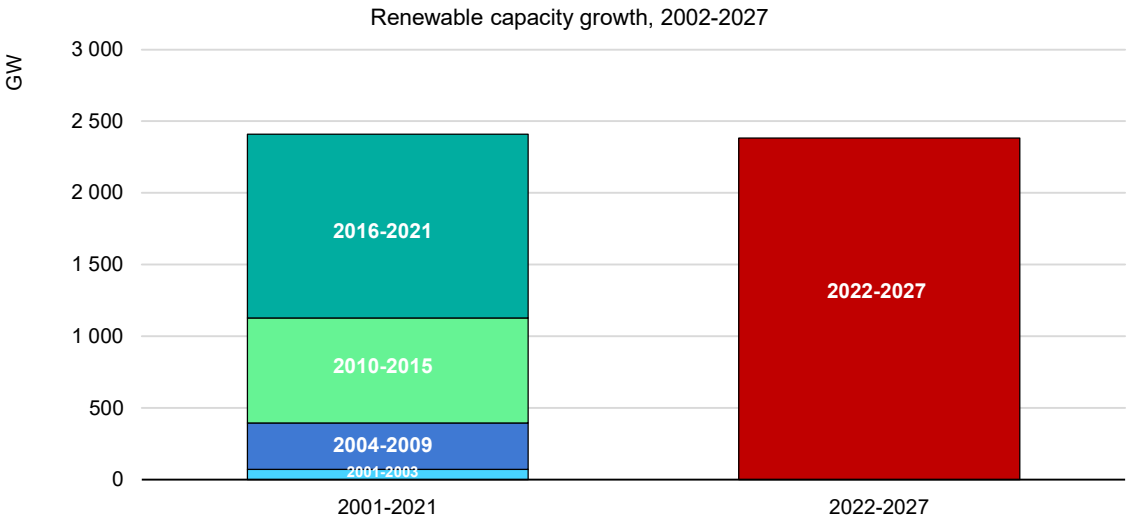




Solar PV deployment and manufacturing: A global perspective

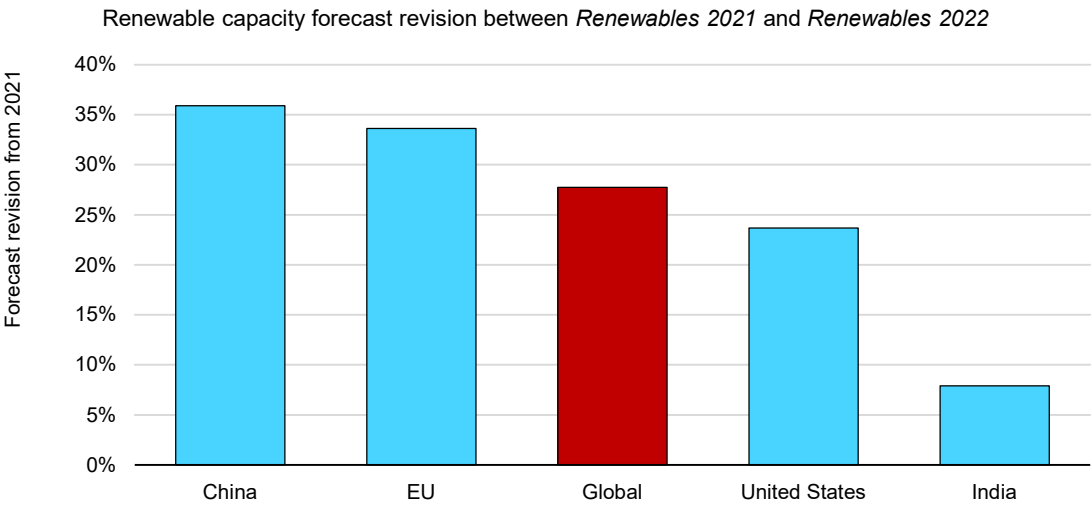
21th Swiss Photovoltaic Conference
Heymi Bahar, 21 march 2023

It took 20 years to achieve renewables growth in the next five years



Renewables will expand by 2400 GW by 2027, equal to the entire installed capacity of China.

