



# Projected Power Mix in ASEAN

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**The 30<sup>th</sup> Clean Coal Day in Japan International Symposium 2021**

**A Pathway to Carbon Neutrality ~ Role of Coal Frontier**

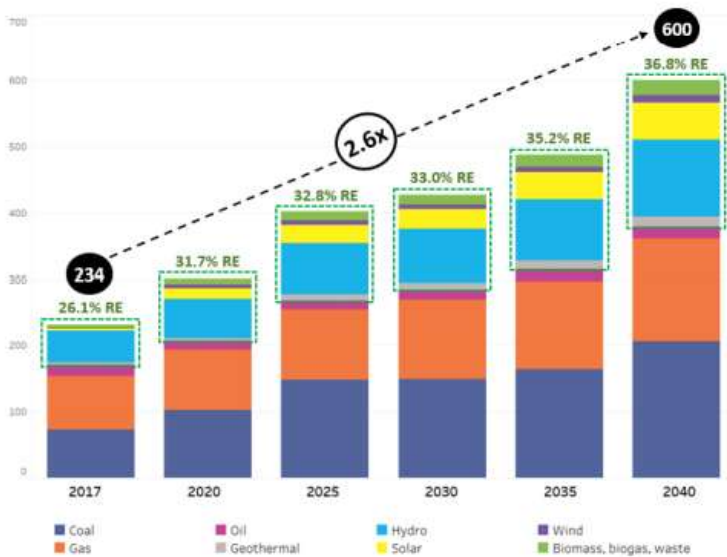
22 September 2021



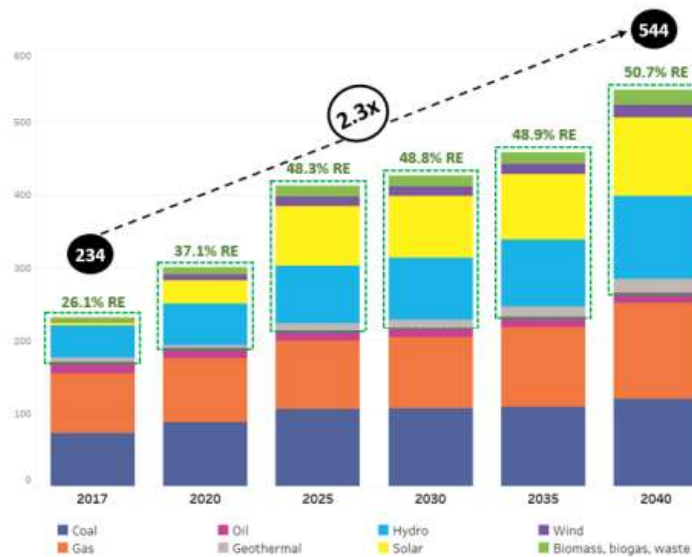
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# Coal Utilisation in ASEAN

ASEAN Target Scenario (ATS)



APAEC Scenario (APS)



