

Summary Record
37th EGEDA Meeting
hosted by People's Republic of China
8-10 April 2026, Guangzhou, China

The 37th Meeting of the APEC Expert Group on Energy Data and Analysis (EGEDA), with the theme *Tracking the Transition: Collecting Data to Help Shape the Future of Energy*, took place in Guangzhou, China, from 8–10 April 2024, hosted by China Southern Power Grid (CSG). The gathering brought together representatives from APEC member economies, expert groups, and international organisations to strengthen cooperation on energy data collection and analysis across the APEC region.

The meeting was attended by members and invited guests from 13 APEC member economies, Economies represented in person included Brunei Darussalam; People's Republic of China; Hong Kong, China; Korea; Malaysia; Papua New Guinea; Singapore; Chinese Taipei; the United States; and Viet Nam, while representatives from Australia; Indonesia; and the Philippines participated online, ensuring broad engagement through both in person and virtual formats. Beyond the participation of EGEDA members, the meeting also welcomed contributions from the APEC Secretariat, EWG Secretariat, EGNRET, EGEEC, EGCFF and APSEC, while resource persons from the International Energy Forum (IEF), International Energy Agency (IEA), International Renewable Energy Agency (IRENA), and United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) provided additional global perspectives on emerging trends in energy statistics, data governance, and analytical approaches.

Building on this wide participation, discussions throughout the three-day meeting brought together energy statisticians and policy analysts to exchange of views on shared data needs, recent progress in data collection, and practical approaches to strengthening the availability and quality of energy statistics across APEC. Participants heard updates from the EGEDA Secretariat on ongoing data compilation work and reporting, while economies provided their own briefings on new, ongoing, and completed surveys, institutional developments, and challenges in maintaining comprehensive and timely datasets. These exchanges helped identify how EGEDA Secretariat and international partners can further support capacity building, methodological harmonisation, and the development of tools that facilitate more efficient and consistent data gathering.

Opening Session

Mr Zhiwen Lin of China Southern Power Grid opened the session under the theme *Tracking the Transition: Collecting Data to Help Shape the Future of Energy*, welcoming representatives from 13 APEC economies, the APEC Secretariat, the Energy Working Group (EWG), APEC Expert Groups, international organisations and related institutes, with a call for open exchange of ideas and stronger cooperation among participants.

Mr Minfeng Xiong, Deputy Director General, Department of International Cooperation, National Energy Administration (NEA) of China delivered the first welcome address in Mandarin. He

congratulated attendees on the convening of the 37th EGEDA meeting in Guangzhou, extended thanks to China Southern Power Grid as the host organiser, and underscored EGEDA's role as a key data platform under the EWG framework, noting that the Asia Pacific region accounted for more than half of global primary energy consumption. Referencing President Xi Jinping's vision of an Asia Pacific community with a shared future, he put forward three proposals: leveraging EGEDA's professional strength to build a solid energy data foundation for APEC governance; jointly exploring new cooperation pathways through digital innovation and collaborative research; and building broader consensus toward an inclusive Asia Pacific energy community.

Mr Wei Liu, Vice President, China Southern Power Grid delivered the second welcome address in Mandarin. He welcomed all delegates, acknowledged the support of the NEA, highlighted that CSG serves southern China and connects to Hong Kong, China; Macao, and Southeast Asian networks with over 1 million kilometers of grid infrastructure, and expressed CSG's commitment to sharing its practical experience in digital grid operations and cross border data cooperation with all APEC partners.

In the opening remarks, **Dr Shan Weiguo**, the EWG Lead Shepherd, highlighted that EGEDA, since its establishment in 1991, has consistently recognised high quality energy data as fundamental to effective energy policy. He also noted significant progress in data collection timeliness, consistency, and coverage, including expanded surveys on hydrogen production, battery storage, electric vehicles, and district cooling systems. He recognised China's priorities, as APEC 2026 host economy, namely energy security, universal energy services, and AI applications in the energy sector. He encouraged EGEDA to establish real time data sharing mechanisms and deepen cross collaboration with other expert groups.

Mr Robert Tromop, EGEDA Chair, introduced himself as originally from New Zealand assuming the role of Chair for the first time. He cited his background in household energy surveys, commercial building surveys, industrial energy analysis, and equipment efficiency programs including work on international efficiency standards from 2002 onward. He expressed gratitude to the Chinese government and China Southern Power Grid for the exceptional hosting arrangements. He called on participants to explore how modern data methods and artificial intelligence could transform the way EGEDA processes and disseminates energy information. Finally, he encouraged members for an honest exchange of ideas throughout the meeting.

Session 1: Guest presentation by the host economy

Dr Yang Chun, the newly elected EGEDA Vice Chair and representative of the Energy Development Research Institute (EDRI) of China Southern Power Grid, presented the host economy report across three areas: China's APEC participation, its energy data practices, and the future Outlook for regional cooperation. On participation, he noted China's active membership since 1991. To strengthen international energy cooperation, the NEA of China led and launched the APEC Energy Cooperation Partnership Network in 2017, which now serves as a liaison platform comprising 73 members. In September 2025 China-hosted event on energy transition that drew more than 60 international experts. On practices, he highlighted two key platforms. The first is the AI Data Analysis Platform for Energy Storage, which equips energy storage systems with an intelligent "brain" for autonomous learning and smart decision-making by collecting data

like battery storage and environmental parameters, processing it through edge computing, and uploading it to the cloud. The second is the PowerAtomOS Ecosystem, which connects operational stages through a unified architecture to gather multi-dimensional data on equipment and environments, providing high-quality input for computing and facilitating a positive cycle of mutual support between electricity and computing. On the future Outlook, he put forward four directions: strengthening data governance to improve adaptive efficiency; advancing innovation and cooperation to enhance regional data capabilities; promoting inclusive capacity building for developing economies; and establishing an APEC energy scenario practice repository to document outstanding digitalisation projects from member economies.

Session 2: Report on APEC activities (Part 1)

Mr Takayuki Niikura, Program Director, APEC Secretariat provided an update on four key areas: the 2026 APEC project sessions, self-funded projects, the EWG event calendar, and the outcomes of the foresight exercise. Project Session 1 for 2026 received eleven concept notes covering topics such as energy efficiency, mineral value chains, the just energy transition, and small modular reactors; nine EWG concept notes were endorsed by EWG members. The deadline for Project Session 2 submissions is on 15 June 2026, and he encouraged all economies to avail of the funding opportunities. Drawing on 2025 data, EWG achieved 15 approved projects, placing it among the top four APEC fora by approvals. He ended his presentation by highlighting the upcoming events in APEC.

Ms Juan SU, EWG Secretariat opened her presentation by invoking a Chinese proverb — "the whole year's work depends on a good start in spring" — to frame the 37th EGEDA meeting as an auspicious beginning for 2026. She outlined four key EWG deliverables for the year: the preparation of a Ministerial Statement for the 16th Energy Ministers' Meeting, to be drafted by the People's Republic of China in consultation with all economies; several ministerial policy dialogues expected to generate new proposals; the exploration of potential new EWG-related goals, with ten ideas already proposed; and the delivery of summary reports on workshops underpinned by more than 20 ongoing projects. She reported that EWG71, held in Nanchang from 15 to 19 March, featured inclusive deliberations covering high-quality universal service, power system resilience, and the synergy between AI and energy, with written feedback from economies to be incorporated into a zero draft Ministerial Statement by April. She closed by affirming the EWG's commitment to deepening cross-forum collaboration in the coming months.

