

Joint Meeting of APEC EGEEC 66 and EGNRET 64

Bangkok, Thailand

1-2 April 2026

Meeting Summary

1. Introduction

The Joint Meeting of the Expert Group on Energy Efficiency and Conservation (EGEEC 66) and the Expert Group on New and Renewable Energy Technologies (EGNRET 64) was held in Bangkok, Thailand, in the mornings of 1 and 2 April 2026. This meeting brought together APEC member economies to discuss cross-fora collaboration and the meeting theme “Transforming the Energy Landscape: Driving Bio-Circular Economy with Clean Energy Technology and AI-driven Energy Efficiency”. The two expert groups conducted their individual meetings in the afternoon on 1 April 2026.

The joint meeting was accompanied by the APEC Forum on Capacity Building to Accelerate Investment on Energy Resilient Infrastructure towards APEC Energy Goals (PPSTI_103_2025A) on 30 March 2026, APEC Capacity Building Workshop for New and Renewable Energy Policy (EWG 104 2025A) on 31 March 2026, and a technical visit in the afternoon of 2 April 2026.

Delegates from twelve member economies (including Canada; China; Hong Kong, China; Japan; Republic of Korea; Malaysia; Papua New Guinea; Peru; Russia; Chinese Taipei; Thailand; and Viet Nam) participated in the meeting. Representatives from APEC fora (EWG, EGEDA, EGCFE, EGEEC, EGNRET, APERC, APSEC) and international organizations (IEA, UNEP, Energy Efficiency Hub) also attended.

2. Opening Session

The session commenced with Welcome Remarks by **Ms Patcharee JONGRAK**, Deputy Director General, Department of Alternative Energy Development and Efficiency (DEDE), Thailand, followed by Opening Remarks from **Dr LIU Meng**, EGEEC Chair.

3. Updates from APEC Fora and Sub-fora

Participating members adopted the agenda with no comments. **Dr Yaowateera ACHAWANGKUL, Engineer Senior Professional Level** from DEDE, Thailand, delivered the host economy presentation. The APEC Secretariat, APERC, APSEC and expert groups (EGCFE, EGEDA, EGEEC, and EGNRET) shared their updates in this session.

3.1 Host Economy Presentation

Dr Yaowateera ACHAWANGKUL from DEDE shared a comprehensive update on the Thailand's energy landscape, policy frameworks, and future roadmaps concerning the energy transition, renewable energy deployment, and energy efficiency, and summarized the four core pillars of its energy strategy: Strategic Decarbonization (supporting long-term emission reduction targets); Renewable Energy Deployment Excellence (leveraging tools such as Utility Green Tariff (UGT)); Energy Productivity Leadership (strictly enforcing building codes and advancing the transportation transition); and Regional Synergy (building a low-carbon, collaborative energy economy).

3.2 APEC Secretariat Updates

The APEC Secretariat, **Mr Takayuki NIIKURA**, provided updates on APEC Projects, and reported on Upcoming Meeting Calendar & Strategic Plan Follow-up. About APEC projects, Session 1, 2026: Currently underway, the Secretariat has received 11 concept notes, along with 2 cross-forum proposals from other APEC fora, which are currently pending final endorsement by EWG members. Session 2, 2026: The deadline for submitting concept notes is June 16, 2026. The Secretariat encouraged economies to take advantage of this opportunity and actively submit applications.

On the administrative side, following this Bangkok meeting, the EGEDA meeting will be held in Guangzhou next week, and the EGCFE meeting will take place in Japan in June. The focus for the second half of the year will be the EWG meeting in Beijing in September, followed by the 16th Energy Ministers' Meeting (EMM16).

About the Strategy and Work Plan: The updated Terms of Reference (ToR) for the EWG and its subsidiary bodies, as well as the EWG Strategic Plan 2025-2030, were agreed upon last December. This year's EWG Annual Work Plan was also formally endorsed at the

Guangzhou meeting in February. The finalized documents have been uploaded to the APEC database for reference.

3.3 EGEDA updates

The report from the Expert Group on Energy Data and Analysis (EGEDA) notes that **Mr Robert TROMOP** (New Zealand) was elected to the role of Chair, with the Chinese representative Dr Yang Chun elected as Vice Chair. The report highlights significant progress toward APEC's dual energy goals: energy intensity has dropped by 29.5% compared to 2005, continuing the trend of decoupling GDP growth from energy demand and steadily advancing toward the 2035 reduction target. Renewable energy is only 1.4 to 1.5 percentage points away from the primary and final energy targets, driven largely by solar (growing by 45%) and wind (growing by 18%). Currently, the APEC region accounts for nearly 60% of the global installed renewable energy capacity, making it the main force driving the global energy transition. In terms of data initiatives, EGEDA has expanded its focus beyond regular demand and supply statistics to prioritize the collection of data related to greenhouse gas emissions and Carbon Capture and Storage and Hydrogen. EGEDA is involved in the global revision of the Standard International Energy Product Classification (SIEC). The next EGEDA meeting will be held in Guangzhou, China, this April.

3.4 EGCFE updates

Ms Yuna NATSUMI, on behalf of EGCFE, highlighted a future focus on Carbon Capture, Utilization, and Storage (CCS/CCU) as well as oil and gas security cooperation. Regarding the annual agenda, the EGCFE Annual Meeting will be held jointly with the 9th APEC Oil and Gas Security Network (OGSN) Forum in Hokkaido, Japan, this June. The event will focus on CCS policy knowledge sharing and feature a site visit to the Tomakomai CCS Demonstration Center, Japan's first large-scale CCS project targeting commercial operation by 2030. Subsequently, in August, China, serving as the Vice Chair, will host a proposed thematic workshop on CCU and CCS, offering economies an excellent opportunity to learn about cutting-edge policies and technologies through site visits to multiple demonstration projects. Furthermore, the three core pillars under the Oil and Gas Security Initiative (OGSI) are steadily advancing: the Oil and Gas Security Exercise (OSGE), an emergency training simulation for supply disruptions, is scheduled for April or May in Malaysia; the Oil and Gas Security Studies (OGSS) plans to release its 21st report in the first half of this year,

examining the impacts of reduced upstream energy investments; and the OGSN activities will be integrated into the aforementioned June meeting in Hokkaido. Meanwhile, the annual conference of the APEC Clean and Low-Carbon Hydrogen Policy Network project is slated to take place in Hong Kong, China, in May, aiming to further facilitate regional discussions and exchanges on hydrogen policies and technological applications.