Energy security and new policies lead to the largest ever forecast revision



China's 14th 5-year plan, REPower EU and member country policies, US Inflation Reduction Act and India's ambitious targets and policy improvements drive more optimistic forecast proving the effectiveness of good policies

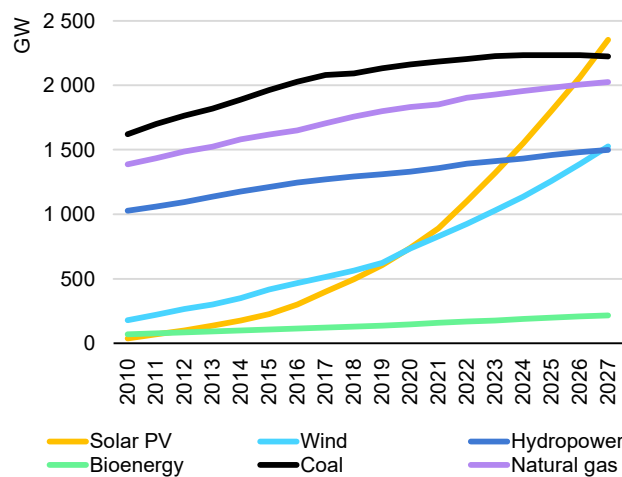
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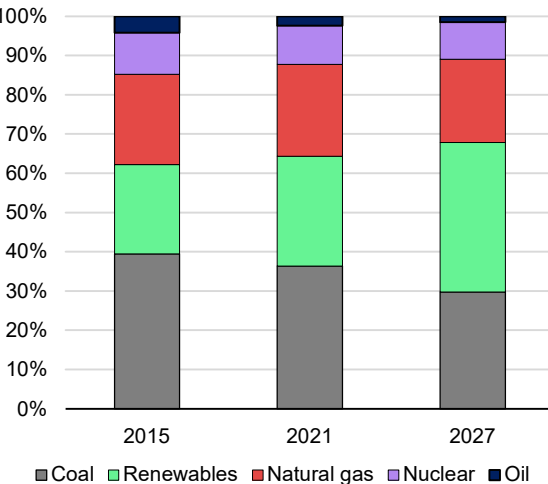
Solar PV becomes the largest installed capacity surpassing coal



