



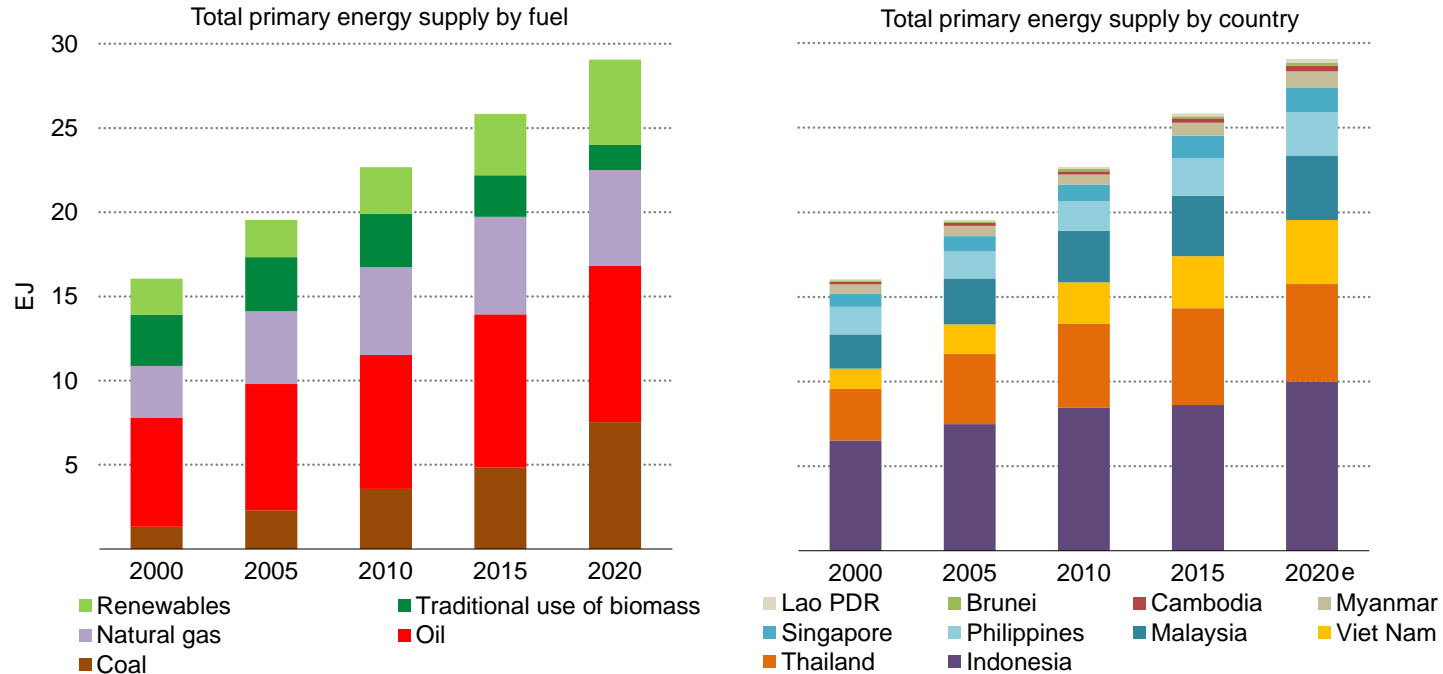
# **Southeast Asia Energy Outlook 2022**

May 2022

- The IEA and ASEAN celebrated ten years of cooperation in late 2021, with Energy Ministers and the Executive Director noting the wide-ranging scope & achievements of the relationship, including the IEA's designation as ASEAN's 'strategic partner'.
- The *Southeast Asia Energy Outlook 2022* is the fifth edition of this World Energy Outlook Special Report – published on a regular basis since 2013.
- Since the last dedicated Southeast Asia report in 2019, the region's policymakers have taken on new, ambitious policy commitments but countries have also been severely affected by the Covid-19 pandemic and, more recently, high and volatile prices exacerbated by Russia's invasion of Ukraine.
- This report explores possible trajectories for the region, based on IEA scenarios:
  - The Stated Policies Scenario (STEPS) explores the implications of today's policy landscape
  - The Sustainable Development Scenario (SDS) reflects the region's new climate policy ambitions