3.5 EGEEC updates

EGEEC shared the outcome of its recent meeting, cross-organizational collaboration, key project progress, and future plans. Firstly, the recent joint meeting of EGEEC 65 and EGNRET 63 held in Seoul, Korea, focused heavily on the theme of “AI-driven energy innovation.” Regarding international cooperation, CLASP pointed out that global appliance energy consumption accounts for up to 36% and strongly advocated for “doubling energy efficiency,” which it believes can bridge 20% of the energy gap required to achieve net-zero emissions by 2030. The International Energy Agency (IEA) emphasized that the current global energy efficiency improvement rate of 1.8% falls far short of the 4% annual target, urging policymakers across economies to accelerate the enhancement of energy efficiency standards and policies. Furthermore, the Energy Efficiency Hub introduced its progress in digitalization, super-efficient equipment, and building energy efficiency, officially joining the EGEEC as a guest member. In terms of key project updates, the EGEEC’s portfolio of 13 projects is advancing steadily. And for new proposals, China submitted an application for Session 1, 2026 funding to promote high-efficiency, low-carbon room air conditioners in the APEC region.

3.6 EGNRET updates

EGNRET Chair **Dr Chi-Wen LIAO** reported on EGNRET’s recent progress, including key meeting outcomes, updates on the overall project portfolio, and actions undertaken by member economies. The 63rd EGNRET meeting and its associated forums, held in Seoul last November, focused on “AI-driven renewable energy innovation“. Ahead of the meeting, EGNRET hosted the Forum on AI-Powered Renewable Energy Innovation, which brought together seven APEC economies with the APEC Secretariat, EWG, APERC, IEA, and IRENA to explore AI applications in forecasting, grid optimization, and smart energy management. At the EGNRET 63rd, member economies contributed diverse perspectives on AI integration. Thailand encouraged stronger AI adoption and proposed funding support.

Russia reported that 60% of its energy companies already use AI under its AI Strategy 2030, with adoption expected to reach 70% by 2027. Chinese Taipei raised challenges related to data protection, model transparency, data center energy demand, and regulatory issues, while emphasizing AMI deployment. China and Thailand highlighted practical AI applications in electricity markets, climate risk prediction, and predictive maintenance.

Regarding overall project progress, as of this March, EGNRET manages 21 ongoing projects and one successfully completed project. Additionally, four new Concept Notes have been submitted for Session 1, 2026 funding and are currently pending final approval.

3.7 APERC updates

Mr Mitsuhiro TAKADA, Vice President of APERC, presented a collaborative project by the APEC aimed at strengthening the capacity of member economies to formulate energy efficiency and conservation policies. Succeeding the previous Peer Review on Energy Efficiency (PREE) project, this initiative fosters experience exchange and technical cooperation among member economies through annual thematic workshops. The first-phase workshop was held in Seoul in November 2025, focusing on the implementation challenges and successful case studies of Minimum Energy Performance Standards (MEPS). The upcoming second phase, proposed by Japan, plans to shift its focus to energy savings and emission reduction in the building sector, exploring the application of smart policies. Through this continuous capacity building, the project is committed to supporting APEC members in achieving their long-term energy visions and optimizing their policy frameworks.

This progress report for APERC provided a comprehensive update on the Centre's latest progress across its four core pillars: research activities, training, energy data networks, and policy cooperation. Regarding core research, the 9th edition of the APEC Energy Demand and Supply Outlook was officially released in Tokyo in December 2025. To better respond to the rapidly evolving energy landscape, APERC plans to shorten its publication cycle to two years, targeting the release of the 10th edition in 2027, while the 2026 edition of the APEC Energy Overview is currently under preparation. In terms of capacity building, APERC continues to provide targeted training programs on energy modeling and data statistics, and welcomes member economies to request on-site expert guidance at any time. Under policy

cooperation activities—which have replaced the traditional peer review mechanism—the Centre successfully hosted workshops focusing on Minimum Energy Performance Standards (MEPS) in Seoul and new and renewable energy policies in Bangkok, the latter succeeding the previous Peer Review on Low Carbon Energy Policy (PRLCE) project to help member economies enhance and strengthen their new and renewable energy policies. Furthermore, APERC has launched two new initiatives: a workshop on the clean and efficient operation of the fossil fuel industry held in Tokyo in December 2025, and the inaugural Clean and Low-Carbon Hydrogen Policy Convention, aimed at supporting hydrogen policy formulation and infrastructure integration, scheduled to be held in Hong Kong, China, in May 2026.

APERC is also planning to hold the Oil and Gas Security Network Forum in Tomakomai, Japan, back-to-back with the EGCFE meeting in June 2026, including a site visit to a CCS demonstration facility.

3.8 APSEC updates

Prof Steivan DEFILLA, Assistant President of APSEC, provided a comprehensive report on the Center’s significant progress in forum activities, flagship research, talent recruitment, and mid-to-long-term planning. Recently, the Center successfully hosted the 11th Asia-Pacific Energy Sustainability Development Forum in Yinchuan, and steadily advanced the publication of the APEC Urban Energy Report series focusing on low-carbon transitions, energy storage, and clean heating/cooling. It also launched cutting-edge research such as the “Energy-AI nexus” project, alongside various cross-regional collaborations. To strengthen its research capabilities, APSEC is actively recruiting global young scientists, senior researchers, and visiting scholars through Tianjin University. Looking ahead, APSEC will center its 2026 (APEC China Year) core activities around the theme of “AI + Energy” empowering future cities, with plans to host the 12th Forum in Beijing in September 2026 and a related leadership side event in Shenzhen in November 2026. Furthermore, APSEC has formalized its five-year strategic roadmap for 2026-2030, focusing sequentially on hydrogen applications (2027, Viet Nam), multi-energy integration (2028, Mexico), microgrid operations (2029), and zero-carbon city development (2030, Singapore).

4. Individual Expert Group Meeting Outcomes

4.1 EGEEC 66

The EGEEC held its individual session in the afternoon on 1 April 2026.

4.1.1 Invited Presentations

UNEP shared strategic actions to enhance building energy efficiency and district energy systems across APEC economies. While the global energy efficiency improvement rate is increasing, it still falls significantly short of the 4% annual target set at COP28, underscoring the critical need for coordinated measures. Through the implementation of pilot projects in countries such as China, Chile, and Viet Nam, the agency demonstrates the immense potential of sustainable cooling pathways and district energy networks to drastically reduce carbon emissions and improve public health. The report further highlights that integrating AI technologies can yield up to an additional 30% in energy savings while optimizing equipment operations. To support these transitions, UNEP offers open-access resources, including assessment toolkits and knowledge management systems, aiming to achieve urban carbon neutrality through the synergy of policy, finance, and technology. In summary, these materials serve as a systematic, practical guide for addressing the surging cooling demand and energy waste at both regional and global levels.

