

## Waaree Energies Limited

March 19, 2025

Facilities/Instruments	Amount (₹ crore)	Rating <sup>1</sup>	Rating Action
Long-term bank facilities	1,904.00 (Reduced from 2,200.00)	CARE A+; Stable	Upgraded from CARE A; Stable
Long-term / Short-term bank facilities	150.00	CARE A+; Stable / CARE A1+	Assigned
Long-term / Short-term bank facilities	810.00 (Enhanced from 105.00)	CARE A+; Stable / CARE A1+	LT rating upgraded from CARE A; Stable and ST rating assigned
Long-term / Short-term bank facilities	2,690.00 (Enhanced from 394.00)	CARE A+; Stable / CARE A1+	Upgraded from CARE A; Stable / CARE A2+
Long-term bank facilities	-	-	Withdrawn

Details of instruments/facilities in Annexure-1.

### Rationale and key rating drivers

Ratings upgrade on bank facilities of Waaree Energies Limited (WEL), which is engaged in manufacturing solar PV cells and solar PV modules, factors in significant improvement in business and financial performance of the company as reflected by improvement in capacity utilisation, enhanced demand prospects for domestic solar cells and module manufacturers, and continued growth in operating income, and sustenance of satisfactory profitability margins and improvement in capital structure. WEL has recorded total operating income (TOI) of ₹ 11,446 crore and ₹ 10,441 crore with operating margins of 14.2% and 17.2% in FY24 and 9M-FY25, respectively. CARE Ratings Limited (CARE Ratings) positively factors in successful completion of the initial public offer (IPO) through which WEL has raised ₹ 3,600 crore by issuance of primary shares, and completion of 5.4 GW of cell manufacturing line in Chikhli, Gujarat. Of the 5.4 GW cell capacity, the commercial production for 1.4 GW capacity has started in February 2025, and the remaining 4.0 GW capacity is expected to commence in next few weeks. WEL has increased its module manufacturing capacity from 12 GW as on December 2023 end to 14.9 GW as on February 2025 end by establishing 1.3 GW line under its wholly owned subsidiary Indosolar Limited and 1.6 GW capacity in Texas region of USA under its wholly owned subsidiary Waaree Solar Americas Inc.

CARE Ratings notes WEL has signed a share purchase agreement (SPA) with Enel Green Power Development S.R.L. (EGPD) to acquire 100% stake in Enel Green Power India Private Limited (Enel) for ~₹ 792 crore. Currently, Enel has an operational portfolio of 640 MWac (750 MWdc) and ~2 GW of capacity under development. As articulated by the management, the transaction is expected to be completed within the next few months, subject to attainment of regulatory and lender/s approvals. As articulated by the management, the company does not intend to own these assets in the long run and would be flipping the operating assets from this pool over the near term. The primary objective of purchasing this platform is access to EPC and module supply business for the under-construction assets being developed in the pool. The company intends to allocate not over ₹ 700 crore over the near term for developing the underlying assets in this vertical. CARE Ratings will continue to monitor developments related to the acquisition and assess its impact on WEL's consolidated credit risk profile.

Ratings continue to be supported by WEL's long track record in production and sale of solar modules. The presence of strong customer profile comprising of leading domestic and global developers and healthy order book position of ~26.5 GW as on December 2024 end provides revenue visibility for the near-to-medium term. The demand prospects for domestic solar cell and module manufacturers remain buoyant considering policy measures and schemes initiated by the Government of India (GoI) such as imposition of basic customs duty (BCD), implementation of the Approved List of Models and Manufacturers (ALMM-I) requiring use of domestically manufactured modules in all solar projects from April 01, 2024, and mandatory use of domestic content requirement (DCR) solar modules in solar installations under central government-aided schemes such as PM Surya Ghar Muft Bijli Yojana (PM-SGMBY) and PM Kisan Urja Suraksha evam Utthan Mahabhiyan (PM-KUSUM) Yojana, among others. The company's healthy order book position is a testament of this. Going forward, with implementation of ALMM for solar cells (ALMM-II), demand prospects for the domestically manufactured solar cells are expected to remain strong as it mandates use of solar modules made from domestically manufactured solar cells for projects to be commissioned beyond June 01, 2026.