# Southeast Asia is an emerging heavyweight of global energy

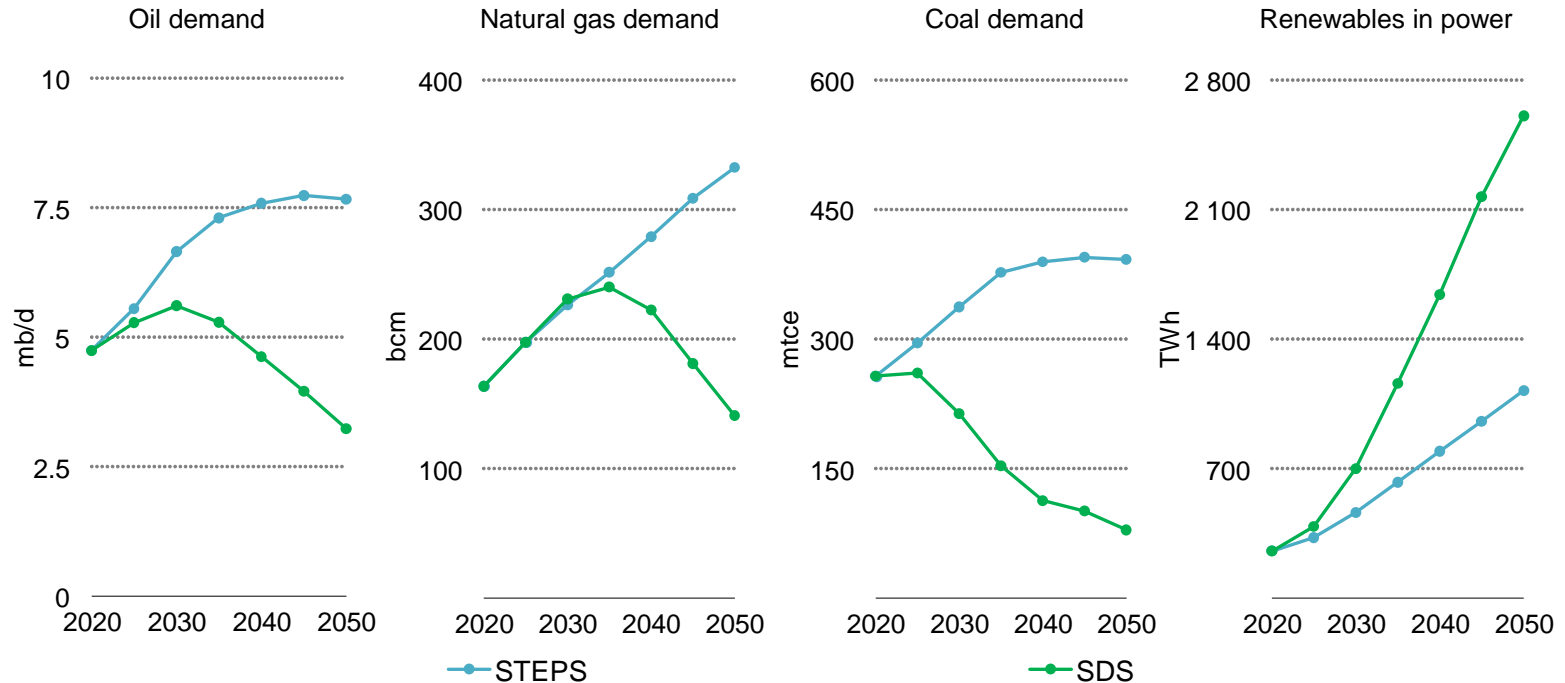
Total primary energy supply in Southeast Asia by fuel and country



**The 10 member economies of the Association of Southeast Asian Nations (ASEAN) are among the world's fastest growing, but there are strong country-by-country economic and energy variations**

