



**DEPARTMENT OF ENERGY  
PHILIPPINES**

# **Challenges for Energy Security in the APEC Region**

**MARIO C. MARASIGAN, *CESO III***

OIC Assistant Secretary  
& Director (concurrent), Renewable Energy Management Bureau  
Department of Energy,

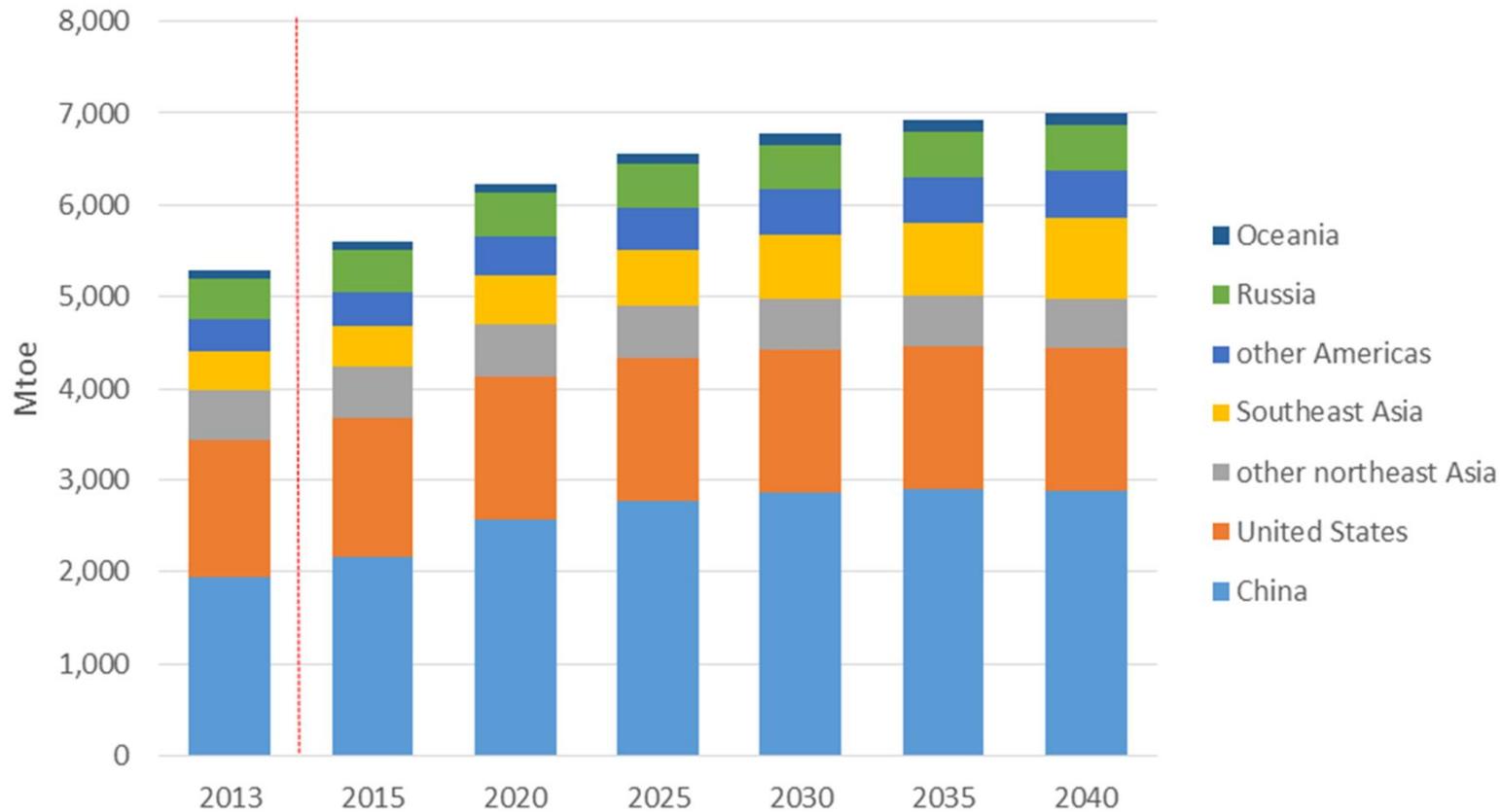
# Where we are now? Socio-Economic

*Based from the IEA Key Findings*

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- **Rapid urban growth** *reaching 616 million in total population in 2013*
- **Standout economic performer**
- **Increased energy demand in services by**
  - **50% between 2000 and 2013**
  - **High fossil fuel share in energy accounting for ( $\frac{3}{4}$  of the total demand)**
- **High Growth in Energy Imports**
- **Continued increase of air pollution and GHG Emission**
- **Large share of household in APEC is still without Access to electricity**
  - **20% of ASEAN population has no access to electricity**
  - **11% of the Filipino households has no access to electricity**