<sup>1</sup>Complete definition of ratings assigned are available at [www.careedge.in](http://www.careedge.in) and other CARE Ratings Limited's publications.

Ratings are constrained considering vulnerability of the company's profitability to variation in raw material prices and foreign exchange rates given the reliance on imports for solar cell procurement and the intense competition in the solar module manufacturing business. The company is further exposed to the performance risk of modules, however this is mitigated by provisioning for warranty. CARE Ratings also factors in the project execution risks pertaining to the implementation of its proposed 6.0 GW deeply integrated (wafer + cell + module) solar manufacturing capacity in Odisha. The given facility is expected to get commissioned in a phased manner by FY27 end. The execution progress and ramping up of operations thereafter would be key monitorables from a credit standpoint. This apart, WEL is exposed to risks pertaining to new lines of business viz. green hydrogen electrolyser manufacturing and battery energy storage systems (BESS), However the same constitutes for ~15% of the total capital deployed by the company.

## **Rating sensitivities: Factors likely to lead to rating actions**

### **Positive factors**

- Sustenance of operating margins above 20% over the medium-to-long run along with maintenance of operating cycle below 75 days.
- Maintenance of total debt /earnings before interest, taxation, depreciation, and amortisation (TD/EBITDA) below 1.0x on a sustained basis.
- Successful commissioning and ramp-up of green hydrogen electrolyser manufacturing capacity and battery energy storage systems with actual profitability from this segment being higher than the envisaged levels.

### **Negative factors**

- Deterioration in financial risk profile on account of lower than envisaged growth in scale and moderation in operating profitability margins below 12%.
- Debt funded capex resulting in TD/ EBITDA above 1.8x on a sustained basis.
- Any Adverse regulatory outcome which reduces the competitiveness of domestic manufacturers against international players.
- Significant delay in commissioning and ramp-up of green hydrogen electrolyser manufacturing capacity and battery energy storage systems with profitability from this segment being significantly lower than the envisaged levels.

### **Analytical approach:** Consolidated

CARE Ratings has analysed Waaree Energies Limited on the basis of consolidated financials of the entity. List of subsidiaries getting consolidated at WEL as on March 31, 2023, is annexed in Annexure 6.

### **Outlook:** Stable

The stable outlook on the CARE A+ rating of WEL reflects CARE Ratings' opinion that the company will continue to operate at envisaged production levels and will be able to execute the under-construction deeply integrated capacity in a timely manner and ramp up its production per envisaged timelines. Further The outlook is supported by the expected robust demand for domestically manufactured solar cells and modules over the near-to-medium term.

### **Detailed description of key rating drivers:**

#### **Key strengths**

##### **Established market position in the solar module manufacturing and solar EPC industry**

WEL is an established player in the solar module manufacturing industry with track record of over 15 years. The company is the largest solar module manufacturer in India with 1.4 GW cell and 14.9 GW module manufacturing capacities (including 1.6 GW module capacity in US) at February 2025 end. In addition to solar module manufacturing, the Waaree group also undertakes engineering, procurement and construction (EPC) activities for solar power plants, which contributes 8-10% of total sales. WEL is also part of the ALMM-I for solar PV module manufacturing in India having enlisted capacity of ~12 GW per the ALMM-I list dated February 17, 2025, released by the Ministry of New & Renewable Energy (MNRE).

## **Growing manufacturing capacity with improvement in production and sales over past few years**

WEL has scaled up its production capacity significantly in the last two-three years as reflected by module manufacturing capacity of 14.9 GW at present against 4.0 GW capacity as on FY22 end. Consequently, the size and scale of the company's operation grew considering satisfactory capacity utilisation of plants. The company's sales of the company also witnessed a significant uptick as reflected by operating income of ~₹ 11,446 crore and ₹ 10,441 crore in FY24 and 9M-FY25, respectively, against ₹ 6800 crore in FY23 and operating margins of 14.2% and 17.2% in FY24 and 9M-FY25, respectively. Going forward, CARE Ratings expects the operating income to remain above ₹ 12,000 crore for FY25 given the increased operational capacity and healthy order book position in place.

