



ENERGY EFFICIENCY: CHALLENGES OF INDONESIA

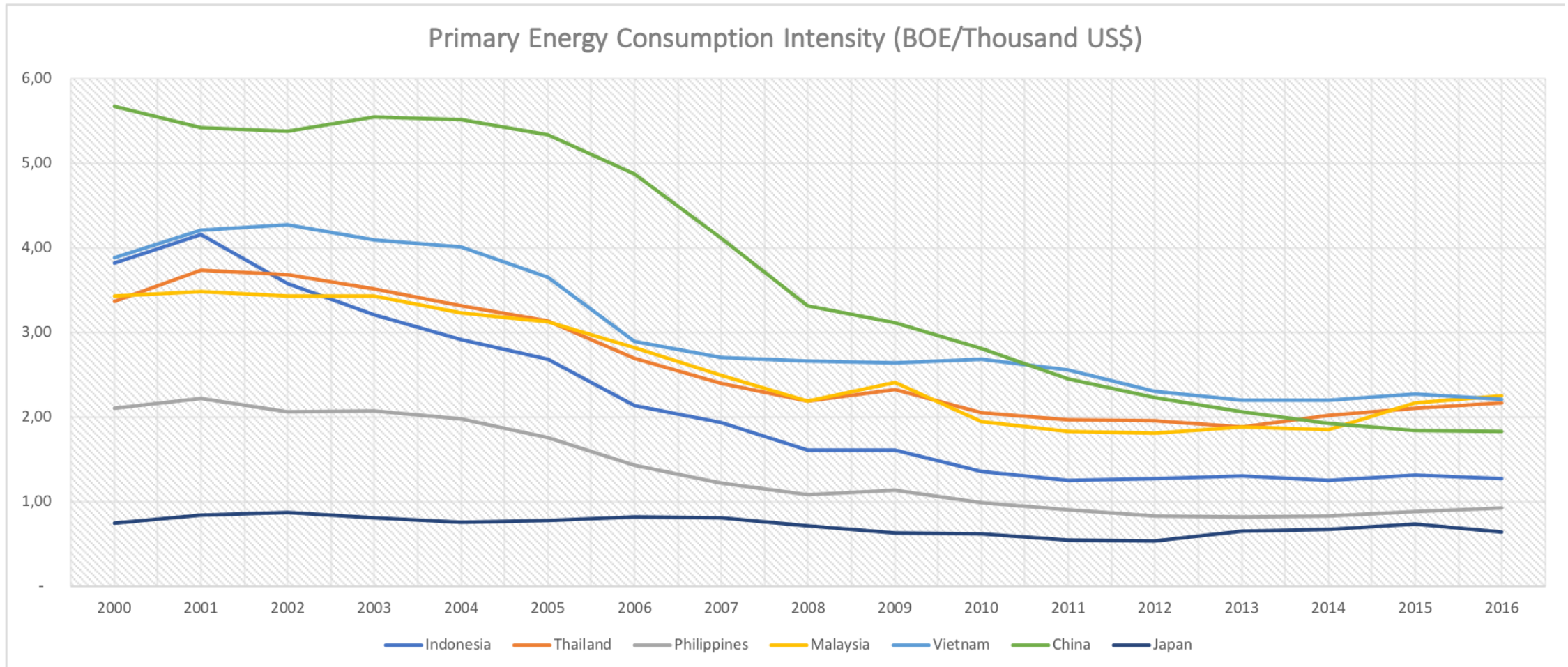
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IEA Energy Efficiency in Emerging
Economy Training Week

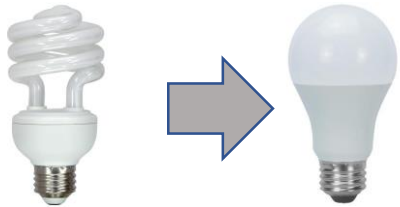
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As country Indonesia has made significant progress in energy efficiency in the past decades, but more to be done...



