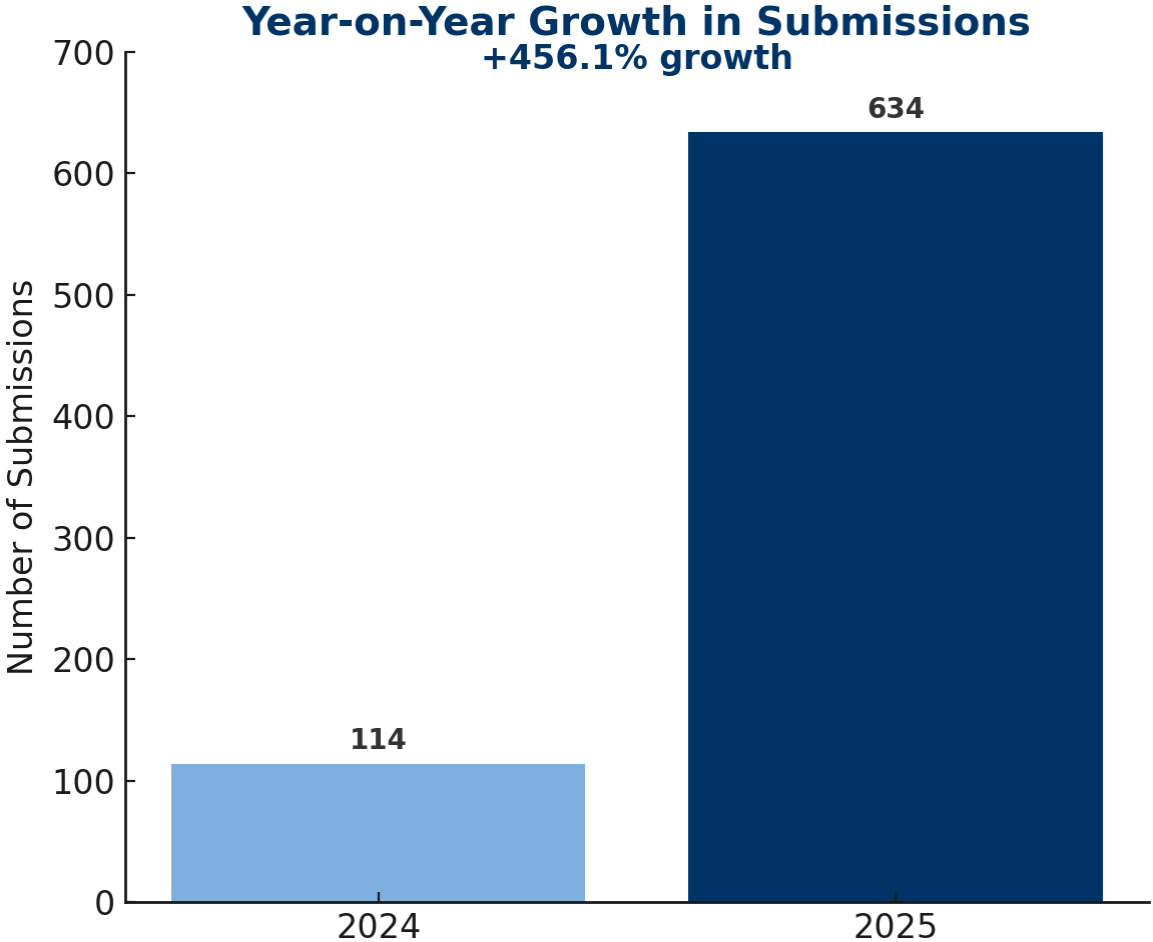
MAIMUNAT ABUBAKAR

MISUN CHOI

TEHILA MWENDA

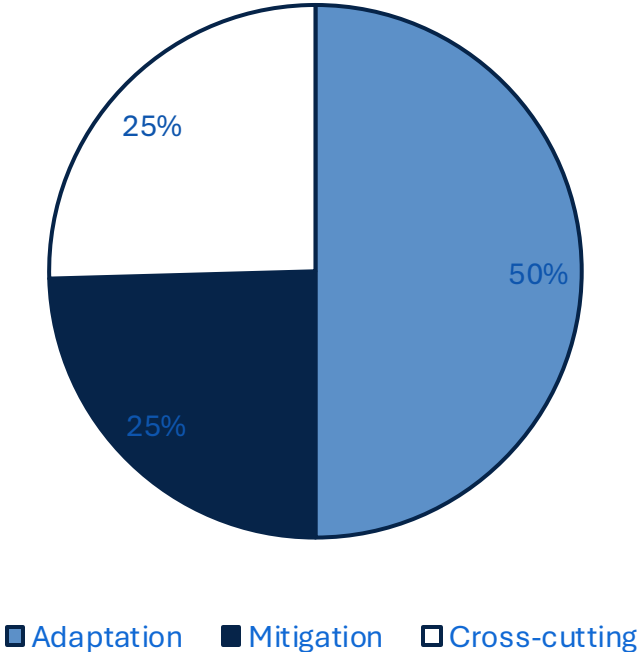
AI for Climate Action Award 2025 Analysis – Overview

- A total of 634 submissions