Cumulative global installed capacity by technology, 2010-2027



Electricity generation by technology, 2015, 2021, 2027

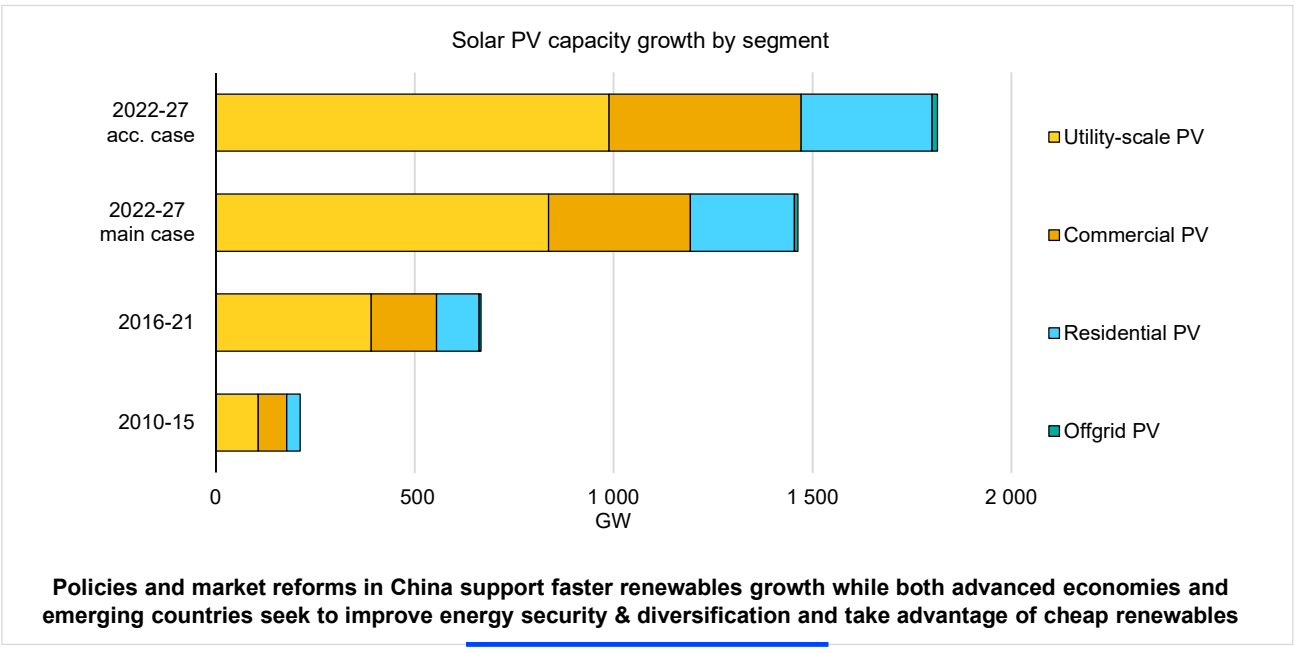


Cumulative solar PV capacity almost triples 1500 GW surpassing natural gas by 2026 and coal by 2027 ...And renewable electricity generation surpass coal by early 2025

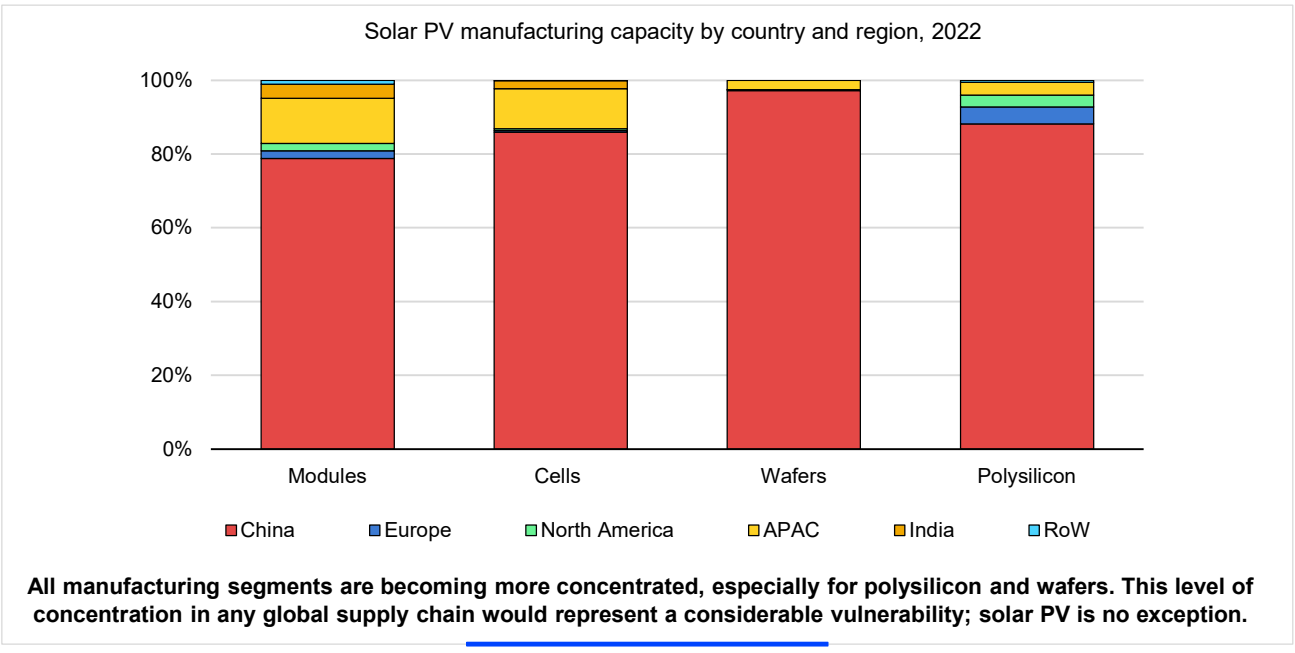
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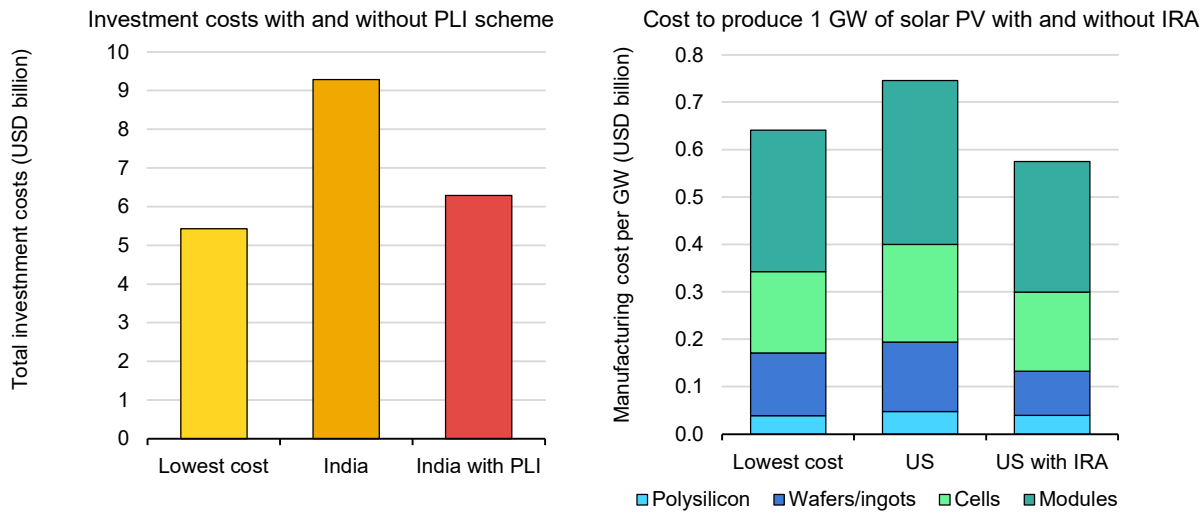
Global renewable capacity growth doubles in the next five years



