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Session 4: Enhancing the Benefits of JODI Capacity Training Introduction of ERIA Capacity Building Program-

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# **Brief on ERIA**

- ERIA stands for Economic Research Institute for ASEAN and East Asia, which is an international organization located in Senayan, Jakarta.
- ERIA is supported by EAS (East Asia Summit) 16 countries which are ASEAN 10 MS + Australia, China, India, Japan, Korea and New Zealand.
- EAS was formulated in 2007 as one of regional fora such as APEC.
- ERIA's major research studies target to following three pillars;
  - Economic Integration
  - Narrowing economic gap
  - Sustainable development
- Energy Unit was established in ERIA in order to contribute the 3<sup>rd</sup> pillar; sustainable development in EAS region and has been submitted results of major energy studies to EAS-ECTF (Energy Cooperation Task Force, a group of energy policy persons) and EAS-EMM (Energy Minister Mieeting).
- Under the 3<sup>rd</sup> pillar, ERIA has been conducting capacity building trainings on production of energy statistics for ASEAN MS especially Cambodia, Lao PDR and Myanmar (CLM) countries.



# Why CLM?

 East Asia Summit (EAS) consists of 18 countries in Asia-Pacific Region: ASEAN10+8

	<b>EAS</b> 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								



# Capacity Building Training on Energy Statistics

- ASEAN seven countries except CLM are supported by APERC regarding production of their energy statistics under APEC framework namely EGEDA
- But ASEAN three countries, Cambodia, Lao PDR and Myanmar (CLM) do not get the support from APERC because CLM are not a member of APEC
- Then these countries officially requested ERIA to provide the capacity building training on production of energy statistics
- ERIA responded to their requests to support the three ASEAN countries in terms of production of their national energy statistics through capacity building trainings



#### Cambodia

- Period: 2016-2017
- Counterpart: General Department of Energy (GDE) and General Department of Petroleum (GDP), Electricity Authority Cambodia (EAC), Electricity du Cambodia (EDC) under Ministry of Mines and Energy (MME)
- Sources of primary energy data
  - GDE: Coal (GDM) and renewable energy data
  - EAC/EDC: Electricity data
  - GDP: Petroleum data



#### ▶ Lao PDR

- Period: 2017-2018
- Counterpart: Department of Energy Policy and Planning (DEPP), Department of Planning and Cooperation (GPC), Electricity du Laos, Department of Renewable Energy (DRE), Laos State Fuel Company (LSFC) under Ministry of Energy and Mines (MEM)
- Sources of primary energy data
  - DEPP: Coal and electricity data (supply)
  - DPC: Integration of energy data
  - DRE: Renewable data
  - EDL: Electricity data (demand)
  - LSFC: Petroleum data



#### Myanmar

Period: 2018-2019

- Counterpart: Oil and Gas Policy Department (OGPD),
   Myanmar Oil and Gas Enterprise (MOGE), Myanmar
   Petrochemical Enterprise (MPE), Natural Resources
   Department (NRD) under Ministry of Electricity and Energy (MOEE)
- Sources of energy data
  - OGPD: Integration of energy data (electricity and renewable data)
  - MOGE: Crude oil and Gas
  - MPE: Petroleum data
  - NRD: Coal



- Steps for Preparation of the National Energy Statistics for CLM
  - Following steps are applied for producing the national energy statistics for CLM
    - Collection and assessment of existing primary energy data
    - Estimation of missing primary energy data
    - Enter the both primary energy data into the APEC/ASEAN joint questionnaire
    - Produce energy balance tables from 2010 to 2015
    - Publish the their National Energy Statistics
  - ERIA supported CLM to conduct following energy data collection;
    - Energy consumption survey in final consumption sectors which are industry, transport, commercial and residential
    - Annual petroleum sales data collection from oil companies with voluntary basis
  - Data Coverage

- Cambodia: 2010-2015

- Lao PDR: 2000-2015

Myanmar: 2000-2016



# **Follow up Training by ERIA**

- > 1st ERIA Energy Internship Program
  - Follow up training on energy statistics was held in 2018 for Lao PDR
    - Purpose: update Laos energy statistics from 2015 to 2016 and 2017 applying "On the Job Training"
    - Contents
      - Assess quality of primary energy data
      - Estimate missing and inconsistent primary energy data
      - Enter the primary energy data into APEC/ASEAN joint questionnaire
      - Produce energy balance tables of 2016 and 2017 using the interface
      - Assess consistency of the energy balance tables
      - Prepare a report of energy demand supply situation of Lao PDR in 2016 and 2017