The International Energy Agency (IEA) shared its latest initiatives and analysis relevant to the global advancement of energy efficiency improvements. The presentation highlighted the IEA Sheltering from Oil Shocks report and global overview of emergency demand-side energy conservation measures, which identify strategies for reducing the impacts of oil shocks on households and businesses, and the emergency measures being employed worldwide to protect consumers. Data indicates that while global energy efficiency progress improved in 2025, the world remains well off track to achieve the COP28 doubling ambition. The IEA's 2025 analysis of world energy employment identified a shortage of applied technical workers, including energy efficiency skilled labour shortages. Improving energy efficiency is a core approach for reducing household expenses, supporting household energy affordability, enhancing energy security, and supporting economic growth. For the specific region of Southeast Asia, the IEA has put forward an Indicators Handbook for Just and Inclusive Transitions, and is developing policy recommendations concerning truck fuel

efficiency. The IEA 11th Annual Global Conference on Energy Efficiency will be held from 29-30 June 2026 in Montreal, Canada.

Energy Efficiency Hub (EE Hub): reported details their role in driving global energy conservation and emission reduction. As a collaborative platform comprising 17 member governments, the institution establishes dedicated task groups focusing on building energy efficiency, digital transformation, the promotion of super-efficient equipment, and the selection of best practice technologies (TOP TENS). EE Hub facilitates policy exchange, , and transnational cooperation among member states. Furthermore, EE Hub outlined planned workshops addressing specific topics such as industrial financing and appliance repairability, aiming to enhance energy efficiency through global collaboration.

4.1.2 EGEEC Chair Presentation

EGEEC Vice-Chair, Ms Jovian CHEUNG delivered the presentation on “AI EE Global Stocktake”. The presentation highlighted the “dual role” of AI in the energy sector. On one hand, AI is a massive energy consumer; global data center electricity demand is projected to quadruple by 2030, with APEC economies currently accounting for over 70% of global capacity. On the other hand, AI serves as a powerful enabler for energy efficiency, capable of significantly reducing energy waste when applied to buildings, industry, transportation, and power grids. To address the APEC region’s major challenges—namely, explosive electricity demand straining renewable energy deployment and a lack of unified mandatory standards—she recommended that the EGEEC establish a dedicated AI energy efficiency subtopic, develop a unified measurement framework, conduct self-assessment surveys among member economies, and strengthen collaboration on capacity building. These actions aim to ensure that AI acts as a solution to climate change rather than a catalyst for energy consumption.

4.1.3 Project updates and new Concept Notes

EGEEC secretariat provided an overview 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, Hong Kong China, Chinese Taipei, and Russia presented updates of APEC projects. Russia delivered a presentation on a proposed new concept note.

- APERC project update:

Ms Jungyoon KIM, Senior Researcher from APERC, delivered an update on the Capacity Building Workshop on Energy Efficiency and Conservation Policy (CBWS-EECP) Phase 1 project, held in Seoul, Korea, on 18 November 2025 under the theme “Members’ Journey with MEPS (Minimum Energy Performance Standards).” The project aims to strengthen the capacity of member economies to develop and implement energy efficiency and conservation policies. Succeeding the previous PREE project, this initiative promotes experience sharing and technical cooperation through annual thematic workshops. The Phase 1 workshop gathered 52 participants from 12 member economies and APEC fora to exchange experiences, implementation challenges, and best practices related to MEPS. Key discussions highlighted the importance of MEPS as a key driver of energy efficiency, as well as the need for stronger compliance systems, improved data collection, testing infrastructure, and integration within broader energy efficiency frameworks. APERC also shared key recommendations from the workshop summary report, which was endorsed and published on the APEC and APERC websites in March 2026. In addition, APERC introduced the upcoming Phase 2 project (EWG_208_2025A), proposed by Japan, which will shift its focus to energy savings and emissions reduction in the building sector through the application of smart policies. Through continued capacity-building activities, the project is committed to supporting APEC members in achieving their long-term energy goals and strengthening their policy frameworks.

- 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 presentation outlines the progress of the Asia-Pacific Economic Cooperation (APEC) project on enhancing the energy efficiency of household electric fans, with a focus on analyzing the rapidly growing market demand in the Asia-Pacific region. To promote energy-saving technologies, the project organized policy and standards workshops involving multinational experts and summarized incentive measures and regulatory experiences from economies such as China and India. The report recommends eliminating trade barriers through the harmonization of international standards and the establishment of testing capabilities, thereby ensuring product quality and reducing compliance costs. Furthermore, future work

will focus on promoting the application of high-efficiency motor technologies and extending product lifespans through circular economy strategies. In summary, this document provides an actionable guide for APEC member economies to achieve energy savings and market integration.

- Hong Kong, China update

This progress report on Hong Kong, China “APEC Practical Training on District Cooling and Heating Systems (DCHS)” (EWG 101 2025A). the presentation outlines the APEC Practical Training on District Cooling and Heating Systems (DCHS) held in Hong Kong, China, in March 2026. The workshop attracted over fifty experts from seven member economies, aiming to delve into the policy frameworks, technical foundations, and engineering design within this field. The meeting focused on achieving sustainable energy utilization by improving system operational efficiency and optimizing operation and maintenance (O&M) management. Through these exchanges, participants mastered core methodologies for long-term land-use planning and the application of innovative technologies. Ultimately, these efforts not only fostered international technical cooperation but also supported Hong Kong, China, towards the ambitious goal of carbon neutrality by 2050.

- New Concept Note and update (Russia)

This update report and concept note, submitted by Dr Alexey TULIKOV of the Russian Energy Agency (REA), systematically elaborates on Russia’s national strategies and practical achievements in integrating energy efficiency governance with digitalization. It highlights that Russia is shifting toward an integrated framework combining project preparation, investment, operations, and financing with diverse funding tools, including public-private partnerships, and reshaping energy management through state information systems, AI, Digital Twins, and Internet of Things (IoT) technologies: for instance, the Belgorod Region achieved over 1 billion rubles in budget savings via a digital system (the system covers 2,000 heat supply points and 3,500 digitized buildings), and “Digital Twin” technology achieved up to 30% energy savings across 150 pilot buildings under energy service model, and new generation of digital lighting systems that implemented in industry bringing total savings compared to traditional lighting to 90%. Based on these success stories, Dr TULIKOV proposed two core initiatives to APEC on behalf of Russia: (1) Workshop on Promoting Just Energy Transition: Aimed at the diverse transition pathways of APEC economies, this initiative seeks to explore

energy security and technical solutions through baseline studies and capacity-building workshops. (2) “New Generation of Investments in Energy Efficiency” Project (2027-2030): Proposed to launch in 2027, this project focuses on leveraging digitalization and IT to develop new financial instruments and management models; it aims to de-risk investments and attract capital to the energy efficiency sector, helping APEC reach its 2035 energy intensity goals.

