

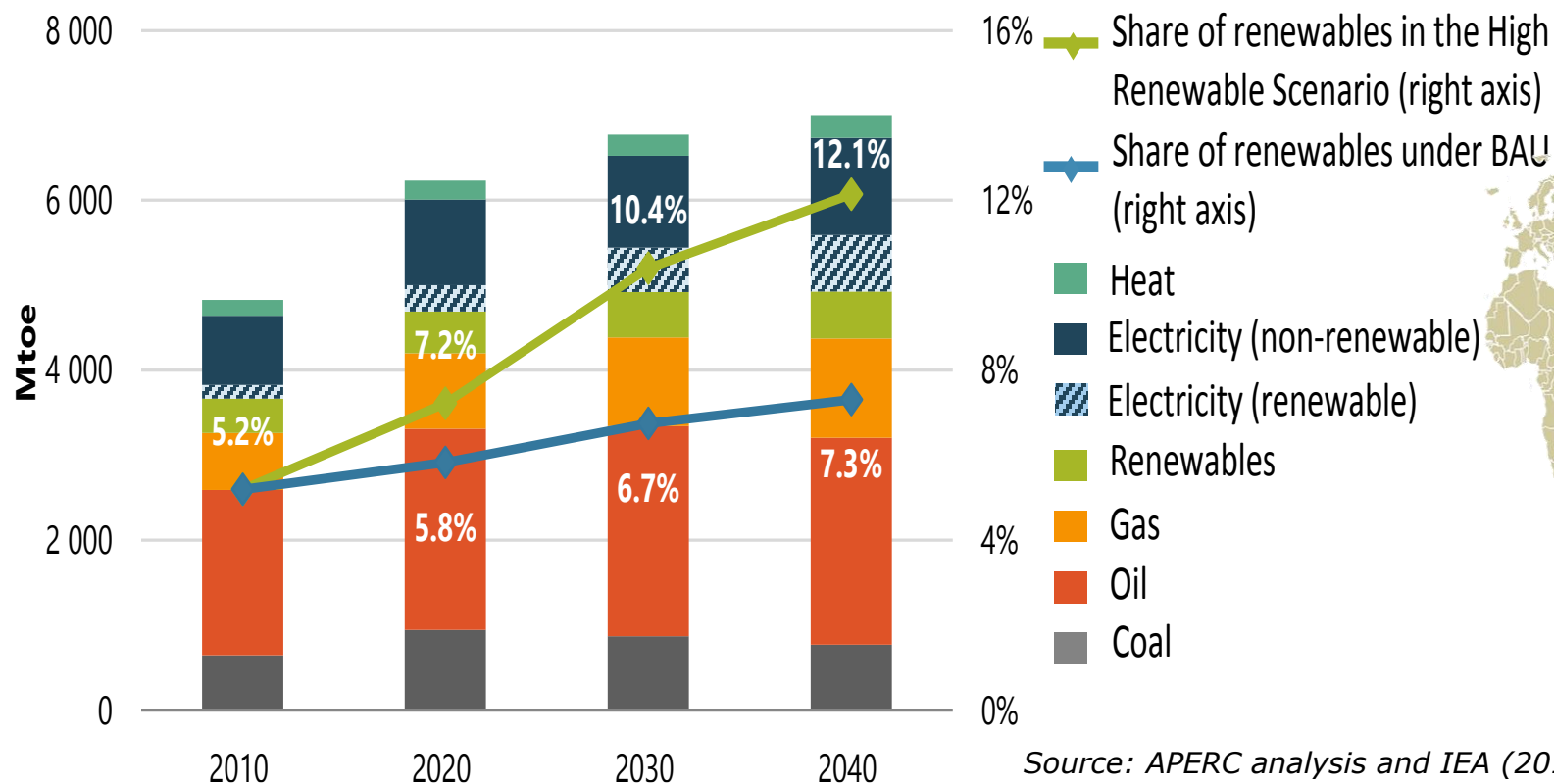


APEC Doubling Renewables Goal: Outlook for renewables in South East Asia

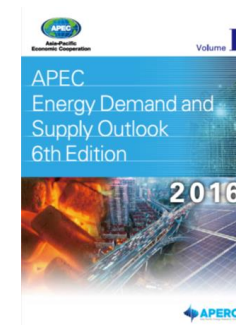
Cecilia Tam, Special Adviser
October 2016, Singapore

