

Agenda item 4 (b) ii. Digital technologies: artificial intelligence

Draft concept note for a technical paper on AI for climate action

TEC/2024/28/5

Technology Executive Committee, 28th meeting and TEC-CTCN Joint session
16-19 April 2024, Copenhagen, Denmark



Background

- **June 2023:** The TEC and the CTCN Advisory Board established the Technology Mechanism Initiative on Artificial Intelligence for Climate Action.
- **TEC 27:** The TEC and the CTCN Advisory Board agreed on a concept note for the Initiative, including activities to be undertaken by the TEC, by the CTCN and jointly by the TEC and the CTCN (TEC/2023/27/21, Annex III). The TEC agreed to develop a draft concept note for a technical paper on AI for climate action with a focus on LDCs and SIDS, including on risks and challenges of the use of AI.
- **COP 28** requested the TEC and the CTCN to implement the Initiative in a manner that, inter alia, considers how it can support the implementation of TNA outcomes and the joint work programme of the Technology Mechanism (Decision 9/CP.28).
- TEC activity group on digital technologies developed the draft concept note for the technical, taking into account COP 28 outcomes.

Objectives

- **Explore the role of AI** as a technological tool for advancing and scaling up transformative climate solutions for mitigation and adaptation action in developing countries, with a **focus on LDCs and SIDS**, while also **addressing the challenges and risks posed by AI**, such as energy consumption, data security and the digital divide.
- **Offer recommendations to policy-makers on how to use AI** as a technological tool for advancing and scaling up transformative climate solutions for mitigation and adaptation action in developing countries and overcome identified risks and challenges.
- **Showcase examples of how AI is already being used in LDCs and SIDS** for addressing climate change.

Draft outline

I. Background

II. Introduction

III. AI for climate action in developing countries

III-1. Monitoring and data collection

III-2. Climate modelling and prediction

III-3. Resource management

III-4. Disaster risk reduction

III-5. Education and community engagement

IV. AI for the implementation of the Technology Mechanism JWP and TNA outcomes

IV-1. AI for the implementation of the Technology Mechanism JWP (2023-2027)

IV-2. AI for the implementation of TNA outcomes

Draft outline (continued)

V. Risks and challenges of using AI for climate action in developing countries

Include gender considerations regarding risks and challenges

V-1. Energy consumption

V-2. Data security

V-3. Digital divide and equitable access to AI for climate action

VI. Policy options

VII. Conclusions and recommendations

VIII. Acknowledgements

References



Next Steps

- **TEC 28:** Agreement on the draft concept note and guidance to the TEC activity group on next steps
- **May-July 2024:** TEC activity group prepares draft technical paper with support of a UNIDO Consultant and the TEC secretariat
- **TEC 29:** Consideration and finalization of the draft technical paper
- **October 2024:** TEC secretariat with support from UNIDO facilitates professional editing, layout and design of the technical paper
- **COP 29:** TEC launches technical paper

Thank you.

