Mundra Solar Technology Limited

July 03, 2024

Facilities/Instruments	Amount (₹ crore)	Rating[1]	Rating Action
Long Term Bank Facilities	1,215.88	CARE A; Stable	Assigned

Details of instruments/facilities in Annexure-1.

Rationale and key rating drivers

CARE Ratings Limited (CARE Rating) has assigned long term rating of CARE A; Stable to Mundra Solar Technology Limited (MSTL).

For arriving the ratings, CARE Ratings has adopted a combined approach with combining MSTL, Mundra Solar Energy Limited (MSEL), Mundra Solar PV Limited (MSPVL) and Adani New Industries Limited (rated, CARE A; Stable/CARE A1). All the four entities are integral parts of the green hydrogen ecosystem and are collectively referred to as ANIL. All the four entities are directly or indirectly held by Adani Enterprises Limited (AEL, rated CARE A+; Positive / CARE A1+).

The ratings assigned to the bank facilities take into consideration operational facility for manufacturing 4 GW of solar PV modules with backward integration capacity of 4 GW of solar PV cells and 2 GW of ingot and wafer, along with the wind turbine generator (WTG) manufacturing facility under the wind segment. Moreover, the presence of glass and other solar module accessories manufacturing units in the vicinity of ANIL's manufacturing facilities offers it a competitive edge over peers. The total operating income of ANIL grew from ₹3,571 crore in FY23 to ₹8,771 crore in FY24 due to the benefit of capex completion in both the segments – solar as well as wind. The ratings also factor in healthy profitability and moderate leverage of ANIL. The ratings further note a healthy outstanding order book and good export demand for solar PV modules the medium term, owing to barriers on imports from China in the USA. CARE Ratings expects moderation in the export demand and consequent decline in the sales prices of solar modules over the medium-term post-commissioning of capacities in the USA and Europe. Nevertheless, integrated nature of ANIL's operations and the favorable capex outlook of renewable energy in India coupled with Adani Group's captive demand shall protect the revenues and profitability. While the Government of India is focused on building domestic manufacturing capabilities, promoting domestic components required in solar modules, and safeguarding the industry from imports, any adverse regulatory changes which reduce the competitiveness of domestic manufacturers would be a key rating sensitivity.

The ratings also derive strength from the parentage of AEL, along with its demonstrated need-based support and ANIL entities being part of AEL, and their strategic importance to AEL's green hydrogen ecosystem.

The above strengths are, however, tempered by vulnerability of solar segment's operating profitability to raw material price fluctuations, intense competition, and significant project risk related to future capex for the green hydrogen ecosystem. Nevertheless, CARE Ratings notes that capex for the green hydrogen ecosystem shall be executed in a modular fashion over the next 3-5 years and will be subject to techno-economic viability, mainly in the electrolyser ecosystem. Furthermore, AEL is committed to infusing required equity for the said large-sized projects, which mitigates the funding risk to an extent.

Rating sensitivities: Factors likely to lead to rating actions

Positive factors

- Substantial growth in the scale of operations and profitability while efficiently managing its working capital cycle and leverage

Negative factors

- Any large debt-funded capex, leading to sustained deterioration in total combined external debt/total combined PBILDT to more than six times
- Adverse regulatory changes reducing competitiveness for domestic players
- Deterioration in the credit profile of the ultimate parent - AEL

Analytical approach: Combined while factoring linkages with AEL

CARE Ratings has combined the financials of Adani New Industries Limited, MSEL, MSPVL and MSTL. All the four entities are integral parts of the green hydrogen ecosystem and are directly or indirectly held by AEL. Also, MSTL is in the process of getting merged with Adani New Industries Limited.

[1]Complete definition of the ratings assigned are available at www.careedge.in and other CARE Ratings Ltd.'s publications

Outlook: Stable

The outlook is expected to remain stable supported by favourable sector outlook and integrated nature of the manufacturing facility. Need based support from AEL is also expected for funding of large sized capex and meeting any exigencies.

Detailed description of the key rating drivers:

Key strengths

Parentage of AEL

Adani New Industries Limited is a wholly-owned subsidiary of AEL, the flagship company of the Adani Group. MSTL is a wholly-owned subsidiary of Adani Infrastructure Private Limited (AIPL), which is a wholly-owned subsidiary of Adani New Industries Limited. MSEL is majorly (74%) held by Adani Tradecom Limited (ATL), which is a wholly-owned subsidiary of AEL. MSPVL is majorly (51%) held by Adani Green Technology Limited (AGTL), which is a wholly-owned subsidiary of ATL.

All the four entities i.e. Adani New Industries Limited, MSTL, MSPVL, and MSEL are ultimately held by AEL and are parts of the green hydrogen ecosystem. Given the significant plans of AEL in the green hydrogen space, these entities are strategically important to AEL.

