

2026 Asia NDE Joint Programme

Forum, Capacity Building on Energy, and NDE-NDA Coordination Meeting

7-10 July

Pattaya, Thailand



GREEN
CLIMATE
FUND

Capacity Building on Integrating Energy Technologies

2026 Joint Programme: Asia NDE Forum, Capacity Building, NDE-
NDA coordination meeting, 7-10 July 2026

Jeawon Kim
CTCN Secretariat



Recap: Key Insights from Asia NDCs and Technology Priorities

- **Energy efficiency** as a tool to strengthen endogenous capacity development
- Strong demand for **capacity building** that:
 - Enhances the application of AI-related technologies
 - Reduces fragmentation application and duplicated projects
- Emphasis on emerging institutional readiness to move from automation toward **data-driven and adaptive system management**.

Regional Priority Technologies

Energy

- Transport
- Power generation
- Optimal energy consumption in plantations
- Grid-connected solar energy

Overall Regional Trend

- Increasing readiness for **system transformation through integration**
- Strong relevance to link production, energy, and planning systems rather than being deployed in isolation

Recap: Field visit to Thai Eastern Group Holdings

1. Timing and urgency

- The time for integration has arrived.
- Meeting today's challenges requires innovation in business models, financing, and partnerships.
- Technologies are diverging into market-ready solutions and innovation-dependent solutions, requiring different support approaches.

2. Market transformation is already underway

- The private sector has shifted from competing on product quality to building sustainable, low-carbon value chains in response to changing customer expectations.
- Integration is already happening in practice (e.g. rubber and palm oil residues converted into biogas and electricity).

3. The policy challenge

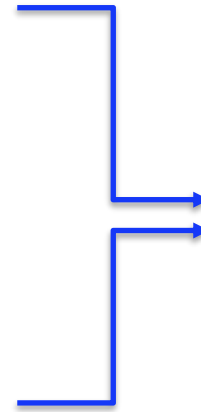
- Regulations have not always kept pace with market transformation. Clear, predictable policies are needed to support investment and economic competitiveness.
- Governments now need to enable system-level integration, including grid stability and policy frameworks that allow businesses to move beyond circular economy towards integrated low-carbon industrial ecosystems.

Common Challenges

- Climate risks
- Resource pressures
- Coordination gaps
- Competing priorities

Opportunities

- Stronger resilience
- Better resource efficiency
- Cross-sector benefits
- More impactful investments
- Scalable solutions



Role of country focal points to the UNFCCC

- Ensure global climate support aligns with national priorities

Role of NDEs

- **Lead integrated technology planning**
- Identify and endorse technical assistance (non-investment instrument) opportunities
- Connect sectors and institutions at the national and regional-level

Role of NDAs

- **Lead integrated finance planning**
- Identify and endorse investment opportunities
- Guide the distribution of climate investments at the national level

Today's workshop schedule and flow

09:20-11:00	Session 1 Reframing System Transformation in Asia's Energy Context (+ 15 mins coffee break)
11:00-13:00	Session 2: Network Fair (Members with Energy Technologies and Artificial Intelligence solutions)
13:00-14:00	Lunch Break
14:00-15:15	Session 3 Learning Energy System Transformative Technologies
15:15-15:30	Coffee Break
15:30-17:00	Session 4 Financing Energy Transition and Premier to TM-FM linkage
18:00~	Cultural Dinner (offered by the host county)

Flow of the Session

The sessions will move from initial framing and individual reflection, to group-based discussions, and conclude with shared insights and collective learning in plenary.

Listen

Reflect

Discuss

Share



Materials at hand

to support readiness and engagement

- Workbook for exercises and individual reflections

Expected Workshop Outputs

Session 1

Understand the current status of the **energy transition in Asia** and reflect on the key **bottlenecks to renewable energy transformation** in your country, including those that are often **overlooked**.

Session 2

Getting to know **emerging technologies** that may support energy system transformation through integration with Artificial Intelligence, offered by CTC Network members.

Session 3

Explore **TEC-verified emerging energy technologies** and gain a **deeper understanding** of how the **innovation and investment priorities** of NDEs and NDAs may differ according to their mandates, responsibilities, and decision-making power.

Session 4

Understand climate finance as a system and **collaboratively identify financing pathways**, stakeholder roles, and implementation barriers that influence the deployment of emerging energy technologies.