Pathway to APEC Renewables Doubling Goal

APEC Final Energy Demand

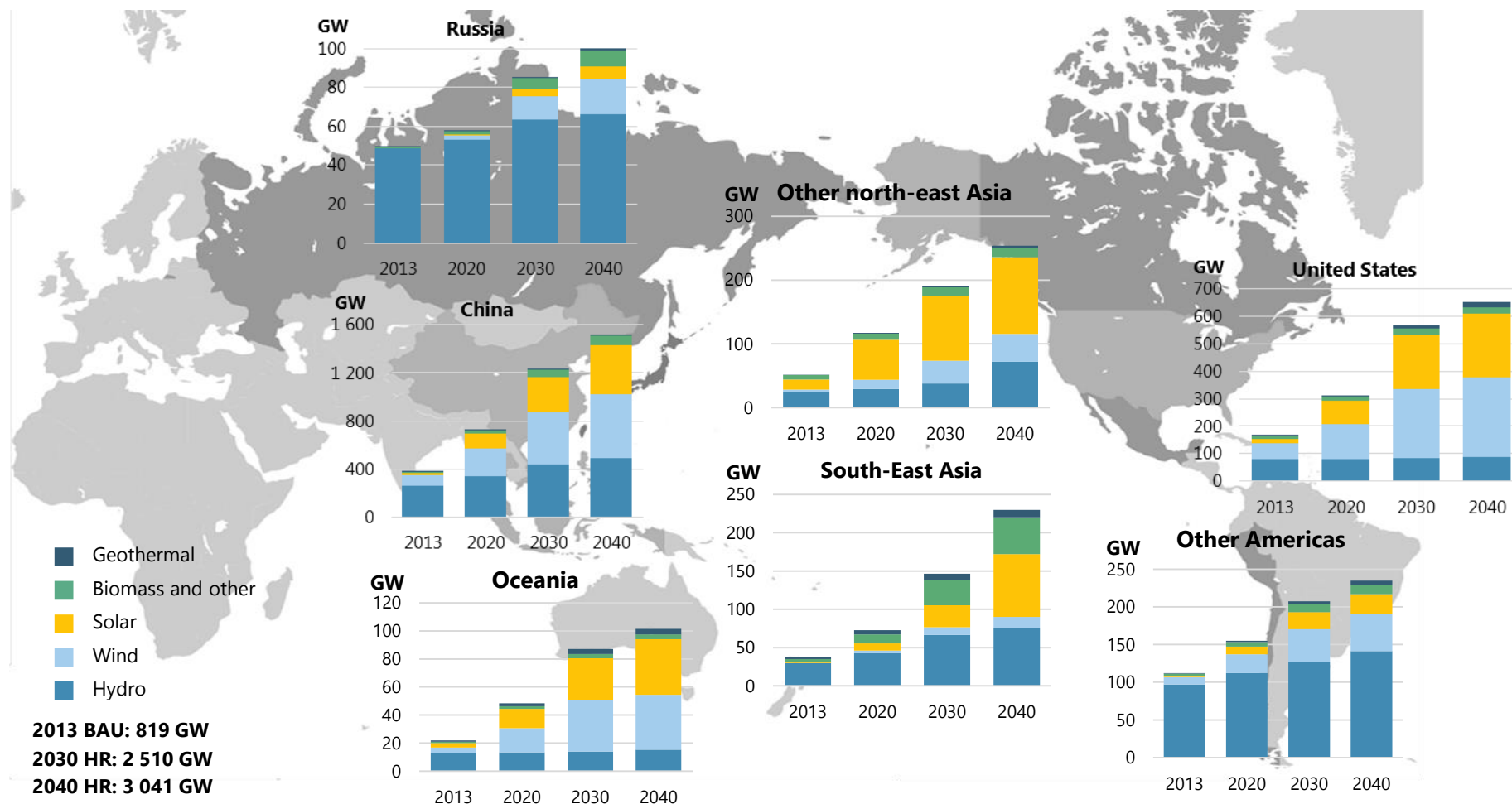


Asia Pacific Economic Cooperation (APEC)



APEC renewable doubling goal is not met in BAU. High Renewables Scenario outlines a pathway to doubling goal in power and transport.

