

August 27, 2025

Emmvee Energy Private Limited: Ratings upgraded to [ICRA]A-(Stable)/[ICRA]A2+; outlook revised to Stable from Positive; rated amount enhanced

Summary of rating action

Instrument*	Previous rated amount (Rs. crore)	Current rated amount (Rs. crore)	Rating action
Long-term fund-based – Cash credit	175.0	255.0	[ICRA]A-(Stable); upgraded from [ICRA]BBB+(Positive); outlook revised to Stable from Positive; assigned for the enhanced limits
Long-term/Short term – Fund-based/Non-fund based - Others	75.0	75.0	[ICRA]A-(Stable) /[ICRA]A2+; upgraded from [ICRA]BBB+(Positive) /[ICRA]A2; outlook revised to Stable from Positive
Short-term – Non-fund based – Others	0.00	70.0	[ICRA]A2+; assigned
Total	250.00	400.00	

*Instrument details are provided in Annexure I

Rationale

For arriving at the ratings, ICRA has taken a consolidated view of Emmvee Photovoltaic Power Limited (EPPL) and its subsidiary Emmvee Energy Private Limited (Emmvee Energy). The ratings upgrade reflects the stabilisation of operations post commissioning of the integrated solar PV cell-cum-module capacities under Emmvee Energy in FY2025, supporting a healthy growth in the consolidated earnings and improving the leverage and debt coverage metrics. The ramp-up of operations of the integrated facility enhances the cash flow visibility, aided by favourable demand prospects in the domestic solar industry and policy support.

The consolidated operating income of EPPL grew 145% to Rs. 2,336 crore in FY2025 over FY2024, with the operating margin improving to 31.8% in FY2025 from 11.0% in FY2024, driven by growth in sales volume as well as a favourable pricing scenario for modules using PV cells manufactured in India {domestic content requirement (DCR)}. The ratings reflect the improved consolidated leverage and coverage metrics, backed by healthy earnings, with the total debt/OPBDITA reducing to 2.8x in FY2025 from 13.9x in FY2024, and the interest coverage strengthening to 6.9x from 3.1x. The growth momentum is expected to be sustained over the medium term, supported by the ramp-up in utilisation of the existing capacity, planned capacity expansion and a healthy order book of Rs. 7,424 crore as of July 2025. The peak rated module manufacturing of the Emmvee Group (EPPL and Emmvee Energy) stands at 7.8 GW and the peak rated cell manufacturing capacity is 2.9 GW at present. With the expected commissioning of an additional 2.5-GW module capacity in September 2025, the overall module capacity will increase to 10.3 GW. However, it is important to secure a timely and adequate enhancement in working capital limits to support its increasing scale of operations.

The ratings continue to factor in the established presence of the Emmvee Group as one of the leading market players in the domestic solar module manufacturing industry. In addition, Emmvee Energy is backward integrated into solar cell manufacturing, where it holds a strong market position as one of the early entrants. Additionally, Emmvee Energy is included in the Approved List of Models and Manufacturers (ALMM) for solar modules as well as cells, which enhances its market access.

The ratings are, however, constrained by the Emmvee Group's large capex plans of Rs. 5,510 crore towards setting up a 6-GW integrated solar PV cell-cum-module facility which is to be funded through sanctioned debt funding of Rs. 3,306-crore debt and the balance through internal accruals. In this context, for the success of its capital expenditure programme, it is important

to commission the project within the budgeted cost and time, stabilise the facilities and ramp up the sales post commissioning. The capex concentration in FY2027 will elevate the debt levels and exert pressure on the leverage and coverage metrics, though partially mitigated by the incremental cash flows from the scale-up in solar module line capacity in FY2026. Herein, a timely mobilisation of the internal accruals towards capex will remain a key credit monitorable.

The Group's past track record in executing integrated solar PV cell-cum-module capacity project and successfully scaling up provides comfort. EPPL has proposed an initial public offering (IPO), primarily aimed at reducing the consolidated debt, with the DRHP filed in July 2025. The Group's successful execution of the IPO, and its ability to deleverage meaningfully and improve its debt coverage metrics would remain a key monitorable, going forward.

The Emmvee Group's profitability also remains exposed to the volatility in raw material prices and the foreign exchange fluctuations, as its key raw materials are imported and constitute a significant portion of its cost structure. Nevertheless, a hedging mechanism for forex risk and a raw material cost pass-through clause in majority of the orders help mitigate the risk to an extent. The ratings also consider the highly concentrated, though reputed, customer profile and the risk of delays in the execution of projects by the customers.

Further, ICRA notes that the domestic module manufacturing sector is characterised by stiff competition and continues to attract new players, given the policy support towards green energy, with a higher share towards the solar sector. Moreover, there is continuous innovation on the product side in the global market, which necessitates regular upgrades and investments in product development by the Group. ICRA also takes note of the risks pertaining to any devolvement of warranties given on the supply of solar modules, through the warranty claim has remained negligible over the past three fiscal years ended FY2025.