## **Healthy order book position and diversified customer profile**

The company's order book continues to remain at elevated levels as reflected by an order book of ~26.5 GW approximating ~₹ 50,000 crore as on December 2024 end against an order book of ~20 GW approximating to ~₹ 47,000 crore as on December 2023 end. The order book proportion has changed significantly with proportion of domestic orders increasing from ~16% as on December 2023 end to ~46% as on December 2024 end. Going forward, the management is aiming to increase share of domestic orders up to ~50% in near future. WEL remains strongly placed considering diversification of sales as it has a strong position against the other domestic original equipment manufacturers (OEMs) (in utility scale and rooftop projects) and reasonable presence in the export market.

## **Satisfactory capital structure and debt coverage metrics**

The company's capital structure is satisfactory as reflected by overall gearing of 0.3x as on September 2024 end. The company's overall gearing has remained below unity as the company has not drawn any debt amount to fund its 5.4 GW cell manufacturing line as the liquidity position was supported due to healthy customer advances and internal cash accruals. While the mentioned debt would be drawn over the near term, the management has articulated that the quantum of debt would be lower by ~₹ 700-800 crore than previously envisaged, thereby resulting in a better-than-expected capital structure. Further, With successful completion of IPO in Q3-FY25, the company's capital structure is expected to remain below unity despite drawal of its currently sanctioned term debts.

## **Strong competitiveness of the domestic solar cell and module manufacturers against Chinese manufacturers**

The demand prospects for domestic solar cell and module manufacturers remain buoyant on account of various policy measures and schemes initiated by the Government of India (GoI) such as imposition of basic customs duty (BCD) of 40% and 25% on imported solar modules and solar cells, respectively, from April 01, 2022, and imposition of Approved List of Models and Manufacturers (ALMM-I) for domestic modules from April 01, 2024, which is expected to be a key growth driver for the domestic manufacturers by making them cost-competitive compared to Chinese players.

Furthermore, the Mandatory use of domestic content requirement (DCR) solar modules in solar installations under central government-aided schemes such as PM Surya Ghar Muft Bijli Yojana, and PM-KUSUM Yojana among others under which 40% raw material shall be domestically manufactured, strengthens the competitive position of homegrown solar cell players such as WEL having 5.4 GW of solar cell manufacturing capacity at present, in the domestic market. Additionally, Introduction of production-linked incentive (PLI) scheme to promote backward integrated plants are also expected to benefit domestic module manufacturers over the medium-to-long term.

Going forward, CARE Ratings expects the demand prospects for WEL to remain strong in the domestic market, given the favourable policy support by the Government. Furthermore, the Implementation of ALMM for solar cells (ALMM-II) is expected to strengthen the demand prospects for domestically manufactured solar cells as it mandates use of solar modules made from domestically manufactured solar cells for projects to be commissioned beyond June 01, 2026.

## **Key weaknesses**

### **Susceptibility of profitability to volatility in raw material prices and foreign exchange rates**

The company's operating margins remained satisfactory as reflected by EBITDA margin of 14.2% and 17.2% in FY24 and 9M-FY25 against 13.0% in FY23 and 4.6% in FY22. However, this remains susceptible to risks of fluctuations in prices of raw material which include polysilicon, wafer, solar cells, aluminium panels, and glass. The key raw material includes solar cells which constitutes ~50% of the total raw material cost, has witnessed price fluctuations in the last two years. Though WEL pass through

rise in input cost to its customers as it undertakes order-backed procurement with price indexation to mitigate this risk, any sharp rise in input cost and the company's inability to pass it to its customers would adversely impact the company's profitability. Moreover, the company has hedging mechanism policy to mitigate impact of adverse movement in currency exchange rates. Going forward, CARE Ratings estimates the profitability margins to remain in double digits in FY25 and expects a similar trend over the near-to-medium term.

### **Execution risk for under-implementation large scale projects**

WEL has large capacity expansion projects under construction, which entails setting up 6 GW deeply integrated capacity where the company is setting up 6 GW each of solar module, solar cell, and wafer/ingot manufacturing capacity in the state of Odisha under its wholly owned subsidiary Sangam Solar One Private Limited (Sangam Solar). The project entails an estimated capex of ~₹ 9000 crore which is proposed to be funded through a mixture of IPO proceeds upto an amount of ₹ 2775 crore, ~₹ 600-700 crore from internal accruals of the company, and term debt of up to ~₹ 5500 crore. As a result, the company's capital structure is expected to get leveraged in near future. Given the relatively large capital outlay, WEL also remains exposed to execution risks which emanate from implementation of these projects. While the company's track record and expertise in implementing module capacity expansion projects in the past is expected to aid in project execution, the company's ability to execute the planned capex without major time and cost overrun would be critical from a credit standpoint.