Dr Meng Liu, Chair, APEC Expert Group on Energy Efficiency and Conservation (EGEEC) reported two joint EGEEC–EGNRET meetings (Seoul 2025 and Bangkok 2026) and their associated workshops on energy-efficiency policy, resilient infrastructure, and renewable-energy capacity building. He summarized key discussions with partners such as IEA, CLASP, EE Hub, and APERC on global efficiency trends, appliance standards, data-centre electricity demand, and AI-enabled energy optimisation. He also reviewed EGEEC's project portfolio—including ongoing work on electric-fan efficiency, MEPS capacity building, manufacturing-sector efficiency, and new proposals such as high-efficiency low-carbon room air conditioners—alongside regional progress on energy intensity reduction and emerging challenges like rising data-centre loads. He concluded with governance updates, guest-member engagement, and the theme for the upcoming

EGEEEC66–EGNRET64 meeting focused on accelerating the bio-circular economy with clean energy and AI-driven efficiency.

Dr Chi-Wen Liao, Chair, APEC Expert Group on New and Renewable Energy Technologies (EGNRET) delivered his updates on EGNRET's recent activities, highlighting the EGEEEC-EGNRET Joint Meeting in Bangkok, where 13 economies and multiple APEC fora shared progress on renewable-energy projects ranging from SMR–renewables integration to hydrogen standards, biogas, and AI-driven wind power. He summarized outcomes from the EWG71 Meeting in Nanchang, including several PS1 concept notes awaiting endorsement and reporting on policy guidance on hydrogen (PGH). His updates also reviewed cross-fora collaborations—an AI-powered renewable energy forum with IEA and IRENA, a PPSTI/ENTEC event on resilient energy infrastructure, and an APERC workshop on renewable-energy policy and investment readiness. He outlined follow-up actions to strengthen the hydrogen knowledge platform, update PGH annexes, and deepen member engagement, and concluded with plans for the next EGNRET meeting and the upcoming APEC Clean and Low-Carbon Hydrogen Convention in May 2026.

Dr Shichang Sun, EGCFE Representative, delivered a presentation that provided an overview of recent and upcoming activities of the APEC Expert Group on Clean Fossil Energy (EGCFE), highlighting 2025 events, the 2026 joint EGCFE–OGSN meeting in Hokkaido with a site visit to the Tomakomai CCS project, and the schedule for OGSi exercises and APERC fossil fuel reports. He also introduced China's proposed 2026 self-funded workshop on CCUS/CCS, emphasizing CCUS as a foundational technology for achieving carbon neutrality, its growing global deployment, and China's rapid progress in CCUS-EOR and large-scale demonstration projects. His presentation concluded with the objectives and themes of the August 2026 CCUS/CCS workshop in Dalian or Changchun, which aims to facilitate knowledge exchange on technologies, best practices, business models, and international cooperation across the CCUS value chain.

Dr Zhexing Yan, Asia-Pacific Sustainable Energy Center (APSEC) Representative, organised his presentation around three areas: (a) the APEC city database, (b) the urban energy flagship report series, and (c) an AI Cooperative Framework for driving cities toward zero carbon. On the city database, APSEC has conducted city-level energy research since 2015, developing an integrated platform that clusters cities from thirteen economies using a three-layer classification system to enable scenario-based carbon emission analysis and pathway modelling. On the report series, he described three consecutive flagship editions covering the low-carbon transition in cities (2023), energy storage as a key enabler (2024), and clean heating and cooling across nine typical APEC cities (2025), the last of which is expected for publication around May 2026. On the AI Cooperative Framework, he noted that urban areas account for 70% of global GDP and approximately 70% of greenhouse gas emissions, underscoring the urgency of the proposed framework's four focus areas: clean urban energy systems, intelligent urban development, energy-carbon accounting, and a network of zero-carbon APEC cities.

[Session 2: Report on APEC activities \(Part 2 – EGEDA Updates\)](#)

Mr Edito Barcelona, Senior Research Fellow, EGEDA Secretariat, presented the annual data collection report and an overview of APEC's 2023 energy supply and demand, including long-term trends since 1990. He noted that data collection for the 2023 reference year faced growing

challenges, including fewer economies completing full data templates, tighter internal approval processes, and a final dataset received in October 2025—well beyond the March deadline. Despite this, some economies expanded their primary data sources and submitted useful historical revisions. On long-term trends, he observed that APEC's share of global GDP rose from 48.2% to 53.7% between 1990 and 2023, while the region's share of global energy consumption grew from 53.9% to 59.2%. For 2023, GDP grew 3.6%, driven by China and Southeast Asia, while renewables led energy supply growth and solar and wind posted the strongest gains in electricity generation. Energy intensity continued its long-term decline, reflecting sustained efficiency improvements across the region.

The EWG Lead Shepherd asked whether the 5.9% decline in hydro generation in 2023 signalled a ceiling on regional hydro capacity. Mr Barcelona clarified that the drop was caused by drought conditions and that a rebound was expected, with future development likely limited to smaller-scale projects. The EGEDA Chair noted that solar and wind had already surpassed hydro even in that drought year, and highlighted hydro's growing role as dispatchable backup for variable renewables. Dr Jeeyoung Yoon of the Republic of Korea asked why fewer economies submitted complete data templates. Mr Barcelona cited staff turnover and manpower constraints and noted that submitted energy balance tables are processed using the secretariat's standardized methodologies that are applied to all economies' data.

Mr Nobuhiro Sawamura, Senior Researcher, EGEDA Secretariat, reported on the EGEDA energy statistics training programme. Established in 2014, the programme aims to strengthen member economies' capacity in energy data collection through three objectives: improving understanding of the APEC energy database, enhancing data reliability, and building human resource networks across the region. Training is conducted in Tokyo over two weeks, covering energy balance construction, questionnaire completion, greenhouse gas calculations, and emerging topics such as hydrogen. Two sessions were held in the most recent cycle: February 2025, with eleven participants from eight economies, and January 2026, with seven participants from six economies. The upcoming 2026 training is scheduled from November 9 to 20 in Tokyo. The Chair reinforced that the programme is a core EGEDA priority and that the Secretariat is equally prepared to provide economy technical assistance to economies upon request.

Dr Matthew Dumlao, Senior Researcher, EGEDA Secretariat, reported on the 23rd APEC Workshop on Energy Statistics, held in Tokyo from September 17 to 19, 2025. The workshop, convened annually since 2002 under a mandate from APEC Energy Ministers, aims to improve the timeliness and quality of member energy data submissions and harmonise energy definitions across the region. This iteration focused on capacity building for household energy consumption surveys, with 51 participants from 14 economies attending alongside representatives from the IEA and APERC. The first half featured economy presentations on end-use data collection experiences, while the second half involved collaborative breakout sessions to develop a draft household survey questionnaire. The 24th Workshop is scheduled for September 30 in Tokyo, with a focus on transportation energy statistics, while the 25th Workshop in 2027 will present pilot survey results. Topic suggestions for the 2028 workshop remain open to member economies.

