



The Pakistan Credit Rating Agency Limited

## Rating Report

### Master Green Energy Limited

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#### Rating History

Dissemination Date	Long Term Rating	Short Term Rating	Outlook	Action	Rating Watch
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 – Master Green Energy Limited. The ratings incorporate the Group's previous experience in successfully commissioning and operating a 52.8MW Wind Energy Power Plant (Master Wind Energy Limited). Master Green is awarded a cost plus tariff, with the payments to be received from CPPA-G backed by the sovereign guarantee. Currently, project is exposed to completion risk because construction work is at initial stage; 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 the wind power technology. In case of delay in achieving the COD, the EPC contractors will be liable to pay the liquidated damages of \$ 29,000 per day backed by irrevocable bank guarantee of 15% of 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 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. Further, the project revenues and cash flows are exposed to wind risk, there is seasonal variation in the wind speed which effect the electricity generation, 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.

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

<b>Name of Rated Entity</b>	Master Green Energy Limited
<b>Type of Relationship</b>	Solicited
<b>Purpose of the Rating</b>	Entity Rating
<b>Applicable Criteria</b>	Methodology   IPP(Jun-19),Methodology   Correlation Between Long-Term And Short-Term Rating Scale(Jun-19),Criteria   Rating Modifier(Jun-19)
<b>Related Research</b>	Sector Study   Power(Jan-19)
<b>Rating Analysts</b>	Arsalan Ahmed   arsalan.ahmed@pacra.com   +92-42-35869504

## The Pakistan Credit Rating Agency Limited

### Profile

**Plant** Master Green is a Renewable Energy Independent Power Producer (RE IPP) operating under the Renewable Energy Policy 2006. The company is setting up 50MW wind power plant located in Jamshoro, Sindh.

**Tariff** Master Green 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** Master Green Energy Ltd ( Master Green) is wholly owned by Master Group. The ownership is segmented among three brothers having an equal shareholding in Master Green through separate holding companies. Associated companies' holds 99.99% of total share holding of the Company; Nadeem Malik Holdings (Pvt.) Ltd. (25.67%), N M Holdings (Pvt.) Ltd. (25.67%), Najeeb Holding (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 and currently 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** Master Green's Board of Directors (BoD) 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 Master Green and has over 2 decades of experience under his belt . Mr. Shahzad Malik is the Managing Director of Master Green, 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** Master Green 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 eleven 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** Master Green's management effectiveness plays a significant role in empowering the organization through positive results, which has made decision making process systematic.

**Control Environment** Master Green has in place an efficient MIS reporting system for its operations, enabling efficient monitoring and timely decision making.

### Completion Risk

**Engineering And Procurement** Master Green 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 company tested various WTG technologies available in Pakistan and opted for Gamesa G114 2.0 MW turbines.

**Power Purchase Agreement** Master Green operates under the Renewable Energy Policy 2006. Energy Purchase Agreement 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 COD.

### Performance Risk

**Industry Dynamics** The government has devised a concrete plan to enhance share of renewable energy in the existing energy mix by 30 per cent till 2030. According to NEPRA, the wind power potential of Pakistan is 50,000MW with current installed capacity at 1,186MW and further wind energy IPPs of 1,014 MW, which have achieved financial close.

**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+4.5%) 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 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 Master Green depends completely on continuous performance of its wind turbines. Master Green has to generate adequate cash flows which will be enough to meet its debt obligations. 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 12.7% as at end June-19. The company, however, achieved financial close during August-19 and as a result the leverage of the company is expected to increase significantly as the project debt constitutes 80% (~USD 51.71ml) of total estimated project cost (~USD 64.64mln).



Master Green Energy Limited

BALANCE SHEET	30-Jun-19	30-Jun-18	30-Jun-17	30-Jun-16
	FY19	FY18	FY17	FY16
<b>Non-Current Assets</b>	<b>94</b>	<b>77</b>	<b>42</b>	<b>27</b>
Investments (Others)				
Equity	-	-	-	-
Debt	-	-	-	-
<b>Current Assets</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>1</b>
Inventory	-	-	-	-
Trade Receivables	-	-	-	-
Other Current Assets	0	0	0	1
Cash & Bank Balances	1	5	0	0
<b>Total Assets</b>	<b>95</b>	<b>82</b>	<b>42</b>	<b>28</b>
<b>Debt</b>	<b>12</b>	<b>11</b>	<b>-</b>	<b>27</b>
Short-term	-	-	-	-
Long-term (Incl. Current Maturity of long-term debt)	12	11	-	27
Other Short term liabilities (inclusive of trade payables)	0	0	0	0
Other Long term Liabilities	-	-	-	-
<b>Shareholder's Equity</b>	<b>83</b>	<b>71</b>	<b>42</b>	<b>1</b>
<b>Total Liabilities &amp; Equity</b>	<b>95</b>	<b>82</b>	<b>42</b>	<b>28</b>

INCOME STATEMENT

Turnover	-	-	-	-
Gross Profit	-	-	-	-
Operating Expense	(0)	(0)	(0)	(0)
Other Income	0	-	-	-
Financial Charges	(1)	(1)	-	-
<b>Net Income</b>	<b>(2)</b>	<b>(1)</b>	<b>(0)</b>	<b>(0)</b>

