

# Southeast Asia Energy Outlook 2017

**Keisuke Sadamori**

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World Energy Outlook Special Report

## ■ Southeast Asia is emerging as major global energy player

- *Strong economic & population growth, urbanisation & industrialisation*
- *Demand increased by 60% since 2000, strong potential for further growth*

## ■ A region with multiple energy challenges

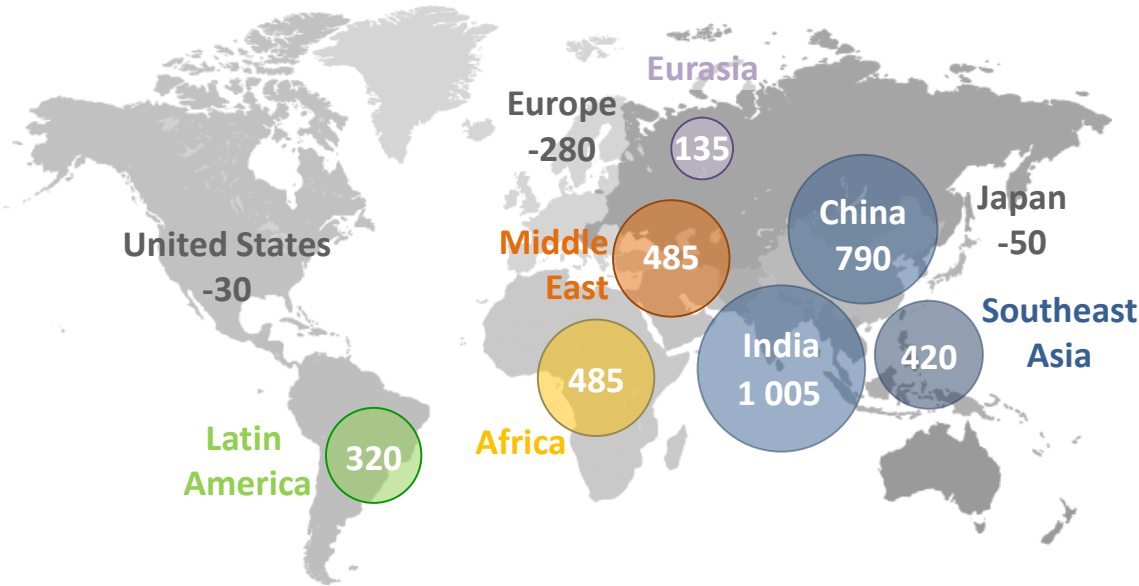
- *65 million lacking access to electricity, 250 million reliant on solid fuels for cooking*
- *Dwindling position as a gas exporter, and a rising dependency on imported oil*
- *Poor air quality, vulnerability to effects of climate change*

## ■ Opportunities for a cleaner energy future

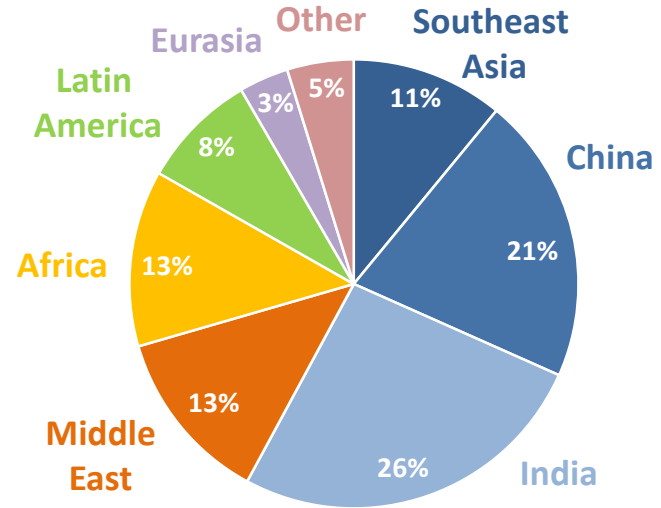
- *Paris Agreement ratified by all, increasing attention to renewables & efficiency*
- *Fossil fuel subsidy reforms making progress*

# A shift in the global centre of gravity for energy

Change in primary energy demand to 2040 (Mtoe)