Session 1

Reframing System Transformation in Asia's Energy Context



Snapshot of Asia Energy Transition

Manoj Kumar, UNEP GEF



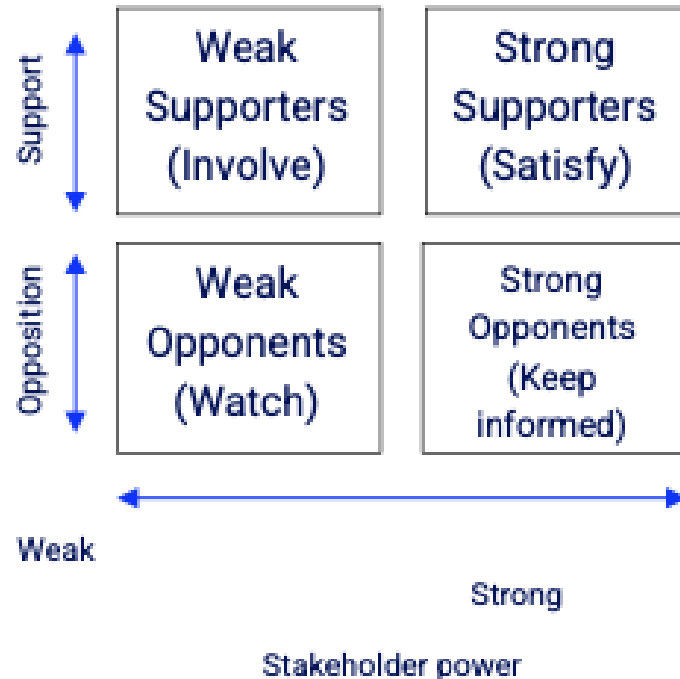
From Country Needs to Finance-Ready Projects: Lessons from Japan's CTCN Technical Assistance Experience

*Ryosuke Tanaka, Global Environmental Affairs Office,
METI, Japan*

Reflection on the System Transformation (40mins)

Silent Thinking (5mins)

Who “blocks” renewable energy-related decisions in our country?



Group Discussion (35mins)

Identify policy, technological, and/or regulatory **failures** in a sticky note (15mins)

1) Is it a technology problem or an issue of approvals, tariffs, and/or regulation? (20mins)

2) How far can the NDE and NDA intervene within the system? (20mins)



● NDE's control

● NDA's control

Gallery Walk

Participants walk around silently for 10 minutes, read other's board

Each participant to give



= Resonates with my country



= I see a potential intervention

? = I have a question (want to further explore over coffee break)



Session 2

Network Fair

Members with Energy
Technologies and
Artificial Intelligence

Purpose of the Network Fair

The Network Fair is designed to create a more intentional space for engagement and exchange.

- Connect NDEs and NDAs with relevant technology providers
- Help countries explore solutions aligned with national priorities
- Enable Network Members to showcase technology expertise and receive feedback
- Foster collaboration opportunities for future technical assistance

Who is in the room with us

- 30 NDEs (14 online) and 10 NDAs from Asia and Middle East region
- 10 Network Booths – Network Members and Local Organizations
- CTCN, UNFCCC/TEC, GCF Secretariats

Format of the Session

- Each organization is hosted at a dedicated table
- Open networking session – NDE and NDA participants move freely between tables
- Total session duration: 2 hours

Flow of the Session

- We start with 2-minute introductions from each participating organization
- Discussions on technologies, country needs, financing opportunities and future collaboration
- Exchange contacts and identify follow-up actions
- Participants to fill in workbook sheets to record takeaways and interest levels

Meet the Network Fair Organizations



WAVESAVE™



CHAROENCHAI TRANSFORMER CO., LTD.



