

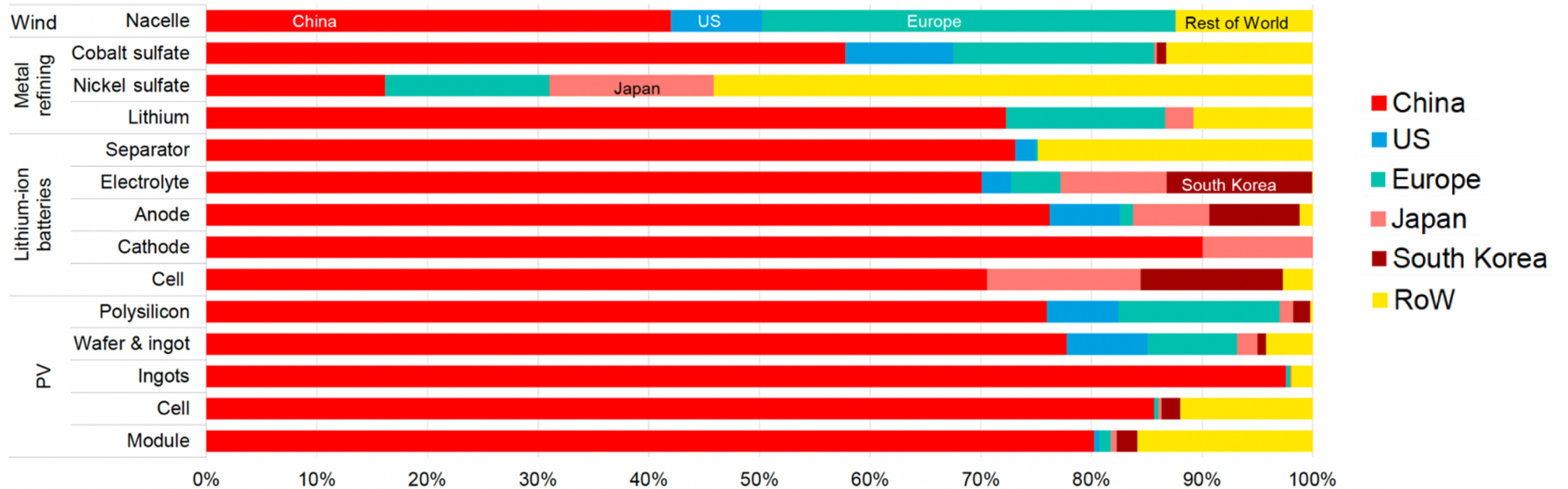


Inside Supply Chains

Global PV module manufacturing with India and the United States in focus

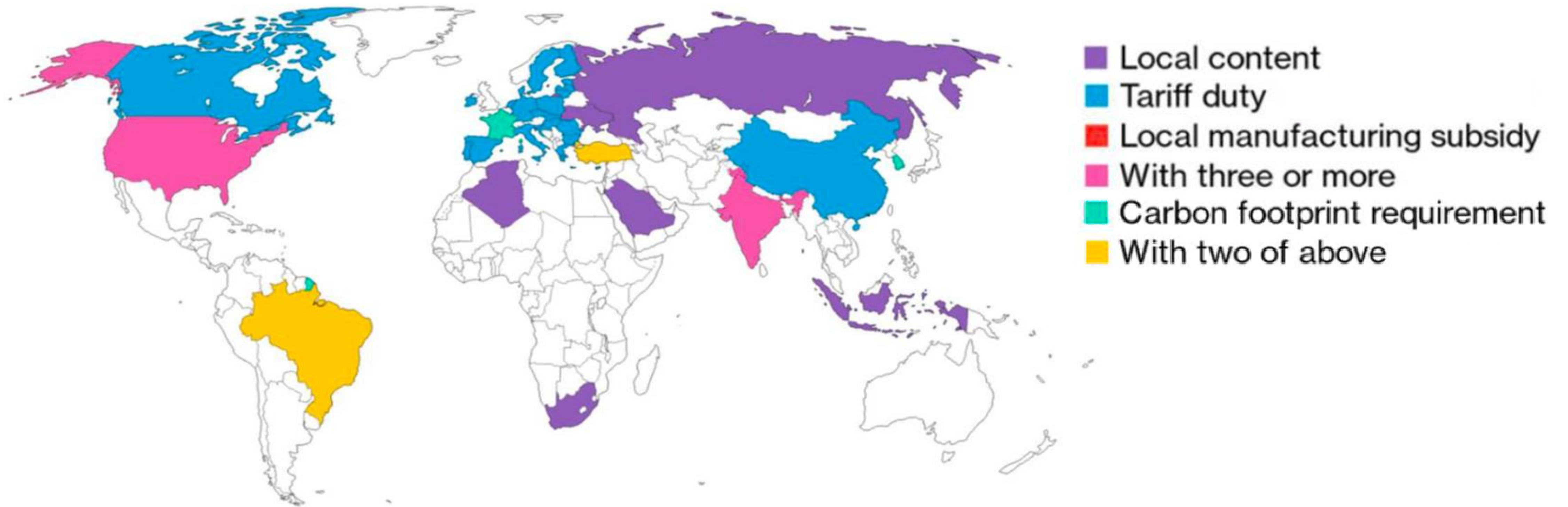
