

# Capacity Building Workshop for New and Renewable Energy Policy

**EGNRET 64 Meeting**

1 April 2026, Bangkok, Thailand

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# Outline

- Background and scene setting
- Project Outline and Agenda
- Key Outputs of the Workshop
- Schedule

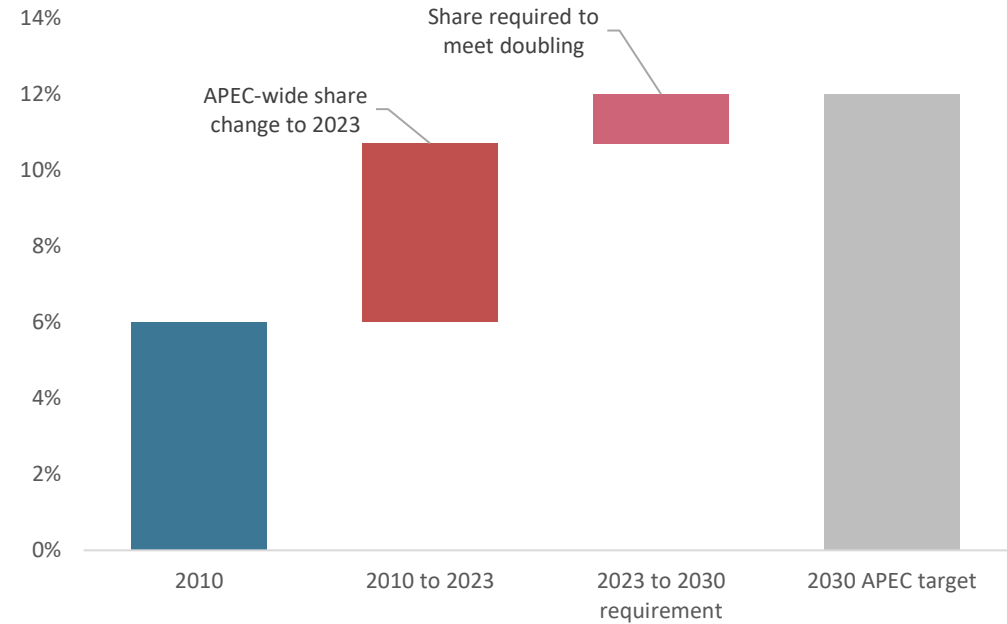
# Background

- APEC has set a collective goal of **doubling its share of renewables in its energy mix by 2030 relative to 2010** and supporting the global goal of tripling renewables by 2030.
- Given these aspirations, the policy capabilities of APEC members needs to be strengthened to promote the formulation of policies for **new and renewable energy supply**. This will help APEC economies meet their respective **targets and pathways**.
- This was facilitated by a **capacity building workshop** focusing on developing new and renewable energy related policies.
  - The **workshop** was held in conjunction with the **first EGNRET meeting in 2026**.

# Progress made on doubling the renewable energy mix

- Strong progress has been made by APEC economies towards doubling the share of renewables in their energy mix.
- Latest EGEDA data is from 2023, so it is entirely possible the target has already been met.
- Growth in renewables being driven by ambitious net zero targets adopted by most APEC economies and decarbonisation of power sectors.

**Renewables as a percentage of final energy consumption**

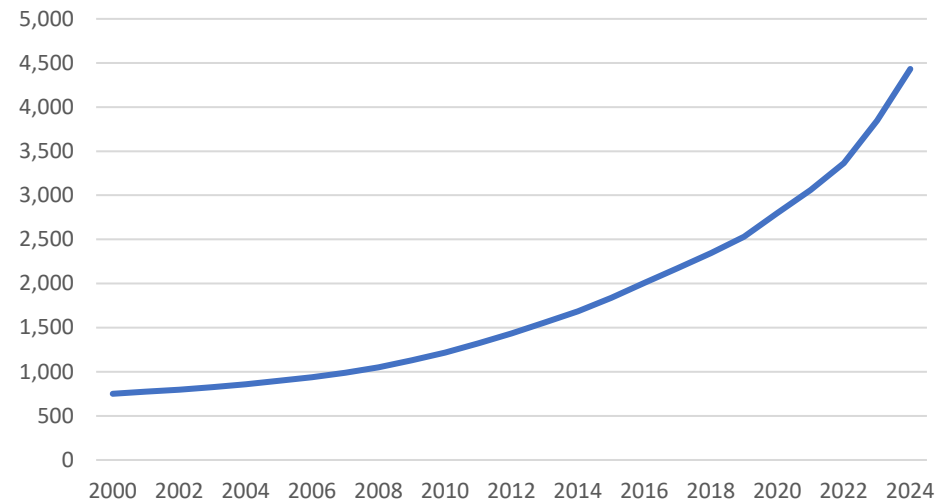


Source: EGEDA data (2025)