This apart, WEL is exposed to risks pertaining to new line of business viz. green hydrogen electrolyser manufacturing and BESS. However, the same constitutes for ~15% of the total capital deployed by the company.

### **Performance risk of modules given the presence of long-term warranties**

The business remains exposed to risks pertaining to any devolvement of warranties provided on the solar modules. The modules are typically sold with a 10-year warranty for product manufacturing defects and a 25-year warranty relating to output performance. However, the warranty claims have remained very low in the past few years. Furthermore, WEL has been making adequate provisions for warranty, thereby mitigating itself from any kind of inadvertent claims that may arise in future.

### **Technology risk owing to the evolving technology for solar cells and modules**

WEL is exposed to technology risk since solar cells and modules are subject to technical advancements thereby exposing the products manufactured by the company to risk of obsolescence in terms of technology. Nevertheless, as per the management, company plans to operate the plant in a modular fashion enabling it to switch from Mono PERC technology to TOPCon technology.

### **Intense competition in the solar module manufacturing business**

WEL faces intense competition in the solar module business from other domestic manufacturers as well as international players thereby exposing it to demand related risks. ~80-85% solar modules used in India were imported till FY22 end given the competitive advantage of imported modules against the indigenous modules. However, with the imposition of BCD on imported solar modules and cells (25%) and applicability of ALMM-1, the cost competitiveness of domestic module manufacturers has improved. While the government remains focussed on building domestic manufacturing capabilities, any adverse regulatory/policy level changes which reduces the competitiveness of domestic manufacturers would be a key negative sensitivity.

### **Liquidity: Adequate**

The liquidity position of the company is adequate as reflected by cash and bank balance aggregating to ~₹ 6800 crore as on December 31, 2024 at standalone level. Additionally, The company has working capital limits of ₹ 810 crore which is almost unutilised as on December 2024 end. Per CARE Ratings' base case scenario, WEL's internal accruals are expected to be adequate to service its debt obligations.

### **Environment, social, and governance (ESG) risks**

WEL is dedicated to fostering sustainable living by championing environmental preservation, promoting health and safety through adoption of green energy practices, empowering children through educational initiatives, and actively engaging communities in environmental stewardship programs. Notably, 50% of WEL's board consists of independent directors, ensuring robust governance and diverse perspectives.

## Applicable criteria

[Consolidation](#)  
[Definition of Default](#)  
[Liquidity Analysis of Non-financial sector entities](#)  
[Rating Outlook and Rating Watch](#)  
[Manufacturing Companies](#)  
[Financial Ratios – Non financial Sector](#)  
[Withdrawal Policy](#)  
[Project stage companies](#)  
[Short Term Instruments](#)

## About the company and industry

### Industry classification

Macroeconomic indicator	Sector	Industry	Basic industry
Industrials	Capital goods	Electrical equipment	Other electrical equipment

Incorporated in 1990, WEL is primarily engaged in manufacturing solar PV cells and modules. As on February 12, 2025, WEL has an operational solar cell and module manufacturing capacity of 1.4 GW and 14.9 GW, respectively, with manufacturing facilities across Gujarat, Uttar Pradesh and Texas, USA. This apart, The company is developing 6 GW deeply integrated solar module manufacturing capacity in the state of Odisha.

Apart from the sale and manufacture of solar PV cells and modules, the company also provides EPC services for solar power plants in India and overseas, and trades in other solar-related products such as solar water heaters and solar water pumps.