China currently dominates global solar PV supply chains

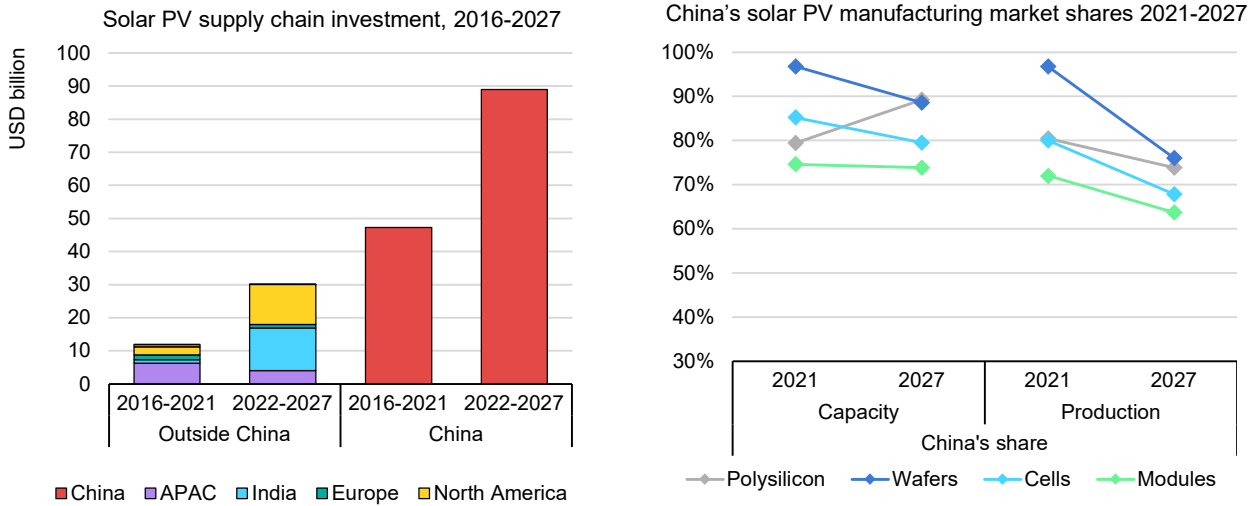


PV manufacturing policy reducing cost gaps in India and the US



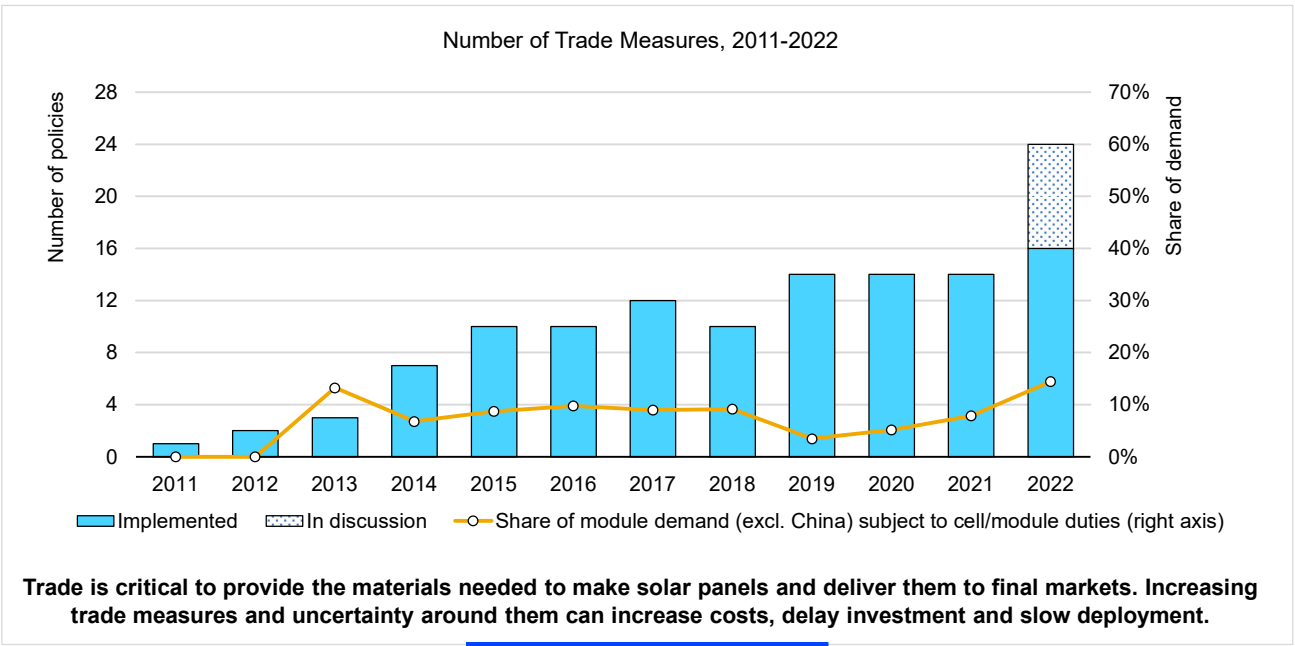
India's PLI scheme provides assistance for high investment costs associated with solar PV manufacturing. The US IRA's tax credit incentivizes production through the solar PV value chain, potentially reducing manufacturing costs.

