

UN CTCN

2026 Joint Programme: NDE Forum, Capacity Building on AI for Adaptive Management in the Energy Sector, and Voluntary Technology Talk for SIDS

14th-18th September, in-person, Incheon and Busan, Republic of Korea

Background

NDE Forum

The **Climate Technology Centre and Network (CTCN)**, implementation arm of the UNFCCC Technology Mechanism (TM), hosted by UNEP, is mandated to support developing countries through capacity building, technical assistance, and knowledge sharing, with **Nationally Designated Entities (NDEs)** serving as national focal points (Decision 1/CP.16, paragraph 117 (b), 123). With the ongoing Programme of Work¹, the focus lies on achieving transformative impacts and scaling up through national innovation systems and digitalization across five key areas: Water-Energy-Food nexus, Buildings and Infrastructure, Sustainable Mobility, Energy Systems and Business and Industry. As part of its mandate and as one of its activities it organizes a Regional Forum for the National Designated Entities on an annual basis. In 2025, for the first time in CTCN's history, global Small Islands Developing States (SIDS) gathered 15 (out of 33) NDEs to foster their discussion and learning on co-creation for system transformation through climate action.

Capacity Building on AI for Adaptive Management in the Energy Sector

The year 2026 marks the fourth year of CTCN's 3rd Programme of Work (PoW), which places increased emphasis on moving from discrete technology support toward integrated, system-level transformation pathways. This direction takes into consideration COP/CMA decisions, including the AI4ClimateAction 2024-2027 workplan and the Belém Technology Implementation Programme (BTIP), which emphasizes demand-driven implementation, capacity building, and a more complete technology cycle to support deployment and diffusion.

CTCN's 2026 Capacity Building Programme focuses on system transformation, understood as coordinated change across technologies, institutions, and decision-making processes to deliver lasting climate impact. Feedback from the 2025 thematic programmes on Climate Finance and Co-creation reinforces the need *to move beyond the status quo, to improve livelihoods, and to measure progress*. Together, these perspectives underscore that impact is understood by NDEs as a system-level outcome, achieved when capacity building enables coordinated change across interconnected layers.

In SIDS, technology priorities emphasize **water and coastal resilience**, including climate-resilient crop varieties, flood-hazard mapping, and mangrove rehabilitation, alongside **energy solutions** such as off-grid electrification and battery electric vehicles. These priorities point to readiness for **transformational adaptation**, where system change is required to manage compounding climate risks rather than incremental improvements alone. While one country (i.e. Papua New Guinea) explicitly

¹ https://www.ctc-n.org/sites/default/files/resources/CTCN%20Third%20Programme%20of%20Work%202023-2027_2.pdf

references **Artificial Intelligence (AI)-related technologies** in its NDC, this highlights both nascent demand and a clear capacity-building opportunity to support responsible integration of digital and AI tools into highly exposed national energy systems.

The 2026 programme builds on this evolution by focusing on updating NDEs' knowledge on AI² application for adaptive management skillset enhancement in the energy sector. The curated sessions will showcase technological innovation led by private and public sectors and provide a space for discussing how AI may increase viabilities of energy solutions and elevate adaptive management required to handle climate crisis.

Voluntary Technology Talk

The Network Engagement Strategy proposed during the 26th Advisory Board meeting responds to the continued growth of the CTCN Network by calling for more systematic, visible, and meaningful engagement modalities that move beyond ad hoc participation and project-based interaction. In this context, the Voluntary Technology Talk (VTT) programme serves as a technology outreach and engagement modality that strengthens endogenous capacity through direct exposure to emerging climate technologies, technology solution providers, and innovation ecosystems.

Grounded in the demand-driven approach of the CTCN, the VTT programme provides NDEs with opportunities to voluntarily engage with current and prospective Network Members to explore innovative and concept-proven technologies relevant to their national priorities. Since 2023, the programme has supported 92 NDEs globally and facilitated the exploration of more than 300 climate technologies across sectors.