Global cleantech supply chains

Clean energy manufacturing capacity by location



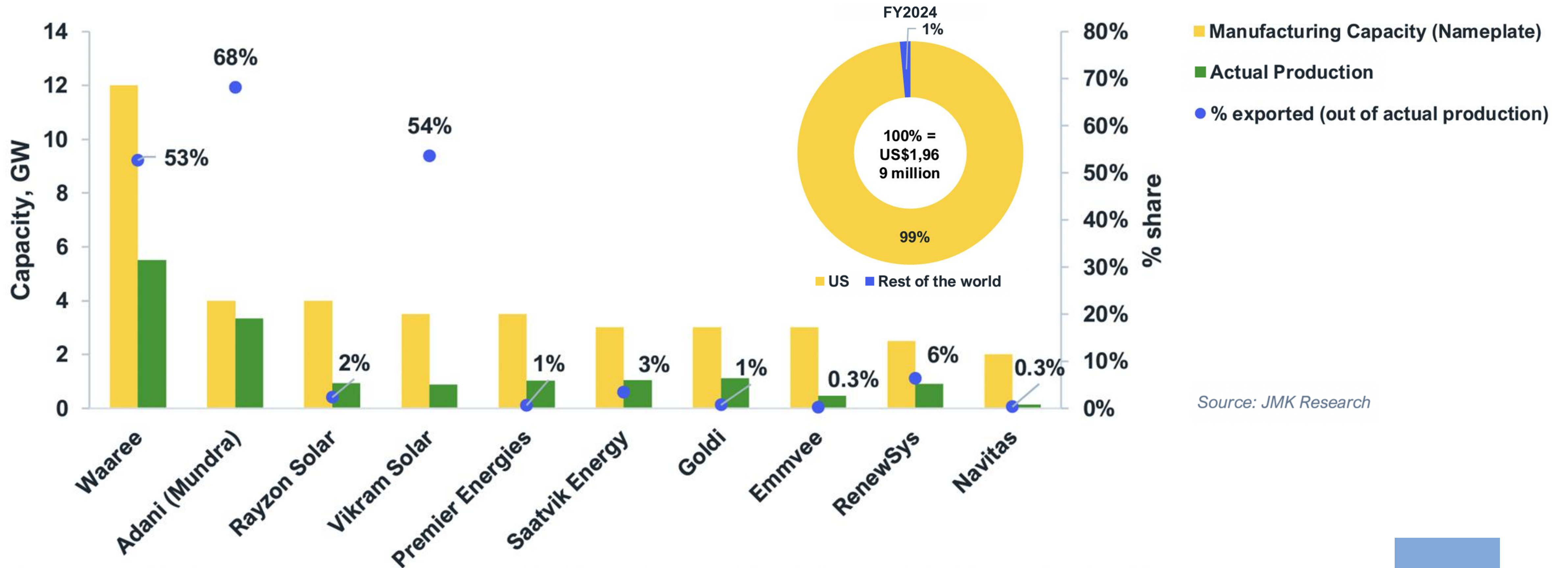
Distribution of manufacturing support policies