Ms Elvira Torres Gelindon, Research Fellow, EGEDA Secretariat, presented the action items arising from the 23rd APEC Workshop. Member economies shared a broad range of forward-

looking commitments: Viet Nam plans to engage its statistics office to begin residential survey work; Thailand will pursue behavioral research aligned with its climate commitments; the Philippines and Korea drew on established survey frameworks to guide other economies; while Papua New Guinea and Chile committed to launching or simplifying their own surveys. The Secretariat will finalise the draft questionnaire developed during the workshop and circulate it to members by June 2026 for review and comment. Pilot surveys are planned for 2026 to 2027 and results are expected to be presented at the 25th EGEDA Workshop in 2027. Ms Gelindon encouraged all members to collaborate with statistics agencies to share costs and strengthen the overall quality of end-use data collection.

Session 3: Report on tracking the APEC energy goals

Presentation

Mr Edito Barcelona, EGEDA Secretariat, reported that as of 2023, APEC has achieved a 29.5% reduction in final energy intensity relative to 2005 levels, representing approximately two-thirds of the 45% target set for 2035. The year 2023 recorded a particularly strong improvement of 2.5 percentage points, with the long-term annual average holding at nearly 2% since 2006. GDP growth of 3.8% in 2023, alongside continued efficiency gains, reinforces a structural decoupling between economic output and energy consumption that has persisted even through the COVID-19 period. On the renewable energy doubling goal, the modern renewable share in primary energy reached 8.21% — just 1.4 percentage points from the target — reflecting a 71.5% increase from the 2010 baseline. Final energy consumption's renewable share stands at 10.51% against a 12.02% target. Solar and wind dominated growth, with solar expanding by over 11,000% and wind by nearly 800% from 2010 to 2023. He emphasised that sustained data collection remains essential for future goal monitoring.

Discussion

The EGEDA Chair opened the discussion by highlighting that solar energy had overtaken hydropower generation. The Chair invited the group to examine the data closely, observing that over the last five to six years there had been a remarkable and accelerating growth in solar and wind capacity, attributing a substantial share of this transformation to China's large-scale manufacturing and deployment of solar photovoltaic modules and wind installations. He referenced a recently published article describing China's solar and wind expansion as having reached a scale "too large to fail," and expressed that this trajectory would materially reshape the global energy landscape and warranted considerable recognition.

Mr Nguyen Anh Tuan of Viet Nam raised a question concerning the impact of current elevated oil and gas prices on energy intensity data, asking whether scenarios involving prevailing gas prices had been factored into the energy intensity calculations in the near term. Mr Barcelona, clarified in response that the dataset currently extends only to 2023, and that the effects of the high oil and gas prices being experienced in 2026 would not be reflected in the available data for another two to three years, as 2024 data collection is still ongoing at this time. The EGEDA Chair supplemented this by acknowledging the inherent two-year lag in collective energy data compilation, noting that the Secretariat was in the process of preparing a short paper to provide

some clarity on the LNG and oil market situation, drawing also on insights from emergency response exercises, while emphasising that a definitive analytical response was not immediately feasible given the data constraints.

Mr Zaharin Zulkifli of Malaysia asked whether the energy intensity and goal-tracking data could be made accessible through a database or portal to allow ongoing monitoring. Mr Barcelona welcomed the suggestion and proposed that progress toward APEC's goals be made more prominently accessible — potentially through a dedicated page on the EGEDA website. He noted that while the APEC Energy Overview, published annually and tracking goal progress since the 2018 edition, already contains this information, it is not readily visible without navigating the full report, and acknowledged the merit of establishing a more visible, standalone tracking interface. The EGEDA Chair added that the executive summary of the forthcoming APEC Energy Overview, then nearing completion, would include an overview of total APEC goal progress.

Dr Chua Shen Hwee of Singapore, shared that the economy had observed strong solar adoption growth, driven largely by significant reductions in solar photovoltaic costs. She cautioned against broadly applying this cost-driven dynamic to other emerging energy technologies which might not have experienced similar reductions in price. She also noted that the rapid entry of data centres could have contributed to decoupling of electricity demand from GDP growth. This could be because data centres' energy consumption might not necessarily correspond directly to GDP output. She invited other member economies and organisations to share whether comparable trends had been observed in their own economies.

The EGEDA Chair acknowledged the point, noting that each economy operates with a different activity mix and that Singapore's experience with data centres may reflect circumstances that are relatively unique to its context. Mr Barcelona added that while the EGEDA dataset does contain individual economy data on intensity changes from 2005 to 2023, the Secretariat deliberately refrains from disaggregating this to the economy level in presentations, as the APEC energy goals are framed as collective rather than individual targets.

Session 4: Presentation from International Partners

Presentation

Dr Amira Remadna, Senior Energy Data and Market Division Analyst and JODI Coordinator, International Energy Forum (IEF), opened with expressions of gratitude to the People's Republic of China and China Southern Power Grid for hosting the meeting, and to APEC for its continued engagement and significant efforts as a key JODI partner. Her presentation covered three focus areas: the findings of the IEF's November 2025 Energy Market Transparency Seminar — held to mark the 20th anniversary of JODI Oil and 11th anniversary of JODI Gas — the current global status of JODI participation, and the newly proposed JODI Sustainability initiative. The IEF Energy Market Transparency seminar confirmed that JODI remains a globally recognised benchmark for energy market transparency, while also surfacing persistent concerns around timeliness, completeness, and the responsiveness of member economies to data quality issues. As a key outcome of the seminar, the IEF, together with JODI partner organisations, is developing a third module — JODI Sustainability — to track carbon abatement, renewables, electricity, critical

minerals, and potentially hydrogen and clean cooking data. A draft questionnaire has been circulated to all JODI partners for feedback, and the official launch is planned for the IEF's second annual data transparency seminar in Riyadh in November 2026.

Mr Edito Barcelona, EGEDA Secretariat, thanked Ms Remadna for her participation in the 2026 EGEDA meeting and noted that the Secretariat would provide comments on the draft JODI Sustainability Questionnaire in the following week. He also highlighted that any new data-collection initiatives within APEC would need to be discussed within EGEDA and subsequently endorsed by the EWG.

Mr Julian Prime, Head of Statistics, International Renewable Energy Agency (IRENA), began by thanking the host economy and acknowledging IRENA's newly granted three-year guest membership in the APEC Energy Working Group, effective September of the previous year, which enables formal and sustained engagement with EGEDA. His presentation covered two statistical collections: IRENA's Renewable Capacity Statistics published March 31, 2026, and SDG7 monitoring data. Global renewable power capacity reached 5,149 GW at end of 2025 — an increase of 692 GW — with renewables now comprising 49.4% of total global electricity capacity; solar and wind together accounted for 96.8% of net capacity additions, with China alone contributing 350 GW of new solar. On SDG7 monitoring, international public financial flows for clean energy in developing economies rose modestly to USD 24.6 billion in 2024, though flows to least developed economies declined 11% to USD 3.7 billion — a worrying trend given tightening development assistance. Globally, renewable capacity per capita reached a record 544 watts per person in 2024, driven by an 18% growth rate in developing economies.

In response to a question about the decrease in the share of renewable energy capacity in 2025, Mr Prime clarified that the decline pertains to the share of capacity additions, not to total installed capacity, which in fact increased compared with 2024.

