The Joint Meeting of APEC EGEEC 65 and APEC EGNRET 63

Meeting Summary

Seoul, Republic of Korea

19-20 November 2025

1. Introduction

The Joint Meeting of the 65th APEC Expert Group on Energy Efficiency and Conservation (EGEEC 65) and the 63rd APEC Expert Group on New and Renewable Energy Technologies (EGNRET 63) was held in Seoul, Republic of Korea, on 19-20 November 2025. This meeting brought together APEC member economies to discuss cross-fora collaboration and the meeting theme "AI-Driven Energy Innovation." The two expert groups conducted their individual meeting in the afternoon on 19 November 2025.

The joint meeting was accompanied by the APEC Workshop on Electric Fans Energy Efficiency Improvement in APEC Region: Review of Experience and Best Practices (EWG 206 2024A), EGNRET Forum on AI-Powered Renewable Energy Innovation, and APEC Capacity-Building Workshops for Energy Efficiency and Conservation Policy (EWG 205 2024A) on 17 and 18 November 2025, respectively, and along with a technical visit in the afternoon of on 20 November, 2025.

Delegates from eleven (11) member economies (Canada; China; Hong Kong, China; Japan; Republic of Korea; Malaysia; The Philippines; The Russian Federation; Chinese Taipei; Thailand, and Viet Nam) participated in the meeting. Representatives from four (4) APEC fora (APEC Secretariat, EWG, EGEDA, EGCFE, APERC) and three (3) international organizations (IEA, CLASP, Energy Efficiency Hub) also attended.

The list of participants in the joint meeting is attached as an annex to the meeting summary.

2. Opening Session

The session commenced with Welcome Remarks by **Dr. You Jae Young**, **Senior Deputy Director at the Ministry of Climate, Energy and Environment, Republic of Korea,** followed by Opening Remarks from **Dr. Chi-Wen LIAO**, **EGNRET Chair**. The session then proceeded with **Dr. LIU Meng**, **EGEEC Chair**, facilitating the adoption of the agenda.

3. Host Economy Presentation

Mr. Junho JEONG, **Senior Manager at the Korea Energy Agency (KEA)**, presented on behalf of the host economy, Republic of Korea. This report outlined Korea's energy consumption status, renewable energy policy changes, and global energy trends. **Energy Status:** Korea ranks 9th globally in primary energy supply, 7th in oil consumption, and 6th in electricity consumption, with a high dependence on energy imports, accounting for 94.4% of total energy demand. The industrial sector remains the largest consumer, driven by energy-intensive industries. **Policy Changes:** Korea is pivoting to a state-led expansion of renewable energy, prioritizing orderly solar growth and accelerating wind energy development, with strategies including a government-led wind industry ecosystem, strategic solar expansion with grid considerations, market reforms (RPS, SRPS, PPA), and support for overseas market development. Consequently, the 2030 deployment outlook for solar and wind has been revised upward. **Global Trends:** The presentation highlights challenges such as rising trade barriers (e.g., U.S. IRA, EU CBAM) and surging electricity demand from AI data centers, emphasizing the need for stronger industrial competitiveness and a sustainable energy transition.

4. Updates from APEC Fora and Sub-fora

Updates were provided by the APEC Secretariat, EWG, and key expert groups.

4.1 APEC Secretariat Updates

This report was presented by **Mr. Takayuki NIIKURA**, **Program Director at the APEC Secretariat**. The Secretariat provided a comprehensive overview of the EWG's strategic and operational trajectory for 2025. The Secretariat then highlighted the active implementation of capacity-building projects addressing critical themes such as energy efficiency, energy security, renewable energy, hydrogen, gas, and the integration of artificial intelligence into energy systems. The Secretariat also reported an adjustment to the EELCER Sub-fund Criteria and Guidelines, raising the funding ceiling from USD 100,000 to USD 150,000 effective from Project Session 1 in 2026, in order to accommodate global inflationary pressures on project costs. On the diplomatic front, the Secretariat outlined the upcoming agenda, anchored by high-level dialogues in Korea, notably the 15th Energy Ministerial Meeting (EMM15), and guided by the Leaders' Gyeongju Declaration, which underscored a regional commitment to grid modernization and energy resilience. Concurrently, the Secretariat reported that the EWG is navigating a governance renewal process mandated by the Steering Committee on ECOTECH (SCE), which necessitates the updating of its Terms of Reference and Strategic Plan by the end of 2025 to ensure continued alignment with APEC's institutional standards.

4.2 EWG Updates

This report was presented by **Prof. SHAN Weiguo, Lead Shepherd at the EWG**. The Lead Shepherd provided the latest progress, which closely aligns with APEC's overarching vision and the priorities of the 2025 host economy, Republic of Korea. Committed to reducing APEC's aggregate energy intensity and doubling the share of modern renewable energy in energy mix, the EWG focused its core 2025 agenda on expanding electricity supply, strengthening power grid security and reliability, and empowering AI-driven energy innovation. Throughout the year, the EWG deepened cooperation via the 15th Energy Ministerial Meeting (EMM15) and Joint Expert Group Meetings, with plans to release key deliverables such as the Implementation Plan of the APEC Policy Guidance to Develop and Implement Clean and Low-Carbon Hydrogen Policy Frameworks and the 9th edition of APEC Energy Demand and Supply Outlook. Furthermore, the EWG is actively advancing cross-fora collaboration with international bodies like the IEA, IRENA, UN ESCAP, ADB, and IEF

and expects to finalize its 2025-2030 Strategic Plan following the update of its Terms of Reference.

4.3 EGEDA Updates

This report was presented by **Ms. Elvira Torres Gelindon**, **EGEDA Secretariat**. The Secretariat provided a comprehensive overview of data collection and processing, training courses and workshops, as well as international cooperation. The Secretariat has completed the publication of the APEC Energy Statistics 2022 and has finished processing the 2023 annual energy supply and demand data from member economies, which is now being prepared for publication. The Secretariat also collects annual energy prices, annual GHG emissions (such as CO_2 and CH_4), energy efficiency indicators, and monthly oil and gas supply and demand through cooperation with JODI, with all data available on the IGEDA EGEDA website. Following the successful completion of the 23rd Energy Statistics Workshop, a new training session is scheduled for early 2026 in Tokyo to further enhance the statistical capabilities of member economies.

The Secretariat also reported the progress toward APEC energy goals during the meeting. Data indicates that in 2023, final energy consumption intensity in the APEC region improved slightly compared to the previous year, achieving a cumulative reduction of 29.2%. Modern renewable energy, particularly solar and wind, has have shown significant growth. APEC likewise supports the global goal of tripling renewable capacity, and it was reported that, with 62% of the global renewable energy installed capacity, the region continues to contribute substantially to the global goal. of tripling renewable capacity.

