The 61st APEC Expert Group on New and Renewable Energy Technologies (EGNRET 61) Meeting

The 61st EGNRET Meeting Summary

Virtual Meeting hosted by Chinese Taipei

From January 16 to 17, 2025.

1. Introduction

The 61st APEC Expert Group on New and Renewable Energy Technologies (EGNRET 61) was hosted by Chinese Taipei from January 16 to 17, 2025, in Taipei, Chinese Taipei.

The 61st EGNRET Meeting was held from 9:00 AM to 11:00 AM on January 16, 2025, and from 9:00 AM to 11:00 AM on January 17, 2025.

Delegates from 12 APEC member economies, namely Canada; Chile; Hong Kong, China; Japan; Republic of Korea; Malaysia; Peru; the Republic of the Philippines; Chinese Taipei; Thailand; the United States, and Viet Nam, and representatives from 6 APEC fora, including APEC Secretariat; APEC Expert Group on Clean Fossil Energy (EGCFE); APEC Expert Group on Energy Data and Analysis (EGEDA); APEC Expert Group on Energy Efficiency and Conservation (EGEEC); Asia Pacific Energy Research Centre (APERC); and APEC Sustainable Energy Center (APSEC) attended.

The list of the 61st EGNRET Meeting participants is attached in the annex of the meeting summary.

2. The 61st EGNRET Meeting - Day 1 (09:00 AM-11:00 AM on January 16, 2025) (UTC+8)

The Meeting was chaired by Dr. Chi-Wen Liao, Chair of EGNRET.

2.1 Official Welcome

On behalf of Chinese Taipei, Ms. Su-Chen Weng, Secretary General from the Energy Administration, Ministry of Economic Affairs of the host economy, welcomed all APEC members, speakers, and participants who attended the 61st EGNRET Meeting. According to her speech, Chinese Taipei is devoted to working with APEC member economies to foster strong collaboration with the international community to fulfill the APEC renewable energy goal by doubling the share of renewable energy in the APEC's energy mix by 2030. To take practical action, Chinese Taipei announced itself entering the second phase of the energy transition this year, focusing on diversifying renewable energy sources, promoting energy conservation, and advancing energy storage technologies. It has installed mature technologies, such as solar PV and offshore wind power, and has been developing emerging energy technologies, such as geothermal and small hydropower. Secretary General Weng stated that the energy transition depends on regional and international cooperation and that Chinese Taipei is fully committed to contributing to sustainable development in the APEC region. She looked forward to exchanging views and learning from all members and experts through the meeting discussions on new and renewable energy. Finally, she wished the 2-day meeting a great success.

2.2 Opening Remarks and Adoption of Meeting Agenda

Dr. Chi-Wen Liao, Chair of EGNRET, expressed his heartfelt gratitude to the host economy, Chinese Taipei, for supportively organizing this meeting. Dr. Liao emphasized the pivotal role of new and renewable energy in driving the green energy transition and achieving the collective goal of increasing the share of renewable energy across the Asia-Pacific. He encouraged participants to take full advantage of this opportunity to explore avenues for collaboration ahead of the upcoming Expert Group Joint Meeting in Hong Kong. Lastly, he encouraged participants to enrich the discussion by sharing ideas and providing updates on the theme of New and Renewable Energy Development in the APEC Region.

2.3 Host Economy Presentation

Dr. Chung-Hsien Chen, Director of the Renewable and Prospective Energy Development Division, Energy Administration, Ministry of Economic Affairs, introduced “New and Renewable Energy Development in Chinese Taipei.” Dr. Chen pointed out that since 97% of the energy in Chinese Taipei relies on importation, it remains challenging to ensure energy security and sustainability, as over 80% of energy consumption depends on fossil fuels. Therefore, Chinese Taipei is dedicated to the development of renewable energy, ambitiously aiming to reach the goal of 60-70% renewable energy by 2050 to achieve net-zero emissions.

