

16th APEC Workshop on Energy Statistics (EGEDA Workshop)
10-12 July 2018
Tokyo Prince Hotel, Japan

Summary Record

The workshop was the 16th of the series which EGEDA conducts yearly on top of the EGEDA regular annual meetings. In this year's workshop, presentation and discussion on district cooling system was included in the agenda which aims to seek the members' concurrence on the inclusion of district cooling statistics in the APEC energy balance table. The filling out—experiences and challenges— of energy efficiency templates, renewable questionnaire and Joint Organisations Data Initiative (JODI) questionnaire were also included in the agenda.

The 16th EGEDA workshop was participated in by sixteen APEC member economies (Australia; Chile; People's Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; The Philippines; Russia; Chinese Taipei; Thailand and Viet Nam) listed in Appendix 1. Representatives from ASEAN Center for Energy (ACE), International Energy Agency (IEA), International Energy Forum (IEF) and International Renewable Energy Agency (IRENA) were also invited and delivered presentations on data collection in ASEAN, energy efficiency, new and renewable energy data and JODI oil and gas, respectively.

The summary of the proceedings is as follows:

OPENING SESSION

In his opening remarks, the Chair and Asia Pacific Energy Research Centre (APERC) Senior Vice President Mr. James Kendall, expressed his appreciation to the participants in the 16th EGEDA Workshop. He mentioned the relevance of the workshop and the APEC statistics to the many works of APERC which contribute towards the realisation of APEC goals, such as: 1) Annual Overview 2) APEC Oil Report 3) APEC Gas Report and 4) APEC Coal Report. Although the previous APEC Outlook used IEA data, the Chair is very looking forward to using APEC/EGEDA data in the upcoming Outlook 8th Edition. The Chair encouraged the members for their continued support in improving quality of APEC energy data.

Mr. Tomio Harada, Ministry of Economy, Trade and Industry (METI), in his welcoming remarks also expressed his appreciation to the members and participants in the Workshop. He highlighted the importance of high-quality energy statistics for policy-making.

SESSION 1: District Cooling In APEC

The objective of this session was to collect information on district cooling systems in APEC and to seek member economies' support for Energy Statistics and Training Office (ESTO)'s proposal to include district cooling data in the APEC energy balances. ESTO gave a technical presentation of how a district cooling system works, which include the energy flow from chilled water production to delivery to various consumers. ESTO showed that district cooling works like district heating and emphasised that data are available from the primary energy used to produce chilled water, the chilled water output to chilled water delivered to buildings.

Two member economies, Hong Kong, China and Malaysia, gave presentations on district cooling facilities in their respective economies. During the roundtable discussions, nine of the sixteen that participated reported that there are district cooling facilities in their economies. Five have none while one had no information. The majority of the economies concurred with the proposal of ESTO of including district cooling data in the APEC energy balances.

IEA advised ESTO that inclusion of district cooling data in the APEC energy balances may be difficult as data may not be collected. ESTO also needs to determine where the transformation occurs. IEA also mentioned that reporting economies should understand the overall picture and reporting instructions should be improved for district cooling data. On free cooling, IEA mentioned that it might be the equivalent of passive heat in heating.

IRENA commented that free cooling improves the efficiency of heat pumps as there would be a need for less energy to chill the already cool water. ESTO responded that the technical issue on whether cooling is just a removal of heat (or energy as heat is a form of energy) should be set aside but just take into consideration the energy needed to chill the water and the chilled water output of a district cooling system as well as the delivered chilled water to consumers. All these energy flows were measurable based on the initial studies in Japan and Malaysia.

SESSION 2: Revised Energy Efficiency Indicators Template

In this session, APERC presented the status of submissions from member economies of the 2017 revised template which included the industry and transportation sectors. IEA gave a presentation on the importance of energy efficiency indicators highlighting that a decrease in energy intensity does not necessarily mean improvement in efficiency as observed in some IEA member countries. Detailed analyses could only be undertaken with more disaggregated data that are collected using the energy efficiency indicators template.

