2016 InterEnerStat Workshop: Energy efficiency and end-use data 13-14 December, 2016 IEA, Paris, France

# Session 2: Energy end-use data collection Current Situation in EAS -

Shigeru Kimura Special Adviser to the President on Energy Affairs

Economic Research Institute for ASEAN and East Asia



## What' EAS?

 East Asia Summit (EAS) consists of 18 Asian countries

	EAS India		
APEC Canada Chile Hong Kong, China Mexico PNG Peru Chinese Taipei	Australia China Japan Korea New Zealand Russia US	Brunei Darussalam Indonesia Malaysia Philippines Singapore Thailand Vietnam	ASEAN Cambodia Lao PDR Myanmar



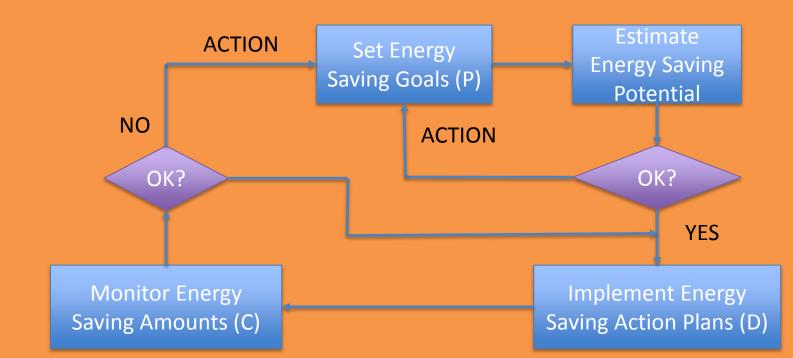
## **Prioritized Energy Issues in EAS**

- 3 Major Work Stream
  - Energy Efficiency (ERIA/IEEJ)
  - Biofuels such as Bio Ethanol and Bio Diesel (ERIA/AIST)
  - Renewable Electricity Sources (Brunei/US/ERIA)
- Institution
  - ECTF (Energy Cooperation Task Force)
    - Group of policymakers (SOE leaders)
  - ERIA (Economic Research Institute for ASEAN and East Asia) with collaboration of ACE (ASEAN Center for Energy)
    - Energy policy studies



## **Promotion of Energy Efficiency**

• PDCA Cycle



 Detailed energy consumption data should be needed for analyzing policy effect from energy saving action plans



## ERIA Energy Research Studies related with Energy Statistics (1)

#### > Brunei Darussalam

- Household energy consumption survey as part of BDECS in 2015
  - BNERI/EDPMO conducted energy consumption survey of household sector
  - ERIA supported this survey with collaboration of IEEJ and a building expert
    - Design of the questionnaire and sampling method
    - Basic lecture to enumerators
    - Validation and analysis on sampling data collected through the survey

#### ≻ Cambodia

- Preparation of Accurate Petroleum Statistics in 2013
  - GDP/MME wanted to estimate smuggling amount of petroleum products
    - ERIA proposed to conduct petroleum product consumption survey and estimate smuggling number defined as consumption – official import amount recorded by Custom Office
  - ERIA implemented this survey with collaboration of GDP/MME and requested IEEJ and an ASEAN energy expert to support ERIA
    - Design of the questionnaires and sampling method
    - Hire Cambodian consultants to conduct the survey in all sectors
      - Validation and analysis on sampling data collected through the survey



## ERIA Energy Research Studies related with Energy Statistics (2)

#### Cambodia

- Petroleum Demand Projection in 2014
  - GDP/MME requested ERIA to forecast future petroleum product demand for setting up a long term strategic supply plan of petroleum products such as refinery construction and stockpiling facilities
  - ERIA supported this projection with collaboration of GDP/MME and requested IEEJ to support ERIA
    - Revise IEA's Cambodian energy balance tables referring to Custom data (import amount of petroleum products)
    - Forecast each petroleum product demand applying econometrics approach
- Publishing Cambodia Energy Statistics in 2015
  - GDP/GDE of MME requested ERIA to prepare Cambodian energy statistics publication
  - ERIA supported this preparation with collaboration of GDP/GDE of MME and consequently hired four external experts
    - Two energy statistics experts, a building expert and an IT expert
    - Collection of existing data, estimation of missing data and producing energy balance tables
    - Establishment of data collection network with all oil companies (importers)
    - Launch of 1<sup>st</sup> Cambodia Energy Statistics in middle of October



## ERIA Energy Research Studies related with Energy Statistics (3)

### ➢ Thailand

#### - Household energy consumption survey in 2016

- Chiang Mai University is conducting energy consumption survey of household sector in Chiang Mai area and Bangkok area
- ERIA supported this survey with collaboration of a building expert
  - Share with CMU some materials developed by the Brunei survey
  - Comments on the questionnaire designed by CMU
  - Lecture on how to validate and analyze the sampling data collected through the survey
  - Check analysis results to be done by CMU in middle of November



## ERIA Energy Research Studies related with Energy Statistics (4)

#### Myanmar

#### - Lecture on Energy Database System in 2016

- MEE, Myanmar requested ERIA to support capacity building training on how to use energy database system
- ERIA supported MEE to use MS-ACCESS for its daily work with collaboration of an IT expert
  - Basic concept of RDBMS
  - Introduction of existing energy database system
  - Hands on exercise of MS-ACCESS
- ERIA will continue to support MEE in terms of;
  - Preparation of energy statistics in 2017
  - Development of energy outlook model in 2018
  - Energy consumption survey in 2019



## ERIA Energy Research Studies related with Energy Statistics (5)

#### Lao PDR

#### – Publishing Lao PDR Energy Statistics in 2017

- Minster of Energy and Mines requests ERIA to prepare Lao PDR energy statistics publication
- ERIA will support this preparation with collaboration of DEPP/MEM and hire three external experts
  - Two energy statistics experts and a building expert
  - Collection of existing data, estimation of missing data and producing energy balance tables
  - Setting up energy data collection network
  - Publishing 1<sup>st</sup> Lao PDR energy statistics
- ERIA will continue to support DEPP/MEM in terms of;
  - Energy consumption survey in 2018
  - Energy outlook modeling in 2019



### **Preparation of Energy Statistics in ASEAN**

- APEC is only one international organization to collect energy data directly from APEC member economies. How about quality of APEC ASEAN energy data;
  - Malaysia and Philippines: Good
  - Brunei and Thailand: Need to improve slightly
  - Indonesia: Need to improve largely
  - Singapore and Vietnam: Enhance energy data collection
- ERIA is supporting Cambodia, Lao PDR and Myanmar in terms of preparation of their energy statistics and conducting energy consumption survey in final sectors including end-use energy consumption data
- Collaboration of three international organization
  - APEC, ERIA and IEA may collaborate to improve energy data quality and enhance energy data collection of ASEAN countries



## **Thank You for your Attention!**

