



Southeast Asia Energy Outlook

APERC Annual Conference 2023

26 April 2023

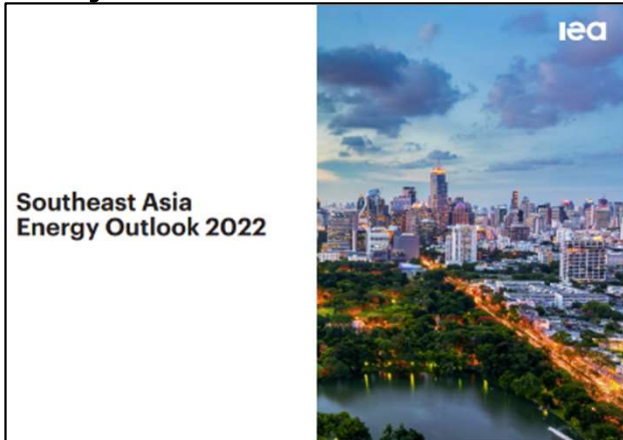
Toru Muta, Senior Energy Analyst

International
Energy Agency

Lasting collaboration between Southeast Asia and the IEA



May 2022



September 2022



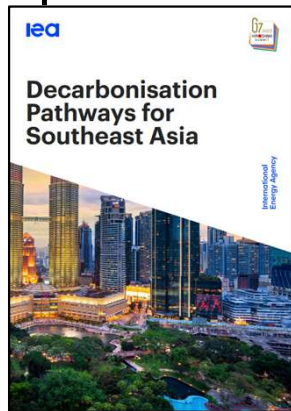
October 2022



March 2023

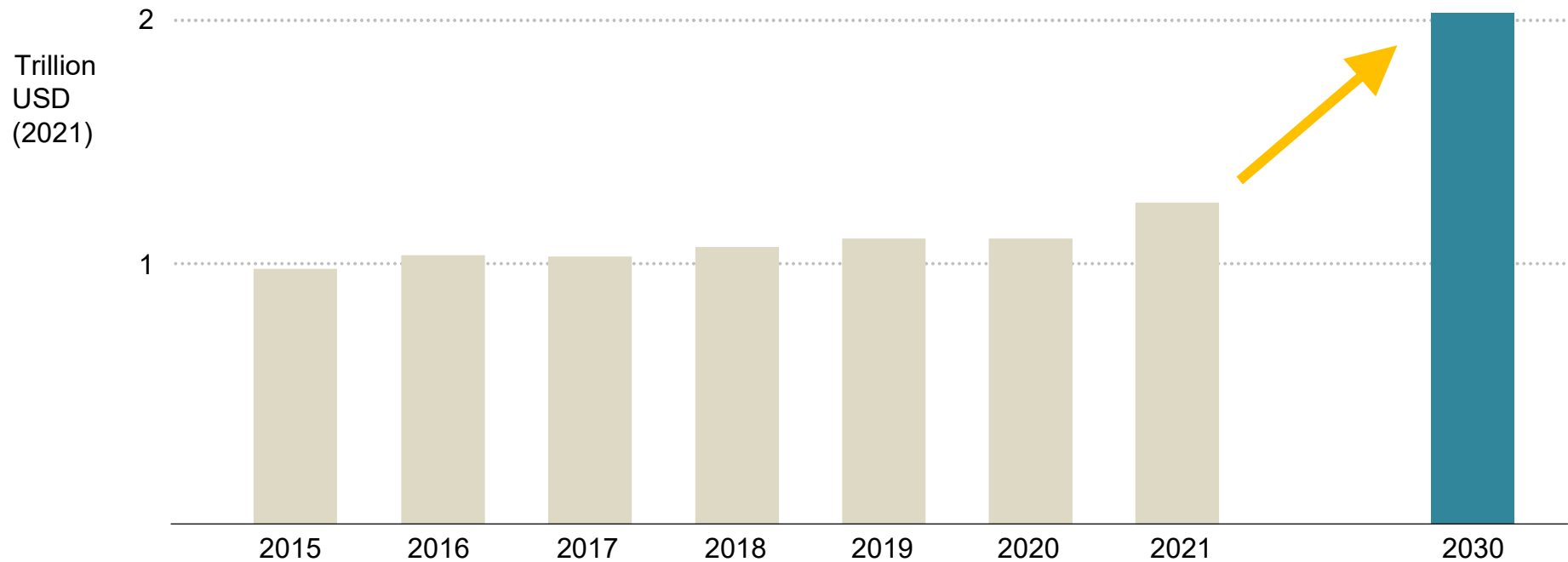


April 2023



Government responses are fast-tracking the clean energy economy

