The Pakistan Credit Rating Agency Limited

Rating Report

Master Green Energy Limited

Report Contents

Rating History

Dissemination Date	Long Term Rating	Short Term Rating	Outlook	Action	Rating Watch
22-Jun-2022	A	A1	Developing	Maintain	Yes
23-Jun-2021	A	A1	Developing	Maintain	Yes
29-Jun-2020	A	A1	Developing	Maintain	Yes
15-Jan-2020	A	A1	Stable	Initial	-

Rating Rationale and Key Rating Drivers

Master Group, pioneers of foam products, installed its second 50MW wind power plant project in district Jamshoro, Sindh – Master Green Energy Limited (“the Company” or “Master Green”), after Master Wind Energy Limited located in Jhimpir, Sindh. The Company signed Energy Purchase Agreement ("EPA") with CPPA-G. As per the EPA, in case of non-project missed volumes the power purchaser shall be liable to pay the missed volumes at applicable tariff rates. Master Green was awarded a cost-plus tariff by NEPRA, with the energy payments to be received from CPPA-G backed by the sovereign guarantee of Government of Pakistan. Hydro China International Engineering Company Limited & Hangzhou Huachen Electric Power Control Company are the EPC contractors. The construction on the project started in September 2019 and commercial operation date (COD) was achieved in August 2021. HydroChina International Engineering Company Limited is O&M operator for next two years, the long-term O&M operator is yet to be finalized. Comfort is drawn from its vast international and local experience. The Company generated 74.1GWh electricity including pre-COD with top line recorded to PKR 404mln. Ratings incorporate adherence to performance benchmarks through power generation, underpinned by decent cash flows generation. Short-term borrowing lines were availed in order to support its working capital needs, going forward a need to oversee the working capital management remains important. Till date the Company has repaid three installments (i.e., ~7%) of its project related long term debt. However the leverage is yet sizeable and will gradually decline along with the life of the project. Management has put forth the requisition for true up tariff to NEPRA, final decision in this respect is awaited.

Upgrading operational performance in line with agreed performance levels is important. Improvement in inflows and availability of unutilized credit limit remained congenial for the ratings.

Disclosure	
Name of Rated Entity	Master Green Energy Limited
Type of Relationship	Solicited
Purpose of the Rating	Entity Rating
Applicable Criteria	Methodology | Independent Power Producer Rating(Jun-21),Criteria | Correlation Between Long-term & Short-term Rating Scales(Jun-21),Criteria | Rating Modifiers(Jun-21)
Related Research	Sector Study | Power(Jan-22)
Rating Analysts	Anam Waqas Ghayour | anam.waqas@pacra.com | +92-42-35869504

Profile

Plant Master Green Energy Limited (MGEL) is a Renewable Energy Independent Power Producer (RE IPP) developed under the Renewable Energy Policy 2006. The company established 50MW wind power plant located in Jamshoro, Sindh.

Tariff MGEL is awarded cost-plus tariff for wind power projects by NEPRA. Under the 2019 NEPRA tariff determination for wind IPPs, the company has a generation tariff PKR 7.2396 per Kilowatt hour (kWh) for years 1-10 and generation tariff of PKR 2.3726 per Kilowatt hour (kWh) for years 11-25. The levelized tariff for the project is US¢ 4.7227/kWh at the time of the financial close

Return On Project The IRR of the project, as agreed with NEPRA, is 14%.

Ownership

Ownership Structure MGEL is wholly owned by Master Group. The ownership is segmented among three brothers having an equal shareholding in MGEL through separate holding companies. Associated companies' holds 99.99% of total share holding of the Company; Nadeem Malik Holdings (Pvt.) Ltd. (25.67%), NM Holding (Pvt.) Ltd. (25.67%), Najeeb Holdings (Pvt.) Ltd. (25.67%) and Master Textile Mills Ltd (23%).

Stability Master Group has a long history spanning over 50 years. The flagship company Master Enterprises (Pvt.) Ltd established in the year 1963. The Group gradually diversified in various industries with operations across textile, engineering, automobile and retail sectors. It is one of the leading Industrial groups in the country.

Business Acumen Sponsor group has significant experience in foam products, chemical, textile, engineering, wind power and home fashion.

Financial Strength The financial strength of the sponsors is considered strong as they have well diversified profitable businesses.

Governance

Board Structure MGEL's Board of Directors comprises three members, including the CEO. All board members are representatives of the Master Group.

