

## **SOLARWORLD ENERGY SOLUTIONS LIMITED**

### **BUSINESS MODEL**

**Core Business:** End-to-end solar energy solutions focusing on EPC (Engineering, Procurement, and Construction) services

**Operations:** Project design, equipment procurement, installation, commissioning and O&M services for solar power projects

**Project Types:** Ground-mounted and rooftop solar installations for PSUs and commercial & industrial clients

**Execution Capabilities:** Completed projects of 253.67 MW AC/336.17 MW DC; ongoing projects of 765 MW AC/994 MW DC

**Backward Integration:** Solar panel manufacturing operational; upcoming 1.2 GW solar cell manufacturing facility

### **ADVANTAGES OF SOLARWORLD ENERGY SOLUTIONS**

### **Dual Business Models**

CAPEX model (customer-owned) and RESCO model (company-owned with PPA) offering flexibility to clients

## **Integrated Value Chain**Backward integration into m

Backward integration into manufacturing enhances margins and ensures supply security

### **Technical Expertise**

Strong project execution capabilities with 336.17 MW DC completed projects and expanding portfolio

### **High Growth Sector**

Positioned in rapidly growing solar energy sector with strong government policy support

### **REVENUE MODEL**

**EPC Services:** Turnkey solar project construction contracts (₹477.93 Cr in FY25)

Product Sales: Solar panels/modules and cells (₹61.05 Cr in FY25)

O&M Services: Post-commissioning support under multi-year contracts (₹5.70 Cr in FY25)

**Project Execution:** 

CAPEX Model: Turnkey solutions with customer ownership

RESCO Model: Company installs, owns & operates projects, selling power via long-term PPAs

**O&M Services:** Bundled with ~95% of EPC projects for 2-5 year periods

### **IPO DETAILS**

Total Offer Size:₹490 CrFresh Issue:₹440 CrOffer for Sale:₹50 CrMarket Cap:₹2,602 CrIssue Type:Book Building

Face Value:₹5 per shareShare Price:₹351EPS (FY25):₹10.68P/E Ratio:33.8xListing:NSE & BSE

## **FINANCIAL HIGHLIGHTS (FY23-25)**

REVENUE FROM OPS. **₹544.77 Cr** 

₹77.05 Cr

PAT

**40.27%** (FY25)

ROE

(FY25)

<sup>\*</sup>Based on Red Herring Prospectus dated September 17, 2025.

## **BUSINESS MODEL & OPERATIONS**

### **SOLAR EPC SERVICES**

### **End-to-End Solar Solutions**

Solarworld Energy Solutions offers comprehensive turnkey solutions for solar power projects, established in 2013. The company specializes in:

- Engineering: Designing optimal solar plant layouts
- Procurement: Sourcing high-quality components
- Construction: Installation and commissioning
- Operations & Maintenance: Post-commissioning support

Completed Projects: 253.67 MW AC / 336.17 MW DC
Ongoing Projects: 765 MW AC / 994 MW DC
Battery Storage: 325 MW / 650 MWh

### **DELIVERY MODELS**

01

#### **CAPEX Model**

Customer-owned solar projects where Solarworld provides end-to-end EPC services. Includes design, installation, commissioning, and grid connectivity. Plant ownership remains with the customer.

02

### **RESCO Model**

Solarworld invests in, builds, owns, and operates the solar plant. Customers sign long-term PPAs (Power Purchase Agreements) to buy electricity at agreed rates with no upfront investment.

### **CLIENT SEGMENTS**

## Public Sector Undertakings

Major government clients including SJVN Green Energy Limited (key customer)

# Commercial & Industrial

Private sector clients seeking renewable energy solutions for operational facilities

### **OPERATIONS & EXPANSION**

### **OPERATIONS & MAINTENANCE SERVICES**

Solarworld provides comprehensive O&M services to ensure long-term performance and reliability of solar power plants:

- 95% of EPC projects bundled with O&M services
- Service contracts ranging from 2-5 years
- Performance monitoring and optimization
- Preventive and corrective maintenance
- Provides stable, recurring revenue streams

### MANUFACTURING EXPANSION

**Solar Panel Manufacturing:** Operational facility in partnership with ZNSHINE PV-Tech Co. Limited (July 21, 2025)

**Upcoming 1.2 GW Solar Cell Facility:** New TopCon cell manufacturing unit planned in Pandhurana, Madhya Pradesh (primary IPO objective)

