

# ASEAN ENERGY AWARD

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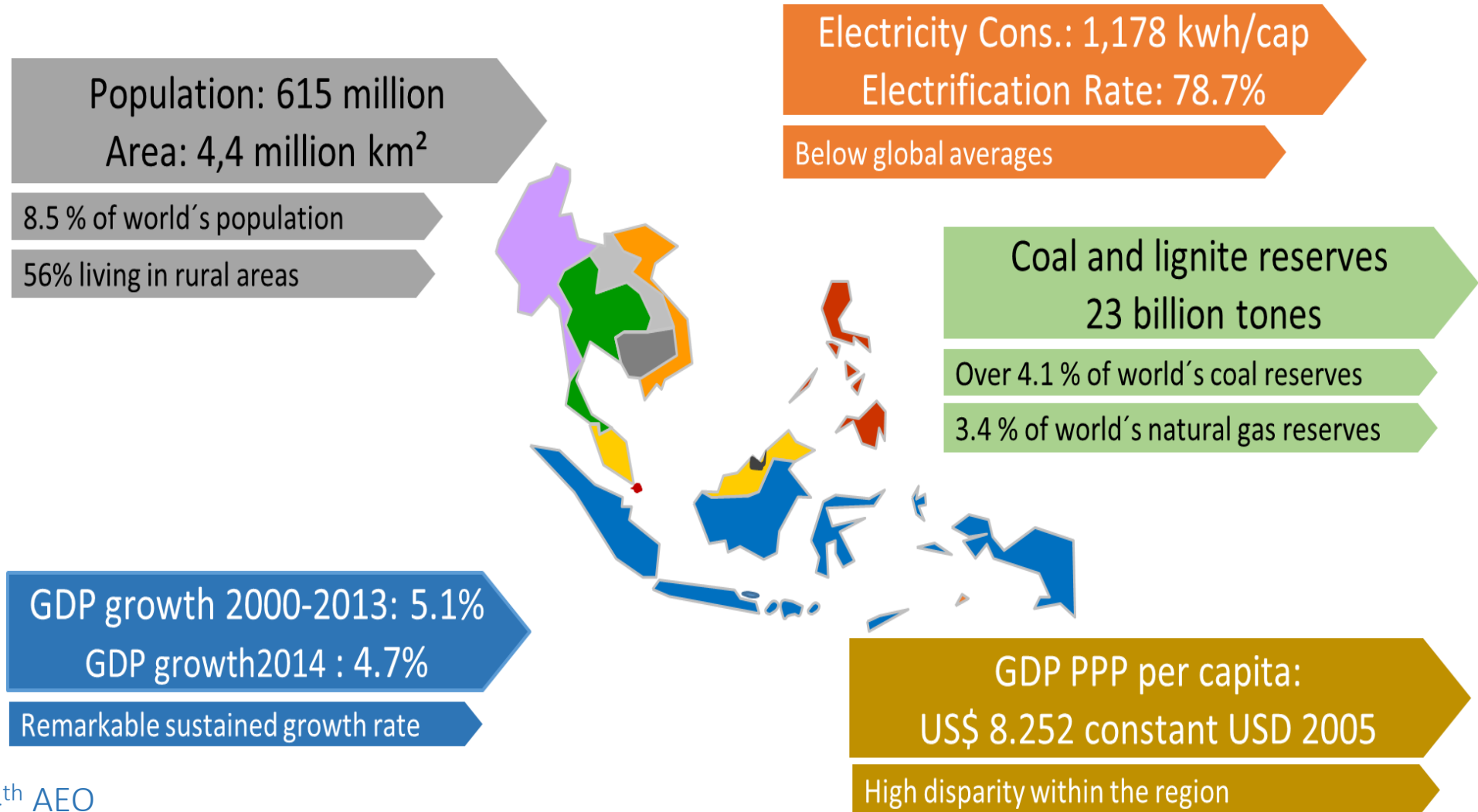