Members' Profile Mr. Nadeem Malik is the Chairman of the board and has associated with the Master Group for over three decades. While, Mr. Najeeb Malik is currently serving as a director on the board of MGEL and has over 2 decades of experience under his belt . Mr. Shahzad Malik is CEO of MGEL, he holds a Master's degree in Business Administration (USA) and has been successfully overseeing the foam and energy business of the group for around 8 years.

Board Effectiveness The experiences of board will help guiding the management in developing effective operational and financial policies.

Financial Transparency Ernst and Young, one of the big 4 audit firms, was the external auditor of the company. They given an unqualified opinion on the financials for the period ending June-21.

Management

Organizational Structure MGEL has a lean organizational structure. The company has a well-defined lean organizational structure with a professional management team in place to monitor the erations and assure control mechanisms.

Management Team Mr. Shahzad Malik was appointed as CEO w.e.f April 7, 2022. He is zealous entrepreneur; since taking over Master Group's foam business has revamped the entire product line, expanded beyond Pakistan and updated the look of the 'Master' brand. Responsible for Master Group's investments in the energy sector.

Effectiveness MGEL's management effectiveness plays a significant role in empowering the organization through positive results, which has made decision making process systematic.

Oversight Of Third-Party Service Providers HydroChina, who is also the onshore contractor, is providing short-term O&M services to the Company. The long-term O&M contract is yet to be finalized.

Completion Risk

Engineering And Procurement MGEL has signed an Onshore Contract with HydroChina International Engineering Company Limited and Offshore supply contract with Hangzhou Huachen Electric Power Control Company of ~USD 12mln and ~USD 45.94mln respectively. Wind power projects' cost is mainly comprised of wind turbines and other instruments, hence cost of offshore EPC contract is major component of total EPC cost. HydroChina is responsible for the overall management, coordination, and implementation of the project. The actual COD was achieved in Aug-21.

Power Purchase Agreement MGEL has been developed under the Renewable Energy Policy 2006. EPA is with CPPA-G, and has tenure of 25 years.

Pre-Commissioning Progress HydroChina International Engineering Company Limited has extensive expertise in Engineering and Design of Renewable Energy projects both within and outside of China. Subject Company is already involved in other wind power projects in Pakistan.

Performance Default Risk The required COD set by CPPA-G was in Jul-21 and the actual COD achieved in Aug-21. The LDs payable to CPPA-G in case of any delay was set as USD 4,167 per day.

Performance Risk

Industry Dynamics The total installed capacity of the country as at End-FY21 stood at ~39,772MW out of which ~1,335MW comes from Wind. Twenty-Six (26) wind power projects of 1335 MW cumulative capacity have achieved Commercial Operation and are supplying electricity to National Grid. Ten (10) wind power projects of 510 MW capacity have achieved Financial Closing and are under construction.

Operation And Maintenance HydroChina is providing short-term O&M services to the Company. The long term O&M contract is yet to be finalized.

Resource Risk Master Group is successfully operating one wind power project in Jhimpir whereby the average wind speed is 7.6 Meter/second. The wind speed in Jamshoro is on average is 7.3 Meter/second. The risk is considered low. Tariff is based on a conservative energy estimate and it is highly likely that energy generation will be in excess of the estimate.

Performance Benchmark The required availability and the capacity factor is 98% and 38.48% by NEPRA.

Financial Risk

Financing Structure Analysis The total project cost is USD 65.03mln, consisting of 80% of debt (USD 52ml) and 20% of equity (USD 13.01mln). The debt financing constitutes foreign loan of USD 25mln (3MLIBOR+4.25%) and local SBP refinance loan of PKR 4.24bln and local conventional loan of PKR 146.50mln (SBP refinance loan rate of 5.25% and KIBOR loan rate of 3MKIBOR+2.25%). The foreign loan and conventional KIBOR loan has the maturity of 13 years while the local SBP refinance loan has maturity of 10 years. Both the local and foreign loan are repayable in quarterly installments. The repayment of first installment of loan was made in September 2021. The equity is injected by sponsors through associated companies.

Liquidity Profile As circular debt continues to be an issue for companies operating in power sector. However, MGEL has strong liquidity profile and is able to cover its short-term and long-term borrowings in timely manner.

Working Capital Financing Renewable IPPs do not have to pay for fuel which minimize their working capital needs.

Cash Flow Analysis The cash generation of Master Green from its operations stood at PKR 1,899mln for the period under review. The stability and sustainability of future cash flows of MGEL will depend completely on continuous performance of its wind turbines. The company would have to make quarterly principal repayments of debt, which also includes foreign debt. The company is maintaining a Payment Service Reserve Account (PSRA), and has provided a SBLC against it equivalent to two quarterly debt repayments.

