

Establishing Energy Efficiency Indicators in ASEAN



A presentation for
Energy Efficiency Policies in ASEAN Region
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ACE at the Glance



- The ASEAN Centre for Energy (ACE) was established on January 1, 1999 as an Inter-Governmental Organization, guided by a Governing Council composed of SOE Leaders of the ASEAN Member Countries.
- ACE as a technical catalyst for economic growth and development of ASEAN by initiating, coordinating, facilitating and disseminating all energy activities to the region and the rest of the world.
- Follow the blueprint for ASEAN cooperation in the field of energy: The ASEAN Plan of Action for Energy Cooperation (APAEC) 2010-2015, theme: *“Bringing Policies to Actions: Towards a Cleaner, more Efficient and Sustainable ASEAN Energy Community”*.

ASEAN Energy Database System



- A WEB-based application for reporting the production and utilization of energy in ASEAN Member Countries.
- <http://aseanenergy.org/database>
- Data format:
 - Energy Reporting Format (ERF)
 - Energy Balance Table (EBT)
- Annual Submission

ASEAN Energy Database System



ace2.aseanenergy.org/dat... x

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Time VS Country
Time VS Detail
Sector VS Time
Sector VS Country
ERF Retrieval
EBT Retrieval
ERF Historical
ERF Cross Section

ENERGY BALANCE TABLE
Country : ASEAN
Unit : KTOE

Annual 1997	PRIMARY ENERGY										
	Biomass		Electricity			Coal	Oil		Natural Gas	Charcoal	E
	Wood	Other	Hydro	Geothermal	Other		Crude Oil & NGL	Other Ref. Intake			
Primary Energy Supply											
Indigenous production	27484	8195	4580	6468	187	45473	130955		133421		
Imports		8			107	6121	120412	1689	1034	10	
Exports(Primary)						-21993	-53014		-1340		
Stock Change						-225	1019		-26		
Gross Primary Energy Supply	27484	8203	4580	6468	294	29377	199372	1689	133089	10	
Statistical Difference	2177	3212	383	-168	1	6249	21825		-8254	-4490	
Energy Transformation											
Oil Refining		85			431		-176212	-1689	-3314		
Gas Manufacture							278		-82288		
Power Generation	-12	-367	-4197	-6635	-187	-11599			-26749		
Fuel Consumed	-12	-367				-11599			-26749		
Hydro, Geo & Nuclear			-4197	-6635	-187						
Other Conversion	-6811	-804				-32					
Trans & Dist Losses											
Sector own use and loss						-137	-674		-18462		
Net Supply	20661	7117	383	-168	538	17609	22763		2276	2396	
Exports(Non Primary)		-8			-517					-24	

EE Indicators at APAEC 2010-2015



- APAEC 2010-2015 Program Area No. 6. Regional Energy Policy and Planning, Strategy 1. Enhancing energy policy and supply security information sharing network, 1.5. Publish ASEAN Energy Review and **Energy Indicators**.
- The 9th Regional Energy Policy and Planning-Sub Sector Network (REPOSSN), held in Singapore on 06 – 07 July 2010, tasked ACE to develop the ASEAN Energy Review and ASEAN Energy Indicators.

Use Of The Energy Efficiency Indicators



- To provide policy makers in ASEAN with a stronger foundation to carry out analysis and make decisions.
- Monitoring efficiency program to evaluate if the targeted reduction 8% in Energy Intensity can be achieved by 2015.

Developing ASEAN Energy Efficiency Indicators



- There are two energy indicators that common used to measure energy efficiency in ASEAN Member Countries:
 1. Energy elasticity, which is the ratio between growth in energy consumption with economic growth. A smaller elasticity number indicates that a country is using its energy more efficiently.
 2. Energy intensity is the ratio between the total consumption of energy per Gross Domestic Product (GDP). The lower the intensity number, the more efficient a country is in using its energy.

- However, in the regional term, current consensus is using energy intensity → **the aspirational goal of reducing regional energy intensity of at least 8% by 2015 based on 2005 level.**

Situation



- The ASEAN Centre for Energy is developing the ASEAN Energy Review, which comprised the Energy Data in ASEAN from 1990 – 2010. Will publish on December 2011. Data is collected using APEC Questionnaires which converted to ASEAN Energy Reporting Format (ERF).
- ACE is also in the development of the questionnaires for Energy Indicators and plans to disseminate to all AMSs by January 2012.
- Energy Efficiency Indicators is not yet on the priority list among ASEAN Member Countries. In fact, some ASEAN countries have the difficulties in providing a good and continuous energy data.
- No specific working group on Energy Efficiency Indicators. For now, it's managed under ESSPA Programme.

Capacity Building



- Energy Efficiency Indicators Workshop for ASEAN and APEC, Bangkok, 6-10 October 2008
- APEC/ASEAN Joint Workshop on Energy Statistics, Kuala Lumpur, 30 November – 4 December 2009
- APEC/ASEAN Joint Workshop on Energy Statistics, Bangkok, 8-12 November 2010

Thank You



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