**EMAK WORKSHOP**  
**3 February 2017**  
**Jakarta, Indonesia**

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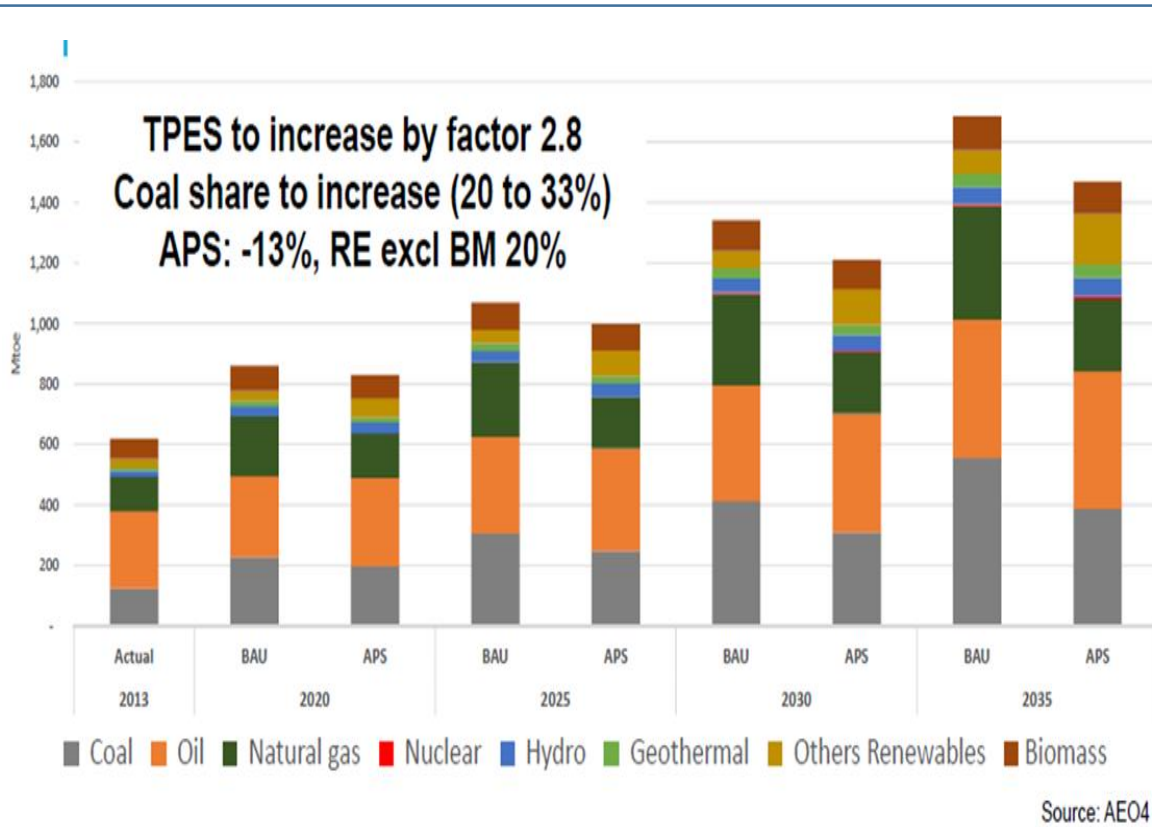
- ❑ ASEAN Economy And Energy In A Glance
- ❑ ASEAN Energy Situation
- ❑ Energy Potential Reduction
- ❑ Regional Target
- ❑ ASEAN Energy Intensity
- ❑ ASEAN ENERGY AWARD: EEB, EM AND GB

