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
24-May-2023	A	A1	Stable	Maintain	-
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, pioneer of foam products in Pakistan, installed its second 50MW wind power plant project in district Jamshoro, Sindh – Master Green Energy Limited (“the Company” or “Master Green”), after the success of its first wind power project. Master Wind Energy Limited located in Jhimpir, Sindh. The Company signed Energy Purchase Agreement ("EPA") with CPPA-G for a period of 25 years. 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. The project revenues and cash flows are exposed to wind risk and operational risk. The operational risk aspect is mitigated by achieving benchmarks of availability and efficiency as agreed in the Energy Purchase Agreement (EPA). Under the cost-plus tariff regime, any variability in wind speeds is to be borne by the Company, due to which its cash flows may face seasonality. Hydro China International Engineering Company Limited & Hangzhou Huachen Electric Power Control Company were the EPC contractors on the Project. 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 the warranty period i.e. up to August 2023. The long-term O&M contractor is expected to be finalized soon by the management. Comfort is drawn from its vast international and local experience of the operators. The Company delivered 88.46GWh electricity during 9MFY23 to the national grid. 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. The Company has repaid seven installments (total number of installments forty for local SBP RE loan and fifty-two for foreign and local conventional KIBOR loan) of its project-related long-term debt by March 2023 in a timely manner without availing any forbearance period. However, the leverage is yet sizeable and will gradually decline along with the life of the project.

Ratings take comfort from the true-up tariff approved by the authority. However, upgrading operational performance in line with agreed performance levels is important. Improvement in inflows and availability of unutilized credit limits 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 | Correlation Between Long-term & Short-term Rating Scales(Jun-22),Methodology | Rating Modifiers(Jun-22),Methodology | Independent Power Producer Rating(Jun-22)
Related Research	Sector Study | Power(Jan-23)
Rating Analysts	Muhammad Mubashir Nazir | mubashir.nazir@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 operates 50MW wind-based power plant, located in Jamshoro, Sindh, and achieved its COD on August 2021.

Tariff MGEL is awarded cost-plus tariff for wind power projects by NEPRA. Under the 2019 NEPRA tariff determination for wind IPPs, the company had a levelized tariff for the project was US¢ 4.7227/kWh at the time of the financial close. The Company applied for the true-up of its tariff against which a decision was awarded by NEPRA in December 2022 whereby the tariff was trued-up upon actual. Furthermore, the Company applied for indexation of its tariff for the period from October 2021 to March 2023. Decision for the same has been issued by the Authority in Feb 2023.

Return On Project The ROE 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 shareholding 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 was established in the year 1963. T

Business Acumen he 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.

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 Managing Director/CEO. All board members are representatives of the Master Group.

Members' Profile Mr. Nadeem Malik is the Chairman of the board and has been associated with the Master Group for over three decades. 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 the Managing Director of MGEL, holds a Master's degree in Business Administration (USA) and has been successfully overseeing the foam and energy business of the group for around 9 years.

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

Financial Transparency Yousaf Adil a QCR-rated audit firm, is the external auditor of the company. The auditor has expressed an unqualified opinion for the review of interim financial statements for the period ending CY22. However, the auditor draws attention to the basis of the preparation of the financial statement. SECP through its SRO dated September 02, 2019, granted exemption from the application of IFRS 16 & IFRS 9, and IAS 21 to all IPPs who have entered into PPA before January 2019. MGEL along with other IPPs who executed their PPA after January 2019 filed a petition in the honorable Lahore high court to also allow exemptions to companies that entered into PPAs after January 2019 on the basis that they had already achieved other significant milestones earlier. The exemption was granted by the Honorable LHC and therefore the financial statements have been prepared on the basis of these exemptions.

Management

Organizational Structure MGEL has a lean organizational structure with a well-defined professional management team to monitor the operations and assure control mechanisms.

Management Team Mr. Rumman Arshad Dar is the COO of the company. Mr. Dar has over 14 years of experience in the energy sector. Mr. Dar holds an MBA in Finance and has cleared the first two levels of the CFA program.

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

Control Environment The management is supported by a team of individuals from the sponsors who provide global support. Under the senior management, the company has appointed different individuals for each role. The company has well organized finance division while the O&M of the plant is outsourced. The operation site team ensures safety of the site along with monitoring O&M contractor in order to minimize any risk that could potentially damage the plants performance.

Operational Risk

Power Purchase Agreement MGEL has been developed under the Renewable Energy Policy 2006. EPA is with CPPA-G and has a tenure of 25 years from the date of COD i.e August 2021.