- From 110 countries
- 38 LDCs/SIDS

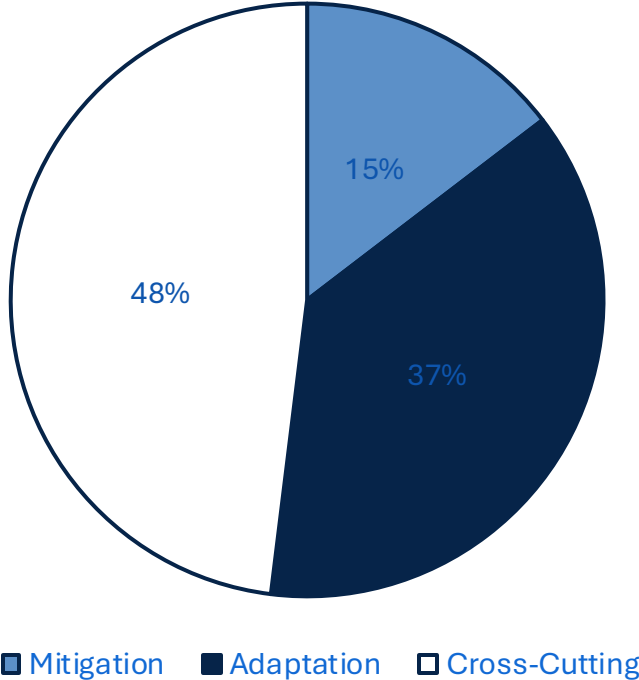


AI for Climate Action Award 2025 Analysis – Targeted areas

Submissions Comparison by Targeted Area (2024)