# ASEAN ECONOMY AND ENERGY IN A GLANCE

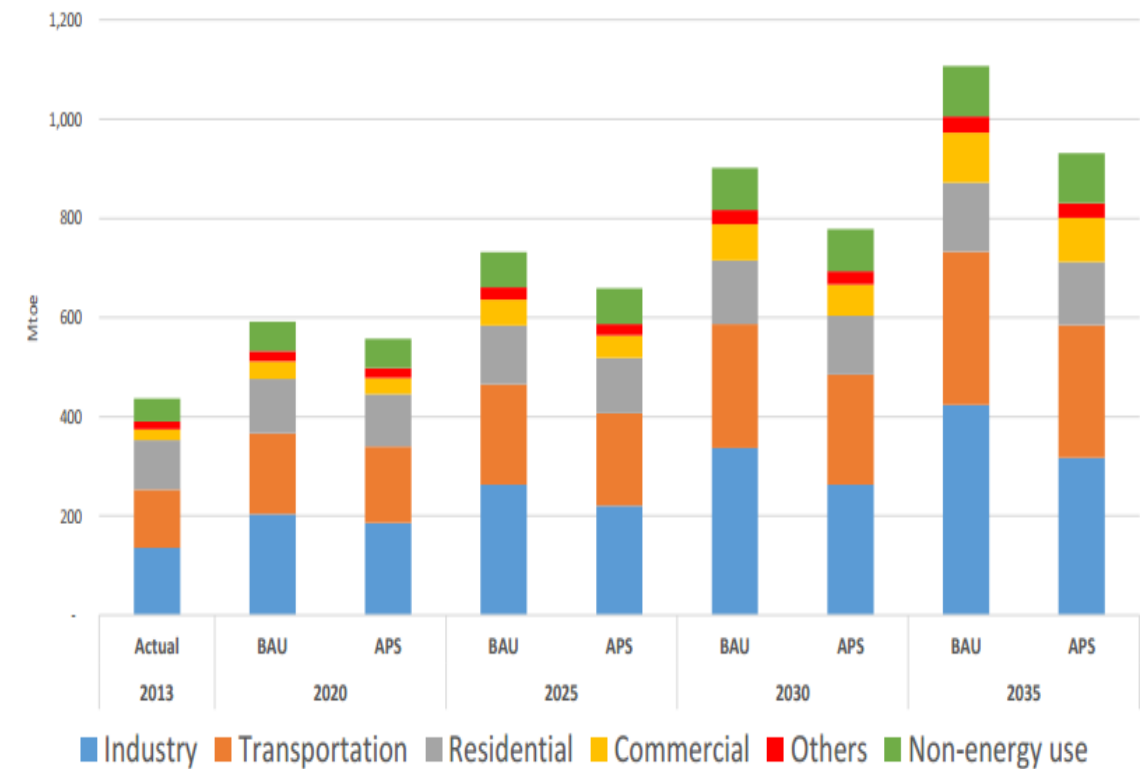


# ASEAN ENERGY SITUATION

## TOTAL PRIMARY ENERGY SUPPLY

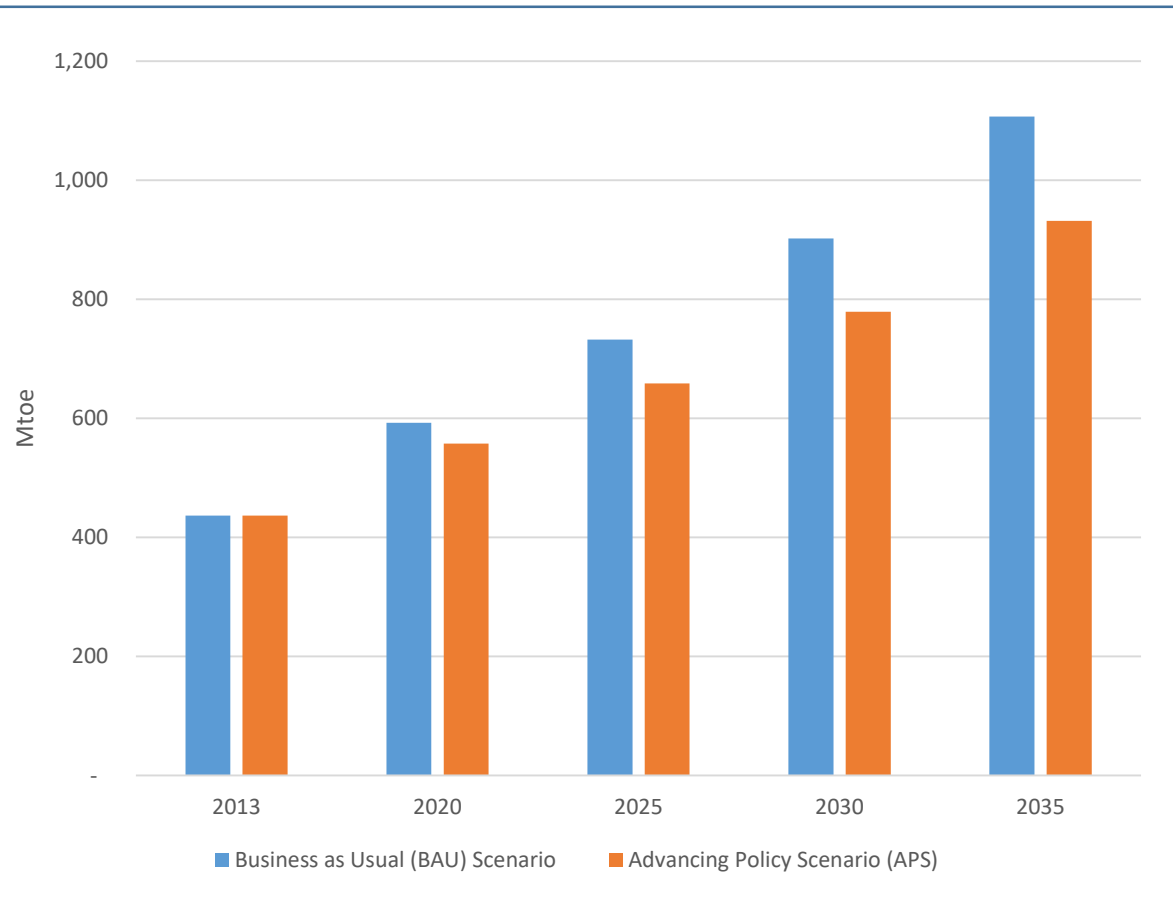


