

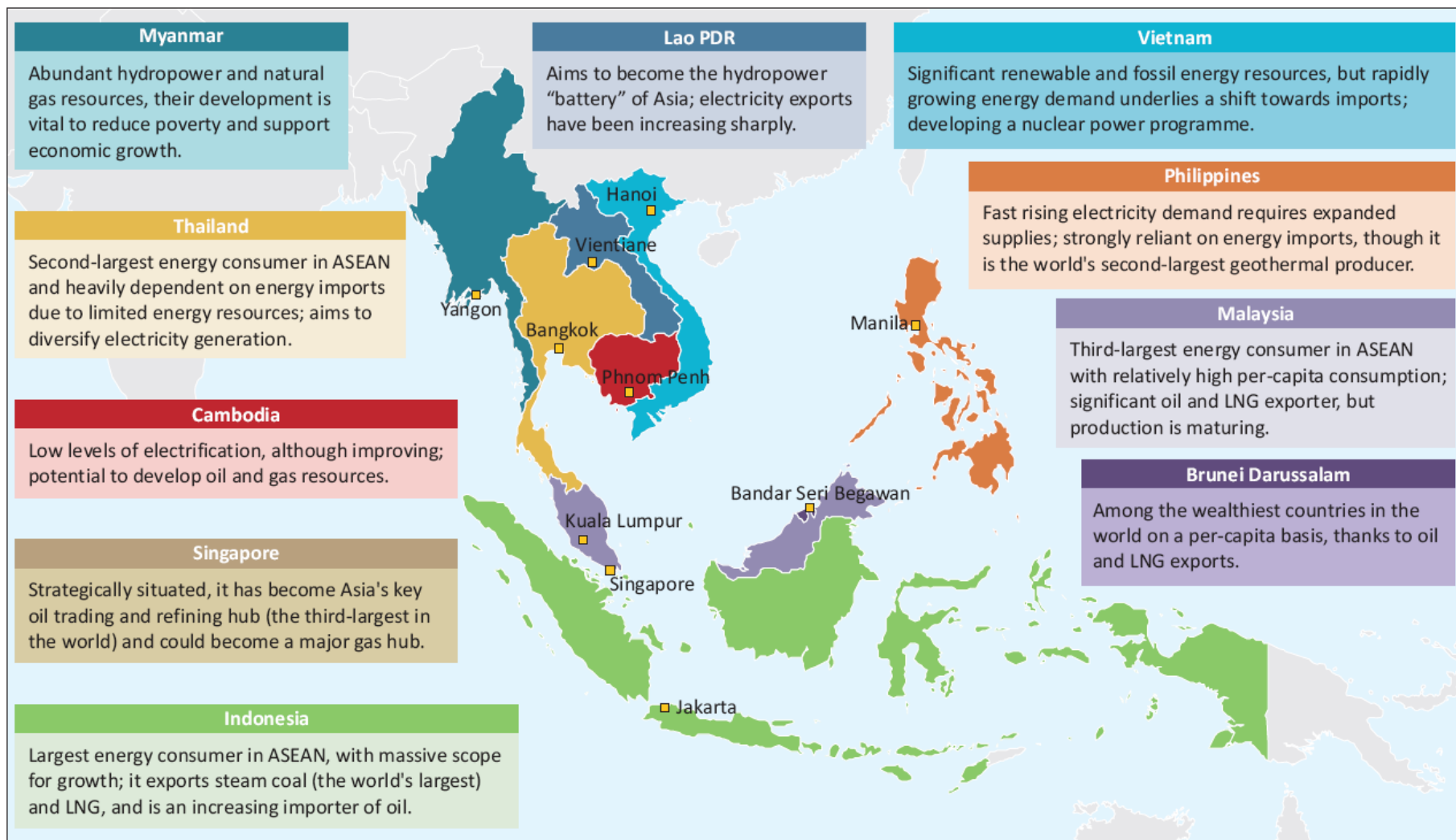
SOUTHEAST ASIA  
ENERGY OUTLOOK

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Executive Director  
International Energy Agency  
2 October 2013

- **Southeast Asia has emerged as a key player in the global energy system**
  - *growing thirst for energy driven by sustained economic & social development*
- **Diverse set of countries with vast differences in patterns of energy use**
- **Many of the individual countries increasingly reliant on energy imports**
  - *although region as a whole is rich in energy resources*
- **Fundamentals suggest energy needs will continue to grow**
  - *economy to triple by 2035, despite some headwinds at present*
  - *population of 600 million to expand by almost one-quarter by 2035*
  - *per-capita energy use is still low & 134 million people lack access to electricity*