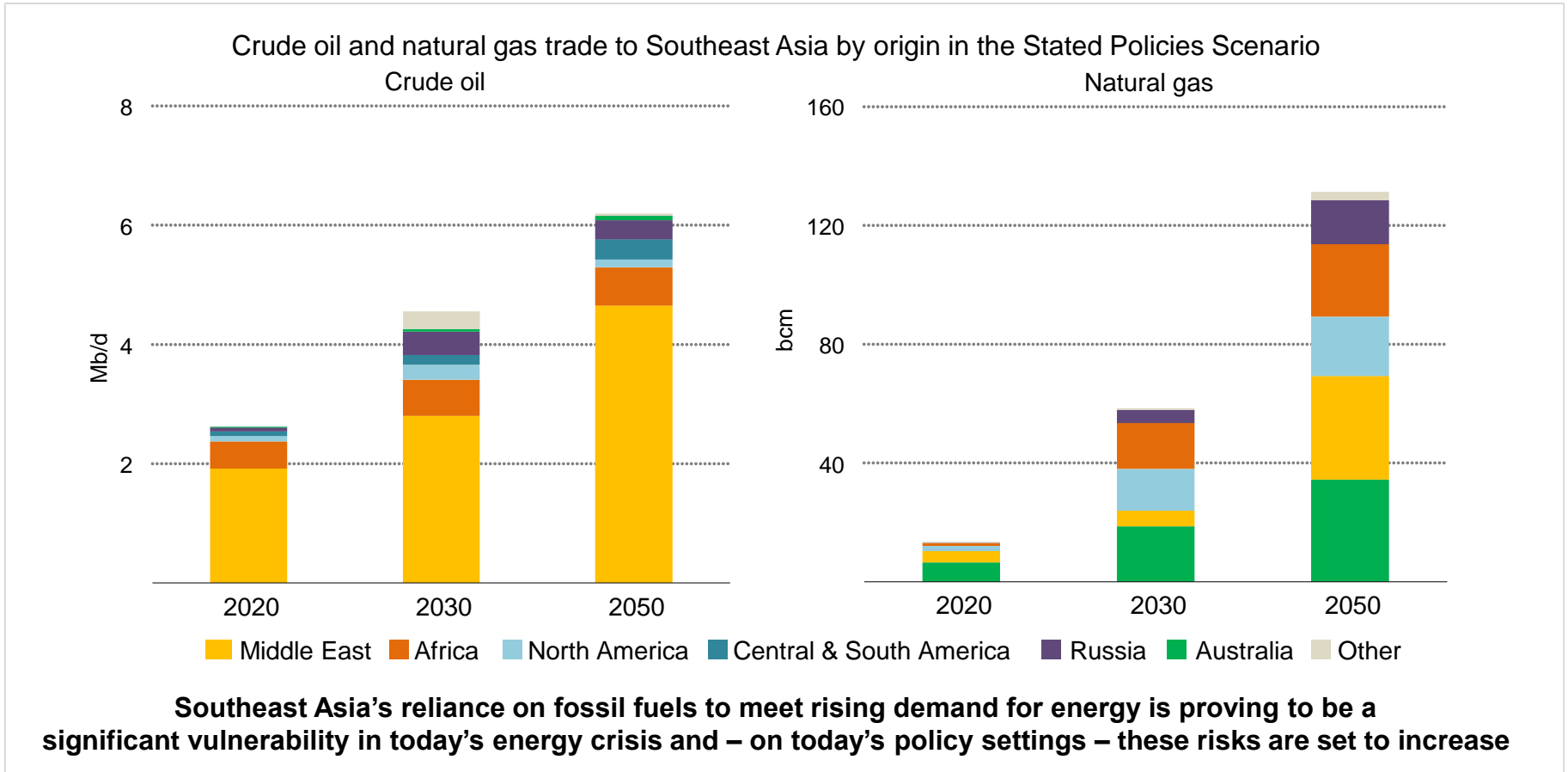
# Announced climate ambitions have huge implications for energy