4.1.4 Governance and Administration

EGEEC governance report highlights the expansion of its guest membership and the planning for its next gathering. It was officially announced that the Energy Efficiency Hub (EE Hub) has joined as a guest member, bringing the EGEEC’s total number of official guest organizations to three (EE Hub, CLASP, and WorldGBC). The 67th EGEEC meeting (EGEEC 67) is scheduled to take place in August 2026, in Shenzhen, Guangdong Province, China, and extended a sincere invitation to all delegates to attend the event in this frontier city of innovation.

4.2 EGNRET 64

EGNRET convened its 64th meeting on the afternoon of 1 April 2026. Delegates from nine member economies participated, including China; Hong Kong, China; Japan; Malaysia; Peru; Russia; Chinese Taipei; Thailand; and Viet Nam. Representatives from the APEC Secretariat and APERC also attended.

4.2.1 Welcome & Adoption of Meeting Agenda

EGNRET Chair **Dr Chi-Wen LIAO**, EGNRET Chair thanked Thailand for hosting and outlined the meeting’s theme. He also acknowledged ENTEC and APERC for the side events held earlier in the week, noting their outcomes would feed into EGNRET collaboration. The agenda was adopted, covering project updates, new proposals, hydrogen policy guidance, and the thematic discussion.

4.2.2 Submission Process and Progress of EGNRET Projects

EGNRET Secretariat **Ms Ya-Ju TENG** introduced the APEC Project Administration System (APAS) and the four-stage project submission workflow, outlining key requirements including EELCER sub-fund criteria, the need for at least four co-sponsoring economies, and the four-

page concept note limit. She highlighted the June 16 deadline for Session 2 and reminded delegates of the importance of timely completion reports, encouraging member economies to leverage this upcoming opportunity. Currently, four concept notes and 21 projects are in implementation under EGNRET.

4.2.3 EGNRET Project Updates

- China

China shared one concept note and one implementing project. First, **Mr YUAN Li** from State Nuclear Power Technology Corporation presented the concept note “Policy and Planning Considerations for Integrating SMRs with Renewable Energy,” addressing the energy trilemma facing APEC economies amid rising demand. The project positions SMRs as a flexible low-carbon partner to renewables, capable of providing baseload power and balancing grid intermittency rather than serving as a replacement. It proposes three deliverables: comparative research, a capacity-building workshop, and a practical guidebook based on IAEA safety standards. He emphasized that the project is an academic policy planning study rather than advocacy for nuclear deployment, aimed at bridging the policy knowledge gap and equipping developing economies’ policymakers, grid operators, and researchers with analytical tools to make informed, sovereign energy choices aligned with the Putrajaya Vision and Lima Consensus.

Dr Yaowateera ACHAWANGKUL, EGNRET Vice-chair offered two suggestions and one question. First, he proposed incorporating public acceptance considerations, given community concerns over potential SMR siting. Second, he suggested including regulatory framework knowledge and experience sharing, particularly for APEC economies just beginning to study SMR technology. He also asked how the project would close the knowledge gap for regional cooperation given SMR’s early operational stage globally. Mr YUAN Li responded that SMRs are not new technology, with over 70 types already documented in IAEA guidebooks and built on 30 to 50 years of nuclear utilization experience. The project aims to share this knowledge so that economies considering nuclear as a low-carbon pathway can exercise their right to make informed choices.

The implementing project was presented by **Ms Zixin WANG** from SPIC, titled “APEC Study on How Zero-Carbon Industrial Parks Help with Energy Transition and Carbon Reduction in

APEC Economies.” She explained how zero-carbon industrial parks support APEC goals across three Putrajaya Vision 2040 dimensions: trade and investment through green industrial clusters, innovation through smart energy management and carbon monitoring platforms, and growth through renewable energy and storage integration. Co-sponsored by Chile; Hong Kong, China; Korea; Papua New Guinea; and Thailand, the project runs from April 2026 to June 2027 under ASF funding. Deliverables include a background study report, a one-day case-sharing workshop, and a 12-page final report on best practices, aimed at enhancing capacity building and knowledge access for APEC economies.

- Hong Kong, China

Ms Vicky LUI shared the outcomes of the APEC Workshop on Hydrogen for Land Transport, held in September 2025 with over 40 experts from 10 APEC economies. The project delivered seven strategic outcomes, including strengthening regulatory frameworks, advancing skills development, overcoming innovation barriers through R&D, establishing regional hydrogen hubs, promoting demonstrative projects, incentivizing investment, and building public awareness, providing APEC economies with a practical roadmap to enhance energy security and clean transport innovation.

- Peru

Mr Hernando HIDALGO, on behalf of Peru, introduced a project proposal on the harmonization of voluntary standards for green hydrogen from renewable energy in APEC, contributing to the implementation of the APEC policy guidance on green and low-carbon hydrogen frameworks. As divergent standards on carbon intensity thresholds, emission accounting, and technical requirements risk creating market fragmentation and trade barriers, Peru proposes a technical study of voluntary standards and certification schemes across APEC economies, examining regulatory frameworks, carbon intensity methodologies, guarantees of origin, and emission accounting along the supply chain. Outputs include a technical study report, a policy brief with recommendations, and a two-day regional hydrogen workshop in Lima bringing together policymakers, regulators, standards bodies, and industry representatives to enhance regulatory transparency and interoperability for cross-border hydrogen trade.

- Russia

Mr Ivan KALMYKOV from the Russia Renewable Energy Development Association (RREDA) presented an overview of renewable energy development in Russia, expressing hope to formulate ideas and identify opportunities for APEC project proposals in future sessions. He noted the market, while modest in scale, has shifted from isolated projects to a clear growth trajectory, with renewable capacity and CO₂ reductions projected to increase through 2035, and an accelerated scenario indicating further potential for renewables and battery storage to substitute thermal generation up to 2042. Development has been supported by capacity supply agreements providing a long-term investment framework, with opportunities also open to foreign investors in smaller consumer-side projects. He proposed exploring a practical support mechanism for study visits among APEC member economies to enable direct in-person exchange on project implementation and regulatory models, inviting collaboration toward future APEC initiatives.