The Stable outlook on the rating reflects ICRA's expectation that the Emmvee Group is likely to sustain its operating metrics. Further, the outlook underlines ICRA's expectation that the Group's incremental capex, which will help expand the manufacturing capacity, will be funded in a manner that it is able to durably maintain its debt protection metrics commensurate with the existing rating.

Key rating drivers and their description

Credit strengths

Established presence in solar module manufacturing industry with backward integration – EPPL is an established player in the solar module manufacturing sector, equipped with the latest TOPCon technology. In addition, Emmvee Energy is backward integrated into solar cell manufacturing, where it holds a strong market position as one of the early entrants. Additionally, Emmvee Energy is included in the Approved List of Models and Manufacturers (ALMM) for solar modules as well as cells, which enhances its market access. The Group has a demonstrated track record of over 15 years in the module manufacturing business.

The Emmvee Group has a peak rated module manufacturing capacity of 7.80 GW and a peak rated cell manufacturing capacity of 2.94 GW as of August 2025. After the completion of the planned capex by FY2028, the Group's module manufacturing capacity will increase to 16.30 GW and cell manufacturing capacity to 8.94 GW.

Improved credit metrics, driven by healthy earnings – The consolidated operating income grew 145% to Rs. 2,336 crore in FY2025 over FY2024, with the operating margin improving to 31.8% in FY2025 from 11.0% in FY2024, driven by growth in sales volume as well as a favourable pricing scenario for DCR modules. The ratings reflect the improved consolidated leverage and coverage metrics, backed by healthy earnings, with the total debt/OPBDITA reducing to 2.8x in FY2025 from 13.9x in FY2024, and the interest coverage strengthening to 6.9x from 3.1x.

Revenue visibility from healthy order book position – The Emmvee Group's order book position was ~Rs. 7,424 crore as on July 2025-end for the supply of PV modules, thereby providing revenue visibility over the medium term. The orderbook includes orders for the supply of modules from reputed customers like Sembcorp Green Infra Private Limited, KPI Green Energy

Limited, Clean Max Enviro Energy Solutions Pvt Ltd, Hero Solar Energy Pvt Ltd, Project Sixteen Renewable Power Pvt Ltd (Ayana) among others. In addition to the scheduled orders in the order book, the Group receives run-rate orders for solar cells, which are fulfilled as received. Further, with an additional 5 GW of module capacity expected to be commissioned in FY2026 — of which 2.5 GW achieved commercial operations in April 2025 — and the ongoing ramp-up of existing module and cell capacities, the Emmvee Group is well-positioned to sustain a growth momentum in its operating performance over the medium term.

Favourable demand outlook for domestic solar industry - The demand outlook for domestic solar module manufacturers remains favourable, supported by the energy transition targets announced by the Government of India with focus on the solar power sector, along with the Govt's plan to promote the development of the domestic solar PV manufacturing value chain. This is reflected through policies such as the imposition of basic customs duty (BCD) on imported cells and modules, the requirement of procuring solar modules from suppliers included in the approved list of module manufacturers (ALMM) which features only domestic suppliers and has been expanded to solar cells, and the notification of the production-linked incentive (PLI) scheme to improve the cost competitiveness of domestic manufacturers.

Credit challenges

Exposure to execution and funding risks from proposed large capex – The Emmvee Group has large capex plans of Rs. 5,510 crore to set up a 6-GW integrated solar PV cell-cum-module facility which is to be funded through Rs. 3,306 crore of sanctioned debt and the balance through internal accruals. The facility is scheduled to become fully operational by April 2027. In this context, for the success of its capital expenditure programme, it is important to commission the project within the budgeted cost and time, stabilise the facilities and ramp up the sales, post commissioning. The capex concentration in FY2027 will elevate the debt levels and exert pressure on the leverage and coverage metrics, though partially mitigated by the incremental cash flows from the scale-up in solar module line capacity in FY2026. Herein, a timely mobilisation of internal accruals towards the capex will remain a key credit monitorable. The Group's past track record in executing integrated solar PV cell-cum-module capacity project and successfully scaling up provides comfort. EPPL has proposed an initial public offering (IPO), primarily aimed at reducing the consolidated debt, with the DRHP filed in July 2025. The Group's successful execution of the IPO, and its ability to deleverage meaningfully and improve its debt coverage metrics would remain the key monitorable, going forward.

High customer concentration risk - The order book is highly concentrated, with the top five customers accounting for ~86% of the total order book as of July 2025-end. Also, the top five customers accounted for 63-75% of the revenue for the last three fiscal years ended FY2025. However, the risk is mitigated to a certain extent by a reputed customer profile and the letter of credit (LC)-backed/advance payments before dispatch. Any execution delays by these customers would adversely impact the Group's ability to scale up its revenue and profitability.