## TOTAL FINAL ENERGY CONSUMPTION (TFEC)

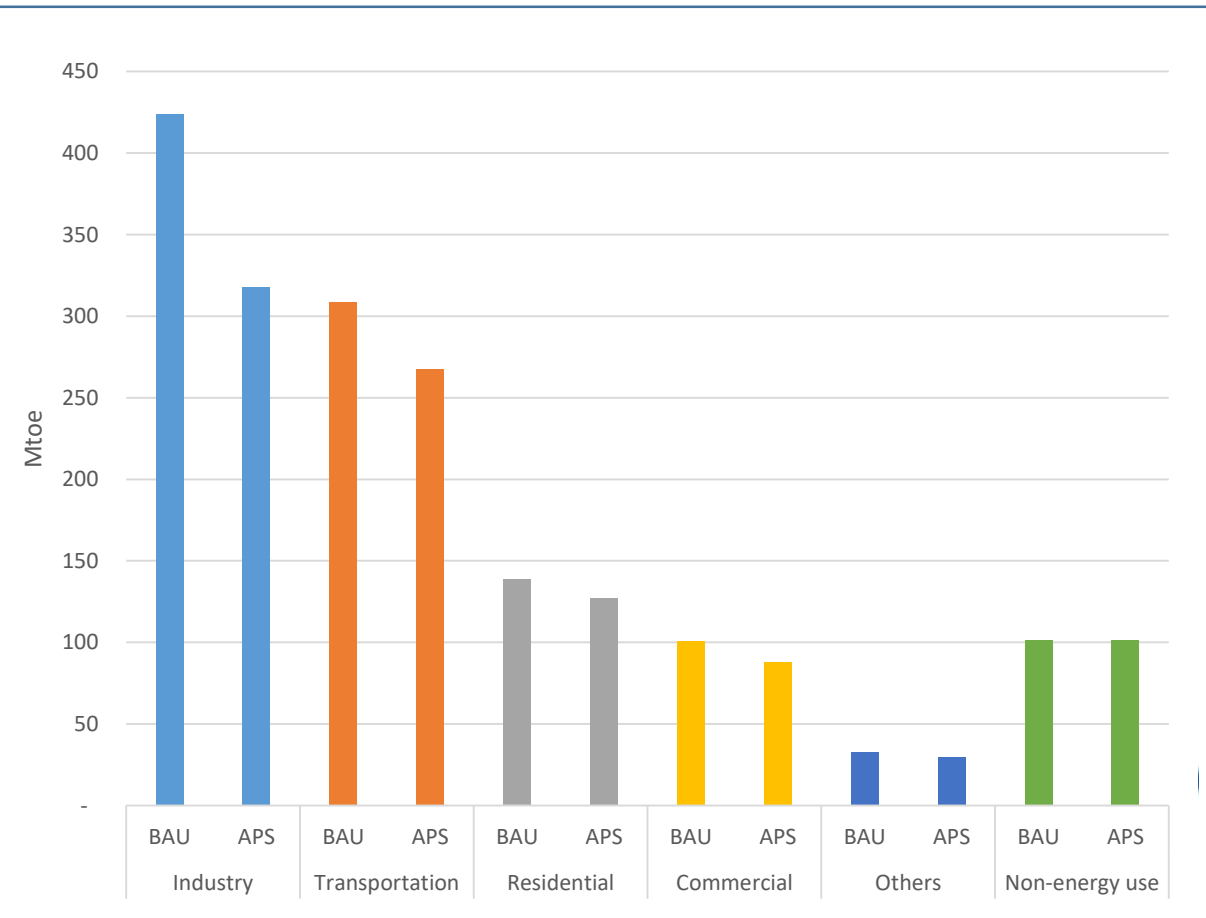


# ENERGY POTENTIAL REDUCTION

Potential Reduction for TFEC on the APS



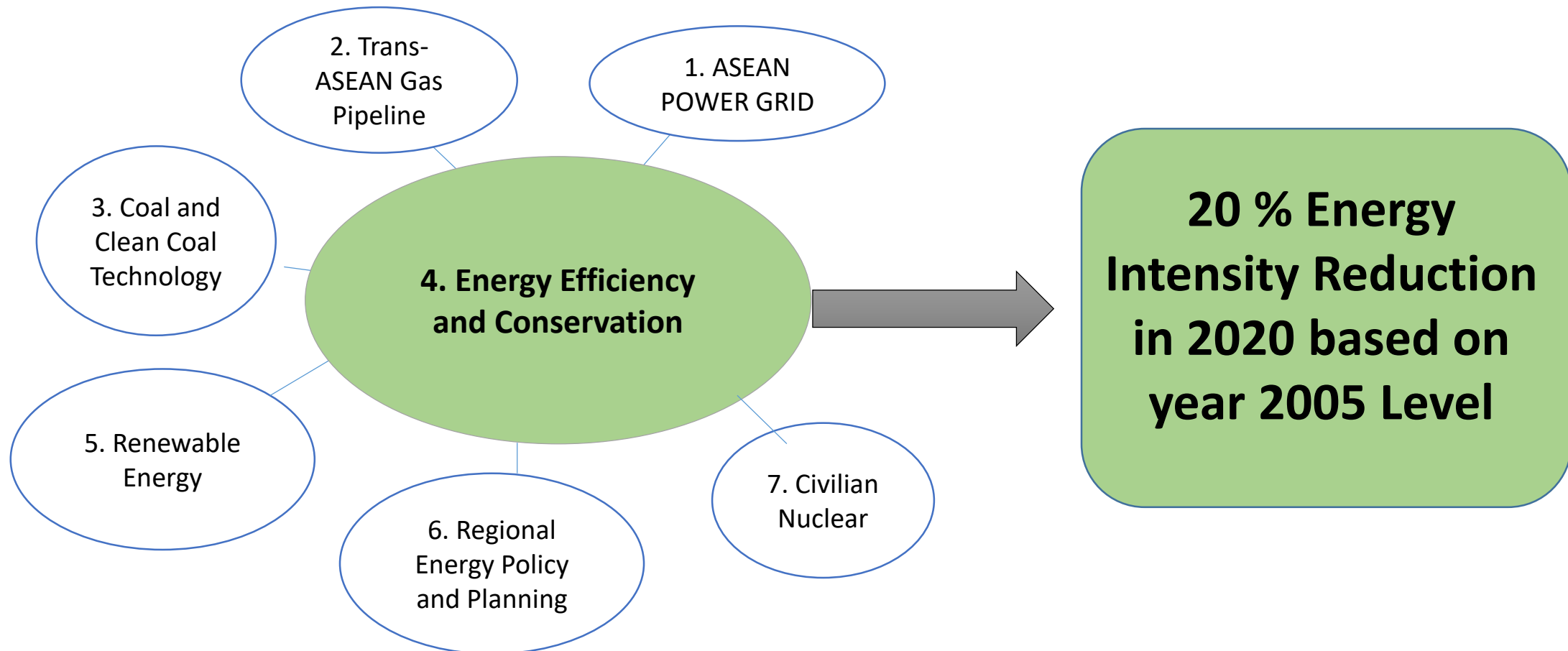
Potential Reduction for TFEC for Each Sector



