



RE and the Transition in the ASEAN Power Sector

(based on ASEAN Power Updates 2021)

The 4th East Asia Energy Forum: A Low-Carbon Energy Transition in the ASEAN Region
Panel Session 1: Natural Gas and vRE as Transition Energy
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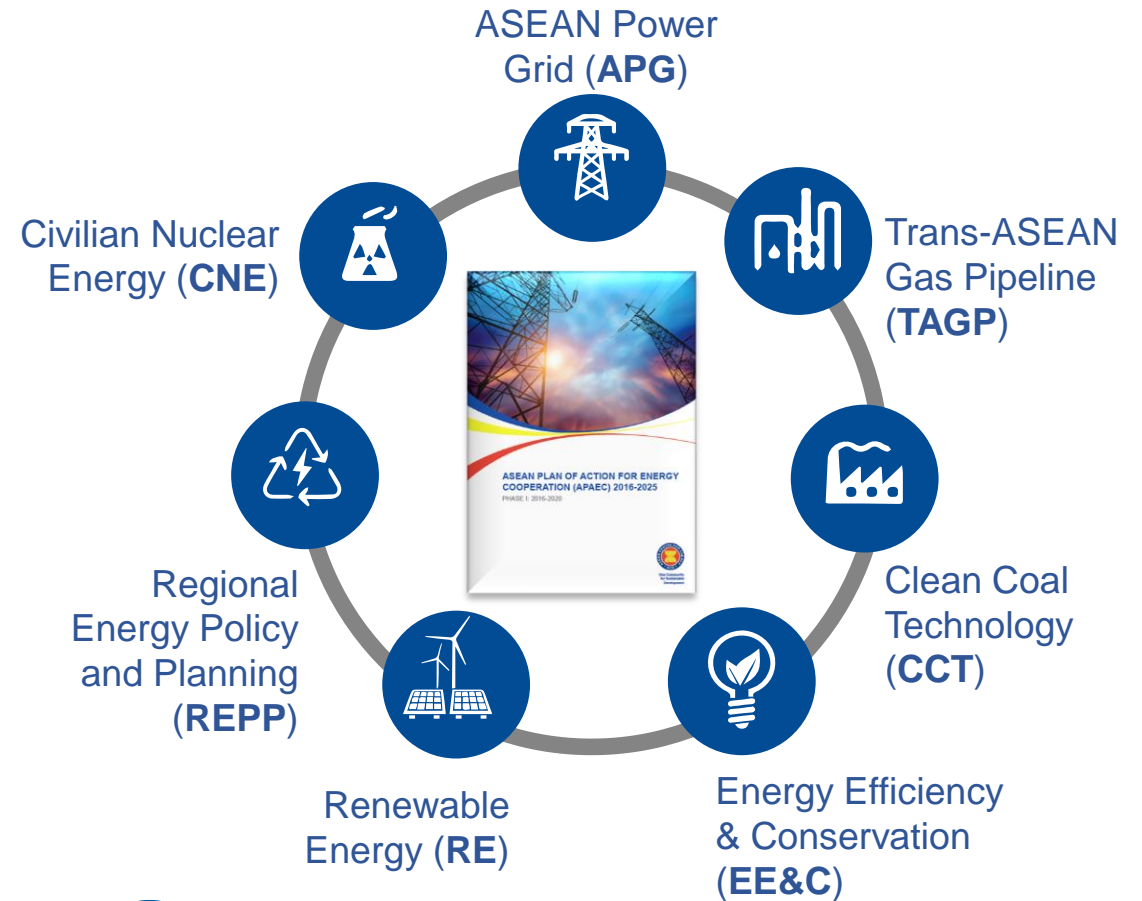
ACE is representing 10 ASEAN countries on energy cooperation



ASEAN Centre for Energy
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Enhancing Energy Connectivity and
Market Integration in ASEAN to Achieve

- ☐ Energy Security
- ☐ Accessibility
- ☐ Affordability
- ☐ Sustainability for All