Backward integration in the solar segment leading to competitive edge and better pricing control

The solar segment has an operational module and cell manufacturing capacity of 4 GW, with MSEL operating a 2 GW mono-passivated emitter and rear contact (mono-PERC) technology and MSPVL operating a 2 GW tunnel oxide passivated contact (Topcon) technology. Module manufacturing and cell manufacturing under MSEL commenced operations in July 2022 and March 2023, respectively. The module and cell manufacturing facility for MSPVL was upgraded from multi-crystalline to Topcon technology and became operational in April 2023 and March 2024, respectively. The solar segment commissioned a 2 GW ingot and wafer plant under MSTL in March 2024, and the plant is presently under stabilization phase. MSTL can also provide wafers to MSEL and MSPVL, which will aid in reducing costs and achieving better pricing control. Moreover, presence of glass and other solar module accessories manufacturing units in the vicinity of ANIL's manufacturing facilities offers it a competitive edge over peers.

Long-term technology tie-up for the wind segment

ANIL is a relatively new entrant in WTG manufacturing space as the 1.5 GW WTG manufacturing project got commissioned in June 2023. However, the company has tied-up with renowned technology providers, thereby mitigating the technology risk. For nacelle and hub, ANIL has signed a technology license agreement with Wind to Energy GmbH (W2E), which has design experience for WTG capacities up to 9 MW. For rotor blades, ANIL has entered into an agreement with WINDnovation Engineering Solutions GmbH (WINDnovation), a Berlin-based renowned design house for designing blades for large onshore and offshore capacities. The WTG manufactured has a high capacity of 5.2 MW and can generate power even at low wind speeds.

Healthy outstanding order book position providing medium-term revenue visibility

The solar segment has a healthy order book position of solar PV modules as of March 31, 2024, thereby providing medium-term revenue visibility to ANIL. Till now, MSEL and MSPVL were importing wafers; however, post-commissioning of the ingot and wafer plant under MSTL, they can procure wafers from MSTL up to 2 GW.

The wind segment has an outstanding order book of 204 WTGs, thereby providing healthy medium-term revenue visibility to the company. The wind segment sold 44 WTGs in FY24. In the medium-term, ANIL plans to sell most of the WTGs to the Adani Group companies, thereby providing further revenue visibility.

Growth in the scale of operations, healthy profitability and moderate leverage

On a combined basis, ANIL reported growth in total operating income (TOI) from ₹3,571 crore in FY23 to ₹8,771 crore in FY24. The growth in the scale of operations was driven by the ramp-up of production post-expansion of the solar module capacity and commencement of operations of the WTG manufacturing unit. Profitability at the combined level also improved, with PBILDT margins of 24% during FY24, up from 10% in FY23. The improved margins are due to commencement of the cell line under MSEL in March 2023 and first year of profitable operations of the wind segment. Margins are expected to remain healthy owing to the commencement of the cell line under MSPVL and wafer production under MSTL. On a combined basis, ANIL had a total debt of ₹4,507 crore as of March 31, 2024, against a net worth of ₹4,153 crore as of March 31, 2024, indicating an overall gearing of 1.09x as of March 31, 2024. Total debt/PBILDT stood moderate at 2.12 times as of March 31, 2024. The term debt is expected to increase in FY25 due to ongoing expansion in the wind segment.

Favourable demand outlook for domestic module manufacturers

The demand outlook for domestic module manufacturers is favourable due to reimposition of the approved list of module manufacturers (ALMM) from April 1, 2024. During FY24, despite the ALMM remaining in abeyance, the company benefitted from its healthy order book from overseas geographies, particularly the USA, which has disincentivized Chinese imports, thereby improving the competitive position of non-Chinese manufacturers. Furthermore, to promote solar module manufacturing in India and reduce dependence on imports, the Government of India has introduced various policy measures to benefit domestic manufacturers over the past two years. Among these measures, the imposition of a basic custom duty (BCD) of 40% and 25% on imported solar modules and solar cells, respectively, from April 1, 2022, is expected to be a key growth driver for domestic manufacturers. Additionally, introduction of a production-linked incentive (PLI) scheme to promote backward integrated plants is also expected to benefit domestic module manufacturers over the medium to long term. Going forward, CARE Ratings expects the demand prospects for ANIL to remain strong in the domestic market, given the favourable policy support by the government and large capex planned in the renewable energy. Furthermore, the USA market is expected to remain attractive over the medium-term, as the domestic capacities being set-up in the USA as part of the Inflation Protection Act may take a similar time to come on stream.

Key weaknesses

Vulnerability of operating profitability due to volatile raw-material prices

The solar segment's operating profitability remains vulnerable to volatile raw material prices. The company enters into fixed price sales contracts, making it susceptible to any rise in the input prices. Key raw materials such as polysilicon and wafers are imported from China, Vietnam, and Malaysia. However, the company's indigenization efforts, such as procuring aluminium frames and glass from units located near ANIL's manufacturing facilities at Mundra and the start of the solar wafer facility, are expected to provide cost benefits. Nevertheless, the company still has to rely on polysilicon imports due to the lack of domestic supply.