As of November 2024, the cumulative installed renewable energy capacity in Chinese Taipei reached 20.6 GW, which is four times the capacity in 2016, primarily driven by solar PV and wind power. Chinese Taipei aims to achieve 20 GW in solar energy and 5 GW in offshore wind energy by 2026. Dr. Chen emphasized the importance of advancing multi-purpose solar panel applications, such as agrivoltaics and aquavoltaics, to expand the capacity of ground-mounted solar panels. Additionally, Chinese Taipei has already achieved its target of 6 GW for rooftop solar panels.

For offshore wind energy, Chinese Taipei ranked 7th globally in total offshore wind power installation capacity in 2023, exceeding 3 GW in 2024, and now has 374 turbines and 6 wind farms. This growth reflects the increasing demand for green power, driven by major enterprises, and underscores Chinese Taipei’s commitment to fulfilling the demand for green energy.

In the end, Dr. Chen reaffirmed the importance of developing various renewable energies, including emerging renewable energy sources such as hydrogen, geothermal, and ocean, to pave the way to a net-zero future.

2.4 Updates of APEC/ APEC Fora

(1) APEC Secretariat Updates by Mr. Takayuki Niikura, Program Director of APEC Secretariat

The APEC Secretariat provided a comprehensive update on recent and upcoming EWG activities, emphasizing several key themes. First, a recap of related meetings and projects from 2024 was presented, highlighting the EWG 67 and EWG 68 meetings held in Lima, Peru, alongside the 14th APEC Energy Ministerial Meeting (EMM14) and various expert group meetings. The Secretariat expressed appreciation to the members and noted major achievements, such as the establishment of the Just Energy Transition Initiative (JETI), focusing on studies, workshops, and knowledge-sharing across five thematic areas, and the election of new EWG leadership for the 2025–2026 term. Energy security and tracking progress in renewable energy capacity remain priorities, with Carbon-Free Energy (CFE) highlighted as the main policy discussion topic for 2025.

The Secretariat also summarized upcoming APEC events in 2025. Additionally, a review of EWG projects in 2024 revealed that 27 projects were completed, with several workshops and projects already planned for 2025. For Project Session 1 of 2024, 7 projects were approved and are currently preparing to enter the implementation stage, while in Project Session 2 of 2024, 8 projects are undergoing the quality assessment process. Finally, the Secretariat outlined the EWG fora assessment process, noting its four-year cycle and the adoption of recommendations to guide strategic and action plans for the next term.

(2) EGNRET Updates by Dr. Chi-Wen Liao, Chair of EGNRET

EGNRET Chair reported on EGNRET's recent activities, including the outcomes of the EGNRET 60 Meeting, EGNRET's contributions and

discussions at the EWG 68, and project updates, including projects currently under implementation and completed projects since the EGNRET 60th Meeting. Dr. Liao also recapped EGNRET's past and future collaborations with APEC Fora. Finally, he highlighted the upcoming joint meeting with EGEEC, EGCFE, and EGEDA in April this year, which will be the first joint meeting among the four expert groups, encouraging all members to participate in this significant event.

(3) EGEEC Updates by Ms. Jovian Cheung, Vice-Chair of EGEEC

EGEEC Vice-Chair shared insights and outcomes of the EGEEC 63 meeting, held on November 7-8, 2024, in Tianjin, China. EGEEC expressed enthusiasm for strengthening its collaboration with the APEC community, emphasizing the significant potential of the upcoming four expert groups' joint meeting, including the EGEEC 64 Meeting, scheduled to be hosted by Hong Kong, China, from April 8-11, 2025. The event aims to foster meaningful cross-collaboration and drive shared initiatives forward. The new logo of EGEEC, symbolizing the collaborative identity and commitment to shared goals, was also presented.

