Summary record

33rd EGEDA (Hybrid) Meeting Hosted by the Philippines 26-28 October 2022

The 33rd meeting of APEC Expert Group on Energy Data and Analysis (EGEDA) was hosted by the Philippines on 25-28 October 2022. This is the first time that the EGEDA meeting was held hybrid (both onsite and online) after holding the 31st and 32nd meetings fully virtual due to COVID-19 pandemic. It was held from 09:00 to 17:00 Philippine time (UTC+8). The meeting was participated in by 67 members and guests (including eight who joined online) from 12 member economies APEC expert groups and international agencies; namely: onsite—Australia; Brunei Darussalam; Indonesia; Malaysia; the Philippines; Papua New Guinea; Chinese Taipei; Thailand; (online and onsite) and Viet Nam and online—Hong Kong, China; Korea; and the United States. The APEC secretariat, EGNRET and EGEEC joined online while IEA, IEF and IRENA where all onsite. The host likewise invited representatives from government agencies and energy stakeholders of their economy as observers in the meeting.

Day 1—26 October 2022

Opening Session

Undersecretary Felix William B. Fuentebella of the Philippine Department of Energy delivered the Official Welcome Remarks. In his remarks, he emphasized the importance of data to fill-in the gap and come up with a strong policies and programs. He also mentioned that the meeting is a good avenue for the members to appreciate the importance and uses of data. He likewise encouraged the members' strong cooperation so that the long-time goal of achieving quality and reliable data is achieved.

Mr Glen Sweetnam, APERC's Senior Vice president and EGEDA Chairperson, extended his gratitude to the Philippines for hosting the event. He expressed his expectations for a successful meeting, so he encouraged the members' active discussion.

Session 1: Report on APEC activities

Mr Sweetnam reported on the result of the EWG meetings 62 and 63 and the forthcoming EWG 64. He reported about the current directives from the senior leaders on revising the APEC twin goals. Mr Sweetnam mentioned that there is a small group now working and reviewing the current APEC goals to help the members in coming-up with a well-informed decision. He likewise reported on APEC Energy Statistics workshop Part 1 and 2, a joint APEC-IEA workshop on energy efficiency indicators. He encouraged all members to join the online workshop to be held o 15-17 November 2022.

EGEDA Vice-Chair Mr Jen-Yi Hou suggested that the latest UNFCCC discussions on the NDCs might provide a good reference in revising the APEC goals, which APERC and ESTO took note of.

Mr Edito Barcelona, Senior Research Fellow and Head of the Energy Statistics Office (ESTO) of APERC reported on the status of 2022 annual energy data collection, which were all received in September with 2020 as the current data. The latest energy data showed decline in supply and consumption compared with 2019 in view of the reduction of mobility due to pandemic. APEC's TPES in 2020 was dominated by fossil fuel, but renewables increased significantly. He likewise provided supplemental explanations about definitions of energy and fuel, energy balance tables, conversion

factors and energy indicators for using data, monitoring the energy market, and tracking energy goals for the benefit of the observers in the meeting.

The progress of APEC energy intensity reduction and doubling renewable share goals was reported by **Ms Elvira Torres Gelindon**, **Research Fellow of ESTO/APERC**. The report highlighted the possibility of achieving the goals earlier than the target years. She reiterated the ongoing analysis being done by the small group on this.

Mr Nobuhiro Sawamura, **Senior Researcher of ESTO/APERC** provided a report on the past and future statistics training courses of EGEDA including the details of both short-term and long-term courses' objectives, contents, and past participants. He mentioned that the secretariat will hold the training courses onsite in 2023.

Session 2: Guest presentation by the Philippines

The Philippines delivered a presentation on the latest energy plans and programs of the economy. **Mr Michael Sinocruz**, **OIC-Director of the Philippine Department of Energy** highlighted the economy's current energy situation, (energy supply and demand, and electricity generation), the energy outlook towards 2040, as well as the corresponding greenhouse gas (GHG) emissions reduction. He also enumerated the government's strategies to achieve their energy goals.

Session 3: Joint Organisations Data Initiative (JODI)

Ms Allyson Cutright, Energy Markets & Data Division Analyst, IEF explained basic information regarding JODI, JODI progresses and energy data transparency, including the reports on current global energy trends. The importance of JODI data was shared, and IEF mentioned cooperating with more economies and energy industry stakeholders to help improve JODI database. Ms Risa Pancho, Researcher, ESTO/APERC reported on the progress of the data submissions for JODI Oil and Gas in APEC region by giving explanations about JODI participation assessment, sustainability, timeliness, and completeness of these data submissions.

There was question about what mobility index was used to see the effect of COVID-19. Ms Cutright answered that there is a "COVID-19 Community mobility reports" published by Google, which includes daily data, monthly average data, and so on regarding how the community moved differently. IEF also mentioned that it was broken down into residential indicators, and IEA is analyzing similar data as well.

