



SINGAPORE INTERNATIONAL ENERGY WEEK (SIEW) 2017 ROUNDTABLE

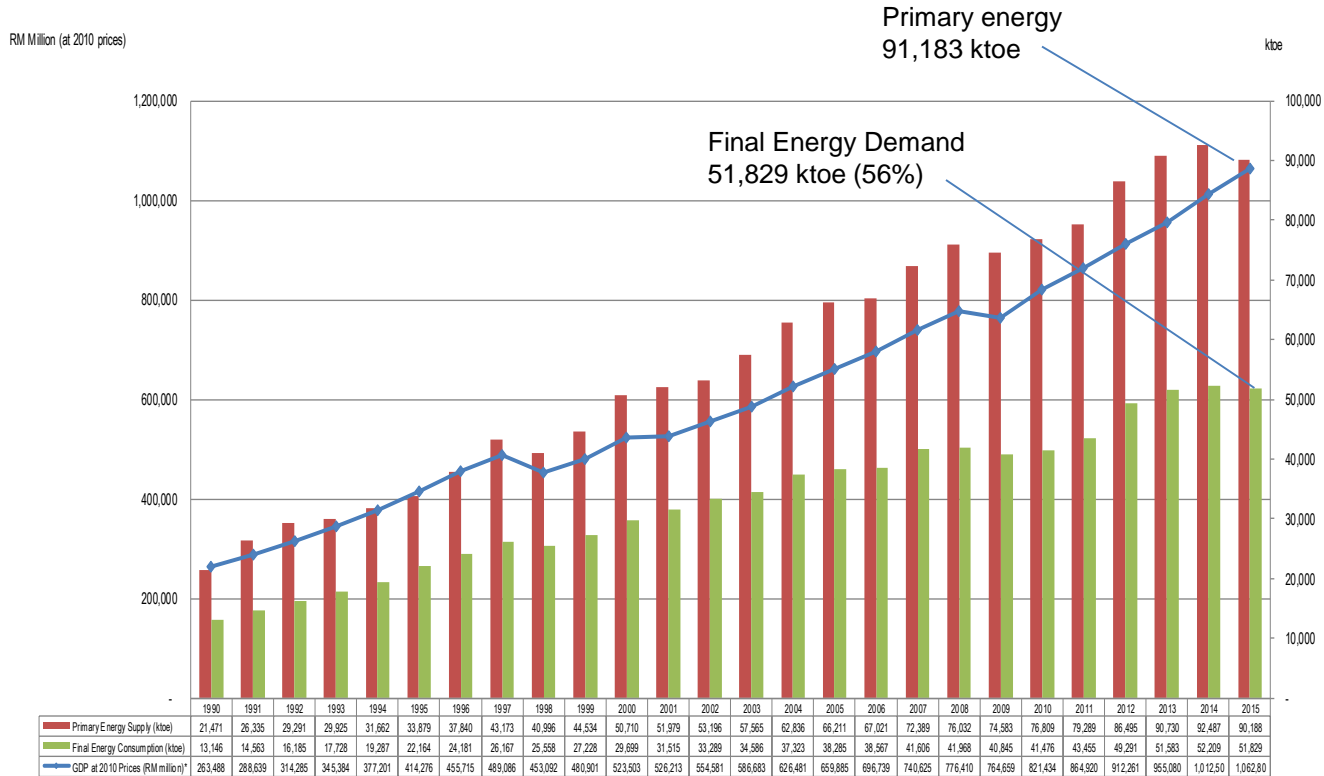
“20% in 2020-Unlocking ASEAN’s Energy Efficiency Potentials” Perspectives from National Policies

