The Pakistan Credit Rating Agency Limited

Rating Report

Harappa Solar (Pvt.) Limited

Report Contents

Rating History

Dissemination Date	Long Term Rating	Short Term Rating	Outlook	Action	Rating Watch
15-Aug-2023	A+	A1	Stable	Upgrade	-
09-Sep-2022	A	A1	Stable	Maintain	-
10-Sep-2021	A	A1	Stable	Maintain	-
11-Sep-2020	A	A1	Stable	Upgrade	-
08-Oct-2019	A-	A1	Stable	Maintain	-
30-Apr-2019	A-	A1	Stable	Maintain	-
30-Nov-2018	A-	A1	Stable	Maintain	-
02-Apr-2018	A-	A1	Stable	Maintain	-
31-Aug-2017	A-	A1	Stable	Initial	-

Rating Rationale and Key Rating Drivers

Harappa Solar Private Limited an 18MWp Solar Power Plant – incorporated in September 2014, operates under the Renewable Energy Policy 2006. Rating upgrade takes into account smooth operational performance and relative positioning in the peer universe. Assigned ratings also take into account sound profile of sponsors having considerable experience in establishing green-field projects in power and industrial sectors and also operating a portfolio of solar projects. A long-term energy purchase agreement of 25 years with Power Purchaser, mitigating the underlying business and economical risk factors, along with sovereign guarantees on power purchaser's payment obligation, also contribute positively towards the ratings. During FY23, Harappa Solar generated 16,776MW of electrical output while maintaining capacity and availability factor. The Company's operating performance improved, with the capacity factor rising to 19.5% (required: 17%). Due to the growth in net revenues (FY23: PKR787mln, FY22: PKR 581mln), gross and operating margins have returned to FY21 levels. The Company has availed both foreign and local loan to finance the debt. The Company has repaid ~55% of local loan and 49% of foreign loan by which leveraging comes down to 60%. The Company is required to maintain Debt Servicing Reserve Account (DSRA) equivalent to two debt repayments under financing documents, the Company is funding DSRA from SBLC.
Short-term borrowing stands at PKR 177mln to meet the working capital requirement. With a favourable liquidity profile and enough internal resources for working capital management, debt servicing remained satisfactory. Power Purchaser has been making payments on time so far; however, any future payment delays may result in some liquidity pressure. Capitalization metrics improved in FY23 due to an increase in the equity base. Based on predicted profitability and minor capex plans in the future, gearing and leverage levels will likely remain low.

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	Harappa Solar (Pvt.) 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	Anam Waqas Ghayour | anam.waqas@pacra.com | +92-42-35869504

Profile

Plant Harappa Solar Private Limited (Harappa Solar) set up an 18 MWp Solar Power Plant near Harappa Bypass, Tehsil and District Sahiwal, Punjab. The Plant is Pakistan's first single axis technology based solar Plant and operates under the Renewable Energy Policy 2006.

Tariff Harappa Solar opted for the Upfront Tariff for Solar Power Projects by NEPRA. The Company has a levelized generation Tariff of 11.6972 US¢ per KWh for 25 years.

Return On Project The ROE of Harappa Solar project, as agreed with NEPRA, is 17%.

Ownership

Ownership Structure Harappa Solar is primarily sponsored by Rana Nasim Ahmed with 75% shareholding, other significant shareholders are Mr. Khaqan Babar Cheema (12%) and Windforce (Pvt.) Ltd (12.8%)

Stability Stability in the IPPs is drawn from the agreements signed between the Company and power purchaser. The term of the EPA is 25 years. Meanwhile, the Implementation Agreement provides a sovereign guarantee for cashflows, given adherence to agreed performance benchmarks.

Business Acumen The project sponsors include local and international players with a track record spanning of 300 MWp renewable projects across multiple countries with hands-on experience of commissioning and operating the power plants.

Financial Strength Strong financial background of sponsors and Windforce (Pvt.) Limited (foreign investor) will continue to provide comfort.

Governance

Board Structure Harappa Solar's Board of Directors (BoD) comprises eight members, including the CEO. Seven Board members are currently nominated by the major sponsors. Only the CEO is executive director while all other directors are non-executive. Rana Nasim Ahmed is the chairman of the Board.

Members' Profile The Board members have diversified experience with limited but useful experience of setting up and running of power plants.

Board Effectiveness Board has not formed any Board committee to oversee the Company's affairs. The company maintains adequate Board meeting minutes.

Financial Transparency BDO Ebrahim & Co. Chartered Accountant is the external auditor of the Company. The auditor gave an unqualified opinion on the Company's financial statements for the year ended June 30, 2022.

Management

Organizational Structure IPPs are generally featured by a flat organizational structure, mainly comprising finance and technical staff, while the engineering, construction, and operations of the plant are outsourced.

Management Team Rana Uzair Nasim is the CEO of the Company. His previous experience of setting up renewable energy projects was the key for smooth incorporation and finalization of all key agreements. Mr. Uzair is supported by experienced, professional and efficient management team.

Effectiveness The management's role in an IPP is confined largely to financial matters and regulatory interaction. The management tier ensures effective delegation of functional responsibility across various departments, facilitating a smooth flow of operations.