Solar trade barriers and local manufacturing initiatives, August 2023



Indian manufacturers and export markets

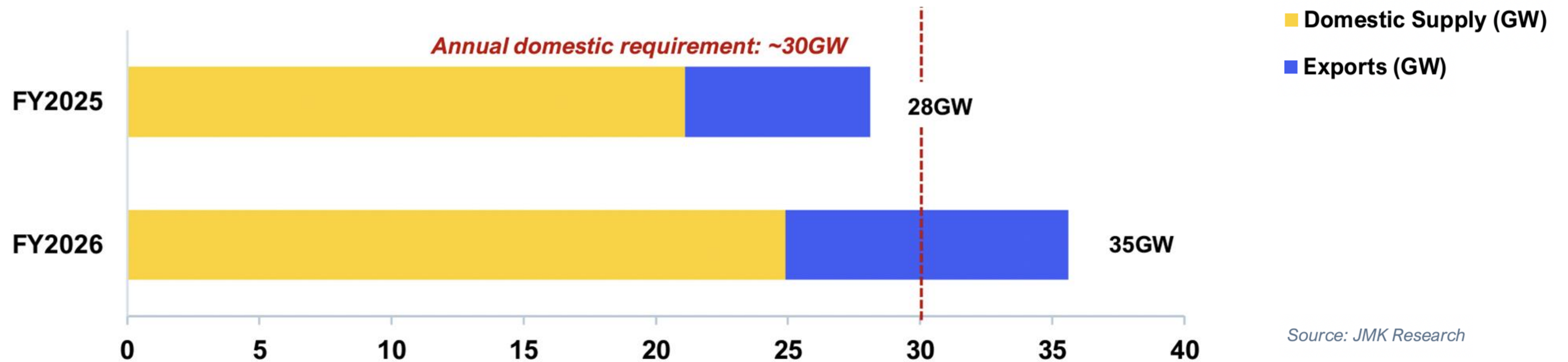
Exports by Leading Domestic PV Manufacturers in FY2024