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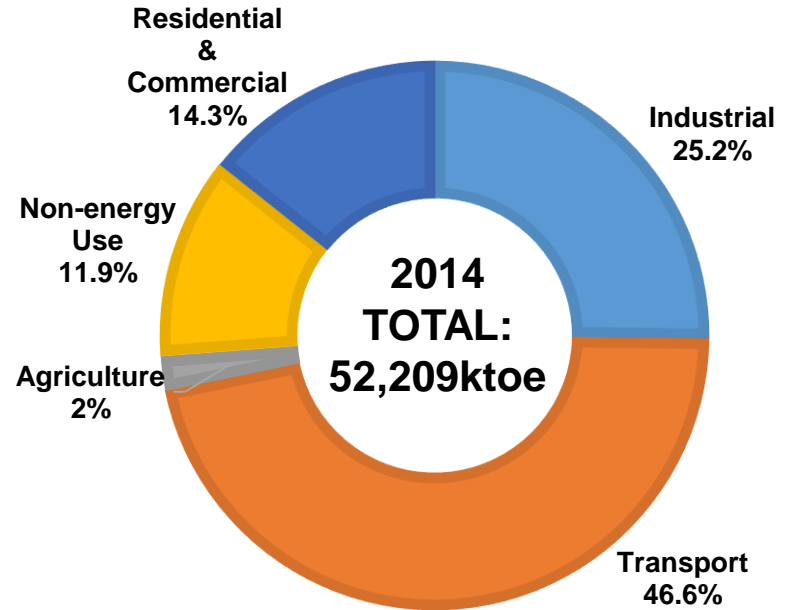
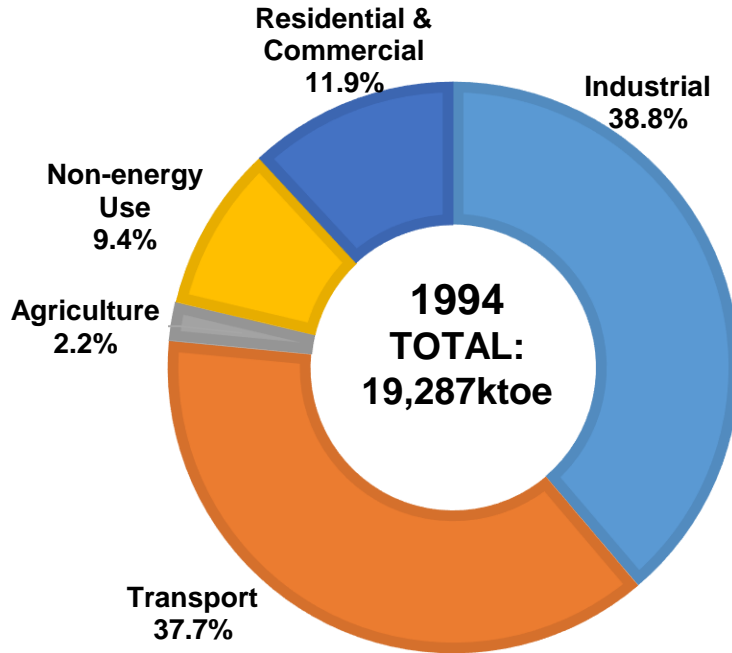