#### **Follow up Training by ERIA**

- > 2<sup>nd</sup> ERIA Energy Internship Program
  - Follow up training was held in 2019 for Cambodia, Lao PDR and Myanmar
    - Purpose: update Cambodia, Laos and Myanmar energy statistics applying "On the Job Training"
      - Cambodia: from 2015 to 2016, 2017 and 2018
      - Lao PDR: from 2017 to 2018
      - Myanmar: from 2016 to 2017
    - Contents same as 1<sup>st</sup> ERIA Energy Internship Program in 2018
    - ERIA invited IEF to this internship for introducing JODI



#### Oil and Gas of CLM Countries

#### **≻** Oil

- Cambodia
  - Start of crude oil production around end of 2019
  - Import of petroleum products such as Gasoline, Jet Fuel, Diesel Oil and LPG
  - LPG use for vehicles has been increasing remarkably
- Lao PDR
  - Import of petroleum products such as Gasoline and Diesel oil
- Myanmar
  - Production of crude oil
  - Refining the crude oil but small refining capacity
  - Import petroleum products such as gasoline and diesel oil



#### Oil and Gas of CLM Countries

- Natural Gas
  - Cambodia
    - Plan to produce natural gas
    - Plan to import LNG
  - Lao PDR
    - Plan to import LNG
  - Myanmar
    - Production of domestic natural gas historically but its production capacity is forecasted to decrease in future
    - Thus plan to import of LNG in future



# **CLM's Challenges to JODI**

- Collection of annual petroleum data of CLM
  - Cambodia: GDP collected annual petroleum data from 2010 to 2017
    - Petroleum sales data in 2018 have not collected yet
  - Lao PDR: LSFC collected annual petroleum data in 2015 but it was not completed
    - Some companies have not submitted their petroleum sales data
  - Myanmar: OGPD collected oil data from oil companies but it was not completed
    - Some companies have not submitted their petroleum sales data
  - Using the specific format (see next slide)



# **Questionnaire for Collection of Annual Petroleum Sales Data**

			Petrole	um Product Sa	ales Questionn	aire					
Corporation/Company:			Contact Person:			Tel:					
Year:								Em	nail:		
	LPG	Naphtha	Motor Gasoline	Kerosene Type	Other Kerosene	Diesel Oil	Fuel Oil	Lubricants	Bitumen	Other Products	
Quantity Descriptions		•		Jet Fuel						(specify)	
	Ton	KL	KL	KL	KL	KL	KL	KL	Specify	Specify	
Import											
Blending											
Own Use											
Stock (in the end of the year)											
Total Sales								1			
Sell to Power producers											
EDL								1			
IPP, Rural, etc								1			
Sell to Large Scale Industrial Users											
Iron and Steel								1			
Chemical (incl. Petro-Chemical)											
Non Ferrous Metals											
Transportation Equipment								1			
Machinery								1			
Mining and Quarrying											
Food, Beverages and Tobacco											
Pulp, Paper and Printing								1			
Wood and Wood Products											
Construction											
Textiles and Leather								1			
Not Elsewhere Specified (Industry)								1			
Sell to Large Scale Transport Users								1			
Taxi, Bus, Road Freight, etc											
International Civil Aviation								1			
Domestic Air Transport								1			
Inland Waterways											
International marine Bunker								1			
Sell to Other Large Scale Users								1			
Commercial Services such as Mall, Hotel,	School, Hospital, O	ffice Building									
Public Services such as Central and Local	Governments							1			
Residential								1			
Agriculture											
Fishing											
Petroleum Wholesaler											
Sell to Gas Station											
Company Owned Stations											
Company Franchises											



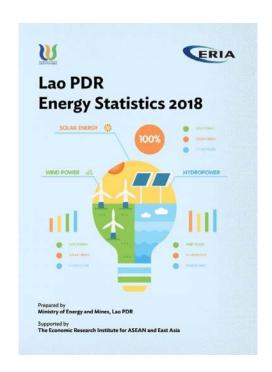
#### Introduction of JODI

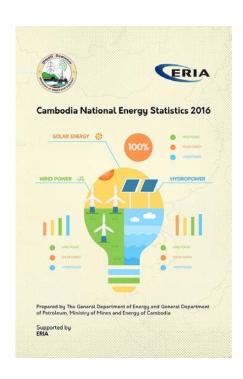
- ➤ IEF introduced JODI at 2<sup>nd</sup> ERIA Energy Internship Program for CLM
  - IEF provided two half day lectures of Oil and Gas as natural resources as well as JODI to CLM and they showed their interest on JODI
  - But CLM countries are not easy to collect monthly oil data from oil companies in their countries because it is voluntary basis
  - ERIA will continue to encourage CLM countries collection of monthly oil data from their oil companies using the JODI questionnaire applying mandatory basis
  - ERIA will collaborate with APEC and IEF to support CLM to be on board of JODI in near future



#### **ERIA's Energy Statistics Publications**







**ERIA Web Site: www.eria.org** 



# **Thank You for your Attention!**