Ms Agnieszka Koscielniak, Head of Energy Demand Data and Efficiency Indicators, International Energy Agency (IEA), presented on the importance and structure of the IEA's energy end-use data collection, established in 2009 and currently covering 62 economies across four modules: residential, transport, industry, and services. She explained that end-use data — covering space heating, cooling, water heating, lighting, and appliances, among others — enables the construction of energy efficiency indicators and supports decomposition analysis that separates the effects of activity growth, structural shifts, and energy intensity changes on overall energy demand. Recent updates to the questionnaire include the addition of a data centre category in the services module, the integration of heat pump data, and continued collection of electric vehicle stock and consumption data. To expand beyond IEA membership, the agency has launched a Global Household Appliance Database and a residential activity data research project collecting indicators such as dwelling counts, average household size, and cooling system penetration. Koscielniak also introduced a new energy end-use toolkit designed to allow economies to input raw data and generate efficiency indicators domestically, and invited APEC member economies to participate in its testing.

Mr Zaharin Zulkifli of Malaysia inquired about the inclusion of water supply in the services module and also asked about the criteria used to select trainees for the recent energy efficiency workshop held in Ha Noi. Ms Koscielniak explained that the addition of water supply may be linked

to revisions in the ISIC classification. Regarding the second question, she noted that she would need to confirm the details with the event organiser.

Mr Barcelona, EGEDA Secretariat, thanked Ms Koscielniak for her participation in the 2026 EGEDA meeting and expressed interest in the end-use modelling toolkit. Ms Koscielniak noted that the IEA would be pleased to explore potential collaboration with APEC economies, including opportunities to test the energy end-use toolkit.

Ms Zuzana Dobrotkova, Head of Annual Energy Data Statistics, International Energy Agency (IEA), presented the IEA's ongoing efforts to integrate data on newer energy technologies into its statistical framework, focusing on hydrogen and ammonia, electric vehicles (EVs), and battery storage. On hydrogen, the IEA and Eurostat have jointly developed a comprehensive methodology covering hydrogen, ammonia, and e-fuels, and a trial data collection is underway; however, Ms Dobrotkova acknowledged significant early-stage challenges, including a 98% purity definition under review and persistent confidentiality concerns in markets with few producers. On EVs, she noted that most OECD economies rely primarily on modelling rather than direct metering to estimate EV electricity consumption, and that reallocation of this consumption from residential to transport sectors remains incomplete in many economies; non-OECD coverage relies largely on modeled estimates. On battery storage, utility-scale installations are tracked using established methodologies, while distributed behind-the-meter batteries — facing the same metering limitations as distributed solar PV — remain outside the current scope of collection.

Mr Nobuhiro Sawamura, EGEDA Secretariat, asked about the status of the IEA's hydrogen data-collection efforts, including those related to ammonia and e-fuels. Ms Dobrotkova explained that the results of the trial collection have so far been not great, although EU member economies are required to report such data to EUROSTAT. She added that hydrogen data collection is still at an early stage, and significant challenges are therefore expected as the work progresses.

There was also a question regarding the estimation of hydrogen production from electricity. Ms Dobrotkova explained that hydrogen produced through electricity—specifically via electrolysis—is the most straightforward process and is relatively easy to measure.

Mr Sergey Tulinov represented UNESCAP at its first participation in an EGEDA meeting. He praised the quality of work presented. UNESCAP has 53 member, 15 of which are also APEC economies. He noted strong alignment between EGEDA's work and SDG7 tracking goals. Renewable capacity in Asia-Pacific is growing fast, but renewables' share of total energy consumption is rising slowly, signaling a structural gap. Both APEC and ESCAP economies also fall short of the 4% annual energy intensity improvement needed by 2030. Mr Tulinov introduced the Asia-Pacific Energy Portal and proposed data sharing and methodology alignment with EGEDA. The Vice Chair welcomed this and scheduled a full UNESCAP presentation for the next meeting.

[Session 5: Member economy updates](#)

[Presentations](#)

Mr Xie Xin of the National Bureau of Statistics of China (NBS) presented on the revision of China's annual energy data for 2019–2022 based on updated statistical specifications and insights from

the Fifth National Economic Census, which expanded survey coverage, improved data detail, and excluded coal-washing solid waste from coal consumption and production. The census incorporated comprehensive monthly surveys of industrial and non-industrial enterprises, supplemented by administrative data from agencies such as the China Electricity Council and CAAC. These revisions led to slight downward adjustments in total primary energy production and total energy consumption—generally around 0.2% to 1.2%—reflecting improved data quality, broader survey scope, and updated energy category definitions, including the shift from “raw coal” to “hard coal and brown coal.”

Mr Zaharin Zulkifli of Malaysia presented the economy’s economywide initiative to update and expand energy-consumption surveys for the manufacturing, commercial, and domestic sectors, addressing outdated datasets, limited geographic coverage, and the need for more representative domestic statistics. The project covers all major energy types, collects three years of historical data, and uses stratified sampling, hybrid survey methods, and detailed end-use data collection across 12,000 total samples. Supported by benchmarking studies, stakeholder workshops, interviewer training, and a structured survey methodology, the effort aims to produce comprehensive insights on sectoral and regional energy-use trends, identify key consumption drivers, and generate policy-relevant outputs such as efficiency indicators and emissions estimates.

Ms Diana Christine Gabito reported on the Philippines’ 2023 Household Energy Consumption Survey (HECS), which provided a picture of household energy use across 45,000 households, detailing energy sources, consumption patterns, appliance usage, and awareness of energy issues. Results show near-universal access to electricity (94.8%), rising average monthly consumption, continued reliance on LPG for cooking, and a significant increase in renewable-energy use—particularly firewood, charcoal, and solar—though usage varies widely by region. The survey also highlights household challenges such as high electricity costs and power interruptions, as well as low but regionally uneven awareness of programs like the Philippine Energy Labelling Program. It further captures attitudes toward nuclear energy, with one-third willing to support it as a long-term option. Moving forward, the DOE plans to publish full HECS results, integrate findings into energy balance updates and demand modelling, conduct policy studies, regionalise the Energy Balance Table, and institutionalise regular household energy surveys.

Mr Kevin Lee of Hong Kong, China reported a wide range of energy-efficiency and climate-action initiatives aligned with APEC goals, highlighting progress toward reducing energy intensity and expanding renewable energy while advancing its own Climate Action Plan 2050. The update showcased how energy data underpins conservation policies across residential, commercial, industrial, and transport sectors, with major gains driven by the Mandatory Energy Efficiency Labelling Scheme (MEELS), which now covers 11 products accounting for roughly 80% of residential electricity use and delivers over 1,300 GWh in annual savings. Additional measures include strengthened building-energy codes, retro-commissioning programs, benchmarking tools, and mandatory energy audits—over 80% of audited buildings achieved reductions in energy-use intensity. Hong Kong, China also expanded district cooling systems, achieving substantial

electricity and emissions savings, and continues to enhance standards, transparency, and planning to meet its long-term targets and goals.

Dr Jeeyoung Yoon of the Republic of Korea presented Korea’s comprehensive revision of its energy balance that modernised a framework first developed in the 1980s to better reflect today’s complex energy system, improve accuracy, and align with international (IEA) standards. The update expands energy product classifications from 29 to 58 and energy flows from 41 to 88, introduces a dual annual–monthly balance system, and significantly enhances the representation of transformation processes such as oil refining, petrochemical operations, and heat and power generation. These changes correct previous issues of aggregation, misallocation, and statistical discrepancies—particularly for coal, petroleum, and renewables—while strengthening governance through clearer reporting authority and designating KEEI as the central statistics agency. The revised balance improves international comparability, supports more robust energy and climate policy analysis, and sets the stage for integrating emerging energy systems such as hydrogen.