Think Tank



Data and Knowledge Hub



Catalyst

ASEAN Power Updates

Edition: September 2021

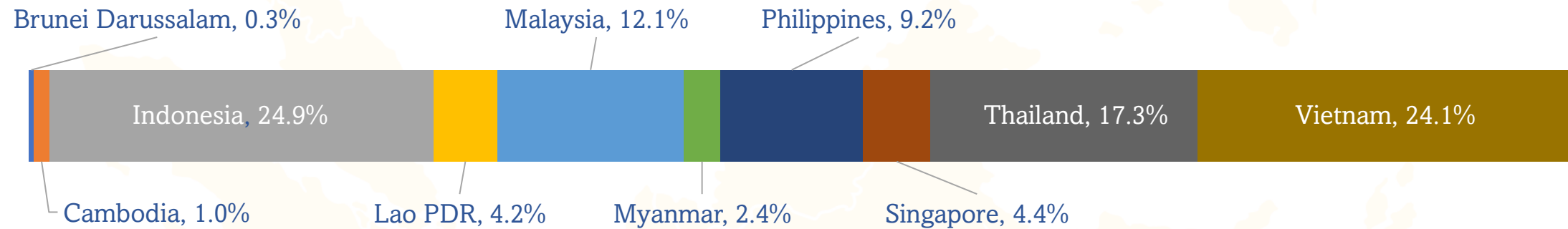
Report is available at: <https://accept.aseanenergy.org/asean-power-updates-2021>



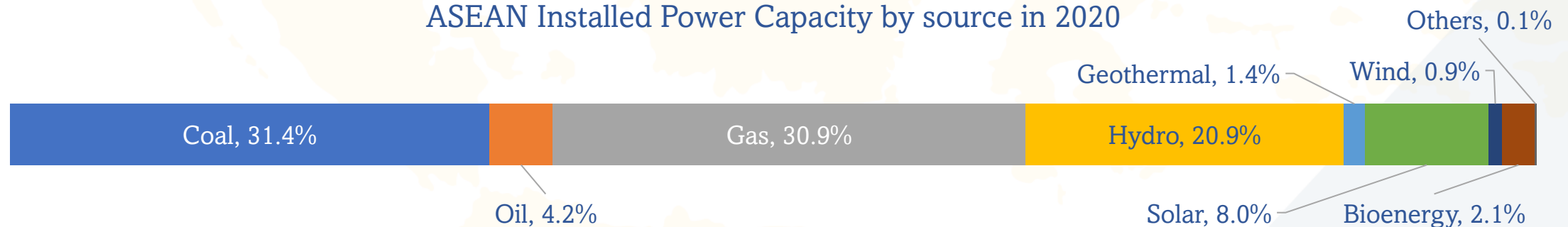
In 2020, AMS had 285 GW of installed power capacity in total

- ❖ Indonesia, Vietnam, and Thailand accounted for around 2/3 of the total capacity.
- ❖ Coal, gas, and hydro contributed more than 80%.

ASEAN Installed Power Capacity by country in 2020



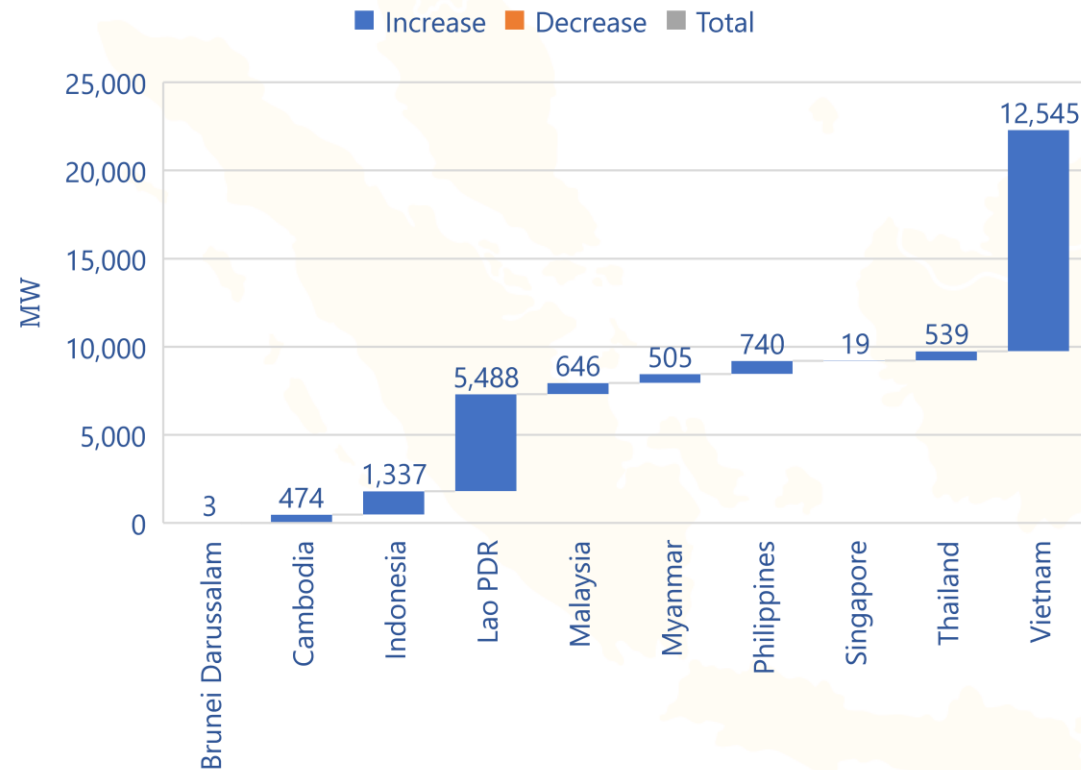
ASEAN Installed Power Capacity by source in 2020