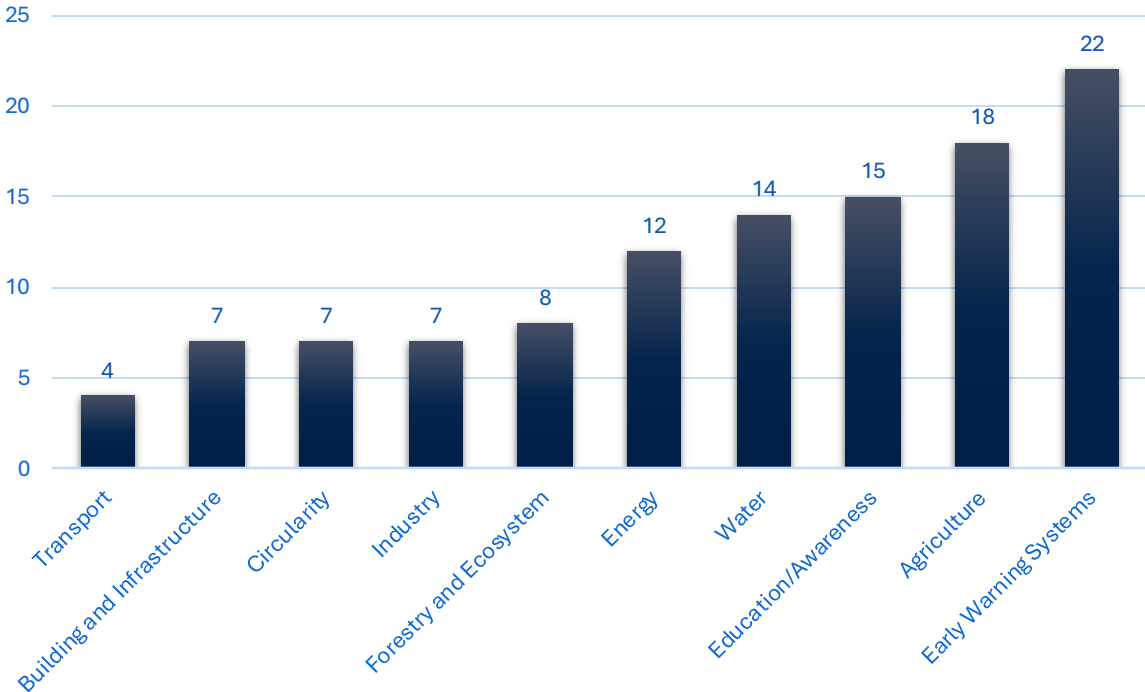


Submissions Comparison by Targeted Area (2025)

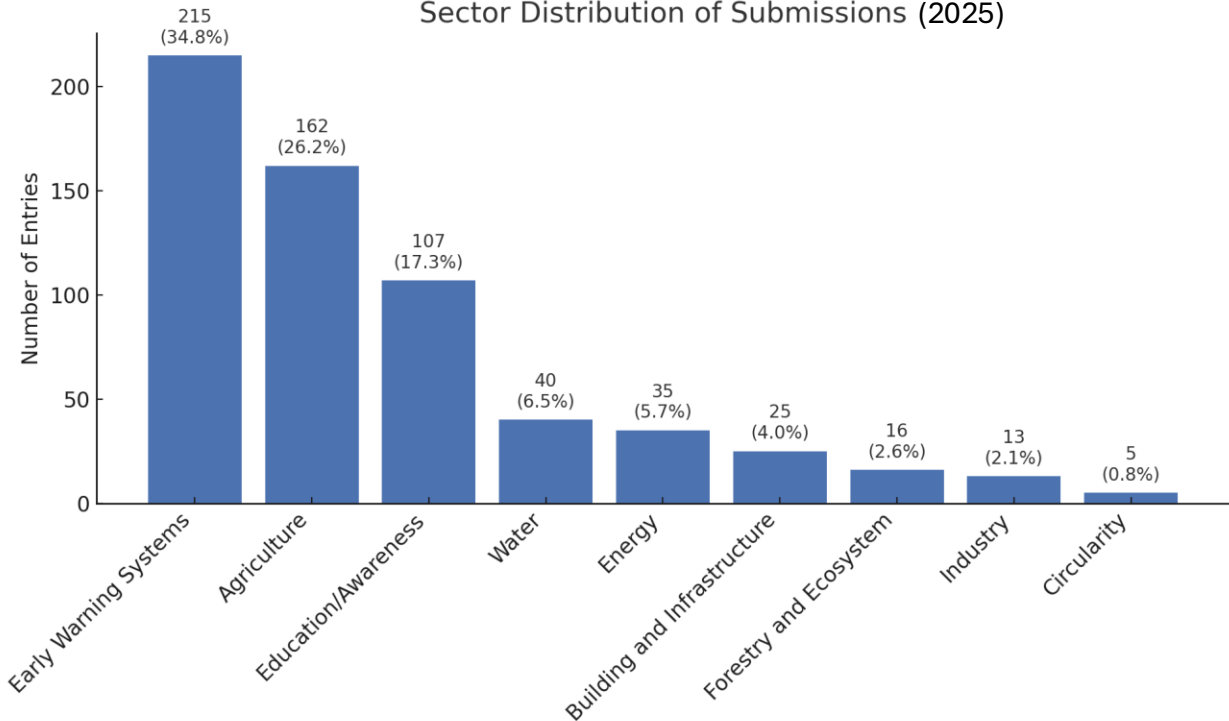


AI for Climate Action Award 2025 Analysis – Target sectors

Sector Distribution of Submissions (2024)