GLOBALYX
IMPOSSIBLE IS POSSIBLE



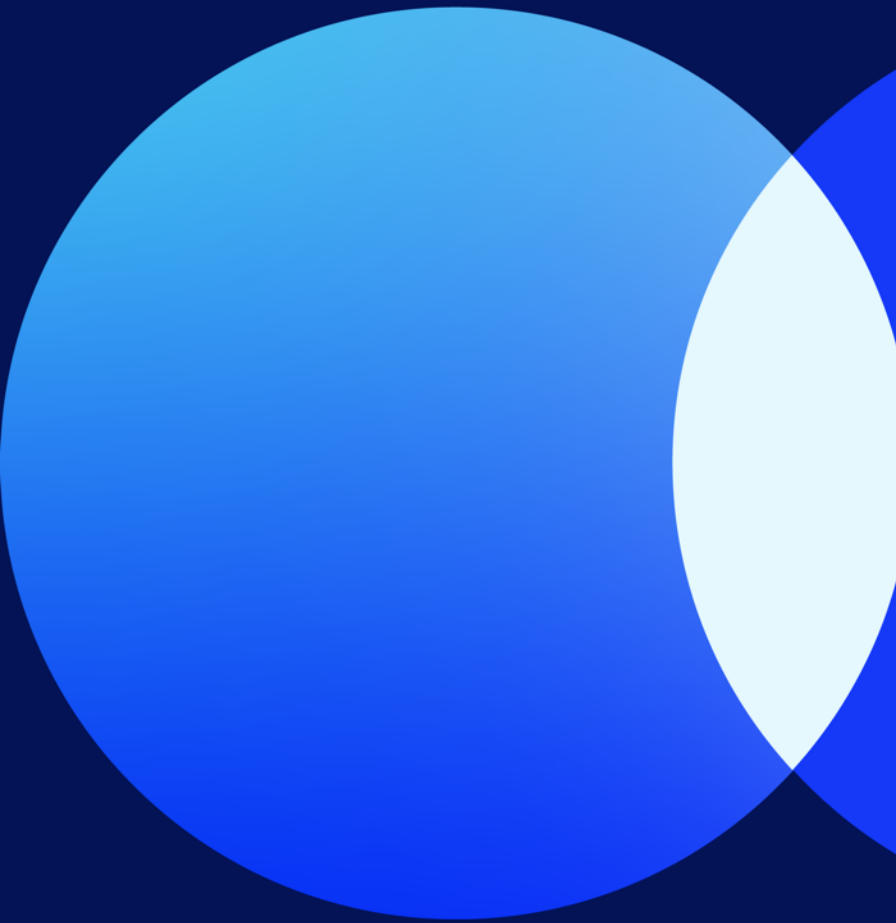
AIT
Asian Institute of Technology



Guiding Questions

- What are your most urgent national priorities that could benefit from technical assistance?
- Where do you see specific gaps or challenges that external expertise could help address?
- Which technologies or solutions are you most interested in exploring or scaling?
- What kind of support would be most valuable (e.g. feasibility studies, capacity building, pilot projects)?
- What concrete idea or concept could we jointly develop into a Technical Assistance project?





Lunch break (13:00~14:00)
Downstairs - Gemini I and II

Session 3

Learning Energy System Transformative Technologies



Transitioning to net zero and renewable energy sources – Gaps in Policies and Opportunities for Implementation

Jingnan Hu, TEC member

Technology Discussion Activity (45mins)

Objective

To identify opportunities and solutions to accelerate renewable energy deployment, through consideration of enabling environment to bring transformational change

Format

14:15-14:20	Introduction of the activity
14:20-14:30	Silent thinking (individual work)
14:30-15:00	Group discussion
15:00-15:15	Reflection from each group

Guiding questions

For NDEs

Based on the gaps/challenges identified in the morning session, what do you need to overcome those gaps/challenges to deploy renewable energy in your country? What kind of CTCN TA projects are needed to promote renewable energy deployment?

For NDAs

Based on the gaps/challenges identified in the morning session, how can NDA coordinate with NDE to overcome gaps/challenges, and deploy renewable energy?

**Let's check how other groups did!
NDEs and NDAs from each group to share
their group's discussion to the room**

UNIDO's works on promoting industrial decarbonisation



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Initiatives



Climate Club
Global Matchmaking Platform



Net Zero Partnership



IDDI

Platform



STePP

Publication



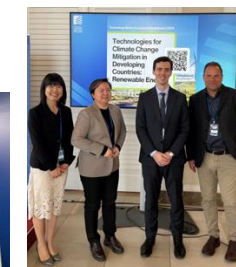
TEC Brief: Integrating hard-to-abate industries in the process of preparing and implementing NDCs