Question & Answer

Mr Robert Tromop, EGEDA Chair, opened the Q&A by asking Hong Kong, China about the relationship between the Electrical and Mechanical Services Department (EMSD) and building owners and developers.

Mr Kevin Lee of Hong Kong, China supplemented that EMSD have a good collaboration with stakeholders as EMSD employs a combination of “Lead-Pull-Push” strategies to encourage participation. For example, i) HKC led by example like setting energy-saving targets for government buildings and providing the necessary guidance, ii) pushing by using legislation through the Buildings Energy Efficiency Ordinance to mandate standards and legally required owners of prescribed buildings to conduct energy audits. Last but not the least, iii) pulling through encouraging voluntary participation and public engagement like Energy Saving Charter.

Mr Tromop noted that an effective approach typically requires elements of both.

Mr Barcelona, EGEDA Secretariat, invited member economies to share how they collect information on the electricity consumption of electric vehicles (EVs). The representatives provided the following responses:

Economy	Responses
Malaysia	The industry association would provide data from public EV charging stations; however, a key challenge is capturing consumption from households charging their EVs at home. This portion must be estimated.
Singapore	EV-charging operators were required by law to submit their electricity-consumption data to the Singapore’s Land Transport Authority. However, similar to what was shared by some economies, private home chargers could not be separately measured because their usage was combined

	with household electricity under the same meter. As a result, estimation might be required to measure home-charging consumption. This could be estimated using the number of registered EVs and average mileage.
Hong Kong, China	<p>In HKC, collection of electric vehicle (EV) electricity consumption data remains largely voluntary. EMSD would collect EV electricity consumption data through three primary channels including i) energy surveys conducted by consultants in private vehicles; ii) energy data that contributed from public utilities and iii) figures of licensed vehicles that collected from government departments.</p> <p>For energy surveys, it included i) questionnaires that sent to vehicle owners or fleet managers of all franchised public transportation like public buses and ii) charging consumption reported by the drivers like private cars, taxis, goods vehicles, etc. In addition, information like vehicle age, motor power, battery capacity, and trip information will also be collected so to better understand consumption patterns. Those energy data would then be published annually in the HKEEUD.</p>
Korea	Electricity consumption from EV charging is primarily captured through charger operators, who report usage data to the Korea Electric Power Corporation for statistical purposes. Private home charging is relatively limited because more than 60% of households live in apartments where EV chargers are already installed and usage is recorded. As a result, most EV charging occurs at shared or public facilities, and the remaining unreported home-charging consumption is relatively small.
China	The approach to collecting EV-charging consumption data is broadly similar to other economies. Public charging-station data is available through government platforms, while private home-charging data is more complex to capture. To address this, China works closely with the government-owned grid and other electricity providers and applies technological tools and smart-modelling methods to estimate household EV-charging consumption.
Australia	The Transport Research Bureau publishes statistics on transport energy use, including modeled estimates of total electricity consumption by electric vehicles. These estimates are based on survey data such as distance travelled and the number of registered EVs. To avoid double counting, this modeled EV-consumption figure is deducted from residential electricity-use estimates. Australia noted that it currently does not have data distinguishing private versus business EV charging.
The Philippines	The current approach to estimating EV electricity consumption is based on the number of registered EVs, using assumptions on typical charging behavior drawn from transport-sector studies. They are also reviewing recent survey results that include EV-related questions—such as where households charge their EVs, how long they charge, and related usage patterns—to refine these

	estimates. The Philippines noted that EV charging occurs both at home and at commercial establishments such as shopping malls.
Viet Nam	Viet Nam is actively developing domestic EV-charging standards and rapidly expanding EV-charging infrastructure across the economy. The aim is to complete and formalise these standards within the year. Viet Nam has a broader strategy to transition from fossil fuels to green energy, including a roadmap to shift the transport sector from petroleum-based vehicles to electric mobility, supported by ongoing work to establish pathways for large-scale EV adoption.
Brunei Darussalam	Brunei Darussalam reported that it is still in the early stages of developing its approach to EV-electricity-consumption data. This year, the economy plans to conduct surveys to begin collecting information on EV energy use.
Indonesia	Current electricity-consumption reports do not separately identify EV charging because there is no dedicated metering for EVs. As a result, EV electricity use is embedded within general consumption data. Indonesia is beginning to incorporate EV-related information—such as estimated charging needs—into its energy statistics this year as part of ongoing efforts to improve data collection.

Session 6: Joint Organisations Data Initiative (JODI)

Presentation

Nobuhiro Sawamura, EGEDA Secretariat, presented JODI's latest progress across APEC, noting EGEDA's role in coordinating submissions from non-OECD member economies to the International Energy Forum. He outlined the bi-annual Participation Assessment framework, which measures sustainability, timeliness, and completeness, each rated as Good, Fair, or Less Reliable. For JODI Oil (July to December 2025), non-OECD economies recorded nine, six, and five Good ratings respectively, with declines from the prior period. For JODI Gas, ratings stood at nine, eight, and six, also reflecting modest deterioration. Economies including Russia and Viet Nam had ceased submissions entirely, while others reported incomplete data fields. Sawamura affirmed that EGEDA would continue outreach efforts to re-engage non-submitting economies.

Discussion

Following the presentation, the EGEDA Chair invited member economies to identify areas where EGEDA could offer direct assistance, emphasising that the Secretariat was prepared to provide on-the-ground technical support — including travelling to economies to assist with the systems used to collect and produce energy data.

Mr Nguyen Anh Tuan of Viet Nam explained that since 2023, Viet Nam has been restructuring its energy information management by establishing a new Energy Data Center to centralise the collection, classification, and verification of domestic energy data. The centre has faced difficulties managing the high volume of data requiring verification prior to JODI submission. An internal issue involving two separate focal points for data submission is being resolved by consolidating responsibility under a single focal point. The representative also noted that the recent formation

of a new government has introduced some limited additional delays. He reaffirmed Viet Nam's commitment to resuming JODI submissions once its institutional arrangements are fully formalised and requested EGEDA's continued patience given the economy's unique transitional circumstances.

The EGEDA Chair acknowledged Viet Nam's considerable institutional transition and reiterated the offer of direct technical assistance, encouraging Viet Nam to contact the Secretariat at any time.

Ms. Kalina Naris Wrakafie of PNG noted that PNG had been submitting reports for oil data and currently holds "Good" smiley face ratings in that stream, as regular reporting is made to the Department of Petroleum. However, the representative acknowledged that PNG does not currently have access to the gas data held by that department, which accounts for its absence from JODI Gas submissions, and expressed PNG's intention to work with EGEDA's assistance to remedy this.

The EGEDA Chair thanked the PNG representative and reiterated that EGEDA remained available as a resource.

Mr Chrisnawan Anditya of Indonesia informed the session that Indonesia had incorporated new LNG data into its JODI submissions beginning in May 2025, and that the delay experienced in the first half of 2025 was attributable to internal organisational changes associated with that update. The representative confirmed Indonesia's commitment to timely submissions going forward.

The EGEDA Chair acknowledged Indonesia's update and wished the delegation well with the transition.

Nobuhiro Sawamura, EGEDA Secretariat, closed the discussion by welcoming the responses from Viet Nam; PNG; and Indonesia, and extended a standing offer of technical cooperation to any economy experiencing difficulties with data submission systems, encouraging direct contact with the Secretariat via email.