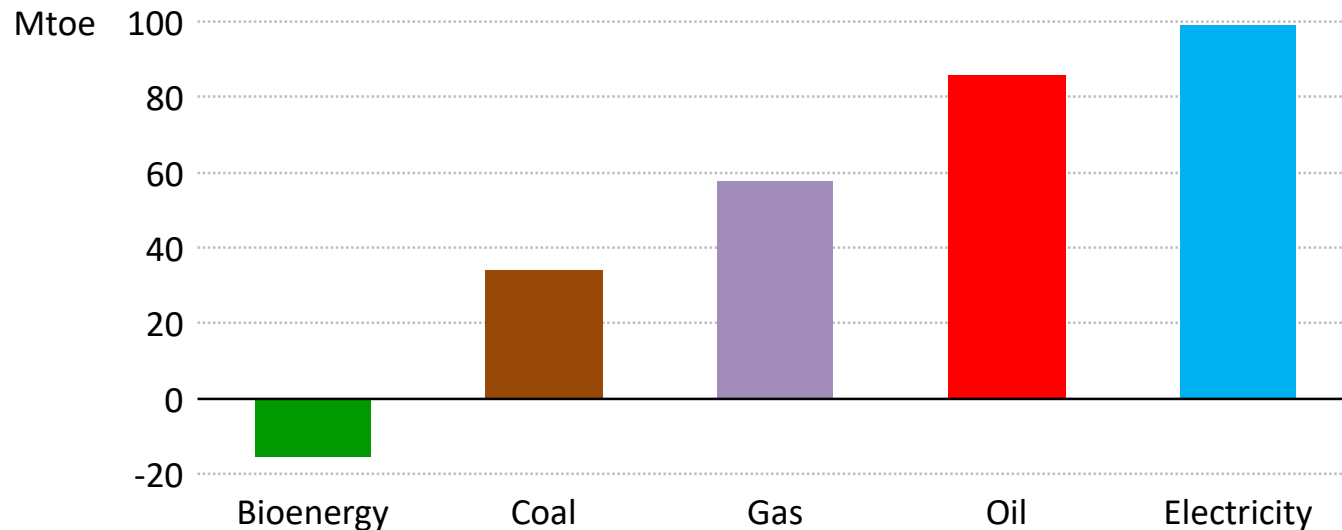
Share of global growth 2016-2040



***Southeast Asia, India and China are the engine of future energy demand growth, together accounting for almost 60% of the global increase to 2040***

# Electricity leads demand growth

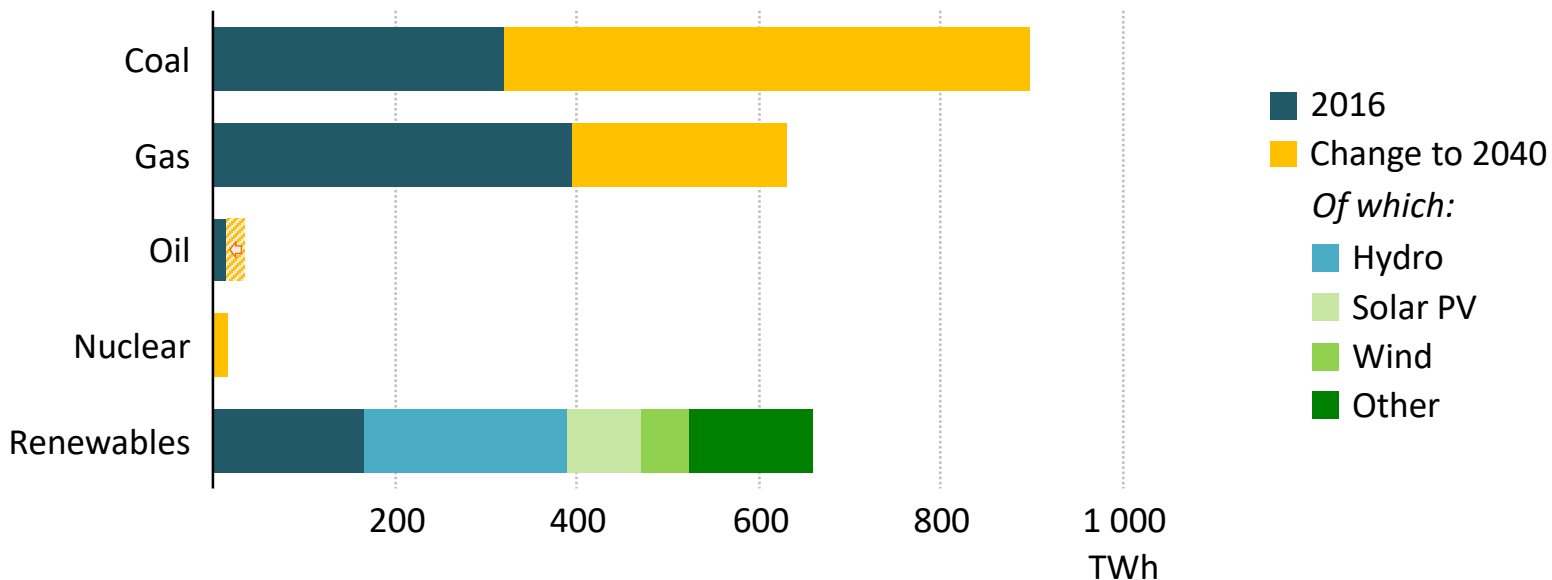
## Change in total final energy consumption 2016-2040