# Southeast Asia Energy Overview

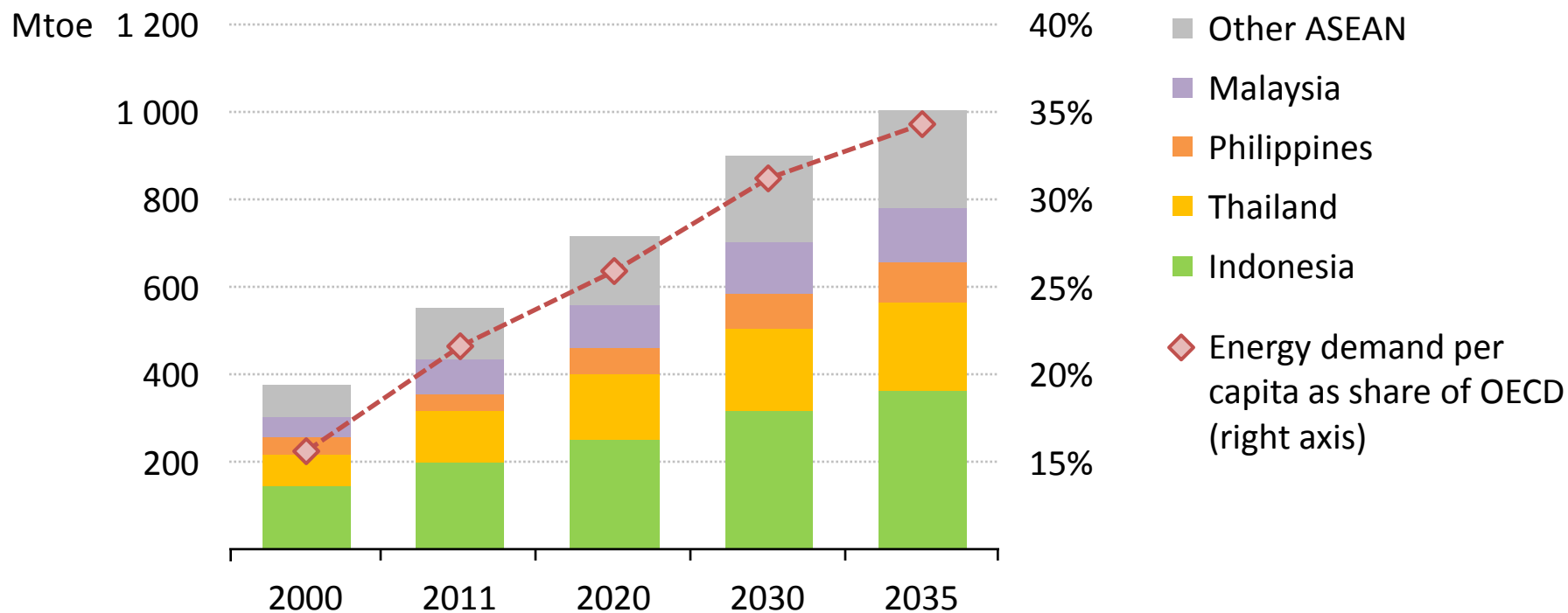
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This map is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries, and to the name of any territory, city or area.

