

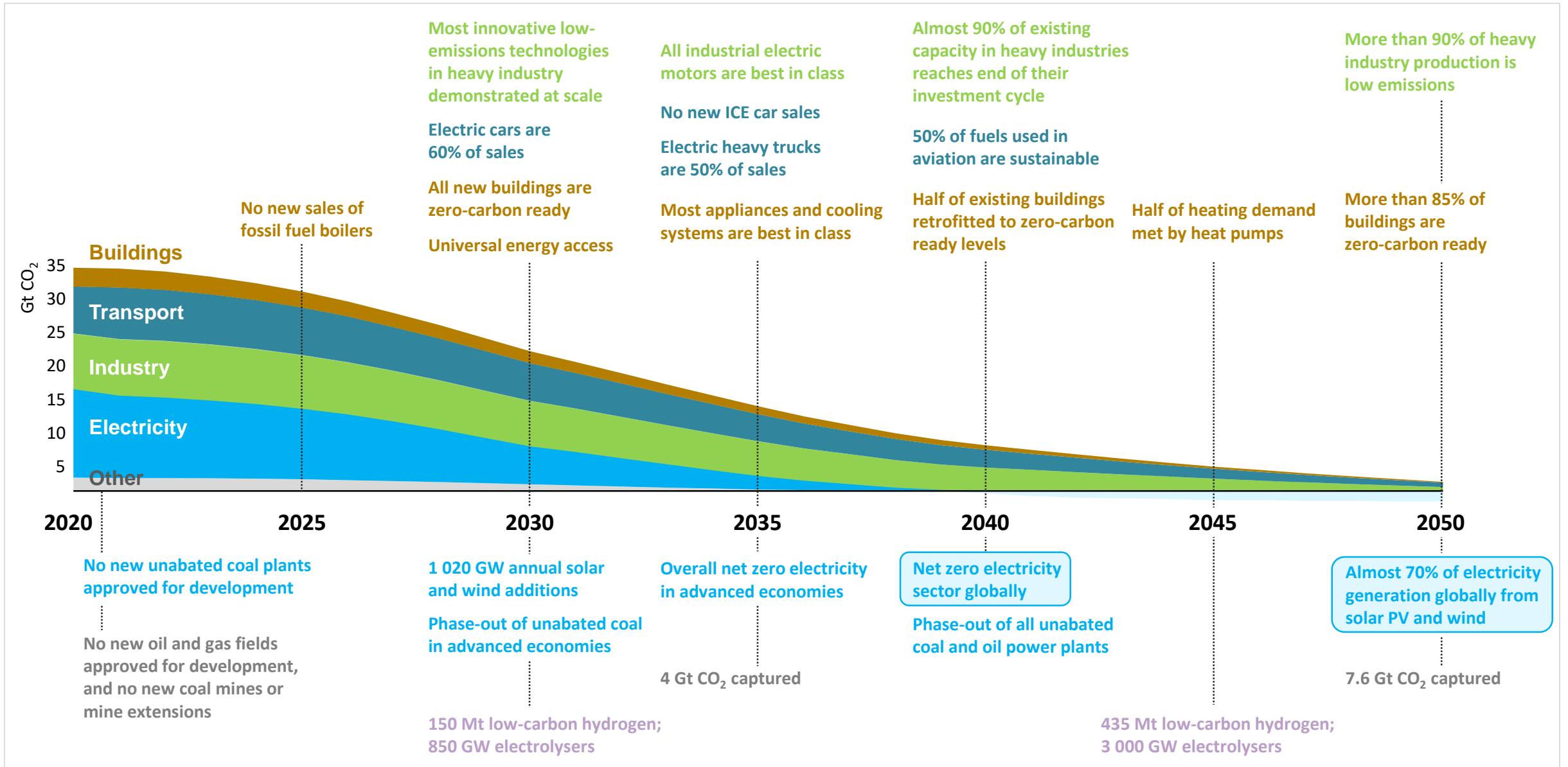


Net Zero by 2050: a Pathway for the Electricity Sector

