APEC Expert Group on New and Renewable Energy Technologies

Recent APEC & EGNRET Activities



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1. Recent EGNRET Activities



1) EGNRET 52nd meeting & Joint meeting w/ EGEEC

Host Economy: Hong Kong, China

Organizer: Electrical and Mechanical Services Department (EMSD), the Government of the Hong Kong Special Administrative Region

■ Meeting Dates: March 18-22, 2019

2) APEC Workshop

APEC Workshop on Supporting Renewable Energy Integration and Energy Efficiency through Effective Regulation

Organized by the National Association of Regulatory Utility Commissioners (NARUC)



1) Participating Economies & Organizations

- Economies (12): Chile; China; Hong Kong, China; Indonesia; Japan; Malaysia; The Philippines; Singapore; Chinese Taipei; Thailand; United States; Viet Nam
- APEC fora (4): EGEDA, APERC, APSEC, LCMT-TF
- Non-APEC organizations (2): NARUC, ICA



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2) Updates of APEC/ EWG/ EGs /APEC Centers

- APEC Secretariat Report
- **EWG Secretariat Updated development of APEC Energy Working Group**
- Update of APEC EGEEC
- Update of APEC EGNRET
- EGEDA- Progress toward APEC Goals
- APERC Overview of APERC Activities
- APSEC –APSEC Activity Updates

All presentations are available on the website at:

https://www.egnret.ewg.apec.org/EGNRET52



3) Meeting Outcome

Key Areas for Collaborative Actions between EGEEC and EGNRET

Key areas for collaborations including:

Electric mobility, energy regulatory, transmission operator, business model, technical barrier and building sector, the target of doubling renewable energy and energy intensity.



4) Site Visit



Zero Carbon Building





Hong Kong Chinese University



1) Participating Economies & Organizations

- Economies (10): Chile; Hong Kong, China; Indonesia; Japan; The Philippines; Singapore; Chinese Taipei; Thailand; United States; Viet Nam
- APEC fora (4): EGEDA, APERC, APSEC, LCMT-TF
- Non-APEC organizations (2): NARUC; Environmental Protection Department, Hong Kong, China



2) 4 Invited Presentations

- APERC : APEC Energy Demand and Supply Outlook to 2050: APEC Target Scenario
- APSEC: APSEC Research Results sharing: Research on Integrated Multi-energy System to Enhance Technological Progress of Renewable Energy Deployment in APEC Region
- LCMT-TF: Progress of the APEC Low-Carbon Model Town (LCMT) Project
- Environmental Protection Department, Hong Kong, China: Waste-to-Energy in Hong Kong, China

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3) Meeting Theme

Member Economy Presentation: Waste to Energy in Urbanized Cities

Member economies introduced their plans, related regulations, incentives and developing projects for waste to energy.



4) Meeting Outcome

Discussion Topic 1: Achieving Doubling Renewable Energy Goal

- Suggest APEC Economies to:
 - ✓ Consider to change action plans, have more activities and work together to achieve the target.
 - ✓ Integrate renewable energy development into the long-term energy development plan
 - ✓ Have more workshop about renewable energy regulatory to share the best practice to benefit economies. (EGNRET)



4) Meeting Outcome

- In addition to EGEEC, EGNRET will consider to Invite other expert groups/task force to have a joint meeting in the future if the agenda can be designed to meet mutual benefits (as we had in the joint meeting with EGEEC)
- Future meeting themes including:

Challenges and strategies to promote renewable energy, geothermal development, financial mechanism, IoT enabled energy technology, etc.



5) Document Discussion and Sharing

Document Discussion:

- Policy Dialogue
- Energy Vision Post 2020

Document Sharing:

- **EWG Work plan**
- EWG Strategic Plan

4. EGNRET Projects



| Status | Projects | Note |
|--------------------------------------|----------|--|
| Concept Note (Session 1, 2020) | 1 | |
| Proposing Projects (Session 2, 2019) | 3 | |
| Project in Implementation | 6 | 1 Project (2016) 1 projects (2018) 4 projects (2019) |

5. EWG 57 Summary



Expert Group and Project Management

- Expert groups are advised to update contact lists regularly and to enhance outreach to enrich membership, especially from private sectors and academia.
- POs should provide <u>completion reports</u> to APEC Secretariat on time. The Chairs of relevant expert groups are requested to follow up the progress with the POs.