(4) EGEDA Updates by Mr. Glen Sweetnam, Chair of EGEDA

EGEDA Chair addressed the data challenges associated with the energy transition and outlined activities targeting these issues. The 23rd APEC Workshop on Energy Statistics, scheduled for September 2025, will focus on conducting end-use energy consumption surveys. The APEC region's progress in renewable energy was reviewed, highlighting its efforts toward the tripling target and providing an overview of the share of each renewable energy type. Discussions also addressed the energy transition quandary, particularly the simultaneous increase in renewable energy deployment

and carbon emissions. EGEDA reaffirmed its commitment to ongoing research in this area and welcomed contributions and perspectives to shape future strategies.

(5) EGCFE Updates by Mr. Yoshiomi Yoshino, Chair of EGCFE

EGCFE Chair shared updates on 2024 activities and planned events, including the Joint Meeting with EGEEC 62 held in May 2024; various workshops, and EGCFE publications. For 2025, the APEC Oil and Gas Security Initiative (OGSI) remains a key focus, with the 8th Oil and Gas Security Exercise (OGSE) in February in Indonesia, the 8th Oil and Gas Security Network (OGSN) in April alongside the four expert groups' joint meeting, and a new Oil and Gas Security Studies (OGSS) LNG-focused study under development. Additionally, a capacity-building workshop on cleaner and more efficient fossil energy operations, proposed by Japan, will take place this year to support emission reduction and energy efficiency. Finally, the Chair emphasized the importance of policy guidance for the development and implementation of a clean and low-carbon hydrogen policy framework in the Asia-Pacific, highlighting the need to enhance knowledge-sharing among economies and foster collaboration toward a shared clean energy transition.

2.5 Member Economies' Presentations: New and Renewable Energy Development in the APEC region

The meeting theme was "New and Renewable Energy Development in the APEC Region," which was presented by two economies (2), namely Japan and the Philippines.

(1) **Japan** reaffirmed its commitment to achieving carbon neutrality by 2050, with updated statistics showing a steady increase in renewable energy and non-fossil fuel shares, even as the overall power supply continues to decline. For offshore wind energy, Japan's target is to achieve 10 GW by

2030. For solar energy, Japan is developing the next-generation solar cells, which are expected to be commercialized within two years. To address regional disparities in renewable energy potential and electricity demand, Japan is enhancing cross-regional networks and strengthening transmission infrastructure to harmonize frequency differences between the eastern and western regions. Japan also highlighted its strategies for a hydrogen economy, emphasizing energy security, environmental compatibility, and technologies while pointing out the potential role of e-methane in the energy transition. Japan also proposed the Asia Zero Emission Community (AZEC) in January 2022 under Prime Minister Kishida, with joint statements emphasizing decarbonization, technology cooperation, and policy development, which have remained Japan's regional priorities from 2022 to 2024.

After Japan's presentation, Mr. Glen Sweetnam, Chair of EGEDA, highlighted the potential role of e-methane in economies that rely on imported LNG. He noted that while e-methane may be less relevant for economies with domestic natural gas production, it could benefit those burning natural gas and emitting CO_2 by enabling the continued use of existing methane and gas infrastructure through CO_2 and green hydrogen conversion. He encouraged further discussion on this topic.

(2) **The Philippines** shared an overview of its energy development. In 2023, renewable energy comprised 30% of installed capacity and 22% of gross power generation. The Philippines provided recent updates on the Philippines' Energy Plan (PEP) 2023-2050, outlining various scenarios. In the reference scenario, the economy aims to achieve a 35% renewable energy share in the power generation mix by 2030 and 50% by 2040-2050. Under the Clean Energy Scenario 1 and 2, renewable energy is projected to exceed 50%, with ambitious targets of adding 19 GW and 50 GW of offshore wind capacity, respectively. The Philippines also introduced the Energy Virtual One-Stop Shop (EVOSS) for streamlining permits and

incentives to attract private investment, along with some key initiatives, including easing foreign ownership limits, prioritizing renewables in energy markets, and the Green Energy Auction Program (GEAP) for fostering competition and offering competitive rates.