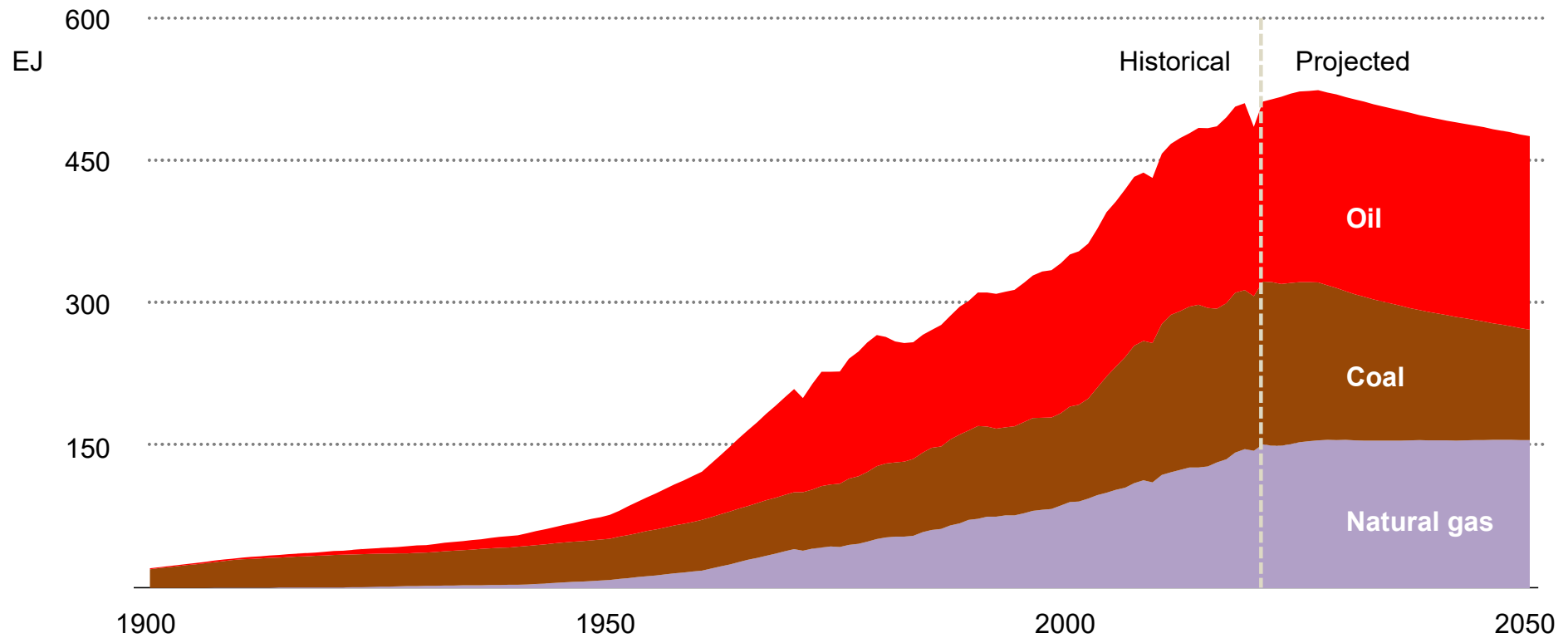
Clean energy investment in the Stated Policies Scenario



The US Inflation Reduction Act, the EU's Fit for 55 package, Japan's GX, China's new clean energy targets and India's solar revolution propel clean energy investment to new highs, but \$4 trillion is needed by 2030 to be on track for 1.5 °C

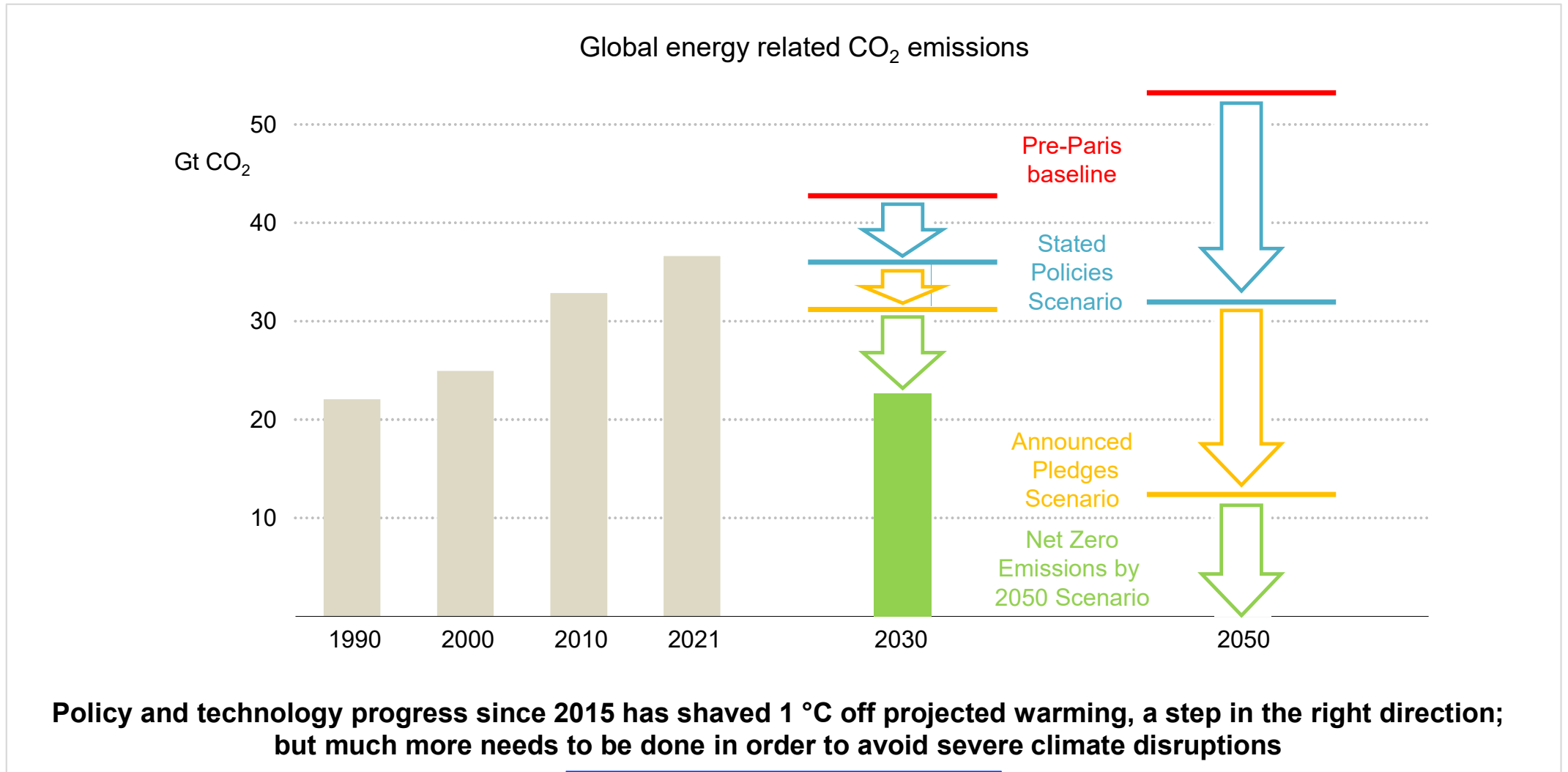
Peak fossil fuel demand is coming this decade