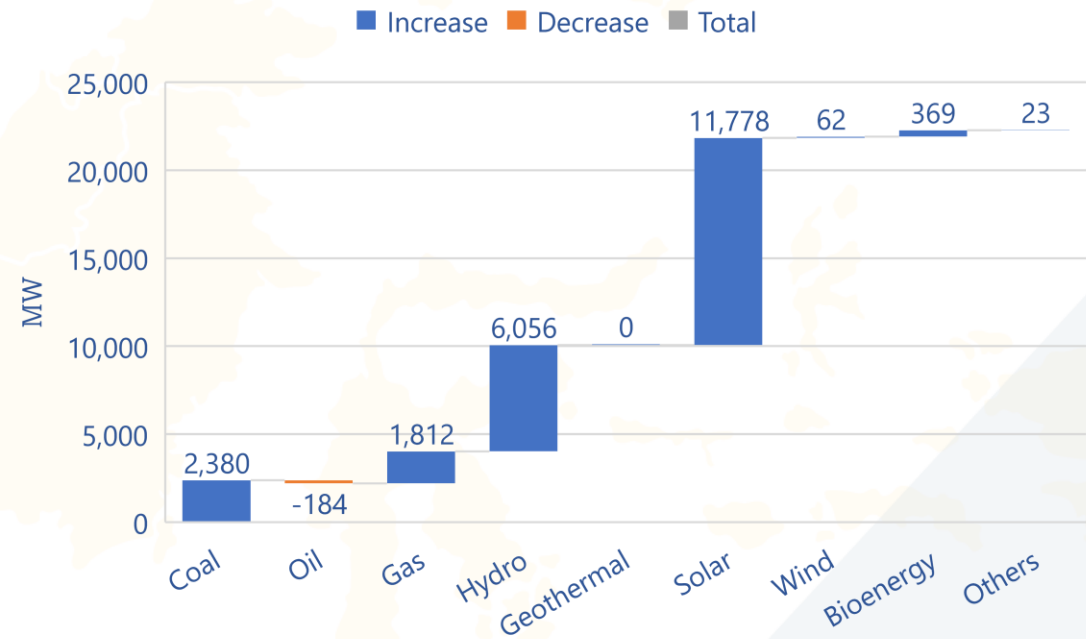
Approximately 22 GW of capacity was added in 2020

- ❖ About 82% of the ASEAN new capacity in 2020 was renewable (a notable new trend).
- ❖ Lao PDR created new hydro capacity, while Vietnam significantly increased its solar capacity.