Exposure of profitability to volatility in raw material prices, foreign exchange rate and competitive pressure - The Group's profitability also remains exposed to the volatility in raw material prices and the foreign exchange fluctuations, as its key raw materials are imported and constitute a significant portion of its cost structure. Nevertheless, the hedging mechanism for forex risk and raw material cost pass through for majority of the orders helps mitigate the risk to an extent. Further, ICRA notes that the domestic module manufacturing sector is characterised by stiff competition. Additionally, given the significant policy push towards domestic manufacturing, the competition is likely to increase, evident from the capex plans by some of the larger domestic players and the attraction of new players.

Risk of devolvement of warranties on solar modules and technological obsolescence - The PV module industry, including components such as cells, is characterised by continuous product and process innovation, along with the rapid adoption of new technology. Given the risk of technological obsolescence, the industry players are required to undertake continuous upgrades and related investments to sustain a competitive advantage. However, the Group's adoption of the latest TOPCon technology provides comfort. Further, while the Government's regulations, targets and policies currently support the industry, the Group remains vulnerable to changes in policies and tariff barriers. Also, the operations remain exposed to risks pertaining to any devolvement of warranties on the supply of solar modules. However, the warranty claim has remained negligible over the past three fiscal years ended FY2025, which provides assurance on the quality of the Group's products and services.

Liquidity position: Adequate

The Group's liquidity position remains adequate, driven by expected sufficient cash flow from operations against debt repayment obligations of ~Rs. 192 crore in FY2026 and ~Rs. 248 crore in FY2027. Further, the Group's liquidity is supported by the advances received from customers for the ongoing orders and the available working capital limits. Additionally, the Group plans to avail enhanced working capital limits. It is important to secure a timely and adequate enhancement in working capital limits to support its increasing scale of operations.

Rating sensitivities

Positive factors - The ratings could be upgraded if the company is able to demonstrate a significant scale-up in its revenues and profitability, leading to an improvement in the leverage, coverage metrics and liquidity position along with timely progress towards funding the proposed capex plans.

Negative factors - Pressure on ratings could arise if the company is unable to scale up its operations, affecting its revenue and profitability. Also, an elongation of the working capital cycle adversely impacting the company's liquidity position would be a trigger for downgrade. Further, any significant time or cost overruns, along with delays in securing funding for proposed capex plans, would be also key trigger. A specific credit metric for downgrade would be a total debt/OPBIDTA above 2.5 times on a sustained basis.

Analytical approach

Analytical approach	Comments
Applicable rating methodologies	Corporate Credit Rating Methodology
Parent/Group support	Not Applicable
Consolidation/Standalone	The ratings are based on the consolidated financial profiles of the company. The list of subsidiaries considered for consolidation are provided in Annexure II

About Emmvee Energy

Bengaluru based Emmvee Energy is wholly-owned subsidiary of EPPL and is involved in the manufacturing of solar photovoltaic (PV) modules and cells. The company has a solar module manufacturing capacity of 6.9 GW as well as solar cell manufacturing capacity of 2.9 GW as of July 2025.

About EPPL

EPPL, set up in March 2007, is involved in the manufacturing of solar photovoltaic (PV) modules. The company has a solar module manufacturing capacity of 867 MW as of July 2025. This apart, the company operates 8-MW solar power assets in Germany. At present, EPPL is wholly held by the promoters, Mr. Manjunatha D.V and Mrs. Shubha Manjunatha. EPPL was converted from a private Limited to Public Limited in May 2025.

Key financial indicators

EPPL Consolidated	FY2024 [^]	FY2025
Operating income	951.9	2336.0
PAT	28.9	369.0
OPBDIT/OI	11.0%	31.8%
PAT/OI	3.0%	15.8%
Total outside liabilities/Tangible net worth (times)	11.9	6.3
Total debt/OPBDIT (times)	13.9	2.8
Interest coverage (times)	3.1	6.9

Source: Company, ICRA Research;; All ratios as per ICRA's calculations; Amount in Rs. crore PAT: Profit after tax; OPBDIT: Operating profit before depreciation, interest, taxes and amortisation; ^ the numbers for FY2024 are restated with adoption of IND AS

Status of non-cooperation with previous CRA: Not applicable

Any other information: None

Rating history for past three years

Current (FY2026)				Chronology of rating history for the past 3 years					
				FY2025		FY2024		FY2023	
Instrument	Type	Amount rated (Rs. crore)	Aug 27, 2025	Date	Rating	Date	Rating	Date	Rating
Fund based – Cash credit	Long term	255.0	[ICRA]A- (Stable)	Feb-18-2025	[ICRA]BBB+ (Positive)	-	-	-	-
Fund-based/Non-fund-based - Others	Long term/Short term	75.0	[ICRA]A- (Stable)/ [ICRA]A2+	Feb-18-2025	[ICRA]BBB+ (Positive)/ [ICRA]A2	-	-	-	-
Non-fund-based – Others	Short term	70.0	[ICRA]A2+	-	-	-	-	-	-