### Energy demand trends in Southeast Asia by scenario



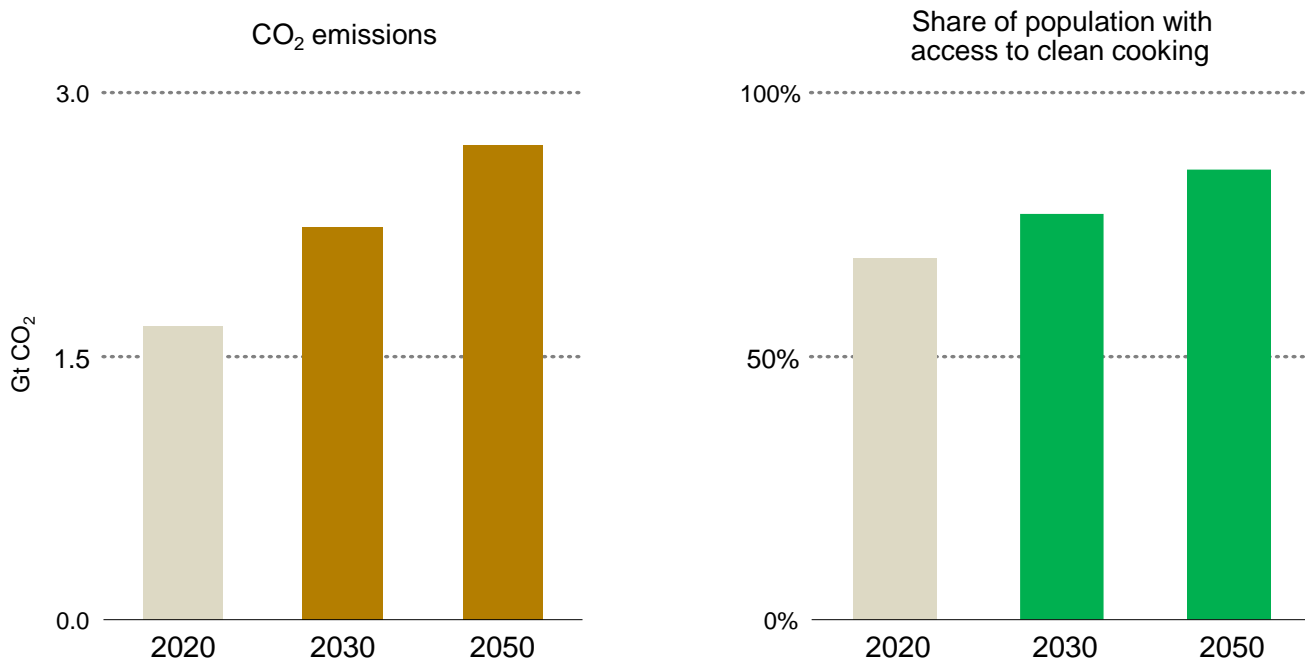
**Today's policy settings in the STEPS imply continued strong reliance on fossil fuels to meet future demand growth; meeting new net zero goals will require major efforts to improve efficiency & switch to low emissions power & fuels**