Session 7: New Energy Data Collection

Presentation

Mr Edito Barcelona, EGEDA Secretariat, delivered a presentation on the Collection of Data on New Energy Technologies, noting that APEC's accelerating decarbonisation efforts are creating a growing need for more detailed and harmonised data on emerging energy technologies. He highlighted that economies are rapidly scaling up renewables, energy storage, electrification, hydrogen and ammonia supply chains, and CCUS—developments that require expanded data collection. EGEDA has begun trial collection of new data points, including district cooling, hydrogen, ammonia, electro-fuels, energy-storage capacity and flows, and carbon captured and stored. Mr Barcelona also explained that the UN-mandated revision of the Standard International Energy Classification (SIEC) introduces major structural updates, such as new categories for hydrogen and synthetic fuels and expanded classifications for renewables, waste, heat, and electricity. Consequently, EGEDA's data-collection templates will need to be updated, with revised

questionnaires planned for the 2026–2027 cycle to enhance APEC’s ability to track energy-transition and net-zero progress.

Round Table Discussion on Hydrogen

APEC economies updated their hydrogen development.

Economy	Update
Australia	Australia’s hydrogen sector remains immature, with limited activity, confidentiality constraints, and unresolved treatment of traditional ammonia-related hydrogen flows. Its recent shift from net to gross reporting created large production and consumption figures with only small unexplained losses, which Australia is still trying to interpret for energy-statistics purposes. More broadly, Australia is monitoring developments while considering whether hydrogen should eventually be treated as a top-level fuel category and how to distinguish renewable from non-renewable supply.
Brunei Darussalam	Regarding hydrogen, Brunei Darussalam previously operated a one-year demonstration plant, completed in 2020, that enabled it to produce hydrogen for export to Japan. However, that plant has already been decommissioned. However, in the coming years, if there is hydrogen production, the economy will report according to the template.
China	NBS started studying how to collect hydrogen data but only on energy use. Since currently energy use is not very large, China has limited hydrogen data.
Hong Kong, China	Further to the Strategy of Hydrogen Development that announced in mid 2024, Hong Kong, China currently operates several pilot-scale hydrogen applications, including hydrogen fuel cell buses, hydrogen street-sweeping vehicles, and hydrogen-powered light rail maintenance vehicles, along with an operational hydrogen filling station. In parallel, the government loosely observes these trials and would formulate an operational safety framework for the use of hydrogen fuel and the corresponding way forward on manufacture, storage, and use of hydrogen as fuel. On the supply side, while HKC currently relies heavily on imported hydrogen, it is also exploring domestic production.
Indonesia	Indonesia is already starting to use hydrogen coming from geothermal energy and is now preparing a format for reporting hydrogen production and utilisation. Indonesia is currently facing challenges, such as an appropriate reporting format because most existing technologies are alkaline-based, and the current production figures are often derived from yearly total capacity rather than measured output. To ensure consistent reporting of clean hydrogen volumes in tonnes per annum (TPA) and to convert these into energy units, Indonesia needs standardised calculation assumption and clear methodological conventions.
Korea	Currently, the Ministry of Climate, Energy, and Environment in Korea is responsible for collecting statistics in the hydrogen industry. Under the Hydrogen Economy Promotion and Hydrogen Safety Management Act, a survey on hydrogen statistics began in 2022 done by K-Petrol and the Korean Gas Corporation. As shown in Korea’s presentation, they are reporting the results to KEEI. Data is being collected on production, transformation, and consumption, and capacity, requiring information based on their business types

	and consumption needs. Some studies have sought to incorporate hydrogen into the energy balance, but this remains in a preliminary stage.
Malaysia	Malaysia has one pilot project in Sarawak, which has already implemented hydrogen-powered vehicles. Other than that, some projects were launched by the Malaysian government, primarily in Peninsular Malaysia. One of them is the big lake in Terangganu Greenhub Hydrogen. Petronas, in partnership with utility Tenaga Nasional Berhad (TNB), is working with the government of Terangganu on this project. Regarding data collection, the data is still confidential because the project is still in the pilot stage.
Papua New Guinea (PNG)	PNG has high potential for hydrogen. Due to a lack of infrastructure and technology, PNG does not explore hydrogen in depth. And as the regulator of the energy sector in PNG, the National Energy Authority is now working with the hydrogen policy in place. PNG can attract investors to tap into its hydrogen potential.
The Philippines	The Philippines has significant potential for natural or native hydrogen. Particularly in Zambales, Palawan, where high-volume, naturally occurring hydrogen gas seeps were recently identified in studies, and it is estimated to contain around 800 tons of natural hydrogen. The Philippines is currently positioning itself to become a hydrogen superpower, and the government is actively investigating these resources to enhance our energy security.
Singapore	In Singapore, under regulations, all new power plants would need to be hydrogen-ready. No hydrogen was produced domestically but Singapore would be looking to import hydrogen if it is operationally and commercial viable. Today, Singapore uses only a small proportion of hydrogen for town gas production. For hydrogen data collection, there could be increased respondent burden to obtain the breakdown of the hydrogen data. Singapore would need to assess the operational impact on the administrative surveys and the licensees' data pipelines.
Chinese Taipei	Hydrogen production in Chinese Taipei is still in its early stages. Its enterprises are now producing hydrogen energy only in the pre-experimental stage. It plans to conduct surveys or data collection once the production and application situation is mature.
Viet Nam	So far, Viet Nam doesn't have hydrogen production. However, the hydrogen definition has been identified in the PDB number 8. Viet Nam believe hydrogen as its new energy. Viet Nam has developed a roadmap for hydrogen development. In PDP number 8, Viet Nam refers to the master plan for power development from 2021 to 2030, with visions for 2020 and 2050. So, Viet Nam will produce hydrogen from renewable energy sources, such as solar and wind, because it has significant potential for renewable energy. And Viet Nam has a plan to use hydrogen in gas thermal power plants, convert them to hydrogen, reduce CO2 emissions, and develop a roadmap for its use in transportation.

Session 8: Restructuring of APEC Energy Supply Chains based on Digital Intelligence Technology

This session was held as a self-funded project workshop, organised by the Energy Development Research Institute (EDRI) of China Southern Power Grid (CSG). The session brought together speakers from across the APEC region to examine how digital intelligence can reshape energy

supply chains. **Dr Yi He** opened the technical presentations with a discussion on restructuring APEC energy supply chains through digital intelligence technology. **Mr Julian Prime** of IRENA then addressed data governance and the design of AI-ready data ecosystems for the energy transition. **Sijing Dai** of China Southern Power Grid presented on digital-intelligent applications for power supply chains and cross-economy coordination. **Mr Dongjoo Kim** of the Korea Energy Economics Institute (KEEI) presented on Information Strategy Planning for intelligent energy statistics in the Republic of Korea. **Mr Changyu Li** of Guangdong Power Grid Corporation discussed comprehensive solutions for digital power grid maintenance. **Dr Weize Song**, Research Director and Assistant Professor at Tsinghua University's Low Carbon Energy Laboratory, spoke on AI-driven energy and climate collaborative governance from data collection to decision empowerment. The session concluded with wrap-up remarks delivered by **Dr Chun Yang**, Vice Chair of EGEDA.