In filling out the Energy Efficiency Indicators template, members expressed difficulties in end-use disaggregation, especially for the residential and commercial sectors and most of the activity data, particularly the transport-related data and gross value added (GVA) by sector data. IEA recommended that the members collaborate with other statistics agencies of their economies, especially on activity data as these surely exist or are collected by other national statistics agencies. They might also need to collaborate with those agencies in conducting a survey so that they will only have to share the cost of conducting the survey and not the full cost, as it is truly expensive. IEA further advised to form a working group consisting of relevant statistical bodies in their respective economies to ensure that important statistics can be obtained. IEA further advised the members to let the data providers know the importance of the data being collected to ensure cooperation.

Chile and the Philippines gave their respective thoughts on data collection. Chile emphasised the importance of estimation in the absence of any data source while the Philippines stated the importance of apprising the officials on their efforts in data collection to get the officials' support.

SESSION 3: New and Renewable Energy Data Collection

In Session 3, APERC ESTO presented the new version of new and renewable annual template and stressed the importance of APEC doubling goal while IRENA, New Zealand and Thailand shared their experiences in data collection and the measurement of production and consumption. In the roundtable

discussions, member economies also explained the challenges in collecting data especially on residential traditional biomass consumption. Economies such as Chile started preparing templates to carry out a new and renewable data energy survey. The Philippines on the other hand, has started designing templates that can provide the needed data on new and renewable energy data in line with the country's requirements for the generation of its EBT. While both economies expressed the need for budget support, the Philippines highlighted the need for staff capacity. Non-OECD member economies requested APEC to share their methodologies in calculating the primary energy of geothermal production. With regard to data collection for hydro, the main difficulty is due to classification of hydro (i.e. small and large) which cannot be disaggregated further into both APEC's and IEA's capacity specification. IEA expressed their plan to change the breakdown of hydro to by technologies, instead of by sizes.

SESSION 4: Improving APEC JODI data

The topic of this session was missing data points in the JODI Oil and JODI Gas data format. The IEF asked participating economies to identify real "0" or "NA (Not available)" for the missing data points and not to leave the data cells as "blank."

ESTO showed the missing data points in the JODI Oil and JODI Gas format submitted by the non-OECD APEC economies. ESTO asked the relevant APEC economies to explain why they put "0" or "NA" and left the data points as "blank" in the format. Concerned member economies responded to the request accordingly.

ESTO also mentioned the possibility of expanding the list of economies for the reporting of imports by source and exports by destination. This is in view of the request by data users for more detailed LNG trade data.

SESSION 5: Other business

Two presentations were given by international organisations, IEA and ACE. IEA gave a brief report on the G20 meeting held on February 2018 in Argentina, and addressed challenges of energy data with a future possibility of data collection in a digitalised system. ACE introduced the ASEAN energy database and their data collection system. ASEAN uses the joint questionnaires with APEC, and APERC/ESTO will send the latest questionnaires to ACE.

APERC research activities were presented, and data needs by the modeling teams were also introduced. APERC/ESTO summarised the revisions of the latest questionnaires and presented the new format of energy balances introduced last year. APERC/ESTO showed the new contents of the EGEDA website and members were encouraged to submit their data via the online submission system. Participants made several comments for future directions to improve the website, such as data visualisation. It was suggested that trade flow with import and export data may also be shown in the database.

APERC introduced its other training program, which is energy model building. The members were given the floor to suggest the kind of training ESTO can give the members for the improvement of their energy statistics. IEF proposed a joint workshop next year focusing on gas and oil statistics.

As regards topics in the next workshop the following were proposed:

- Sharing of experiences in energy end-use surveys

- Data collection in small scale renewable energy, new vehicles, and pipeline transportation
- Sharing of practices in estimating data
- Systems of distributing data
- GIS application in data collection
- Joint oil and gas statistics workshop with IEF

The suggestions from the floor will be carefully considered by the EGEDA secretariat.