Cashflow Statement

Free Cashflow from Operations (FCFO)	(0)	(0)	(0)	(0)
Net Cash changes in Working Capital	0	0	0	(0)
Net Cash from Operating Activities	(1)	(0)	0	(1)
Net Cash from Investing Activities	(18)	(24)	(15)	(27)
Net Cash from Financing Activities	14	30	15	28
Net Cash generated during the period	(4)	5	(0)	0

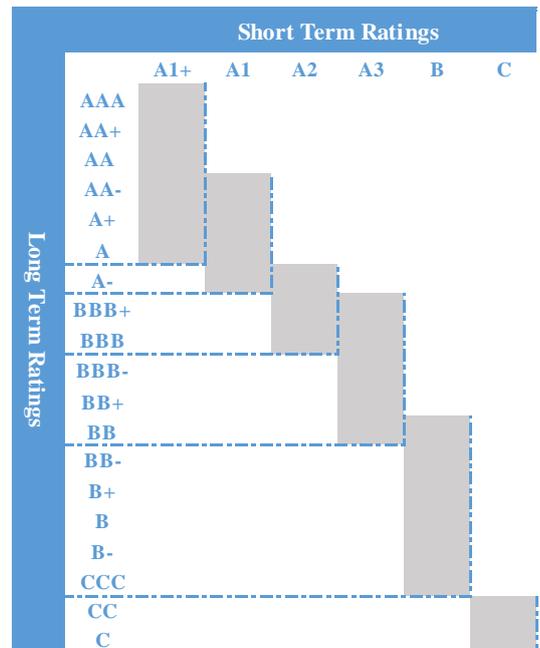
Ratio Analysis

<b>Performance</b>				
Turnover Growth	N/A	N/A	N/A	N/A
Gross Margin	N/A	N/A	N/A	N/A
Net Margin	N/A	N/A	N/A	N/A
ROE	N/A	N/A	N/A	N/A
<b>Coverages</b>				
Debt Service Coverage (X) (FCFO/Gross Interest+CMLTD)	(0.5)x	(0.3)x	-	(1.7)x
Interest Coverage (X) (FCFO/Gross Interest)	(0.5)x	(0.3)x	-	-
FCFO Pre-WC/Gross interest+CMLTD+Uncovered STB	(0.5)x	(0.3)x	-	(1.7)x
FCFO POST-WC/Gross interest+CMLTD+Uncovered STB	(0.4)x	(0.3)x	-	(5.8)x
<b>Liquidity</b>				
Current Ratio (X)	8.3x	11.8x	1.8x	4.2x
Short Term Adjusted Quick Ratio	-	-	-	-
<b>Capital Structure</b>				
Total Debt/Total Debt+Equity	12.7%	13.5%	0.0%	97.3%

## Credit Rating Scale & Definitions

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 Ratings		Short Term Ratings	
<b>AAA</b>	<b>Highest credit quality.</b> Lowest expectation of credit risk. Indicate exceptionally strong capacity for timely payment of financial commitments	<b>A1+</b>	The highest capacity for timely repayment.
<b>AA+</b> <b>AA</b> <b>AA-</b>	<b>Very high credit quality.</b> 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.	<b>A1</b>	A strong capacity for timely repayment.
<b>A+</b> <b>A</b> <b>A-</b>	<b>High credit quality.</b> 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.	<b>A2</b>	A satisfactory capacity for timely repayment. This may be susceptible to adverse changes in business, economic, or financial conditions.
<b>BBB+</b> <b>BBB</b> <b>BBB-</b>	<b>Good credit quality.</b> 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.	<b>A3</b>	An adequate capacity for timely repayment. Such capacity is susceptible to adverse changes in business, economic, or financial conditions.
<b>BB+</b> <b>BB</b> <b>BB-</b>	<b>Moderate risk.</b> 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>	The capacity for timely repayment is more susceptible to adverse changes in business, economic, or financial conditions.
<b>B+</b> <b>B</b> <b>B-</b>	<b>High credit risk.</b> 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.	<b>C</b>	An inadequate capacity to ensure timely repayment.
<b>CCC</b> <b>CC</b> <b>C</b>	<b>Very high credit risk.</b> 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.		
<b>D</b>	Obligations are currently in default.		



**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, a) some material identifiable event and/or b) deviation from expected trend. 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 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) cessation of underlying entity, c) the debt instrument is redeemed, d) the rating remains suspended for six months, e) the entity/issuer defaults, or/and f) PACRA finds it impractical to surveil the opinion due to lack of requisite information.

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

**Disclaimer:** PACRA's ratings are an assessment of the credit standing of entities/issue in Pakistan. They do not take into account the potential transfer / convertibility risk that may exist for foreign currency creditors. PACRA's opinion is not a recommendation to purchase, sell or hold a security, in as much as it does not comment on the security's market price or suitability for a particular investor.

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(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

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(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)

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(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.

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(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)

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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

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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)

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(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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