Source: JMK Research

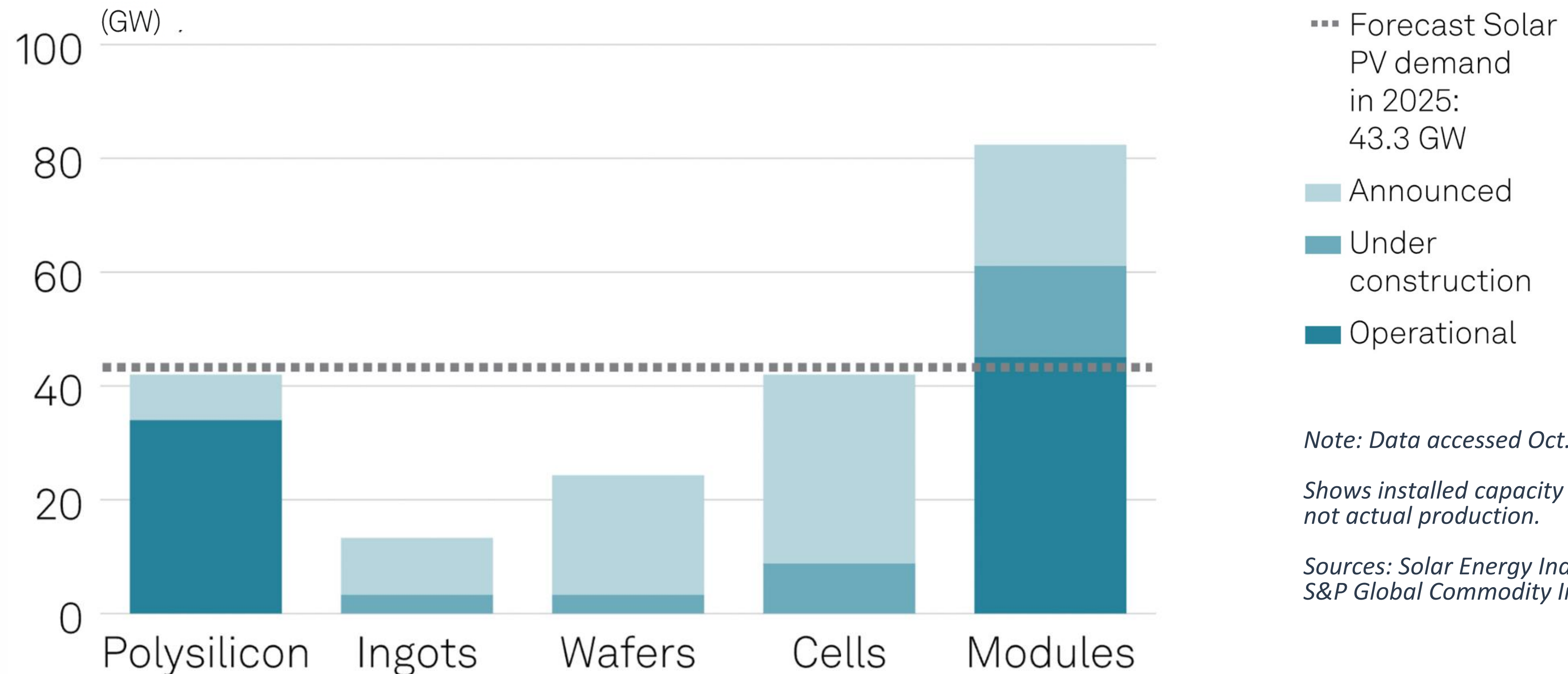
Manufacturing capacity in India

Forecast of Actual Supply of PV Modules by Indian Players to the Domestic Market



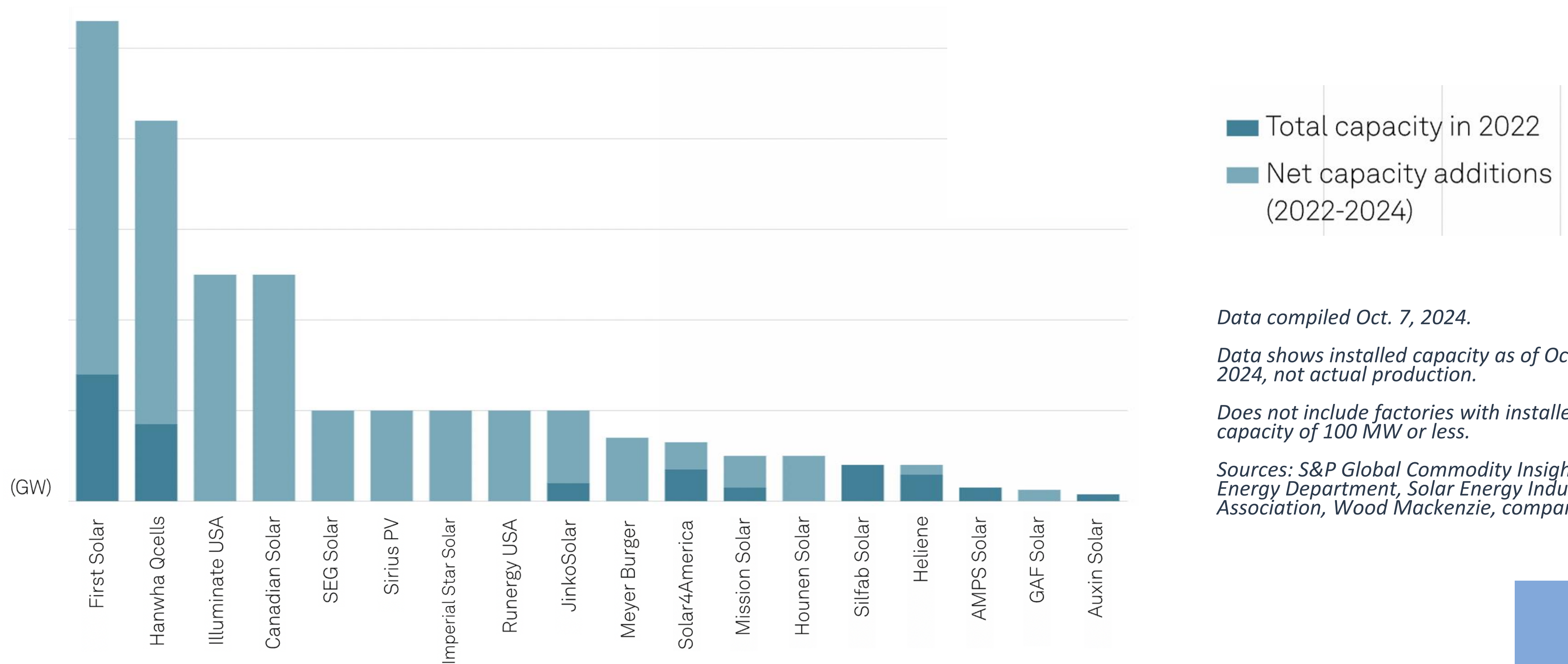
Manufacturing capacity in the United States

US solar manufacturing capacity closing in on demand



Module manufacturing expansion underway

US solar panel manufacturing capacity surged 2022-2024



Data compiled Oct. 7, 2024.