- Chinese Taipei

Dr Keng-Tung WU, representing Chinese Taipei, proposed a new self-funded concept note titled “AI-Driven Wind Power Development in the APEC Region,” aligned with the EMM15 Joint Statement recognizing AI’s role in enhancing forecasting, demand management, system efficiency, and addressing rising energy demand from data centers. The project addresses core challenges in wind power, including intermittency, forecasting uncertainty, grid integration complexity, and outdated regulatory frameworks, positioning AI as a solution to enhance system resilience through improved forecasting accuracy. The objectives are to identify practical AI applications in wind power infrastructure, benchmark international practices, and strengthen regional synergy through structured knowledge exchange. Running from May to the end of 2026, the project will deliver two key outputs: a forum alongside the EGNRET 65 meeting to share international experience on AI applications in wind power, and a comprehensive report integrating forum outcomes and member perspectives. Chinese Taipei will circulate the concept note among EGNRET members within one to two weeks before submission and welcomes co-sponsoring economies.

- Thailand

Dr Yaowateera ACHAWANGKUL updated the progress of two implementing projects led by Thailand. The first project, “Enhancing Climate Change Adaptability and Resilience of Energy Infrastructure toward Carbon Neutrality Using Renewable Energy Scheme”

(EWG_207_2024A), co-sponsored by Chile; China; Hong Kong, China; Japan; the Philippines; and Viet Nam, aims to promote preparedness, mitigation, and response actions to enhance climate adaptability and resilience of energy infrastructure through a two-day workshop, with shared experiences disseminated as recommendations across APEC economies. Chiang Mai University has been successfully procured as the research consultant, and the project officially commenced today. Following the kick-off meeting, research, data collection, and survey implementation will run from April to August 2026, with a two-day capacity building workshop planned in Thailand in early September and the final report publication by March 2027.

The second project, “Promotion and Development of Biogas Technology and Biogas Inventory in the Livestock Farm among APEC Economies” (EWG_208_2024A), co-sponsored by China; Singapore; Chinese Taipei; and Viet Nam, aims to assess current animal waste management practices, develop training materials including a greenhouse gas inventory handbook and toolkit with best-practice case studies, and compile a final summary report for publication on the APEC website. Chiang Mai University has been awarded the research contract with full APEC endorsement, while procurement for the workshop organizer is being finalized. Following the kick-off on 23 March, a comprehensive literature review and dataset collection begin in early April, training materials development in July, a three-day capacity building workshop in Bangkok in early August, and final report submission to the APEC Secretariat in November.

- Viet Nam

Ms Thanh Mai DINH reported on the APEC Workshop on Promoting Sustainable Energy Development in the Garment and Textile Industry, held 18–19 September 2025, co-sponsored by Indonesia, Japan, China, and Thailand. The workshop convened stakeholders to share experiences, practices, and recommendations on sustainable energy development in the sector. Eight recommendations were delivered: holistic transformation across the supply chain; establishing a regional green finance framework; promoting the circular economy; advancing technology and green skill development; strengthening leadership and harmonized definitions; deepening regional cooperation with concrete roadmaps; fostering public-private partnerships and joint communication; and enhancing knowledge sharing and policy harmonization through regional platforms. These outcomes provide a roadmap for

advancing sustainable energy transition in the garment and textile industry across APEC economies.

4.3 EGNRET Administration and Operation

Ms Ya-Ju TENG, EGNRET Secretariat, provided updates on three key areas. First, the updated EGNRET Terms of Reference (ToR) were officially endorsed by the EWG and SCE in December 2025, and are now available on the EGNRET website. Second, EWG 72 will be hosted by China on 8–9 September 2026, with venue details to be confirmed. Third, EGNRET 65 is currently seeking a host economy, and member economies are welcomed to express interest and suggest meeting themes. The Secretariat also outlined the five-step selection process for the 2027–2028 Chair and Vice-Chair, with nominations opening two months before EGNRET 65 and the election to take place during the meeting. Member economies are encouraged to nominate suitable candidates.

4.4 Update on the APEC Policy Guidance to Develop and Implement Clean and Low-Carbon Hydrogen Policy Frameworks in the Asia-Pacific Implementation Plan

- EGNRET

Dr Chi-Wen LIAO, EGNRET Chair, outlined three key implementation actions for the APEC clean and low-carbon hydrogen policy guidance. First, a dedicated hydrogen section will be developed on the EGNRET website to share roadmaps, strategies, and best practices among member economies. Second, a questionnaire will be circulated in early April to update Annex 1, covering national hydrogen strategies, market instruments and financial mechanisms, APEC projects, and external collaboration. Third, member economies are encouraged to prioritize hydrogen initiatives, propose new APEC projects, and participate in regional activities, including the APEC Clean and Low-Carbon Hydrogen Convention to be held in May 2026 in Hong Kong, China.

- Peru

Mr Hernando HIDALGO, representing Peru's Ministry of Foreign Affairs, provided an update on the implementation of the APEC Policy Guidance on Clean and Low-Carbon Hydrogen 2024, which recognizes hydrogen as an important energy vector for decarbonization while acknowledging challenges related to cost, infrastructure, and safety. He highlighted that the

implementation plan adopted by the EWG in July 2025 sets priority actions, including benchmarking certification schemes, strengthening information exchange, and cooperating on standards and emissions accounting. Peru noted that at least eight to nine APEC projects have supported the policy guidance since its adoption, covering hydrogen transport, regulatory frameworks, certification, and renewable energy integration. Peru also emphasized the importance of cross-fora collaboration within APEC, including with the Transportation Working Group, PPSTI, and SCSC, as illustrated by Peru's own concept note circulated through both SCSC and EWG. Engagement with international organizations was further stressed to ensure coherence with global hydrogen market development.

4.5 APEC Project Event Outcomes

- APEC workshop – Capacity Building Workshop for New and Renewable Energy Policy

Mr Daniel BURLUTSKY, APERC Researcher, shared the outcomes of the APEC Capacity Building Workshop on New and Renewable Energy Policy held on 31 March 2026, accompanying the joint meeting of EGEEC 66 and EGNRET 64. The Workshop supported APEC's goal of doubling renewables in its energy mix by 2030 relative to 2010 and APEC's contribution to the global target of tripling renewable capacity by 2030. Themed "Are we on the right track?", the workshop comprised four sessions covering Thailand's policy presentation, business models for scaling renewables, frameworks and approaches for VRE investment, and breakout group discussions where participants shared insights they learnt. Key insights included Thailand's net-zero pathway with its 37% renewable share target by 2037 under the "Driving Thailand's Clean Energy Future strategy; AGORA's traffic-light assessment tool identifying barriers; renewable energy adoption; XanhTerra's five structural challenges for VRE implementation; and the growing role of corporate PPAs, which drove 25% of global wind and solar additions outside China between 2024 to 2026. Financing experts highlighted the USD 1 trillion of investment needed in the SEA region to expedite renewable project development given the vulnerability of the region to global warming and the need to expedite project development. The workshop featured engaging formats such as fishbowl discussions and World Café dialogues, which were highly recommended for future APEC workshops. A Phase 2 concept note has been submitted to track progress, with the workshop summary report due in November and the LTEAP response in August 2027.