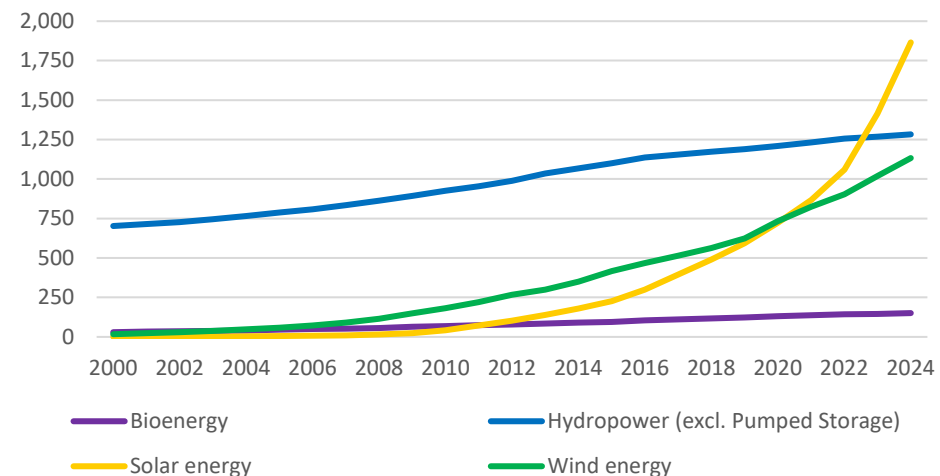
# Progress made on tripling renewable capacity - Global

- Total renewable energy capacity in 2023 was 3,870 GW.
- By 2024 it was 4,448 GW, a 15% annual increase.
- To reach 11,000 GW, the world will need to maintain a 16% growth rate.
- Strong growth in solar adoption brought on by decreases in module costs, policy support and ease of implementation.

Global RE capacity (GW)



Global RE capacity by type (GW)