4.4 EGCFE Updates

This report was presented by **Mr. Mitsuhito TAKADA**, **Vice President of at the APERC**, on behalf of the EGCFE. The Vice President provided a comprehensive overview of the group's core activities in 2025, including the EGCFE 2025 annual meeting and the 8th OGSN Forum held in Hong Kong, China, the 6th Oil and Gas Security Exercise (OGSE) completed in Indonesia, and the publication of several thematic reports on oil, gas, coal, and hydrogen.

Looking ahead, a workshop on cleaner and more efficient operation of the fossil energy

industry is scheduled for December 2025 in Tokyo. Plans for 2026 include conducting the 7th OGSE in Malaysia in February and launching the 1st Annual Convention for the APEC Clean and Low-Carbon Hydrogen Policy Network in Hong Kong, China in May. Notably, the EGCFE 2026 annual meeting will be held jointly with the 9th OGSN Forum in Hokkaido, Japan, featuring a site visit to the Tomakomai CCS demonstration project. The report concludes with a call for member economies to actively submit more project proposals to sustain cooperation in these critical areas.

4.5 EGEEC Updates

This report summarizes the outcomes of the 64th EGEEC meeting and recent updates on organizational governance. The meeting, previously held in Hong Kong, China, convened 18 economies and multiple international organizations to deliberate on pathways for enhancing energy efficiency in electricity generation and appliances. During the sessions, CLASP and UNEP presented insights on air conditioner efficiency and district heating and cooling systems, respectively, while the Energy Efficiency Hub (EE Hub) provided updates on its progress in areas such as digitalization. The EGEEC Chair highlighted the concept of Integrated District Energy Systems (IDES), aiming to optimize regional energy efficiency through a systemic framework, with plans to develop relevant standards by 2026. Regarding governance, the report confirmed the new Chair and Vice-Chair appointments for the 2025-2027 term, endorsed the draft Terms of Reference for the next four years, and officially accepted CLASP as a guest member to further deepen international cooperation on energy efficiency.

4.6 EGNRET Updates

This report was presented by **Dr. Chi-Wen Liao**, **EGNRET Chair**. The Chair reviewed the outcomes of the 62nd EGNRET meeting, the joint meeting of Four Expert Groups of the APEC EWG, and the joint meeting with the EGCFE, focusing on discussions around utilizing carbon-free energy technologies to expand clean electricity, and the APEC Policy Guidance to Develop and Implement Clean and Low-Carbon Hydrogen Policy Frameworks in the Asia-Pacific. The Chair also briefed on the report given at the 70th EWG meeting and updated the project portfolio: as of November 2025, there are 17 ongoing projects, 5 five newly endorsed proposals, and 4four recently completed projects. Additionally, the meeting confirmed that

the 64th EGNRET meeting will take place in Bangkok, Thailand, in the spring of 2026, with a theme focused on driving the Bio-Circular-Green (BCG) Economy with clean energy technology.

4.7 APERC Updates

This report was presented by **Mr. Mitsuhito TAKADA**, **Vice President at the of APERC**. The Vice President provided a comprehensive overview of APERC's core achievements in 2025, highlighting the upcoming release of the 9th APEC Energy Demand and Supply Outlook, the publication of the   APEC Energy Overview 2025, and several thematic reports covering coal, oil, gas, and hydrogen. In terms of policy cooperation activities, APERC continues to advance capacity building workshops on energy efficiency and conservation policy, as well as cleaner and more efficient fossil energy operations. It also deepened the Oil and Gas Security Initiative (OGSI) by completing a security exercise in Indonesia and conducting research on issues such as declining LNG investment.

Future, APERC outlines a detailed plan for 2026 aimed at driving regional energy transition through diverse international activities. Key initiatives include hosting the first New and Renewable Energy Policy workshop in Bangkok, Thailand, in March, convening the inaugural Clean and Low-Carbon Hydrogen Annual Convention in Hong Kong, China in May, and conducting a new round of oil and gas security exercises in Malaysia. Furthermore, APERC continues to strengthen capabilities in energy data management and modeling by scheduling a series of statistics training sessions and energy modeling seminars in Tokyo to consistently enhance the energy analysis expertise of member economies.

5. Meeting Theme: "AI-Driven Energy Innovation"

Members engaged in extensive discussions on the theme "AI-Driven Energy Innovation." Presentations covered how Artificial Intelligence is being utilized to optimize energy management, enhance grid stability, and accelerate the deployment of renewable energy technologies. Economies shared case studies on using AI for demand-side management and predictive maintenance in energy infrastructure.

5.1 China

This report on "AI Empowers the Development of China's Offshore Wind Power" was presented by **Dr. Liu Wei**, **Deputy Director at the State Power Investment Corporation (SPIC)**, **China**. China provided a comprehensive overview of the significant achievements in its offshore wind industry, driven by policy guidance and technological innovation. The report noted that China's offshore wind cumulative installed capacity now accounts for over 50% of the global total, and the Levelized Cost of Energy (LCOE) has decreased significantly, driven by technological advancements and a mature supply chain, with nearshore project costs now around USD 0.04/kWh, making it economically competitive with traditional energy sources.

Addressing challenges such as technical bottlenecks, high operation and maintenance (O&M) costs and system integration compatibility as the offshore wind industry expands into deep and distant seas, the presentation highlighted the critical enabling role of Artificial Intelligence (AI) throughout the project lifecycle. By integrating AI into planning and design, equipment manufacturing, construction and O&M, the offshore wind industry has achieved precise resource assessment and efficient fault prediction, significantly reducing overall costs. Looking forward, the sector is evolving towards intelligent deep-sea development and a collaborative multi-energy ecosystem. The report also emphasized China's commitment to promoting global standards and industrial cooperation and expresses an active willingness to deepen international exchange on Zero-carbon Industrial Parks as the host of APEC 2026.

5.2 Hong Kong, China

This report was presented by **Mr. Ngai Hang CHU**, **Senior Engineer at the Electrical and Mechanical Services Department (EMSD)**, **Hong Kong, China**. Hong Kong, China summarized the progress regarding its strategy to achieve carbon neutrality before 2050, with a primary focus on enhancing building energy efficiency and adopting clean energy. Hong Kong, China is amending the Buildings Energy Efficiency Ordinance and upgrading the Mandatory Energy Efficiency Labelling Scheme (MEELS) to significantly reduce electricity consumption in commercial and residential sectors by 2035. District Cooling Systems (DCS), a critical infrastructure, have expanded from Kai Tak to new development

areas like Tung Chung and Hung Shui Kiu, actively incorporating artificial intelligence and optical fiber technologies to optimize operational efficiency. Furthermore, Hong Kong, China is exploring tax incentives to encourage private sector participation in DCS construction and plans to host an APEC training workshop on District Cooling and Heating Systems in the first quarter of 2026 to continuously drive the digital and green transformation of electrical and mechanical facilities.