# Southeast Asia's energy needs will continue to grow

## Growth in ASEAN primary energy demand

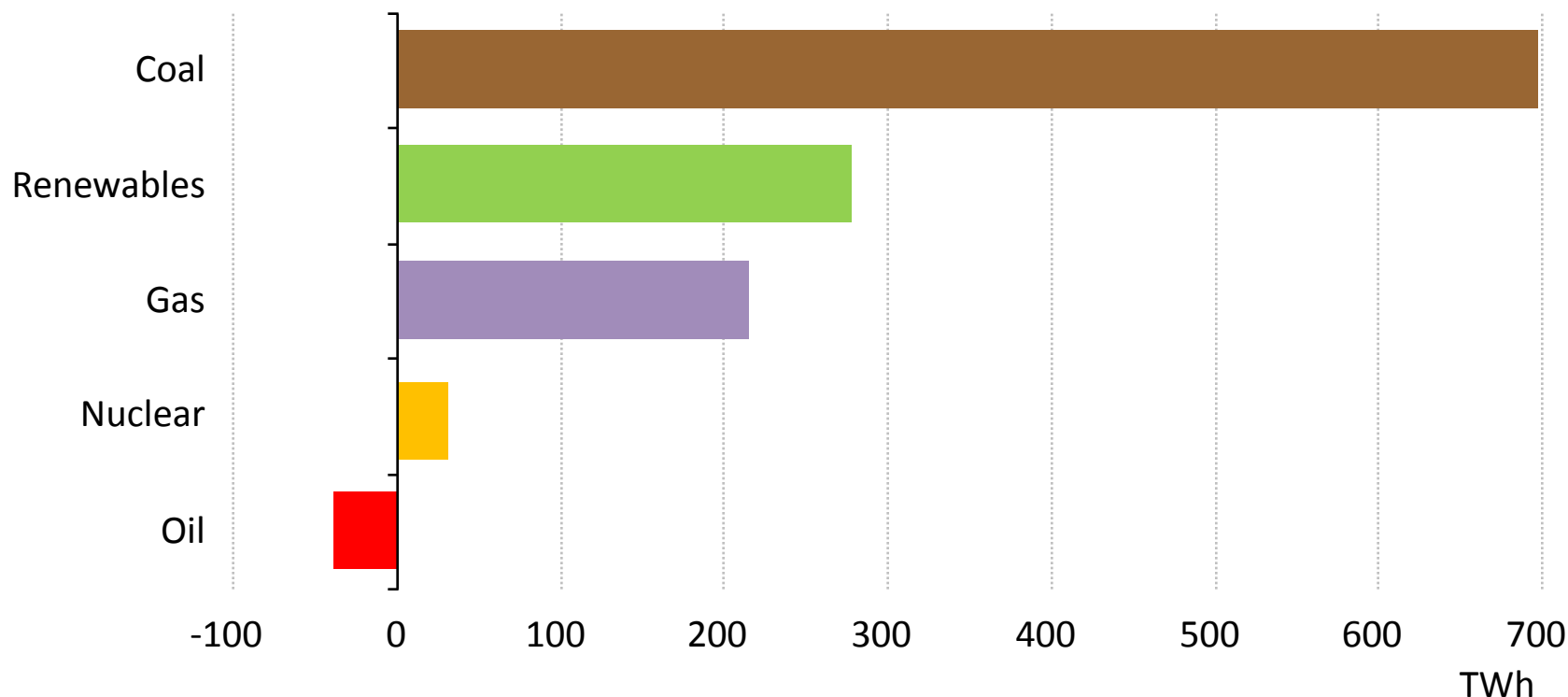


***Southeast Asia's energy demand increases by over four-fifths in the period to 2035, or by more than the current consumption of Japan***

# The power sector is fundamental to the energy outlook of Southeast Asia

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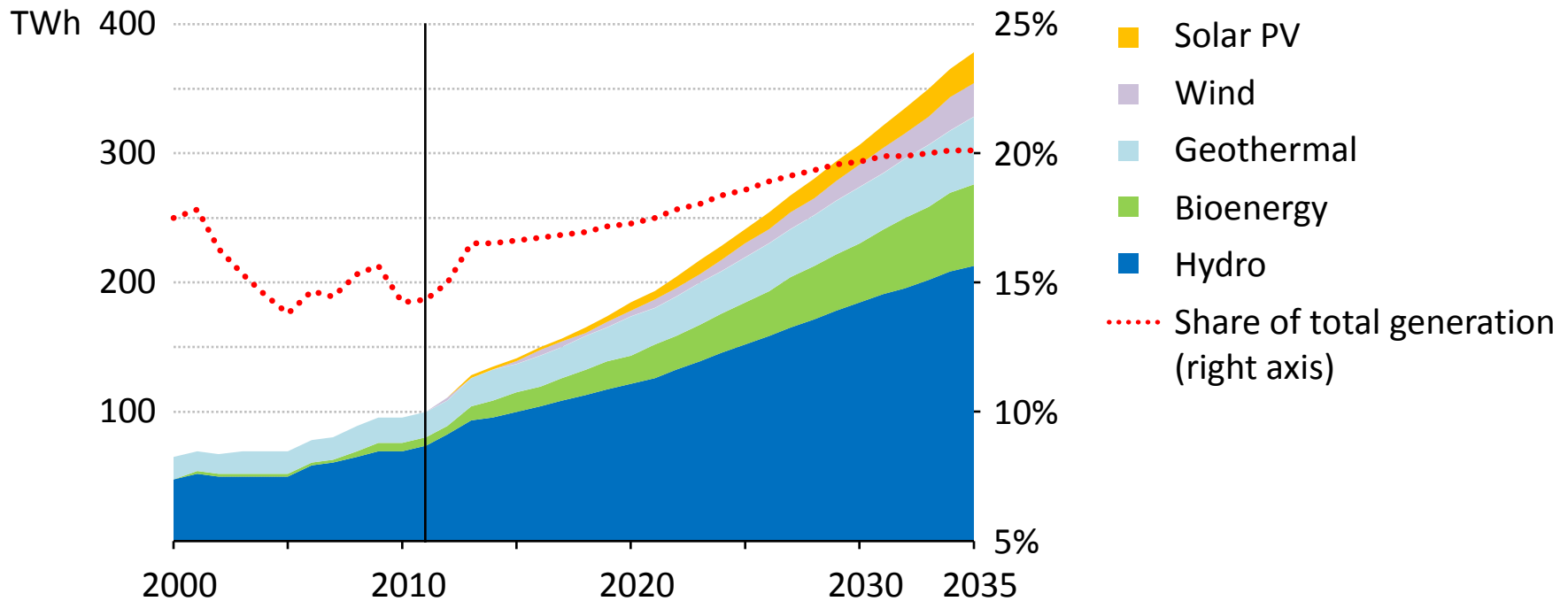
## ASEAN incremental electricity generation by fuel, 2011-2035