Additional ASEAN Installed Power Capacity in 2020, compared to 2019, by country

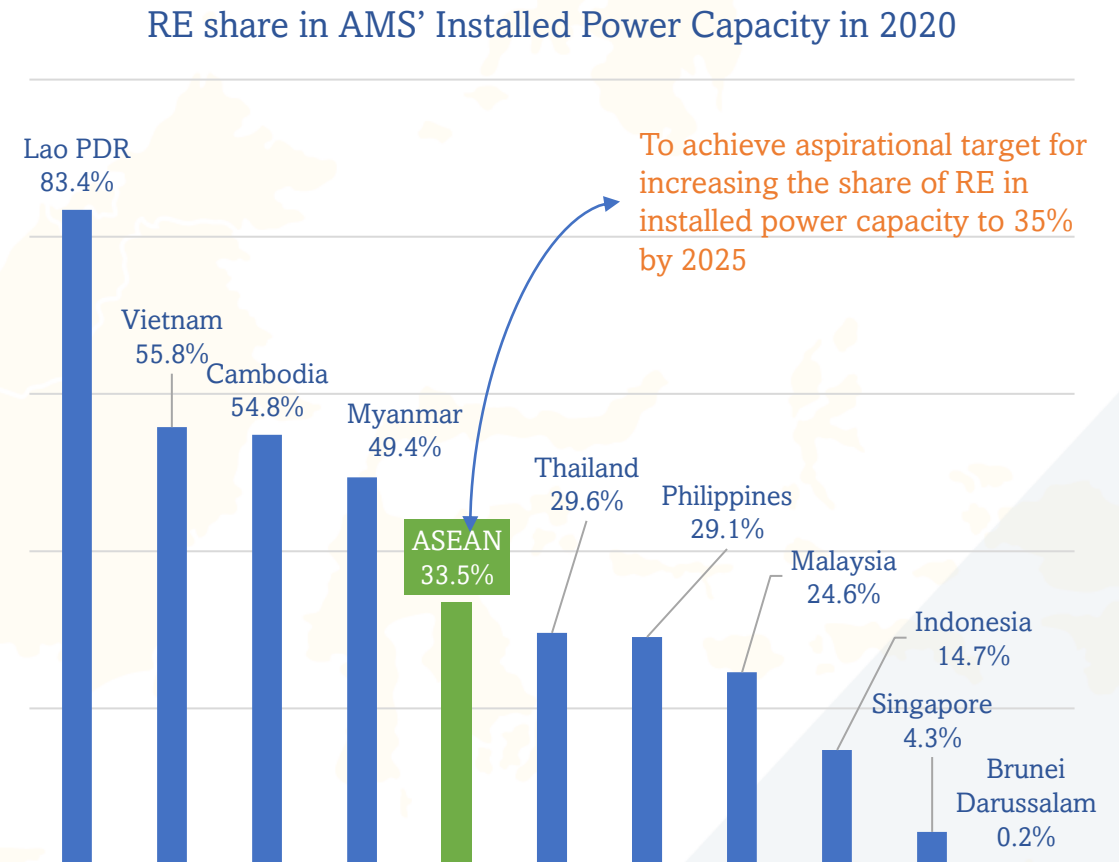
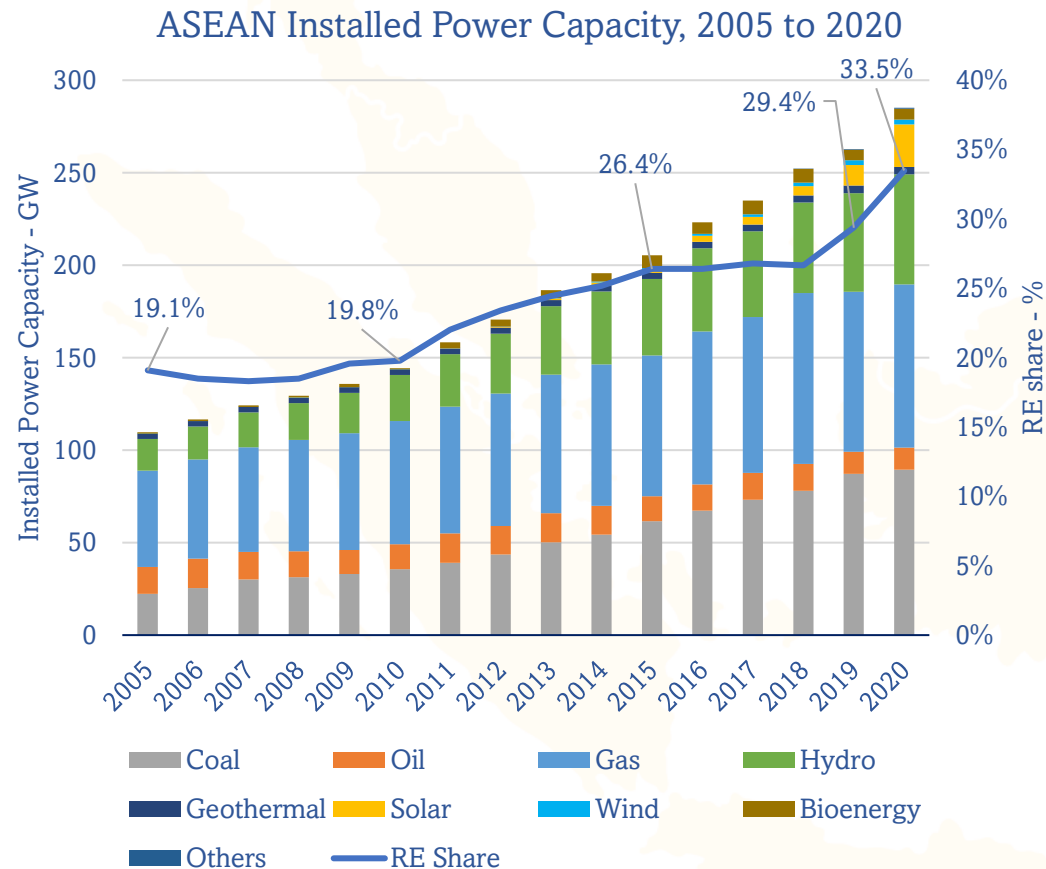