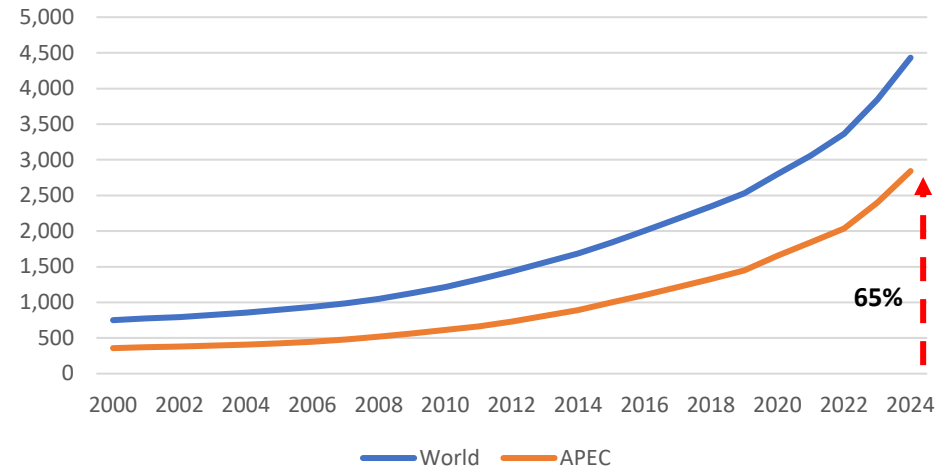


Source: Renewable Capacity Statistics 2025

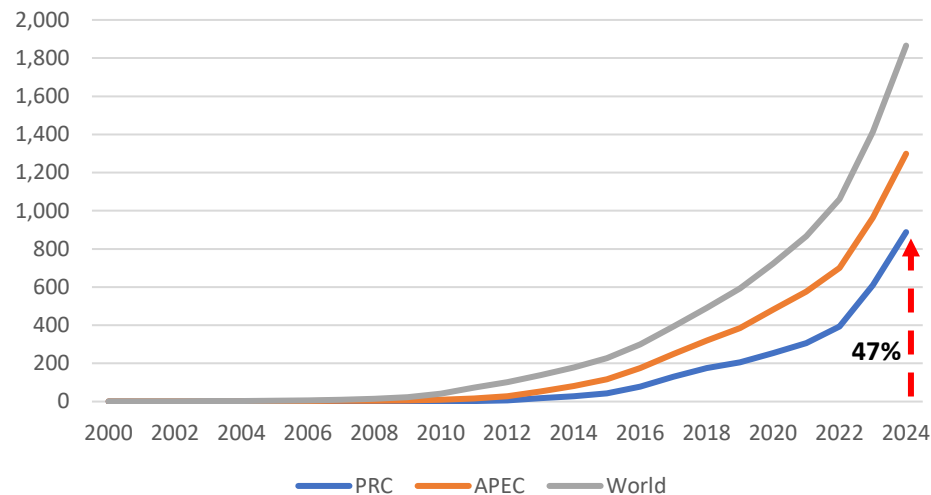
# APEC's contribution to this growth

- APEC economies have made strong contributions in meeting this global target.
- By 2024, they contributed 65% of global renewable capacity.
- Solar and wind once again the dominant drivers of APEC RE capacity growth.
- The PRC has installed the dominant share of global solar capacity (nearly 50%).

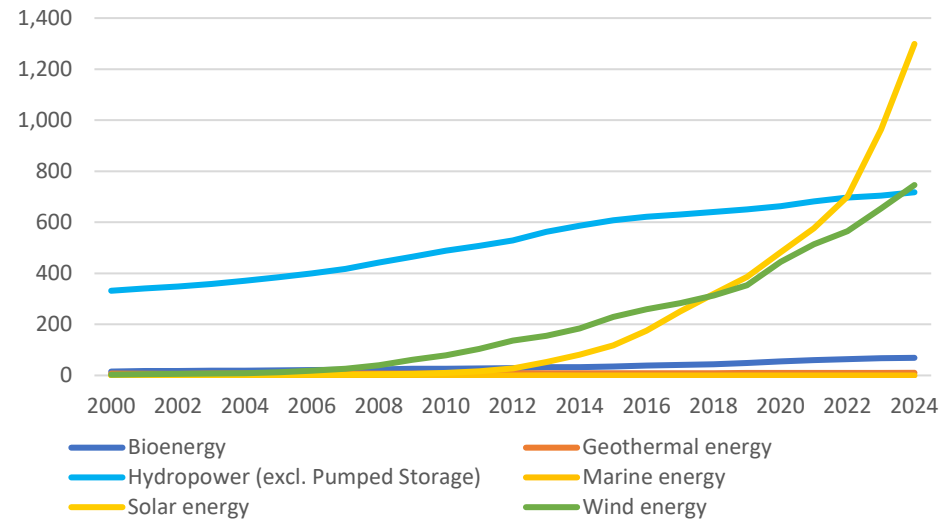
**Renewable capacity (GW)**



**Solar capacity compared (GW)**



**RE capacity by type in APEC (GW)**



# Project Outline

<b>Project title</b>	Capacity Building Workshop for New and Renewable Energy Policy (Phase I)
<b>Project theme</b>	RE Policies and Investments: Are we on the Right Track? Key Trends, Reflections, Directions and Lessons Learned
<b>Proposing Economy</b>	Japan
<b>Co-Sponsoring economies</b>	Chile; Indonesia; Peru; the Philippines; Chinese Taipei; Thailand
<b>Consultant</b>	Asia Clean Energy Partners
<b>Objectives</b>	<p>Providing a platform for APEC economies to contribute to ongoing APEC dialogue on energy policies and support APEC economies in refining their national strategies in line with regional and international goals.</p> <ul style="list-style-type: none"><li>• Develop an understanding of the effectiveness of RE policies in different contexts.</li><li>• How technology and financing solutions can be better aligned with policy design.</li><li>• What priority actions APEC economies can pursue to accelerate RE energy deployment.</li></ul>
<b>Outputs</b>	<ol style="list-style-type: none"><li>1. Capacity Building Workshop for New and Renewable Energy Policy</li><li>2. Workshop Summary Report</li></ol>

# Output 1. Capacity Building Workshop

<b>Date</b>	31 March 2026
<b>Venue</b>	Armari Hotel, Bangkok
<b>Agenda</b>	<p><b>Session 1: Host economy presentation and subsequent discussion</b></p> <ul style="list-style-type: none"><li>• Presentation by the host economy of its policies and programs for renewable energy, lessons learnt, and challenges faced. A discussion on the presentation amongst members was followed, identifying strong points and how similar policies can be adopted with advice provided by experts.</li></ul> <p><b>Session 2: Business Models and Policies for Scaling Up New and Renewable Energy</b></p> <ul style="list-style-type: none"><li>• A discussion was had to cover a range of business models and policies that have been effective in scaling RE implementation such as grid resilience measures, competitive renewable energy zones and policy frameworks.</li></ul> <p><b>Session 3: Frameworks and Approaches to Scaling Up Renewable Energy Investment: International and APEC Experience</b></p> <ul style="list-style-type: none"><li>• A discussion to provide insights on scaling up investment and financing RE projects, covering the challenges and opportunities for APEC economies. Key topics included project identification, pipeline development, project bankability, transaction advisory and investment facilitation, amongst others.</li></ul> <p><b>Session 4: Break-out Session</b></p> <ul style="list-style-type: none"><li>• Participants worked in breakout groups representing different types of economies. Each team acted as a national advisory team to identify RE deployment measures, priority actions, technologies and business models.</li></ul>