***Electricity generation increases by more than the current power output of India; coal emerges as the fuel of choice, accounting for 58% of the growth***

# Renewables enter into the mainstream

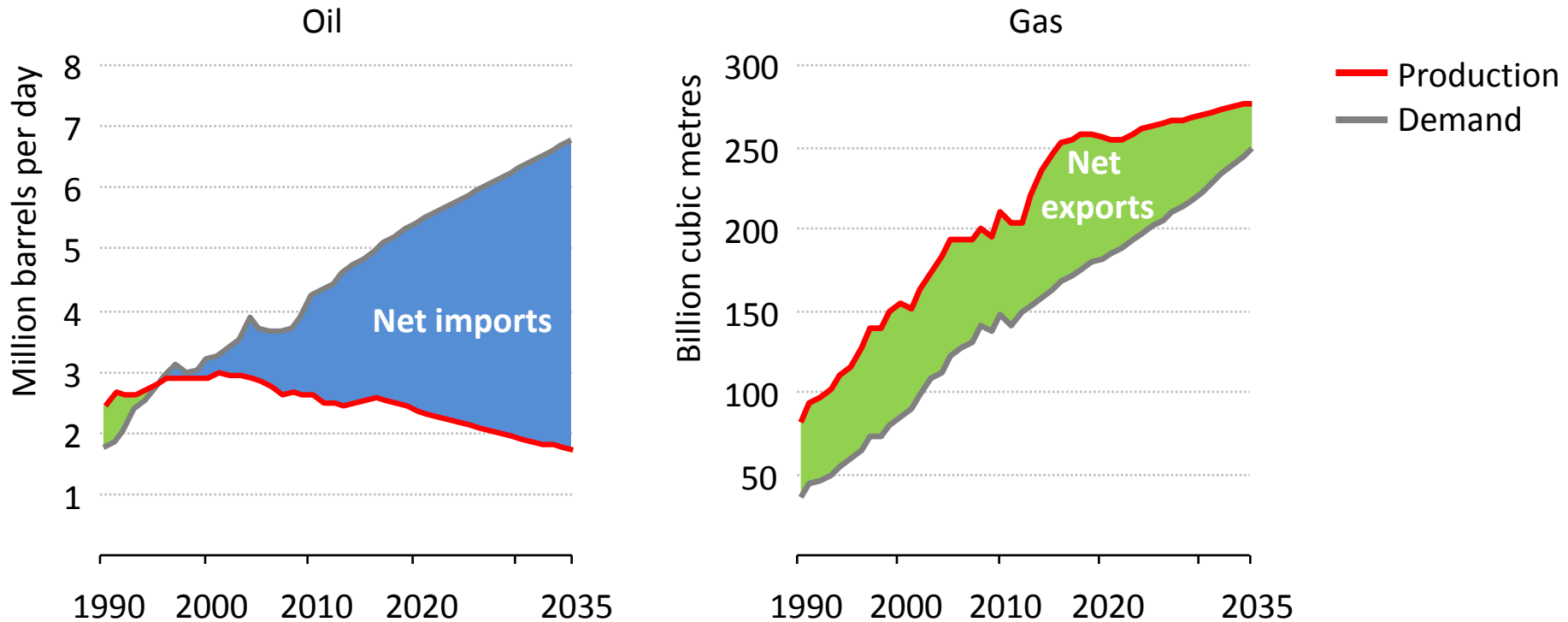
## ASEAN electricity generation from renewables



**Renewables-based power increases by more than the current total power output of Indonesia & Thailand combined, although barriers to deployment need to be tackled**