...leading to more diversified PV supply chain & a possible supply glut

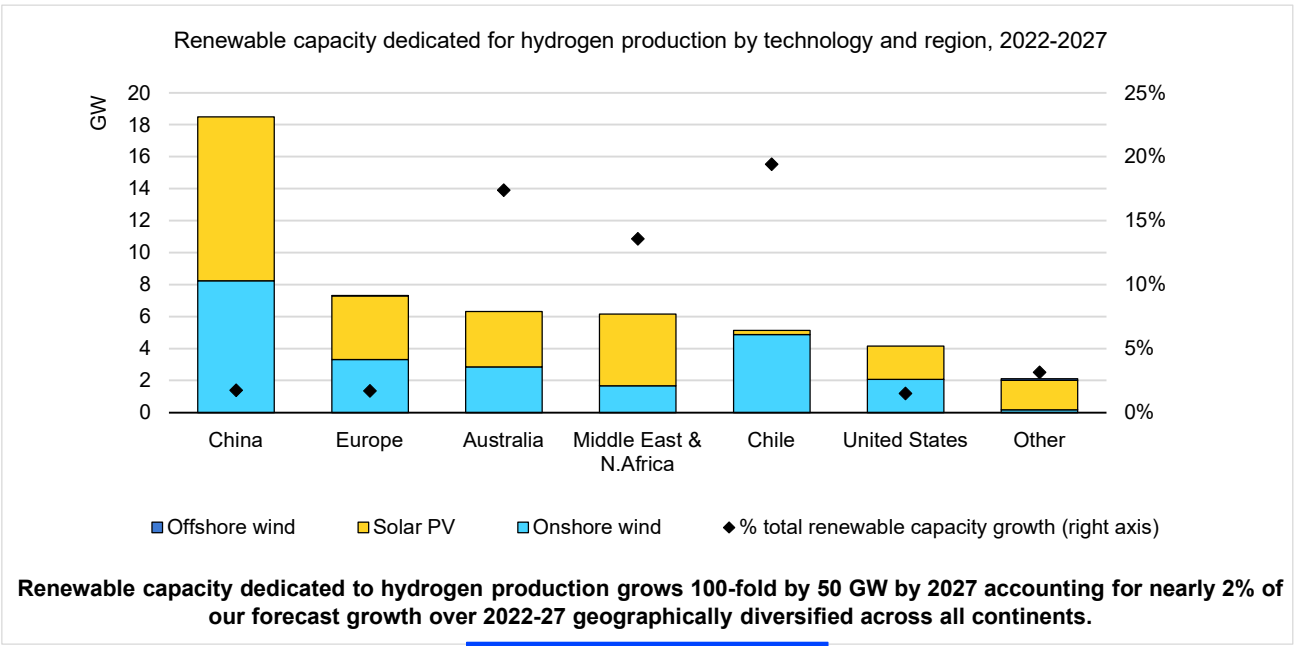


New policy support in India and USA will triple PV manufacturing investment outside China, increasing geographical diversification. However, if all announced projects come online, overcapacity across supply chain may reach 200%.

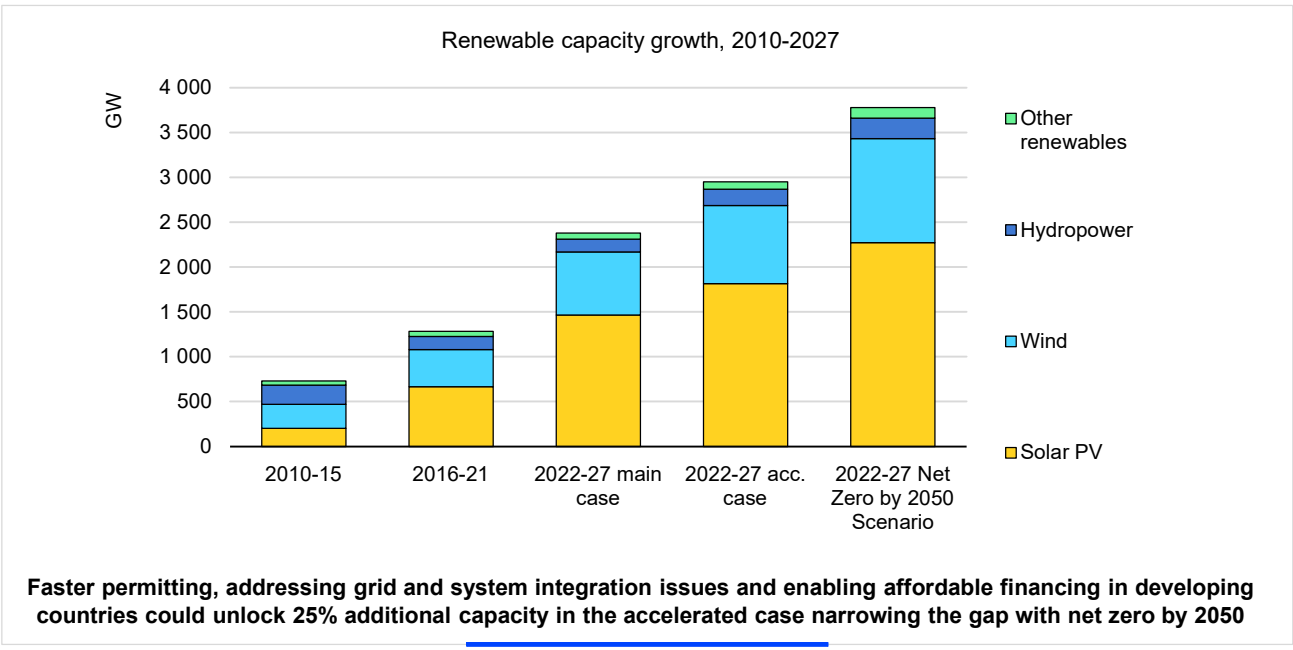
Expanding PV trade measures may slow deployment



Hydrogen production emerges as a new driver for solar PV and wind



Improved policies can further narrow the gap with net zero by 2050



Questions