- APEC Forum on Capacity Building to Accelerate Investment on Energy Resilient

Infrastructure towards APEC Energy Goals

Dr Nuwong CHOLLACOOP from ENTEC, Thailand, the Project Overseer, presented the outcomes of the APEC Forum on Energy Resilience Infrastructure Investment held on 30 March 2026. This cross-sectoral project, jointly proposed to the PPSTI and EWG fora and funded under the EECLER sub-fund, is co-sponsored by Indonesia, Japan, Korea, Chinese Taipei, Viet Nam, and Chile. Under the theme “Capacity Building to Accelerate Investment on Energy Resilient Infrastructure toward APEC Energy Goal,” the forum gathered around 20 participants from six economies to align stakeholder expectations on driving private investment into renewable energy and energy efficiency infrastructure that is both bankable and climate-resilient. Discussions covered Thailand’s renewable energy policy direction by DEDE, the IEA’s global perspective on energy sector resiliency, and case studies including the Phi Suea House hydrogen microgrid in Chiang Mai, Viet Nam’s USTH research on green financing for transmission infrastructure, and Chinese Taipei’s smart grid resilience investment leveraging AMI. Outputs include a research report, the capacity-building workshop, and a final project report with recommendations. A follow-up APEC workshop is planned in Bangkok in September or October 2026 to advance capacity building and cross-fora collaboration between the EWG and PPSTI.

4.6 Discussion of Meeting Theme

- APERC

Mr Thanan MARUKATAT, Research Fellow at APERC, presented the 9th Edition APEC Energy Demand and Supply Outlook with a focus on bioenergy. Globally, bioenergy accounts for 61% of renewable primary energy supply, while APEC contributed 29% of the global total in 2022, indicating significant expansion potential under the Bio-Circular-Green model. APEC bioenergy demand is projected to peak around 2040, driven by the power and transport sectors, with declining residential demand as cleaner heating and cooking alternatives are adopted. Biomass remains the backbone of supply, with a clear shift from traditional to modern biomass, while liquid biofuels are evolving as biodiesel grows in Southeast Asia, biogasoline declines with EV adoption, and bio-jet kerosene for Sustainable Aviation Fuel (SAF) emerges as a key growth area led by the US. Biogas, though small, holds strong potential particularly in rural areas and waste management, with China leading deployment. APEC is largely self-reliant in bioenergy supply, but maintaining this requires strategic

feedstock management, sustainable land use planning, and continued infrastructure investment such as refinery repurposing for HVO and SAF production. Recent global supply tensions have further accelerated biofuel blending, reinforcing bioenergy's role in regional energy security.

- China

Mr GAO Yang from China's National Energy Administration shared China's achievements, key experiences, and future outlook on new and renewable energy. By end-2025, China's installed renewable power capacity reached 2.34 TW, accounting for over 60% of total power capacity, with wind and solar combined at 1.84 TW. Renewable utilization rates have remained above 95%, and renewable electricity's share of total consumption rose from 29% in 2020 to over 38% in 2025. China leads globally in turbine and PV technology, with the largest offshore wind turbine at 26 MW and TOPCon cell efficiency reaching 25.7%, supported by the world's most complete renewable industrial chain. Over the past decade, China has helped reduce global LCOE for wind and solar by 60% and 80% respectively, with exported products cumulatively reducing 4.2 billion tons of carbon emissions during the 14th Five-Year Plan. Key experiences include strong historical consensus on energy transition since 1986, clear strategic direction with a 3.6 TW wind and solar target by 2035, high marketization, and well-designed policy support. China expressed commitment to advancing green energy cooperation under the Belt and Road Initiative and sharing its renewable development experience with the world.

4.7 Closing Remark

The EGNRET Vice-Chair **Dr Yaowateera ACHAWANGKUL** delivered the closing remarks, expressing appreciation for delegates' active engagement and productive exchanges on project development, policy frameworks, and emerging energy solutions. He thanked the EGNRET Chair, Secretariat, and DEDE team for their leadership and support, and called for continued collaboration among member economies toward a sustainable and resilient energy future.

5. Invited Presentations

5.1 National Higher Education Science Research and Innovation Policy Council (NXPO)

This report, presented by **Dr Wongkot WONGSAPAI**, Vice President of Thailand's NXPO, details the pathways for the energy and power sectors to achieve Thailand's 2050 Net Zero goal. As the energy sector accounts for approximately 70% of Thailand's total greenhouse gas emissions, its transformation is critical. Thailand plans to decarbonize through five key strategies: significantly increasing the share of renewable energy, enhancing energy efficiency (aiming for a 30% reduction by 2037), promoting electrified transportation, establishing carbon sinks, and developing cutting-edge technologies like Carbon Capture, Utilization, and Storage (CCUS).

Furthermore, the report emphasizes the pivotal role of "Innovative Finance" in the energy transition. It proposes differentiated investment and financing strategies based on the technological maturity of projects: commercially viable technologies such as energy efficiency, heat pumps, and solar energy and SAF should attract investment through traditional financial markets; meanwhile, early-stage, high-CAPEX technologies like Small Modular Reactors (SMR), green hydrogen, CCUS, and nature-based solutions require policy incentives and innovative financial instruments to lower investment barriers. The report demonstrates how Thailand is building a low-carbon, resilient energy future through the integration of policy guidance, technological innovation, and financial tools, providing a valuable reference for APEC economies.

5.2 National Energy Administration of PRC

Ms WANG Lifan from the National Energy Agency outlined China's agenda, theme, and three core priorities for the APEC energy sector as the 2026 host. The central theme, "Forge an Innovative and Synergistic Asia-Pacific Energy Community for All," aims to drive energy transition and sustainable growth through regional cooperation. The three key priorities and their deliverables are summarized as follows:

- **Energy for All:** Focuses on enhancing energy accessibility and affordability, especially for rural, remote, and vulnerable groups, with the goal of building high-quality, resilient, and eco-friendly modern energy systems. Key deliverables include guidelines for high-quality universal energy services and recommended solutions for enhancing power system resilience.
- **AI + Energy:** Emphasizes technological innovation as the core driver for digital and intelligent transformation, exploring AI to improve efficiency and security. Core tasks include an action plan for collaborative AI-energy governance and technical

recommendations for new-type power systems adapted to high VRE penetration.