Capitalization The leverage (Debt/Equity) of the company stood at 83.3% as at end Dec-21 (78.8% Dec-20). The project debt constitutes 80% (USD 52mln) of total project cost (USD 65.03mln).

PKR mln

Master Green Energy Limited	Dec-21	Jun-21	Jun-20	Jun-19
Power	6M	12M	12M	12M
A BALANCE SHEET				
1 Non-Current Assets	10,241	8,313	1,363	94
2 Investments	-	-	-	-
3 Related Party Exposure	-	-	-	-
4 Current Assets	2,182	731	3,580	1
a Inventories	-	-	-	-
b Trade Receivables	*173*	-	-	-
5 Total Assets	12,422	9,044	4,943	95
6 Current Liabilities	1,532	7	17	0
a Trade Payables	-	-	-	-
7 Borrowings	8,681	6,770	3,357	-
8 Related Party Exposure	379	213	167	-
9 Non-Current Liabilities	15	14	13	12
10 Net Assets	1,815	2,039	1,389	83
11 Shareholders' Equity	1,815	2,039	1,389	83
B INCOME STATEMENT				
1 Sales	404	-	-	-
a Cost of Good Sold	*(257)*	-	-	-
2 Gross Profit	146	-	-	-
a Operating Expenses	(26)	(6)	(19)	(0)
3 Operating Profit	120	(6)	(19)	(0)
a Non Operating Income or (Expense)	*(360)*	*182*	*(69)*	*0*
4 Profit or (Loss) before Interest and Tax	(240)	176	(89)	(0)
a Total Finance Cost	*(168)*	*(0)*	*(0)*	*(1)*
b Taxation	*(4)*	*(0)*	*(3)*	-
6 Net Income Or (Loss)	(411)	176	(92)	(2)
C CASH FLOW STATEMENT				
a Free Cash Flows from Operations (FCFO)	*283*	*(4)*	*(21)*	*(0)*
b Net Cash from Operating Activities before Working Capital Changes	*124*	*(5)*	*(94)*	*(1)*
c Changes in Working Capital	*1,606*	*1,130*	*(1,647)*	*0*
1 Net Cash provided by Operating Activities	1,730	1,125	(1,741)	(1)
2 Net Cash (Used in) or Available From Investing Activities	(2,089)	(6,940)	(1,268)	(18)
3 Net Cash (Used in) or Available From Financing Activities	1,672	4,110	4,898	14
4 Net Cash generated or (Used) during the period	1,313	(1,704)	1,889	(4)
D RATIO ANALYSIS				
1 Performance				
a Sales Growth (for the period)	N/A	N/A	N/A	N/A
b Gross Profit Margin	36.2%	N/A	N/A	N/A
c Net Profit Margin	-101.9%	N/A	N/A	N/A
d Cash Conversion Efficiency (FCFO adjusted for Working Capital/Sales)	468.0%	N/A	N/A	N/A
*e Return on Equity [Net Profit Margin * Asset Turnover * (Total Assets/Shareholders' Equity)]*	-52.4%	N/A	N/A	N/A
2 Working Capital Management				
a Gross Working Capital (Average Days)	78	N/A	N/A	N/A
b Net Working Capital (Average Days)	N/A	N/A	N/A	N/A
c Current Ratio (Current Assets / Current Liabilities)	1.4	106.2	216.1	8.3
3 Coverages				
a EBITDA / Finance Cost	1.8	N/A	N/A	N/A
b FCFO / Finance Cost+CMLTB+Excess STB	0.5	0.0	-0.1	N/A
c Debt Payback (Total Borrowings+Excess STB) / (FCFO-Finance Cost)	36.2	-1667.8	-165.4	0.0
4 Capital Structure				
a Total Borrowings / (Total Borrowings+Shareholders' Equity)	83.3%	77.4%	71.6%	0.0%
b Interest or Markup Payable (Days)	60.2	N/A	N/A	N/A
c Entity Average Borrowing Rate	4.2%	0.0%	0.0%	--