# Production: oil in decline & gas struggling to keep up with demand

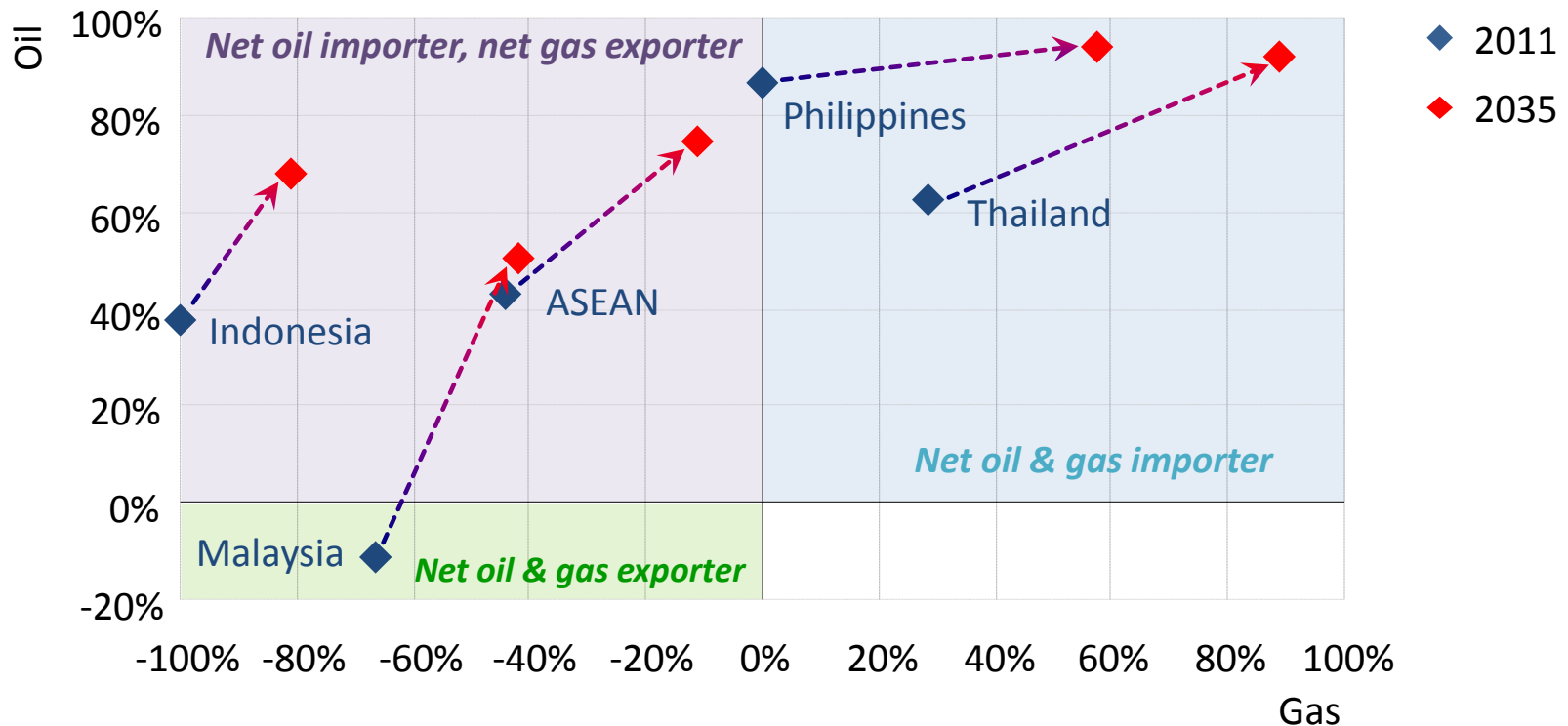
## ASEAN oil and gas balances



***Southeast Asia becomes the world's fourth-largest oil importer (behind China, India and the EU) & sees a vastly reduced surplus of natural gas for export***