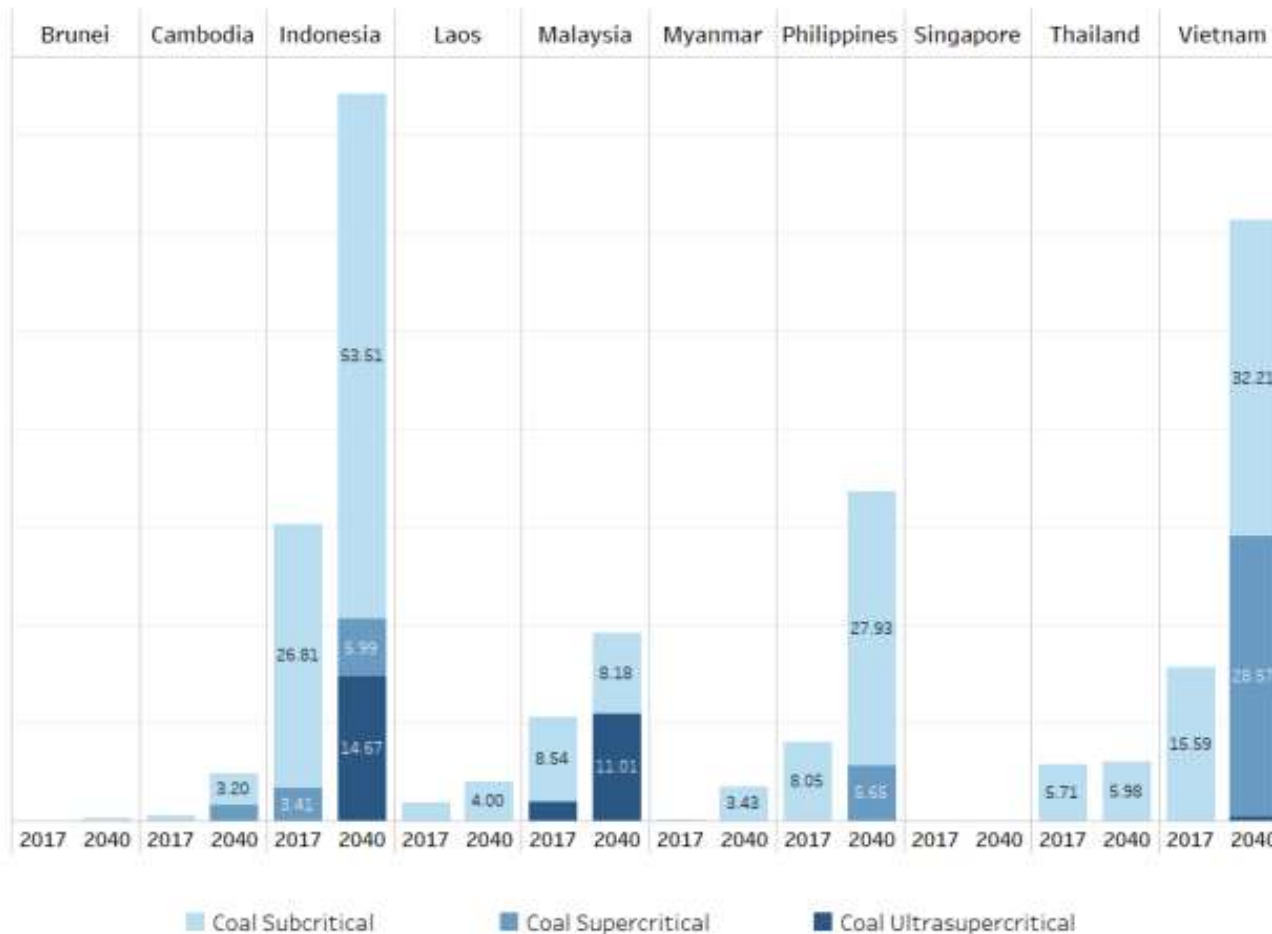
ASEAN Installed Capacity Mix for ATS and APS

ATS reflects the country's power development plan with energy efficiency measures  
 APS implies the acceleration of RE considering each country's RE potential.

- In ASEAN power sector, a significant transition to low carbon sources is expected to take place under the ATS and the APS, however, coal will remain important.
- **Under ATS, in 2025, coal fired power plants contribute 37% of total capacity whereas RE is 33%.**
- **Under APS, in 2025, coal contributes 26% of total capacity compared to 52% of RE share.**
- With high penetration of solar and wind, the **role of coal will be essential to maintain grid stability.**

Source: Strategic Report on the New Role of Coal-Fired Power Plants in Era of Energy Transition (2021)

# Cleaner Coal Utilisation for ASEAN



- In 2040, it is projected that there will be **more than 60 GW additional capacity of Supercritical and Ultra-Supercritical Coal** power plants with around **US\$ 77 billion investment** needed.
- Malaysia is leading the way to shift away from conventional coal fired power plants by increasing the Ultra-Supercritical capacity from 2 GW in 2017 to 11 GW in 2040.
- **This would be a good starting point for ASEAN to utilize Clean Coal Technologies for new coal fired power plants.**

Source: Strategic Report on the New Role of Coal-Fired Power Plants in Era of Energy Transition (2021)

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