# REGIONAL TARGET

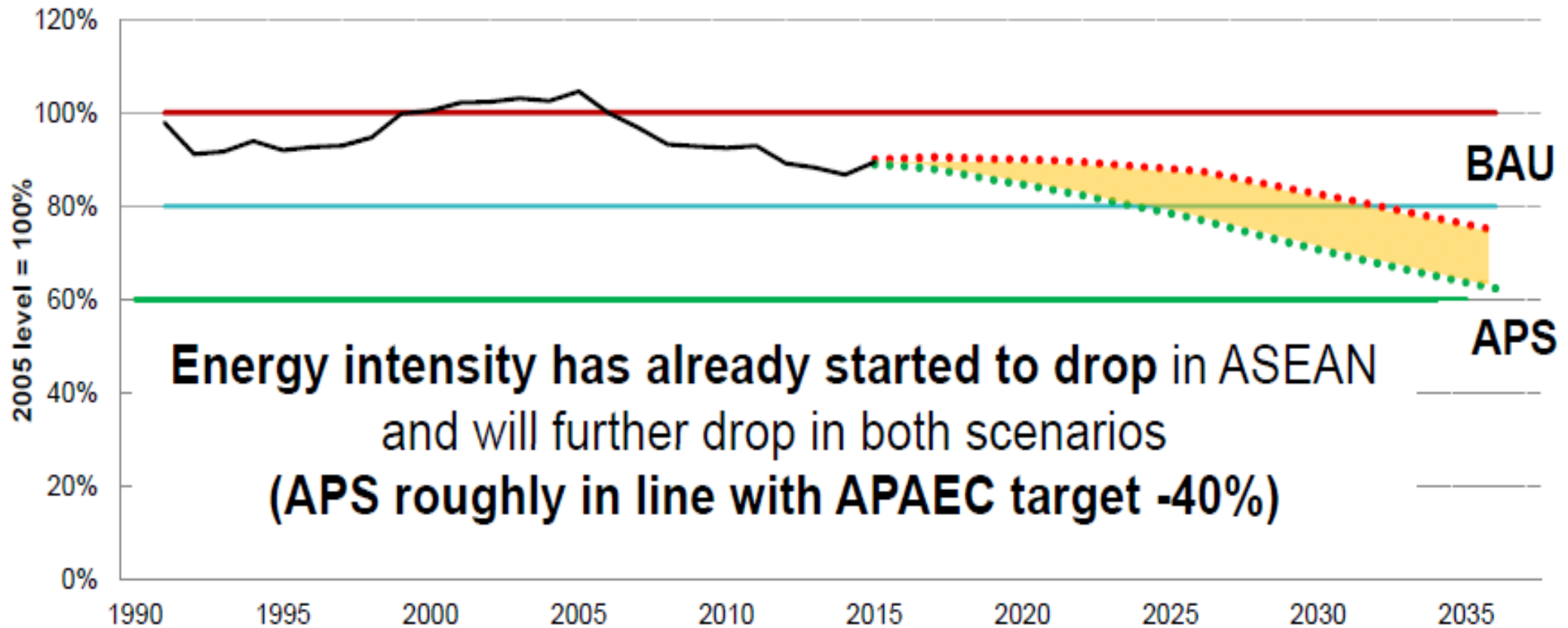
## ASEAN Plan of Action for Energy Cooperation (APAEC ) 2016-2025:

*“Enhancing Energy Connectivity and Market Integration in ASEAN to Achieve Energy Security, Accessibility, Affordability and Sustainability for All”*





# ASEAN ENERGY INTENSITY



# ENERGY EFFICIENCY AND CONSERVATION IN ASEAN

- ❑ Energy efficiency and conservation (EE&C) has been a key area of cooperation since the establishment of the ASEAN Energy Cooperation on 4 June 1986.
- ❑ The EE&C Sub-Sector Network (EE&C-SSN) and the ASEAN Centre for Energy (ACE) implement all EE&C activities under the ASEAN Plan of Action on Energy Cooperation (APAEC) for reporting to the ASEAN Senior Officials on Energy (SOME)
- ❑ Aspirational goal of reducing regional energy intensity by 20% by 2015 based on 2005 level. In 2015, ASEAN EI was reduced by 8.5%
- ❑ Major EE programme:
  - AJEEP & ECAP
  - ASEAN Energy Manager Accreditation System (AEMAS)
  - Harmonisation of EE testing methods for Air Conditioners and Lighting
  - EE&C Awards
  - Workshop/seminars/handbooks/publications
  - ASEAN+3 Mitigation Programme