# Rising oil & gas imports will have high economic costs

## Net oil and gas imports as a share of demand

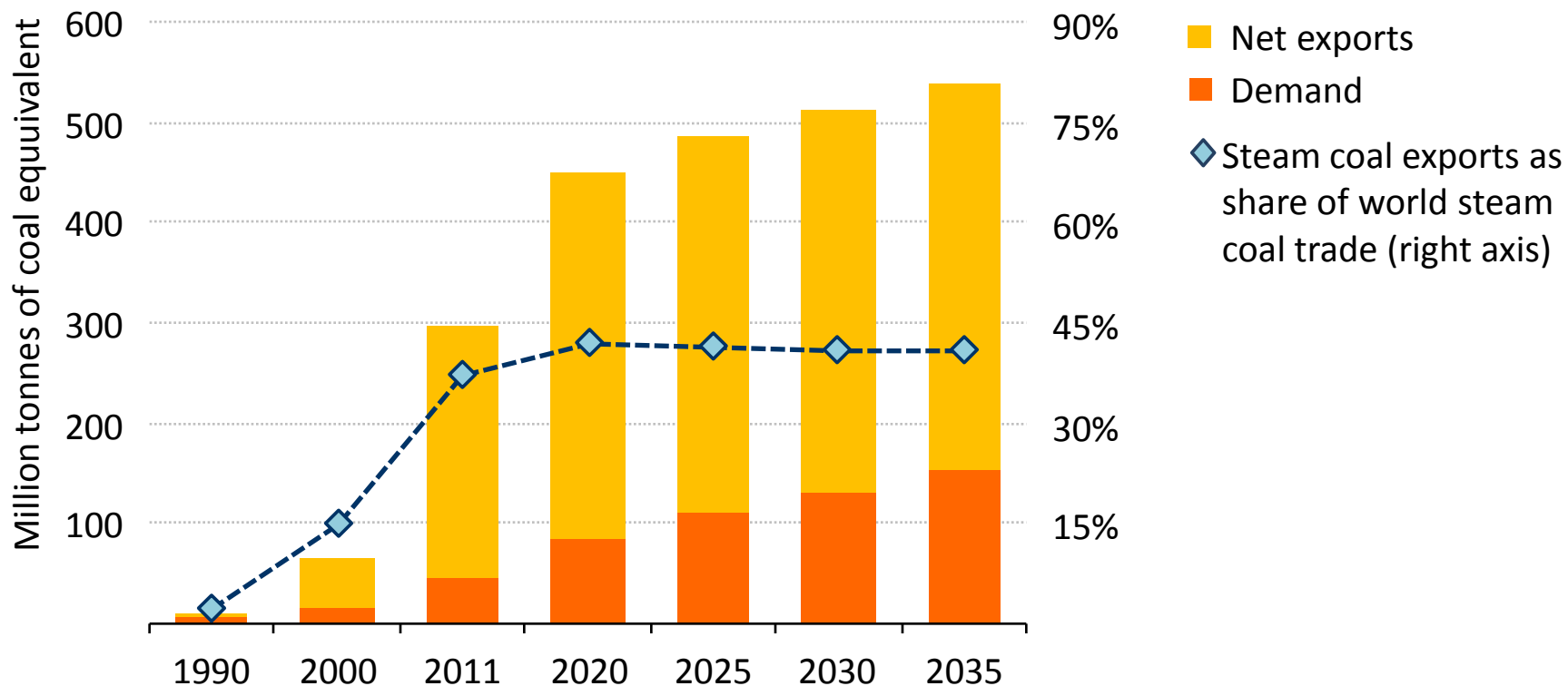


**The region imports 75% of its oil in 2035, as spending on oil imports triples to \$240 billion; net revenues from gas exports fall by more than three-quarters**