5. EWG 57 Summary



Progress toward Renewable Energy Doubling Goal

- APEC will not be able to achieve its Renewable Energy Doubling Goal by 2030. Additional efforts are necessary especially in addressing the barriers to renewable development. More can be done to identify economy-by-economy barriers and to formulate policy responses as part of a comprehensive roadmap.
- EGNRET is requested to report what extra efforts are needed to reduce the gap of achieving Renewable Energy Doubling Goal. Renewable Energy Doubling Goal is for APEC in collective; therefore, inter-economy's activities should be the focus.
- EGNRET is requested to look into areas such as knowledge sharing, capacity building, and to identify key areas that APEC can work together. The Lead Shepherd acknowledged the cooperation between APERC, EGNRET and EGEDA on the Renewable Energy Doubling Goal and wished the cooperation to continue.
- The Lead Shepherd mentioned that APEC is not the only international organisation that has renewable energy goal, and suggested EGNRET to work with IRENA to seek synergy.

6. EWG 58 Summary



- EGNRET is requested to have discussion on the policy dialogue on Renewable Energy Transition for Sustainable Growth relevant to the work towards RE doubling goal, and is advised t work with relevant subfor a on it.
- The APEC Leader's Meeting in 2020 will be held in Malaysia. Please consider to cooperate Malaysia and let Malaysia to be the priority to host meetings.

Thank you for your attention!







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| | APEC-funded Project Title | Proposed Economy |
|---|---|---------------------|
| 1 | Facing the Challenges of Integrating Electrical Vehicles and Solar Rooftop PV in Electricity Distribution Systems with Continued Performance of Distribution Transformers | Thailand |



3) 6 On-going APEC-funded Projects

| | APEC-funded Project Title | Proposed Economy | Project Number |
|---|--|---------------------|-------------------|
| | Low Emissions Development Strategies: Supporting the transition to energy efficient, electric transport systems | USA | EWG 10 2018A |
| 2 | Off Grid Electrification Option for Remote Regions in APEC Economies | China | EWG 07 2016A |
| | APEC Workshop on University Collaboration to Support Data Gathering and Analysis in Energy Efficiency and Renewable Energy | USA | EWG 06 2019A |
| 4 | Filling the Gap to Reach the Goal of Doubling Renewable Energy in the APEC Region-Phase 2 | Chinese Taipei | EWG 02 2019A |
| 5 | APEC Multi-stakeholder Dialogue on Promoting Renewable and Clean Energy Policies | Viet Nam | EWG 03 2019A |
| 6 | Exploring Co-Benefit Opportunities for Renewable Energy and Energy Efficiency Projects in the APEC Region | Thailand | EWG 04 2019A |

EGNRET



3) Approved in-principle (Project Proposal Stage)

2019 Session 2

| | Project Title | Proposed Economy | Project Number |
|---|--|---------------------|-------------------|
| 1 | Accommodating Disruptive Technology into RE&EE Policy for Energy Security | Thailand | EWG 11 2019A |
| 2 | APEC Workshop on Strategies and Successful Case Studies on Solar Energy | Viet Nam | EWG 10 2019A |
| 3 | Evaluation of Energy Technologies, Programs and Policies | USA | EWG 12 2019A |



4) 2 Completed Project since EWG 57

| | Project Title | Proposed Economy | Project Number |
|---|--|------------------|-------------------|
| 1 | Technological Challenges and Opportunities to Supply Flexibility to Electric Systems | Chile | EWG 15 2018A |
| 2 | APEC Workshop on Public-Private Partnership for Solar Energy Development | Viet Nam | EWG 12 2018A |