3. The 61st EGNRET Meeting - Day 2 (09:00 AM-11:00 AM on January 17, 2025) (UTC+8)

3.1 APERC Activities by Dr. Kazutomo IRIE, President of APERC

APERC President shared recent activities of APERC since the EGNRET 60 Meeting in Kaohsiung, Chinese Taipei. He first elaborated on recent research, including the 9th APEC Energy Demand and Supply Outlook, expected to be published in October 2025, the preparation of APEC Energy Overview 2025, and various Topical Studies. He then summarized APERC's policy cooperative activities, such as the Peer Review on Energy Efficiency (PREE) in Chile, the Peer Review on Low Carbon Energy Policies (PRLCE) for Peru, and a potential capacity-building workshop with EGNRET from 2025/2026 onward. He also highlighted collaborations on OGSI with EGCFE, the Energy Resiliency Enhancement Project, and the Energy Transition Symposia. Finally, he mentioned that APERC is planning to organize the APEC Workshop on Cleaner and More Efficient Operation of the Fossil Energy Industry in Japan this year.

After APERC's presentation, Dr. Chi-Wen Liao, Chair of EGNRET, acknowledged APERC's contributions to energy transition research and policy cooperation, particularly on hydrogen energy. He inquired about potential collaboration between APERC, EGNRET, and EGCFE. Dr. Irie responded that discussions on the APEC Policy Guidance to Develop and Implement Clean and Low-Carbon Hydrogen Policy Frameworks in the Asia-Pacific are ongoing. He noted that APERC, in consultation with METI, EGNRET, and EGCFE, plans to propose a follow-up project for the second session of APEC project funding. Dr. Liao welcomed this proposal and recognized its potential benefits for implementation.

3.2 APSEC Updates by Mr. Jinlong Ma, Vice President of APSEC

APSEC Vice President provided an update on APSEC's projects, key activities, contributions to EWG 68, and research on the APEC Energy Report. He also summarized the 10th APSEC Sustainable Energy Development Forum, held from November 5-8, 2024, in Tianjin, China, and reported on the outcomes of concurrent meetings, workshops, and sub-fora. Additionally, he elaborated on APSEC's recent research, including the APEC Urban Energy Report 2023 and 2024. Finally, he outlined APSEC's inputs to the Policy Dialogue in Peru last year, including its participation in the Policy Guidance Revision and support for the workshop on "Exchange of Best Practices for the Development of Green and Low Carbon Hydrogen Roadmaps in the Asia-Pacific Region" (EWG 212 2023A).

Following APSEC's presentation, Dr. Chi-Wen Liao, Chair of EGNRET, acknowledged APSEC's contributions to urban energy transformation and carbon neutrality. He inquired how expert groups could collaborate to implement policy guidelines and support APEC goals such as carbon neutrality. Dr. Ma responded that EWG and EGNRET serve as key platforms for research exchange and discussions. He suggested organizing more workshops and encouraging targeted APEC project submissions to enhance collaboration among expert groups and sub-fora. Dr. Liao welcomed these suggestions.

3.3 EGNRET Project Updates by Ms. Yi-Ting Chang, EGNRET Secretariat

The EGNRET Secretariat provided an overview of the project process, project cycle, and recent updates, beginning with the APEC Project Administration System (APAS), which manages all steps. The Guidebook on APEC Projects was introduced as a key resource for member economies applying for APEC projects. She also outlined the four stages of the project cycle. To apply for the EELCER Sub-Fund, projects must meet criteria such as having at least four co-sponsoring economies, aligning with APEC's goals, and demonstrating clear

capacity-building benefits for APEC's developing economies. As of December 2024, EGNRET has 14 ongoing projects and has completed 2 projects since the last meeting.

3.4 Project Updates

3 projects presented by two (2) member economies, namely Chile and Hong Kong, China, are listed in the table below.