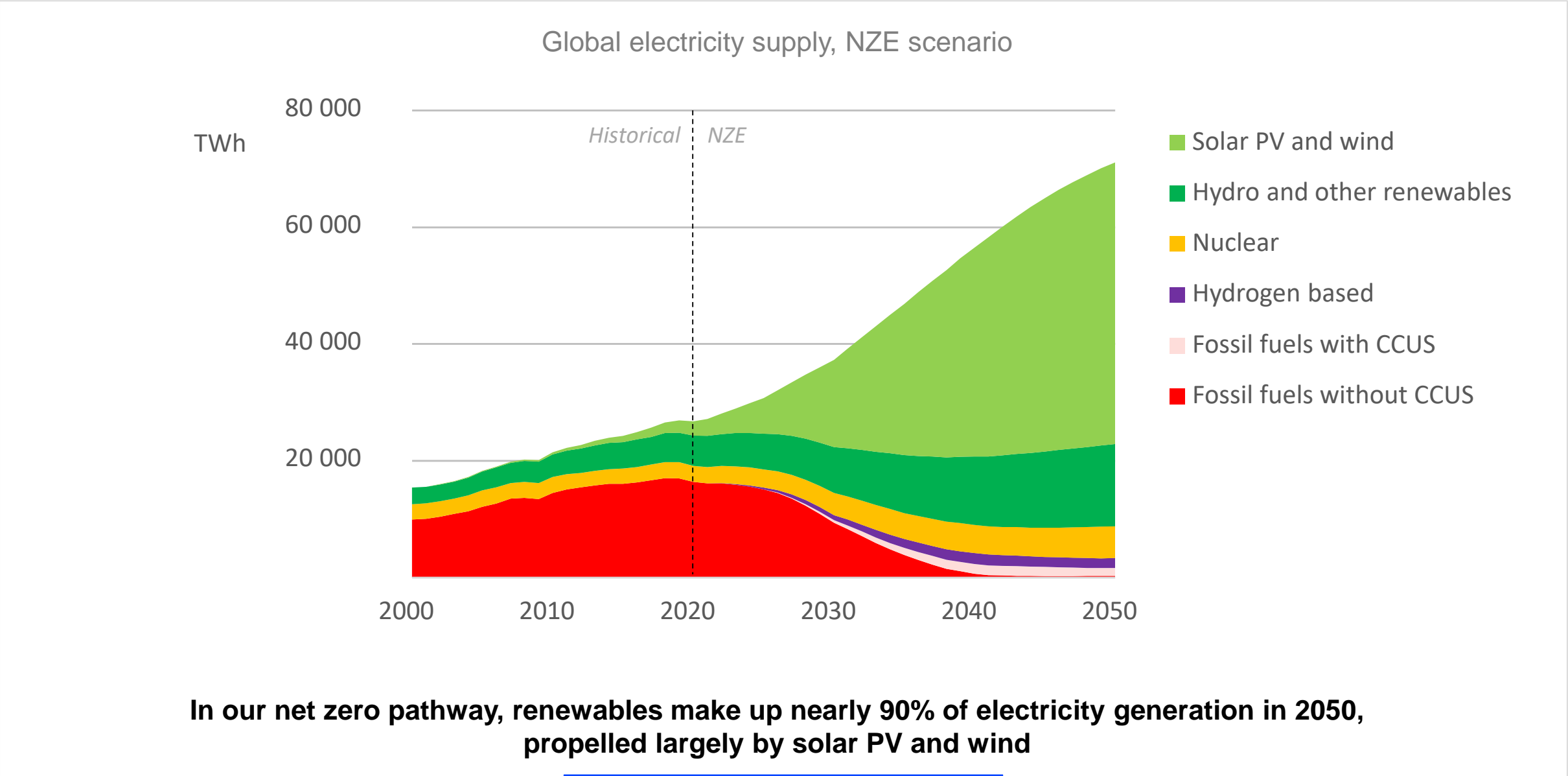
IAEE June 2021

Brent Wanner, Head of Power Sector Unit, World Energy Outlook, IEA

