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
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, is setting up its second 50MW wind power plant in district Jamshoro, Sindh – Master Green Energy Limited. Master Green has been awarded a cost-plus tariffby NEPRA, with the energy payments to be received from CPPA-G backed by the sovereign guarantee of Government of Pakistan. The overall construction of the project is ~98% completed. Construction on the project is started in September 2019 and commercial operation date (COD) was expected to be achieved in November 2020. However, due to the outbreak of Covid19 construction activities were halted. The management now expects COD to be achieved by end-July 2021. Hydrochina International Engineering Company Limited & Hangzhou Huachen Electric Power Control Company are the EPC contractors, comfort is drawn that they have ~40 years of worldwide experience in wind power technology. The management has represented that in case of delay in achieving the COD, the EPC contractors will be liable to pay liquidated damages of $29000 per day backed by an irrevocable guarantee of 15% of the EPC cost. The construction contractor will be the O&M operator for two years after COD; it will provide the warranty bond (10% of EPC cost) in the form of an irrevocable bank guarantee for 24 months after COD. These bank guarantees provide additional cushion for the sustainable financial risk profile. Further, the company will maintain the Payment Service Reserve Account (PSRA), which will be filled by 6 months SBLCs and 3 months cash flows, in total providing coverage of nine months on its financial obligations till maturity. In addition, the project revenues and cash flows are exposed to wind risk, there is seasonal variation in the wind speed which affect the electricity generation, and ultimately cash flows may face seasonality. However, historical wind speeds provide comfort that Master Green would be able to generate enough cash flows to keep its financial risk manageable. Comfort is drawn from the group association, having strong financial backing and relevant experience in successfully commissioning and operating 52.80MW Wind Energy Power Plant (Master Wind Energy Ltd).

The Company has 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. The Government of Pakistan has given payment guarantee against dues from CPPA-G. The Company has adequate insurance coverage to cover the risk of business interruptions, marine & erection etc. Furthermore, external factors such as any adverse changes in the regulatory framework or prolonged delay in achieving COD may impact the ratings. Upholding financial discipline is also a consideration.

Disclosure

Name of Rated Entity	Master Green Energy Limited
Type of Relationship	Solicited
Purpose of the Rating	Entity Rating
Applicable Criteria	Methodology | IPP(Jun-20),Methodology | Correlation Between Long-Term And Short-Term Rating Scale(Jun-20),Criteria | Rating Modifier(Jun-20)
Related Research	Sector Study | Power(Jan-21)
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 is setting up 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 Managing Director. 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 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 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 firm, is the external auditor of the company.

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 operations and assure control mechanisms.
Management Team Mr. Rumman Arshad Dar is the CEO of the company. Mr. Dar has over twelve 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 decision making process systematic.
Control Environment MGEL has in place an efficient MIS reporting system for its operations, enabling efficient monitoring and timely decision making.

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. However, due to the Lockdown in China (Hubei) in January-20 because of the COVID-19 pandemic, the EPC contractors have filed a Force Majeure Event (FME) Claim with MGEL which MGEL rejected. Now, a detailed response from the EPC contractors is awaited. MGEL has also notified the same to Central Power Purchasing Agency (CPPA). The management has given the argument that National Transmission & Dispatch Company had recently served a FME claim to CPPA, and CPPA have subsequently served an Other Force Majeure Event claim to the MGEL. The management is of the view that this would strengthen their claim as well.
Power Purchase Agreement MGEL is being 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 Insurance is attained for material damage, third party liability, and delay in startup affecting the profits. EPC contractors will be liable to pay Liquidated Damages (LDs) as per the contract if benchmark performance ratio is not met or in the event that plant is not functional by the Required COD.

Performance Risk

Industry Dynamics Owing to newly installed plants, Pakistan's energy mix is shifting towards Solar/Gas/and coal from Furnace Oil and other expensive sources. As on June-20, installed capacity of electricity reached 38,719 MW, which was 38,995 MW at end June-19, decline of 0.7%.(276MW)in FY20, due to the expunge of 784MW of GTPS-Kotri (144MW) and TPS Guddu (640MW). There was an increase of 508MW new power projects including CPEC from coal and renewable sources and this will increase further in coming years. Although electricity generation varies due to availability of inputs and other constraints, generation decreased from 136,532 GWh to 134,745 GWh, posting a decline of 1.3% in FY20 as compared to FY19.
Operation And Maintenance The long term O&M contract is yet to be finalized.
Fuel Supply Agreement 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 97% and 38.48% by NEPRA.

Financial Risk

Financing Structure Analysis The total project cost is ~USD 64.64mln, consisting of 80% of debt (~USD 51.71ml) and 20% of equity (~USD 12.93mln). 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+1%). The foreign loan has the maturity of 13 years while the local loan has maturity of 10 years. Both the local and foreign loan are repayable in quarterly installments. The repayment of loan is due to begin 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. Consequently, IPPs have to manage their liquidity requirements from short-term borrowings.
Working Capital Financing Renewable IPPs do not have to pay for fuel which minimize their working capital needs.
Cash Flow Analysis The stability and sustainability of future cash flows of MGEL depends 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 will maintain the Payment Service Reserve Account (PSRA), which will be equivalent to three quarterly payments(9 months). PSRA will be filled by 6 months SBLC and 3 months cash flows.
Capitalization The leverage (Debt/Equity) of the company stood at 78.8% as at end Dec-20 (12.7% June-19). This huge increase is owing to the fact that the company achieved financial close during August-19 and as a result the leverage of the company increased significantly as the project debt constitutes 80%(~USD51.71ml) of total estimated project cost (~USD 64.64mln).