# Today's pathway brings significant energy security risks



# The region is not on track to hit its sustainability goals

Key sustainability indicators in Southeast Asia in the Stated Policies Scenario

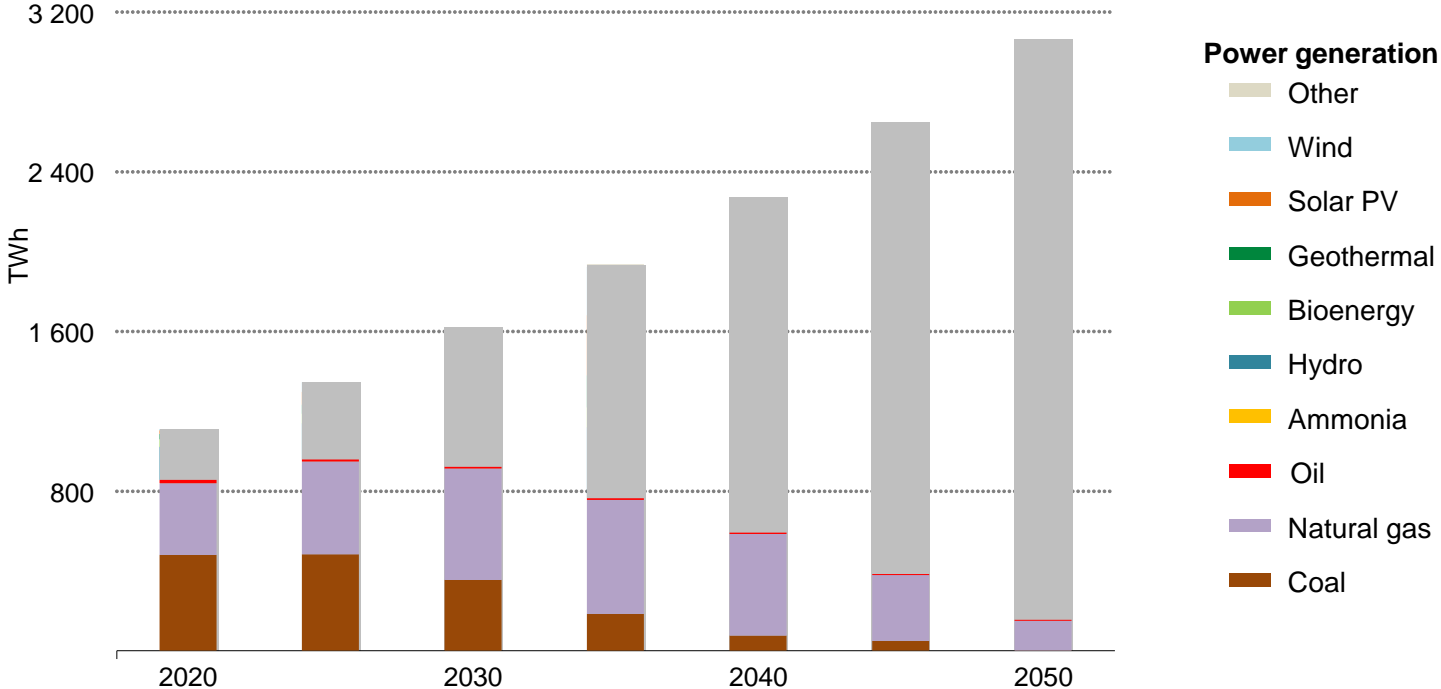


**Today's policy settings produce a rising trend for energy-related emissions and – while Southeast Asia has made impressive progress with access to electricity – universal access to clean cooking fuels is not secured**

# Flexibility is the watchword for a wind and solar-rich power mix



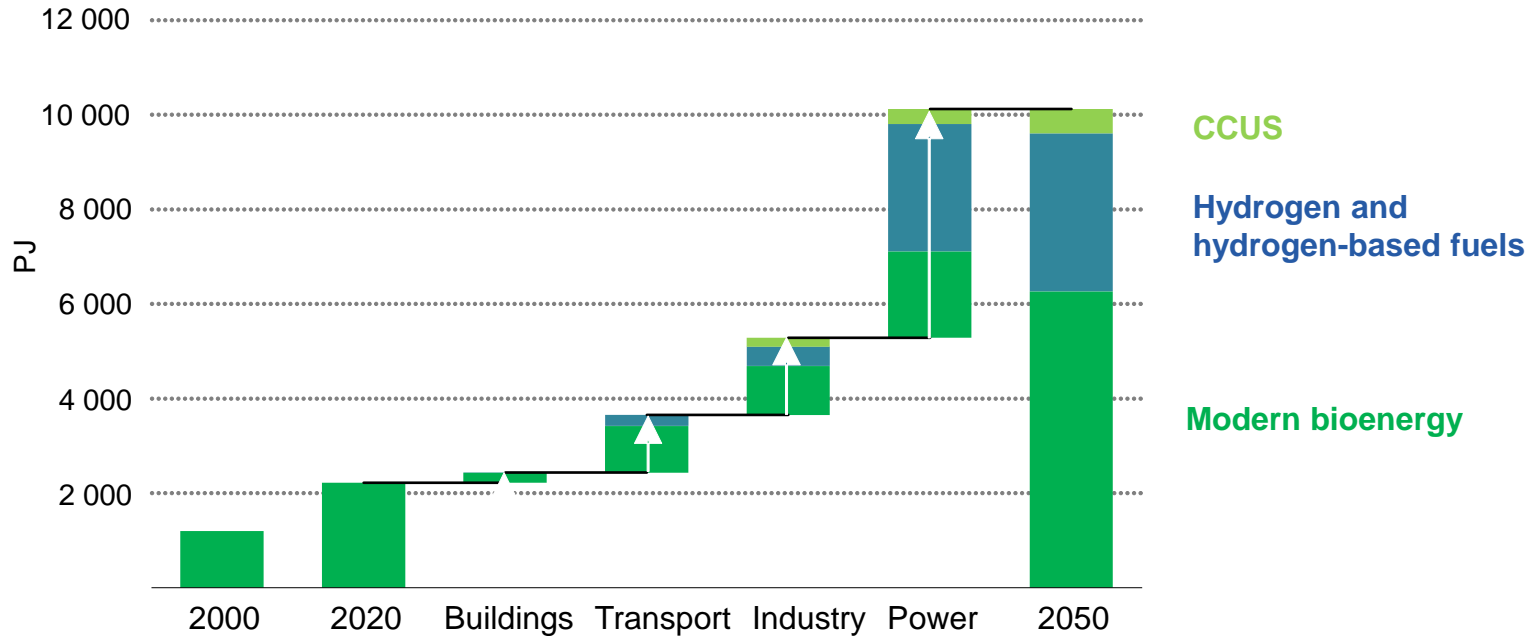
Power generation and shares of variable renewables in Southeast Asia in the Sustainable Development Scenario