**Vertical Integration Strategy:** Moving up the value chain to secure supply, improve margins, and capitalize on government incentives

**BESS Capabilities:** Expanding into Battery Energy Storage Systems with ongoing projects of 325 MW/650 MWh

### **COMPETITIVE ADVANTAGES**





**End-to-End Solutions** 

**Dual Business Models** 





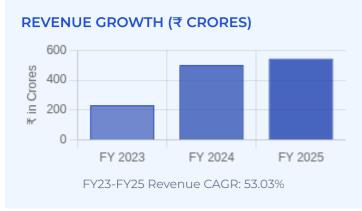
Vertical Integration

**Execution Excellence** 

## **REVENUE MODEL**

### **REVENUE STREAMS**





### **REVENUE MODEL DETAILS**

### **KEY REVENUE SOURCES**

**EPC Services** ₹477.93 crores (87.73%)

Turnkey solar project construction contracts under CAPEX and RESCO models. Core business segment with strong growth driven by government and C&I clients.

Product Sales ₹61.05 crores (11.21%)

Sale of solar panels and cells from manufacturing operations. Significant growth area with 19,530% YoY increase from FY24 following backward integration into manufacturing.

**O&M Services** ₹5.70 crores (1.05%)

Recurring revenue from operations and maintenance contracts, typically bundled with EPC projects for 2-5 year periods. 29% growth from FY24 with expanding installed base.

Other Revenue ₹0.09 crores (0.02%)

Ancillary income including sale of scrap materials from project operations.

### **BUSINESS MODEL INTEGRATION**

**CAPEX Model:** One-time revenue recognition based on project completion milestones

**RESCO Model:** Long-term recurring revenue through PPAs with fixed tariff rates

**Vertical Integration:** Manufacturing capability now provides both internal supply security and external revenue stream

**Value Chain:** Moving up the value chain with planned manufacturing expansion to enhance margins and control

### **REVENUE SUMMARY (FY 2025)**

₹544.77 Cr

Total Revenue

9% YoY Growth

EBITDA Margin

**19.6**%

14.1%

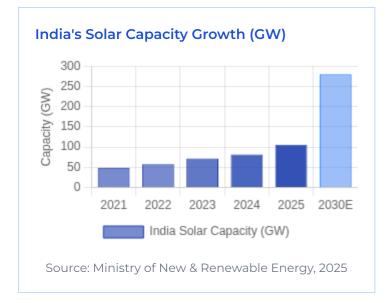
PAT Margin

**40.27**%

ROE

## INDIAN SOLAR INDUSTRY ANALYSIS

### SOLAR ENERGY MARKET



### **KEY MARKET INSIGHTS**

**Installed Capacity:** 105.65 GW as of March 2025, with 23.8 GW added in FY25

**2030 Target:** Government targets 280 GW solar capacity as part of 500 GW non-fossil fuel goal

**Future Growth:** Expected addition of 170-180 GW new solar capacity over FY26-FY30

**Total Addressable Market:** Based on average cost of ₹4.5-5 Cr/MW, the 170-180 GW capacity addition represents a TAM of approximately ₹7.5-9.0 lakh Cr over next 5 years

Market Growth: Indian renewable energy market projected to grow at 8.1% CAGR (2025-2033)

## **POLICY SUPPORT**

### **PLI Scheme**

₹24,000 crore incentives for domestic manufacturing of highefficiency modules

### **BCD** on Imports

Basic Customs Duty on imported solar cells and modules

### **ALMM Listing**

Approved List of Models & Manufacturers to promote domestic production

### **Net Metering**

Supportive policies for rooftop solar installations across states

### **COMPETITIVE LANDSCAPE**

### **MAJOR EPC PLAYERS**

Tier 1 Players (>12 GW)

Tata Power Solar, Sterling 8

Tata Power Solar, Sterling & Wilson Renewable Energy

Leading market position with strong execution capabilities and large-scale project experience

Tier 2 Players (1-12 GW)

Waaree Renewables, L&T, Mahindra Susten, Jakson Green, Rays Power

Well-established players with growing portfolios and specialized capabilities

Tier 3 Players (<1 GW)

Solarworld, KPI Green, Prozeal Infra, Gensol Emerging players with specialized focus and growing capacity

### **MODULE MANUFACTURING**

Total capacity: ~101 GW (Aug 2025)

- Waaree Energies
- Tata Power Solar
- Adani Solar (Mundra)
- ReNew Photovoltaic
- First Solar

**T2** 

**T3** 

### **CELL MANUFACTURING**

Total capacity: ~25 GW (2025)

- Premier Energies
- Waaree Energies
- Tata Power Solar
- Adani Solar
- Jupiter Solar

### **TECHNOLOGY TRENDS**

TopCon solar cell technology is becoming dominant, projected to capture 70-80% market share by 2025-26.