Renewable Capacity Triples to Achieve Doubling Share Goal in Power

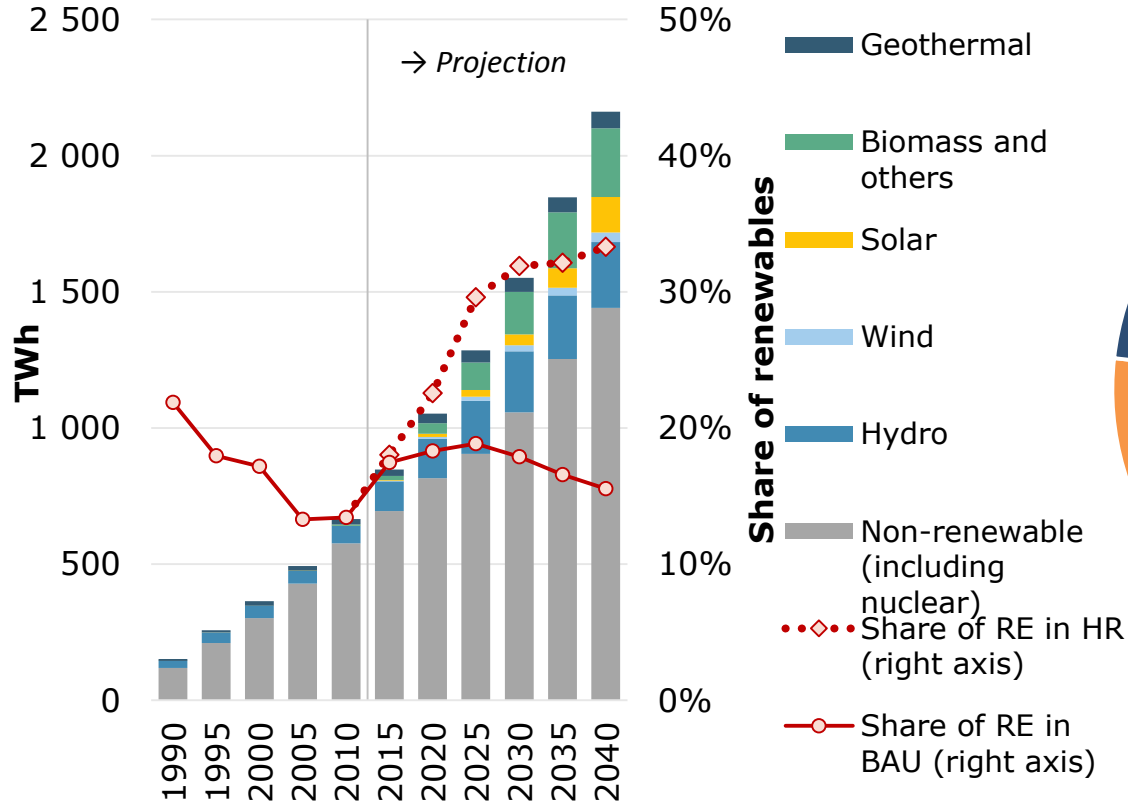


Note: this map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory, **Oceania** (Australia, New Zealand and PNG), **Other Americas** (Canada, Chile, Mexico and Peru), **Other north-east Asia** (Hong Kong, Japan, Korea and Chinese Taipei), **South-East Asia** (Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, Thailand and Viet Nam), **BAU** = Business-as-usual, **HR** = High Renewables

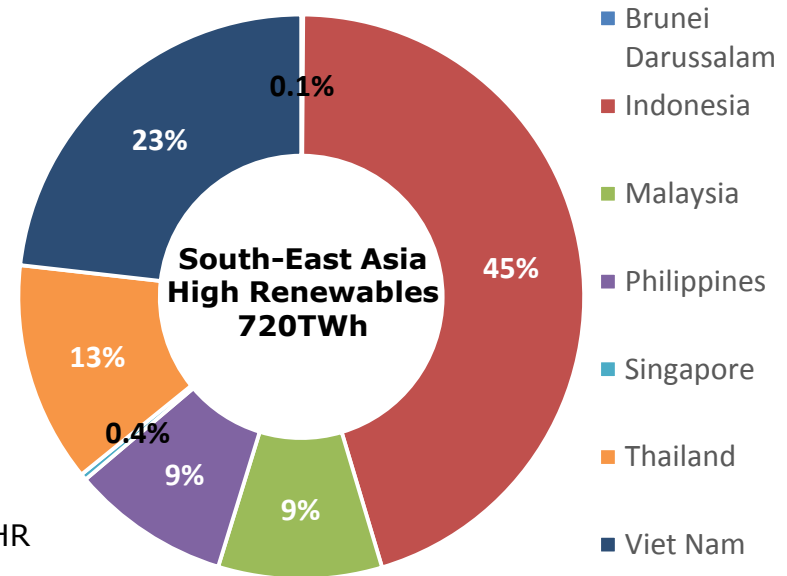
Source: IEA statistics 2015 and APERC analysis