Fossil fuel demand in the Stated Policies Scenario, 1900-2050



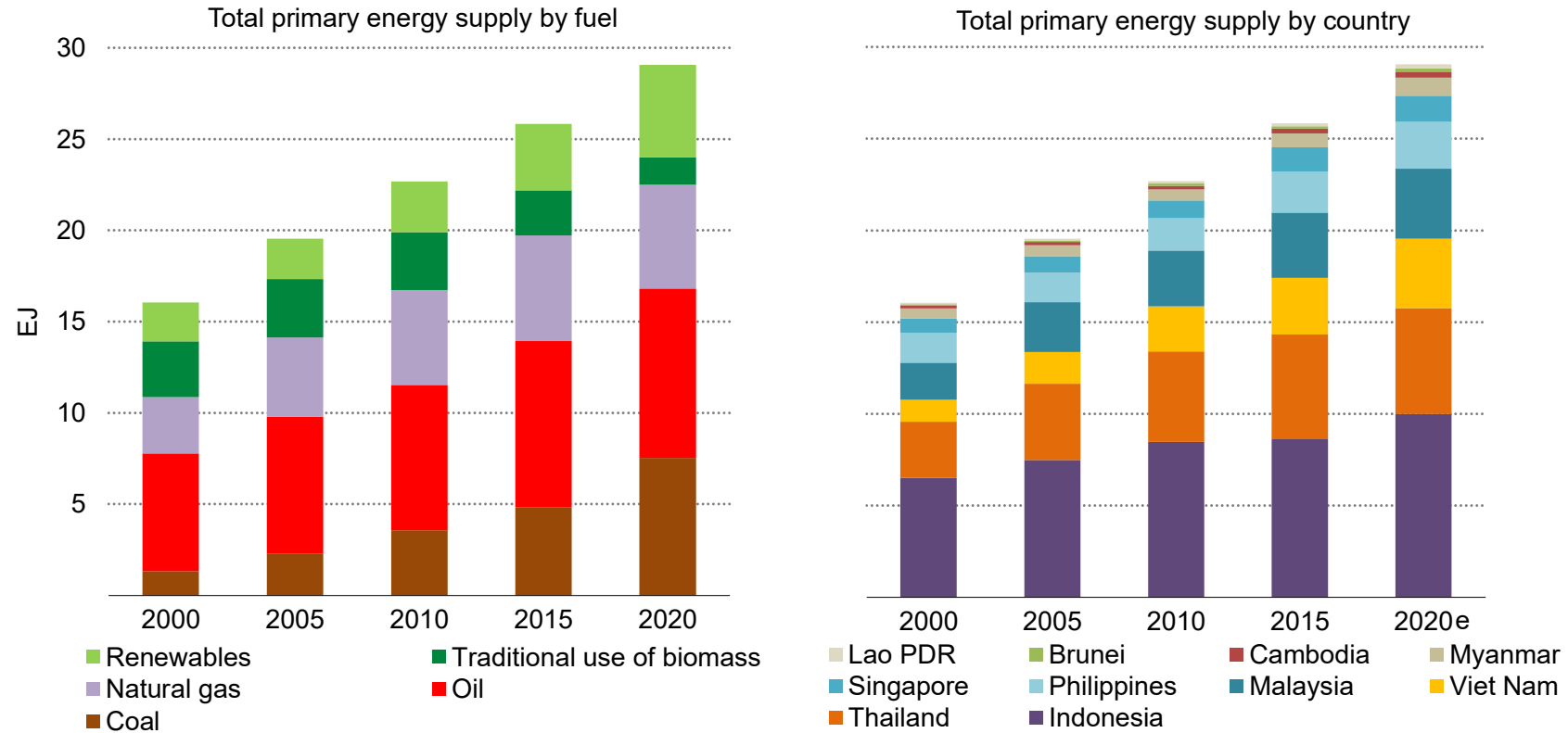
Today's policy settings are now sufficiently strong that they produce a distinct peak in fossil fuel use before 2030