5.3 Japan

This report on "Overview of the Strategic Energy Plan" was presented by **Ms. Seonghee KIM** and **Mr. Takao IKEDA**, **Executive Economist at the Institute of Energy Economics, Japan (IEEJ)**. Japan outlined the core directions and strategic adjustments in its latest 7th Strategic Energy Plan. While continuing to uphold the "S+3E" principle (Safety + Energy Security, Economic Efficiency, Environmental Sustainability), the plan re-emphasizes the importance of energy security and economic efficiency in light of resurging geopolitical risks and the rising electricity demand driven by emerging industries such as data centers. Japan has set a target to reduce greenhouse gas emissions in the energy sector by 70% by 2040 compared to 2013 levels and is committed to increasing the share of non-fossil power generation to between 60% and 70%. Japan specifically highlighted that to address the challenges of renewable energy fluctuations and integration costs, Digital Transformation (DX: AI, IoT) will play a key role in enhancing the accuracy of power generation forecasting and output fluctuation management, optimizing supply-demand balance, and strengthening the monitoring and management of distributed energy resources (DERs). Furthermore, for the hard-to-abate heat sector, the plan proposes specific decarbonization pathways utilizing hydrogen and its derivatives, Carbon Capture and Storage (CCS), and biofuels.

5.4 Malaysia

This report on "AI-driven energy innovation in Malaysia" was presented by **Ms. Khalilulnisha Abu Bakar**, **Principal Assistant Secretary at the Ministry of Energy Transition and Water Transformation**, **Malaysia**. Malaysia outlined its progress in leveraging AI technologies to address core challenges such as electricity supply losses, instability in renewable energy grid integration, and low energy efficiency. Tenaga Nasional Berhad (TNB) has successfully deployed smart grid and digital twin technologies, achieving

self-healing grid capabilities and predictive asset maintenance. In the energy efficiency sector, the Diamond Building in Putrajaya and the District Cooling System in Cyberjaya have set benchmarks through building automation and AI optimization.

In the future, Malaysia plans to fully roll out smart meters by 2026 and utilize the MyTNB app to enhance user awareness of energy management. As the ASEAN Chair for 2025, Malaysia aims to drive the ASEAN Power Grid interconnection. Seizing this opportunity, the country will continue to accelerate the deep application of AI in the energy sector and foster regional cooperation by updating regulatory frameworks, strengthening financial support, and enhancing skills training.

5.5 The Philippines

This presentation on "ENERGY EFFICIENCY AND CONSERVATION ACT" was delivered by **Ms. Dorella Maye Perlas, Senior Science Research Specialist at the Department of Energy**, **the Philippines**. The Philippines provided a comprehensive review of the implementation progress of the legal framework anchored by the Energy Efficiency and Conservation Act (Republic Act No. 11285). Building on this foundation, the Philippines has established the National Energy Efficiency and Conservation Plan (NEECP) covering the period from 2023 to 2050. This plan aims to mainstream energy efficiency across all economic sectors—including government, commercial, and industrial—through a structured roadmap with defined short, medium, and long-term interventions.

To foster deeper industry collaboration, the inaugural Philippine Conference on Energy Efficiency and Conservation (PCEEC) was convened in 2025. Moving forward, strategic priorities will center on Demand Side Management, the expansion of Minimum Energy Performance Standards (MEPS), and the accelerated implementation of the Government Energy Management Program (GEMP). Crucially, by enhancing the National EEC Database and ensuring continuous monitoring of Designated Establishments (DEs), the Philippines is dedicated to solidifying the data foundation necessary to effectively drive AI-based innovations within the energy sector.

5.6 The Russian Federation

This report was delivered by **Ms. Ulyana Rybachik**, **Senior Specialist at the Russian Energy Agency**, **Ministry of Energy of the Russian Federation**. Russia outlined its strategy to support digitalization, aligned with national development goals for 2030 established at the federal level. Key initiatives include the new national project "Data Economy and Digital Transformation of the State," which aims to achieve high digital maturity across energy infrastructure and sector participants by optimizing business processes, adopting new technologies, and implementing unified standards for information architecture, AI, and authorization. Russia also highlighted that AI is considered a key advantage of the project: since 2019, Russia has implemented a national AI development strategy for 2030, providing a foundation for energy companies to develop their own AI initiatives. Between 2021 and 2025, the share of energy companies using AI doubled to 60%, and it is expected to reach 70% by 2027.

In the future, Russia will continue to foster international collaboration and maintain continuous monitoring, providing a strategic framework to build resilient, inclusive, and sustainable digital energy ecosystems that can adapt to new technological and environmental challenges and enhance governance.

5.7 Chinese Taipei

This report on "AI-Driven Energy Innovation in Chinese Taipei" was presented by **Ms. Yu-Chi Liu**, **Senior Planner at the Energy Administration (EA), Ministry of Economic Affairs**, **Chinese Taipei**. Chinese Taipei outlined its pathway toward net-zero emissions by 2050, with renewable energy expected to supply 60–70% of total electricity. Chinese Taipei also highlighted how Artificial Intelligence (AI) is enhancing the efficiency, safety, and reliability of renewable energy systems, particularly in solar power and offshore wind, through smart inspection, early warning, and real-time monitoring. Looking ahead, AI will support integrated energy management, connecting environmental, maritime, and asset data to build a smarter, more resilient, and sustainable green energy system.

The presentation by **Dr. Chi-Chun HUANG**, **Deputy Division Director at the Industrial Technology Research Institute (ITRI)**, **Chinese Taipei**. Chinese Taipei showcased

practical applications of Artificial Intelligence (AI) in enhancing energy efficiency across industrial, commercial, and residential sectors. In the industrial sector, AI and machine learning optimized the textile dyeing and finishing process, improving energy efficiency by over 10%, reducing rework by 50%, and shortening modeling time by 58%. In the commercial sector, AI-managed HVAC, lighting, and refrigeration in convenience stores achieved approximately 65% energy savings per store, with predictive maintenance and continuous optimization implemented across more than 3,000 stores in Chinese Taipei. Chinese Taipei also demonstrated how AI-driven solutions can reduce energy consumption, cut costs, and support sustainable green energy practices.

5.8 Thailand

This report on "THAILAND's AI-Driven Energy Innovation" was presented by **Mr. Ratchaphak Tantisanghirun**, **Engineer at the Department of Alternative Energy Development and Efficiency (DEDE)**, **Thailand**. Thailand outlined its key initiatives to accelerate achieving its Net Zero emissions target by 2050. Addressing the transportation and industrial sectors, which dominate energy consumption, Thailand is committed to improving energy efficiency and reducing dependence on fossil fuels.