High Renewables Scenario: Renewable power in APEC South-East Asia

Renewable generation by scenario



Renewable generation by economy, 2040

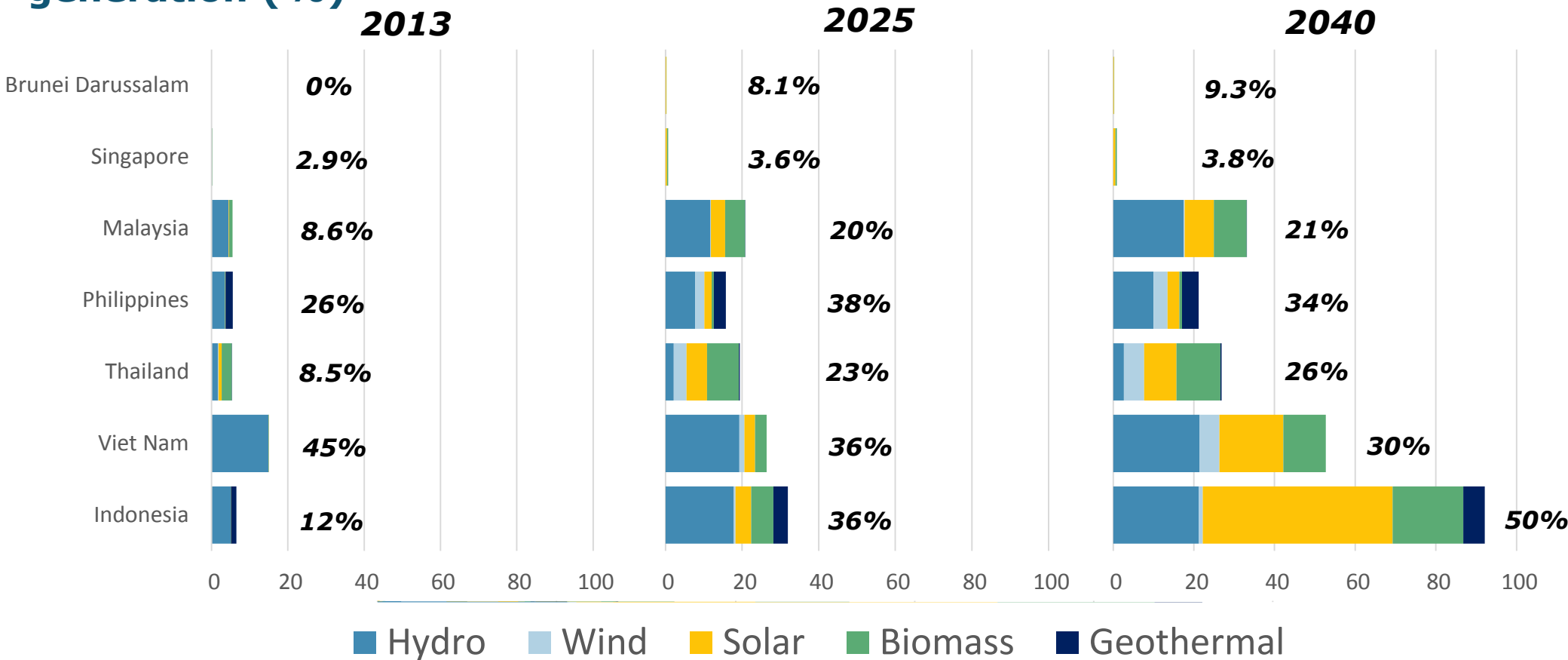


Renewable power generation reaches 32% by 2030 from just 14% in 2010.

Note: **South-East Asia** (Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, Thailand and Viet Nam), **BAU**=Business-as-usual, **HR**=High Renewables
Source: IEA (2015) and APERC (2016).