Proposed Economy	Project Number	Project Title
Chile	EWG_106_2024A	Floating Offshore Wind Farms Development in APEC Economies for Both Electricity and Green Hydrogen Production
	EWG_206_2023A	Conversion of Coal-fired Power Plants Using Energy Storage System: Experiences, Challenges, and Opportunities
Hong Kong, China	EWG 01 2023A	Promoting Digital Solar Resource Maps and Management Technologies in Advancing Renewables Growth in APEC

3.4.1 Conversion of Coal-fired Power Plants Using Energy Storage System: Experiences, Challenges, and Opportunities (EWG_206_2023A / Chile)

The project held a two-day seminar in Santiago, Chile, on August 20-21, 2024, bringing together 69 delegates from 8 APEC economies and 13 experts to discuss coal plant conversion, policy challenges, environmental and social impacts, and business opportunities. Participants emphasized advancing clean energy, workforce retraining, and financial mechanisms. The completion report is expected by September 2025.

3.4.2 Floating Offshore Wind Farms Development in APEC Economies for Both Electricity and Green Hydrogen Production (EWG_106_2024A / Chile)

The project is expected to host a two-day in-person seminar in Santiago, Chile,

on July 1-2, 2025, with preparations underway for four key topics: floating offshore wind development, environmental and social requirements, technical challenges, and synergies with green hydrogen production. The nomination process is set for March 2025.

3.4.3 Promoting Digital Solar Resource Maps and Management Technologies in Advancing Renewables Growth in APEC (EWG 01 2023A / Hong Kong, China)

The project hosted a one-day workshop in Hong Kong, China, on July 8, 2024, gathering 30 experts from 8 APEC economies to discuss challenges in urban solar energy deployment, grid capacity, storage integration, AI-driven solutions, and emerging solar technologies. The workshop summary has been submitted, and the completion report is in progress.

3.5 Member Economies' Presentations: New and Renewable Energy Development in the APEC region

The meeting theme was "New and Renewable Energy Development in the APEC Region," which was presented by five economies (5), namely Malaysia, Hong Kong, China, Chile, Thailand, and Viet Nam.

(1) **Malaysia** presented its energy policy, renewable energy installed capacity, and targets. Since 2011, Malaysia has been implementing renewable energy initiatives and policies to achieve its targets. The renewable energy capacity target is set at 13 GW by 2025 (31% of total capacity), 18 GW by 2035 (40%), and 55 GW by 2050 (70%). As of December, Malaysia has reached 11.9 GW. The primary contributors to this progress are hydropower and solar energy (especially rooftop solar). Given the current trajectory, Malaysia is optimistic in meeting its 2025 renewable energy target.

(2) **Hong Kong, China** presented that an ambitious target has been set to achieve 7.5% to 15% renewable energy in the total energy mix by 2050, as outlined in Hong Kong's Climate Action Plan 2050. Additionally, efforts are underway to completely phase out coal for electricity generation and increase the share of zero-carbon and renewable energy in their fuel mix to approximately 60-70% by 2035. To achieve these goals, a range of initiatives is being implemented to promote renewable energy adoption and explore new opportunities.

(3) **Chile** presented its target of achieving 100% zero emissions. To meet this goal, in addition to the development of solar and wind energy, Chile will need to advance energy storage technologies and implement a comprehensive decarbonization plan. As part of this effort, three major projects are set to launch soon: the Largest Solar PV Park, the Thermal Complex Retrofit, and the Green Hydrogen Industrial Complex in Chile. Additionally, an update on green hydrogen (GH2) projects was provided, and members were encouraged to participate in the survey and interviews for the project "Certification of Hydrogen and its Derivatives in APEC Economies: Its Role in Driving the Market" (EWG 105 2024A).