Keeping the door to 1.5 °C open



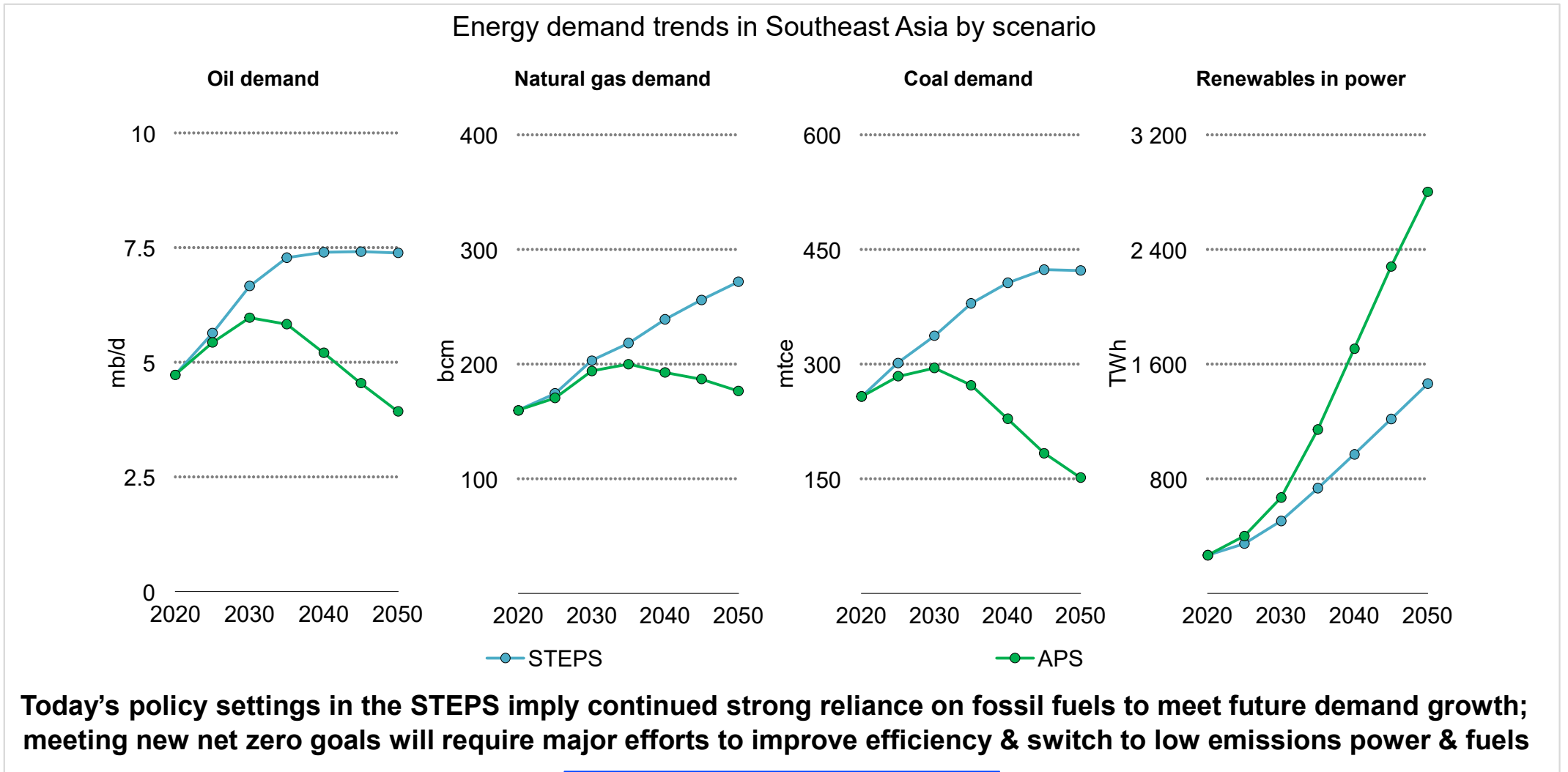
Southeast Asia is an emerging heavyweight of global energy