***A growing middle class proves a formidable factor behind both the increase in electricity (in households) and oil (for transport)***

# The power mix becomes more diversified

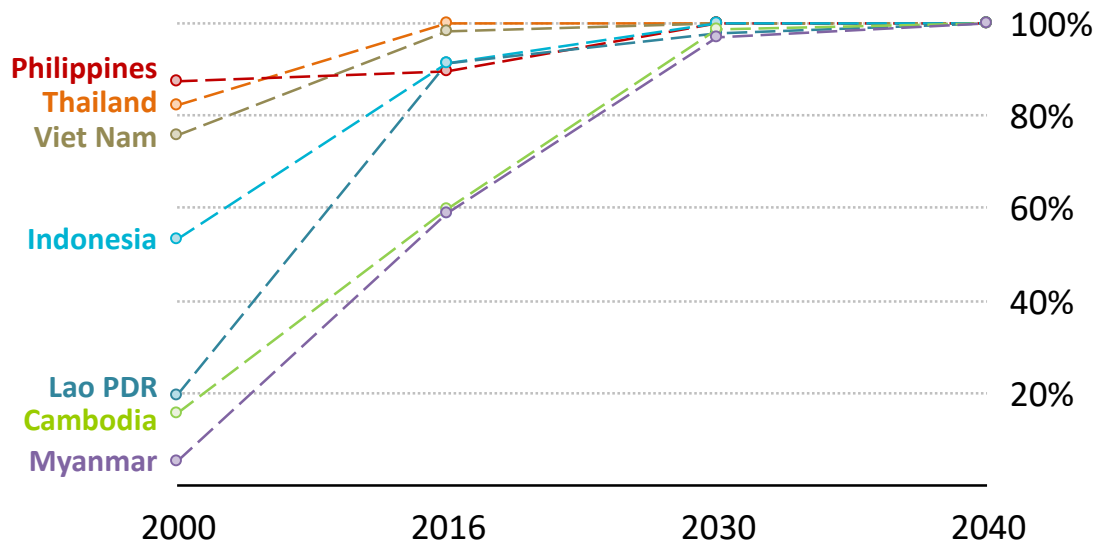
## Power generation by fuel in the New Policies Scenario



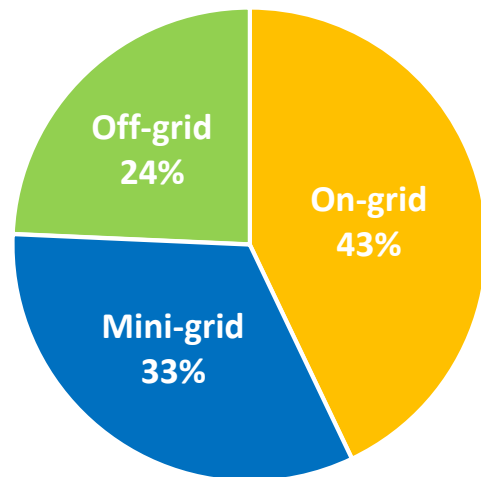
***Renewables account for the largest share of installed capacity in 2040, but coal plays a major role in the projected generation mix***