- **Synergistic Cooperation:** Leverages the complementarities in resources and development stages across APEC economies to deepen the integration of regional interests. Major outcomes feature voluntary principles for energy synergy, a cooperative framework for zero-carbon cities, the establishment of the Asia-Pacific Clean Energy Training Institute, and non-binding principles for energy security coordination.

The report provides a clear roadmap for 2026 APEC energy collaboration, aiming to address energy security and climate challenges through the synergy of policy, technology, and finance.

5.3 National Energy Technology Center

Presented by **Dr Kampanart SILVA** from Thailand's National Energy Technology Center (ENTEC), this report outlines the approach to enhancing energy system resilience in alignment with the APEC Bangkok Goals on the Bio-Circular-Green (BCG) Economy Model. It emphasizes that while the global trend of increasing renewable energy share supports Thailand's Net-Zero 2050 goal and NDC 3.0 commitments, the rising RE penetration—currently at 15.4% of total energy consumption, targeting 68% of power generation by 2035 and 74% by 2045—introduces a new risk profile distinct from conventional fossil fuel systems. The proposed strategy focuses on addressing four emerging risks: severe disaster impacts, battery safety issues, land use conflicts, and grid instability. Furthermore, Thailand has led the development of the ASEAN Energy Resilience Assessment Guideline, endorsed by SCSEER and COSTI in 2022 and updated in 2026 with refined risk concepts and an Adaptive Resilience Curve framework, validated through four pilot assessments across solar, biomass, biogas, and microgrid systems, and applied in Malaysia (UiTM) at multiple solar PV facilities. The report concludes that the guideline, together with the APEC PPSTI-EWG cross-fora capacity-building project, can contribute to accelerating investment in resilient energy infrastructure across APEC economies.

5.4 Economic Research Institute for ASEAN and East Asia

Presented by **Dr Nuki Agya UTAMA** from the Economic Research Institute for ASEAN and East Asia (ERIA), this report explores the imperatives and opportunities for developing a bio-circular economy in the Asia-Pacific region. It highlights that the region contributes 60% of global marine plastic leakage and faces the grave challenge of waste outstripping economic growth at three times the rate of regional GDP, yet holds an unrealized circular economy

potential of \$2 trillion. Resting on the three pillars of “Regenerate, Optimize, and Loop,” the bio-circular economy advocates for transitioning from fossil fuels to biomass, leveraging Industry 4.0 technologies to maximize resource value, and establishing closed-loop systems. With the region accounting for roughly 90% of global rice and palm oil output and generating about 1 billion tonnes of agricultural residue annually, the opportunity spans resource recovery, regenerative agriculture, and industrial symbiosis. Through practical examples such as rice husk biochar production in Cambodia, mycelium-based leather innovation in Indonesia, grassroots plastic recycling in the Philippines, and low-emission rice farming in Viet Nam, the report demonstrates the model’s significant impact on reducing emissions, enhancing resource efficiency, and creating economic value.

5.5 ASEAN Centre for Energy

Presented by **Dr Tharinya SUPASA** of the ASEAN Centre for Energy (ACE), this report highlights the “ASEAN Energy Transition Framework 2026-2030” with a specific focus on biofuels. Aligned with “ASEAN Renewable Energy Long-term Roadmap 2045,” ASEAN commits by 2030 to a 30% renewable energy share in TPES, 45% in installed capacity, and a 40% reduction in energy intensity from the 2005 baseline—targets that require a threefold increase in biofuel use, from 16 Mtoe in 2023 to 47 Mtoe by 2030. The report frames biofuels within an “Energy Trilemma” of energy security, affordability, and sustainability, noting that today’s focus on energy security alone is insufficient for long-term competitiveness as aviation, shipping, and investors increasingly demand certified low-carbon fuels. It identifies four key challenges: environmental and social concerns, cost and technology readiness, regulatory limitations, and cross-sectoral coordination. To address these, the framework outlines a regional cooperation programme covering the full value chain—from feedstock and processing to end uses including road transport blending, SAF, and marine applications—striving for a more concrete and structured biofuel strategy by 2030 that fosters intra-region bioenergy trade and aligns carbon market policies.

6. Meeting Theme: “Transforming the Energy Landscape: Driving Bio-Circular Economy with Clean Energy Technology and AI-driven Energy Efficiency”

Members engaged in extensive discussions on the theme “Transforming the Energy

Landscape: Driving Bio-Circular Economy with Clean Energy Technology and AI-driven Energy Efficiency.” Presentations covered clean energy technology and AI-driven energy efficiency to promote energy transforming to the future.

6.1 China

First report from China by **Mr XIE Yitian** of China’s National Energy Administration, this report highlights the pivotal role of AI in driving the bio-circular economy and energy transition. It states that the bio-circular economy achieves high resource efficiency and zero waste through innovation, with AI serving as a key engine to enhance energy efficiency within this process. Through case studies such as power demand-side response and large-scale models for industrial circulating water, the report demonstrates that AI can significantly reduce energy use in industry and buildings, exemplified by a 56.3% power reduction in iron-making cooling optimization. Despite challenges like rising energy consumption in data centers, AI will continue to function as a “digital brain” to optimize resource allocation, helping the Asia-Pacific region forge a secure, green, and sustainable energy future.

The second report, presented by **Ms Xiaoru WANG** from SPIC Economic and Technological Research Consulting, China, systematically introduces China’s practical experience in integrating the bio-circular economy with low-carbon energy transition through a “Dual-Drive Strategy” of policy guidance and AI empowerment. It highlights that China utilizes AI technology to break down barriers across all links of the energy system, achieving synergistic development among biomass power generation, clean heating, and precision agriculture, which ensures energy security while significantly reducing carbon emissions. Through representative models such as those in Yiyang, Hunan, and Qiqihar, Heilongjiang, these practices have not only substantially reduced coal consumption but also directly increased farmers’ income and created numerous jobs, realizing a three-in-one synergy of environmental protection, economic empowerment, and livelihood security.

6.2 Hong Kong, China

This report by **Ms Vicky LUI** elaborates on Hong Kong, China’s strategic pathways and recent progress toward achieving carbon neutrality by 2050. It highlights the target to reduce carbon emissions by half from 2005 levels before 2035, focusing on transforming the fuel mix, promoting energy saving, and advancing green transport. A core component is

electricity saving in buildings, aiming for a 30% to 40% reduction in commercial building consumption. To this end, Hong Kong is vigorously implementing District Cooling Systems (DCS), utilizing advanced monitoring with GNSS and IoT sensors to enhance efficiency, while providing tax incentives and technical support to encourage private sector participation in building a low-carbon city.