In terms of implementation, Thailand highlighted three main innovation pillars: First, the establishment of the Demand Response Control Center (DRCC) to manage grid balancing amidst renewable energy fluctuations, which is now expanding into Electric Vehicle (EV) load aggregation. Second, the showcase of the DEDE 70th Anniversary Building as a prototype for a Zero Energy Building (ZEB), utilizing solar power and smart systems to achieve an energy consumption reduction of over 70%. Finally, the creation of the Renewable Energy Forecast Center (REFC), which uses AI algorithms to accurately predict solar and wind output, enhancing grid resilience and supporting clean energy planning.

6. Individual Expert Group Meeting

6.1 EGEEC 65

The EGEEC held its individual session in the afternoon on 19 November 2025, focusing on governance, projects, and international cooperation.

6.1.1 Invited Presentations

CLASP: Presented on "Doubling Energy Efficiency with Appliances." CLASP emphasizes that appliances and equipment account for 36% of global final energy consumption and nearly 40% of energy-related carbon emissions, making them a key area for achieving climate goals. To meet the COP28 target of doubling the global average annual rate of energy efficiency improvements to 4% by 2030, the report points out that existing policies are insufficient, while improving appliance efficiency could bridge 20% of the energy reduction gap needed to reach Net Zero emissions by 2050. Through in-depth case studies of Brazil, China, India, and Indonesia, the report reveals significant room for improvement in key equipment such as air conditioners, motors, and industrial boilers in these countries compared to the world's best Minimum Energy Performance Standards (MEPS). In light of this, CLASP recommends that economies should strengthen MEPS by benchmarking against the highest international standards, set measurable efficiency targets and integrate them into Nationally Determined Contributions (NDCs), and enhance regional and international collaboration to accelerate global progress in energy efficiency.

APERC: Presented on A preview of "APERC APEC Data Centre Electricity Demand preview". This preview report on data center electricity demand was presented by Ms Jungyoon KIM, Senior Researcher at APERC, at the 65th EGEEC Meeting. Based on the forthcoming 9th APEC Energy Demand and Supply Outlook, the report analyzes the growth trends of electricity demand for data centers in the APEC region against the backdrop of the rapid development of the digital economy and AI. It is projected that this demand will almost triple by 2030 and quadruple by 2035, becoming a major driver of regional electricity consumption growth. While this trend presents investment opportunities for economic growth and the low-carbon transition, it also poses significant challenges to grid infrastructure, clean energy supply, and system stability. The report emphasizes that in the face of forecasting uncertainties and pressures from localized load surges, economies need to balance competitiveness with sustainability, optimizing grid planning and expanding clean energy scale through strengthened public-private cooperation.

IEA: Delivered a video presentation reporting on the latest developments in global energy efficiency in 2025. The report analyzed four major trends contributing to the slow progress,

including increased energy consumption in the industrial sector, policy implementation lagging behind technological advancements, and rising demand for air conditioning. Simultaneously, it highlighted the accelerating pace of policy development in the Asia-Pacific region and put forward recommendations for accelerating energy efficiency progress by increasing the ambition of existing policies and filling policy gaps.

Energy Efficiency Hub (EE Hub): the head of EE hub introduced its mission and four task groups. and outlined the recent activities of each working group, including the Digitalization Working Group's focus on data centers, as well as the Building Working Group's work on financing for building energy retrofits and life-cycle analysis, and he mentioned a series of workshops and conferences recently organized by the Hub, aimed at enhancing the visibility of energy efficiency and promoting the sharing of best practices.

6.1.2 Project updates and new Concept Notes

EGEEC Secretariat give a review report first. It provides a comprehensive overview of the 13 projects currently managed by the group, spanning the full life cycle from completion to proposal stages. APERC, Chinese Taipei and Viet Nam give the presentation about updates of projects. China propose a new concept note and give the presentation.

● APERC project update:

This The progress report on the APERC APEC Capacity Building Workshop for Energy Efficiency and Conservation Policy (EWG 205 2024A) was presented by APERC Researcher Yasmin Fouladi. The project aims to assist APEC economies in strengthening their policy-making capabilities through two-phase workshops to supporting the regional goal of reducing energy intensity. The Phase 1 workshop was successfully concluded on November 18, 2025, in Seoul, where representatives from 13 economies focused on the implementation challenges of Minimum Energy Performance Standards (MEPS). There was a consensus that establishing robust compliance mechanisms and promoting standards harmonization are key to ensuring the effectiveness of MEPS. The report concluded by confirming that the Phase 2 workshop, focusing on policy impact assessment, is scheduled to be held in Bangkok, Thailand, in March 2026, with preparations proceeding as planned.

- Chinese Taipei update

This progress report on the project "Electric Fans Energy Efficiency Improvement in APEC Region" (EWG 206 2024A) was presented by the representative from Chinese Taipei. The project aims to formulate strategies to increase the market share of high-efficiency, low-carbon electric fans within the APEC region by investigating current technologies and best practices.

As a core component of the project, a workshop was successfully held in Seoul on November 17, 2025. The event convened experts from 11 economies and international organizations such as CLASP and UNEP to facilitate in-depth discussions on market status, Minimum Energy Performance Standards (MEPS), and technological trends. Key takeaways from the meeting emphasized the importance of adopting IEC international test standards to promote regional harmonization, while also highlighting major challenges such as the high cost of efficient motors (BLDC) and insufficient market compliance surveillance. The project is currently in its concluding phase, with the final report expected to be completed and submitted for EGEEC endorsement by December 2025.

- Viet Nam update

This progress report on the Viet Nam-led "APEC Workshop on Promoting Energy Efficiency in the Manufacturing Sector" (EWG 102 2024A) summarizes the project's execution status and outcomes. As an initiative aimed at driving regional manufacturing energy efficiency through experience exchange, the workshop was successfully concluded in Da Nang, Viet Nam, in June 2025. The event attracted 80 delegates from APEC economies, who engaged in in-depth discussions on key topics such as energy efficiency policy incentives, the application of smart manufacturing technologies, and green financing models. The project successfully facilitated knowledge sharing on both technical and policy levels among stakeholders and formulated specific industry development recommendations. Currently, the project is in its concluding phase, with the final report containing detailed outcomes expected to be formally submitted by December 2025.

- New Concept Note (China)

Concept note submitted by China focuses on promoting the widespread deployment of high-efficiency low-carbon Room Air Conditioners (RACs) in the APEC region. The proposal aims to remove market barriers and enhance regional energy efficiency through strengthened policy coordination, standards benchmarking, and the sharing of technological best practices. The project outlines a systematic series of activities, including status surveys, comparative analysis, capacity-building workshops, and the publication of guidebooks. It is scheduled to launch in December 2025 and run through the end of 2027. The plan is to submit it in the first session of 2026, they are currently actively seeking support from the member economies.