# The road to universal electricity access

## Access to electricity



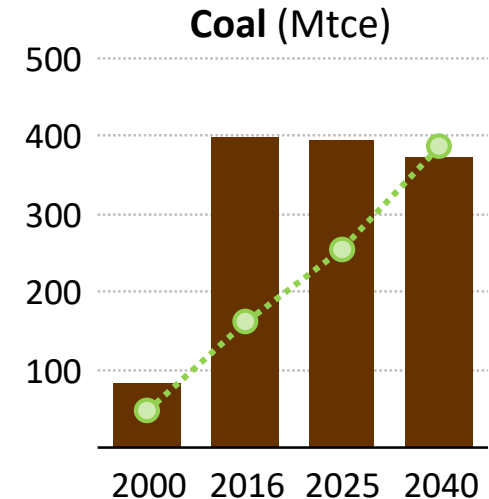
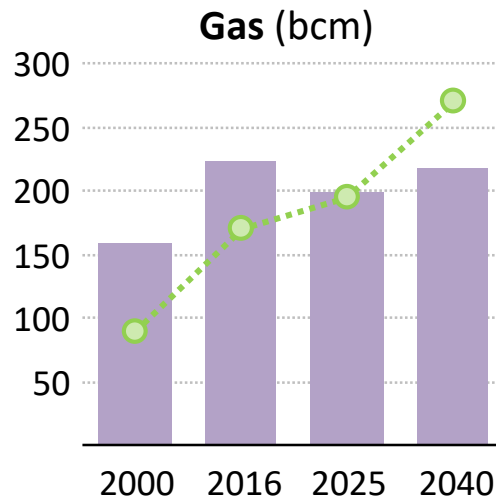
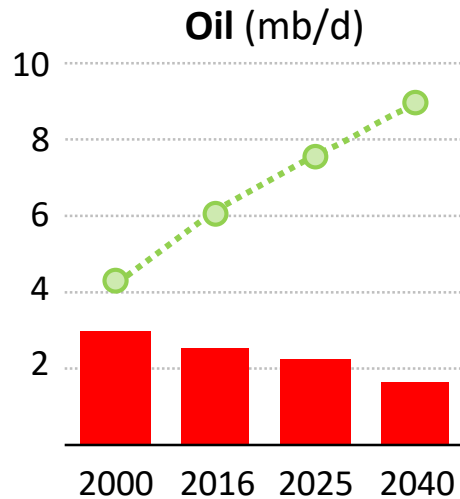
## Access by type of connection, 2030



**All countries in the region achieve universal access to electricity by the early 2030s, deploying a range of technologies depending on circumstance**

# A growing need for imports

## Fossil fuel production and demand to 2040



■ Production

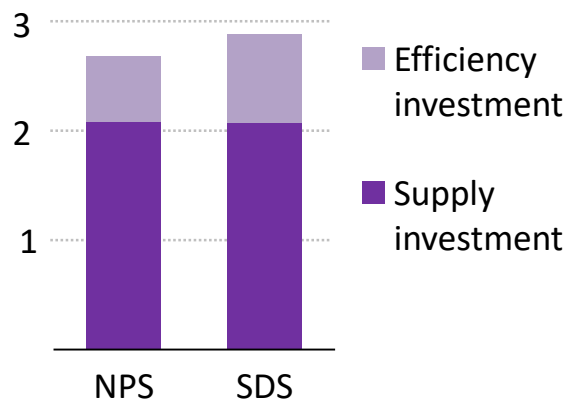
● Demand

***By 2040, Southeast Asia is a net importer of all fossil fuels,  
and the import bill exceeds \$300 billion***

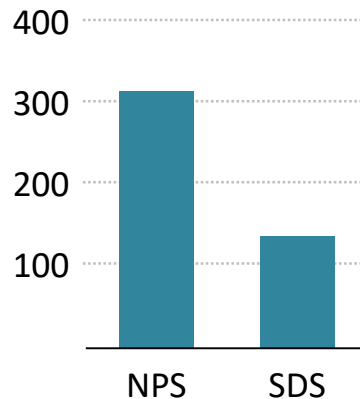
# A sustainable pathway for Southeast Asia

## Key indicators for New Policies (NPS) and Sustainable Development (SDS) Scenarios

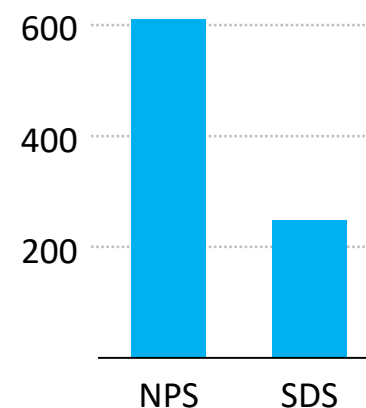
**Cumulative investment**  
(Trillion dollars)



**Fossil fuel import bill**  
(Billion dollars)



**Premature deaths from air pollution**  
(Thousand people)



***A small increase in investment sets Southeast Asia on a sustainable pathway and brings multiple benefits***



- **Robust economic growth and fast-paced demographic change mean that Southeast Asia's role in global energy is set to expand**
- **The region faces myriad energy challenges; it is crucial for policy-makers to pursue a consistent strategy to meet them**
- **Energy efficiency, subsidy reform and enhanced regional integration play vital roles**
- **With a small increase in overall investment, but a major reallocation of flows, Southeast Asia can achieve a more sustainable pathway, with multiple benefits**
- **With international engagement on energy more important than ever, the IEA stands ready to be a strong partner for the region**