Complexity level of the rated instruments

Instrument	Complexity indicator
Long-term fund-based – Cash credit	Simple
Long term/Short term – Fund-based/Non-fund based	Simple
Short-term – Non-fund based – Others	Very Simple

The Complexity Indicator refers to the ease with which the returns associated with the rated instrument could be estimated. It does not indicate the risk related to the timely payments on the instrument, which is rather indicated by the instrument's credit rating. It also does not indicate the complexity associated with analysing an entity's financial, business, industry risks or complexity related to the structural, transactional or legal aspects. Details on the complexity levels of the instruments are available on ICRA's website: [Click here](#)

Annexure I: Instrument details

ISIN	Instrument name	Date of issuance	Coupon rate	Maturity	Amount rated (Rs. crore)	Current rating and outlook
NA	Fund based – Cash credit	-	-	-	255.0	[ICRA]A-(Stable)
NA	Fund-based/Non-fund-based	-	-	-	75.0	[ICRA]A-(Stable)/ [ICRA]A2+
NA	Non-fund-based – Others	-	-	-	70.0	[ICRA]A2+

Source: Company

[Please click here to view details of lender-wise facilities rated by ICRA](#)

Annexure II: List of entities considered for consolidated analysis

Company Name	EPPL Ownership*	Consolidation Approach
Emmvee Energy GmbH	100.00%	Full Consolidation
Solarpark Emmvee Sokrates GmbH	100.00%^	Full Consolidation
Solarpark Emmvee Doberschutz GmbH	100.00%^	Full Consolidation
Emmvee Verwaltungs GmbH	100.00%^	Full Consolidation
Emmvee Energy Private Limited	99.99%	Full Consolidation
Emmvee Energy Inc.	100.00%	Full Consolidation

Source: Company; * as on March 31, 2025; ^ held by Emmvee Energy GmbH

ANALYST CONTACTS

Girishkumar Kadam

+91 22 6114 3441

girishkumar@icraindia.com

Vikram V

+91 40 6939 6410

Vikram.v@icraindia.com

Sankalpa Mohapatra

+91 40 6939 6409

sankalpa.mohapatra@icraindia.com

Chinmay Sheth

+91 79 4027 1550

chinmay.sheth@icraindia.com

RELATIONSHIP CONTACT

L. Shivakumar

+91 22 6114 3406

shivakumar@icraindia.com

MEDIA AND PUBLIC RELATIONS CONTACT

Ms. Naznin Prodhani

Tel: +91 124 4545 860

communications@icraindia.com

HELPLINE FOR BUSINESS QUERIES

+91-9354738909 (open Monday to Friday, from 9:30 am to 6 pm)

info@icraindia.com

ABOUT ICRA LIMITED

ICRA Limited was set up in 1991 by leading financial/investment institutions, commercial banks and financial services companies as an independent and professional investment Information and Credit Rating Agency.

Today, ICRA and its subsidiaries together form the ICRA Group of Companies (Group ICRA). ICRA is a Public Limited Company, with its shares listed on the Bombay Stock Exchange and the National Stock Exchange. The international Credit Rating Agency Moody's Investors Service is ICRA's largest shareholder.

For more information, visit www.icra.in

ICRA Limited



Registered Office

B-710, Statesman House, 148 Barakhamba Road, New Delhi-110001

Tel: +91 11 23357940-45



Branches



© Copyright, 2025 ICRA Limited. All Rights Reserved.

Contents may be used freely with due acknowledgement to ICRA.

ICRA ratings should not be treated as recommendation to buy, sell or hold the rated debt instruments. ICRA ratings are subject to a process of surveillance, which may lead to revision in ratings. An ICRA rating is a symbolic indicator of ICRA's current opinion on the relative capability of the issuer concerned to timely service debts and obligations, with reference to the instrument rated. Please visit our website www.icra.in or contact any ICRA office for the latest information on ICRA ratings outstanding. All information contained herein has been obtained by ICRA from sources believed by it to be accurate and reliable, including the rated issuer. ICRA however has not conducted any audit of the rated issuer or of the information provided by it. While reasonable care has been taken to ensure that the information herein is true, such information is provided 'as is' without any warranty of any kind, and ICRA in particular, makes no representation or warranty, express or implied, as to the accuracy, timeliness or completeness of any such information. Also, ICRA or any of its group companies may have provided services other than rating to the issuer rated. All information contained herein must be construed solely as statements of opinion, and ICRA shall not be liable for any losses incurred by users from any use of this publication or its contents.