6.1.3 Governance and Administration

This report on EGEEC governance confirmed key leadership appointments and institutional updates. The meeting officially approved the new leadership arrangement for the term from July 2025 to June 2027, with Dr. LIU Meng from China serving as Chair and Ms. Jovian CHEUNG from Hong Kong, China as Vice-Chair. At the same time, the Expert Group completed the revision and endorsement of the Terms of Reference (ToR) for 2026-2029, establishing the work agenda for the next phase. Furthermore, to expand the international energy efficiency cooperation network, the Chair proposed to inviting the EE Hub to apply for Guest Status in the EGEEC.

The Chair noted that the EE Hub's objectives align with those of EGEEC, and the Guest Status will further boost energy efficiency efforts across all economies.. He expressed hope to in inviting the EE Hub to apply for Guest Status in the EGEEC to foster better cooperation with member economies and promote energy efficiency improvements.

 Participating members have no adverse comment and the EGEEC Secretariat will further solicit feedback from all member economies via email after the meeting.

6.2 EGNRET 63

The 63rd EGNRET Meeting was held from 02:30 PM to 04:20 PM on November 19, 2025, focusing on the submission process and progress of EGNRET projects, project updates, administration and operation, and discussion of AI-Driven Energy Innovation.

6.2.1 Welcome & Adoption of Meeting Agenda

Dr. Chi-Wen Liao, **Chair of EGNRET**, extended a warm and cordial welcome to all participants, and expressed heartfelt appreciation to the Republic of Korea for its invaluable support in organizing this important meeting.

The Chair recalled that the 62nd EGNRET Meeting had addressed "Collaboration on Potential New APEC Goals and Clean and Low-Carbon Hydrogen (CLCH)." Building on that momentum, the 63rd EGNRET meeting would further delve into "AI Driven Energy Innovation," highlighting its critical role in enhancing advancing renewable energy forecasting, grid integration, and smart energy systems. He encouraged participants to take full advantage of this opportunity to engage in further discussions. The meeting agenda was subsequently adopted by participating member economies.

6.2.2 Submission Process and Progress of EGNRET Projects

This report was presented by **Ms. Wei-Chun Wang**, **EGNRET Secretariat**. The Secretariat provided an overview of the APEC Project Administration System (APAS) and the Guidebook on APEC Projects (Edition 16), detailing the four-stage project submission process: Concept Note preparation and endorsement, Project Proposal development and quality assessment, project implementation and monitoring, and submission of progress and completion reports.

The Secretariat then highlighted key requirements for applying to the EELCER Sub-Fund, including securing at least four co-sponsoring economies, alignment with APEC priorities (energy intensity reduction, renewable energy share, energy resilience, and energy access), demonstrating clear capacity-building benefits for APEC's developing economies, and the budget ceiling for Category 2 projects has been raised to USD 150,000.

The Secretariat also provided an update on the current EGNRET project portfolio: as of November 2025, there are 5 five newly endorsed project proposals, 17 ongoing projects, and 4 four completed projects across member economies.

Finally, the Secretariat concluded by reminding participants to use the latest templates,

ensure compliance with APEC publication guidelines, and submit all required documents in a timely manner, and encouraged further project submissions to advance EGNRET initiatives.

6.2.3 Project Updates

Two (2) Concept Notes, one (1) Project Proposal, and four (4) On-going Projects presented by five (5) APEC economies, namely Canada, Japan (APERC), Russia, Chinese Taipei, and Thailand, are listed in the table below.

Proposing Economy	Project Number	Project Title
Canada	Project Proposal	Roadmapping Hydrogen Codes and Standards
Japan (APERC)	EWG_104_2025A	Capacity Building Workshop for the New and Renewable Energy Policy
Russia	Concept Note	APEC Workshop on Promoting Just Energy Transition
Chinese Taipei	EWG_103_2024A	Benchmark of Facilitated Actions to Fulfill the Energy Efficiency Benefit of AMI in the APEC Region
	Concept Note	Clean & Low-carbon Biohydrogen Building the Green Transition Pathway toward a Sustainable Tomorrow
Thailand	EWG_207_2024A	Enhancing Climate Change Adaptability and Resilience of Energy Infrastructure toward Carbon Neutrality Using Renewable Energy Scheme
	EWG_208_2024A	Promotion and Development of Biogas Technology and Biogas Inventory in the Livestock Farm among APEC Economies

6.2.3.1 Roadmapping Hydrogen Codes and Standards (Canada)

This report was presented by **Ms. Sun Young (Sunny) Park**, **Senior Economic Officer at**

the **Embassy of Canada**, **government of Canada**. Canada reported that Natural Resources Canada and the Standards Council of Canada jointly submitted the project "Roadmapping Hydrogen Codes and Standards," which has been endorsed by both the EWG and SCSC and is pending final approval by the APEC Budget and Management Committee. The project aims to help APEC economies develop hydrogen codes and standards roadmaps by sharing Canada's experience through a workshop, technical guidance, and peer learning. Canada noted that the project workshop is planned for next year, most likely in Western Canada, and welcomed APEC economies to raise questions or follow up with their technical experts.

6.2.3.2 Capacity Building Workshop for the New and Renewable Energy Policy (Japan)

This report was presented by **Mr. Daniel BURLUTSKY**, a **Visiting Researcher of at the APERC**. APERC provided an update on the project "Capacity Building Workshop for New and Renewable Energy Policies," which aims to strengthen APEC economies' policy-making capabilities in support of APEC's goals of doubling the share of renewables in its energy mix by 2030 and contributing to the global tripling goal. The project workshop will be held in conjunction with EGNRET 64 in March 2026 in Bangkok and will focus on identifying common policy challenges, sharing best practices, and gathering expert recommendations. APERC reported that consultant selection is in progress, with workshop design and expert identification planned for from December to January, preparation in February, and implementation from March to early April. APERC also invited EGNRET members to recommend relevant policy experts and thanked EGNRET for providing the platform to host the workshop.

6.2.3.3 APEC Workshop on Promoting Just Energy Transition (Russia)

This report was presented by **Ms. Ulyana Rybachik**, **Senior Specialist at the Russian Energy Agency, Ministry of Energy of the Russian Federation**. Russia shared a project concept note "APEC workshop on promoting a just energy transition," planned for submission in Project Session 1, 2026. The project concept note highlights the need for tailored transition pathways across APEC economies due to differing starting points, resource endowments, and domestic circumstances. In addition, the project concept note is

structured around three components: (1) a baseline study mapping domestic approaches to just energy transition; (2) a two-day workshop in Russia involving policymakers, regulators, researchers, and industry; and (3) a summary report consolidating findings. The initiative aims to support APEC's Just Energy Transition Initiative by focusing on energy security, equity, technological solutions, and future fuels, and APEC Energy Security Initiative by advocating for a technologically neutral strategy and the development of the widest variety of energy sources and technologies. The initiative will also seek collaboration with relevant EWG fora.