Operation And Maintenance HydroChina, who was the onshore contractor, is currently providing warranty period O&M services to the Company for a period of two years from the date of COD.

Resource Risk The average wind speed in Jamshoro at 7.43 Meter/second. The risk is considered low however any fluctuation in wind speed under EPA is to be borne by the MGEL.

Insurance Cover Insurance Cover is attained for material damage, third-party liability, terrorism and business interruptions affecting the profits.

Performance Risk

Industry Dynamics The total installed capacity of the country as at End-FY22 stood at ~43,775MW with contributions from Hydro (24%), Thermal (61%), Nuclear (8%) and Renewables (7%). The Installed generation capacity of wind IPPs stood at 1,838MW as at end June 2022. Out of the total electricity generation of 153,874GWh during FY22, wind IPPs contributed approx. 3% to the national grid.

Generation During 9MFY23 the Company delivered 88.46Gwh of electricity to the national grid.

Performance Benchmark During 9MFY 23 the actual availability and capacity of the project remained below the benchmark parameters owing to wind speed variation. The availability and capacity benchmarks can be compared at the end of the year.

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 loan of PKR 4.64bln (SBP refinancing rate of 3%+2.25%; Bank rate of 3MKIBOR+2.25%).

Liquidity Profile As circular debt continues to be an issue for companies operating in the power sector. Consequently, MGEL is managing its liquidity requirements through a mix of cash generation and short-term borrowings.

Working Capital Financing Financing Renewable IPPs do not have to pay for fuel which minimizes their working capital needs. MGEL's Net Working Capital Days stood at 98 days for 6MFY23. As the plant achieved its COD in August 2021, therefore the actual pattern of receivable from authority is yet to be seen.

Cash Flow Analysis The cash generation of Master Green from its operations stood at PKR 978mln for 6MFY23. 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 78.7% as of the end Dec 2022 (80.9% June-22), majorly consisting of project-related loans (63.5%). Leveraging of the Company will be expected to improve with timely repayment. As of End March 2023, the Company has successfully paid 7 installments. Project-related debt is expected to end in June 2031 for local SBP RE loan and in June 2034 for foreign and local KIBOR loan.

The Pakistan Credit Rating Agency Limited

Financial Summary
PKR mln

Master Green Energy Limited Power	Dec-22 6M Management	Jun-22 12M Audited	Jun-21 12M Audited	Jun-20 12M Audited
A BALANCE SHEET				
1 Non-Current Assets	11,510	11,162	8,313	1,363
2 Investments	-	-	-	-
3 Related Party Exposure	-	-	-	-
4 Current Assets	1,134	1,357	731	3,580
a Inventories	-	-	-	-
b Trade Receivables	*763*	*412*	-	-
5 Total Assets	12,645	12,519	9,044	4,943
6 Current Liabilities	276	626	7	17
a Trade Payables	*177*	*593*	-	-
7 Borrowings	9,358	9,244	6,785	3,371
8 Related Party Exposure	379	379	213	167
9 Non-Current Liabilities	-	-	-	-
10 Net Assets	2,631	2,270	2,039	1,389
11 Shareholders' Equity	2,631	2,270	2,039	1,389
B INCOME STATEMENT				
1 Sales	1,096	1,006	-	-
a Cost of Good Sold	*(370)*	*(581)*	-	-
2 Gross Profit	726	424	-	-
a Operating Expenses	(33)	(67)	(6)	(19)
3 Operating Profit	694	357	(6)	(19)
a Non Operating Income or (Expense)	*16*	*117*	*182*	*(69)*
4 Profit or (Loss) before Interest and Tax	710	474	176	(89)
a Total Finance Cost	*(345)*	*(418)*	*(0)*	*(0)*
b Taxation	*(5)*	*(11)*	*(0)*	*(3)*
6 Net Income Or (Loss)	360	44	176	(92)
C CASH FLOW STATEMENT				
a Free Cash Flows from Operations (FCFO)	*978*	*893*	*(4)*	*(21)*
b Net Cash from Operating Activities before Working Capital Changes	*642*	*497*	*(5)*	*(94)*
c Changes in Working Capital	*(736)*	*(290)*	*1,130*	*(1,647)*
1 Net Cash provided by Operating Activities	(93)	207	1,125	(1,741)
2 Net Cash (Used in) or Available From Investing Activities	(68)	(2,398)	(6,940)	(1,268)
3 Net Cash (Used in) or Available From Financing Activities	(53)	2,796	4,110	4,898
4 Net Cash generated or (Used) during the period	(214)	605	(1,704)	1,889
D RATIO ANALYSIS				
1 Performance				
a Sales Growth (for the period)	118.0%	N/A	N/A	N/A
b Gross Profit Margin	66.3%	42.2%	N/A	N/A
c Net Profit Margin	32.9%	4.4%	N/A	N/A
d Cash Conversion Efficiency (FCFO adjusted for Working Capital/Sales)	22.1%	59.9%	N/A	N/A
*e Return on Equity [Net Profit Margin * Asset Turnover * (Total Assets/Sh*	27.5%	2.3%	N/A	N/A
2 Working Capital Management				
a Gross Working Capital (Average Days)	98	150	N/A	N/A
b Net Working Capital (Average Days)	34	-66	N/A	N/A
c Current Ratio (Current Assets / Current Liabilities)	4.1	2.2	106.2	216.1
3 Coverages				
a EBITDA / Finance Cost	2.7	2.0	N/A	N/A
b FCFO / Finance Cost+CMLTB+Excess STB	1.3	0.7	0.0	-0.1
c Debt Payback (Total Borrowings+Excess STB) / (FCFO-Finance Cost)	7.4	19.0	-1671.2	-166.0
4 Capital Structure				
a Total Borrowings / (Total Borrowings+Shareholders' Equity)	78.7%	80.9%	77.4%	71.7%
b Interest or Markup Payable (Days)	5.5	7.1	N/A	N/A
c Entity Average Borrowing Rate	7.2%	4.7%	0.0%	0.0%