Beyond technology showcasing, the VTT programme supports countries in articulating technology needs in ways that are matchable to existing technological solutions and expertise. The programme also functions as an initiating platform for voluntary co-creation processes between NDEs and Network Members through early-stage dialogue, exchange of expectations, and partnership exploration that may evolve into future technical assistance and collaborative activities.

Complementing the VTT programme, the CTCN also trialled a "Network Fair" format during the Asia, Africa, and Latin America and the Caribbean regional forums in 2026. While the VTT programme primarily focuses on technology outreach and engagement, the Network Fair format was designed as a more targeted matchmaking space to facilitate direct interaction and partnership-building between NDEs and Network Members within regional forum settings. This year's VTT programme will be held at the World Climate Industry Expo³ 2026, themed "Energy for AI & AI for Energy", organised by Ministry of Climate, Energy and Environment (MCEE, Republic of Korea) and International Energy Agency (IEA).

Objectives

The three objectives of this joint programme are to:

- a) Share experiences, lessons learned, and best practices from CTCN technical assistance projects in SIDS;

² 2024 capacity building was on #AI4ClimateAction

³ <https://wce.or.kr/Eng/Main.asp>

- b) Enhance knowledge and practical understanding of AI applications for adaptive management and skillset development in the energy sector; and
- c) Facilitate NDEs' participation in exhibitions showcasing emerging climate technologies and promote direct engagement with technology solution providers.

Hosting organizations

UN CTCN (Climate Technology Centre & Network, www.ctc-n.org: The Implementation arm of Technology Mechanism of UNFCCC), Global Green Growth Institute (GGGI, <https://gggi.org/>, International organization)

Partnering organization

Google DeepMind (<https://deepmind.google/>)

Target audience

13 NDEs from the Pacific and Caribbean

Venue

Day 1-2 Incheon, CTCN Partnership and Liaison Office (PALO), G-tower 32F

Day 3-4 Busan, **TBC**

Anticipated sessions

- NDE Forum: Information on COP30, peer-to-peer learning on CTCN procedures and services, and bilateral with CTCN
- Capacity Building: Information on AI and energy related developments and discussion on enhancing adaptive management skills, workshop on climate narrative and ToC
- Voluntary Technology Talk: Group Hall Tour, voluntary bilateral with exhibited companies

Proposed Agenda

Day 1 – SIDS NDE Forum (14th September)

Arrival and Registration	
08:30~09:00	Arrival and Registration
Official Opening and Introduction to the Joint Programme	
Moderator: Suil Kang, Coordination Officer, CTCN	
09:00~09:10	Welcome Remarks TBC, Ministry of Science and ICT Korea
09:10~09:15	Remarks TBC, Incheon Metropolitan City
09:15~09:20	Opening Remarks Ariesta Ningrum, Director, CTCN
09:20~09:25	Group photo
09:25~09:45	NDEs Round of Introductions - NDE/NDE representative: Name, country - Role of the NDE in their countries
	Introduction of the CTCN teams
09:45~10:00	Overview of the Agenda Tomoko Furusawa, Senior Programme Management Officer, CTCN
Session 1: Updates by UNFCCC Technology Mechanism	
Moderator: Suil Kang, Coordination Officer, CTCN	
10:00~10:20	Technology Development and Transfer under the UNFCCC (COP 30) TBC, UN Climate Change Secretariat (recording)
10:20~10:40	CTCN Activities and Outlook for 2026-2027 Tomoko Furusawa, Senior Programme Management Officer, CTCN
10:40~11:10	Q&A and Coffee break (15 minutes)
11:10~11:30	TEC Activities and Outlook for 2026-2027 TBC, TEC Member, Non-Annex I, Country TBC (recording)
11:30~12:00	Q&A
Lunch break – 75 minutes	
Session 2: Updates on Support	
Moderator: Suil Kang, Coordination Officer, CTCN	
13:15~13:45	Key Concept Notes for Technical Assistance for 2026-27 - Global and SIDS Hoyoung Jo, Climate Technology Specialist, CTCN
13:45~14:15	CTCN Programme: Adaptation Fund support for SIDS Nadege Trocellier, Global Adaptation Lead, CTCN
14:15~14:45	Youth Innovation Programme TBC