6.2.3.4 Benchmark of Facilitated Actions to Fulfill the Energy Efficiency Benefit of AMI in the APEC Region (Chinese Taipei)

This report was presented by **Mr. Cheng-Nan Chu (Jimmy)**, **Deputy Project Director at the Industrial Technology Research Institute (ITRI)**, **Chinese Taipei**. Chinese Taipei provided an update on the project "Benchmark of Facilitated Action to Fulfill the Energy Efficiency Benefit of AMI in the APEC Region". The project, co-sponsored by Chile, the Philippines, the United States, and Viet Nam, aims to help APEC economies maximize the benefits of AMI adoption in the APEC region, emphasize improving behavior feedback, and conduct a real-case survey on early adopters of AMI within the APEC region. The project workshop held on 4–5 September 2025 in Chinese Taipei, which included panel discussions and technical site visit with 64 participants across seven economies. Achievements of the project include strengthened regional cooperation, a unified framework of best practices, validation of AMI benefits such as improved building efficiencies and reduced outages, and exploration of next-generation AMI trends. These insights will inform the final APEC reports, providing actionable policy recommendations.

6.2.3.5 Clean & Low-carbon Biohydrogen Building the Green Transition Pathway toward a Sustainable Tomorrow (Chinese Taipei)

This report was presented by **Dr. Keng-Tung Wu**, **Research Consultant at the Industrial Technology Research Institute (ITRI)**, **Chinese Taipei**. Chinese Taipei shared a project concept note "Clean & Low-carbon Biohydrogen Building the Green Transition Pathway toward a Sustainable Tomorrow," planned for April 2027 to June 2028. The project concept

note, co-sponsored by Canada, Chile, Indonesia, Republic of Korea, Peru, Papua New Guinea, and Thailand, aims to build capacity by developing skills on clean and low-carbon innovation, set collaborative network for stakeholder, and facilitate green energy transition for sustainable growth across APEC economies. Key activities include policy dialogue, workshop, training course, and best practice. The activities will engage regulators, technologists, young entrepreneurs, and APEC stakeholders, with an emphasis on knowledge sharing and gender balance. Funding for the initiative includes US$100,000 from EELCER and US$50,000 in self-funding, which will support policy review, events, and reporting. The project concept note will be carried out in collaboration with PPSTI and other relevant APEC fora to support a clean and low-carbon hydrogen transition.

6.2.3.6 Enhancing Climate Change Adaptability and Resilience of Energy Infrastructure toward Carbon Neutrality Using Renewable Energy Scheme (Thailand)

This report was presented by **Dr. Yaowateera Achawangkul**, **Senior Engineer at the Department of Alternative Energy Development and Efficiency (DEDE)**, **Thailand**. Thailand provided an update on the project "Enhancing Climate Change Adaptability and Resilience of Energy Infrastructure towards Carbon Neutrality using Renewable Energy Stream." The project, co-sponsored by Chile, China, Hong Kong China, Japan, the Philippines, and Viet Nam, aims to promote a mitigation plan and enhance the climate adaptability and resilience of energy infrastructure. Due to unexpected personnel changes in the project time, the project timeline has been adjusted, with the new project team established and the project deadline extended to June 2027. Key activities include consultant selection and contract signing in December 2025 to January 2026, research and survey implementation from February to May 2026, and a two-day workshop in June 2026, followed by completion and publication of the summary report before the end of 2026.

6.2.3.7 Promotion and Development of Biogas Technology and Biogas Inventory in the Livestock Farm among APEC Economies (Thailand)

This report was presented by **Dr. Yaowateera Achawangkul**, **Senior Engineer at the Department of Alternative Energy Development and Efficiency (DEDE)**, **Thailand**. Thailand provided an update on the project "Promotion and Development of Biogas

Technology and Biogas Inventory in the Livestock Farm among APEC Economies." The project, co-sponsored by China, Singapore, Chinese Taipei, and Viet Nam, aims to conduct a need risk assessment by gathering information on current animal waste management practices, develop training materials and technical guidelines including a GHG inventory handbook and toolkit, and compile a summary report by documenting key findings, recommendations, and best practices for publication on the APEC website. Due to unexpected personnel changes in the project time, the project timeline has been adjusted, with the new project team established and the project deadline extended to December 2026. Preparations for consultant selection in November to December 2025, need assessment and data collection early next year, development of the GHG handbook and toolkit in April to May 2026, a three-day workshop including a technical site visit in June to August 2026, and completion of the summary report and publication by November 2026.

6.2.4 EGNRET Administration and Operations

This report was presented by **Ms. Wei-Chun Wang**, **EGNRET Secretariat**. The Secretariat provided an overview of EGNRET administration and operations, including the updates on the Terms of Reference (TORs), the design of the survey questionnaire for the Implementation Plan of the APEC Policy Guidance to Develop and Implement Low-Carbon Hydrogen Policy Frameworks in the Asia-Pacific region.

The Secretariat then provided updates on the 4th Terms of Reference (TORs), endorsed on July 14, 2025, which integrate BESS and demand response into EGNRET's mission objectives, include energy access for Indigenous and remote communities, and introduce a term limit for the Chair and Vice-Chair positions, allowing a maximum of two consecutive terms.

The Secretariat also presented the design of the survey questionnaire for the Implementation Plan of the APEC Policy Guidance to Develop and Implement Low-Carbon Hydrogen Policy Frameworks in the Asia-Pacific region. EGNRET members will review the questionnaire, provide feedback within two weeks, and submit final responses to support EGNRET's alignment with international hydrogen standards and best practices.

Information on upcoming events were also shared by the Secretariat, including the 71st EWG

Meeting, tentatively hosted by China in March 2026, and the 64th EGNRET Meeting in Bangkok, Thailand, from March 31 to April 2, 2026, with the theme "Transforming the Energy Landscape: Driving the Bio-Circular-Green Economy with Clean Energy Technology."

Finally, the Secretariat provided updates on the Secretariat list, endorsed on August 28, 2025, with two new secretaries, Mr. Cheng-Nan Chu (Jimmy) and Ms. Wei-Chun Wang, joining to support EGNRET administration and operations.