# Session 1: Host economy presentation

- Thailand delivered a presentation on **“Driving Thailand’s Clean Energy Future”**
- **Accelerated Climate Ambitions**
  - Net zero for GHG emissions by 2050.
- **Aggressive AEDP Targets**
  - Aiming for 37% renewable energy share by 2037, delivering substantial economic, social and environmental benefits.
- **Innovative Market Mechanisms**
  - Unlocking massive green investments via direct PPA’s and offering clearer market choices through Utility Green Tariffs.
- **Comprehensive Sectoral Actions**
  - Scaling solar across all levels and utilizing biomass and advancing future fuels like SAF and green hydrogen.

## Host economy presentation on key measures to drive targets:

**Key Measures to Drive Targets**

Electricity Sector	Heat Sector	Biofuels Sector
<p><b>Policy, Legal, and Regulatory Measures</b></p> <ul style="list-style-type: none"><li>• Promote electricity purchasing from renewable energy sources</li><li>• Encourage renewable electricity generation through tax incentives</li><li>• Support appropriate green electricity tariff structures</li><li>• Revise and improve relevant laws and regulations</li></ul> <p><b>Stability and Energy Security</b></p> <ul style="list-style-type: none"><li>• Promote and develop energy storage systems</li><li>• Support decentralized renewable energy (RE) generation</li><li>• Encourage off-grid renewable power systems in remote areas</li><li>• Develop digital-based RE forecasting systems</li></ul> <p><b>Development of New Renewable Energy Sources</b></p> <ul style="list-style-type: none"><li>• Conduct studies on hydrogen production and utilization in the power sector</li><li>• Promote green hydrogen production and utilization</li></ul>	<p><b>Promote green hydrogen production and utilization</b></p> <ul style="list-style-type: none"><li>• Promote systematic storage and aggregation of renewable fuels</li><li>• Support upgrading renewable fuels into primary or co-firing fuels (e.g., wood pellets, RDF)</li><li>• Encourage the use of alternative fuels from industrial waste streams</li><li>• Support business matchmaking initiatives</li></ul> <p><b>Entrepreneurial Mindset</b></p> <ul style="list-style-type: none"><li>• Publicize successful project outcomes</li><li>• Promote pilot projects in industries with low RE adoption</li></ul> <p><b>Investment</b></p> <ul style="list-style-type: none"><li>• Promote investment through tax incentives and low-interest financing</li><li>• Support fuel switching from fossil fuels to renewable or alternative energy</li><li>• Facilitate access to green finance under environmental conditions</li></ul>	<p><b>Promotion of Sustainable Aviation Fuel (SAF)</b></p> <p><b>Domestic Implementation</b></p> <ul style="list-style-type: none"><li>- Assess national potential and impacts of SAF utilization</li><li>- Develop carbon credit trading mechanisms to support SAF</li><li>- Establish domestic certification bodies</li></ul> <p><b>International Engagement</b></p> <ul style="list-style-type: none"><li>- Review Default Life Cycle Emissions values</li><li>- Negotiate SAF utilization criteria from feedstocks such as CSPO, molasses, sugarcane, and palm oil</li><li>- Engage in SAF carbon trading negotiations</li></ul> <p><b>Promotion of Hydrogen Utilization</b></p> <p><b>Preparation Phase (2024–2027)</b></p> <ul style="list-style-type: none"><li>- Study and develop regulatory frameworks for production, transport, and utilization</li><li>- Define investment promotion measures across the value chain, including infrastructure and FCEVs</li></ul> <p><b>Pilot Phase (2028–2034)</b></p> <ul style="list-style-type: none"><li>- Initiate pilot projects in various sectors</li></ul> <p><b>Commercialization Phase (2035–2037)</b></p>