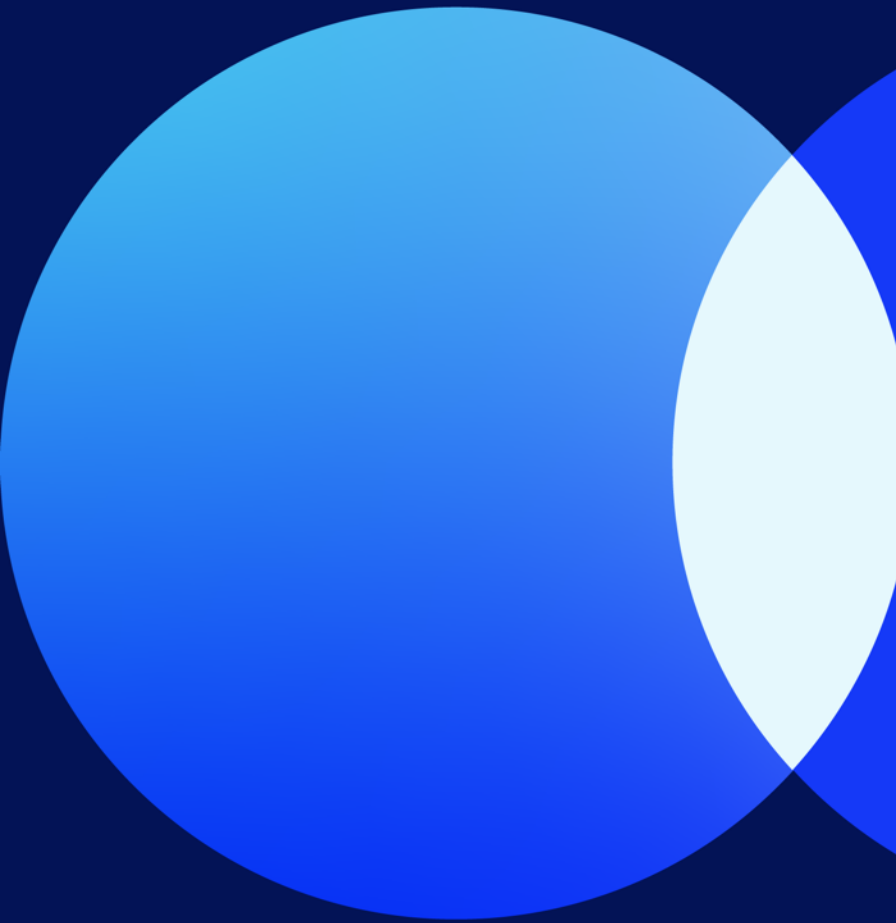


Background Paper: Mapping of initiatives that promote low and near zero emission production and products in hard-to-abate sectors

Global convening

Global events for promoting industrial decarbonisation and renewable energy, e.g. COP29, COP30, International Vienna Energy and Climate Forum (IVECF)





**Coffee break
(15:15~15:30)**

Session 4

Financing Energy Transition and Premier to TM-FM linkage



Systemic approach: Climate financing pathways

*Bapon Fakhruddin, Climate Investment Principal,
Department of the Asia and the Pacific Region, GCF*

Financing Discussion Activity (40mins)

Financing Matchmaking (15mins)

Technologies are not financed. Activities are financed.
Using the renewable energy technology selected during Session 3:

- What must happen before deployment?
- What activities require financing?
- Who needs to be involved?

Financing Sequencing (20mins)

For NDEs, based on the gaps/challenges identified in the morning session, what do you need to overcome those gaps/challenges to deploy renewable energy in your country? What kind of CTCN TA projects are needed to promote renewable energy deployment?

Institutional Friction Analysis (10mins)

Group divides into NDE groups and NDA groups.

Using the same guiding questions for the silent thinking, discuss among NDEs/NDAs.