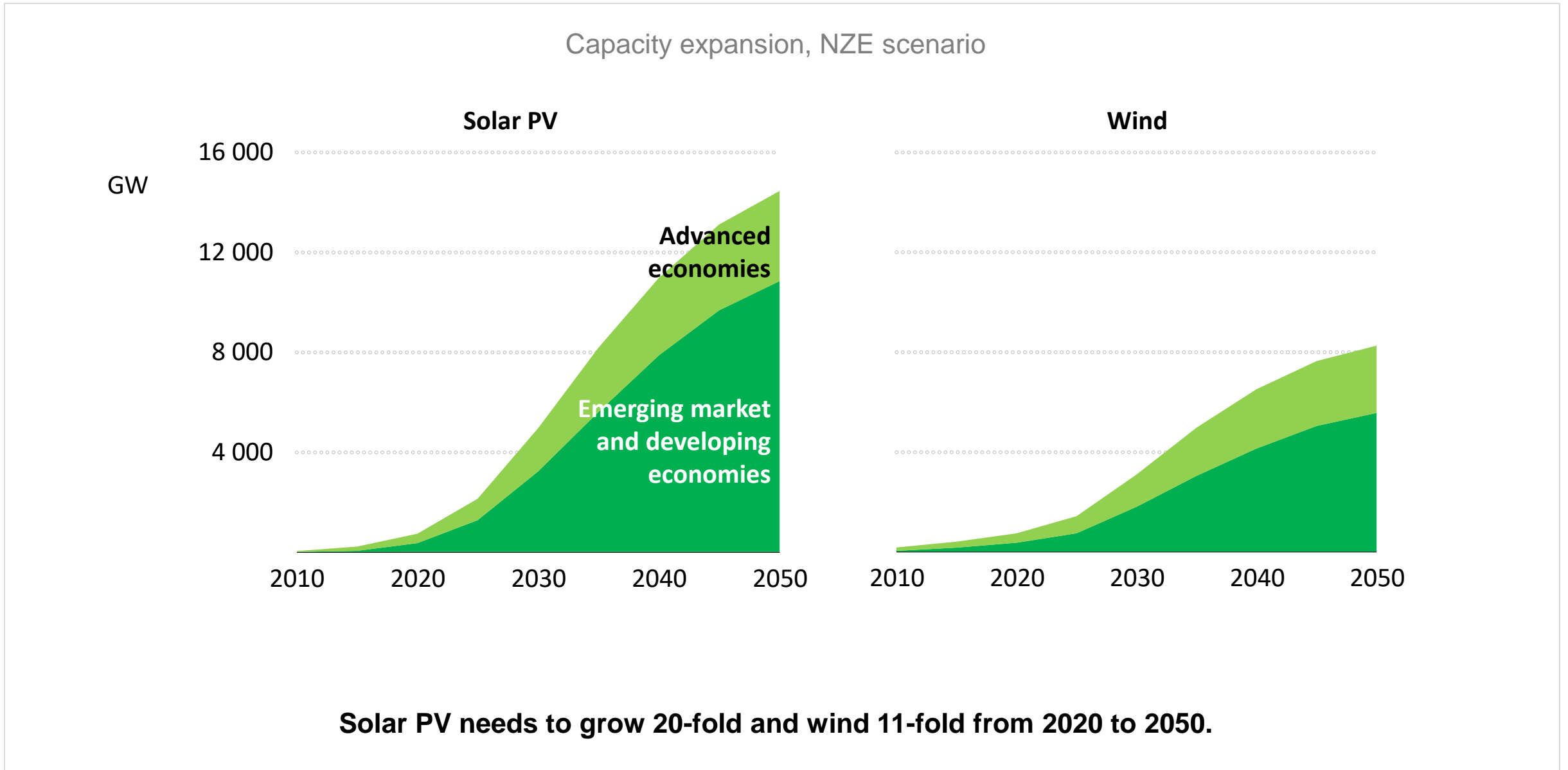
Set near-term milestones to get on track for long-term targets