Project risk related to future capex related to green hydrogen

ANIL plans to set-up an end-to-end manufacturing facility for 1 million metric tonnes per annum (MMTPA) of green hydrogen production by 2030. Establishing a green hydrogen ecosystem will entail significant capex. To control the cost of green hydrogen production, the ANIL ecosystem aims to be fully integrated along the value chain, from manufacturing various components and equipment required for generating renewable energy to producing downstream products from green hydrogen. However, the entire capex will be implemented in a phased manner. Moreover, technology for manufacturing cost-efficient electrolysers is still evolving.

While technological risks and achieving lower cost of green hydrogen production are key concerns, ANIL has the flexibility to limit the capex to manufacturing facilities and the renewable energy park. The capex is proposed to be executed over 3-5 years and is subject to techno-economic viability, mainly in the electrolyser ecosystem. AEL is committed to infusing required equity for the said large-sized projects, which mitigates the funding risk to an extent. Going forward, any large debt-funded capex leading to sustained deterioration in total combined external debt/total combined PBILDT to more than six times will be closely monitored.

Highly competitive industry

As of FY24 end, the annual production capacity of domestic WTG original equipment manufacturers (OEMs) is approximately 15 GW. WTG technology has evolved, and state-of-the-art technologies are available in the country for manufacturing WTGs. Around 70-80% indigenization has been achieved with strong domestic manufacturing in the wind sector. All the major global players in this field have a presence in the country, with more than 12 different companies. However, outstanding orders from group companies mitigate demand risk to some extent for ANIL's wind segment.

The solar segment faces intense competition in the solar module business from other domestic manufacturers as well as international players, exposing it to demand-related risks. Around 80-85% of the solar modules used in India were imported until the end of FY22, given the competitive advantage of imported modules over indigenous modules. However, with the imposition of BCD on imported solar modules and cells and the applicability of ALMM, the cost competitiveness of domestic module manufacturers has improved. While the government remains focused on building domestic manufacturing capabilities, any adverse regulatory or policy changes that reduce the competitiveness of domestic manufacturers will be a key monitorable.

Liquidity: Adequate

At a combined level, the company had free cash and cash equivalents of ₹1,022 crore as of March 31, 2024. Operations are working capital intensive due to the higher lead time in procurement of raw materials, leading to higher inventory days of about 100-120 days. All the companies have sanctioned working capital limits. The average fund-based utilization of working capital limits remained nil for the trailing twelve months ended May 2024. The combined generated cash accruals will be sufficient for debt repayment of ₹259 crore in FY25 and ₹553 crore in FY26.

Assumptions/Covenants: Not applicable

Environment, social, and governance (ESG) risks: Not applicable

Applicable criteria

Consolidation
Definition of Default
Factoring Linkages Parent Sub JV Group
Liquidity Analysis of Non-financial sector entities
Rating Outlook and Rating Watch
Manufacturing Companies
Financial Ratios – Non financial Sector

About the company and industry

Industry classification

Macro Economic Indicator	Sector	Industry	Basic Industry
Industrials	Capital Goods	Electrical Equipment	Other Electrical Equipment

MSTL was established in November, 2021 for setting up manufacturing facilities of 2GW of ingots and wafers at Mundra, Gujarat. The plant got commissioned in March 2024. The estimated project cost is Rs. 1,737 crore which was funded in debt-to-equity ratio of 70:30.

Brief Financials (₹ crore) – Combined^	March 31, 2023 (A)	March 31, 2024 (A)
Total operating income	3,571	8,771
PBILDT	353	2,121
PAT	(132)	1,325
Overall gearing (times)	1.84	1.09
Interest coverage (times)	2.10	5.49

^Combined financials of Adani New Industries Limited, MSEL, MSPVL and MSTL
A: Audited; Note: 'the above results are latest financial results available'; The financials have been classified as per CARE Ratings' criteria

Brief Financials (₹ crore) -Standalone	March 31, 2023 (A)	March 31, 2024 (A)
Total operating income	NM	NM
PBILDT	NM	NM
PAT	NM	NM
Overall gearing (times)	0	1.42
Interest coverage (times)	NM	NM

A: Audited; NM; Not meaningful due to project stage entity; Note: 'the above results are latest financial results available'; The financials have been classified as per CARE Ratings' criteria

Status of non-cooperation with previous CRA: Not applicable

Any other information: Not applicable

Rating history for last three years: Please refer Annexure-2

Covenants of rated instrument / facility: Detailed explanation of covenants of the rated instruments/facilities is given in Annexure-3

Complexity level of various 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 along with Rating Outlook
Term Loan-Long Term	-	-	-	31-12-2033	1215.88	CARE A; Stable

Annexure-2: Rating history for the 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	Term Loan-Long Term	LT	1215.88	CARE A; Stable	-	-	-	-

LT: Long term

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

Annexure-4: Complexity level of the various instruments rated

Sr. No.	Name of the Instrument	Complexity Level
1	Term Loan-Long Term	Simple

Annexure-5: Lender details

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

Note on the complexity levels of the rated instruments: CARE Ratings has classified instruments rated by it on the basis of complexity. Investors/market intermediaries/regulators or others are welcome to write to care@careedge.in for any clarifications.

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About us:
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