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Financial Summary
PKR mln

00-Jan-00	Dec-20	Jun-20	Jun-19	Jun-18
##	6M	12M	12M	12M
A BALANCE SHEET				
1 Non-Current Assets	8,043	1,363	94	77
2 Investments	-	-	-	-
3 Related Party Exposure	-	-	-	-
4 Current Assets	895	3,580	1	5
a Inventories	-	-	-	-
b Trade Receivables	-	-	-	-
5 Total Assets	8,938	4,943	95	82
6 Current Liabilities	1	17	0	0
a Trade Payables	*1*	-	-	-
7 Borrowings	6,829	3,371	12	11
8 Related Party Exposure	213	167	-	-
9 Non-Current Liabilities	-	-	-	-
10 Net Assets	1,894	1,389	83	70
11 Shareholders' Equity	1,894	1,389	83	71
B INCOME STATEMENT				
1 Sales	-	-	-	-
a Cost of Good Sold	-	-	-	-
2 Gross Profit	-	-	-	-
a Operating Expenses	(3)	(19)	(0)	(0)
3 Operating Profit	(3)	(19)	(0)	(0)
a Non Operating Income or (Expense)	*134*	*9*	*0*	-
4 Profit or (Loss) before Interest and Tax	132	(10)	(0)	(0)
a Total Finance Cost	*(0)*	*(79)*	*(1)*	*(1)*
b Taxation	*(0)*	*(3)*	-	-
6 Net Income Or (Loss)	131	(92)	(2)	(1)
C CASH FLOW STATEMENT				
a Free Cash Flows from Operations (FCFO)	*(3)*	*(21)*	*(0)*	*(0)*
b Net Cash from Operating Activities before Working Capital Changes	*(3)*	*(94)*	*(1)*	*(0)*
c Changes in Working Capital	*1,114*	*(1,647)*	*0*	*0*
1 Net Cash provided by Operating Activities	1,111	(1,741)	(1)	(0)
2 Net Cash (Used in) or Available From Investing Activities	(6,675)	(1,268)	(18)	(24)
3 Net Cash (Used in) or Available From Financing Activities	4,015	4,898	14	30
4 Net Cash generated or (Used) during the period	(1,548)	1,889	(4)	5
D RATIO ANALYSIS				
1 Performance				
a Sales Growth (for the period)	N/A	N/A	N/A	N/A
b Gross Profit Margin	N/A	N/A	N/A	N/A
c Net Profit Margin	N/A	N/A	N/A	N/A
d Cash Conversion Efficiency (FCFO adjusted for Working Capital/Sales)	N/A	N/A	N/A	N/A
*e Return on Equity [Net Profit Margin * Asset Turnover * (Total Assets/Sh*	N/A	N/A	N/A	N/A
2 Working Capital Management				
a Gross Working Capital (Average Days)	N/A	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)	842.2	216.1	8.3	11.8
3 Coverages				
a EBITDA / Finance Cost	-4.1	-0.2	-0.5	-0.3
b FCFO / Finance Cost+CMLTB+Excess STB	0.0	-0.1	-0.5	-0.3
c Debt Payback (Total Borrowings+Excess STB) / (FCFO-Finance Cost)	-1076.4	-35.1	-8.1	-12.3
4 Capital Structure				
a Total Borrowings / (Total Borrowings+Shareholders' Equity)	78.8%	71.7%	12.7%	13.5%
b Interest or Markup Payable (Days)	0.0	68.8	0.0	0.0
c Entity Average Borrowing Rate	0.0%	4.8%	8.8%	0.0%

Credit Rating

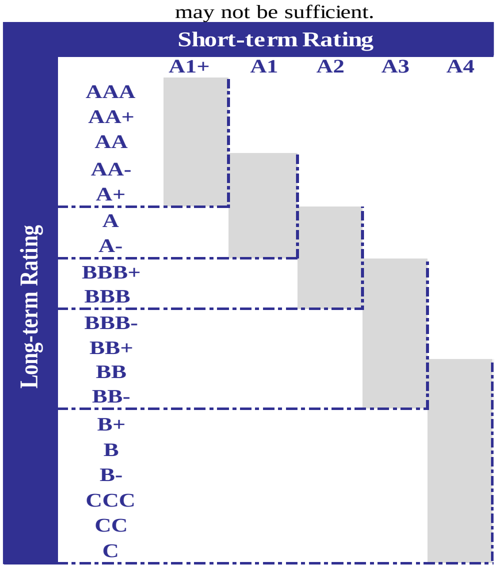
Credit rating reflects forward-looking opinion on credit worthiness of underlying entity or instrument; more specifically it covers relative ability to honor financial obligations. The primary factor being captured on the rating scale is relative likelihood of default.

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)

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.

(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