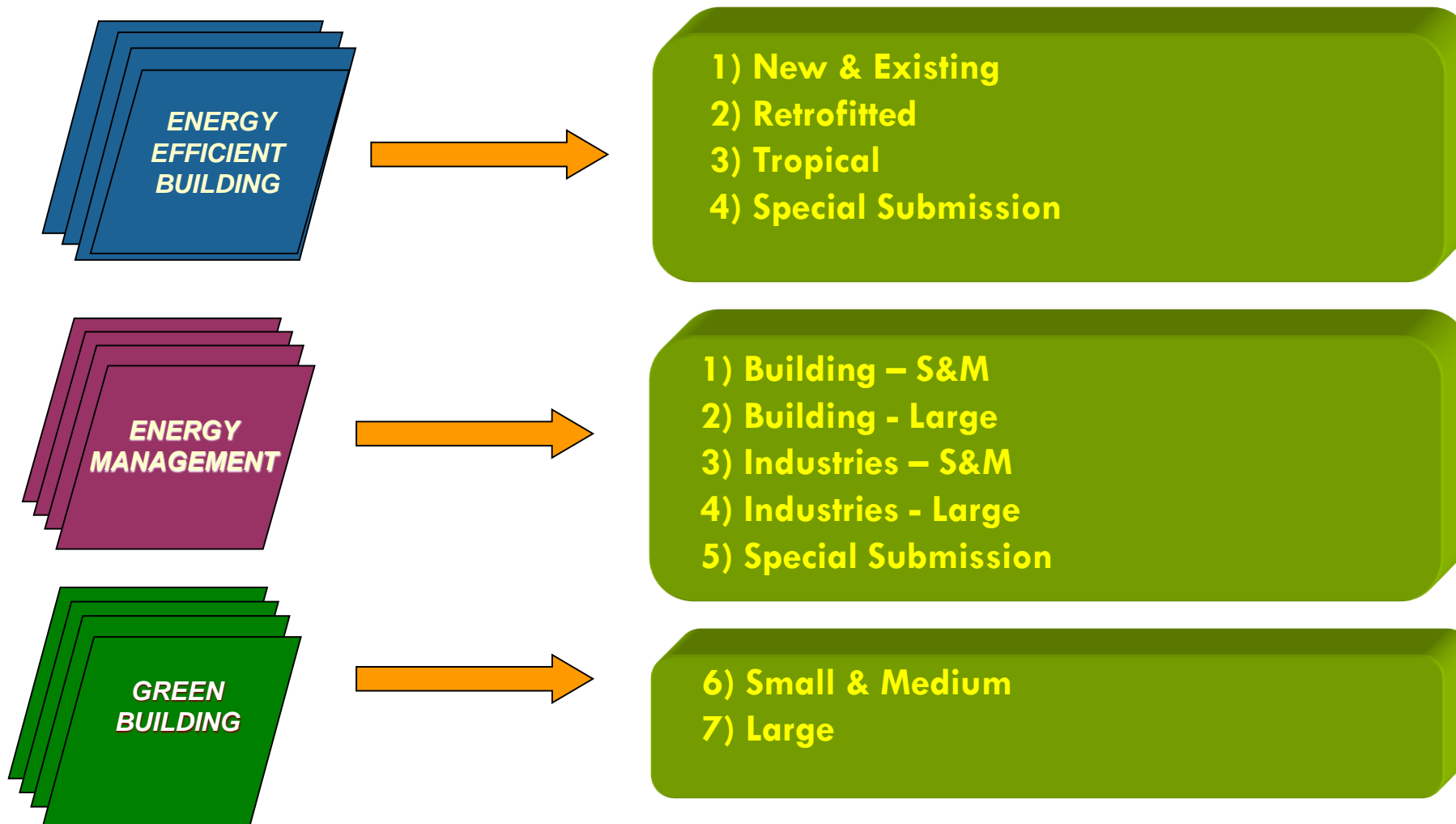


# ASEAN ENERGY AWARD

The ASEAN Energy Awards is Southeast Asia's highest reward for excellence in the field of energy. The first area is in the field of energy efficiency and conservation (EE&C) in buildings since buildings are most energy intensive feature of the urban development. The competition was first launched in 2000 with two (2) categories, namely: a) new and existing building and b) retrofitted building. In 2002, the tropical building and special submission categories were added. The objective of the Awards is to promote awareness on EE&C in buildings and to promote greater private sector participation in EE&C best practices.