Electricity leads the way to net zero

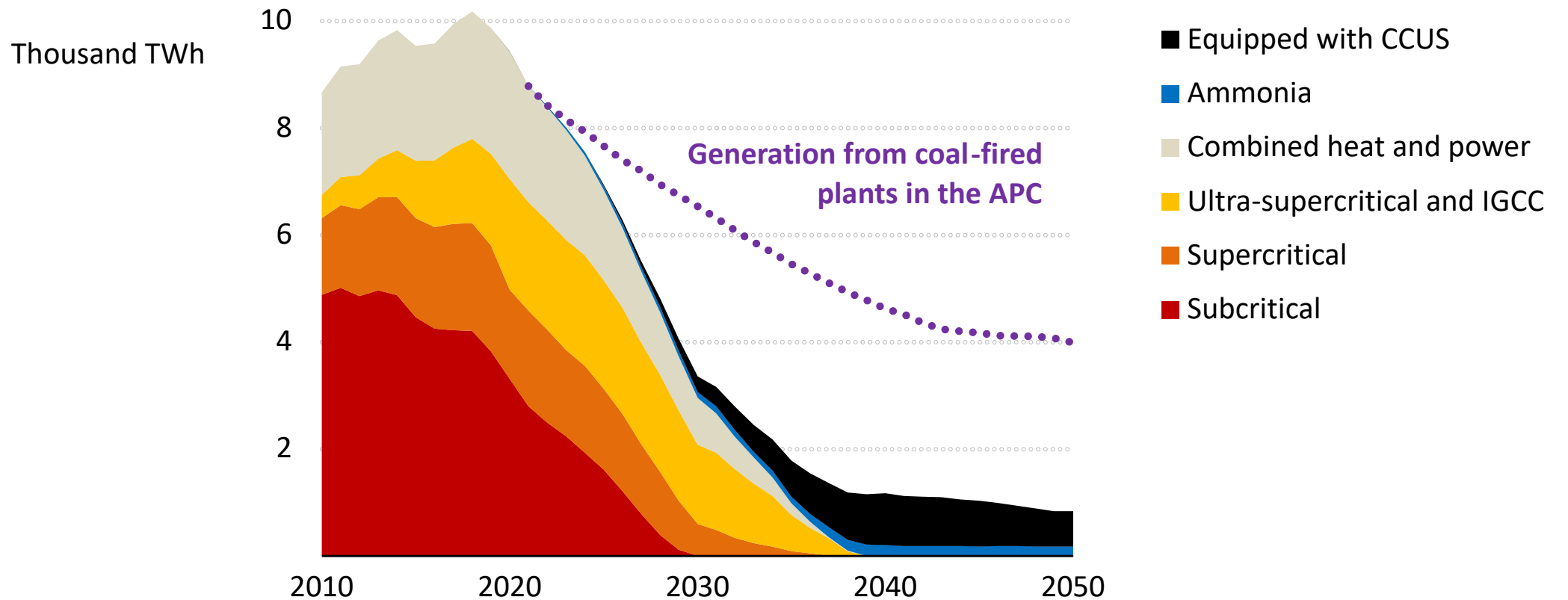


Scale up solar PV and wind massively



Phase out unabated coal-fired generation

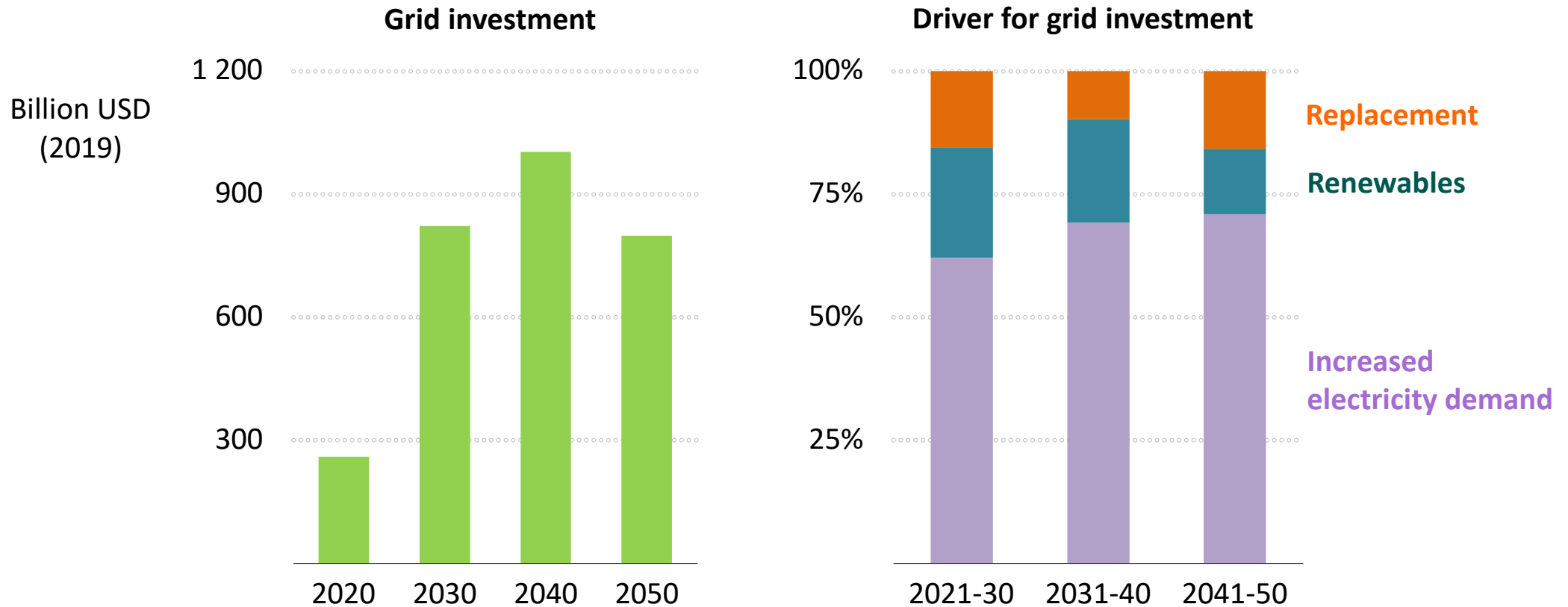
Coal-fired electricity generation by technology, NZE scenario