(4) **Thailand** presented its final energy consumption data for 2023 and outlined its strategic plans for energy development. In 2023, renewable energy accounted for approximately 14.5% of total final energy consumption, with 30% used for electricity generation, 64% for industrial applications, and 17% as fuel for transportation. According to the Alternative Energy Development Plan (AEDP 2024-2037), Thailand aims to increase the share of renewable energy to 37% of total final energy consumption by 2037. The plan specifies detailed targets for various types of renewable energy across key sectors, including power generation, thermal energy, and biofuels and alternative fuels for transportation.

(5) **Viet Nam** shared two new decrees issued in 2024, Decree 80/2024/ND-CP and Decree 135/2024/ND-CP. The Decree 80/2024/ND-CP introduces

a direct transaction mechanism between renewable energy producers and large consumers, offering two models — private transmission lines and the national grid — to promote renewable energy use and increase market competition. Decree 135/2024/ND-CP supports self-consumption rooftop solar systems by removing licensing requirements, offering tax incentives, simplifying procedures, and encouraging energy storage, making installation easier for small users. Meanwhile, stricter regulations apply to systems over 1,000 kW and public facilities to balance market growth with policy goals.

3.6 EGNRET Administration and Operation by Ms. Yi-Ting Chang, EGNRET Secretariat

3.6.1 Terms of Reference (ToR)

(1) The Senior Officials recommended the renewal of the EWG, requiring all expert groups to update their ToRs and report to SCE1 in 2025. In response, the EGNRET Secretariat revised a draft ToR, which was endorsed on January 16, 2025, following member review.

(2) Key revisions include updates to EGNRET's mission statement, incorporating the Energy Security Initiative (ESI), the Just Energy Transition Initiative (JETI), and APEC Policy Guidance to Develop and Implement Clean and Low-carbon Hydrogen Frameworks in the Asia-Pacific. These changes align with the 2024 EWG Fora assessment results and guidance from the APEC Secretariat and EGNRET members, ensuring consistency with the EWG ToR and APEC initiatives.

(3) Further modifications include the addition of APEC's guiding documents—the Putrajaya Vision 2040, the Aotearoa Plan of Action, and APEC Leaders' and Ministerial Statements—to reinforce alignment with broader APEC goals. Standard text required by SCE for policy compliance and references to annual reporting requirements were also incorporated.

(4) Additionally, the "Sunset Clause" was renamed "Term and Review," and

the term period was updated from “2022-2025” to “January 1, 2026-December 31, 2029,” ensuring consistency with the EWG ToR and relevant clauses.

3.6.2 Upcoming Meetings

The EWG 69 Meeting will be held from February 24-27, 2025, in Gyeongju, Korea. Moreover, the next EGNRET Meeting (EGNRET 62) is scheduled to be held with other expert groups as the Joint Meeting of APEC Four Expert Groups from April 8-11, 2025, in Hong Kong, China. The Secretariat also encouraged economies to host the EGNRET 63 Meeting.

3.6.3 Next Chair and Vice Chair Selection

According to the EGNRET ToR, the Chair and Vice-Chair are elected by consensus at the EGNRET meeting for a two-year term of office. Following the nomination period from December 6, 2024, to January 3, 2025, Dr. Chi-Wen Liao from Chinese Taipei was nominated for Chair, and Dr. Yaowateera Achawangkul from Thailand was nominated for Vice-Chair. Indonesia and Japan expressed support for Chinese Taipei, while Chinese Taipei and Japan supported Thailand’s nomination.

With no further interventions, Dr. Liao was re-selected as Chair, and Dr. Achawangkul was selected as Vice-Chair by consensus for the 2025-2026 term, with member endorsement finalized on February 8, 2025.

3.6.4 EGNRET Secretariat List Update

The EGNRET Secretariat shared the updated EGNRET Secretariat list at the meeting, as Dr. Keng-Tung Wu and Ms. Debbie Teng have jointed the Secretariat. The updated list was endorsed by members on December 19 in

2024.