# Indonesia: a dominant player in global coal markets

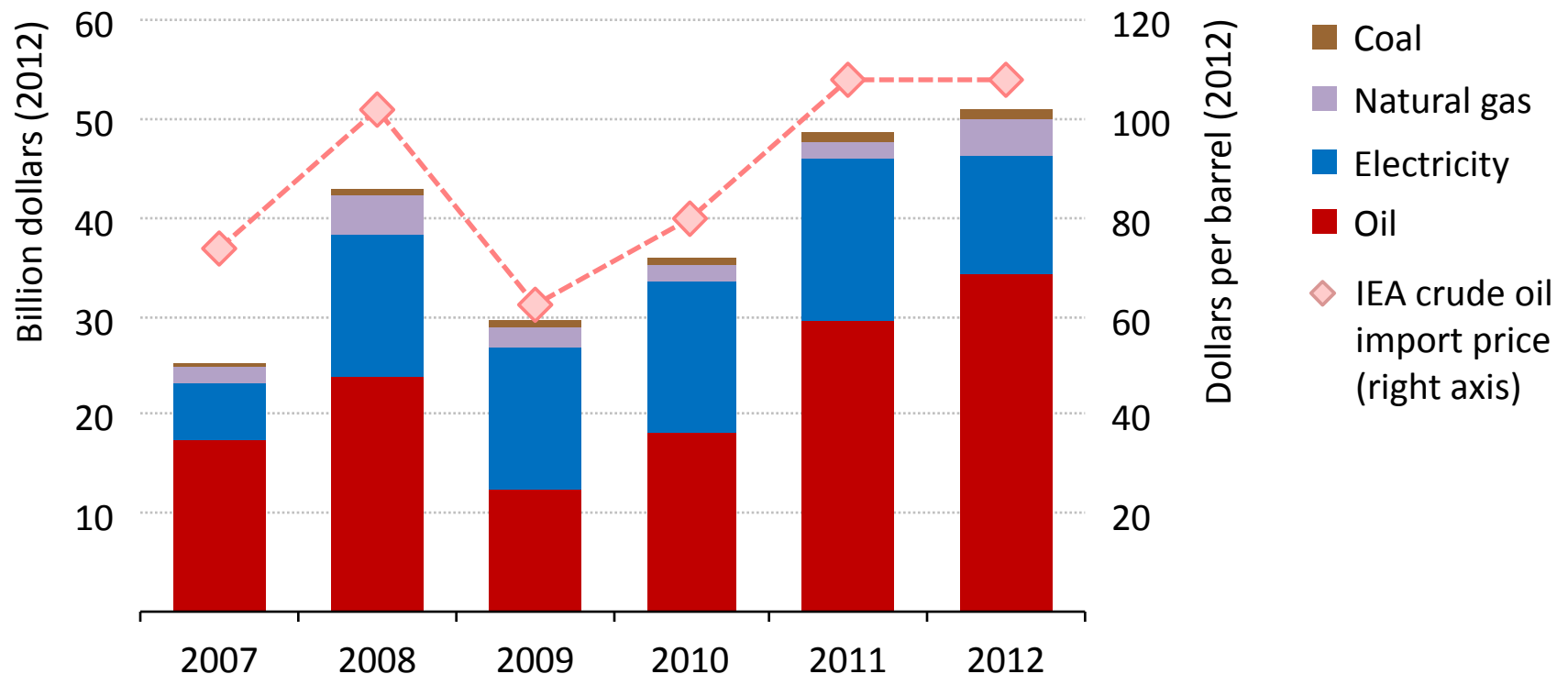
## Indonesia's coal production



**Indonesia accounts for 85% of Southeast Asia's coal production; it remains the world's top exporter of steam coal – by a very large margin – through to 2035**

# Fossil-fuel subsidies continue to distort energy markets

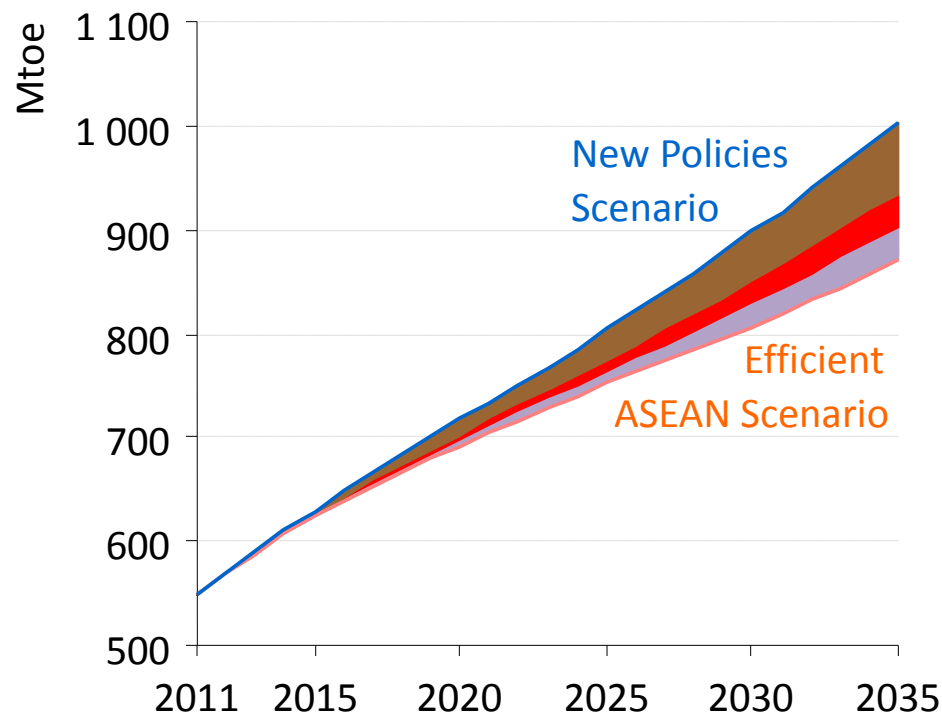
## Value of fossil-fuel subsidies in Southeast Asia, 2007-2012



***Fossil-fuel subsidies amounted to \$51 billion in 2012; despite recent reforms – notably in Indonesia & Malaysia – they continue to distort energy markets***