14:45~15:15	Q&A
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Coffee Break – 15 minutes

Session 3: Roundtable Discussion with NDEs

Moderator: Suil Kang, Coordination Officer, CTCN

15:30~16:00	Summary of 2026 Roundtable and Framing Tomoko Furusawa, Senior Programme Management Officer, CTCN Roundtable Discussion with NDEs Topics: - BTIP - TM-FM linkages - CTCN's independent review - Hosting agency
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Session 4: Premiering National Insights on Adaptive Management Skills

Moderator: Suil Kang, Coordination Officer, CTCN

16:00~16:30	Republic of Korea: Climate Technology Plan to Meet 2035 Emissions Goals TBC, Ministry of Science and ICT Korea
16:30~17:00	Incheon: Regional Hub of Making Cities Resilient 2030 Initiative TBC, Incheon Metropolitan City

Day 2 – SIDS NDE Forum and Capacity Building on AI for Adaptive Management in the Energy Sector (15th September)

Session 5: CTCN Procedures

09:00~10:30	Open house format - The Open House format is an interactive dialogue designed to foster learning and action. - Designated rapporteurs will provide a topic-related guide, address questions, and support the creation of outputs. - Participants will choose and rotate through thematic stations focused on key CTCN operations. <i>Topic 1: Logistical Support (Rapporteur: Jeawon Kim)</i> - If you join this table, you will learn how NDEs can use CTCN logistical support to strengthen their national role, convene stakeholders, and build a pipeline of climate technology projects, as well as support follow-up actions after project completion, drawing on recent examples of Cambodia and Somalia. - NDEs are encouraged to draft LS form and receive direct feedback from CTCN. <i>Topic 2: NDE Manual and Post Impact of TA (Rapporteur: Hoyoung Jo)</i>
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	- If you join this table, you will be introduced to the new CTCN post-implementation monitoring and evaluation form, providing guidance on how to complete it effectively and highlighting its benefits for tracking results, learning, and follow-up. - NDEs are encouraged to understand the post-implementation form and if any TA is/are near completion, start drafting under CTCN's consultative support. <i>Topic 3: CRD&D (Rapporteur: Suil Kang)</i> - If you join this table, you will learn CTCN's ongoing and planned cRD&D facilitation support. - NDEs are encouraged to share thematic areas requiring cRD&D facilitation. <i>Topic 4: High-quality CTCN requests (Rapporteur: Tomoko Furusawa)</i> - If you join this table, you will learn about the latest updates in the manual about your role as an NDE to provide a high-quality CTCN request, focusing on alignment with NDCs, TNAs and TAPs, strong stakeholder engagement, and national ownership. - NDEs are encouraged to receive CTCN's feedback on under-design TA request (if any). <i>Coffee break from 10:30~10:45</i>
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Session 6: Updates from UNFCCC Finance Mechanism

Moderator: Jeawon Kim, Capacity Building and Network Engagement Specialist

10:45~11:10	Updated Strategic Plan 3, Modalities, and SIDS portfolio TBC, Green Climate Fund Q&A
11:10~11:35	Introduction to the Fund for responding to Loss and Damage (FRLD) – Support and procedures TBC, FRLD Q&A
11:35~12:00	Introduction to Santiago Network – Support and procedures TBC, Santiago Network Secretariat Q&A

Lunch break – 75 minutes

Session 7: Future of cRD&D

Moderator: Suil Kang, Coordination Officer

13:15~14:30	
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Session 8: Peer to Peer learning for potential multi-country TA

Moderator: SPREAP/SPC

14:30~15:30	Planning process of GEF and GCF Readiness portfolio
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	In a smaller group, NDEs will exchange how they plan large-scale funding proposals Type 1: GEF FS Type 2: GCF readiness NDEs present country priorities, success/failed cases of climate projects.
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Coffee break – 15 minutes

Session 8: Bilateral Meetings with CTCN

15:45~17:00	Free time for participants to schedule their own bilateral meetings with CTCN to discuss on TA under implementation and near completion for a progress check.
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Day 3 – Capacity Building on AI for Adaptive Management in the Energy Sector with GGGI (16th September)