High Renewables Scenario: South-East Asia

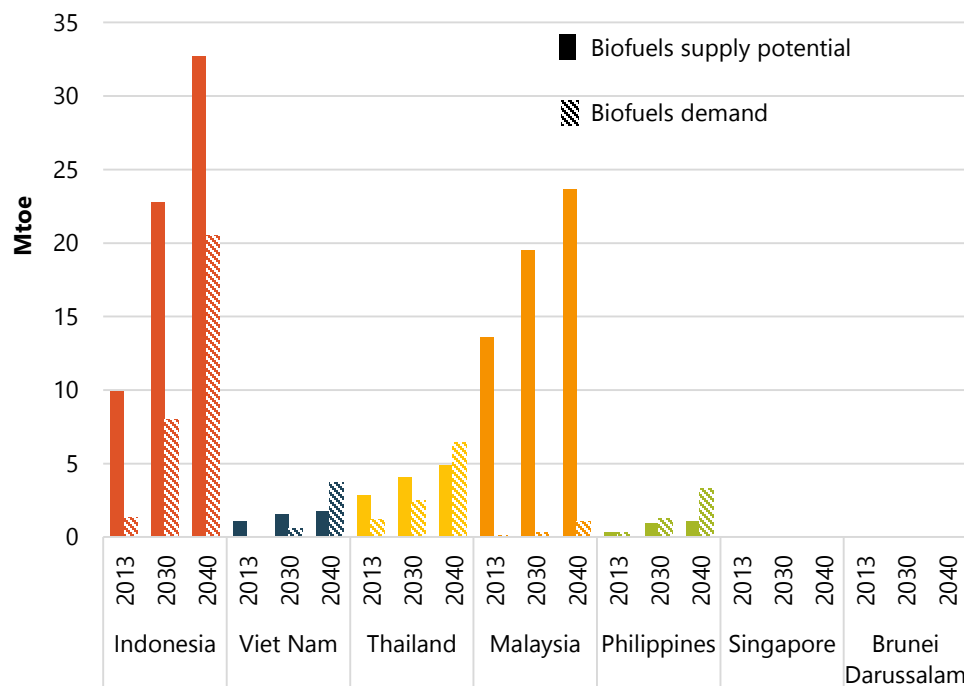
Installed Renewable Capacity (GW) and Share of renewable generation (%)



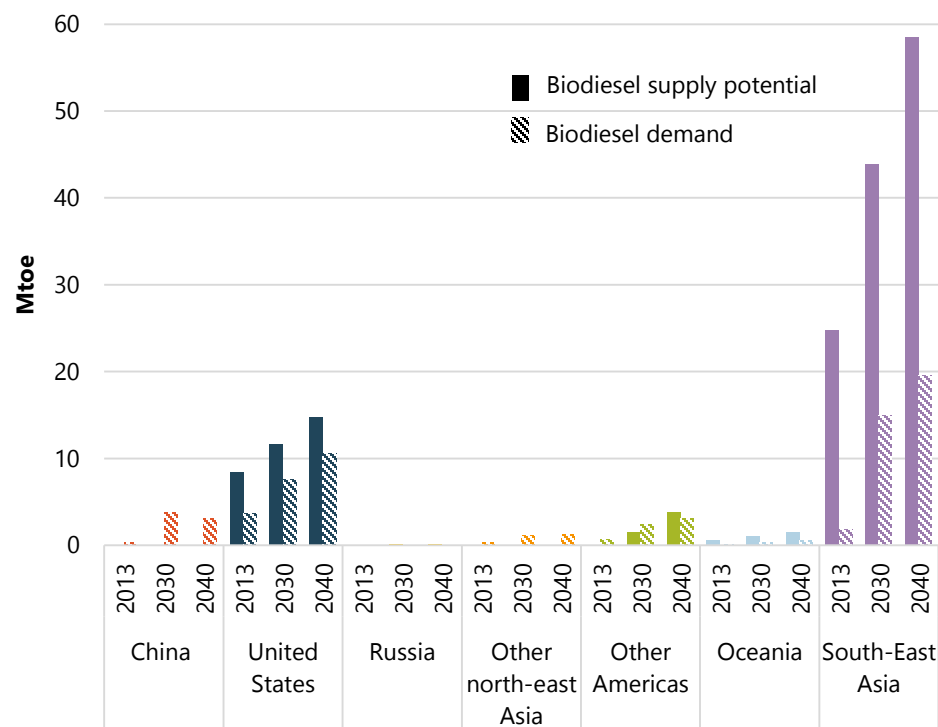
An average of 6.4 GW of new capacity added annually to 2025, and 7.5 GW from 2030-2040. Over the next decade hydro and biomass lead additions

