

First Solar (Nasdaq: FSLR) makes thin-film solar panels (cadmium telluride, or CdTe, instead of silicon) and sells them by the watt to U.S. utility-scale project owners, and a U.S. manufacturing tax credit (Section 45X) sold for cash helps carry the profit. FY2025 (year ended Dec 31, 2025) net sales were \$5.22B (+24%) on 17.5 GW of modules sold, with 96% of sales in the United States. Gross profit was \$2.12B (40.6% margin, down from 44.2%), operating income \$1.60B and net income \$1.53B. In 2025 it agreed to sell \$1.40B (face value) of 2025 manufacturing credits for \$1.34B in cash. At Dec 31, 2025 it had signed contracts to sell 50.1 GW for \$15.0B through 2030, and two customers were 11% and 10% of net sales. H1 2026 net sales were \$2.10B (+8%) and net income \$769.2M, but Q2 net sales fell 3.7% to \$1.06B and Q2 gross margin of 57.3% included an \$88.6M net benefit from expected tariff refunds; operating cash flow was negative \$359.8M in H1 as cash and securities fell from \$2.9B to \$1.7B, and it paid off its India credit facility in May 2026.

BUSINESS MODEL CANVAS

First Solar

Research date: Oct 11, 2026

Evidence-backed · sources in companion brief

KEY PARTNERS

- **Glass and chemical suppliers** — CdTe, tellurium and substrate glass are single-sourced or limited-source inputs (FACT).
- **Utility and developer customers** — Silicon Ranch and NextEra Energy were each 10%+ of modules-business net sales in 2025 (FACT).
- **Tax-credit buyers** — 2025 credits sold: \$701.9M face for \$668.1M (June–July) and \$699.7M face for \$668.2M (October) (FACT).
- **Trade coalition** — the American Alliance for Solar Manufacturing Trade Committee filed duty petitions on imports from Cambodia, Malaysia, Thailand and Vietnam (FACT).
- **Government programs** — the Tamil Nadu state granted incentives for the Indian plant; the Treasury pays Section 45X credits that are not sold (FACT).

KEY ACTIVITIES

- **Run the factory line** — glass in, finished module out in a few hours; 16.1 GW produced in 2025 (FACT).
- **Expand U.S. capacity** — Louisiana started in 2025; South Carolina plant targeted for 2H 2026 (FACT).
- **Research** — perovskite line, CuRe program, two CdTe efficiency records (23.1% cell, 19.9% module aperture) (FACT).
- **Sell and collect** — per-watt contracts, advance payments, and 45X credit sales (FACT).
- **Protect the technology** — patent suit against JinkoSolar filed Feb 25, 2025 in

KEY RESOURCES

- **Factories** — Ohio, Alabama, Louisiana in the U.S.; Malaysia, Vietnam, India; South Carolina under construction (FACT).
- **Long-lived assets** — \$5.90B, of which \$4.39B in the U.S. (FACT).
- **Technology** — CdTe thin film; more than 93 GW sold worldwide (FACT).
- **People** — about 7,900 associates at Dec 31, 2025 (FACT).
- **Cash** — \$2.86B at Dec 31, 2025; \$1.73B at Jun 30, 2026 (INFERENCE sum of cash and securities).

VALUE PROPOSITIONS

- **Made-in-U.S. modules** — 96% of 2025 net sales were in the U.S.; U.S. plants qualify for 45X (FACT).
- **Thin-film performance** — better temperature and partial-shade response, no cell cracking (company claim, FACT as stated).
- **Warranty** — product warranty up to 12.5 years; power output of at least 98% in year one, up to 30 years (FACT).
- **No Chinese crystalline-silicon supply chain** — the company says its process doesn't rely on it (FACT as stated).
- **Recycling** — collection and recycling program offered since 2005 (FACT).

CUSTOMER RELATIONSHIPS

- **Long contracts** — 50.1 GW / \$15.0B backlog at Dec 31, 2025; 45.1 GW / \$13.6B at Jun 30, 2026 (FACT).
- **Prepayments** — deferred revenue \$1.82B at Dec 31, 2025 and \$1.70B at Jun 30, 2026 (FACT).
- **Price adjustments** — 23.2 GW with clauses for technology improvements, up to \$0.6B (FACT).
- **Disputes** — BP / Lightsource termination: \$384.6M payments triggered, \$61.0M recognized, suit filed (FACT).
- **Support** — warranty claims and module recycling after sale (FACT).

CHANNELS

- **Direct contract sales** — to developers, power producers, utilities and corporate buyers (FACT).
- **U.S.** — \$4,994.7M of net sales in 2025 (FACT).
- **India** — \$195.6M in 2025 vs \$201.7M in 2024 (FACT).
- **Distribution centers** — U.S. network used to manage logistics costs (FACT).
- **Freight** — logistics costs up \$173.1M and warehousing up \$130.7M in 2025 (FACT).

CUSTOMER SEGMENTS

- **Utility-scale developers and independent power producers** — the core buyers (FACT).
- **Regulated utilities** — own or contract solar to meet load growth (FACT).
- **Corporate energy buyers** — including technology companies seeking power for data centers (FACT).
- **Concentration** — customers #1 and #2 were 11% and 10% of 2025 net sales (FACT).
- **India** — \$195.6M in 2025; Europe nearly absent (FACT).

COST STRUCTURE

- **Cost of sales** — \$3,099.0M, 59.4 % of net sales (FACT).
- **Operating expenses** — \$523.5M: SG&A \$203.8M, R&D \$233.4M, start-up \$86.3M (FACT).
- **Capex** — \$869.9M in 2025 (2024: \$1,526.1M) (FACT).
- **Freight and tariffs** — logistics up \$173.1M, warehousing up \$130.7M, tariffs on imported modules \$94.4M (FACT).
- **Warranty** — \$79.4M liability at Dec 31, 2025; the 10-K also cites a \$50M specific liability for the Series 7 issue (FACT).

REVENUE STREAMS

- **Module sales** — \$5,219.4M FY2025 net sales (+24%); 17.5 GW sold (FACT).
- **Profit** — gross profit \$2,120.3M (40.6%); net income \$1,528.2M (FACT).
- **Manufacturing credit** — about 17 cents per watt for U.S.-made modules; \$1,401.6M of 2025 credits sold for \$1,336.3M cash (FACT / INFERENCE sum).
- **H1 2026** — net sales \$2,100.4M (+8%), net income \$769.2M (FACT).
- **Q2 2026** — net sales \$1,056.2M (−3.7%); margin 57.3% incl. \$88.6M net tariff-refund benefit (FACT).