

Report on energy statistics training courses and APEC workshop on energy statistics

The 36th Meeting of APEC Expert Group on Energy Data and Analysis (EGEDA)

8-9 April 2025 – Hong Kong, China

Mr Edito BARCELONA
EGEDA Secretariat
Senior Research Fellow, APERC



Outline

- Energy statistics training courses
- APEC energy statistics workshop

Energy statistics training courses

Energy statistics training courses

- Carried out once a year in Tokyo
- Purpose:
 - a. Increase capacity of energy statistician in APEC economies
 - b. Enhance human resource network between APEC economies and APERC/ESTO
 - c. Increase the level of understanding of APEC energy database by APEC economies
 - d. Introduce world trends in energy statistics to APEC economies
 - e. Improve the reliability of the APEC energy database
- Duration: 2 weeks (10 working days)
- APERC funds one trainee from each economy; APEC economies can send more than one trainee provided that additional trainee will be self-funded

Training agenda

- Importance of energy statistics
- Explanation of energy products and flows + methodologies for estimating NRE production and consumption
- Units and unit conversion
- Preparing the energy balance table
- Calculating GHG emissions using the energy balance table
- Calculating energy indicators
- Sharing of energy data collection practices and methodologies
- Tracking energy efficiency in the industrial, commercial, residential and transport sector
- Decomposition analysis
- Hands-on exercises are given on all topics

Energy statistics course (Held in Tokyo)

22 January to 2 February 2024



No. of economies – 9 (BD, CHL, MAS, PNG, PE, SGP, CT, THA, VN)

No. of participants – 12 (3 self-funded)



10-21 February 2025



No. of economies – 8 (INA; MAS; PNG; PHL; SGP; CT; THA; VN)

No. of participants – 11 (3 self-funded)

22nd APEC workshop on energy statistics

- **Date:** 23-26 July 2024
- **Theme:** Tracking the progress of capacity built from the last workshops
- **Participants:** 24 persons from 14 economies participated (9 persons online)
IRENA in-person, 4 speakers from IEA online
- **Objectives**
 - The workshop's main objective is to provide knowledge on the new energy data and statistics required to monitor the energy sector during the energy transition.
 - The workshop will enhance the participants' ability to apply the methodologies and techniques learned from previous workshops in the collection of data such as:
 - new energy products and technologies,
 - energy efficiency indicators, and
 - new and renewable energy data and statistics.
 - The workshop will facilitate dialogues on the issues and challenges encountered in collecting these data and statistics through economy presentations and roundtable discussions.

Group photo with two online participants



Agenda

- Session 1 – Efforts in collecting new and renewable energy statistics and new energy products and technologies
- Session 2 - Hydrogen/ammonia/e-fuels data collection
- Session 3 – District cooling data collection
- Session 4 – Grid-scale electricity storage data collection
- Session 5 - Collection of energy consumption of EVs, PHEVs and FCEVs
- Session 6 – Fugitive methane emissions data collection
- Session 7 – Importance of energy efficiency indicators
- Session 8 – Energy consumption survey in collecting energy efficiency indicators

Expert speakers

- Mr Julian Prime – IRENA
- Ms Konstantina Kalogianni – IEA
- Mr Riccardo Inverni – IEA
- Mr Fabian Burkard – IEA
- Mr Aloys Nghiem – IEA
- Ms Alessia Scoz – IEA
- Mr Seiya Endo – Japan
- Mr Domenico Lattanzio – IEA
- Dr Ian Mead, US EIA