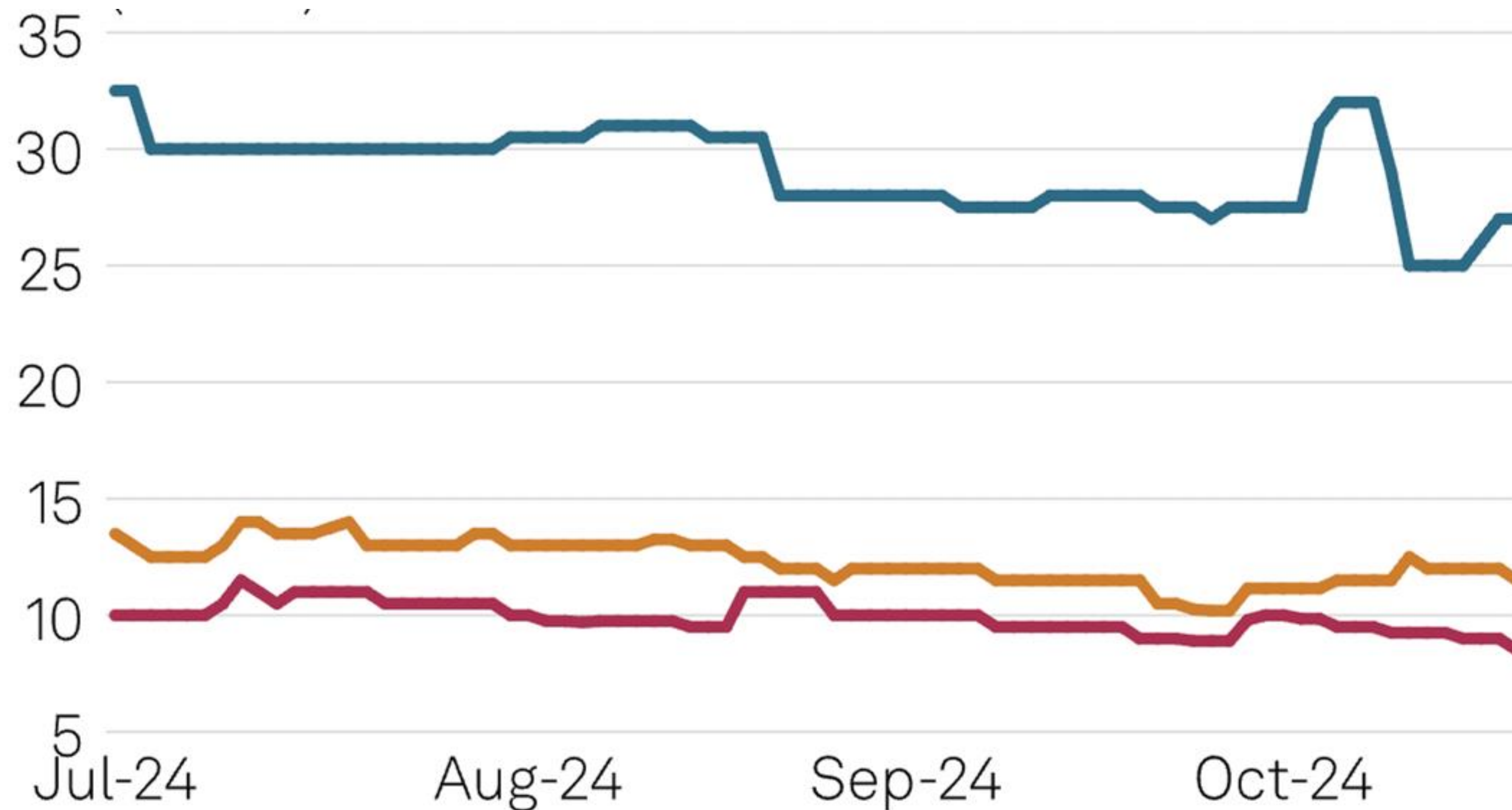
Data shows installed capacity as of October 2024, not actual production.

Does not include factories with installed capacity of 100 MW or less.

Sources: S&P Global Commodity Insights, US Energy Department, Solar Energy Industries Association, Wood Mackenzie, companies.

Cost of trade barriers

Solar modules far more expensive in US



Delivered duty paid

— US

— Europe

Free on board

— China

Platts assessed price of 570-720 Watt TOPCon solar modules (¢/watt).

Source: S&P Global Commodity Insights

Food for thought

What would be the size of the US market if developers / installers weren't paying \$0.25 - 0.35/W?

Can the European market sustain prices higher than $> \$0.10/W$?

What role could India play in becoming a major non-Chinese exporter?