3.7 EGNRET Report by Ms. Wei-Chia Huang, EGNRET Secretariat

The EGNRET Secretariat reported the outcome of the 61st EGNRET Meeting, including meeting highlights, the number of economies and APEC fora participating in the meeting, a brief summary of presentations shared by each APEC forum, the result of the EGNRET Chair and Vice Chair Selection for the 2025 to 2026 term, project updates, and conclusions. The EGNRET Secretariat also announced that the EGNRET 62 Meeting will be held with the EGEEC, EGCFE, and EGEDA as a Four Expert Group Joint Meeting and expressed its welcome for the economies to host the EGNRET 63.

3.8 Closing Remarks by Mr. Chun-Li Lee, Deputy Director General, Energy Administration, Ministry of Economic Affairs, Chinese Taipei and Dr. Chi-Wen Liao, Chair of EGNRET

Mr. Chun-Li Lee, Deputy Director General from the Energy Administration, Ministry of Economic Affairs, Chinese Taipei, extended his gratitude to all delegates from each economy and APEC fora for supporting and contributing to the 61st Meeting of APEC Expert Group on New and Renewable Energy Technologies (EGNRET 61). He mentioned that as a member of APEC, Chinese Taipei is determined to move towards net zero. Besides developing green energy, Chinese Taipei is also advancing the deployment of their offshore wind power. Chinese Taipei believes that through continuous innovations and the exchanges among APEC members, the economic growth in the Asia-Pacific region can be fostered, and together APEC members can build a more sustainable future for our future generations.

Dr. Chi-Wen Liao, Chair of EGNRET, expressed his sincere appreciation to all delegates and representatives from each economy and expert group for their contributions, insights, and presentations to the meeting. He also thanked Chinese Taipei for hosting the EGNRET 61. Although the meeting was held

virtually this time, he believes that this platform has allowed everyone to come together, share each other's experiences and perspectives, and contribute to advancing new and renewable energy technologies. He believes that by working together, EGNRET members can jointly achieve their current and new goals. Finally, he thanked everyone for their support and active engagement in EGNRET and wished all participants a joyful and prosperous new year.

ANNEX: LIST OF The 61st EGNRET MEETING PARTICIPANTS

	Title	Given Name	Family Name	Economy/EGs/Fora	Organization
1	Mr.	Takayuki	Niikura	**APEC Secretariat**	APEC Secretariat
2	Dr.	Kazutomo	IRIE	**APERC**	Asia Pacific Energy Research Centre (APERC)
3	Mr.	Glen	SWEETNAM	**APERC/EGEDA**	Asia Pacific Energy Research Centre (APERC)
4	Mr.	Yoshiaki	Imaizumi	**APERC**	Asia Pacific Energy Research Centre (APERC)
5	Mr.	Edito	BARCELONA	**APERC**	Asia Pacific Energy Research Centre (APERC)
6	Mrs.	Elvira	GELINDON	**APERC/EGEDA**	Asia Pacific Energy Research Centre (APERC)
7	Mr.	Daniel	BURLUTSKY	**APERC**	Asia Pacific Energy Research Centre (APERC)
8	Dr.	Yong	SUN	**APSEC**	APEC Sustainable Energy Center (APSEC)
9	Dr.	Jinlong	MA	**APSEC**	APEC Sustainable Energy Center (APSEC)
10	Ms.	Jovian	CHEUNG	**EGEEC**	Electrical and Mechanical Services Department
11	Mr.	Chun Yin	LI	**EGEEC**	Electrical and Mechanical Services Department
12	Dr.	Chi-Wen	Liao	**EGNRET Chair**	Industrial Technology Research Institute (ITRI)
13	Dr.	Keng-Tung	Wu	**EGNRET Secretariat**	Industrial Technology Research Institute (ITRI)
14	Ms.	Yi-Ting	Chang	**EGNRET Secretariat**	Industrial Technology Research Institute (ITRI)
15	Ms.	Wei-Chia	Huang	**EGNRET Secretariat**	Industrial Technology Research Institute (ITRI)
16	Mr.	Michael	Paunescu	**Canada**	Natural Resources Canada
17	Ms.	Adelaida	Baeriswyl	**Chile**	Ministry of Energy