### Financial performance: WEL (Consolidated)

Brief Financials (₹ crore)	March 31, 2023 (A)	March 31, 2024 (A)	December 31, 2024 (UA)
Total operating income	6798	11446	10441
PBILDT	882	1623	1799
PAT	500	1274	1284
Overall gearing (times)	0.5	0.3	NM
Interest coverage (times)	10.7	11.6	NM

A: Audited; UA: Unaudited; NM: Not Meaningful; Note: these are latest available financial results

**Status of non-cooperation with previous CRA:** Not applicable

**Any other information:** Not applicable

**Rating history for last three years:** Annexure-2

**Detailed explanation of covenants of rated instrument / facility:** Annexure-3

**Complexity level of instruments rated:** Annexure-4

**Lender details:** Annexure-5

**Annexure-1: Details of instruments/facilities**

Name of the Instrument	ISIN	Date of Issuance (DD-MM-YYYY)	Coupon Rate (%)	Maturity Date (DD-MM-YYYY)	Size of the Issue (₹ crore)	Rating Assigned and Rating Outlook
Fund-based - LT-Term Loan	-	-	-	September 2027	0.00	Withdrawn
Fund-based - LT-Term Loan	-	-	-	March 2032	1904.00	CARE A+; Stable
Fund-based - LT/ ST-Forward Contract	-	-	-	-	150.00	CARE A+; Stable / CARE A1+
Fund-based - LT/ ST-Working Capital Limits	-	-	-	-	810.00	CARE A+; Stable / CARE A1+
Non-fund-based - LT/ ST-BG/LC	-	-	-	-	2690.00	CARE A+; Stable / CARE A1+

**Annexure-2: Rating history for last three years**

Sr. No.	Name of the Instrument/ Bank Facilities	Current Ratings			Rating History			
		Type	Amount Outstanding (₹ crore)	Rating	Date(s) and Rating(s) assigned in 2024-2025	Date(s) and Rating(s) assigned in 2023-2024	Date(s) and Rating(s) assigned in 2022-2023	Date(s) and Rating(s) assigned in 2021-2022
1	Fund-based - LT-Term Loan	LT	-	-	1)CARE A; Stable (03-Apr-24)	-	1)CARE A-; Stable (07-Feb-23) 2)CARE BBB; Stable (23-Jun-22)	-
2	Fund-based - LT-Term Loan	LT	1904.00	CARE A+; Stable	1)CARE A; Stable (03-Apr-24)	-	1)CARE A-; Stable (07-Feb-23)	-
3	Fund-based - LT/ ST-Working Capital Limits	LT/ST	810.00	CARE A+; Stable / CARE A1+	1)CARE A; Stable (03-Apr-24)	-	1)CARE A-; Stable (07-Feb-23)	-
4	Non-fund-based - LT/ ST-BG/LC	LT/ST	2690.00	CARE A+; Stable / CARE A1+	1)CARE A; Stable / CARE A2+ (03-Apr-24)	-	1)CARE A-; Stable / CARE A2+ (07-Feb-23)	-
5	Fund-based - LT/ ST-Forward Contract	LT/ST	150.00	CARE A+; Stable / CARE A1+				

LT: Long term; ST: Short term; LT/ST: Long term/Short term

**Annexure-3: Detailed explanation of covenants of rated instruments/facilities:** Not applicable

**Annexure-4: Complexity level of instruments rated**

Sr. No.	Name of the Instrument	Complexity Level
1	Fund-based - LT-Term Loan	Simple
2	Fund-based - LT/ ST-Forward Contract	Simple
3	Fund-based - LT/ ST-Working Capital Limits	Simple
4	Non-fund-based - LT/ ST-BG/LC	Simple

**Annexure-5: Lender details**

To view the lender wise details of bank facilities please [click here](#)

**Annexure-6: List of entities consolidated**

Sr No	Name of the entity	Extent of consolidation	Rationale for consolidation
1	Waaree Renewable Technologies Ltd	Full	Subsidiary
2	Waaree Solar America Inc.	Full	Subsidiary
3	Indosolar Limited	Full	Subsidiary
4	Waaree Green Aluminium Pvt Ltd (formerly known as Blue Rays Solar Pvt Ltd)	Full	Subsidiary
5	Sangam Solar One Pvt Ltd	Full	Subsidiary
6	Waaree Forever Energies Solutions Limited (formerly known as Sangam Solar Four Pvt Ltd)	Full	Subsidiary
7	Waaree Clean Energy Solutions Pvt Ltd (formerly known as Sangam Solar Three Pvt Ltd)	Full	Subsidiary
8	Waaree Energy Storage Solutions Pvt Ltd (formerly known as Sangam Solar Two Pvt Ltd)	Full	Subsidiary
9	Waareep Solar One Pvt Ltd	Full	Subsidiary
10	Waaree Power Pvt Ltd	Full	Subsidiary
11	Rasila International Pte Ltd	Full	Subsidiary
12	Waasang Solar One Pvt Ltd	Full	Step-down subsidiary
13	Waaree Energies Middle East FZE	Full	Subsidiary
14	Waaree Renewable Energies Australia Pty Ltd	Full	Subsidiary
15	Sunsational Solar Pvt Ltd	Full	Subsidiary
16	Sunsational Energy Pvt Ltd	Full	Subsidiary