Source: DAEDE

# Session 2: Business Models and Policies for scaling up NRE

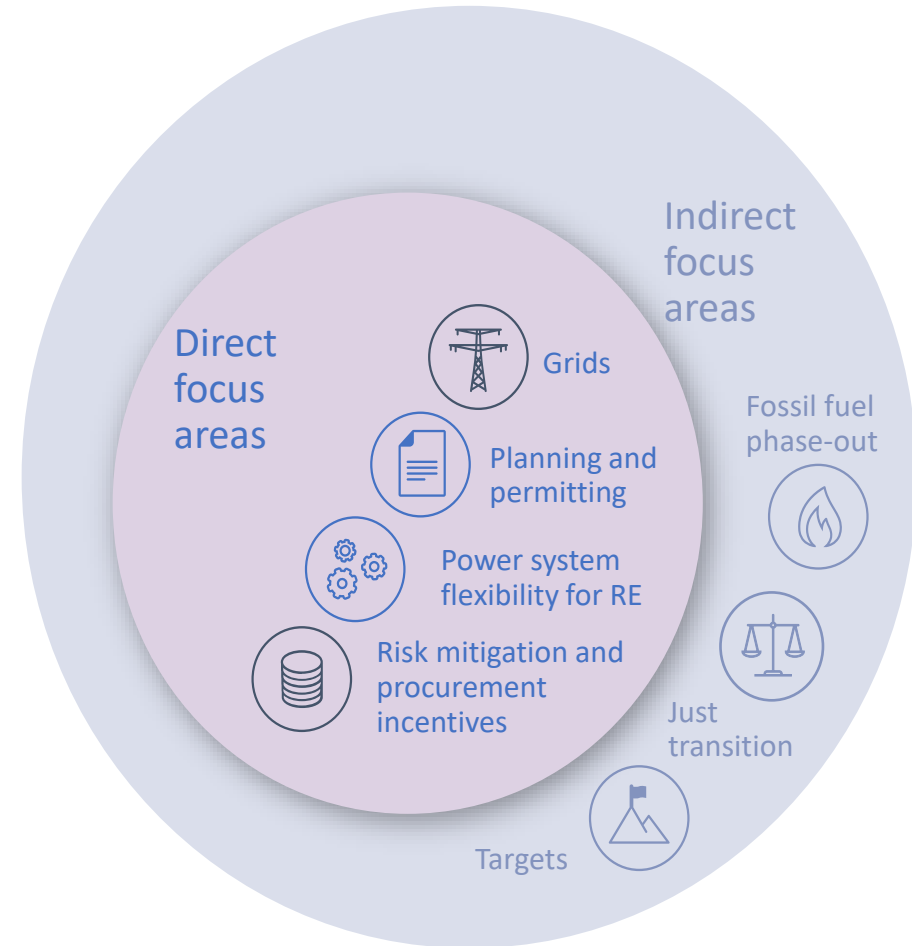
- **AGORA**

- Wind and solar are disruptive technologies but present novel integration challenges.
- Flexibility is the new paradigm of power systems. Baseload operation is an obsolete concept, as power plants provide most of the flexibility needs.
- Developed a policy framework that provided an assessment of key barriers and opportunities for RE adoption.

- **XanhTerra**

- Identified 5 key structural challenges for RE implementation: Pricing and revenue certainty, grid access and off-take risk, bankability of PPA's, land permitting/planning and institution/utility readiness.

## AGORA Renewable Energy Policy Framework



Source: AGORA

# Session 2: Business Models and Policies for scaling up NRE

- Traffic light system developed by AGORA:
- Used to qualitatively assess renewable energy barriers for economies.
- For Japan; land acquisition and permitting are significant barriers.
- The lack of economic dispatch and available grid capacity leads to high curtailment rates and reduced RE project bankability.
- A tool like this provides policy makers with comprehensive insights into the challenges and opportunities for RE deployment.

## An example for Japan:

1. Risk Mitigation and Procurement Incentives	2. Planning and Permitting	3. Power system flexibility for RE integration	4. Grids	A. Fossil Fuel Phase Out	B. Targets	C. Just Transition
1.1: PPA design and risk mitigation	2.1: Spatial Planning for RE	3.1: Dispatch regulation	4.1: Grid development plan	A1: Phase out: strategies for fossil fuels	B1: Net zero commitment	C1: Siting and consultation
1.2: Incentive for large scale RE	2.2: Permitting and ESIA's	3.2: RE forecasting	4.2: Grid access and usage		B2: Targets for RE	C2: Special incentives for community owned projects
1.3: Incentive for DG/rooftop solar		3.3: Regulatory measures for flexibility and system integration	4.3: Grid connection procedures		B3: Monitoring and governance	C3: Co-Benefits
1.4: Other fiscal incentives		3.4: Market based incentives for flexibility and system integration	4.4: Smart grids for RE integration			C4: Re-Skilling and Up-Skilling
1.5: Carbon pricing						C5: Regional transition plans