Session 4: Energy efficiency indicators

Mr Julian Prime, Senior Statistician from the International Energy Agency (IEA) provided a very detailed information on how IEA collects and analyses energy efficiency indicators from IEA/OECD members. His presentation included sample analysis which is helpful in formulating energy efficiency policies in their member countries/economies. He showed the UK as a good example of country using the energy efficiency indicators in developing policies.

Ms Gelindon reported the status of collection of the energy efficiency indicators template in APEC as well as a brief background of when the collection started. The secretariat has received templates from 13 economies as IEA-APEC members shared the templates that they submitted to the IEA. She highlighted the enhanced cooperation with IEA especially in the improvement of the template, collection from OECD members and in conducting the workshops, Part 2 to be held online on 15-17 November 2022.

In the ensuing discussion, the EGEDA Vice Chair asked why the energy intensity of the mining industry of the economy in Ms Gelindon's presentation is not showing improvement. He suggested the need to check with the industry. Ms Gelindon responded that that was the objective of detailed data, to know which industry is performing well in terms of intensity.

Day 2 — 27 October 2022

Session 5: APERC research activities

Mr Sweetnam described the research activities that APERC is conducting, including the fossil fuel reports, OGSS, independent studies, etc.

Session 6: Other matters

Mr Barcelona delivered a presentation on new energy technologies namely, district cooling and hydrogen. He mentioned the pilot collection of hydrogen data in 2023.

The EGEDA Vice Chair suggested to add a table in the hydrogen questionnaire for the collection of energy inputs for its production and remove some items that may not be necessary. Mr Barcelona agreed with the Vice-Chair's suggestion. Mr Hou raised his concern on the number of submissions that the secretariat can receive as other members may not have the information on hydrogen. The secretariat suggested to go around the members participating in the meeting and ask about the hydrogen situation in their respective economies. Following was the result:

Economy	Status
Australia	Currently conducting
	surveys to get
	information on
	consumption data.
Brunei	1-year demonstration
Darussalam	project on hydrogen
	production and
	transportation.
Hong Kong,	No hydrogen production
China	and consumption data
	available at present.
Indonesia	Conducting Pre-
	Feasibility study on
	possible use of
	Hydrogen.
Korea	Trying to collect data but
	still needs to improve
	collection system.
Malaysia	Pilot project on ammonia
	co-firing in coal power
	plants.

Economy	Status
Papua New	Looking into studying
Guinea	renewable-hydrogen in the
	future.
The	Conducting further study on
Philippines	possible inclusion of Hydrogen
	in the energy mix.
Chinese	Conducting pilot project on
Taipei	green hydrogen and co-firing
	with hydrogen and ammonia.
Thailand	Conducting a study on the
	possibilities of hydrogen use in
	power generation, industry,
	transportation and others.
United Sates	Collects data on hydrogen
	disposition.
Viet Nam	Conducting the pilot study on
	Hydrogen production.
	Hydrogen production.

In addition, regarding district cooling, Malaysia shared that data can only be collected from co-generators regulated by law.

Mr Prime of IEA presented the highlights from the 2022 Global Hydrogen Review and progress on data collection issues. He reported that hydrogen consumption is increasing and would rise rapidly, as the

drivers of the consumption of this resource is increasing. He also reported on IEA's prototype questionnaire for hydrogen data collection and the plan to start the collection of 2022 data.

On Australia's question how IEA would incorporate hydrogen in the energy balance, Mr Prime responded that it is still under discussion. The vice chair suggested to IEA and the EGEDA secretariat to work closely on hydrogen energy data collection so that common member economies of APEC and IEA will not fill out hydrogen template twice. Mr Prime replied that IEA will continue to work closely with APEC on this matter.

Mr Takuo Miyazaki of the APEC Secretariat presented "APEC project proposals and budget" as requested by the EGEDA secretariat to explore the possibility of availing APEC funding by member economies for the collection of end-use energy data. Mr Miyazaki mentioned that the Energy Efficiency, Low Carbon and Energy Resiliency Measures (EELCER) sub-fund could be used for this purpose.

In the ensuing discussion, the EGEDA Chair asked and Mr Miyazaki responded positively that energy consumption surveys can be funded by the EELCER provided that the project would benefit multiple economies. The limitation of 15-20 months in project duration can be extended for more than two years if the reason is justifiable. If a project is expected to last longer than 2 years or so, the project is recommended to be entirely self-funded by an economy, as a 100% self-funded project is not required to meet the time limitation obligation.

The members find this opportunity also as possible areas of cooperation among economies for funding by the APEC is the development of survey tools for household and other sectors' energy consumption

The secretariat likewise finds this as an opportunity to be a continuous project to cover as many economies as needed until the objective of improving energy data and statistics is achieved.