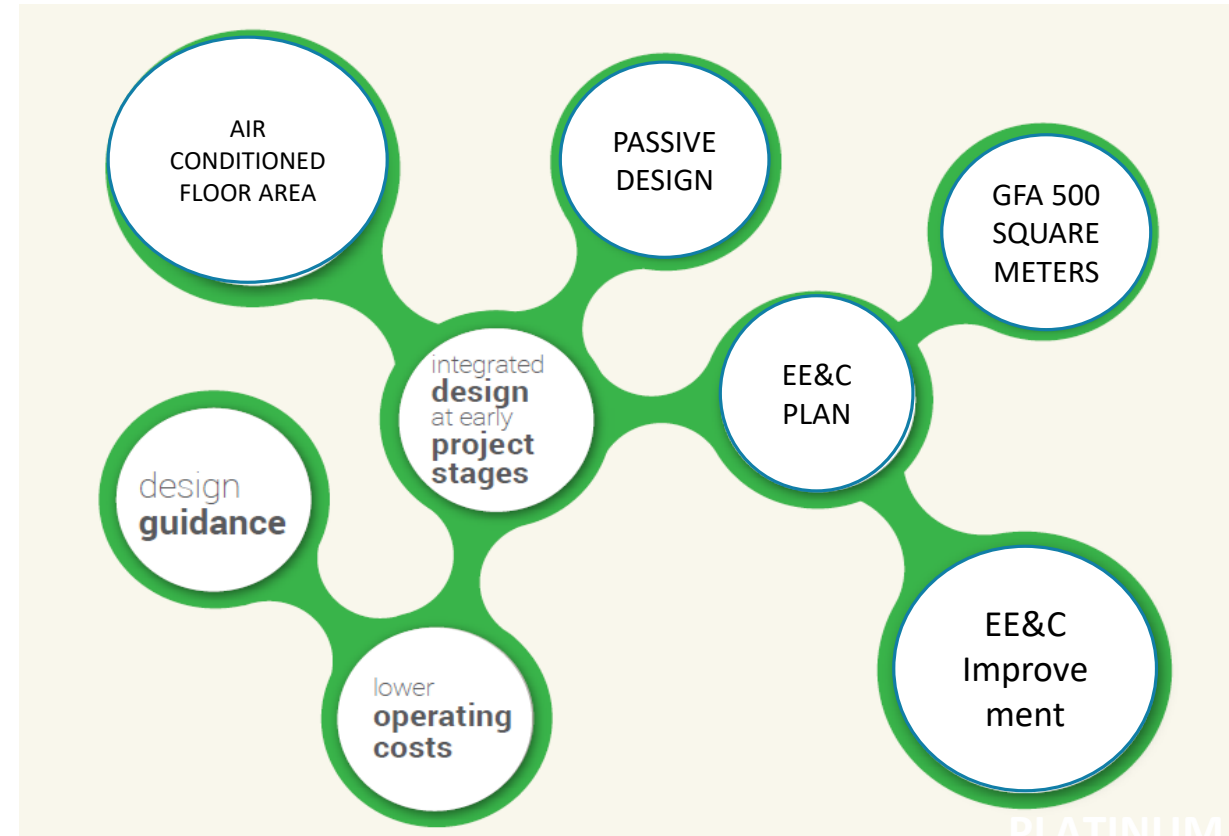
# ASEAN ENERGY AWARD - EE&C CATEGORIES



*\*All submissions must be channeled through the ASEAN EE&C-SSN Focal Points who shall ensure that all submissions are in full compliance with the rules and requirements of the competition*

# ASEAN ENERGY AWARDS FOR ENERGY EFFICIENT BUILDINGS

- The ASEAN Energy Awards for Energy Efficient Buildings is ASEAN's first award system launched by ACE in 2000.
- The objective of the Awards is to promote awareness on EE&C in buildings and to promote greater private sector participation in EE&C best practices.
- The categories of AEA in Energy Efficient Buildings are:
  - i) New and Existing Building
  - ii) Retrofitted Building
  - iii) Tropical Building
  - iv) Special Submission
- Around 300 building submissions since 2000 from AMS.



# DEVELOPMENT OF GUIDELINES FOR AEA FOR EEB

- The Guidelines of EEB were developed by the ASEAN Board of Judges and the ASEAN Centre for Energy in 1999 and was endorsed in 2000.
- The criteria & distribution of the scores, rules & format of submission and evaluation & scoring are well defined.



Criteria and Mark Structures				
No.	Criteria Group	Maximum Marks Allocation		
		New & Existing Building	Tropical Building	Retrofitted Building
1	Overall site design	15%	20%	--
1a	Energy Saving Achieved	--	--	25%
2	Passive Design	25%	40%	15
3	Active Design	25%	15%	25%
4	Maintenance & Management	25%	15%	25
5	Environmental impacts	10%	10%	10
6	<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

## DEVELOPMENT OF GUIDELINES FOR AEA FOR EEB (CONT'D)

- The Energy Performance: Pre-qualification criteria had been defined and strictly enforced, such as, EE Index of occupied air conditioned area, temperature and other settings, lighting load, operating hours per year. For retrofitted buildings, the total energy savings must be 20% of the total energy consumption. All buildings must at least one fully year of operation prior to nomination in competition.
- The Special Submission Category has a separate guidelines. Special submissions are projects which involve significant development in the field of EE in buildings in the areas of equipment, material, system applications, design and management processes. This category aims to promote the development of innovative energy efficiency – related solution together with ASEAN wisdom.