Source: compiled by IESR (2018)

Potential energy savings is huge, and the money too



54 PJ/yr \$1.2bn/yr



97 PJ/yr \$0.8bn/yr

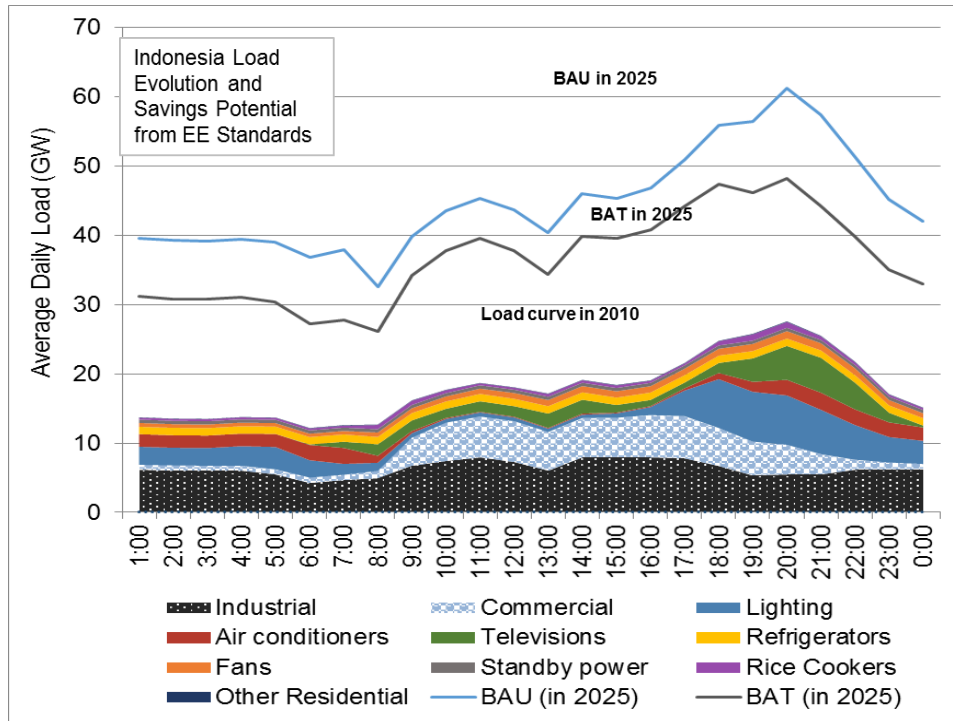


32 PJ/yr \$0.69bn/yr



75 PJ/yr \$0.63bn/yr

Cooling Efficiency is a critical for Peak Demand Management in Indonesia



Challenges and recommendations:

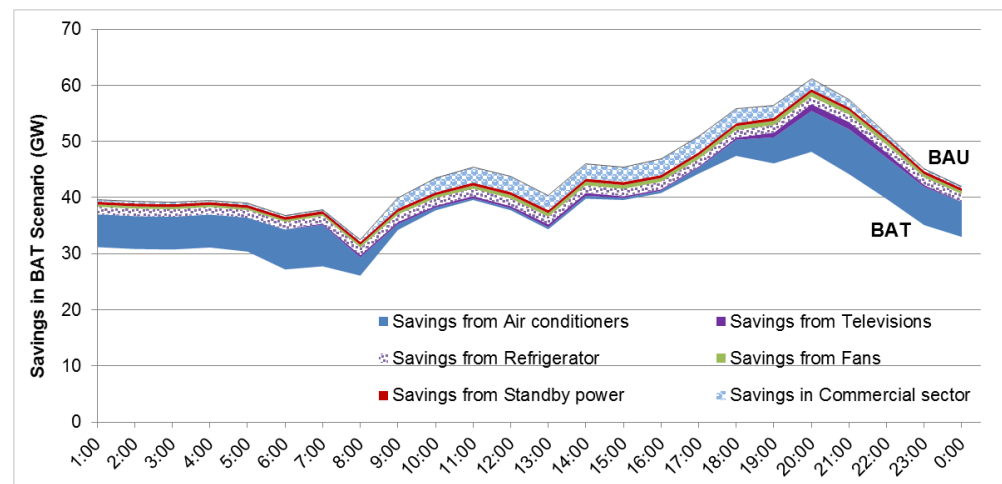
“Grade inflation”: Currently 80% of the market is labeled as most efficient. Standards and Labels need to be designed to identify high efficiency products

Consumers extremely sensitive to first cost: tax incentives and other financial mechanisms should be explored to reward suppliers of efficient ACs and create a market (which in turns decrease costs)

Indonesia plans to add 56GW of capacity by 2027 (mostly thermal) resulting in over \$ 100 bn investment.