101 GW25 GW23.8 GW40-45%ModuleCellAdded in3rd Party EPCCapacityCapacityFY25Share



## **MANAGEMENT & PROMOTERS**

### **BOARD OF DIRECTORS**

### **EXECUTIVE DIRECTORS**



### Kartik Teltia

KT Managing Director

Chartered Accountant with over 10 years of experience in the solar sector. Leads strategic initiatives and company operations.



### Rishabh Jain

Whole-time Director

Chartered Accountant with 10+ years of experience in finance and operations. Oversees day-to-day business activities.

#### NON-EXECUTIVE DIRECTORS

- Sushil Kumar Jain Finance & Taxation Expert
- **Mangal Chand Teltia Business Development**

### INDEPENDENT DIRECTORS

- · Ramakant Pattanaik Ex-Indian Navy Vice Admiral
- Rini Chordia IIT Delhi, ISB Graduate

### **KEY MANAGERIAL PERSONNEL**



**Mukut Goyal** MG Chief Financial Officer

Varsha Bharti Company Secretary

### **PROMOTER GROUP**

## **INDIVIDUAL PROMOTERS** Kartik Teltia **KT** Managing Director & Key Promoter Rishabh Jain **RJ** Whole-time Director & Promoter **Mangal Chand Teltia MCT** Non-Executive Director & Promoter Sushil Kumar Jain **SKJ** Non-Executive Director & Promoter

### **CORPORATE PROMOTERS**

**Anita Jain** 

Promoter

Pioneer Facor IT Infradevelopers Private Limited **Pioneer Securities Private Limited** 

**Pioneer Fincap Private Limited** 

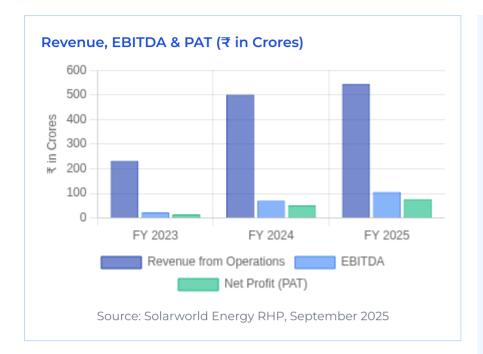
### **OWNERSHIP STRUCTURE**

**78.7**% **Promoter Holding** 

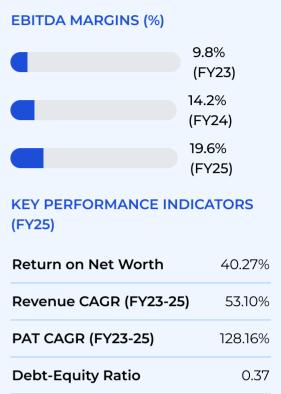
Promoters hold 58,339,886 Equity Shares Out of total 74,137,042 pre-offer shares

## **FINANCIAL PERFORMANCE (FY23-FY25)**

### **3-YEAR FINANCIAL SNAPSHOT**



### **KEY METRICS**



## **DETAILED FINANCIAL PERFORMANCE (₹ IN CRORES)**

Particulars	FY23	FY24	FY25
Revenue from Operations	232.46	501.02	544.77
YoY Growth (%)	-	115.53%	8.73%
EBITDA	22.88	71.09	106.75
EBITDA Margin (%)	9.84%	14.19%	19.59%
PAT	14.84	51.69	77.05
PAT Margin (%)	6.38%	10.32%	14.14%
Net Worth	21.91	73.60	309.07
Total Assets	120.43	155.02	598.02





## FINANCIAL HIGHLIGHTS

- Strong revenue growth with 53.1% CAGR (FY23-25)
- EBITDA margin improved from 9.8% to 19.6%
- PAT grew at impressive 128.2% CAGR (FY23-25)
- Return on Net Worth stands at robust 40.27%
- Consistent improvement in operational efficiency
- Significant increase in net worth and total assets in FY25

## **KEY RISK FACTORS**

### **CRITICAL INVESTMENT RISKS**



### **Customer Concentration Risk**

In FY25, 79.19% of revenue came from a single customer (SJVN Green Energy Limited). Loss of this key customer could severely impact business operations and financial performance.



