

# 13.a. EGEDA Chair Report

**The 65th Meeting of APEC Energy Working Group (EWG65)**

21-22 May 2023 (EDT) - Detroit, Michigan, US

Glen SWEETNAM

Chair, EGEDA

Senior Vice President, APERC



# Outline

How is electricity generated?

- Capacity and load factors

Why is electricity so important for decarbonization?

- Consumption

- Production

What are the challenges of decarbonizing the power sector?

How can we predict future changes in the power sector?

How can we monitor the changes as they occur?

# Regular energy data collection

# Regular APEC energy data collection

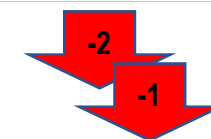
- ❑ **APEC Energy Statistics 2020** and **APEC Energy Handbook 2020** were published in March 2023
  - The publications are now being shipped to EWG and EGEDA members as well as to other APEC fora
- ❑ The secretariat is now collecting the **annual energy supply and demand data for the year 2021**
  - **APEC Energy Statistics 2021** will be published **online**; **APEC Energy handbook 2020** will still be printed
- ❑ Other data collections continue
  - Annual energy prices
  - Annual CO<sub>2</sub> emissions from energy combustion
  - Energy efficiency indicators
  - Monthly oil and gas supply and demand (JODI)
  - Quarterly energy supply

# Smiley faces of JODI Oil in APEC (July to December 2022)

Economy	Sustainability	Timeliness (M-1 & M-2)	Completeness (%)	Sustainability	Timeliness	Completeness (%)
Brunei Darussalam	6	6	100%	😊	😊	😊
China	6	5	67%	😊	😐	😐
Hong Kong, China	6	6	100%	😊	😊	😊
Indonesia	6	6	100%	😊	😊	😊
Malaysia	6	5	52%	😊	😐	😞
Papua New Guinea	2	1	95%	😞	😞	😊
Peru	6	3	100%	😊	😞	😊
Philippines	6	0	100%	😊	😞	😊
Russia	6	5	29%	😊	😐	😞
Singapore	6	6	52%	😊	😊	😞
Chinese Taipei	6	6	100%	😊	😊	😊
Thailand	6	6	97%	😊	😊	😊
Viet Nam	6	2	5%	😊	😞	😞
		Number of	😊	12	6	8

Compared to Jan – Jun 2022  
Compared to Jul – Dec 2021

No change



# Smiley faces of JODI Gas in APEC (July to December 2022)

Economy	Sustainability	Timeliness (M-1 & M-2)	Completeness (%)	Sustainability	Timeliness	Completeness
Brunei Darussalam	6	6	100%	😊	😊	😊
China	6	6	64%	😊	😊	😐
Hong Kong, China	6	6	100%	😊	😊	😊
Indonesia	6	6	100%	😊	😊	😊
Malaysia	6	5	62%	😊	😐	😐
Papua New Guinea	0	0	0%	😞	😞	😞
Peru	0	0	0%	😞	😞	😞
Philippines	6	6	100%	😊	😊	😊
Russia	6	6	27%	😊	😊	😞
Singapore	6	6	64%	😊	😊	😐
Chinese Taipei	6	6	100%	😊	😊	😊
Thailand	6	6	91%	😊	😊	😊
Viet Nam	6	2	24%	😊	😞	😞

Number of



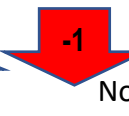
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9

