

Solar - China

Key takeaways from solar expert call with Rystad Energy

Industry Overview

We hosted Mr. Marius Mordal Bakke, Senior Solar Analyst at Rystad Energy to discuss the outlook for global solar supply chain. Below are the key takeaways.

Demand: Growth could weaken substantially in 2024

After a stellar c.50% demand growth in 2023 driven by both residential and C&I distributed segments, Rystad expects global solar demand growth to taper off to mid-single digit in 2024 on high interest rate and installation costs, and waning policy support in rooftop hurting the distributed segment. Long time to get permits in utility scale also remains an issue with 900+ GW of active power capacity remaining in queues in the US, while the EU is looking to reduce the permitting times from 20+ months for new solar projects to 5-10+ months.

Inventory: High in PERC & distributed segment in Europe

The gap between solar module imports from China to Europe versus European solar installation has narrowed from 46.7GW in 2022 to 37GW in 2023 according to Rystad's data. Mr Bakke sees the time to clear the inventory is rather steady in Europe while the absolute levels could be at around 85GW. Given the shift from P- to N-type and purchase from utility scale, there will still be Chinese shipment to Europe (indeed mostly from China now versus some Southeast Asian shipment few years ago) with overall demand in Europe still at mid-60s GW in 2024. Distributors in the distributed segment sitting on the inventory have been discounting to sell and some are having financing challenges – watch European solar exports. Red Sea disruption is increasing the shipment time from 30-35 days to 45 days, but based on current freight rate he doesn't see major impact.

US: Good utility scale growth with lower LCOE on ITC

Rystad sees the US is building up module capacity fast possibly reaching 50GW by end 2024, high than demand, but the upstream segments will lag and hence still relying on imports. The 30% Investment Tax Credits (ITC) make the US one of the top regions for solar development with solar Levelized Cost of Electricity as low as Chile and Mexico. But the near-term demand from rooftop solar, with falling module prices recently, will likely drag overall demand depending on any new policy support.

China: Module prices falling toward RMB0.9/W

Active and announced global module capacity has reached c.1,000GW in 2023 and will rise to c.1,500GW in 2024 with still over 80% coming from China. He thinks module production utilization rates will continue to decline across the industry with small scale and new entrants suffering more in 2024. Demand is shifting toward TOPCon and Mr Bakke expects TOPCon prices to approach RMB0.9/W on average in 2024. Module prices may be volatile around the Chinese New Year but a sustained price increase will not happen anytime soon.

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