Overview of the Workshop

09:30~10:15	Overview of the Workshop with a live survey on System Transformation
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Session 1: Understanding Adaptive Systems in Small Island Contexts

09:20~09:35	Snapshot of SIDS Reality TBC, AOSIS
09:35~09:50	What does an energy transformation really mean in SIDS TBC,
09:50~10:30	Reflection on the System Transformation Roundtable discussion with guiding questions: 1) When, in the past five years, did the system come under strain? 2) What worked at that moment, and what stopped working? 3) How fast were decisions made?

Coffee break – 15 minutes

Relocation to **Convention Hall, 3rd floor, Grand Ball Room for morning session of World Climate Expo**

12:00-13:00: Networking lunch - TBC

Session A. The AI-energy nexus: efficiency, infrastructure and accountability

13:30-13:40	Welcoming and opening remarks
	Welcoming remarks: Sang-hyup Kim , Executive Director, GGGI Opening remarks: IEA (TBC)
13:40-13:50	Presentation 1: Google's Full-stack approach to AI x Energy nexus

Presenter:

Spencer Low, Head of Regional Sustainability, Asia Pacific, Google (TBC)

13:50-
14:25

Set the scene: How artificial intelligence is reshaping energy transitions and climate action.

Moderated by a journalist from a global media partner, the conversation will bring together perspectives from GGGI, Google, and CTCN to frame the key implications of AI for energy demand, technology deployment, and climate policy.

Moderator: Media partner

Panelist:

- **Sang-Hyup Kim**, Executive Director, GGGI
- **Hohyeon Lee**, Vice-Minister, Ministry of Climate, Energy and Environment, Republic of Korea
- Google (TBC)
- **Kim Won-jun**, President and CEO, Samsung Global Research
- **Tomoko Furusawa**, Deputy Director & Head of Partnership and Liaison Office, UNEP CTCN

14:25-
15:00

Panel discussion 1: Sustainable AI Era: Scaling clean energy to power semiconductor supply chain

AI growth is driving rapid expansion in the semiconductor industry, significantly increasing energy demand across the supply chain. The discussion will explore key challenges, including how to secure reliable clean energy, reduce emissions, and support continued industry growth.

Moderator: **Kim Seungwan**, Professor, Korea Institute of Energy Technology

Panelist:

- **Malle Fofana** – Deputy Executive Director, GGGI
- **Spencer Low** – Head of Regional Sustainability, Asia Pacific, Google
- **Addison Chi** – Vice President, Furiosa AI
- **Lizet Lai** – Global Procurement Manager, Sustainability and Renewable Energy, Micron
- **Eric Gibbs** – Senior Vice President, Corporate Energy Buyers Association (CEBA)
- Korean company (TBC)

15:00-
15:30

Group photo and coffee break

Session B. Aligning climate policy with energy innovation and technology

15:30-
15:40

Keynote speech: 100 GW by 2030: Accelerating Korea's renewable energy to power AI nation

Presenter:

Hyun-Jae Kim, President, Korea Energy Economics Institute (KEEI)

15:40-16:20	Panel discussion 2: How policy can accelerate the deployment of clean energy to support AI growth
	AI growth is creating significant new electricity demand, increasing the need for faster deployment of clean energy. Key policy priorities include addressing regulatory barriers, strengthening investment incentives, mobilizing finance, and enabling the infrastructure needed to support data center expansion and power AI growth sustainably. Moderator: Ferruccio Santetti, Chief of Staff and Director, Strategy, Sustainable Finance and Global Initiatives, GGGI Panelist: HSBC Su Hyeon Heo, Team Manager, RE100 Policy Division, Korea Energy Agency (TBC) Dr. Tae Eui Lee, Senior Research Fellow, Korea Energy Economics Institute (KEEI) (Confirmed) Junhyung Kim, Head of AI Innovation, Korea Electric Power Corporation (KEPCO) (TBC) PNG NDE (TBC)
16:20-17:00	Panel discussion 3: Aligning climate policy with energy innovation and technology
	Identify governance frameworks, accountability standards, and partnership models that align climate policy with energy innovation and accelerate the deployment of climate technologies for sustainable energy transitions. Moderator: Andreas Galatoulas, Data and AI Lead, GGGI Panelist: (TBC) Kiribati or Nauru NDE (TBC) Offshore renewable energy supplier Junyoung Jung – Head of AI, KOICA Jörgen Sandström – Head of the Transforming Industrial Ecosystem Program, World Economic Forum
17:00-17:10	Closing Plenary: A shared roadmap for sustainable intelligence
	Present key takeaways and announce collaborative next steps. Speaker: GGGI Group photo