6.3 Japan

This report presented by **Ms Yuna NATSUMI** from Japan's Ministry of Economy, Trade and Industry (METI), this report highlights Japan's international commitments and domestic progress in advancing sustainable fuels. It notes that Japan co-launched the "Belem 4X Pledge" at COP30, committing to quadruple global demand for sustainable fuels by 2035 compared to 2024 levels, while emphasizing the role of hybrid technology in decarbonizing road transport. Domestically, Japan is accelerating the commercialization of SAF, bio-based synthetic fuels, and synthetic methane, with pilot implementations planned for regions like Okinawa by 2028 and a goal of full-scale commercialization of synthetic fuels by the early 2030s to create an energy landscape that balances economic viability with environmental protection.

6.4 Malaysia

Presented by **Ms KHALILULNISHA Abu Bakar** from Malaysia's Ministry of Energy Transition and Water Transformation, this report highlights the strategic framework for accelerating the bio-circular economy through AI and clean energy technologies. It notes that Malaysia is leveraging policies like the National Energy Transition Roadmap (NETR) to shift from a linear model to a "waste-to-wealth" circular model, with plans to increase biorefinery capacity to 3.5 billion liters by 2050. In terms of application, Malaysia utilizes AI-driven building automation, smart meters, and predictive maintenance to enhance efficiency, while pioneering SAF production from microalgae. Despite AI's pressure on power and water infrastructure, Malaysia aims to reduce energy intensity and achieve its low-carbon vision through mandatory energy audits, carbon taxes, and the new Climate Change Act.

6.5 Chinese Taipei

The first presentation from Chinese Taipei was delivered by **Ms Yu-Chi LIU** from the Energy

Administration, Ministry of Economic Affairs, Chinese Taipei. The presentation systematically introduced the pathway and practice of building a circular energy system through PV module recycling. The report notes that with the continuous growth of solar PV installations, retired modules are expected to reach 100,000 metric tons by 2035, making an efficient recycling system crucial. Chinese Taipei has established the “3C1R” operational mechanism, covering collection, clearance, database creation, and recycling, supported financially by a mandatory recycling fee of NTD 1,000 per kW collected from developers. This framework not only ensures the traceability and compliant treatment of end-of-life modules but also reflects its commitment to implementing circular economy practices and achieving sustainable resource management in the renewable energy sector.

The second presentation from Chinese Taipei was delivered by **Dr Chi-Chun HUANG**. The project was directed by the Energy Administration, Ministry of Economic Affairs, Chinese Taipei, and implemented by the Industrial Technology Research Institute (ITRI). This report focuses on practices for accelerating commercial sector decarbonization through AIoT and Energy Management Systems (EMS). It notes that 85.82% of commercial sector emissions are electricity-related, making energy conservation the primary goal for achieving the 2050 Net Zero target. By deploying a wireless AIoT architecture and machine learning control strategies in supermarkets, the solution achieved an energy saving rate of over 10% with a payback period of less than two years. This model, characterized by its ease of installation and large-scale replicability, provides an efficient technical pathway for SMEs to achieve low-carbon transformation.

6.6 Thailand

Thailand report explores leveraging AI to drive the Bio-Circular-Green (BCG) economy model toward the 2050 Net Zero target. It identifies the agricultural sector, which employs 30% of the local workforce, as the primary arena for technological transformation. AI functions as the “central nervous system” of the BCG model, maximizing bio-economy value through precision agriculture, closing the loop in the circular economy via smart logistics, and automating energy management for a green economy. Using the Ubon Ratchathani prototype as an example, AI-assisted drone monitoring and automated irrigation have doubled farmer income and significantly improved resource efficiency, proving the pivotal role of digital transformation in achieving ecological and economic synergy.

7. Closing

7.1 EGEEC meeting outcome

This outcome report summarizes the outcomes of the 66th APEC Expert Group on Energy Efficiency and Conservation (EGEEC 66) meeting held in Bangkok. The meeting covered energy efficiency in buildings and district energy system transformation strategies shared by international organizations like UNEP and IEA, and reviewed project updates from Chinese Taipei, APERC, and Hong Kong, China. A key highlight was Russia's new concept note, "New Generation of Investments in Energy Efficiency", which aims to mitigate investment risks through digital and financial innovation. Additionally, the meeting emphasized the harmonization of motor efficiency standards and confirmed that EGEEC 67 will be held in Shenzhen, China, in August 2026, focusing on AI-driven energy efficiency.

7.2 EGNRET meeting outcome

Ms Ya-Ju TENG, EGNRET Secretariat, reported on the EGNRET 64 meeting outcomes. The meeting convened delegates from nine APEC member economies, alongside the APEC Secretariat, APERC, and ENTEC. Project updates were shared by China; Hong Kong, China; Peru; Russia; Chinese Taipei; Thailand; and Viet Nam, covering new concept notes, ongoing implementing projects, and workshop outcomes.

Key takeaways from the APEC forum emphasized private investment as the main driver for scaling up renewable energy, with growing focus needed on climate-resilient infrastructure beyond bankability, as demonstrated by cases such as the Phi Suea House microgrid in Thailand. A follow-up APEC workshop will be held in Bangkok around September to October to support capacity building and regional collaboration.

Key takeaways from the workshop included Thailand's case study on policy implementation, deployment barriers across economies, grid flexibility as a new paradigm for modern power systems, and the expanding role of the private sector through corporate PPAs, with Phase two proposed to track progress toward 2027.

7.3 Closing remarks

The EGNRET Chair **Dr Chi-Wen LIAO** expressed sincere gratitude to the host, Thailand,

and member economies for their active contributions. He emphasized that this joint meeting sustained the positive momentum generated at EWG 71, further solidifying a collective platform for advancing clean energy innovation by deepening cross-sectoral collaboration and drawing insights from recent workshops. It reaffirmed the core consensus of deeply integrating renewable energy and energy efficiency measures with emerging digital technologies to build sustainable and resilient energy systems. The Chair also highly commended the practical experiences shared by various parties regarding clean energy deployment, strategic investments, and capacity building. Finally, the Chair expressed strong confidence in translating these in-depth regional dialogues into tangible, positive outcomes, looking forward to maintaining the robust momentum of energy cooperation across the Asia-Pacific.

7.4 Adjourn

In his closing remarks at the joint meeting, **Mr Nunthanis WONGWATTHANA**, Deputy Director General, DEDE, Thailand expressed his sincere gratitude to all attendees and the organizing team. He reaffirmed the critical role of regional cooperation in driving the energy transition, explicitly highlighting three core priorities: accelerating clean energy deployment, enhancing energy efficiency, and leveraging digital technologies. Finally, he called on all member economies to build upon the outcomes of this meeting, deepen their collaboration, and translate innovative ideas into concrete actions to collectively forge a more resilient and sustainable energy future for the Asia-Pacific region.