18	Mr.	Gonzalo	Yévenes	**Chile**	Ministry of Foreign Affairs of Chile, Subsecretaría de Relaciones Económicas Internacionales(SUBREI)
19	Ms.	Elaine	YIP	**Hong Kong, China**	Electrical and Mechanical Services Department
20	Mr.	Takao	IKEDA	**Japan**	The Institute of Energy Economics, Japan
21	Mr.	Yoshiomi	Yoshino	**Japan / EGCFE**	Ministry of Economy, Trade and Industry / Expert Group on Clean Fossil Energy (EGCFE)
22	Mr.	Takehiko	Saeki	**Japan**	Ministry of Economy, Trade and Industry
23	Mr.	Gota	Arimura	**Japan**	Ministry of economy, Trade and industry
24	Mr.	Hyung Man	Kim	**Republic of Korea**	Korea Energy Agency
25	Mrs.	Yun Kyong	Park	**Republic of Korea**	Korea Energy Agency
26	Mr.	Hyunjong	Hwang	**Republic of Korea**	Korea Energy Agency
27	Mrs.	WAN NIHAYAH	BINTI WAN HUSSIN	**Malaysia**	Ministry of Energy Transition and Water Transformation
28	Mr.	MUHAMAD HAFIZ WILDAN	HASSAN	**Malaysia**	Ministry of Energy Transition and Water Transformation
29	Ms.	Dewi	Zamora Mendoza	**Peru**	Ministry of Foreign Affairs
30	Mr.	Victor	Muñoz Tuesta	**Peru**	Ministry of Foreign Affairs
31	Mr.	Rommel	Castro	**Peru**	Peru's Ministry of Energy and Mining
32	Ms.	Ruby	De Guzman	**Republic of Philippines**	Department of Energy

33	Ms.	Realo	Anna Mikko Guadines G.	**Republic of Philippines**	Department Of Energy
34	Ms.	Angelica	Delos Santos	**Republic of Philippines**	Department Of Energy
35	Mr.	Chun-Li	Lee	**Chinese Taipei**	Energy Administration, Ministry of Economic Affairs
36	Ms.	Su-Chen	Weng	**Chinese Taipei**	Energy Administration, Ministry of Economic Affairs
37	Dr.	Chung-Hsien	Chen	**Chinese Taipei**	Energy Administration, Ministry of Economic Affairs
38	Mr.	Bo-Ru	Chen	**Chinese Taipei**	Energy Administration, Ministry of Economic Affairs
39	Ms.	Shih-Hua	Hsu	**Chinese Taipei**	Energy Administration, Ministry of Economic Affairs
40	Ms.	Yu Chi	Liu	**Chinese Taipei**	Energy Administration, Ministry of Economic Affairs
41	Dr.	Tzu-Yar	Liu	**Chinese Taipei**	Industrial Technology Research Institute (ITRI)
42	Mr.	Cheng-Nan	Chu	**Chinese Taipei**	Industrial Technology Research Institute (ITRI)
43	Mrs.	Hui-Ling	Hsu	**Chinese Taipei**	Industrial Technology Research Institute (ITRI)
44	Dr.	Yaowateera	Achawangkul	**Thailand**	Department of Alternative Energy Development and Efficiency (DEDE)

45	Ms.	Kittiya	Kaewmee	**Thailand**	Department of Alternative Energy Development and Efficiency (DEDE)
46	Ms.	Sutthasini	Glawgitigul	**Thailand**	Department of Alternative Energy Development and Efficiency (DEDE)
47	Mr.	Zach	Hauser	**The United States**	U.S. Department of Energy
48	Ms.	Thanh Mai	Dinh	**Viet Nam**	Ministry of Industry and Trade
49	Mr.	Tuan	Nguyen	**Viet Nam**	Ministry of Industry and Trade