Day 4 – Capacity Building on AI for Adaptive Management in the Energy Sector (17th September)
Moderator: Jeawon Kim, Capacity Building and Network Engagement Specialist

Opening	
09:00~10:30	Summary and reflection of Day 2 and Intro to Day 3

RoundTable discussion on Day 3 GGGI-Google Sessions

Coffee break – 15 minutes

Session 2: Financing Adaptive Management in Pacific & Caribbean SIDS

10:45~11:00	Different types of financial scheme for adaptive management TBC, Adaptation Fund / Nadege CTCN
11:00~11:50	Peer Exchange Guiding question: - Which financing in our country is the most rigid? - Which financing has provided the most breathing room?
11:50~12:00	Summary of points

Lunch break – 90 minutes

Session 3: The role, application, and potential of AI

13:30~13:50	Case of adaptive system strengthened through AI – International Deeba Yavrom, Deployment Strategist, Palantir Technologies
13:50~14:30	Case of adaptive system strengthened through AI – Republic of Korea Ji Eun Choi, Senior Economist, World Bank

Coffee break – 15 minutes

Session 4: Climate Narrative to design an energy project with strong AI components

15:30~17:00	<i>All NDEs</i> <i>NDE Logic Desk - Initiate for change: Development of problem and solution trees</i> Three sequential activities to be covered: - Brainstorming for problem identification - Ideate on the elements of climate narrative (30 minutes) - Problem tree - Organize the brainstormed elements into a problem tree, aligning them with the specific scope of the project (20 minutes and *10 minutes for sharing time) - Solution tree - Transform their problem tree into solution tree, adapting the elements to match the goals and structure of the intended financing modality (20 minutes and *10 minutes for sharing time) In between activities B and C, each group representative will present their idea board to the room for 10 minutes.
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Day 5 – Voluntary Technology Talk: Part 2 (18th September)

Moderator: Jeawon Kim, Capacity Building and Network Engagement Specialist

Introduction	
09:30~10:15	Flow of the day and expected outputs
Relocation to Convention Hall, 3rd floor, Grand Ball Room	
Session 1: Technology Exhibition	
10:30~11:30	Guided Hall Tour KEA & WCE Accompanied by CTCN team, NDEs will take a tour of the exhibition hall. The tour will introduce 6~9 CTC Network member's technologies and offer a direct discussion with them at each booth.
11:30~12:00	On-site matchmaking request submission for afternoon NDEs will be shared with In Parallel, pre-arranged meeting with Network members
Lunch Break – 75 minutes	
Session 2: Technology Matchmaking	
14:15~15:30	Voluntary Technology Talk (Translation service available) BEXCO Hall X & X NDEs with the map of entire exhibition halls, will have time to freely explore emerging technologies that are interest of theirs. A reflection form will be available for NDEs to make notes as they explore, network, and learn the next innovative technologies. At the end of the tour, NDEs will be asked to rank top 3 technologies that captured their full attention.
Relocation to the Haewoondae Hotel	
Reflections and way forward	
16:00~17:00	Exchange of technologies explored among NDEs For 30 minutes, in a smaller group of 4, NDEs will exchange technologies that they have explored at the exhibition halls. Open reflection from NDEs For 30 minutes, NDEs are invited to share reflection of their experience on the programme overall, including forum, CB, and VTT.
17:00~17:05	Closing Remarks Tomoko Furusawa, CTCN