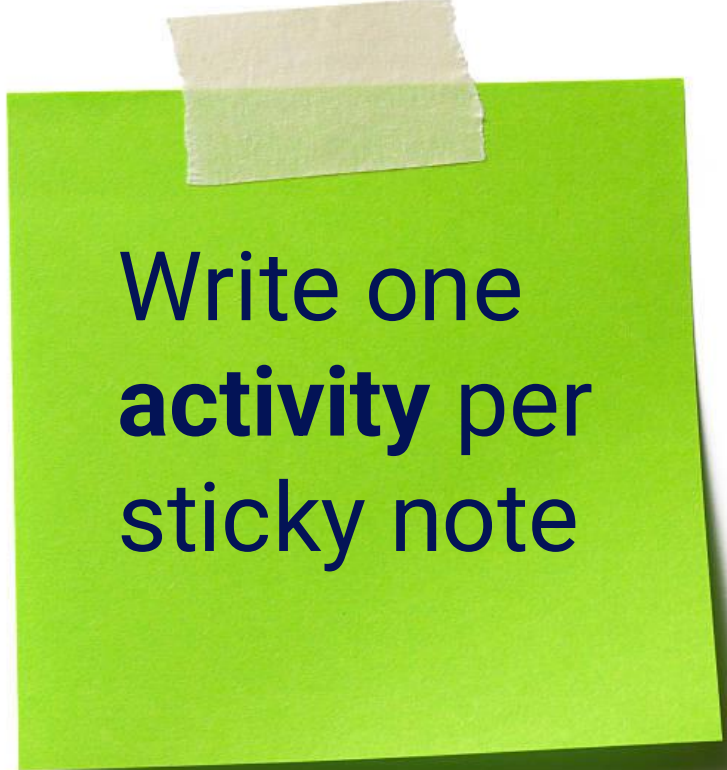
Individual Activity (5 minutes)

Financing Matchmaking Step 1

Step 1. What must happen first?

Think beyond infrastructure:

- Studies
- Policies
- Capacity
- Demonstrations
- Business models
- Investment readiness



Write one
activity per
sticky note

Individual Activity (5 minutes)

Financing Matchmaking Step 2

Step 2. Financing Instruments

Need	Possible instrument
Feasibility study	Grant
Pilot project	Grant / concessional loan
Commercial deployment	Loan / equity
Risk reduction	Guarantee
SME innovation	Venture capital
Grid infrastructure	Public finance / MDB loan

Write one
financing
instrument
per sticky
note

Individual Activity (8 minutes)

Financing Matchmaking Step 3

Step 3. Identify Key Institutions

NDE

NDA

Ministry

Utility

Development Bank

Commercial Banks

Private Sector

Local Government

Other (seed, research, IOs)



Write one
**institution/
entity** per
sticky note

Individual Activity (10mins)

Financing Sequencing

- At what stage does financing become possible?
- What support is required before investors become interested?
- At what stage can private finance participate?
- Which actor assumes the greatest risk?

Group Activity

Financing Sequencing (10mins)

Public policy instruments supporting innovation

Economic and financial policy instruments

Market creation
(e.g., feed-in tariffs,
tax subsidies, loans,
procurement, carbon
pricing)

Technology
demonstration

Technology
development

Research

Regulatory and soft instruments

Renewable
standards
Building codes
Performance
standards
Information
provision; labelling;
mandated purchases