Total primary energy supply in Southeast Asia by fuel and country



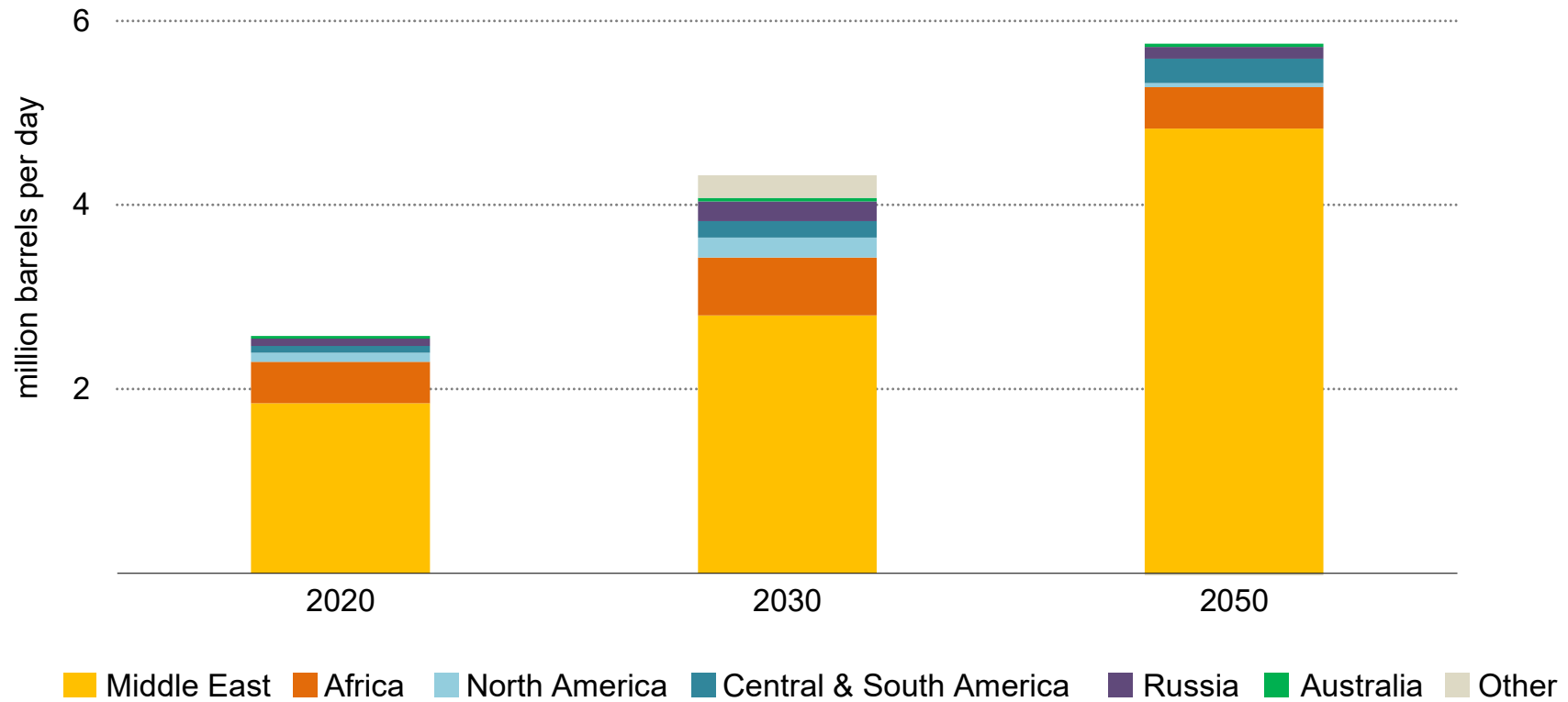
The 10 member economies of the Association of Southeast Asian Nations (ASEAN) are among the world's fastest growing, but there are strong country-by-country economic and energy variations

Announced climate ambitions have huge implications for energy



Today's pathway brings significant energy security risks

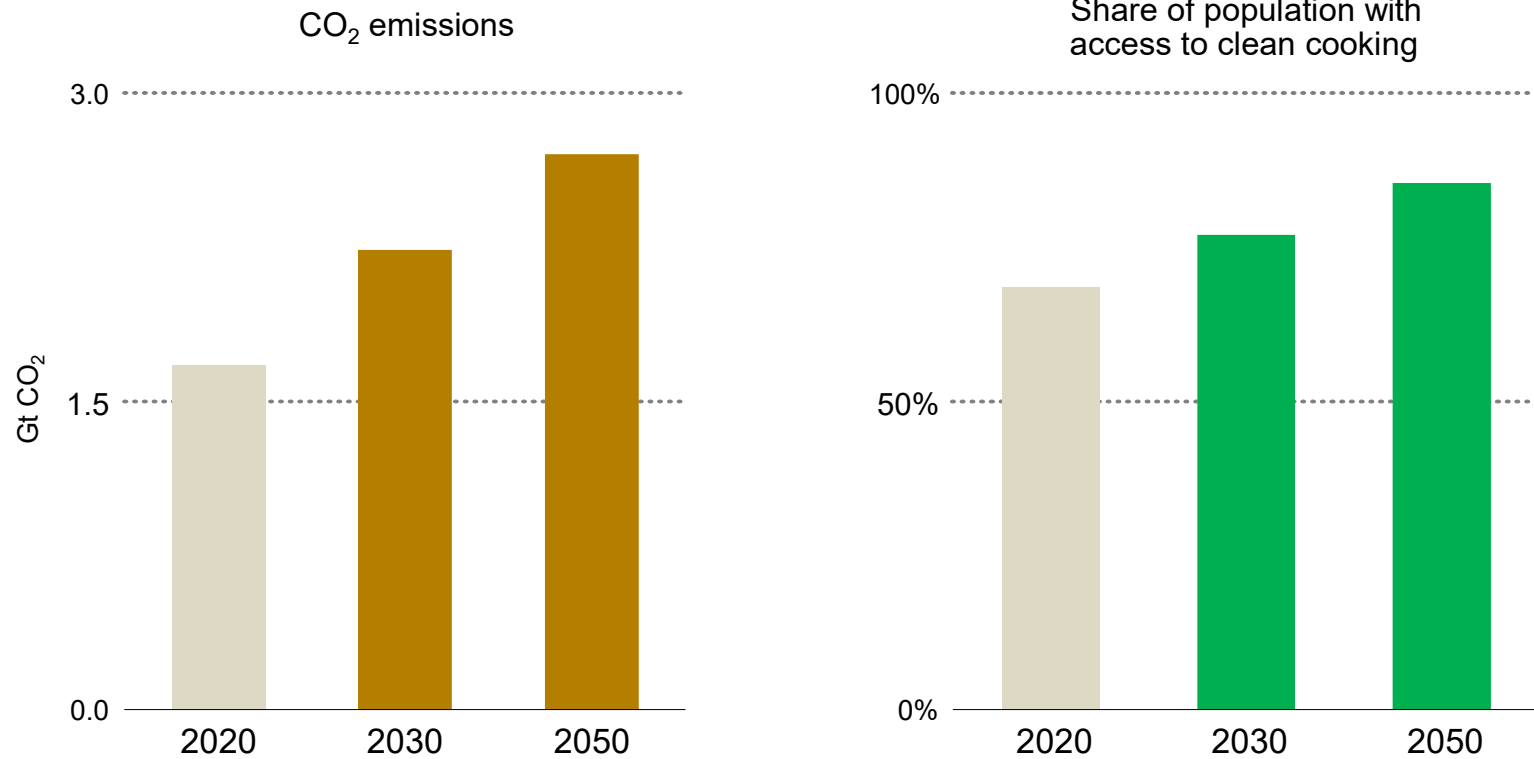
Crude oil trade to Southeast Asia by origin in the Stated Policies Scenario