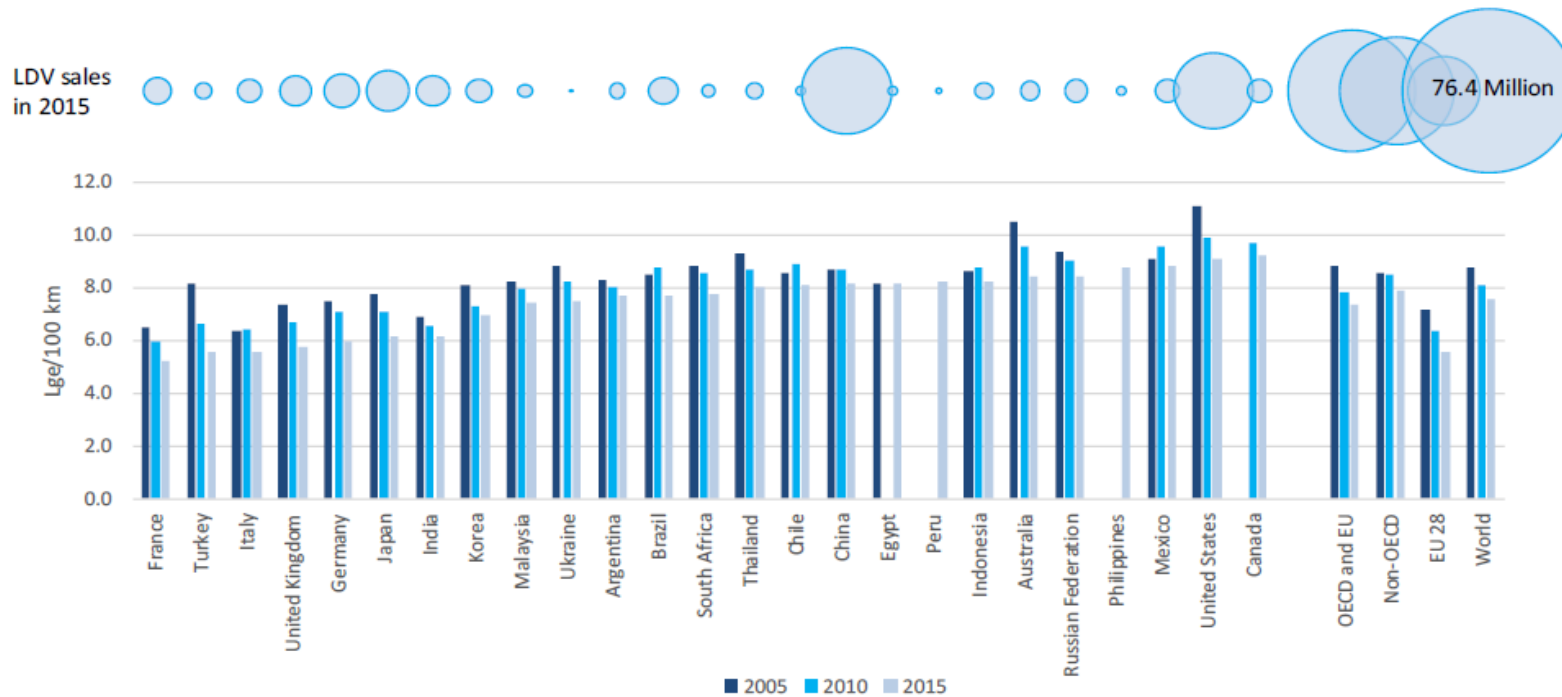
LBNL identify 13 GW savings from EE policy for appliances by 2025, thus bridging gap for additional capacity needs.

Biggest demand reduction by far comes from EE air conditioners due to (1) high growth (2) high usage and (3) strong technology opportunity – 7 GW by 2025



Indonesia LDV fuel economy is less efficient to its peer

Figure 5 • Average new LDV fuel economy by country, normalised to the WLTC, 2005-15



Notes: OECD and EU = the 28 EU member countries and Australia, Canada, Chile, Japan, Korea, Mexico, Turkey and United States; Non-OECD = Argentina, Brazil, China, Egypt, India, Indonesia, Malaysia, Peru, Philippines, Russian Federation, South Africa, Thailand and Ukraine.

Turning energy efficiency potential into real energy savings requires a lot of effort

- 1 Consumer behavior and preferences
- 2 Industry engagement
- 3 Energy pricing policy
- 4 Quality and sound policy and regulatory framework (incl. law, standard, label)
- 5 Delivery infrastructure (e.g. laboratory and testing facilities)
- 6 Financing and access to finance
- 7 Intra-ministerial coordination

THANK YOU | TERIMA KASIH

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