

# Solar and energy storage manufacturing capacity is rapidly expanding in the US as both industries capitalize on incentives in the IRA

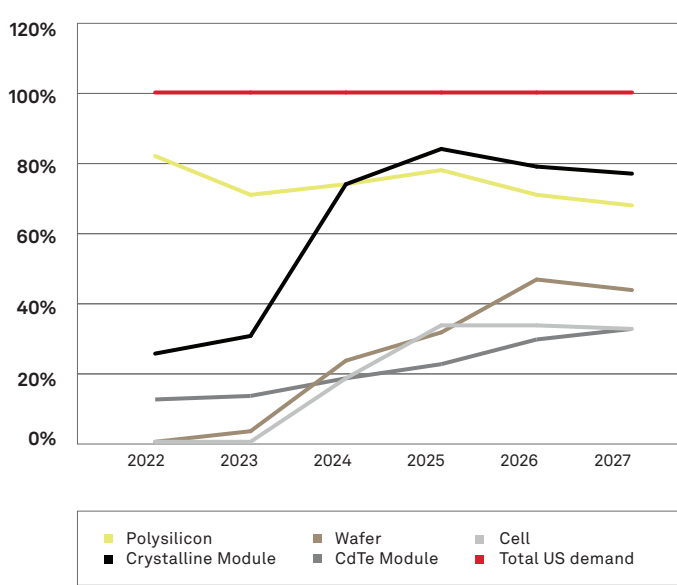


## Solar PV

Post-IRA, solar manufacturers will add significant capacity at the module node, which will exceed demand by 2025.

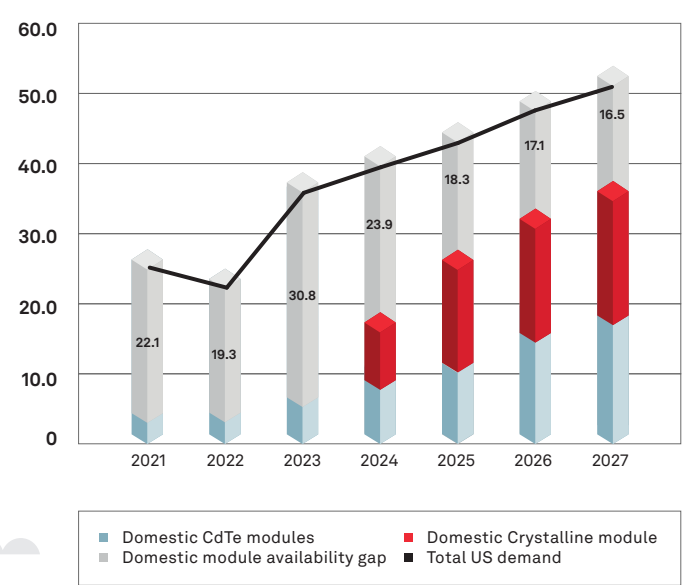
Recent guidance for the domestic content bonus is expected to drive more announcements at the cell node, too – however, poor economics at further upstream nodes will bottleneck full self-sufficiency long-term.

Self-sufficiency of PV manufacturing supply chain in the United States by node



Self-sufficient PV module availability in the United States (GWdc)

The US will be able to serve 68% of demand with fully domestic modules in 2027



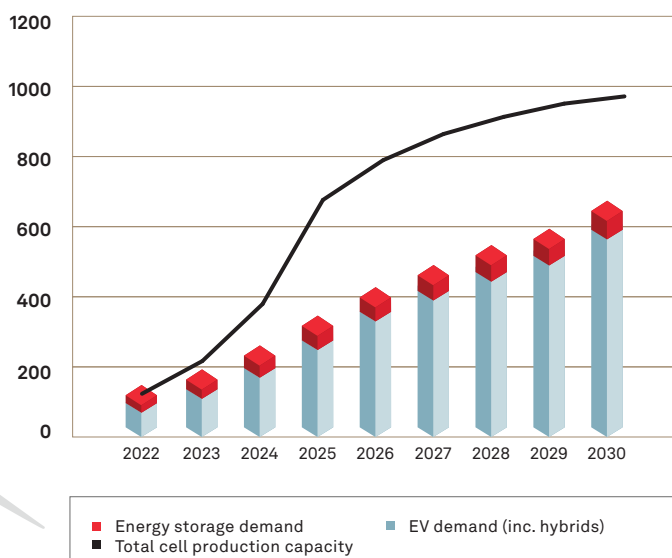
There is more than enough polysilicon and wafer capacity in Southeast Asia and China to augment the domestic supply chain. However, more than 20% of demand beyond 2025 will carry additional risk from potential geopolitical roadblocks.

## Energy Storage

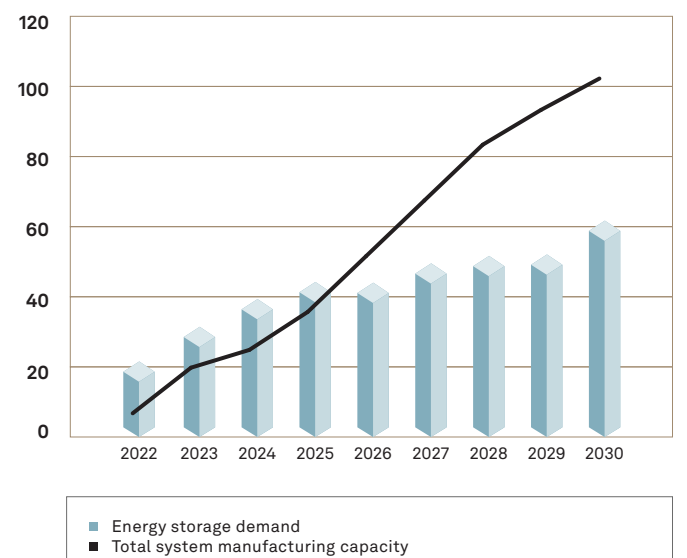
US battery cell and system manufacturers have also made significant capacity announcements, exceeding forecasted domestic demand.

Similar to solar, however, upstream issues around the mining and refining of key raw materials may become a limiting factor long-term.

US cell production capacity vs US battery demand (GWh)



US system manufacturing capacity vs US ESS demand (GWh)



As China dominates the global battery supply chain with a significant presence in the mining and refining of critical minerals, the US drive to onshore raw material production will strengthen through increased investment in recycling or mining.