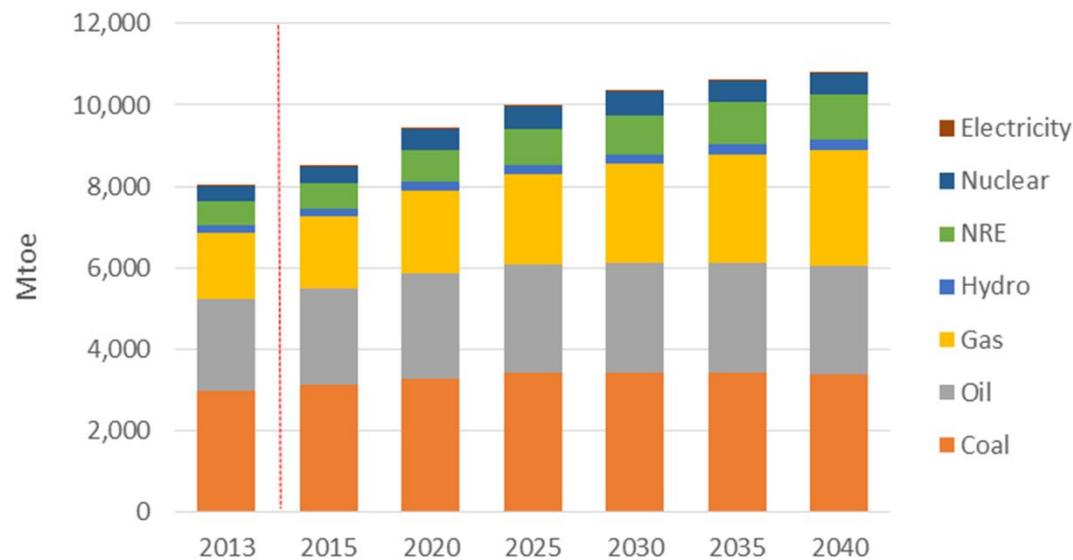
# Outlook - Increasing Energy Demand in APEC Region



Source: APERC (6<sup>th</sup> APEC Energy Outlook)

- “ China and SEA account for the bulk of increase in energy demand with an annual growth rate of 1.5% and 2.9%, respectively.
- “ Increasing demand poses a challenge for energy security and sustainable development

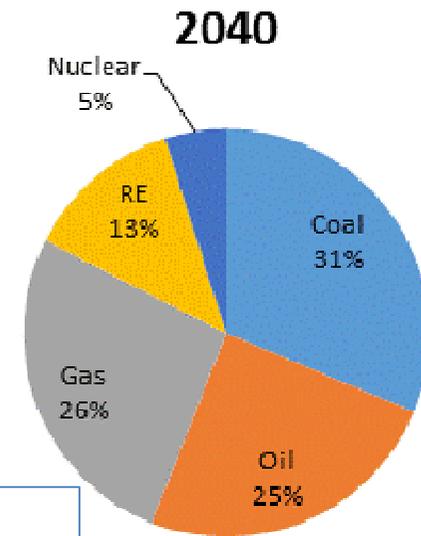
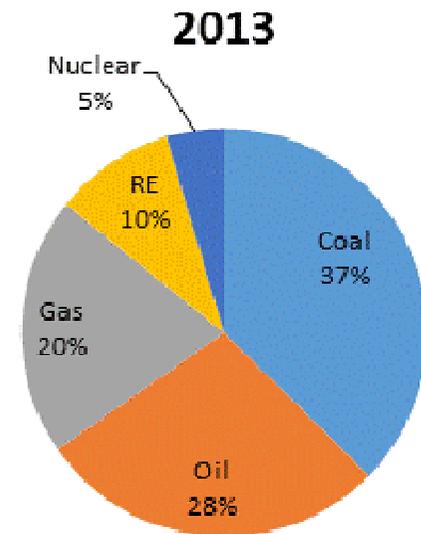
# Total Primary Energy Supply in APEC Region



Source: APERC (6<sup>th</sup> APEC Energy Outlook)