Lastly, Indonesia announced that the next EGEDA meeting will be held in Bali, Indonesia around late February 2019.

ADJOURNMENT

The workshop adjourned with the EGEDA chair thanking delegates for participating in the workshop, wishing them to enjoy the remaining time in Tokyo and have a safe journey home.

Annex 1: List of Participants

Economy	Title	Name	Designation	Organisation
Australia	Mr.	Terence BRADLEY	Statistician	Economics Branch, Commonwealth Department of the Environment and Energy
Chile	Ms.	Natalie REBOLLEDO	Economist	Energy Policy and Forecast Division, Ministry of Energy
People's Republic of China	Mrs.	YANG Jia	Principal Program Officer	Department of Energy Statistics, National Bureau of Statistics
People's Republic of China	Mrs.	LI Nan	Research Assistant	Research Management and International Collaboration Division Energy Research Institute, National Development and Reform Commission
People's Republic of China	Prof.	GAO Shixian	Deputy Director General	Research Management and International Collaboration Division Energy Research Institute, National Development and Reform Commission
People's Republic of China	Mrs.	GU Lijing	Associate Researcher	Research Management and International Collaboration Division Energy Research Institute, National Development and Reform Commission
Hong Kong, China	Mr.	Raymond Kwok- ying POON	Assistant Director	Electrical and Mechanical Services Department, Government of the Hong Kong Special Administrative Region
Hong Kong, China	Mr.	Anthony Chun- wai YUE	Engineer	Electrical and Mechanical Services Department, Government of the Hong Kong Special Administrative Region
Hong Kong, China	Mr.	Sam Ming-sum CHOI	Engineer	Electrical and Mechanical Services Department, Government of the Hong Kong Special Administrative Region
Indonesia	Mr.	Agus Cahyono ADI	Head	Center for Data & Information Technology on EMR, Ministry of Energy & Mineral Resources, Indonesia (MEMR)

Economy	Title	Name	Designation	Organisation
Indonesia	Mr.	Zulhelmi THAIB	Energy Statistician	Center for Data & Information Technology on EMR, MEMR, Indonesia
Japan	Mr.	Tomio HARADA	Director for Natural Resources and Energy Research	International Affairs Agency for Natural Resources and Energy, METI
Japan	Mr.	Tomonori KAWAMURA	Deputy Director	International Affairs Agency for Natural Resources and Energy, METI
Republic of Korea	Mrs.	Bohye LEE	Associate Research Fellow	Energy Statistics Research Division, Korea Energy Economics Institute
Malaysia	Mrs.	Noor Aizah ABDUL KARIM	Head of Unit	Malaysia Energy Information Hub, Energy Commission
Malaysia	Mr.	Zaharin ZULKIFLI	Senior Regulatory Officer	Malaysia Energy Information Hub, Energy Commission
Mexico	Mr.	Samuel BARRERA	Deputy Director for Energy Statistics	Directorate General for Energy Planning and Information Secretariat of Energy
New Zealand	Mr.	James Lawrence HOGAN	Manager - Energy and Building Trends	Research, Evaluation and Analytics Ministry of Business, Innovation and Employment
Papua New Guinea	Mr.	Alfred RUNGOL	Manager	Measurement, Reporting & Verification and National Communication Climate Change and Development Authority
The Philippines	Ms.	Lilibeth MORALES	Senior Science Research Specialist	Policy Formulation and Research Division, Energy Policy and Planning Bureau, Department of Energy (DOE)
The Philippines	Ms.	Diana Christine GABITO	Senior Science Research Specialist	Policy Formulation and Research Division, Energy Policy and Planning Bureau, DOE
The Philippines	Ms.	Geraldine SACAYAN	Science Research Specialist II	Oil Industry Competition and Monitoring Division, Oil Industry Management Bureau, DOE
Russia	Ms.	Olga BUROVA	Advisor	Enterprise Statistics Department Federal State Statistics Service
Chinese Taipei	Ms.	Chih-ching YANG	Associate Research Fellow	Research Division I, Taiwan Research Institute