Southeast Asia's reliance on fossil fuels to meet rising demand for energy is proving to be a significant vulnerability in today's energy crisis and – on today's policy settings – these risks are set to increase

The region is not on track to hit its sustainability goals

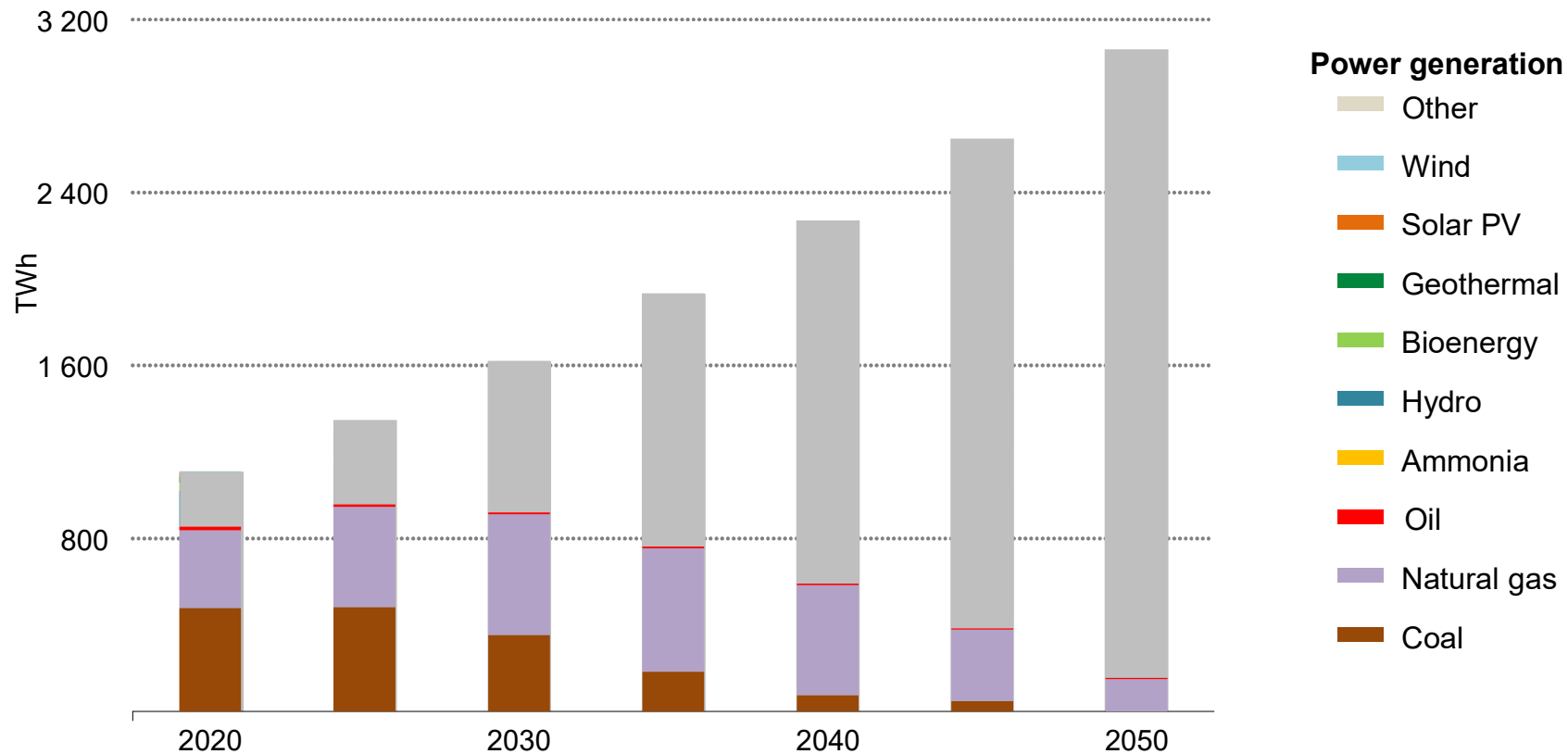
Key sustainability indicators in Southeast Asia in the Stated Policies Scenario