Key takeaways

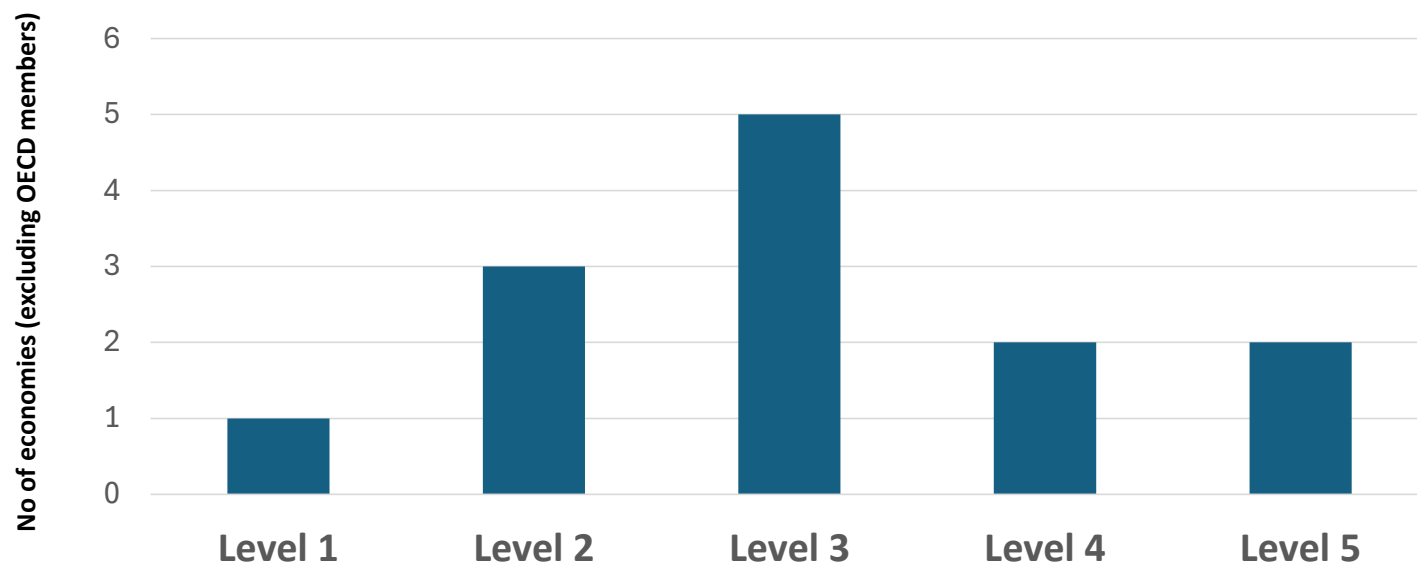
- New technologies make data collection more difficult while there are still basic data collection that members need to work on.
- There's a wide variety of capabilities among the member economies are new efforts that are required. Base surveys are still extremely important for data collection.
- On hydrogen/ammonia/e-fuels, several economies are just starting pilot projects and/or developing hydrogen plants seems too early to collect data. However, as much as possible, member economies should fill out the template developed by the EGEDA secretariat.
- Regarding battery electricity storage and the importance of avoiding double counting, keeping track of energy stored and delivered to the grid from these facilities is needed.
- Fugitive emissions are another new data set being collected by the secretariat. They are difficult to track because they are fugitives.
- On energy efficiency indicators, member economies are on different levels of capabilities to fill-out the template. Member economies should try to fill it out although some economies have more data than others.

Assessment of performance levels of member economies in data collection

Performance levels for collecting/reporting energy statistics

Level	Performance
1	<ul style="list-style-type: none"> • Economy collects energy production data for administrative purposes (e.g., managing private oil and gas companies) • Electricity data (only that collected by the state electricity company); no estimates of renewable energy production • Economy does not compile energy statistics/balances; does not complete APEC annual energy collection templates.
2	<ul style="list-style-type: none"> • Collects energy data from administrative sources; energy balances are incomplete • Energy consumption data are aggregated and limited to major sectors (i.e., industry, transportation, buildings, etc.) • Economy does not complete the APEC annual energy data collection templates
3	<ul style="list-style-type: none"> • Collects energy data from administrative sources; energy balances are incomplete • Some energy consumption data are categorized by subsectors; no end-use data • Does not complete the APEC annual energy data collection templates
4	<ul style="list-style-type: none"> • Collects energy data from administrative sources; energy balances are largely complete • Energy consumption data are broken down into subsectors • Conducts end-use energy consumption surveys; but does not submit end-use data in the APEC EEI template • Completes the APEC annual energy data collection templates
5	<ul style="list-style-type: none"> • Collects energy data from administrative sources; prepares complete and accurate energy balances • Categorizes energy consumption data by subsector • Conducts end-use energy consumption surveys; submits end-use energy consumption data in the APEC EEI template • Completes the APEC annual energy data collection templates

Currently a wide range of collection and reporting capabilities



- ❖ *Majority of the members are not able to complete the APEC annual energy data collection templates.*
- ❖ *Most of the data submitted does not reflect the preferred degree of granularity for energy use (fuel by end-use)*

2025 APEC workshop on energy statistics

- **Venue:** Tokyo
- **Date:** September 2025

□ Objectives

- The workshop's main objective is sharing of energy consumption survey practices among member economies such as:
 - Sampling methodologies
 - Preparation of questionnaires and enumerator's manual
 - Conduct of pilot survey
- The workshop will facilitate dialogues on the issues and challenges encountered in end-use energy consumption surveys and how these can be addressed.

Way forward

- Continue to hold the EGEDA energy statistics training course to elevate member economies' performance level in data collection
- Continue to hold APEC workshop on energy statistics to facilitate sharing of expertise in various energy data collection methodologies and techniques



Thank you.

<https://aperc.or.jp>