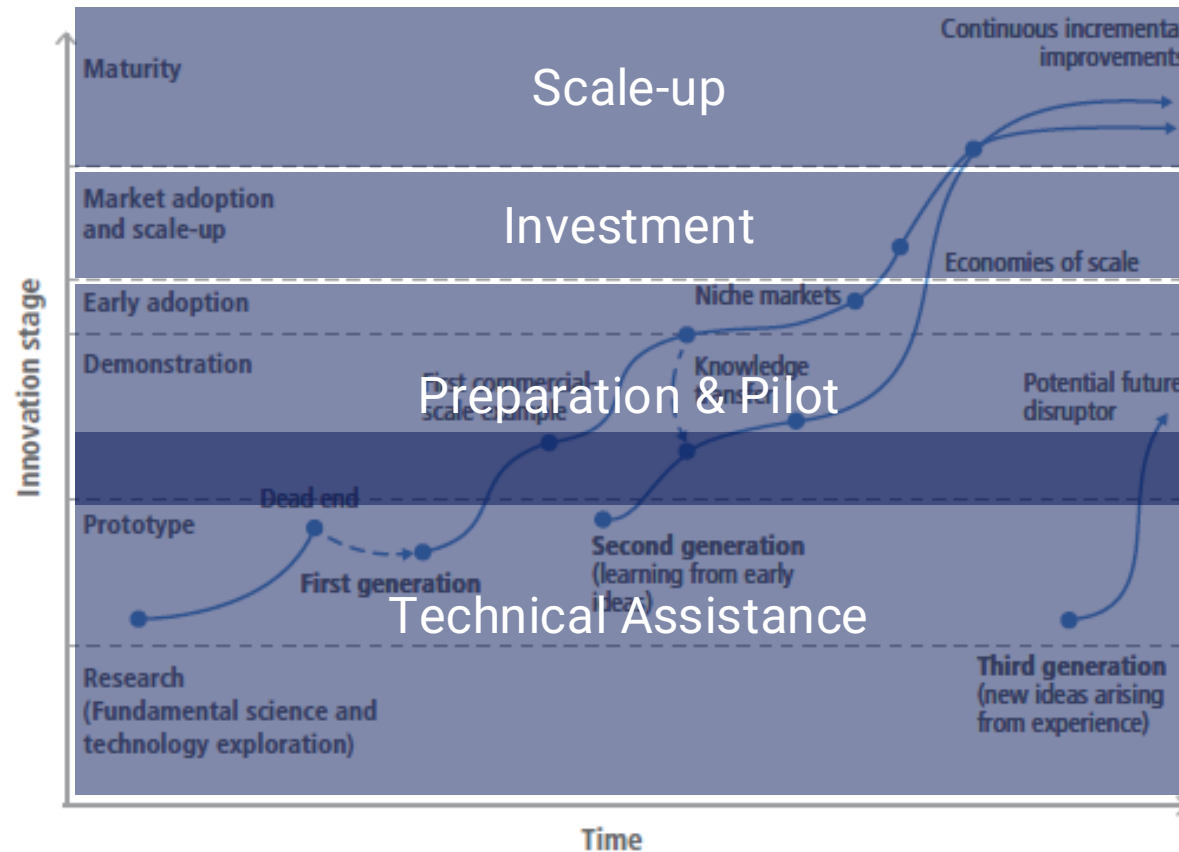


Figure TS.27 | Technology innovation process and the (illustrative) roles of different public policy instruments (on the right-hand side), IPCC 6th AR, WG3 Mitigation of Climate Change

Group Activity

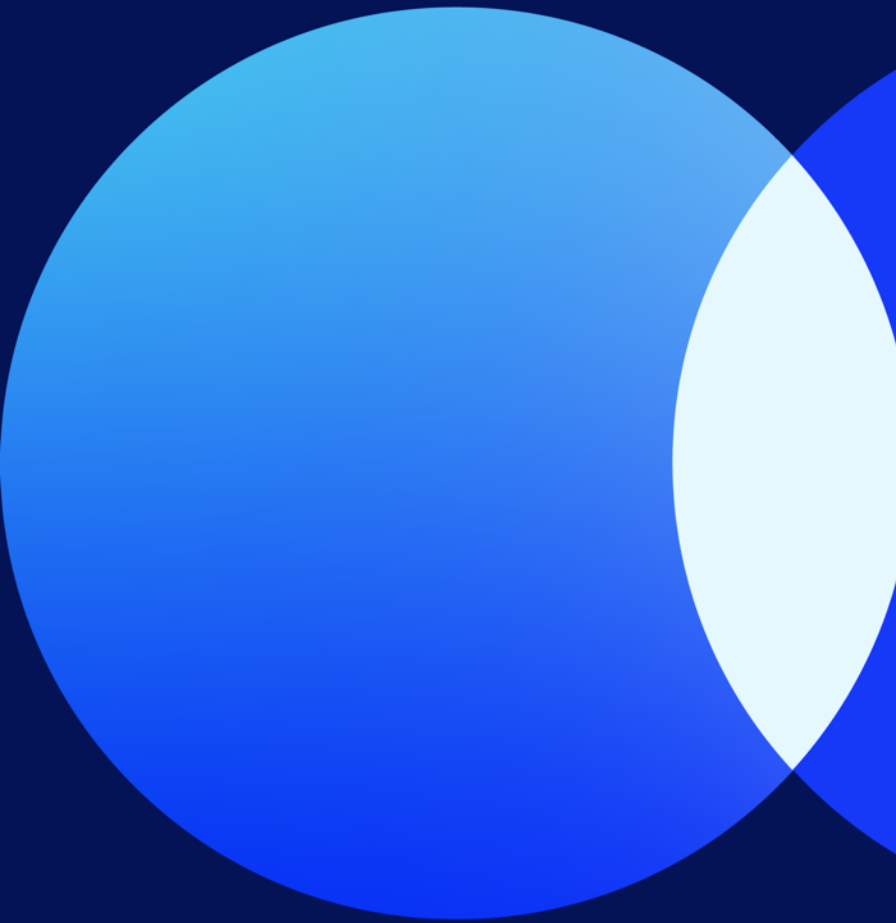
Institutional Friction Analysis (10mins)

