

MECON Project overview and key results

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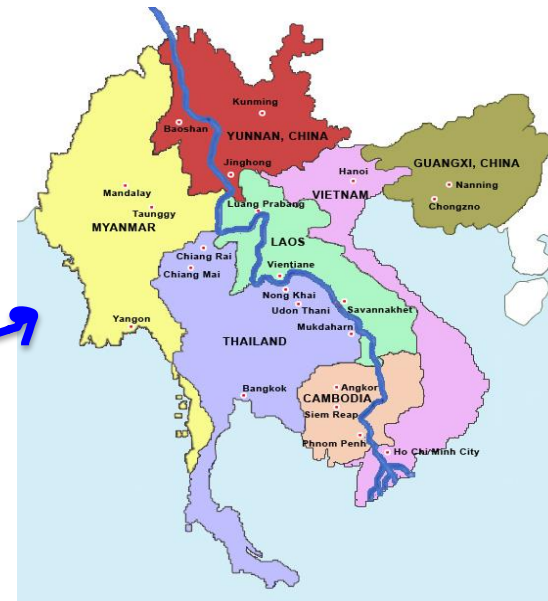
Effective energy efficiency policy implementation targeting
“**New Modern Energy CONsumers**” in the Greater Mekong Subregion



Introduction to MECON project

New Modern Energy Consumers, defined as those whose income is in the range of 2-5\$/day/person and have access to electricity.

The MECON is a two year project, started June 2013, investigating the design and implementation of energy efficiency policies in the Greater Mekong Sub-region (Cambodia, Laos, Myanmar, Thailand, Vietnam).



Project Partners

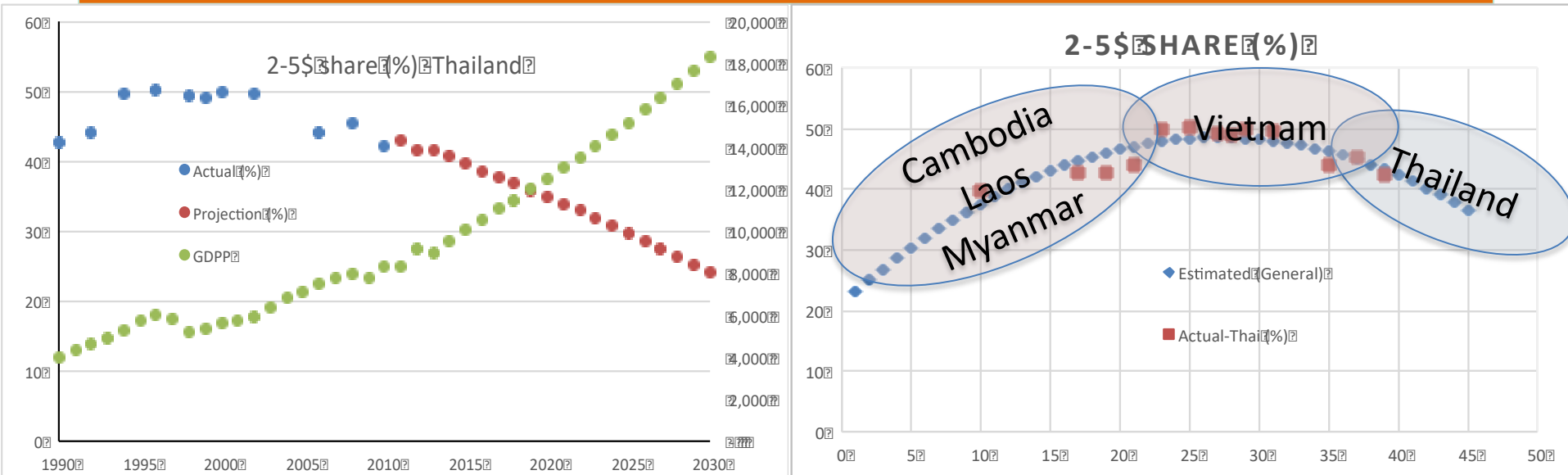
- UCL Energy Institute, University College London (UCL), UK
- Joint Graduate School of Energy and Environment (JGSEE), Thailand
- Hanoi University of Science and Technology (HUST), Vietnam
- Royal University of Agriculture (RUA), Cambodia
- Myanmar Engineering Society (MES), Myanmar
- National University Of Laos (NUOL), Laos
- <http://meconproject.com>
- <http://www.bartlett.ucl.ac.uk/energy/research/themes/energy-systems/mecon>



MECON project objectives

- ❖ To quantify the share of modern energy consumers in GMS countries;
- ❖ To analyse the current energy consumption pattern and technologies used by new modern energy consumers;
- ❖ To quantify energy efficiency improvement potential;
- ❖ To analyse energy aspiration of the modern energy consumers;
- ❖ To identify opportunities and barriers to the adoption of energy efficient technologies amongst new modern energy consumers in the GMS;
- ❖ To disseminate the project findings to various stakeholders;
- ❖ To enhance the analytical capacity in the GMS region.