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

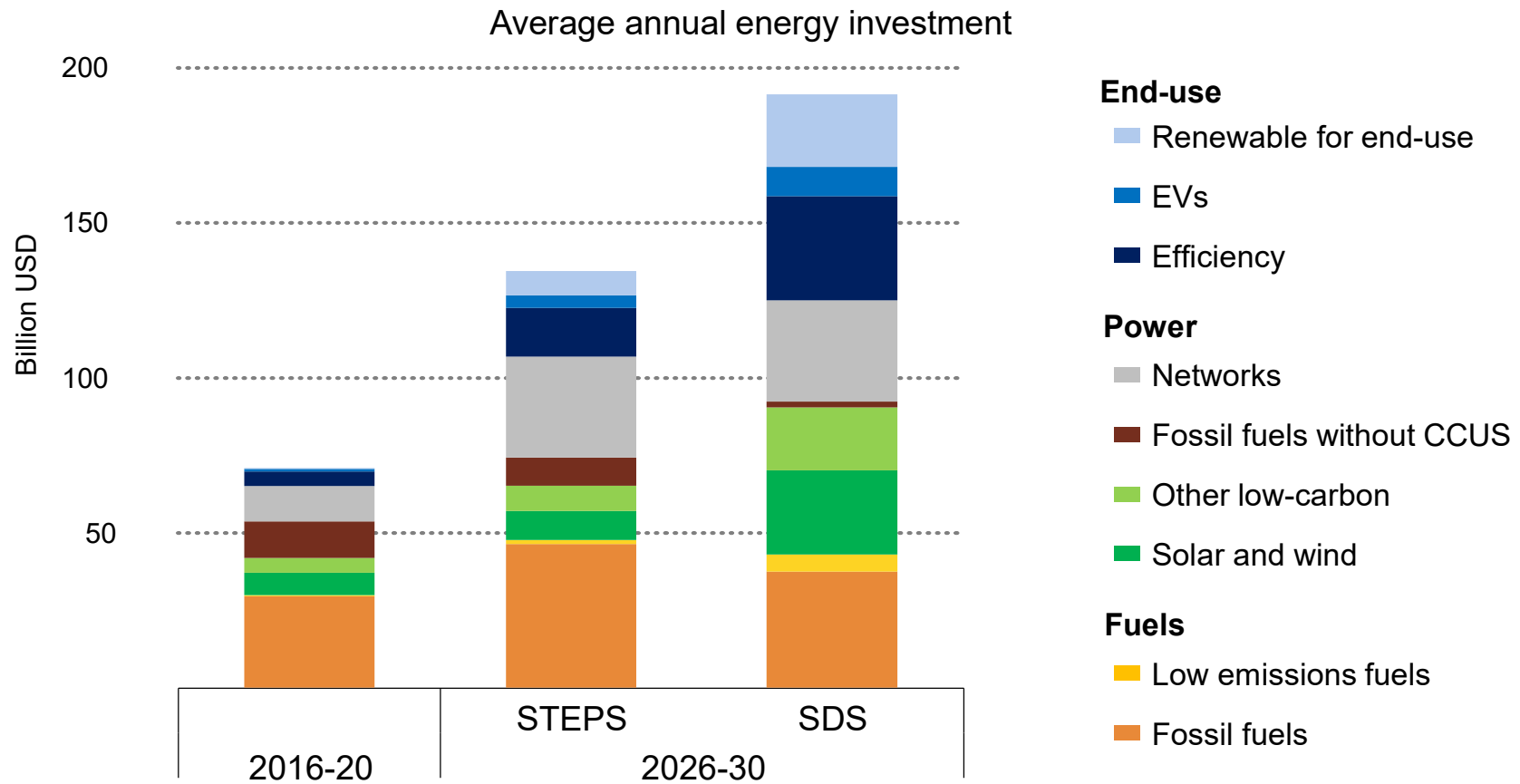
Flexibility is the watchword for a wind and solar-rich power mix

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

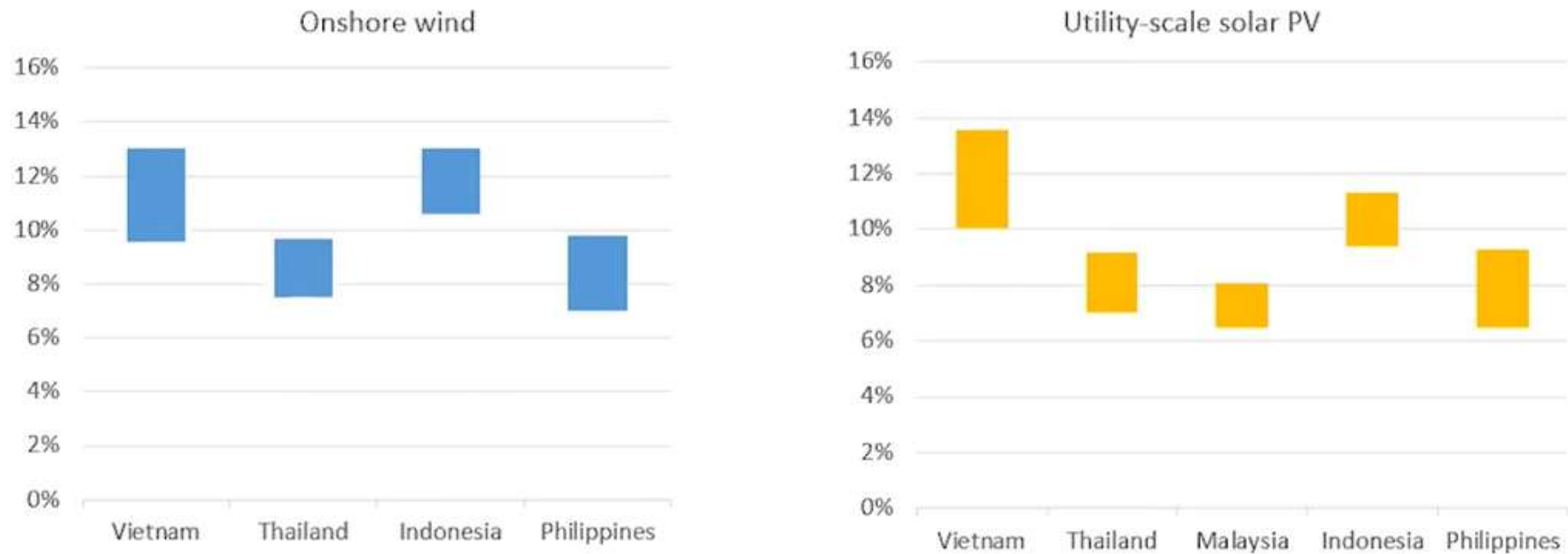
A surge in clean energy investment is needed this decade