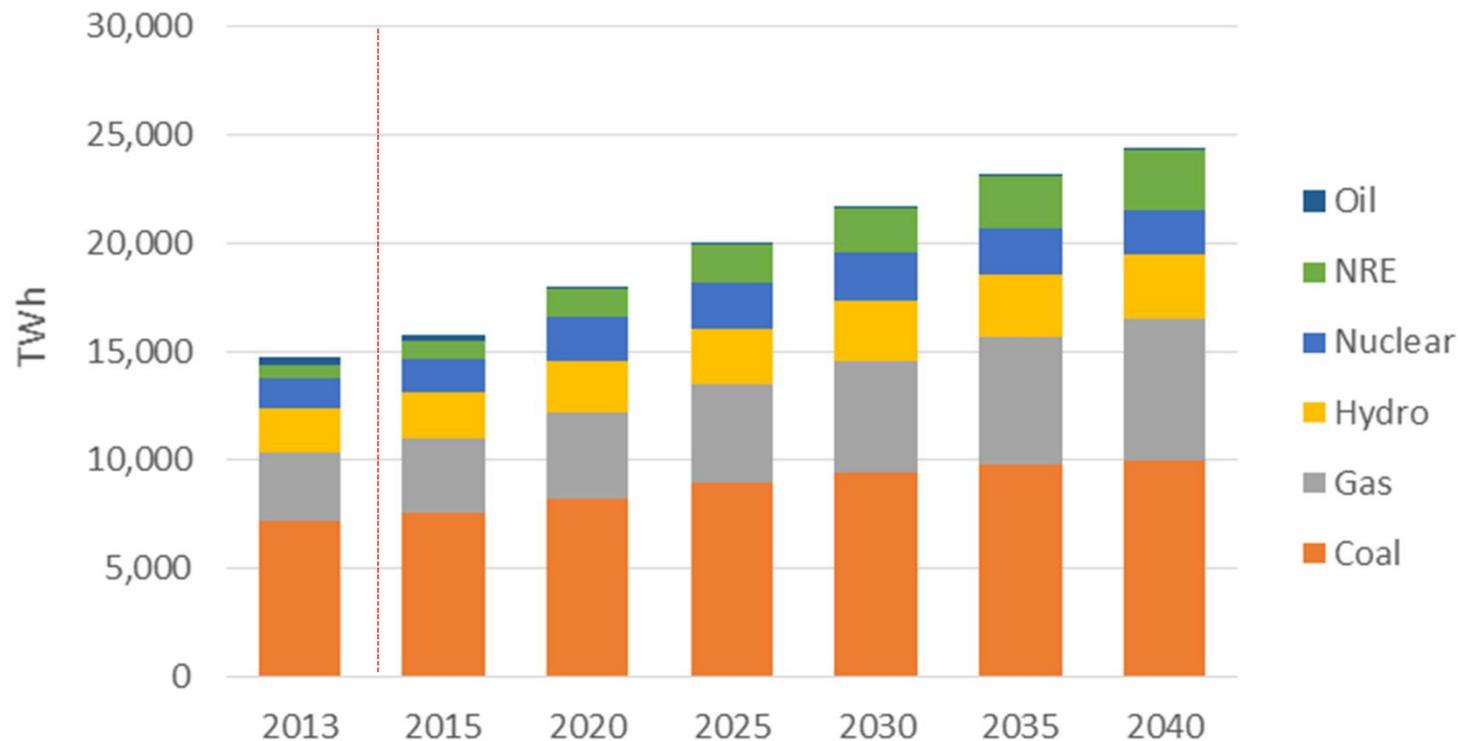
- “ Fossil fuels still dominate the primary supply mix by 82% with coal having the largest share at 30% by 2040.
- “ Gas exhibits the fastest growth at 2.2% annually among the fossil fuels.
- “ RE grows annually at 2.1% but not enough to capture a larger share in the supply mix

Thus, challenges sustainability of fossil fuel supply in the region. For RE, grid integration remains to be a concern in some economies.



# Evolving Power Mix

## Electricity generation



Source: APERC (6<sup>th</sup> APEC Energy Outlook)

- “ Generation mix of the region is concentrated on coal with a share of about 40% in 2040.
- “ Thus, postulates an alarming concern not only in terms of coal supply but also on the environment.

# Challenges and Policy Actions

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- Reduce energy intensity without necessarily affecting the economic growth trends of APEC economies.
  - APEC has a collective target of energy intensity reduction of 45% by 2035 based on 2005 level

*Economies needs to come up with its respective energy efficiency roadmap supporting such target.*

- A law or legislation on energy efficiency and conservation is important

# Challenges and Policy Actions

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- Diversify to less carbon-intensive energy supply
  - Prioritize investments on infrastructure, innovation and R&D to expand the use of clean energy e.g. gas and RE
  - Facilitate trade on clean fuels and technologies
- Address climate change vulnerabilities
  - Enhance energy infrastructure resilience
  - Strengthen emergency preparedness both institutional and response measures

# Challenges and Policy Actions

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- Establish a regional terminal or storage
  - With increasing demand for oil and gas, additional terminal and storage facilities must be put up

*Economies with limited access to funds and land would benefit to regional facilities that are strategically located*

- Secure energy investment
  - Improve business environment to expedite entry and completion of highly capital intensive energy infra projects
  - Facilitate joint investment ventures in the region

# THANK YOU !!!



**MARIO C. MARASIGAN, CESO III**  
OIC Assistant Secretary  
and Director, Renewable Energy Management Bureau  
Department of Energy  
[mcmarasigan826@yahoo.com](mailto:mcmarasigan826@yahoo.com)