Session 9: APERC research activities

Presentation

Dr Matthew Dumlao, acting as the Economy Lead for the Philippines, Asia Pacific Energy Research Centre (APERC), presented the findings of the 9th APEC Energy Demand and Supply Outlook on behalf of APERC's Outlook Team. The Outlook provides analysis and policy insights on future energy demand and supply across APEC economies, with the 9th edition extending projections to 2060 under two scenarios: a Reference Scenario (REF) based on historical trends and a Target Scenario (TGT) where all economies achieve their stated energy policy goals. Key findings show that under REF, total APEC energy demand continues growing through 2060, while under TGT it peaks in 2034 and ends 17% lower than REF by 2060. Fossil fuels remain significant in both scenarios, though their share of total primary energy supply falls from 85% in 2022 to 68% in REF and 47% in TGT, with electricity demand projected to grow by 75% and 93%, respectively. CO₂ emissions decline by 22% in REF and 67% in TGT relative to 2022 levels, though grid reliability and the high cost of energy transition, estimated at 57 trillion USD in the power and hydrogen sectors under REF, remain key challenges. Looking ahead, APERC plans to transition to the LEAP modelling software, shorten the publication cycle to two years, and adopt 2024 as the base year for the next edition of the Outlook.

Mr Robert Tromop, Senior Vice President, Asia Pacific Energy Research Centre (APERC), reported on the centre's ongoing and future activities. APERC's work is organised around five main clusters: research publications, training, the APEC Energy Data Network, and policy cooperative activities. On the research front, the 9th Edition of the APEC Energy Demand and Supply Outlook has been officially launched in Tokyo. The 10th Edition is already underway under a shortened two-year publication cycle. The APEC Energy Overview 2025 has also been published, and fossil fuel topical reports on coal, gas, and oil are either recently released or forthcoming. On training, APERC continues to hold its annual Seminar on Energy Modelling in Tokyo for trainees from developing economies. It also offers short-term courses on energy statistics to support capacity building across the region. On policy cooperation, APERC is advancing several initiatives. These include capacity-building workshops on energy efficiency and renewable energy policy, as well as the Oil and Gas Security Initiative.

Discussion

Mr Tromop, acting as APERC Senior Vice President, opened the feedback session by stressing that the Outlook development team is particularly keen to receive practical insights from energy data analysis experts. He explained that the team is currently a few months into the next production cycle and is actively developing its capacity for cost analysis while integrating an expanded range of emerging technologies into the model. He strongly encouraged all attendees to submit contributions at this early stage in the process, given the direct window of influence available to participants at this juncture.

Mr Lee, from Hongkong, China, advised that Hong Kong, China also uses LEAP software for energy modelling on some aspects like energy intensity, residential building, etc. and is currently studying the feasibility to enhance the projection models for data centre energy consumption. He observed that while there were some historical correlations linked between data centre energy use to total floor area or number of IT racks in the data centre sector/segment, those correlations may have weakened considerably in recent years. Due to the varying purposes of data centre, there can be significant differences in their energy consumption patterns. The critical electrical load (measured in watts) or computing capacity is emerging as a more reliable metric. He would like to know if it may be feasible to provide some sharing on the experience in projection method related to the data centre industry in future workshops, which may have strong growth in near future.

Mr Tromop, responded by referencing a recent proposal presented at the Expert Group on Energy Efficiency and Conservation (EGEEC) meeting in Bangkok. He confirmed that APEC is engaged in direct discussions with SEMI — the global semiconductor producers' association — to understand forward curves for power intensity in semiconductor systems. He acknowledged that the full implications of projected data centre growth remain poorly understood across all stakeholders and proposed that this topic might be productively developed as a co-shared project between the EGEEC and EGEDA.

Mr Zaharin from Malaysia, welcomed APERC's use of the LEAP software and confirmed that Malaysia uses LEAP for the ASEAN Energy Outlook in collaboration with ASEAN Centre for Energy (ACE). He noted that Malaysia's two-year reporting cycle is consistent with both the Outlook publication schedule and that Malaysia is currently preparing its second Biennial Transparency Report (BTR2) with plans to use LEAP for that publication. He also confirmed that 2024 energy data is already available for Malaysia.

Dr Chua from Singapore expressed a keen interest in understanding how technology costs would impact the supply-side outlook, specifically requesting that future editions include Levelised Cost of Energy (LCOE) analysis for each supply technology. Dr. Dumlao briefly acknowledged the request and indicated it would be taken into consideration.

Dr Yoon from Korea raised two distinct issues. First, she asked whether the Outlook contains any analysis of critical mineral supply and demand, noting this had not been immediately visible in the report. Second, she observed that while data centre electricity consumption may appear modest in aggregate graphs, the geographic concentration of data centres could create localised grid

congestion not captured in region-wide projections and asked whether future editions might address this spatial dimension more explicitly. Dr Dumlao responded that critical minerals are not currently being tracked but committed to relaying this feedback to the team. On grid congestion from data centres, he noted that grid modelling would be the key analytical mechanism to identify which segments of the grid would face stress from concentrated data centre growth and flagged this as a potential area of work for the next iteration. Mr Tromop asked whether the focus on critical minerals should be narrowed to approximately half a dozen minerals most relevant to the energy sector, such as those used in high-efficiency electric motors and semiconductors, rather than addressing the full range of identified critical minerals. The Korea representative responded that while he is not a specialist, seven or eight minerals are commonly cited as the most critical and would constitute a reasonable starting point.

Ms Kalina from Papua New Guinea confirmed that the PNG team had attended UN-conducted training on LEAP software but has not yet operationally deployed it for data collection purposes. They expressed a working understanding of the software and indicated openness to receiving further support. Mr Tromop offered to assist PNG with policy analysis and data collection guidance, to which the PNG representative responded that they would reach out as specific needs arise.

Mr Hj Jasrin, Representative from Brunei Darussalam, noted that Brunei Darussalam is currently developing its National Energy Master Plan, expected to be published within the current year, with a central focus on downstream energy development and the associated growth in energy demand from that sector. He added that Brunei Darussalam is also targeting a 30% share of renewables in its generation mix. He indicated that the APEC Outlook projections for Brunei Darussalam may diverge from the Master Plan targets and suggested that the next revision of the Outlook incorporate Brunei Darussalam's National Energy Master Plan to ensure alignment.

Mr Prime, from IRENA, posed a non-economy-specific question asking whether the team had conducted any retrospective accuracy assessment across the nine editions produced to date — specifically whether the forecasts made in earlier editions have been evaluated against actual outcomes. Mr Tromop noted that a recent internal exercise had compared APEC Outlook baselines against those of major institutions, including BP and the IEA. He observed significant divergence across organisations over time, with projections spreading into a wide range while APEC's outlook fell roughly in the middle. On target or accelerated policy scenarios, most organisations project similar rates of technological transition, with the primary divergence being the timing of when transitions begin, with some models showing a 15-year delay relative to others. Reviewing APEC's back casting, he found variation across editions to be explainable, as each cycle's trajectory is shaped by its specific policy framing, such as a 1.5°C endpoint versus a net-zero pathway. He suggested the exercise had sufficient analytical merit to merit publication as a paper for IAEE and offered to continue the conversation offline.