**Today's contractual arrangements for coal- and gas-fired plants offer no incentives for these plants to provide flexibility; this is one of the areas that will need to change to enable a rapid rise of clean electrification**

# Low emissions fuels are a vital part of Southeast Asia's energy future

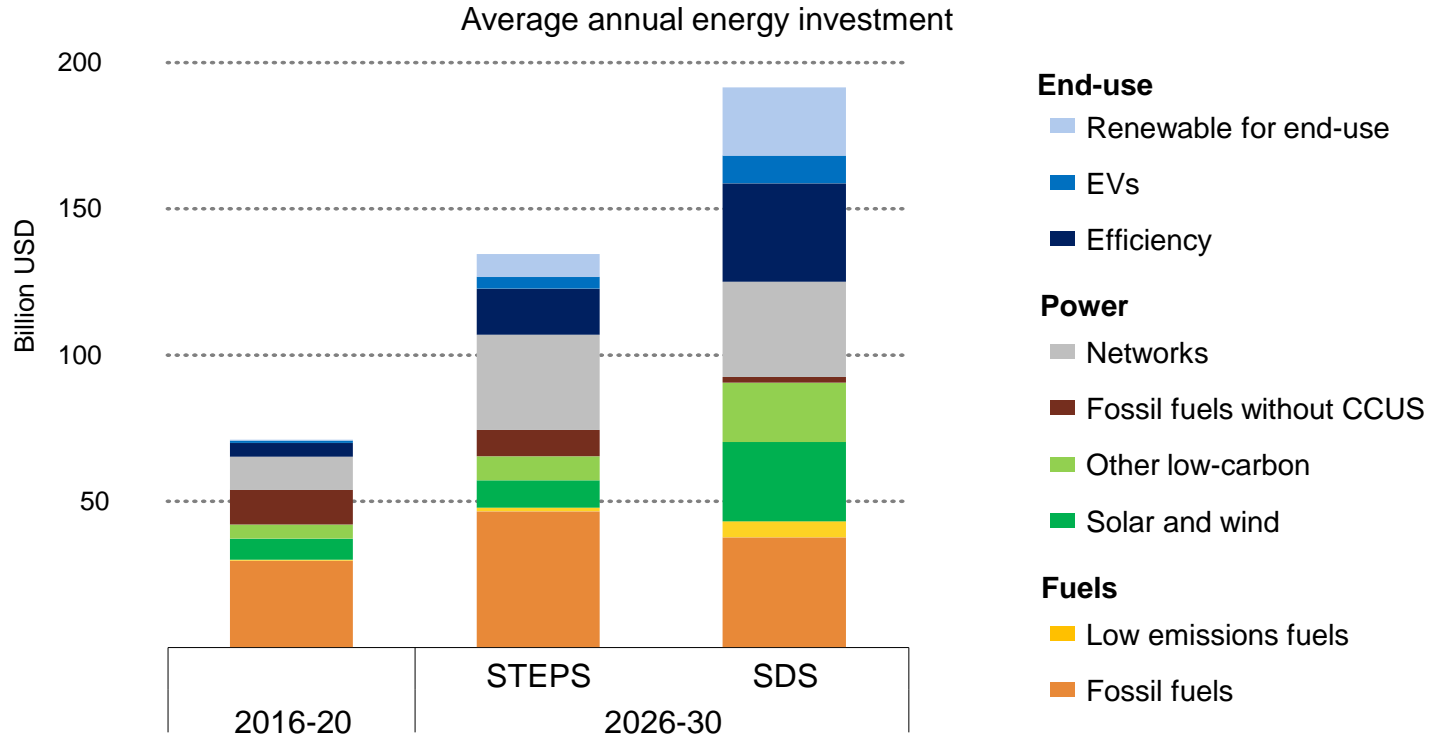
Changes of low-emissions and abated fuels in Southeast Asia in the Sustainable Development Scenario