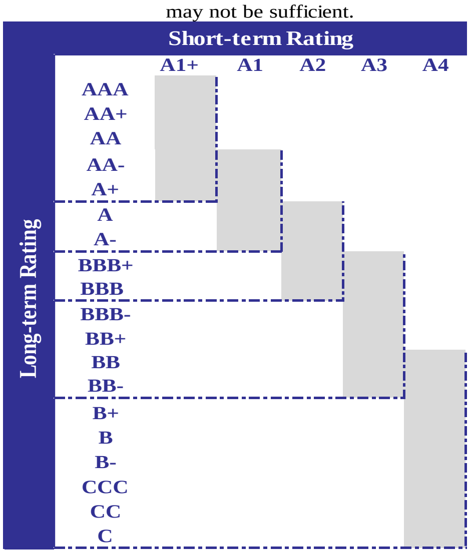
#	Notes

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):

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

Disclaimer: PACRA has used due care in preparation of this document. Our information has been obtained from sources we consider to be reliable but its accuracy or completeness is not guaranteed. PACRA shall owe no liability whatsoever to any loss or damage caused by or resulting from any error in such information. Contents of PACRA documents may be used, with due care and in the right context, with credit to PACRA. Our reports and ratings constitute opinions, not recommendations to buy or to sell.

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)

ii. PACRA, the analysts involved in the rating process and members of its rating committee, and their family members, do not have any conflict of interest relating to the rating done by them | Chapter III; 12-2-(e) & (k)

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

Restrictions

(3) No director, officer or employee of PACRA communicates the information, acquired by him for use for rating purposes, to any other person except where required under law to do so. | Chapter III; 10-(5)

(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)

(11) PACRA promptly investigates, in the event of a misconduct or a breach of the policies, procedures and controls, and takes appropriate steps to rectify any weaknesses to prevent any recurrence along with suitable punitive action against the responsible employee(s) | Chapter III; 11-B-(m)

Independence & Conflict of interest

(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)

(14) PACRA discloses that no shareholder directly or indirectly holding 10% or more of the share capital of PACRA also holds directly or indirectly 10% or more of the share capital of the entity which is subject to rating or the entity which issued the instrument subject to rating by PACRA; | Reference Chapter III; 12-2-(f)

(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)

(16) PACRA ensures that the analysts or any of their family members shall not buy or sell or engage in any transaction in any security which falls in the analyst’s area of primary analytical responsibility. This clause shall, however, not be applicable on investment in securities through collective investment schemes. | Chapter III; 12-2-(l)

(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)

Proprietary Information

(23) All information contained herein is considered proprietary by PACRA. Hence, none of the information in this document can be copied or, otherwise reproduced, stored or disseminated in whole or in part in any form or by any means whatsoever by any person without PACRA’s prior written consent