Additional ASEAN Installed Power Capacity in 2020, compared to 2019, by source



RE share was 33.5% in 2020, only 1.5% gap from 2025 target

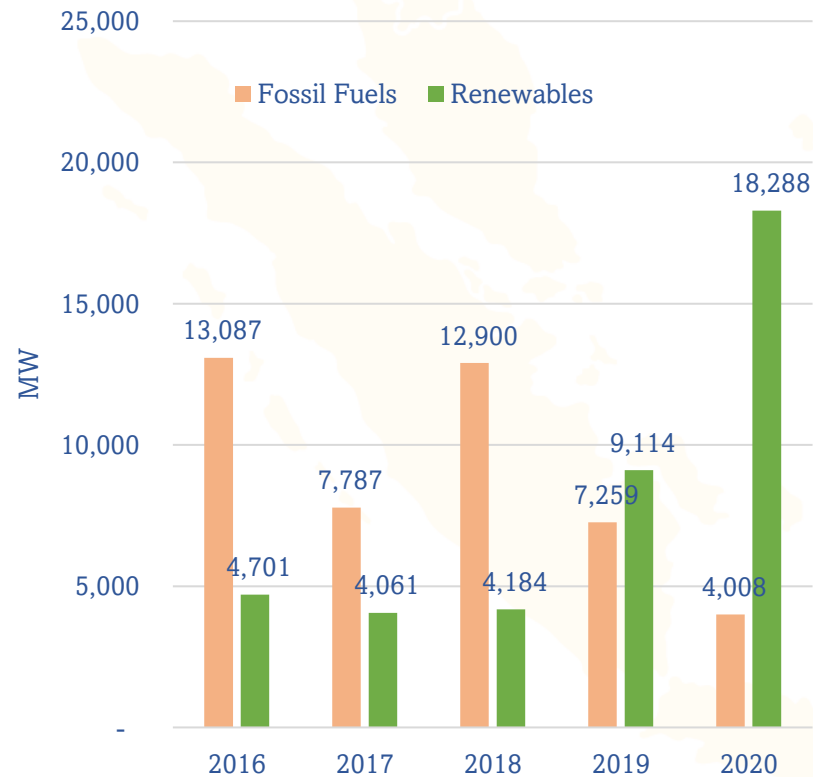
- ❖ Most of the increase in RE has been in hydro and bioenergy; solar and wind began to increase sharply in 2015.
- ❖ Despite different RE potential among the AMS, all their shares of RE increased.