6.2.5 Discussion of "AI-Driven Energy Innovation"

6.2.5.1 EGNRET Presentation

The session proceeded with the EGNRET presentation by **Dr. Chi-Wen Liao**, **Chair of EGNRET**. The Chair highlighted the 2025 APEC Energy Ministerial Meeting held in Busan, Republic of Korea, emphasizing the strategic role of artificial intelligence (AI) in driving innovation within the energy sector, noting its contributions to enhancing energy efficiency, strengthening energy security, improving system reliability, and facilitating the integration of renewable energy. The Chair further outlined key AI applications, including predictive analytics, demand management, energy optimization, and advanced developments such as virtual power plants and AI-based energy dispatching, underscoring their importance in supporting sustainable energy transitions across the Asia-Pacific region.

6.2.5.2 Outcome sharing of the "EGNRET Forum on AI-Powered Renewable Energy Innovation"

The session continued with the outcome sharing of the "EGNRET Forum on AI-Powered Renewable Energy Innovation" by **Mr. Cheng-Nan Chu (Jimmy)**, **EGNRET Secretariat**. The EGNRET Forum on AI-Powered Renewable Energy Innovation, held on 17 November 2025 in Seoul, brought together delegates from seven (7) APEC economies, namely Canada, China, Republic of Korea, Malaysia, the Philippines, Chinese Taipei, and Thailand; representatives from three (3) APEC fora, including APEC Secretariat, EWG, APERC; and two (2) international organizations, including International Energy Agency (IEA) and International Renewable Energy Agency (IRENA) also attended. Participants discussed how AI can support renewable energy deployment and enhance system reliability, efficiency,

and integration of variable renewables. Key insights from the IEA included rising electricity demand from data centers driven by AI, and the role of AI in improving forecasting, optimizing grid operations, and accelerating innovation in battery materials and next-generation solar technologies. Presentations from the IRENA, Industrial Technology Research Institute (ITRI), Korea Electric Power Corporation (KEPCO) highlighted practical AI applications such as predictive maintenance, real-time optimization, virtual power plants, and AI-Based Metering Solution like LossPro. Experiences from APEC, Chinese Taipei, and Thailand demonstrated AI's contribution to energy security, offshore wind operations, smart grid development, and regulatory sandboxes. The EGNRET Forum concluded that AI and digitalization are essential for advancing renewable energy integration, strengthening system efficiency and resilience, and that supportive policies and enhanced regional cooperation are critical to achieving a smart, low-carbon, and reliable energy system across the APEC region.

6.2.5.3 Discussion

The session then continued with an active discussion among APEC economies on "AI-Driven Energy Innovation."

Ms. Sutthasini Glawgitigul, **Senior Plan and Policy Analyst at the Department of Alternative Energy Development and Efficiency (DEDE)**, **Thailand**, noted the importance of further integrating AI into both renewable energy and energy efficiency efforts, and suggested establishing funding support to strengthen capacity-building and encouraged APEC economies to submit more AI-related project concept notes to enhance cross-fora collaboration.

Ms. Ulyana Rybachik, **Senior Specialist at the Russian Energy Agency**, **Ministry of Energy of the Russian Federation**, shared updates on its national AI policy, highlighting AI as a key digital technology supported by a comprehensive strategy running through 2030. AI requirements have been integrated into state-owned companies' development plans, which is significant given their large share in the electricity, oil, and gas sectors. Currently, about 60 percent of Russian energy companies use AI, a figure expected to grow to 70 percent by 2027. Russia also reported ongoing efforts under the Ministry of Energy's "Digital

Energy" program, which identifies AI needs across companies and engages both large companies and small technology start-ups to ensure broad access to advanced AI solutions.

Dr. Keng-Tung Wu, **EGNRET Secretariat**, outlined four major challenges for applying AI in the energy sector, including General Data Protection Regulation (GDPR) related data protection issues, bias and transparency concerns in machine learning models, rising computing power and energy demand associated with data centers, and regulatory and copyright considerations. The Secretariat emphasized the importance of AMI deployment for renewable energy integration and encouraged future project proposals addressing these emerging challenges.

Dr. Liu Wei, **Deputy Director at the State Power Investment Corporation (SPIC)**, **China**, highlighted the potential of AI in electricity market operations, and noted that AI tools have already played an important role in supporting electricity trading, particularly in spot market functions.

Dr. Yaowateera Achawangkul, **Senior Engineer at the Department of Alternative Energy Development and Efficiency (DEDE)**, **Thailand**, further elaborated on opportunities to apply AI in climate-related risk mitigation and renewable energy deployment. Suggestions included using AI for disaster prediction affecting energy infrastructure, site selection for solar and wind installations, and predictive maintenance of renewable power plants. Thailand also encouraged developing enabling regulatory frameworks to support AI adoption in the public sector and proposed future policy dialogues or project initiatives focused on regulatory preparedness for AI integration.

6.2.6 Closing Remarks

Dr. Chi-Wen Liao, **Chair of EGNRET**, expressed his sincere appreciation to all speakers and participants for their active participation, insightful presentations, and meaningful contributions, and noted that the discussions had deepened understanding of opportunities and challenges in advancing new and renewable energy across the APEC region, enriched dialogue through diverse perspectives, and strengthened the foundation for future cooperation.

7. Closing and Future Meetings

7.1 EGEEC Meeting Outcome

This outcome report of EGEEC 65 summarizes the core agenda and future planning of the meeting. The meeting brought together 9 member economies as well as cross-fora and international organizations such as APERC, IEA, and CLASP, focusing on the critical role of energy efficiency in the energy transition. CLASP emphasized that improving appliance energy efficiency can bridge 20% of the energy gap required to reach Net Zero emissions, APERC analyzed the strong growth in electricity demand from data centers and its challenges to grid stability, while the IEA pointed out that the global rate of energy efficiency improvement still lags behind the 2030 doubling target, urgently requiring policy acceleration. In addition, the meeting reviewed project progress on electric fans, manufacturing energy efficiency, and policy capacity building, and considered a new concept note proposed by China on promoting high-efficiency low-carbon air conditioners. Finally, the meeting confirmed that the 66th and 67th meetings will be held in Thailand and China respectively in 2026, with the Energy Efficiency Hub (EE Hub) to be invited for applying guest status.

7.2 EGNRET Meeting Outcome

This outcome report was presented by **Ms. Wei-Chun Wang**, **EGNRET Secretariat**. The meeting brought together representatives from nine (9) APEC economies and three (3) APEC Fora. Representatives from five (5) APEC economies shared updates on new concept notes, project proposal, and ongoing projects, covering titles such as hydrogen codes and standards, for capacity building new and renewable energy policy, just energy transition, AMI energy efficiency, clean and low-carbon biohydrogen, climate-resilient of energy infrastructure, and biogas development and biogas inventory. The discussion on "AI-driven energy innovation" highlighted the potential of AI to accelerate renewable energy deployment. Participants emphasized addressing challenges, while promoting capacity building, cross-fora collaboration, and supportive policy frameworks. Future initiatives, including project proposals, policy dialogues, and pilot programs, were encouraged to ensure responsible and effective AI integration across APEC energy systems.