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

Renewables financing costs differ in the region

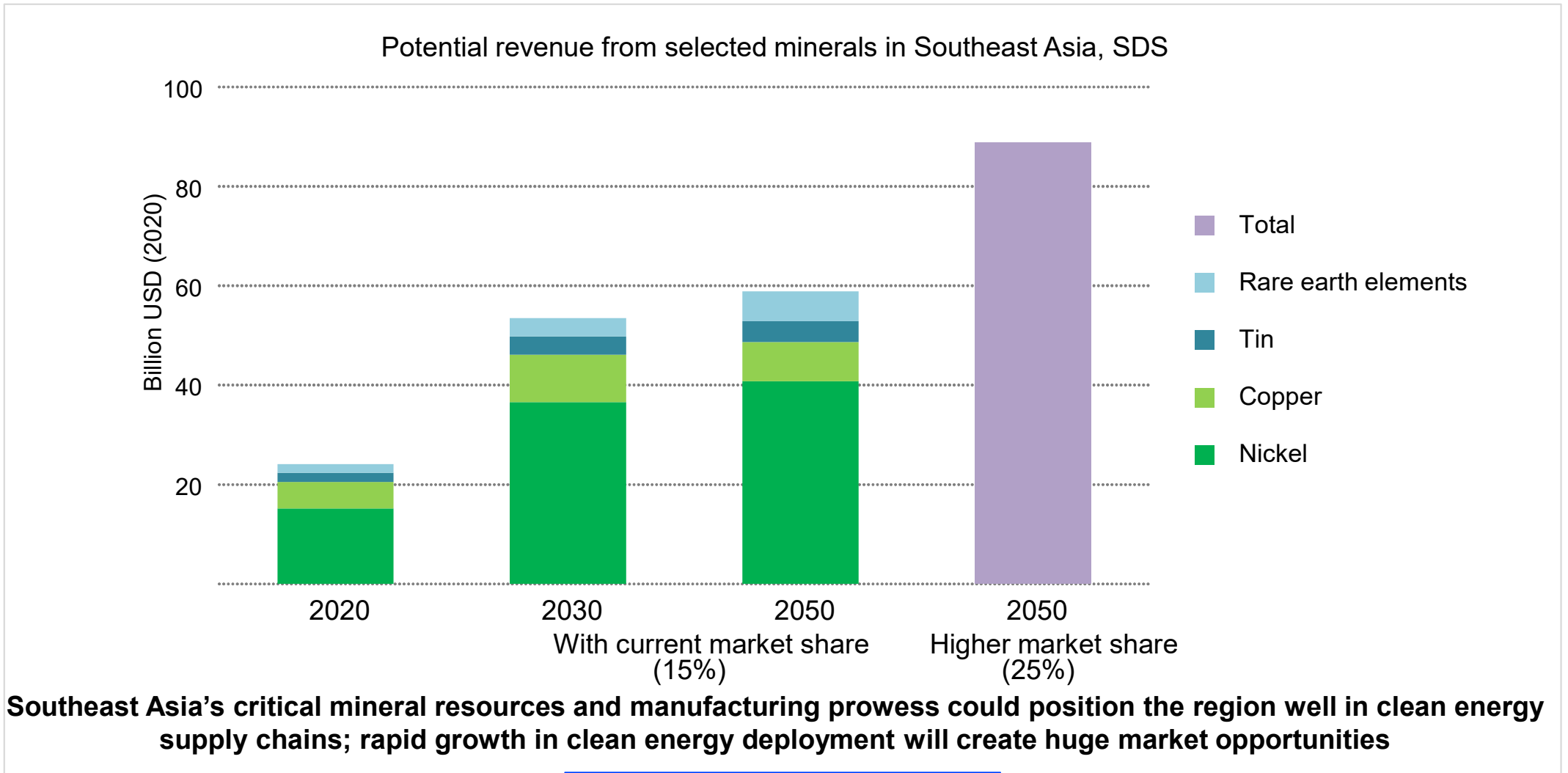
Weighted average cost of capital for onshore wind and utility-scale solar PV, local currency terms



Source: IEA and Imperial College London (2023)

Cost of capital is lower in those countries with fewer policy and integration risks, as well as more developed financial systems

A new global energy economy is emerging



iea