Unabated coal-fired power is phased out in advanced economies by 2030 and globally by 2040.

Step up investment in smart and digital grids

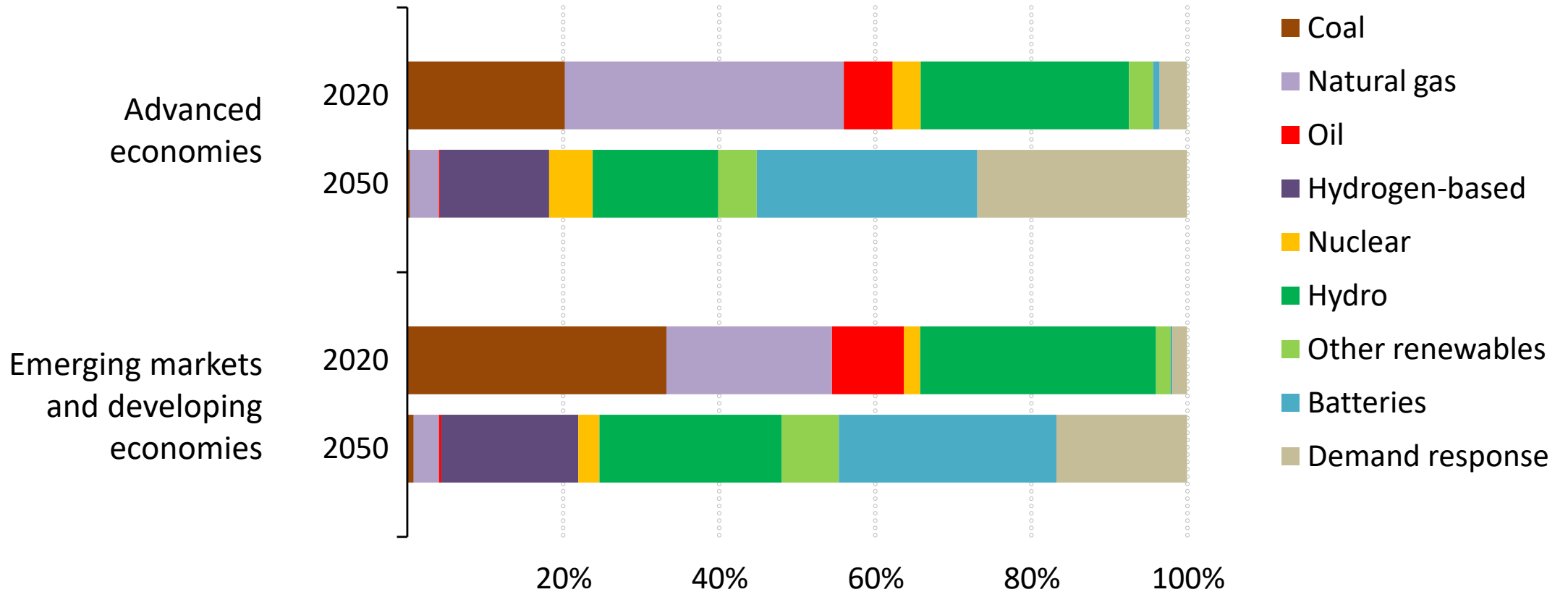
Global investment in electricity networks, NZE scenario



Electricity network investment triples to 2030 and remains elevated to 2050 to meet electricity demand growth, connect and integrate renewables and replace ageing infrastructure.

Enhance flexibility in electricity systems

Hour-to-hour flexibility by source, NZE scenario



To meet 4x higher flexibility needs - batteries, demand response, renewables and hydrogen-based fuels step up.

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