Biofuels Supply Potential in the High Renewables Scenario

South-East Asia supply potential and demand



APEC biodiesel supply potential and demand



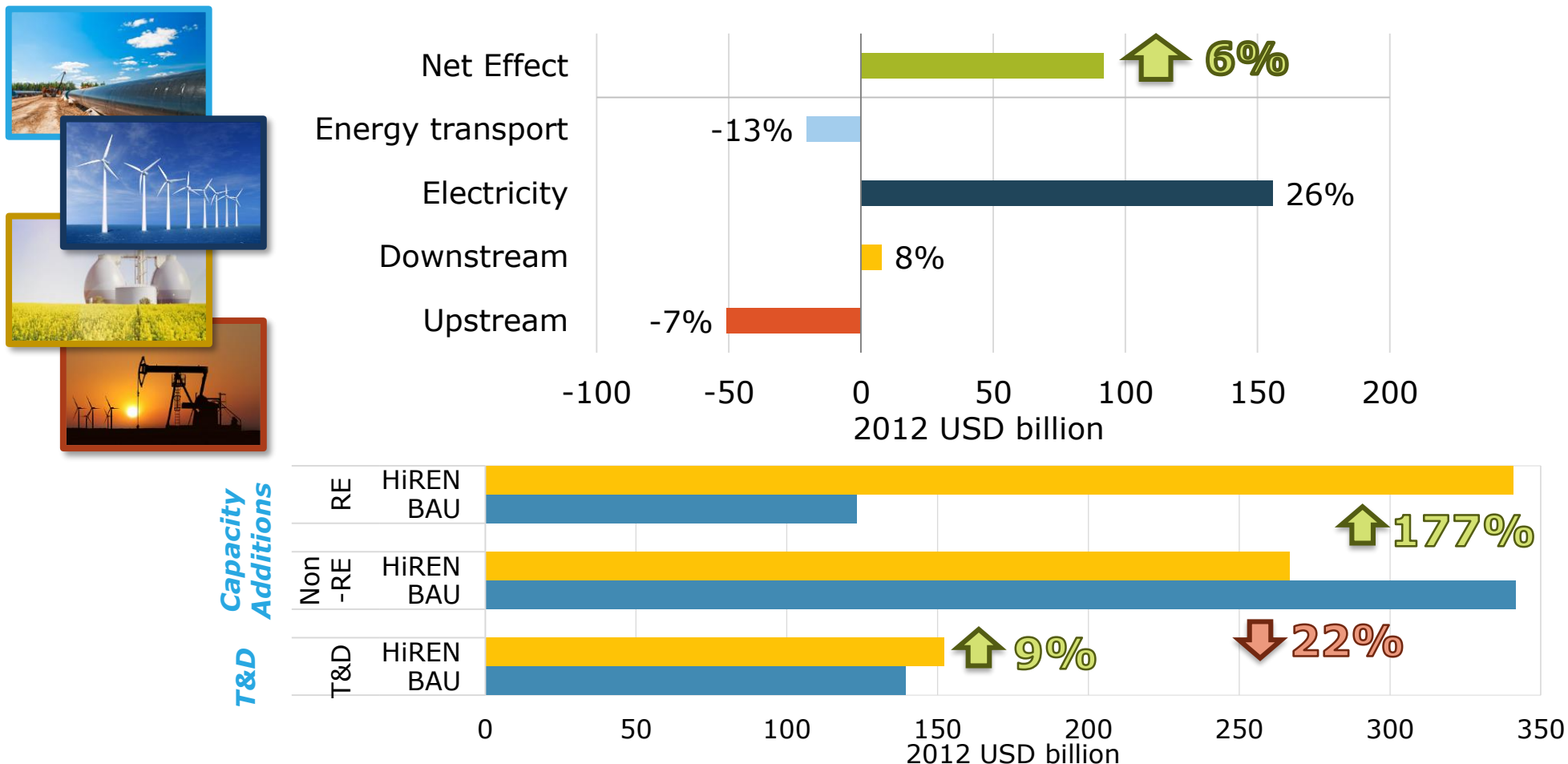
Higher biofuel blend rates to drive demand.

Regional biofuels surpluses and deficits provide great trading opportunity, particularly for Malaysia and Indonesia with high biodiesel supply potential.

Sources: IEA (2015) and APERC (2016).

The High Renewables Scenario requires a small increase in investment

Change in investment under the High Renewables Scenario from BAU, 2015-40



Energy sector investments rise 6% (USD 92 billion) above BAU

RE capacity and T&D investments partially offset by lower non-RE investments.



<http://aperc.ieej.or.jp/>

**APEC Expert Group on New and Renewable Energy
Technologies**

<http://www.egnret.ewg.apec.org/index.html>