**Note on complexity levels of rated instruments:** CARE Ratings has classified instruments rated by it based on complexity. Investors/market intermediaries/regulators or others are welcome to write to [care@careedge.in](mailto:care@careedge.in) for clarifications.

### Contact us

<b>Media Contact</b>  Mradul Mishra Director <b>CARE Ratings Limited</b> Phone: +91-22-6754 3596 E-mail: <a href="mailto:mradul.mishra@careedge.in">mradul.mishra@careedge.in</a>	<b>Analytical Contacts</b>  Jatin Arya Director <b>CARE Ratings Limited</b> Phone: 91-120-4452021 E-mail: <a href="mailto:Jatin.Arya@careedge.in">Jatin.Arya@careedge.in</a>
<b>Relationship Contact</b>  Saikat Roy Senior Director <b>CARE Ratings Limited</b> Phone: 912267543404 E-mail: <a href="mailto:saikat.roy@careedge.in">saikat.roy@careedge.in</a>	Mayuresh Karavade Assistant Director <b>CARE Ratings Limited</b> Phone: 91-226-8374468 E-mail: <a href="mailto:Mayuresh.karavade@careedge.in">Mayuresh.karavade@careedge.in</a>
	Md Rizwan Ahmad Lead Analyst <b>CARE Ratings Limited</b> E-mail: <a href="mailto:Rizwan.Ahmad@careedge.in">Rizwan.Ahmad@careedge.in</a>

### About us:

Established in 1993, CARE Ratings is one of the leading credit rating agencies in India. Registered under the Securities and Exchange Board of India, it has been acknowledged as an External Credit Assessment Institution by the RBI. With an equitable position in the Indian capital market, CARE Ratings provides a wide array of credit rating services that help corporates raise capital and enable investors to make informed decisions. With an established track record of rating companies over almost three decades, CARE Ratings follows a robust and transparent rating process that leverages its domain and analytical expertise, backed by the methodologies congruent with the international best practices. CARE Ratings has played a pivotal role in developing bank debt and capital market instruments, including commercial papers, corporate bonds and debentures, and structured credit.

### Disclaimer:

The ratings issued by CARE Ratings are opinions on the likelihood of timely payment of the obligations under the rated instrument and are not recommendations to sanction, renew, disburse, or recall the concerned bank facilities or to buy, sell, or hold any security. These ratings do not convey suitability or price for the investor. The agency does not constitute an audit on the rated entity. CARE Ratings has based its ratings/outlook based on information obtained from reliable and credible sources. CARE Ratings does not, however, guarantee the accuracy, adequacy, or completeness of any information and is not responsible for any errors or omissions and the results obtained from the use of such information. Most entities whose bank facilities/instruments are rated by CARE Ratings have paid a credit rating fee, based on the amount and type of bank facilities/instruments. CARE Ratings or its subsidiaries/associates may also be involved with other commercial transactions with the entity. In case of partnership/proprietary concerns, the rating/outlook assigned by CARE Ratings is, inter-alia, based on the capital deployed by the partners/proprietors and the current financial strength of the firm. The ratings/outlook may change in case of withdrawal of capital, or the unsecured loans brought in by the partners/proprietors in addition to the financial performance and other relevant factors. CARE Ratings is not responsible for any errors and states that it has no financial liability whatsoever to the users of the ratings of CARE Ratings. The ratings of CARE Ratings do not factor in any rating-related trigger clauses as per the terms of the facilities/instruments, which may involve acceleration of payments in case of rating downgrades. However, if any such clauses are introduced and triggered, the ratings may see volatility and sharp downgrades.

**For detailed Rationale Report and subscription information,  
please visit [www.careedge.in](http://www.careedge.in)**