### **Project Execution & Cost Risks**

EPC projects face potential cost overruns, execution delays, performance guarantee failures, and unforeseen site challenges. These issues could significantly impact profitability and reputation.



### **Geographic Concentration**

Historically, a large portion of business is from Uttar Pradesh. Regional policy changes, natural disasters, or market saturation in this area could adversely affect operations.



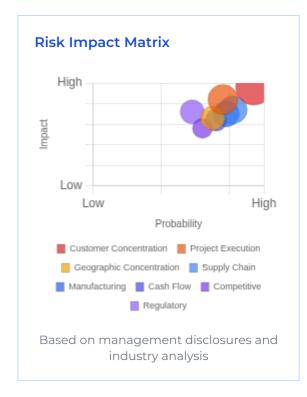
## **Supply Chain Vulnerability**

High dependence on suppliers for modules, cells, and components. Raw material price volatility, supply disruptions, and import restrictions (especially from China) can impact costs and project timelines.

### ADDITIONAL RISK CONSIDERATIONS

- Manufacturing
  Inexperience
  Limited experience in
  manufacturing;
  significant capex for new
  cell facility
- 7 Competitive Intensity
  Highly competitive EPC
  market with established
  players and thin margins
- Cash Flow Challenges
  Historical negative
  operating cash flows;
  working capital
  mismatch risks
- Regulatory Changes
  Dependency on
  favorable government
  policies and incentives

### **RISK ASSESSMENT**



# BANK GUARANTEES & CONTINGENT LIABILITIES

The company has significant exposure to:

- Performance guarantees on EPC contracts
- Bank guarantees for bid securities
- Warranties on installed systems
- Contingent liabilities related to ongoing projects

Any failure to meet contractual obligations could trigger these guarantees, impacting financial stability.

### OTHER KEY RISKS

### **Property & Operational Risk**

Main offices and facilities are on leasehold properties, creating potential business disruption risk if leases are not renewed on favorable terms.

### Seasonal & Weather Impacts

Installation activities are affected by monsoons and extreme weather, potentially causing project delays and seasonal revenue fluctuations.

### **Technology Obsolescence**

Rapid evolution of solar technology could render current equipment or manufacturing investments outdated before achieving ROI.

## **GROWTH DRIVERS & OPPORTUNITIES**

### **MARKET & POLICY DRIVERS**



### STRONG POLICY SUPPORT

**PLI Scheme for Solar Manufacturing:** Production-linked incentives promoting domestic manufacturing of cells and modules

**ALMM Policy:** Approved List of Models and Manufacturers providing market protection for domestic producers

**Basic Customs Duty (BCD):** 20% on solar modules, 20% on cells to reduce import dependence

**BESS Integration Requirements:** New tenders mandating battery storage components

**Net Metering Policies:** Favorable regulations for rooftop solar deployment

### ADDRESSABLE MARKET SIZE

170-180 GW

> New Solar Capacity (FY26-FY30)

₹3-3.5 Lakh Cr

Addressable EPC Opportunity (Third-Party EPC Market)

EPC services represent ~40-45% of total market, with expected 15% CAGR through 2030

### **COMPANY GROWTH STRATEGIES**

### **VERTICAL INTEGRATION**

MODULE MANUFACTURING
Operational facility in partner

Operational facility in partnership with ZNSHINE PV-Tech - secures supply chain and enhances margins

O2

CELL MANUFACTURING EXPANSION

Planned 1.2 GW TopCon cell facility in

Pandhurana, MP - moving up value chain

with higher technology

BATTERY ENERGY STORAGE SYSTEMS

Expansion into BESS with ongoing projects of 325 MW/650 MWh - addressing growing demand for storage solutions

### **CUSTOMER BASE DIVERSIFICATION**

Recent expansion with orders from four new customers representing 88.54% of order book (as of July 31, 2025):

0% 88.54% New Customers

100%

Reducing dependency on SJVN Green Energy Limited (previously >75% of revenue) and expanding geographic presence beyond Uttar Pradesh

### **TECHNOLOGY ADVANCEMENT**

Solarworld is investing in TopCon cell technology, projected to capture 70-80% of global market by 2028:

### **TopCon Technology**

Higher efficiency (23-24%) and better performance ratio compared to conventional modules

### Expanding O&M Business

Focus on recurring revenue through expanding O&M service contracts

### **Smart O&M**

AI/ML-driven operations & maintenance enhancing plant performance and reliability

### **Factory Automation**

Smart manufacturing techniques for quality and efficiency improvement

## **VALUATION ANALYSIS**

### **IPO VALUATION HIGHLIGHTS**

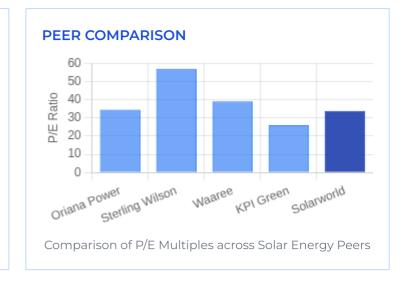
### **Issue Structure & Key Metrics** Offer Size: ₹490 Cr Shares Outstanding: 7.41 Cr Fresh Issue: ₹440 Cr **IPO Price:** ₹351 per share Offer for Sale: ₹50 Cr Market Cap: ₹2.602 Cr 600 500 in Crores 400 300 200 100 0 EBITDA (FY25) Revenue (FY25) Net Worth Source: Solarworld Energy Solutions RHP, September 2025

### **KEY FINANCIAL RATIOS**



### **VALUATION INSIGHTS**

- **IPO Price:** ₹351 per share
- P/E Ratio: 33.8x at IPO price (based on FY25 EPS)
- Growth Premium: Company's rapid growth (43.8% revenue CAGR FY23-25) justifies premium multiple
- Return Metrics: Strong ROE (40.27%) indicates operational efficiency and profitability
- Strategic Valuation: Manufacturing expansion could drive future value creation beyond current financials



### **ADDITIONAL VALUATION CONTEXT**

### **KEY VALUE DRIVERS**

- · Backward integration into cell manufacturing
- Expansion into Battery Energy Storage Systems (BESS)
- Growing customer diversification (reducing concentration risk)
- Government policy incentives (PLI, ALMM)
- Potential higher margins through value chain integration

### **VALUATION CONSIDERATIONS**

- Customer concentration (SJVN Green Energy dependence)
- Geographic concentration (Uttar Pradesh focus)
- Competitive intensity in solar EPC sector
- Execution risk in new manufacturing ventures
- Market positioning vs larger established players

## **PEER COMPARISON & INVESTMENT VIEW**

### PEER COMPARISON

Company	Market Cap (₹ Cr)	P/E Ratio	Revenue (₹ Cr)	PAT (₹ Cr)
Oriana Power	5,400	34.5	987	159
Sterling Wilson Renewables	6,324	57	6,302	86
Waaree Renewable Technologies Limited	11,380	39	1,597	229
KPI Green Energy	9,500	26	1,735	325
Solarworld Energy	2,600	33.8	551	77

Data as of latest available financials. Solarworld figures for FY2025. Based on proposed valuation of ₹351 per share.

### **INVESTORZONE VIEW**

The company operates in the solar energy space which has excellent total addressable market potential, but faces huge competition in the sector. A significant concern is that until FY25, approximately 75% of revenue is derived from a single customer (SJVN), which presents a substantial concentration risk. The company is now attempting to diversify its customer base, but success remains to be seen. Additionally, most of its business currently comes from Uttar Pradesh, adding geographic concentration risk.

It's worth noting that the promoters are cashing out ₹50 Cr through the OFS component, which raises questions as future market conditions may become more challenging. In the solar space, there is minimal product differentiation - success primarily depends on execution capabilities and achieving economies of scale. At a pre-money P/E multiple of 33x, the valuation appears to be on the higher side compared to the company's risk profile and certain peers in the sector.

### INVESTMENT CONSIDERATIONS

### **POSITIVES**

- Strong revenue growth (43.8% CAGR over FY23-25)
- Impressive profitability (33.1% EBITDA margin)
- High return on net worth (40.3%)
- Backward integration into manufacturing
- Strong government policy support
- Robust solar capacity addition targets

### **CONCERNS**

- High customer concentration (SJVN >75%)
- Geographic concentration (Uttar Pradesh)
- Large unproven manufacturing capex
- Supplier/raw material price volatility
- Intense competition in EPC space
- Execution risks for new manufacturing venture

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