Session 10: Energy efficiency indicators

Presentation

Ms Gelindon, EGEDA Secretariat, presented APEC's ongoing efforts to strengthen the collection and use of energy efficiency indicators (EEIs), outlining progress since the development of the

EEl template in 2014 and subsequent collaborations with the IEA and member economies. She mentioned that only several APEC economies—particularly APEC-OECD members, Hong Kong, China, and Chinese Taipei—are able to submit complete templates. The presentation highlighted the various methods used to gather EEl data, including administrative sources, surveys, metering, and modelling, and emphasised the importance of EElS for evidence-based policymaking, cross-economy benchmarking, scenario modelling, and monitoring policy effectiveness. Ms Gelindon also illustrated how detailed end-use data helps explain consumption patterns, such as differing residential energy trends across APEC economies, and concluded by underscoring that better data enables better analysis and more effective energy-efficiency policymaking.

Round Table Discussion

Ms Gelindon of the EGEDA secretariat led the round table discussion on *Session 10A. APEC efforts on energy efficiency indicators*. The members were asked about their consent on three discussion points:

- 1) EGEDA will continue requesting from the APEC-OECD members copies of the energy efficiency indicators templates that they submit to the IEA

Economy	Responses
Australia	Answering on behalf of the person responsible for completing the EEl template, Australia is willing to continue sharing the EEl template it submitted to the IEA.
Korea	The person responsible for filling in the EEl is from a different office but will relay the information. Korea sees no problem in continuing to provide the EEl template.

- 2) For APEC- Non-OECD members (without end-use surveys), the EGEDA secretariat would like to a) seek the members' kind assistance in filling the "MACRO-ECONOMIC" and "COMMODITIES" parts of the EEl and b) include estimations based on the methodology provided by the consultant they engaged in a project.

Economy	Responses
Brunei Darussalam	Brunei Darussalam will soon (within two years) conduct a consumption survey through UN funding. Open to any corporation with the EGEDA secretariat.
People's Republic of China	China is willing to help complete the "Macro-Economic" and "Commodities" sheets of the EEl template as proposed by National Bureau Statistics (NBS) of China.
Papua New Guinea	The data needed for the mentioned sheets are from the statistics office. Will try to coordinate with the agency to obtain the data.
Singapore	The data needed for the mentioned sheets were from the Singapore Department of Statistics (DOS) and consent would be needed from DOS to share the data.
Viet Nam	The data needed for the mentioned sheets are from the statistics office. Will try to collaborate with the concerned agency, if possible, to obtain the data. Viet Nam ensured coordination among the relevant responsible persons to complete the template with the required data.

- 3) For APEC- Non-OECD (with end-use surveys), EGEDA looks forward to: a) the continuing submission of Hong Kong, China, and Chinese Taipei of the completed EEI template and b) Malaysia and the Philippines in completing the EEI template with the results of their respective energy consumption surveys.

Economy	Responses
Hong Kong, China	Will continue completing the EEI template and submitting it to the EGEDA secretariat.
Chinese Taipei	Will continue completing the EEI template and submitting it to the EGEDA secretariat.
Malaysia	Will share the results once available and fill in the EEI template. Will collaborate with the EGEDA secretariat in completing the template.

Session 11: Aspirational Goals and Other Business

APEC Aspirational Goals

In the discussion on APEC’s aspirational goals, Mr Barcelona, EGEDA Secretariat, explained how progress toward the renewable-energy doubling goal is tracked. He noted that only modern renewables are included in calculating the renewable-energy share. This excludes traditional solid-biomass consumption in the residential, commercial, and agriculture sectors. While some modern uses of solid biomass—such as wood pellets—may exist in these sectors, current data collection systems are not yet able to capture them.

Upcoming Events

Mr Barcelona, EGEDA Secretariat, outlined the upcoming activities to be implemented by the Secretariat, including the 24th APEC Workshop on Energy Statistics scheduled for 30 September–2 October 2026, and the EGEDA Energy Statistics Training Course to be held on 9–20 November 2026.

Dr Shichang Sun of EGCFE shared several forthcoming events: the EGCFE 2026 and OGSN Forum in June 2026 in Hokkaido, Japan; the 8th OGSE in May 2026 in Malaysia; the publication of Oil and Gas Security Studies (OGSS) 21 in the first half of 2026; the 1st Annual Convention for the APEC Clean and Low-Carbon Hydrogen Policy Network Project in May 2026 in Hong Kong, China; and an APEC Workshop on Cleaner and More Efficient Operation of the Fossil Energy Industry (date to be confirmed).

Mr Julian Prime of IRENA noted that the IRENA Annual Assembly will take place in January 2027, but no information is yet available regarding the next IRENA Council Meeting.

Mr Tulinov of UNESCAP announced the following events, all to be held at UNESCAP headquarters in Bangkok: the International Committee on Statistics Meeting on 2–4 December 2026; the 4th Energy Ministerial Forum in September 2027; and the Working Group Meeting on Access to Energy, Energy Efficiency, and New and Renewable Energy on 13–14 May.

Dr Liu Meng, Chair of EGEEC, shared that the next EGEEC meeting will be held in China. There will also be a workshop on District Cooling and AI but there is no definite venue and schedule yet.

Next EGEDA meeting (EGEDA38)

The venue and the date of the next EGEDA meeting is not yet finalised although the Chair and the Secretariat are already in discussion with a member economy, which will highly likely host the meeting.

Other Matters

Mr Hj Jasrin Serudin of Brunei Darussalam suggested that when the Secretariat revises the APEC annual energy questionnaires, training sessions should be provided to EGEDA focal points to familiarise them with the updated templates.

Dr Liu Meng of EGEEC expressed the expert group's interest in deepening collaboration with EGEDA.

Ms Gelindon, EGEDA Secretariat, announced that Overview 2027 will be simpler than Overview 2026, allowing APERC researchers to focus on the APEC Energy Outlook 10th, Edition given the shortened preparation cycle from three years to two.

Session 12: Closing Session

Mr Tromop, EGEDA chair, closed the meeting by thanking all delegates and APEC staff for their presentations and contributions to productive discussions. As a first-time chair, he reflected on his admiration for energy statistics professionals, often just one or two people per economy responsible for gathering, managing, and resolving data from many sources, and passed on EGEDA's thanks to those individuals. He also praised the EGEDA secretariat for the significant work behind coordinating the meeting, including data analysis, training workshops, and logistics, and thanked co-chair Dr. Yang Chung for their shared leadership. Looking ahead, he invited delegates to suggest improvements to the meeting format, including the possibility of combining online and in-person sessions, and outlined personal action items such as drafting meeting setup guidelines, adjusting agenda timing, and improving presentation tools. He closed by expressing gratitude to the Government of China and the China Southern Power Grid for their generous sponsorship and hosting of the meeting.

Mr Lin Zhiwen, Chief Accountant of the Energy Development Research Institute, CSG, delivered the closing remarks. On behalf of the host institution, he extended his gratitude to all participants who travelled to attend the meeting. He thanked the APEC Secretariat and the Energy Working Group for their support in promoting regional energy cooperation, and the EGEDA Secretariat for their meticulous organisation, which ensured the smooth conduct of the meeting. He also acknowledged the active participation of experts from member economies, international organisations, universities, and enterprises, whose contributions strengthened mutual understanding and laid a foundation for deeper energy data cooperation. As host of APEC 2026, he emphasised that the conclusion of the meeting marks not an end, but a new starting point for deeper collaboration. He expressed confidence that collective efforts would advance regional energy data cooperation and support the broader energy transition across the Asia-Pacific.

After Mr Lin's closing remarks, the EGEDA37 adjourned.