Source: AGORA

Key: size of barrier to RE deployment

Big Medium Low N/A

# Session 2: Business Models and Policies for scaling up NRE

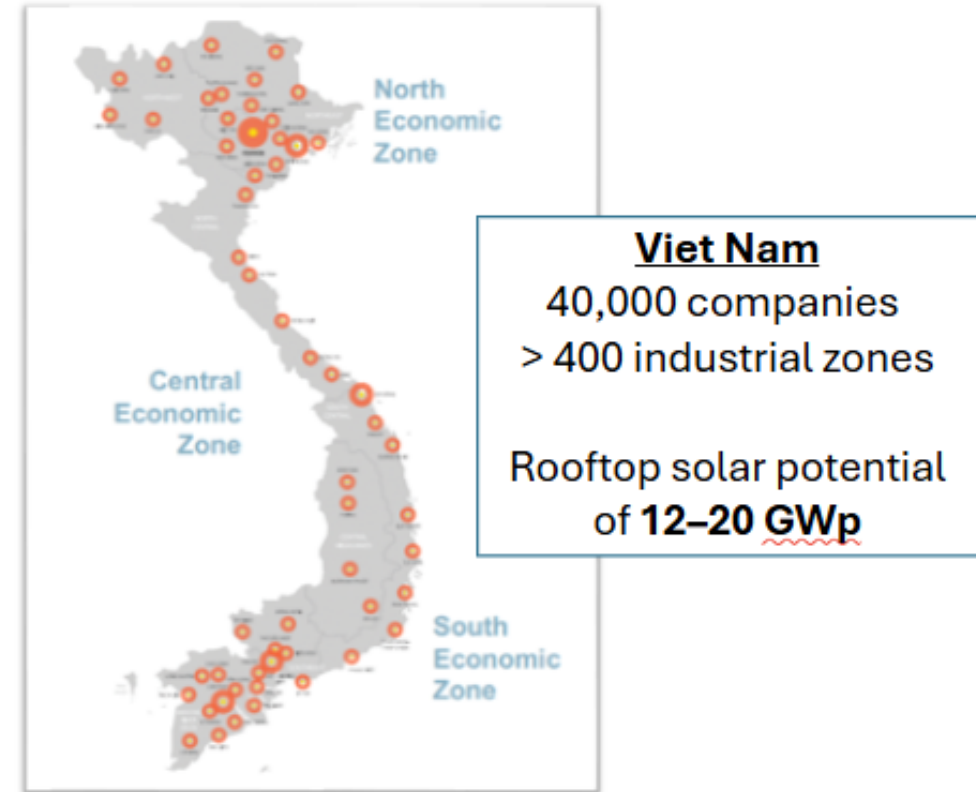
**Jennifer E. Leisch, Ph.D**

- Discussed the different approaches to scaling RE: Corporate PPA's, Renewable Energy Zones, Transmission Planning, Industrial Parks and Distributed Energy, Auctions and Competitive Procurement.
- Corporate PPA's were 25% of the world's wind and solar additions between 2024-2026 (exc. China).

## **Insights from fishbowl discussions:**

- Challenges in scaling certain technologies (e.g offshore wind), importance of stable long-term policy settings for investor confidence, importance of land availability, policy clarity and transparency and public acceptance of renewable development.

**Viet Nam's industrial parks:**



*Source: Jennifer E. Leisch, Ph.D*

# Session 3: Frameworks and Approaches to scale up RE investment

## AVPN:

- Climate action is a key pillar of the social impact ecosystem (7/10 countries most at risk from climate change are APEC members).
- 1 trillion USD is needed to fund RE investment but only 14% of world funding flows to SEA. There is a clear gap but why?

## Kairos Renewables:

- Renewables are now a hedge against energy supply disruptions and high spot oil and gas prices.
- However, the policy-capital-people pipeline takes 6 years approximately and expediting this is important.

## Key suggestions from both consultants

### AVPN Key suggestions:

- 1) Capacity building for local climate organisations
- 2) Facilitating clean growth investment through measures such as blended finance, private public partnerships etc
- 3) Mobilise blended capital into socially inclusive energy solutions.

### Kairos key suggestions:

- 1) Publish credible, long-term auction pipelines
- 2) Enable direct corporate PPAs
- 3) Establish dedicating permitting offices with clear statutory timelines to speed up approval
- 4) Invest in grid and workforce.

# Session 3: Frameworks and Approaches to scale up RE investment

## PFAN:

- 1) Too few investment-ready projects 2) Regulatory and ecosystem barriers slow progress 3) Finance exists, but investment uptake remains low.
- Solutions include:
  - Use sector-focused, value-chain approaches with flexible technical assistance tailored to local markets
  - Strengthen local ecosystems through capacity building
  - Develop blended finance and market instruments that can close funding gaps and attract investors.