**Countries across Southeast Asia are well-placed to tap into significant resources of bioenergy and hydrogen as well as CO<sub>2</sub> storage potential**



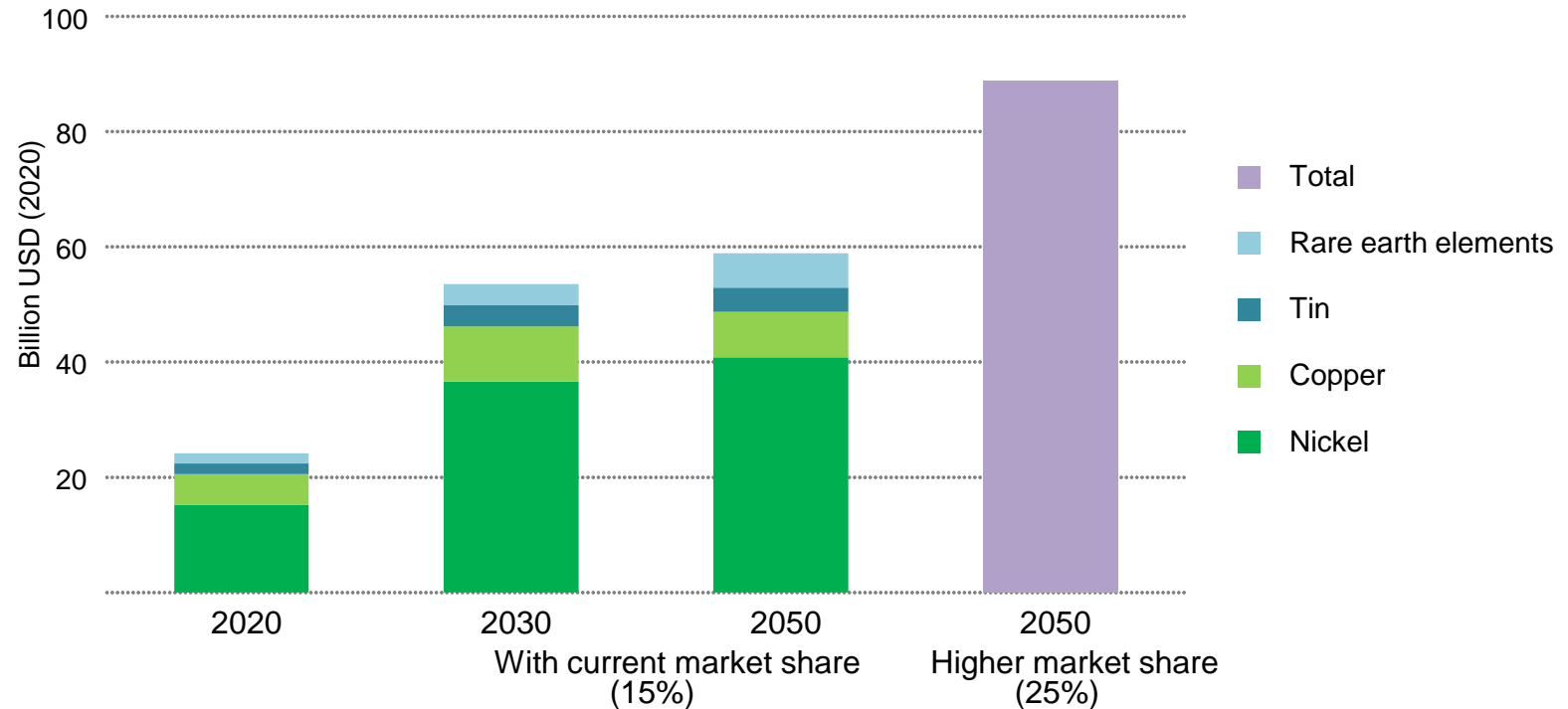
# A surge in clean energy investment is needed this decade



**National & international public finance will be essential to meet the region's energy security & climate goals, but governments need to do much more to attract private investors by reducing regulatory and financing risks**

# A new global energy economy is emerging

Potential revenue from selected minerals in Southeast Asia, SDS



**Southeast Asia's critical mineral resources and manufacturing prowess could position the region well in clean energy supply chains; rapid growth in clean energy deployment will create huge market opportunities**

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