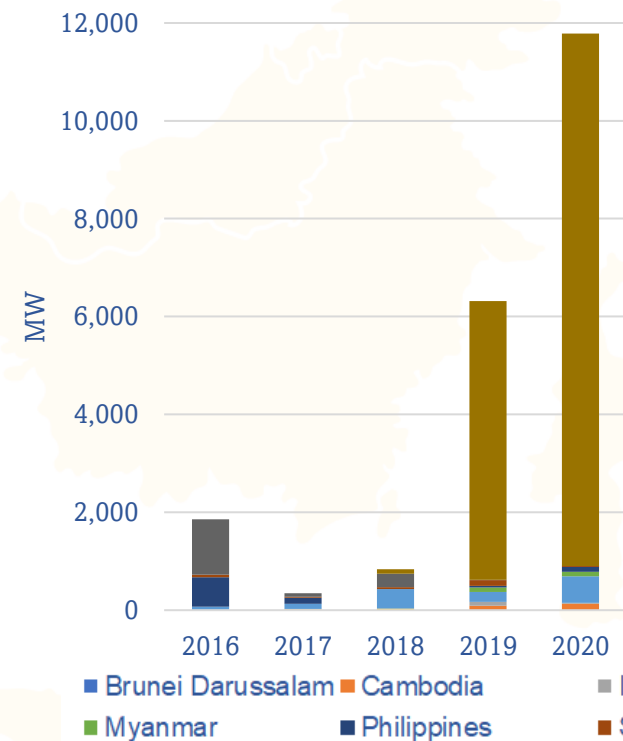
Solar and wind become the core of more RE development

- ❖ While the installed fossil fuel capacity and renewables capacity were comparable in the past, the AMS are now looking more towards RE.
- ❖ Vietnam's solar power greatly expands, and Thailand's and the Philippines' wind power climbs.

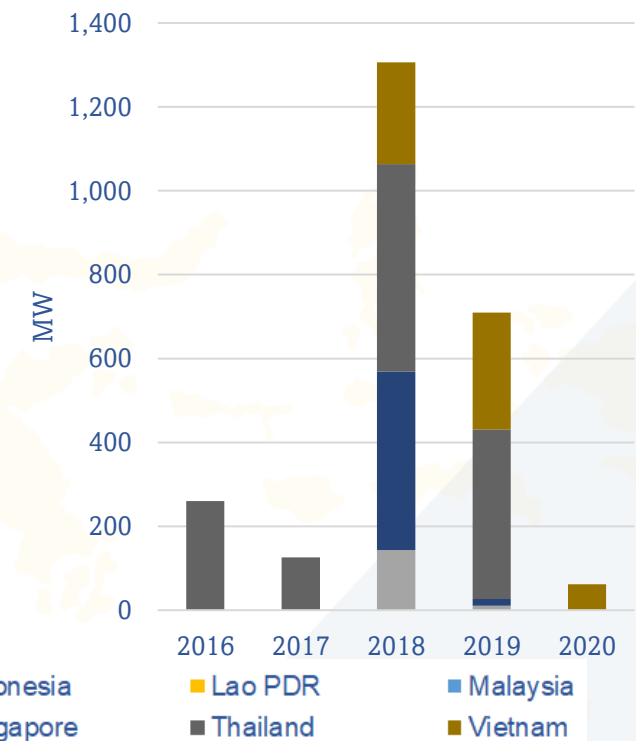
Total Additional ASEAN Installed Power Capacity, 2016 to 2020