Economy	Title	Name	Designation	Organisation
Thailand	Dr.	Pongpan VORASAYAN	Professional Engineer	Bureau of Energy Regulation and Conservation, Department of Alternative Energy Development and Efficiency, Ministry of Energy
Thailand	Ms.	Passarin PETCHUMLI	Plan and Policy Analyst	Energy Statistics Section, Department of Alternative Energy Development and Efficiency, Ministry of Energy
Thailand	Ms.	Wachiraporn CHATURAWITTAW ONG	Policy and Plan Analyst Professional Level	Energy Forecast and Information Technology Center, Energy Policy and Planning Office, Ministry of Energy
Viet Nam	Dr.	NGUYEN Ngoc Hung	Deputy Head	Energy Economics Institute of Energy
ACE	Mr.	Visal VENG	Energy Research Analyst (Senior Officer)	Policy Research and Analytics Programme, ASEAN Center for Energy
IEA	Mr.	Duncan MILLARD	Chief Statistician & Head	Energy Data Centre, International Energy Agency
IEF	Mr.	Yuichiro TORIKATA	Energy Analyst	Energy Dialogue, International Energy Forum
IRENA	Dr.	Adrian WHITEMAN	Chief Statistician	International Renewable Energy Agency
APERC	Mr.	James KENDELL	Senior Vice President and Chair, EGEDA	Asia Pacific Energy Research Centre
APERC	Mr.	Munehisa YAMASHIRO	Vice President and General Manager for Research	Asia Pacific Energy Research Centre
APERC ESTO	Dr.	Kaoru YAMAGUCHI	Senior Research Fellow	Energy Statistics and Training Office, Asia Pacific Energy Research Centre
APERC ESTO	Mr.	Edito BARCELONA	Research Fellow and Head	Energy Statistics and Training Office, Asia Pacific Energy Research Centre
APERC ESTO	Ms.	Elvira GELINDON	Senior Researcher	Energy Statistics and Training Office, Asia Pacific Energy Research Centre
APERC ESTO	Mr.	Goichi KOMORI	Senior Researcher	Energy Statistics and Training Office, Asia Pacific Energy Research Centre

Economy	Title	Name	Designation	Organisation
APERC ESTO	Dr.	Yusuke KIMURA	Senior Researcher	Energy Statistics and Training Office, Asia Pacific Energy Research Centre
APERC ESTO	Ms.	Atikah ISMAIL	Researcher	Energy Statistics and Training Office, Asia Pacific Energy Research Centre
APERC ESTO	Ms.	Takako HANNON	Research Staff	Asia Pacific Energy Research Centre
APERC ESTO	Ms.	Yoko FUKUDA	Administration Staff	Asia Pacific Energy Research Centre
APERC	Mr.	Muhamad Izham ABD. SHUKOR	Researcher	Asia Pacific Energy Research Centre
APERC	Mr.	Cho Yee IP	Research Fellow	Asia Pacific Energy Research Centre
APERC	Mr.	Ruengsak THITIRATSAKUL	Research Fellow	Asia Pacific Energy Research Centre
APERC	Mr.	Alexey KABALINSKIY	Researcher	Asia Pacific Energy Research Centre
APERC	Dr.	NGUYEN Linh Dan	Researcher	Asia Pacific Energy Research Centre
APERC	Mr.	Diego RIVOTA Rivera	Researcher	Asia Pacific Energy Research Centre
APERC	Mr.	Thomas Patrick Conway WILLCOCK	Researcher	Asia Pacific Energy Research Centre
APERC	Dr.	Gigih Udi ATMO	Senior Researcher	Asia Pacific Energy Research Centre
APERC	Mr.	Juan Ignacio ALARCON	Researcher	Asia Pacific Energy Research Centre