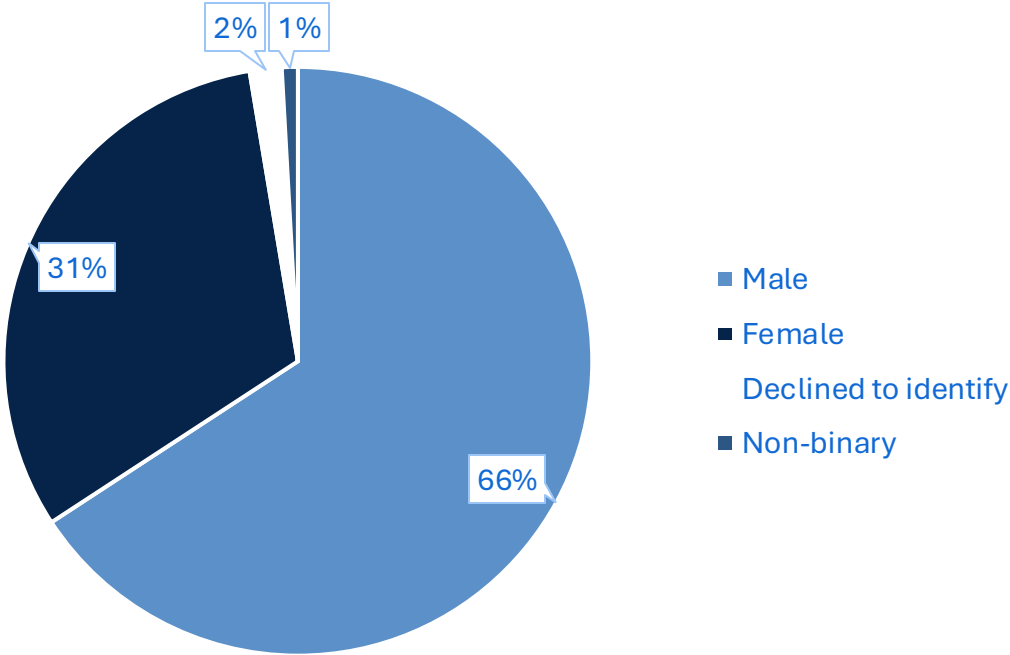


Sector Distribution of Submissions (2025)

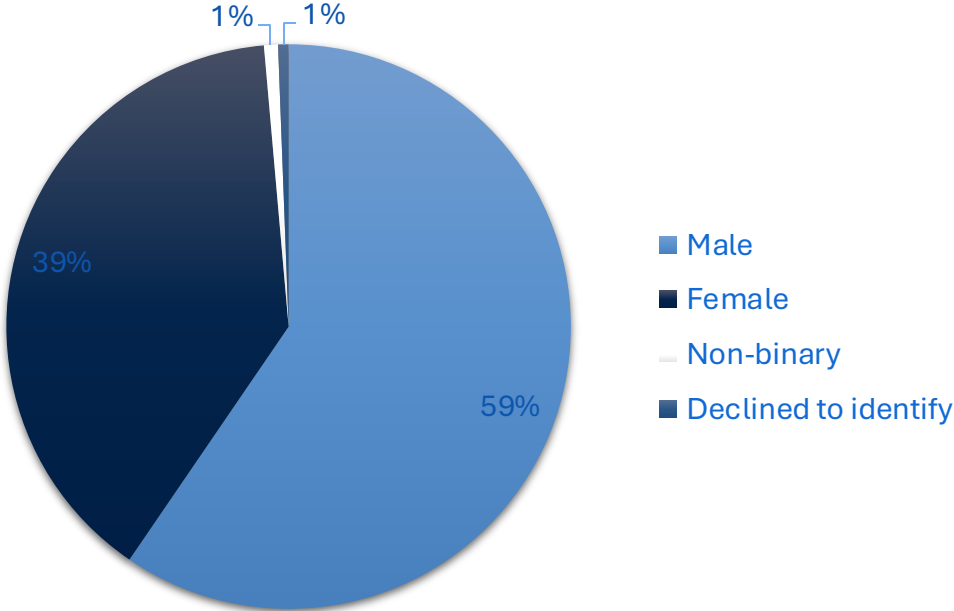


AI for Climate Action Award 2025 Analysis – Gender

Gender composition (2024)



Gender composition (2025)



Thank you.



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