7.3 Next Meeting

The schedule for upcoming meetings was announced: First Half 2026: EGEEC 66 and EGNRET 64 Joint Meeting to be hosted by Thailand. The Department of Alternative Energy Development and Efficiency (DEDE) of Thailand's Ministry of Energy officially announced that the Joint 66th EGEEC and 64th EGNRET Meeting will be held in Bangkok from March 31 to April 2, 2026. The meeting will be centered around the theme "Transforming the Energy Landscape: Driving Bio-Circular-Green (BCG) Economy with Clean Energy Technology". The three-day agenda will include an APERC workshop, joint and individual expert group sessions, and planned technical site visits for delegates to the MINE Smart Ferry, DEDE's Net Zero Energy Building, and Wimut Hospital, aiming to deepen technical exchange and cooperation within the region.

7.4 Closing Remarks

The meeting concluded with remarks from the EGEEC Chair. The Chair expressed their gratitude to the Republic of Korea for their hospitality and successful organization of the joint meeting.

ANNEX: List of Participants in the Joint Meeting

No.	Title	Name	Economy/EGs/Fora	Position	Organization
1	Mr.	Takayuki NIIKURA	APEC Secretariat	Project Director	APEC Secretariat
2	Prof.	SHAN Weiguo	EWG	EWG Lead Shepherd	EWG
3	Mr.	ZHANG Pengcheng	EWG	EWG Secretariat	EWG
4	Ms.	SU Juan	EWG	EWG Secretariat	EWG
5	Mr.	SHI Hongyu	EWG	EWG Secretariat	EWG
6	Dr.	LIU Meng	EGEEC	EGEEC Chair	EGEEC
7	Dr.	LIU Ren	EGEEC	EGEEC Secretariat	EGEEC
8	Dr.	Chi-Wen LIAO	EGNRET	EGNRET Chair	EGNRET
9	Mr.	Cheng-Nan CHU	EGNRET	EGNRET Secretariat	EGNRET
10	Dr.	Keng-Tung WU	EGNRET	EGNRET Secretariat	EGNRET
11	Ms.	Wei-Chun WANG	EGNRET	EGNRET Secretariat	EGNRET
12	Mr.	Mitsuhito TAKADA	APERC	Vice President	APERC/EGCFE
13	Ms.	Jung Yoon KIM	APERC	Senior Researcher	APERC
14	Ms.	Elvira Torres GELINDON	APERC	Researcher Fellow/EGEDA Secretariat	APERC/EGEDA

No.	Title	Name	Economy/EGs/Fora	Position	Organization
15	Ms.	Yasmin FOULADI	APERC	Researcher	APERC
16	Mr.	Daniel BURLUTSKY	APERC	Visiting Researcher	APERC
17	Ms.	Sun Young (Sunny) PARK	Canada	Senior Economic Officer	Embassy of Canada
18	Dr.	WEI LIU	People's Republic of China	Deputy Director	SPIC Economic and Technological Research Consulting Co., Ltd
19	Ms.	Xiaoru WANG	People's Republic of China	Research Specialist	SPIC Economic and Technological Research Consulting Co., Ltd
20	Ms.	Zixin WANG	People's Republic of China	Manager	SPIC Integrated Smart Energy Co., Ltd.
21	Ms.	Wen-Xiu HUANG	People's Republic of China	Chief Expert	China National Electric Apparatus Research Institute CO LTD
22	Mr.	Ngai Hang CHU	Hong Kong, China	Senior Engineer	EMSD HKSAR Government
23	Mr.	Takao IKEDA	Japan	Executive Economist	Institute of Energy Economics
24	Ms.	Seonghee KIM	Japan	Executive Economist, Manager	Institute of Energy Economics
25	Dr.	YOU JaeYoung	Republic of Korea	Senior Deputy Director	Ministry of Climate, Energy and Environment

No.	Title	Name	Economy/EGs/Fora	Position	Organization
26	Mr.	Young-Sun YOU	Republic of Korea	Director General	Korea Energy Agency
27	Mr.	Junho Jeong	Republic of Korea	Senior Manager	Korea Energy Agency
28	Ms.	Sohyun PARK	Republic of Korea	Assistant Manager	Korea Energy Agency
29	Ms.	Kyunglim Lee	Republic of Korea	Intern	Korea Energy Agency
30	Dr.	ROSMAHANI MOHD SHAH	Malaysia	Senior Researcher	Sustainable Energy Development Authority
31	Ms.	Khalilulnisha Abu Bakar	Malaysia	Principal Assistant Secretary	Ministry of Energy Transition and Water Transformation
32	Mr.	NORAZRIN RUPADI	Malaysia	DEPUTY DIRECTOR	Energy Commission
33	Ms.	Dorella Maye Perlas	The Philippines	Senior Science Research Specialist	Department of Energy
34	Ms.	CATHERINE CADIZ	The Philippines	SCIENCE RESEARCH SPECIALIST II	Department of Energy
35	Ms.	Ulyana Rybachik	The Russian Federation	Senior Specialist	Russian Energy Agency
36	Mr.	Chih-Lin CHEN	Chinese Taipei	Officer	Energy Administration
37	Ms.	Yu-Chi LIU	Chinese Taipei	Senior Planner	Energy Administration
38	Mr.	Chia Ho CHU	Chinese Taipei	Administrative Coordinator	Energy Administration

No.	Title	Name	Economy/EGs/Fora	Position	Organization
39	Mr.	Yu-Hao CHIU	Chinese Taipei	Researcher	Industrial Technology Research Institute
40	Mr.	Chi-Chun HUANG	Chinese Taipei	Deputy Division Director	Industrial Technology Research Institute
41	Mr.	Ting-Jui (Ray) SUN	Chinese Taipei	Senior Researcher	Industrial Technology Research Institute
42	Dr.	Yaowateera Achawangkul	Thailand	Senior Engineer	Department of Alternative Energy Development and Efficiency
43	Ms.	Sutthasini Glawgitigul	Thailand	Policy and Plan Analyst	Department of Alternative Energy Development and Efficiency
44	Mr.	Ratchaphak Tantisanghirun	Thailand	Engineer	Department of Alternative Energy Development and Efficiency
45	Ms.	THANH MAI DINH	Viet Nam	Official	Ministry of Industry and Trade
46	Ms.	Moumita Chandra	CLASP	Senior Associate	CLASP
47	Dr.	Lei (steven) ZENG	CLASP	Director of China Programs	CLASP