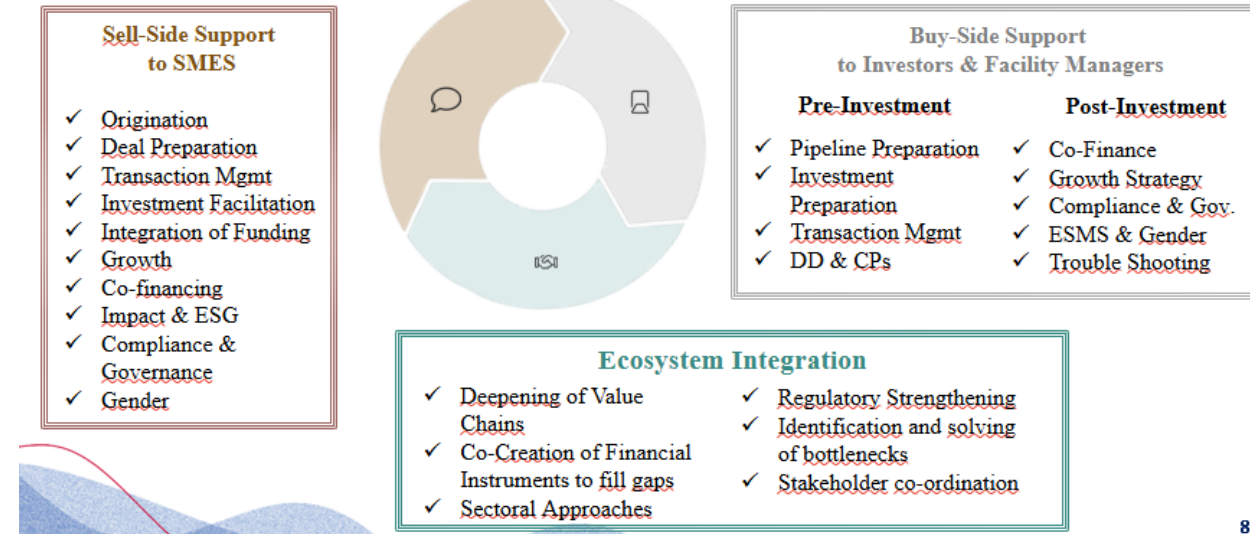
## Insights from fishbowl discussions:

- Stronger communication on cost effectiveness, grid management in a profitable manner and exposure to spot prices prompting a shift to RE.

## PFAN's solution to key challenges:

### Integrated Eco-System Approaches

An integrated service delivery model creates a virtuous cycle where improvements in one area strengthen the entire ecosystem, maximizing impact and sustainability.