Credit Rating

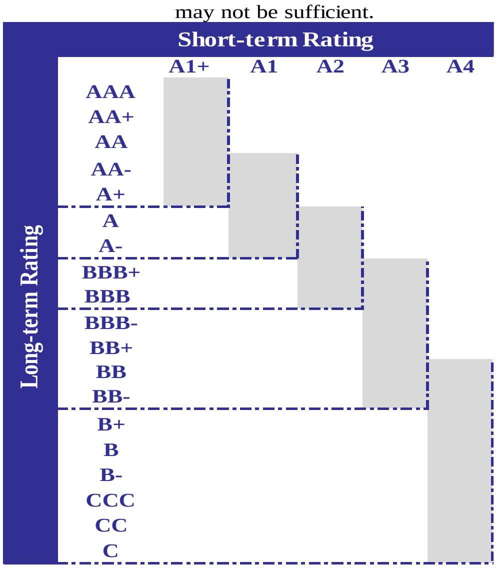
Credit rating reflects forward-looking opinion on credit worthiness of underlying entity or instrument; more specifically it covers relative ability to honor financial obligations. The primary factor being captured on the rating scale is relative likelihood of default.

Long-term Rating

Scale	Definition
AAA	**Highest credit quality.** Lowest expectation of credit risk. Indicate exceptionally strong capacity for timely payment of financial commitments
AA+ AA AA-	**Very high credit quality.** Very low expectation of credit risk. Indicate very strong capacity for timely payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.
A+ A A-	**High credit quality.** Low expectation of credit risk. The capacity for timely payment of financial commitments is considered strong. This capacity may, nevertheless, be vulnerable to changes in circumstances or in economic conditions.
BBB+ BBB BBB-	**Good credit quality.** Currently a low expectation of credit risk. The capacity for timely payment of financial commitments is considered adequate, but adverse changes in circumstances and in economic conditions are more likely to impair this capacity.
BB+ BB BB-	**Moderate risk.** Possibility of credit risk developing. There is a possibility of credit risk developing, particularly as a result of adverse economic or business changes over time; however, business or financial alternatives may be available to allow financial commitments to be met.
B+ B B-	**High credit risk.** A limited margin of safety remains against credit risk. Financial commitments are currently being met; however, capacity for continued payment is contingent upon a sustained, favorable business and economic environment.
CCC CC C	**Very high credit risk.** Substantial credit risk "CCC" Default is a real possibility. Capacity for meeting financial commitments is solely reliant upon sustained, favorable business or economic developments. "CC" Rating indicates that default of some kind appears probable. "C" Ratings signal imminent default.
D	Obligations are currently in default.

Short-term Rating

Scale	Definition
A1+	The highest capacity for timely repayment.
A1	A strong capacity for timely repayment.
A2	A satisfactory capacity for timely repayment. This may be susceptible to adverse changes in business, economic, or financial conditions.
A3	An adequate capacity for timely repayment. Such capacity is susceptible to adverse changes in business, economic, or financial
A4	The capacity for timely repayment is more susceptible to adverse changes in business, economic, or financial conditions. Liquidity may not be sufficient.



**The correlation shown is indicative and, in certain cases, may not hold.*

Outlook (Stable, Positive, Negative, Developing) Indicates the potential and direction of a rating over the intermediate term in response to trends in economic and/or fundamental business/financial conditions. It is not necessarily a precursor to a rating change. 'Stable' outlook means a rating is not likely to change. 'Positive' means it may be raised. 'Negative' means it may be lowered. Where the trends have conflicting elements, the outlook may be described as 'Developing'.

Rating Watch Alerts to the possibility of a rating change subsequent to, or, in anticipation of some material identifiable event with indeterminable rating implications. But it does not mean that a rating change is inevitable. A watch should be resolved within foreseeable future, but may continue if underlying circumstances are not settled. Rating watch may accompany rating outlook of the respective opinion.

Suspension It is not possible to update an opinion due to lack of requisite information. Opinion should be resumed in foreseeable future. However, if this does not happen within six (6) months, the rating should be considered withdrawn.

Withdrawn A rating is withdrawn on a) termination of rating mandate, b) the debt instrument is redeemed, c) the rating remains suspended for six months, d) the entity/issuer defaults., or/and e) PACRA finds it impractical to surveill the opinion due to lack of requisite information.

Harmonization A change in rating due to revision in applicable methodology or underlying scale.

Surveillance. Surveillance on a publicly disseminated rating opinion is carried out on an ongoing basis till it is formally suspended or withdrawn. A comprehensive surveillance of rating opinion is carried out at least once every six months. However, a rating opinion may be reviewed in the intervening period if it is necessitated by any material happening.

