

## Undergoing energy transition (still not done)

- Decarbonization plans gaining social, economic, and political traction
- Awareness of renewables role for “sustainable” development
- “Big news are not a surprise” (e.g. solar in Myanmar, Vietnam, ...), but challenges ahead

## Moving to a next phase of the energy (socio-technical) transition

- Not only solar, but wind (on and offshore), hydropower, geothermal, decentralized, ...
- Not only “a bit”, but interconnections, batteries, hydrogen, storage, within cities, ...
- Not only electricity generation, but transport, cooling, industries, cooking, data centers, ...
- Not only energy, but industrial transition (e.g. incumbents, oil & gas, mining, growth areas...)

## Short and long-term trade offs

- Carbon neutrality of “entire economy” (green growth strategies)
- Expanding the energy trilemma (environment, equity, economics)
- Just transition, Build Back Better, Urban vs rural, 3Ds, New energy companies, ...
- By, for and from ASEAN

## Universities-Research-Policy-Transformation nexus?

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