Additional ASEAN Installed Solar Capacity by country, 2016 to 2020



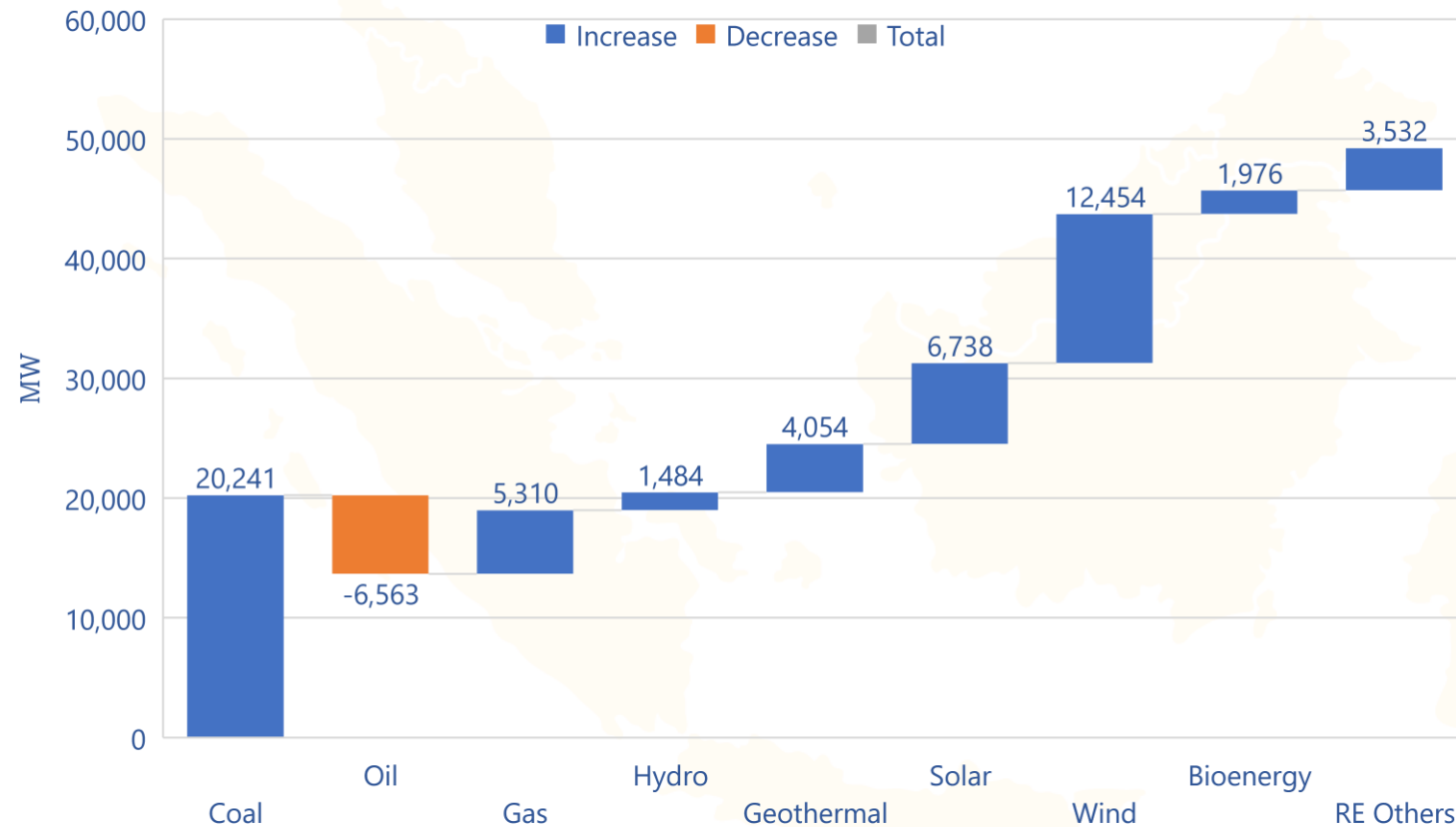
Additional ASEAN Installed Wind Capacity by country, 2016 to 2020



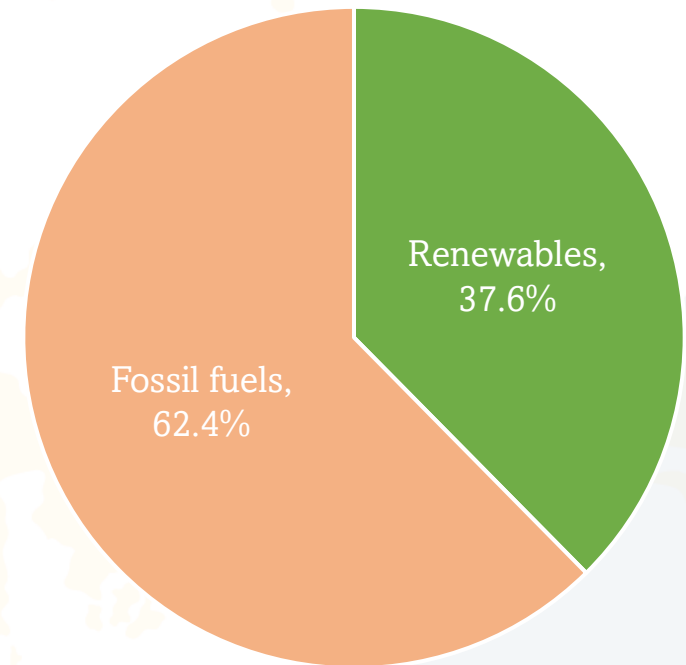
Eager for energy transition, AMS continue to install RE

- ❖ More than 60% of the newly installed capacity up to 2025 will be coming from renewables.
- ❖ This will mean a 37.6% share of RE in 2025, which is 2.6 units above the regional target.

Projected Additional Installed Power Capacity, 2021 to 2025 by source



Fuel share in 2025





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Thank You