# Energy efficiency: a huge opportunity going unrealised

## ASEAN primary energy demand in the Efficient ASEAN Scenario relative to the New Policies Scenario

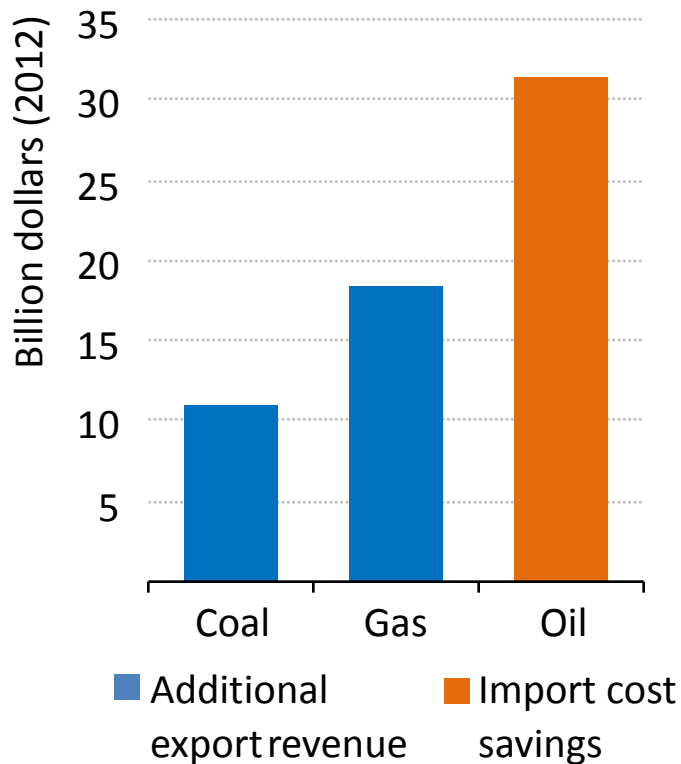


Savings in 2035	
Coal	100 Mtce
Oil	0.7 mb/d
Gas	28 bcm

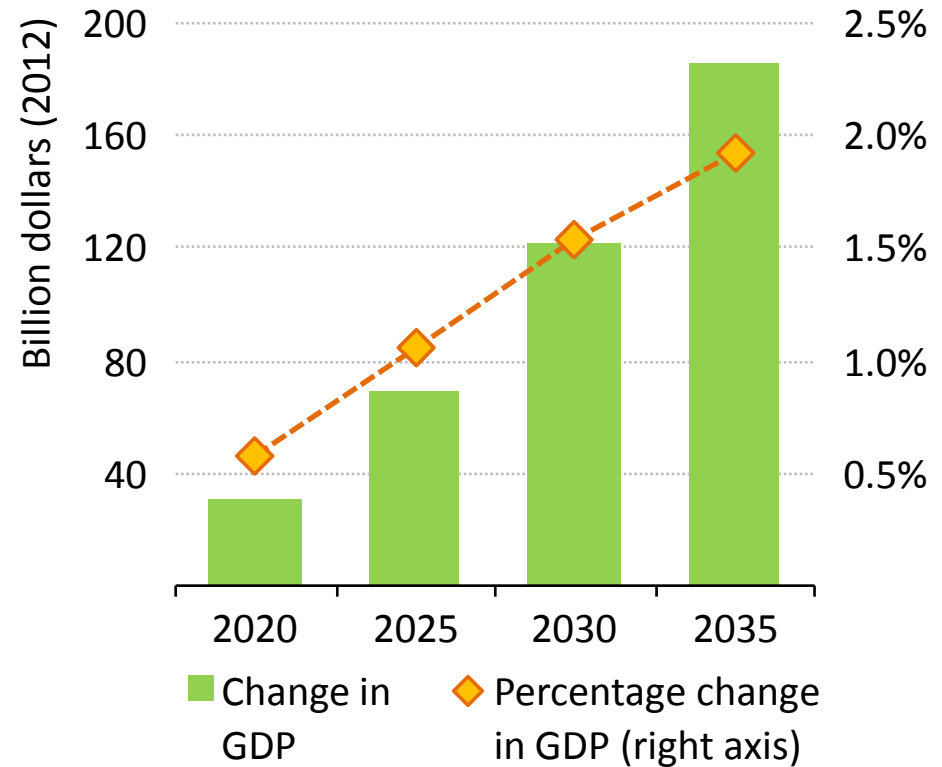
***Economically viable efficiency measures can cut the region's energy use in 2035 by almost 15%, or more than the current energy use of Thailand***

# Improved energy efficiency brings economic gains

## Gains in fossil-fuel trade balances



## Increase in GDP



***In 2035, spending on oil imports is cut by \$30 billion, while revenues from exports of natural gas & coal are increased by \$30 billion; regional GDP is boosted by about 2%***

# **Southeast Asia: an emerging giant of the global energy market**

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- **Southeast Asia – along with China & India – is shifting the centre of gravity of the global energy system to Asia**
- **Its outlook for energy production & demand has implications that will be felt well beyond the region**
- **Developing policies to improve efficiency & attract investment will be vital for enhancing energy security, affordability & sustainability**
- **The region faces global challenges, underscoring the need to enhance cooperation intra-regionally & with international partners**