Ms Nazik Elhassan of the International Renewable Energy Agency (IRENA) delivered a presentation on renewable energy statistics for tracking SDG 7. IRENA explained how it provides data for calculating the following three indicators: 7.2.1: RE share (%) of total final energy consumption, 7.a.1: Financial flows to developing countries and 7.b.1: RE electricity capacity in developing countries. She highlighted that IRENA is a co-custodian of indicators 7.a.1 and 7.b.1 but also provides data for 7.2.1. She explained that indicator 7.b.1 is calculated by dividing renewable energy capacity (in Watts) by population (number of inhabitants) measured as renewable energy capacity per capita (Watts per capita).

Dr Lee of EGNRET raised the question on what is included as renewable hydropower where she responded to explain that it excludes pumped storage and only includes renewable hydropower and mixed plants.

On the question why renewable capacity per capita (Watt/capita) is used instead of renewable electricity generation per capita (Watt-hour/capita), Ms Elhassan IRENA collect detailed country level data on renewable electricity generation, installed capacity and renewable energy consumption figures but specifically for 7.b.1 renewable capacity data is the selected for measuring the indicator instead of renewable electricity generation.

The Philippines raised a suggestion related to calculating the share of variable renewable energy of total electric generating capacity and suggested to IRENA to consider monitoring progress of that share given its importance in the stability of the electric grids.

Dr Tom Lee, outgoing chair of EGNRET reported on their working group meetings as well as APERC's tracking of the APEC RE doubling goal, examples of EGNRET APEC funded projects and discussion on potential new APEC energy goals. He showed that Kaya identity which equates CO₂ emissions to population, GDP/capita, Energy intensity and CO₂ intensity, that may be used in crafting the new goals.

EGEDA Chair mentioned that the small group reviewing the goals may face a challenge in the analysis as there are differences in the definition of CO_2 intensity, i.e., CO_2/GDP vs $CO_2/energy$, the latter is used in the calculation of Kaya identity.

Mr EC Vy, Chair of EGEE&C presented on their activities and highlighted the joint events between their working group, other working groups and other APEC and non-APEC fora. He also mentioned the active support from EGEE&C members to provide APERC with more detailed data for more in-depth analysis.

Session 7: Other business

A. Upcoming events (EGEDA, IEA, IEF, IRENA)

IEA — The Energy Statistics Development Group (ESDG) will be held on November 9 -10, 2022 in Paris. Statistics training course will take place in March 2023.

IEF — In early February, Asia ministerial meeting will be held. Annual Symposium regarding analysis of energy outlooks will be held in February. IEF ministerial may be held in May with a heads of JODI meeting as a side event.

IRENA — Upcoming Off-grid Renewable Energy Statistics will be published in the end of this year. Recently, Indonesia Energy Transition Outlook was published October 2022. The 13th IRENA Assembly will be held in Abu Dhabi.

EGEDA — EWG64 will be held on 1-3 November 2022.

B. The 20th APEC workshop on energy statistics

EGEDA secretariat will hold 20th APEC workshop on energy statistics online on 15-17 November 2022. This is Part 2 of APEC-IEA collaboration on end-use energy consumption data.

C. Next meeting (34th EGEDA meeting)

The 34th EGEDA meeting will be held jointly with EGNRET tentatively in April 2023 to be hosted by the USA.

APEC Outlook 8th Edition Roadshow

APERC gave a presentation on the APEC Energy Demand and Supply Outlook 8th Ed to the EGEDA members. Mr Sweetnam and **Mr Nabih Matussin, Researcher, APERC**, explained the methodologies, scenarios and assumptions, and projections for each of the individual member economies that participated in the meeting.

The following are the comments of the EGEDA representatives:

- Australia: Expressed that electrification of transportation will be difficult to achieve, even in CN
 as Australia remains heavily reliant on oil due to long driving distances in the economy.
- Brunei Darussalam: Suggested to remove the specific names of the industries and mention them
 in generic form. In addition, the economy inquired if the demand of electric vehicles is shown in
 the electricity generation or elsewhere. APERC mentioned that such demand is indeed reflected
 in the electricity generation. However, APERC model does not distinguish the source of
 generation for electric vehicles' charging.
- Hong Kong, China: No comments
- Indonesia: Concurred that APERC projections are in line with their economy's forecasts.
- Korea: Agreed with the projections which are in line with their forecasts. Korea also added that
 the economy would require significant LNG imports in the future to ensure security of its energy
 supply

- Malaysia: Suggested the possibility of CCS utilisation in coal-fired power plants, given that coal is the most carbon intensive fuel. In addition, Malaysia expects the emission trajectories to be in line with their NDC projections.
- **Papua New Guinea:** Expressed no comments on APERC's projections. However, the emissions projections are not in line with its carbon neutrality goal by 2050.
- **Chinese Taipei**: Provided information on its National Net-zero Transition Pathway, including electricity consumption growth, energy mix, and future planning of hydrogen utilization.
- Thailand: Concurred that APERC's projections are in line with their plans.

Adjournment:

The meeting participants appreciated the inclusion of the APEC energy outlook roadshow as part of the meeting agenda. They find the topic very informative being able to know the projections on other economies and on their own.

Having no other matters to discuss, the 33rd EGEDA meeting was adjourned.