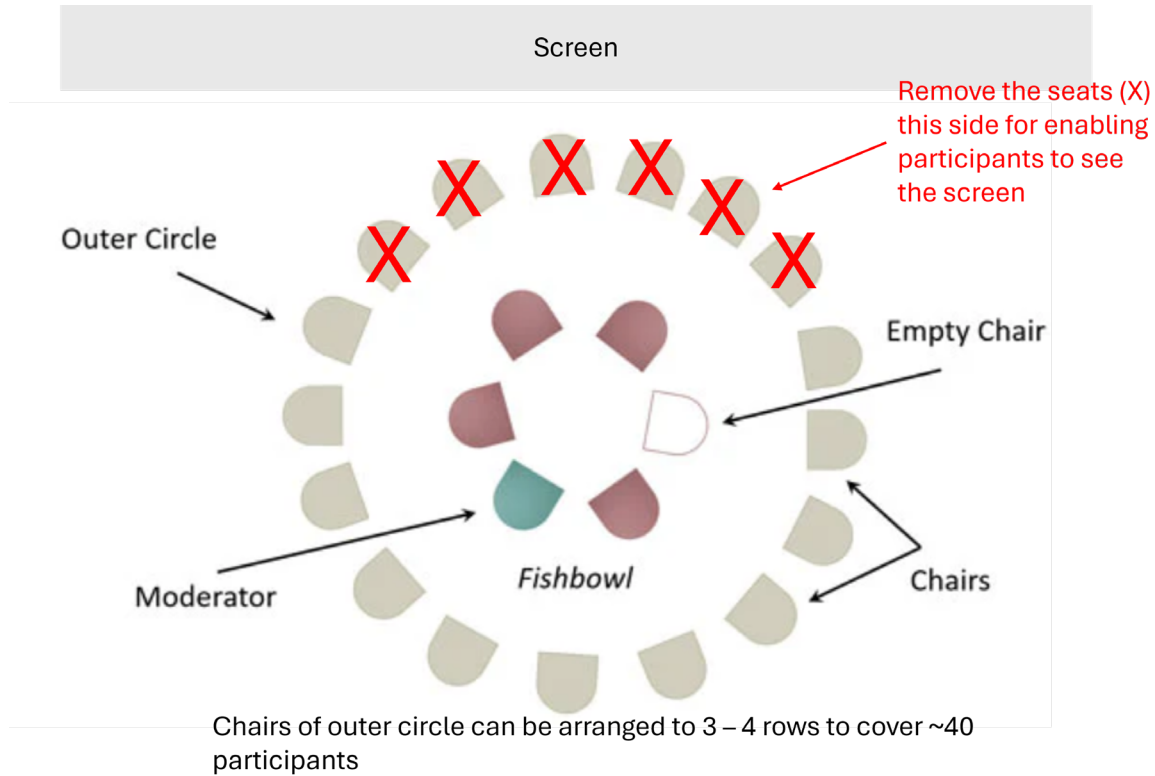
Source: PFAN

# A note on the presentation structure

- Credit needs to be given to Asia Clean Energy Partners for organizing the workshop in such an engaging manner.
- Two new concepts of presenting materials:
  - **Fish-bowl method of discussion**
    - ▶ Audience members sit in a wedge surrounding the center which will consist of experts discussing key concepts. Audience members are then asked to provide individual input following the discussion from the experts.
  - **World Café dialogue (session 4)**
    - ▶ Participants rotated across 6 expert tables. Each table was hosted by one of the experts recommended by the consultants where discussions were had on specific topics.
- APERC would highly recommend members adopt these techniques (where appropriate) in future EGNRET projects.

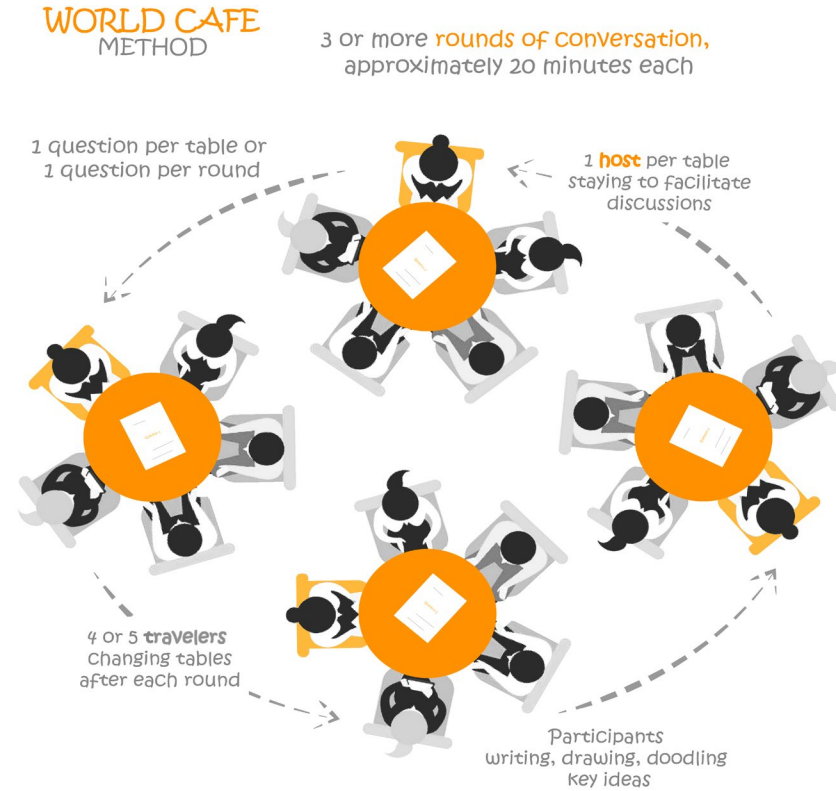
# A note on the presentation structure

## Example of a Fishbowl discussion



Source: ACE Partners

## Example of the “World café” method



Source: URBACT

# Key outcomes

- **Phase 2** – proposed as a concept note and already submitted.
- **Post Evaluation survey**
  - Will help determine whether recommendations made by participants/experts will be adopted.
  - These will be priority actions that APEC economies can pursue over the next three to five years to accelerate renewable energy deployment.
- **Workshop Summary Report**
  - Best practices identified will be shared publicly online for addressing challenges and opportunities.

# Schedule/next steps

Date	Actions
March 2026	Phase 1 of the Capacity Building Workshop for New and Renewable Energy Policy (CBWS/NREP) held in conjunction with EGNRET 64.
March 2026	Concept note for Phase 2 of the Capacity Building Workshop has been submitted.
November 2026	Submit Workshop Summary Report.
August 2027	LTEAP response.

**Thank you for your kind attention.**

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