## **ASEAN ENERGY AWARDS FOR ENERGY MANAGEMENT IN BUILDINGS AND INDUSTRIES**

- The Energy Performance: Pre-qualification criteria had been defined and strictly enforced, such as, EE Index of occupied air conditioned area, temperature and other settings, lighting load, operating hours per year. For retrofitted buildings, the total energy savings must be 20% of the total energy consumption. All buildings must at least one fully year of operation prior to nomination in competition.
- The Special Submission Category has a separate guidelines. Special submissions are projects which involve significant development in the field of EE in buildings in the areas of equipment, material, system applications, design and management processes. This category aims to promote the development of innovative energy efficiency – related solution together with ASEAN wisdom.



# ENERGY MANAGEMENT-CRITERIA AND DISTRIBUTION OF SCORES

Criteria and Mark Structures		
No.	Criteria Group	Maximum Marks Allocation
1	<b>Impact</b>	<b>30%</b>
	1. Energy Saving (kWh/year, kL/year, ktoe)	12%
	1. Environmental Effect	6%
	1. Economic Effect	6%
	1. Investment	
	1. Payback Period	
	1. Energy Efficiency Index (kWh/m <sup>2</sup> /year, GJ/ton, etc.)	6%
2	<b>Sustainability</b>	<b>40%</b>
	1. Level of Participation and Involvement	10%
	1. Top Level Management Commitment	10%
	1. Short and Long-term Plan	5%
	1. Organization	5%
	1. Established or Improved Organization for Energy Management	
	1. Capacity Building	10%
	1. Activities	5%
	1. Educational Training	5%
3	<b>Replicability</b>	<b>15%</b>
	1. Management Practices and Measures	10%
	1. Technology	5%
4	<b>Originality</b> (Creativity / Innovation)	<b>10%</b>
5	<b>Overall Presentation and Impression</b> (Readability, Adherence to format)	<b>5%</b>

## DEVELOPMENT OF GUIDELINES FOR AEA FOR EM

- The Guidelines were developed by the ASEAN Board of Judges and ASEAN Centre for Energy (ACE) with support from Energy Conservation Centre, Japan (ECCJ).
- The criteria applied in the selection of awardees are: i) impact, ii) sustainability, iii) replicability, and iv) originality.
- To pre-qualify for the competition, buildings and industries should be at least operational in the last 3 years.
- A separate Guidelines were developed for special submissions which are projects that involve innovation, successful best practices and excellent cases in EM in buildings. To qualify under Special Submission, a project must involve energy management practices and techniques.

# GREEN BUILDINGS ASEAN ENERGY AWARDS

- In 2011, ASEAN started the discussion to introduce a new Award for Green Buildings;
- Two categories were created: i) Small & Medium GB and ii) Large GB .
- The guidelines for the GB AEA were developed by ASEAN BOJ and ACE and were endorsed in 2013. The first competition was held in May 2014 in Vientiane, Lao PDR.
- For a start the 6 entries - from 4 ASEAN countries namely Indonesia, Myanmar, Singapore and Thailand – was encouraging.
- The awardees were selected based on the following criteria: i) Energy Efficiency (30%), Renewable Energy (10%), Water Efficiency ( 10%), Environmental Sustainability (20%), Indoor Environment Quality (20%), Operation and Maintenance & other green features and innovation ( 10%)



# GREEN BUILDING-CRITERIA AND DISTRIBUTION OF SCORES

Criteria		Marks Allocation (%)
1	Energy Efficiency (active and passive designs)	30
2	Renewable Energy	5
3	Water efficiency	10
4	Environmental Sustainability (Materials, Greenery, Sustainable Site, waste management, etc)	25
5	Indoor Environmental Quality	20
6	Operation and maintenance & Other Green features, and Innovation	10
Total		100



# AWARDING CEREMONY 2016



Nay Pyi Taw, Myanmar



# ASEAN ENERGY AWARD-MOVING FORWARD

- ❑ The number of entries and awardees has been constantly increasing over the past 17 years. As per of 2016, 542 applicants participated in the competition of which total of 301 awarded the ASEAN Energy Award.
- ❑ Encourage ASEAN countries that currently have an existing policy and regulatory framework to identify policy gaps and conduct policy mapping to further enhance existing framework on energy efficiency for the buildings and industry sector;
- ❑ Develop, update and maintain Reference Document that describes EE&C in the buildings and industry sector in ASEAN, provides features and characteristics of buildings and data related to new or revised building regulation and standards.
- ❑ Develop and maintain an ASEAN Building and industry Database which contains information regarding physical configurations/ descriptions and energy performance data of buildings .
- ❑ Pursue rating system (labeling) and benchmarking for EEB in ASEAN. The ASEAN Energy Award takes particularities of individual countries and regions into account for benchmarks to be established at ASEAN level.
- ❑ Regular exchange of experience and training-Best practice examples need to be regularly shared in national and in international exchange of experiences.



Thank you.