Note. This scale is applicable to the following methodology(s):

Entities
a) Broker Entity Rating
b) Corporate Rating
c) Financial Institution Rating
d) Holding Company Rating
e) Independent Power Producer Rating
f) Microfinance Institution Rating
g) Non-Banking Finance Companies (NBFCs) Rating

Instruments
a) Basel III Compliant Debt Instrument Rating
b) Debt Instrument Rating
c) Sukuk Rating

Regulatory and Supplementary Disclosure
(Credit Rating Companies Regulations,2016)

Rating Team Statements
(1) Rating is just an opinion about the creditworthiness of the entity and does not constitute recommendation to buy, hold or sell any security of the entity rated or to buy, hold or sell the security rated, as the case may be | Chapter III; 14-3-(x)

2) **Conflict of Interest**
i. The Rating Team or any of their family members have no interest in this rating | Chapter III; 12-2-(j)
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iii. The analyst is not a substantial shareholder of the customer being rated by PACRA [Annexure F; d-(ii)] Explanation: for the purpose of above clause, the term “family members” shall include only those family members who are dependent on the analyst and members of the rating committee

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(4) PACRA does not disclose or discuss with outside parties or make improper use of the non-public information which has come to its knowledge during business relationship with the customer | Chapter III; 10-7-(d)
(5) PACRA does not make proposals or recommendations regarding the activities of rated entities that could impact a credit rating of entity subject to rating | Chapter III; 10-7-(k)

Conduct of Business
(6) PACRA fulfills its obligations in a fair, efficient, transparent and ethical manner and renders high standards of services in performing its functions and obligations; | Chapter III; 11-A-(a)
(7) PACRA uses due care in preparation of this Rating Report. Our information has been obtained from sources we consider to be reliable but its accuracy or completeness is not guaranteed. PACRA does not, in every instance, independently verifies or validates information received in the rating process or in preparing this Rating Report | Clause 11-(A)(p).
(8) PACRA prohibits its employees and analysts from soliciting money, gifts or favors from anyone with whom PACRA conducts business | Chapter III; 11-A-(q)
(9) PACRA ensures before commencement of the rating process that an analyst or employee has not had a recent employment or other significant business or personal relationship with the rated entity that may cause or may be perceived as causing a conflict of interest; | Chapter III; 11-A-(r)
(10) PACRA maintains principal of integrity in seeking rating business | Chapter III; 11-A-(u)
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(12) PACRA receives compensation from the entity being rated or any third party for the rating services it offers. The receipt of this compensation has no influence on PACRA´s opinions or other analytical processes. In all instances, PACRA is committed to preserving the objectivity, integrity and independence of its ratings. Our relationship is governed by two distinct mandates i) rating mandate - signed with the entity being rated or issuer of the debt instrument, and fee mandate - signed with the payer, which can be different from the entity
(13) PACRA does not provide consultancy/advisory services or other services to any of its customers or to any of its customers’ associated companies and associated undertakings that is being rated or has been rated by it during the preceding three years unless it has adequate mechanism in place ensuring that provision of such services does not lead to a conflict of interest situation with its rating activities; | Chapter III; 12-2-(d)
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(15) PACRA ensures that the rating assigned to an entity or instrument is not be affected by the existence of a business relationship between PACRA and the entity or any other party, or the non-existence of such a relationship | Chapter III; 12-2-(i)
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(17) PACRA has established policies and procedure governing investments and trading in securities by its employees and for monitoring the same to prevent insider trading, market manipulation or any other market abuse | Chapter III; 11-B-(g)

Monitoring and review
(18) PACRA monitors all the outstanding ratings continuously and any potential change therein due to any event associated with the issuer, the security arrangement, the industry etc., is disseminated to the market, immediately and in effective manner, after appropriate consultation with the entity/issuer; | Chapter III | 18-(a)
(19) PACRA reviews all the outstanding ratings on semi-annual basis or as and when required by any creditor or upon the occurrence of such an event which requires to do so; | Chapter III | 18-(b)
(20) PACRA initiates immediate review of the outstanding rating upon becoming aware of any information that may reasonably be expected to result in downgrading of the rating; | Chapter III | 18-(c)
(21) PACRA engages with the issuer and the debt securities trustee, to remain updated on all information pertaining to the rating of the entity/instrument; | Chapter III | 18-(d)
Probability of Default
(22) PACRA´s Rating Scale reflects the expectation of credit risk. The highest rating has the lowest relative likelihood of default (i.e, probability). PACRA´s transition studies capture the historical performance behavior of a specific rating notch. Transition behavior of the assigned rating can be obtained from PACRA´s Transition Study available at our website. (www.pacra.com). However, actual transition of rating may not follow the pattern observed in the past | Chapter III | 14-(f-VII)
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