6

Compared to Jan – Jun 2022  
Compared to Jul – Dec 2021

No change



No change

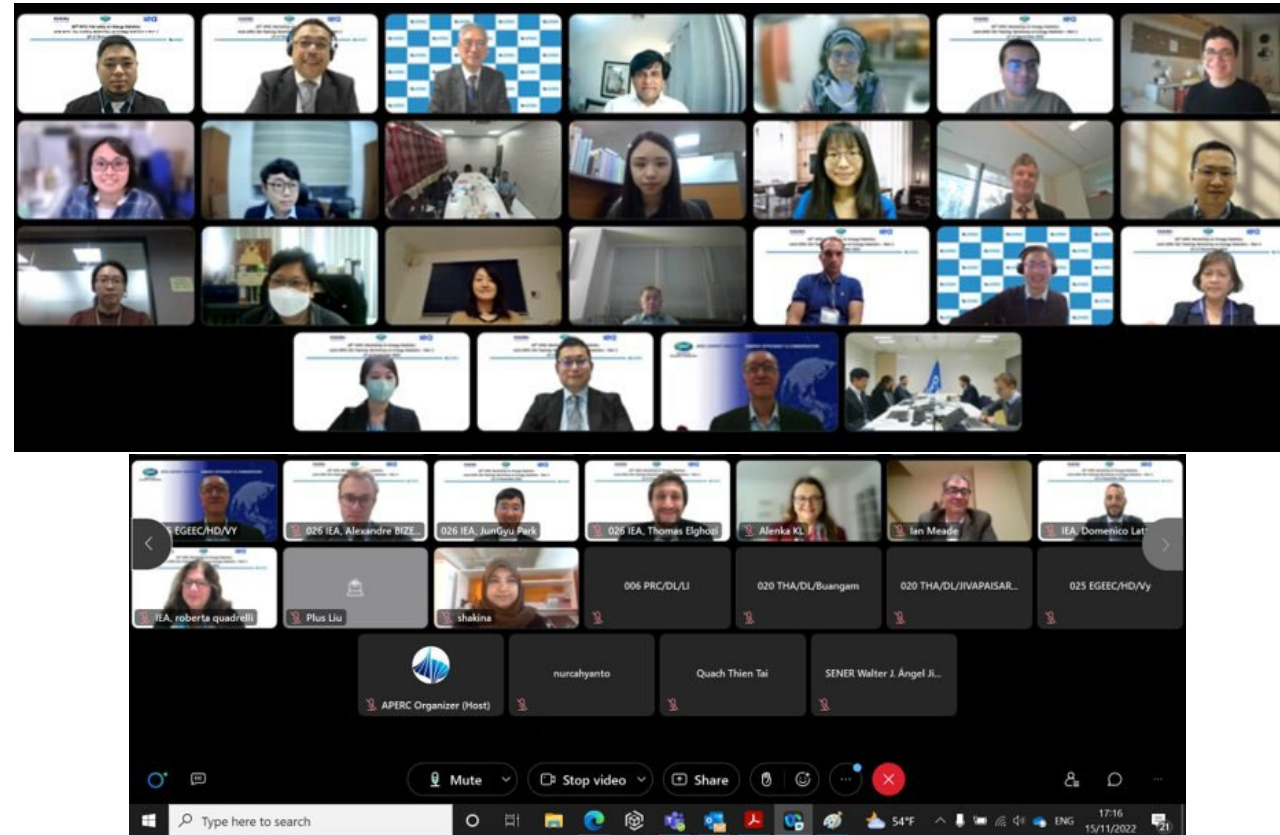
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# APEC workshops on energy statistics

# 20<sup>th</sup> APEC workshop on energy statistics (1)

- Online on **15-17 November 2022**:
  - **Part 2** of the Joint APEC/IEA Workshop on energy efficiency indicators,
- **Participants**
  - No. of participants – 59
  - No. of economies – 14 (AUS; CDA; PRC; HKC; INA; JPN; ROK; MAS; PNG; PHL; CT; THA; US; VN);
  - EGs/Fora – EGEEC; APERC
  - Experts and Speakers - IEA (6) and METI
  - Consultants – 2
- **Purpose**: improve member knowledge about end-use data collection and estimation processes and how best to use published data.



- **Agenda**
  - Data gaps analysis
  - Modeling sectoral end-use energy consumption
  - Hands-on exercises on data estimation
  - Resolving data gaps at the economy level



# 20<sup>th</sup> APEC workshop on energy statistics (2)

## □ Economy presentation

- **Chinese Taipei** presented "***Energy transition policies and tracking energy efficiency indicators***" showing how energy indicators are used to track energy transition policies.
  - Highlighted 11 indicators for tracking energy transition.
- The **US** presented "***EIA's experience with end-use energy estimation***".
  - meaningful disaggregation of end-use estimation from billing information;
  - importance of building characteristics data, administrative data and wider community knowledge.
  - EIA uses two approaches such as regression models and engineering models. Results should be calibrated/adjusted with billing data.

## □ IEA's National roadmap for demand-side data collection and development of energy efficiency indicators

- significance and importance of energy efficiency indicators, collaboration among statistical agencies, trusted and empowered data collection systems, proper resource allocation, staff capacity and stability, data collection strategies, assessment tools and statistical guides.

# 21<sup>st</sup> APEC workshop on energy statistics

- Tentative schedule: **12-14 September 2023** (Tokyo)
- Purpose: to enhance the EGEDA members knowledge on hydrogen, district cooling, and other new energy technologies such as large-scale battery electricity storage, electric vehicles, etc., to facilitate data collection on these new energy products and technologies.
- Agenda
  - **Hydrogen** production, transportation, and consumption, and data requirements for inclusion in energy balances/statistics
  - **District cooling** and challenges in collecting data
  - **Grid-scale battery storage technologies** and how data could be incorporated in energy balances/statistics
  - **Other new energy technologies** such as electric vehicles, fuel cell vehicles, etc.