New Modern Energy Consumers



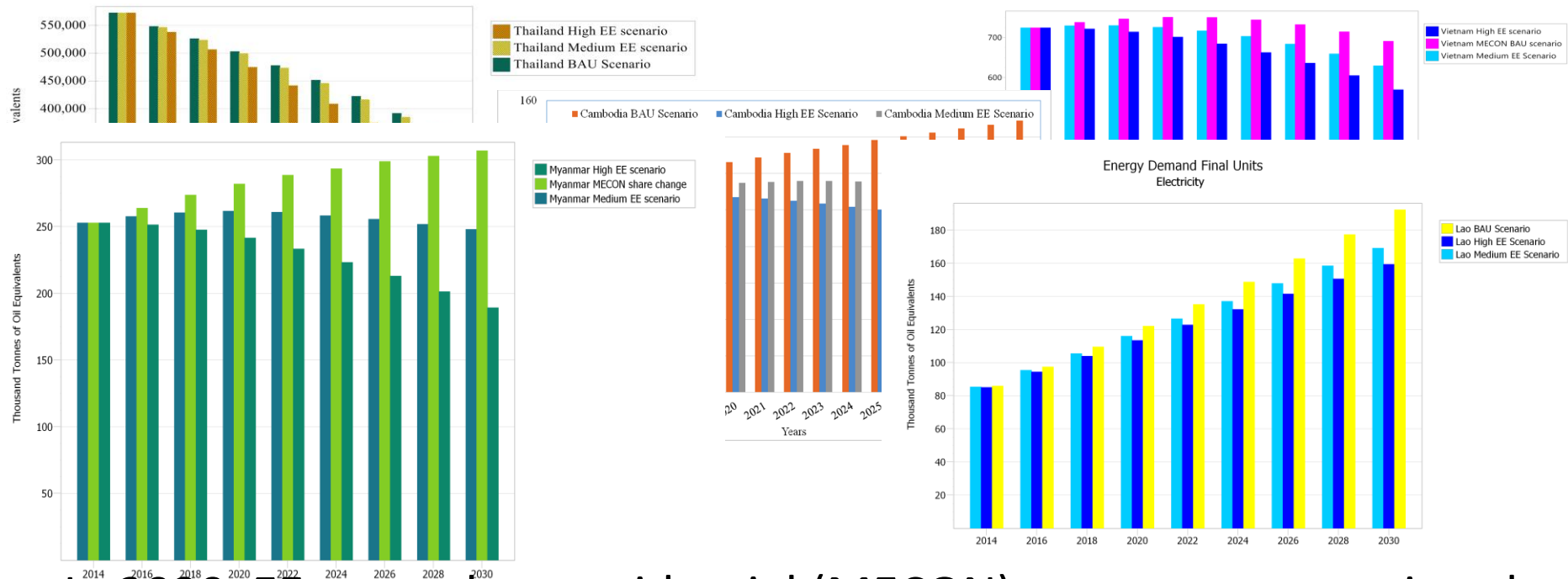
- In 2008, new modern energy consumers accounted for 45.4% of the population in Thailand.
- MECON share has already **peaked in Thailand**; **peaking in Vietnam**; and **yet to peak in Cambodia, Laos and Myanmar**.
- Thailand will decrease to 24% by 2030.
- In Laos, Cambodia and Myanmar, the share of the MECON is expected to be in the range of **40-50%** in 2030



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Energy consumptions under different scenarios in GMS countries



- In 2030, EE can reduce residential (MECON) energy consumptions by 2% (Thailand) -20% (Myanmar) in MEE and 16% (Thailand)-38% (Myanmar) in HEE compared to that of BAU scenario
- Highest potential, in terms of percentage reduction, is in light bulbs



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Challenges for EE policy: amongst the GMS countries

Common barriers

- Information failure: which appliance is more efficient?
- Lack of awareness and low priority of energy efficiency
- Availability of EE products, especially in remote areas

Country-specific barriers

- Cases of Lao and Cambodia: fake EE label
- Case of Myanmar: under developed transmission lines and energy management system
- Case of Myanmar: fixed electricity price

Key Findings

- Retailers may need more education on energy efficiency in general and energy efficient household products in particular.
- More dialogue between producers, wholesalers and retailers could ease the bottlenecks in availability of energy efficient appliances
- Support for phasing out of less efficient forms of lighting presents a good opportunity for policymakers to drive EE in households.
- Low cost access to finance may provide a potential solution to the financial barriers
- Most of the EE has the potential to reduce households' energy bills

Output

- 2 stakeholder engagement workshops in each country.
- Few policy briefings in each partner country
- Organized MECON project sessions (2 sessions) at the SEE2014 conference in Thailand with 10 MECON project presentations.
- Two journal papers published and few are being developed
- Enhanced modelling and analytical capacity of over 20 researchers
- Enhanced interaction between policy makers and researchers
- End of project international dissemination workshop – CO-organised by Electricity Generating Authority of Thailand (EGAT)
 - Three sponsored participants from each partner country and at
- Major challenges: inadequate capacity (modeling and analytical)
 - Keeping the network alive; Follow-on projects

Myanmar Experiences

- Household Electricity tariff is too low (3.5 cent to 5 cent /KWh)
- Availability of Energy Efficient appliances is low (25%)
- Upfront costs are higher (2 to 5 times)
- Different payment methods in some places
- Low energy efficiency awareness
- No government Laws and regulations



Impacts in Myanmar

- Capacity Building
 - Awareness of Energy Efficiency
 - LEAP trainings, survey trainings, Seminars
 - Research, surveys, tools, awareness
- Involvement of Policy makers
 - Form Energy Efficiency and Conservation Division under Ministry of Industry
 - MEPS, Energy Efficiency guide-lines
 - UNEP's project - Leapfrogging Myanmar's Market to High Efficiency Lighting and Appliances
- Won ASEAN Green Award 2015 (Country Winner) by MCCC-AAET



Thank you

Please visit our website at www.meconproject.com



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