PRIMARY ENERGY SUPPLY VS FINAL ENERGY DEMAND

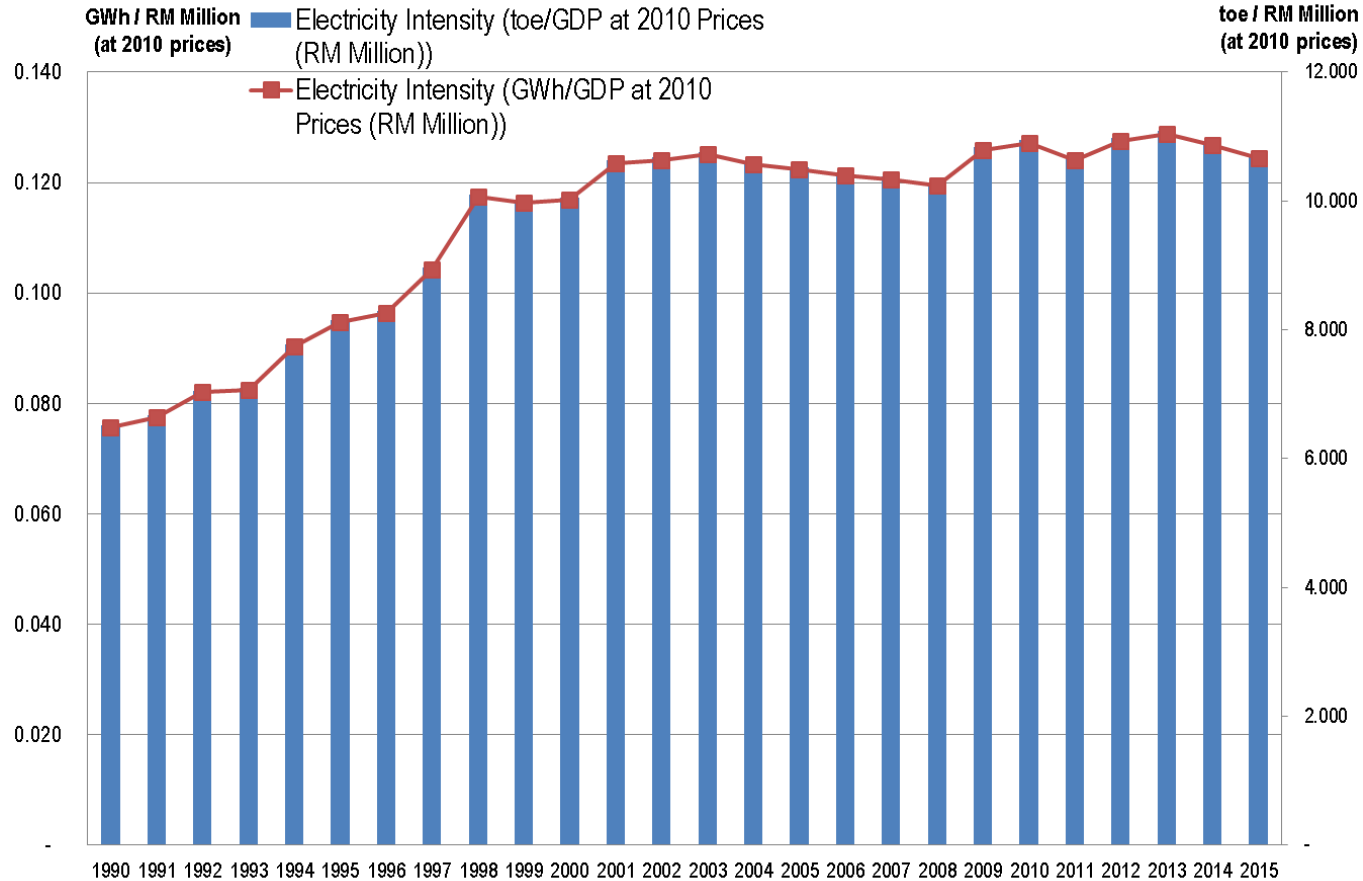


Sources: National Energy balance 2015

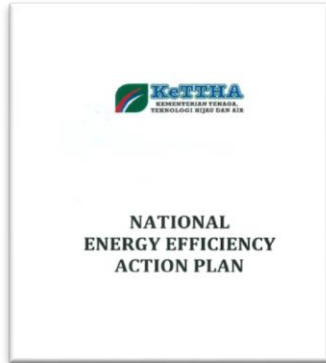
FINAL ENERGY CONSUMPTION BY SECTOR



ELECTRICITY INTENSITY



NATIONAL ENERGY EFFICIENCY ACTION PLAN (NEEAP) 2016-2025



5 key initiatives:

- Initiative 1 : Promotion of 5-star rated appliances
- Initiative 2 : Minimum Energy Performance Standards (MEPS)
- Initiative 3 : Energy Audits & Energy Management in Buildings & Industries
- Initiative 4 : Promotion of co-generation
- Initiative 5 : Energy Efficient Building Design

Policy Direction:

- Promote EE to ensure productive use of energy & minimise waste
- Contribute to sustainable development;
- Increased welfare and competitiveness”

Electricity demand growth reduction in 2025 : 52,233 GWH (8.0%) savings

GREEN TECHNOLOGY MASTER PLAN (GTMP)



6 key sectors in GTMP



Energy



Manufacturing



Transport



Building



Waste



Water



Energy

- Electricity generation diversity
 - Maintaining HHI below 0.5
- Carbon emission from power plants
 - Clean coal technology for new coal-fired power plants
- Reinvigorating co-generation policy
- RE mix of 30% installed capacity in 2030
- **Energy Efficiency : Electricity intensity reduction of 15% in 2030**

Reinvigorating Demand Side Management (DSM)

- Demand Side Management Policy Study
 - Completed July 2017
- Critical key barriers identified from the study are :

1 Fragmented overall national plan



2 Lack of a comprehensive EE&C Law



3 Lack of EE funding sources and financing mechanisms



4 Limited availability of certain energy related data i.e thermal energy consumption data



5 The absence of a dedicated EE&C entity



6 Lack of support from financial system for EE initiatives implementation



Projected impacts (electricity savings) 2016-2020 - 3,701 GWh

2017:

- Target electricity intensity reduction of 2% from Business As Usual (BAU)
- Equitable to 5,704.46 GWh (490.5 ktoe) electricity reduction

A. Expanding Demand Side Management (DSM) Measures

1. Financial Mechanism

- Establishment of Energy Performance Contracting Fund (launched August 2017)



2. Buildings

- Energy Audit Conditional Grant in Commercial Buildings
- Increasing Numbers of Registered Electrical Energy Manager (REEM)
- Promoting Energy Service Companies for Government & Private Buildings Maintenance
- Retrofit Government Buildings
- Promoting ISO50001 for Buildings & Industries

3. Industries

- Energy Audit Conditional Grant in Industries
- Implementing Enhanced Time of Use (EToU) with three different time zones
- Abolishing the Special Industrial Tariff (SIT)
- Promoting Co-Generation
- Implementing smart grid with the introduction of smart meters and Home Energy Report (HER)

4. Households

- Enhancing Minimum Energy Performance Standard (MEPS) and Labelling

B. Energy Efficiency & Conservation Act (EECA)

- Drafting of EECA will commence in Q4 2017 and expect to be completed in 18 months (June 2019)



THANK YOU