# **EGEDA training courses on energy statistics**

# EGEDA's training courses (1)

## Held in Tokyo

### ❑ EGEDA Short term course (6 – 16 Feb 2023)

- No. of economies – 9 (BD; INA; CHL; MAS; PNG; PHL; SGP; THA; VN)
- No. of participants – 12
- Consultant/Trainers - 6

### ❑ Objectives

- Increase the level of understanding of APEC energy data base by APEC economies.
- Improve reliability of the APEC energy database.
- Enhance members' understanding on end-use energy consumption and energy efficiency indicators.
- Develop human resource network between APEC economies and APERC.



# EGEDA's training courses (2)

## Held in Tokyo

- ❑ **Special training course for Viet Nam (27 Feb – 3 Mar 2023)**
  - 7 participants from 5 agencies in VN (EREA, OGCD, IEVN, MLTPD, GSO)
  - Others-OJT, long-term trainee, APERC-VN
  - Trainers – 5
- ❑ Enhance capability to collect, process and report energy data and statistics and complete questionnaires using Viet Nam data.
- ❑ **Workshop**- identified challenges encountered in data collection.
- ❑ **Proposed solution**- create an MOU for inter-agency collaboration



*We are hopeful that further relaxing of COVID 19 travel restrictions will allow in-person meetings/trainings to continue*

# EGEDA's training courses (3)

- ❑ Middle term: 8 weeks of on-the-job training in ESTO,APERC (**planned for June 2023**)
- ❑ Invited: Papua New Guinea and Peru
- ❑ Agenda
  - ❑ Energy products and flows, unit conversions, energy balance table, CO2 emissions, estimating renewable energy data, and JODI
  - ❑ Review and revision of annual energy, socio-economic, and energy-related data
  - ❑ Identification of energy data sources and designing energy consumption survey templates/questionnaires
  - ❑ Estimating end-use energy consumption data and conducting decomposition analyses
  - ❑ Completing energy efficiency templates

# International meetings

# Secretariat's participation in international meetings

- JODI Inter-Secretariat Working Group (ISWG) meeting on **7 June 2022**
  - Discuss organization updates, technical issues and cooperation with private stakeholders
- Task Team for the Revision of Standard International Energy Classification (TT-SIEC) under International Energy Statistics Working Group (InterEnerStat)
  - Discuss revisions to SIEC with the ongoing revisions of Central Product Classification (CPC) and International Standard Industrial Classification (ISIC)
  - Monthly online meetings scheduled until December 2023
- IEA's Energy Statistics Development Group (ESDG, **9-10 November 2022**)
  - EGEDA secretariat to share plans to pilot data collection of hydrogen data in APEC in 2022-2023; propose collection of district cooling data and energy efficiency indicators data in APEC



# 34<sup>th</sup> EGEDA meeting

# 34<sup>th</sup> EGEDA meeting held jointly with EGNRET58 (1)

**Host : Hawaii, The United States**

**Date : 4 – 5 April 2023**

**Time :** (Day1) 9:00AM-4:50PM [Hawaii time]  
(Day2) 9:00AM-5:15PM [Hawaii time]

## Participants

- 50 participants
- 12 economies (AUS, BD, HKC, JPN, ROK, PNG, PHL, CT, SGP, THA, US, VN)
- EGEDA, EGNRET, EGCFE (Chair), EGEEC (Vice Chair), EWG (Lead Shepherd), IRENA, and APERC



# 34<sup>th</sup> EGEDA meeting held jointly with EGNRET58 (2)

## Highlights:

- ❑ EWG, EGNRET, EGEDA, EGEEC, EGCFE and APERC updates
- ❑ Overview of APEC **2020 energy supply and demand** including progress toward the two **APEC energy goals**
- ❑ Renewable energy statistics : IRENA renewable energy statistics and Renewable energy data collection in the USA
- ❑ **Hydrogen** data collection
- ❑ **JODI** updates
- ❑ EGNRET project reports
- ❑ Hawaii Natural Energy Institute presentation
- ❑ APERC research on renewable energy certificates (RECs)
- ❑ Discussions on potential collaboration between EGEDA, EGNRET, EGCFE, and EGEEC

# 34<sup>th</sup> EGEDA meeting held jointly with EGNRET58 (3)

## **Opportunities for further collaboration among expert groups:**

- Initiate a concept note for seminar/workshop where respective experts can share approaches to tracking/evaluating the ramp-up of new energy technologies.
- US suggested expert groups meet jointly at least once a year to ensure mutual knowledge of new activities.
- Hong Kong, China proposed that each APEC member economy collaborate with the expert groups to enhance capabilities, including data collection.
- Research Centres should consider addressing issues raised by expert groups, e.g., hydrogen, e-fuels, etc.
- The Lead Shepherd encouraged increased member attendance at expert group meetings and planned to raise the issue at EWG meetings.
- Hybrid meetings and workshops should be used to enable greater member participation.
- Deepen collaboration with the Transportation Working Group to cover transport-related topics, e.g., EV vehicles.

**Thank you.**

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