Thinking about what would most likely prevent implementation of this technology in your country, share within your group, which barrier scored the highest.

Miniquiz on TM-FM Linkages (with a prize ;D!)

Mentimeter.com
Code 8548 4732





Cultural dinner and Networking

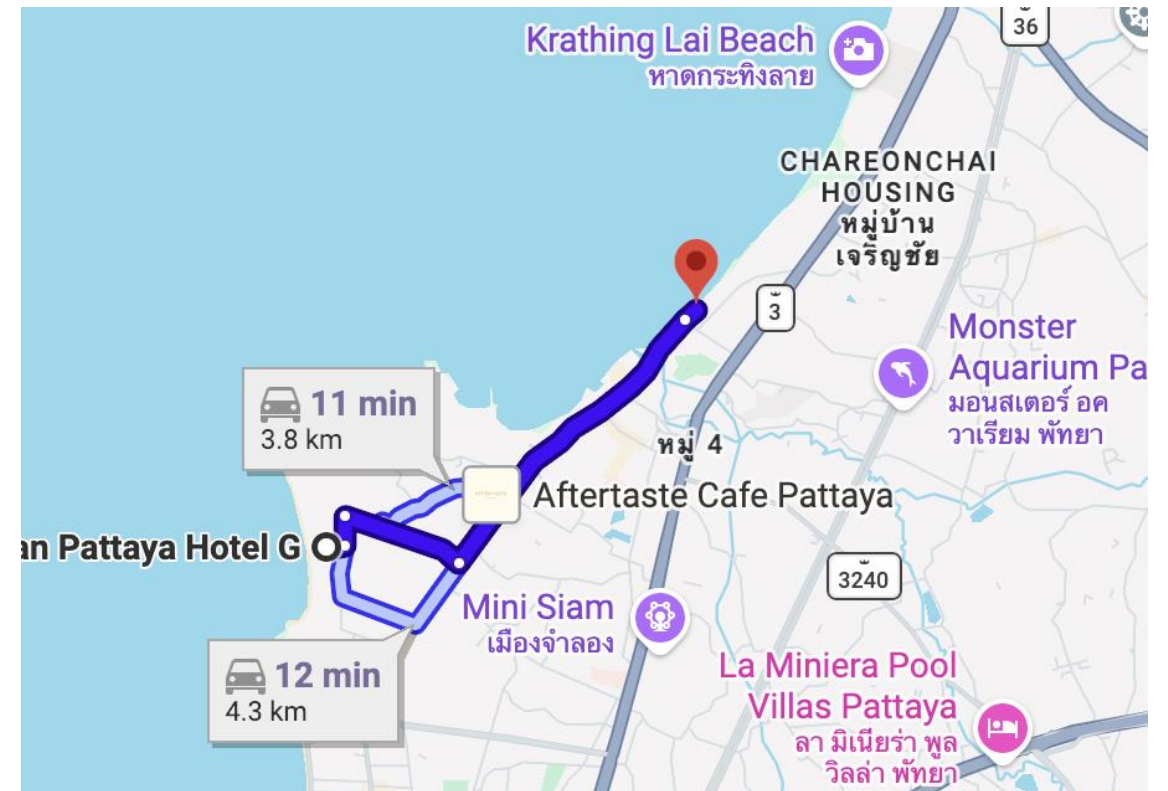
See you there!

Moom Aroi Na Kluea

Address: 83 4 Na Kluea 4 Alley, Muang Pattaya,
Bang Lamung District, Chon Buri 20150, Thailand

Hosted by NXPO, featuring a dinner
highlighting local cuisine in a beachfront
setting in Pattaya.

Participants will relocate to the restaurant
independently.





UNFCCC_CTCN



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Centre Network

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