Control Environment Harappa Solar takes advantage of advanced I.T. solutions to deliver comparatively better on many fronts.

Operational Risk

Power Purchase Agreement The Energy Purchase Agreement (EPA) is with the Central Power Purchasing Agency (Guarantee) Limited (CPPA-G) and has a tenure of 25 years. There will be only an energy payment in contrast to other thermal plants which includes energy and capacity payments.

Operation And Maintenance OMS (Pvt.) Limited is the current O&M contractor of Harappa Solar for a period of three years. In case of any equipment's malfunctioning O&M team will have a natural timeline of twelve hours of non-sunlight hours to fix the issue. This gives comfort to the O&M team to minimize plant downtime.

Resource Risk Solar Energy is dependent on mainly two things irradiation and temperature. Harappa Solar has employed single axis technology, which will help the plant to effectively utilize solar energy

Insurance Cover Insurance is attained for material damage and third party liability affecting the profits. EPC contract also includes some performance benchmarks to be met. If actual performance is lower than the benchmark performance then EPC contractor will be liable to pay Liquidated Damages.

Performance Risk

Industry Dynamics After the introduction of Renewable Power Policy 2006, the inclination towards the renewable energy sources i.e. Hydro, Solar, Wind, Biogas, has been on rise. Till June FY22, the total installed generation capacity of Pakistan has jumped to 41,557MW (FY21: 37,261MW), posting a growth of 11.5%. Out of which solar IPPs contribute around 1%. Biggest contributor remains to be thermal i.e. 62% followed by hydro i.e. 24%.

Generation The Annual Benchmark electricity generation for Harappa Solar based on 17% Capacity Factor is 26,806 MWh. The Company has generated 31,026 MW of electricity during CY22 (FY22: 34,671 MW, FY21: 37,557 MW).

Performance Benchmark The required availability for Harappa Solar under the EPA is 90%. During 9MFY23, average plant availability has been maintained according to agreed parameter (99%).

Financial Risk

Financing Structure Analysis Debt financing constitutes 75% of the total Harappa Solar's project cost i.e. USD 18mln. The FCY facility between the ECO Trade and Development and Harappa Solar is for USD 8.2mln with a tenure of 10 years with quarterly payments. The local debt facility is between The Bank of Punjab and Askari Bank, Pak Oman Investment Company and Harappa Solar for PKR 996mln. The equity portion of the project cost amounts to USD ~6mln. Harappa Solar has repaid twenty installments of both local and foreign loan by end-June 23. The Company is required to maintain DSRA equivalent to two debt repayments under financing documents, this requirement is being met by SBLC from sponsors and is planned to be funded by the Company from internal cash flows going forward. As per the agreement, any upward shift in US dollars is adjusted in the Company's tariff that is reflected in the top line of the company.

Liquidity Profile During FY23, Harappa Solar total receivables stood at PKR 265mln. (FY22: PKR 285mln). 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 As at end June'23, total short term working capital lines i.e. ~PKR 325mln (FY21: ~PKR 325mln), remained ~54% utilized.

Cash Flow Analysis During FY23, free cash flows from operations (FCFO) stood at PKR 662mln as compared to PKR 500mln in FY22. Coverages (FCFO pre WC / Gross Interest +CMLTB) have increased due to sizable cash generation and reduced finance cost.

Capitalization The Company currently has leveraged capital structure comprises 25% debt during FY23. Short Term Debt (PKR 177mln) comprises 9.2% of total debt & LTD comprises 91% (PKR 1,374mln).

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Financial Summary
PKR mln

Harappa Solar Power	Jun-23	Jun-22	Jun-21	Jun-20
	12M	12M	12M	12M
A BALANCE SHEET				
1 Non-Current Assets	2,848	2,642	2,541	2,655
2 Investments	25	62	113	30
3 Related Party Exposure	-	-	-	-
4 Current Assets	518	420	460	478
a Inventories	-	-	-	-
b Trade Receivables	*371*	*286*	*320*	*313*
5 Total Assets	3,391	3,125	3,114	3,163
6 Current Liabilities	175	102	72	77
a Trade Payables	-	-	*2*	*2*
7 Borrowings	1,934	1,879	2,008	2,068
8 Related Party Exposure	-	-	-	-
9 Non-Current Liabilities	2	2	2	2
10 Net Assets	1,280	1,141	1,032	1,016
11 Shareholders' Equity	1,282	1,141	1,032	1,016
B INCOME STATEMENT				
1 Sales	787	581	613	619
a Cost of Good Sold	*(201)*	*(176)*	*(174)*	*(168)*
2 Gross Profit	585	405	440	451
a Operating Expenses	(56)	(43)	(36)	(34)
3 Operating Profit	529	362	404	417
a Non Operating Income or (Expense)	*10*	*30*	*24*	*35*
4 Profit or (Loss) before Interest and Tax	540	392	428	452
a Total Finance Cost	*(186)*	*(124)*	*(118)*	*(154)*
b Taxation	*(2)*	*(1)*	*(1)*	*(1)*
6 Net Income Or (Loss)	352	267	309	297
C CASH FLOW STATEMENT				
a Free Cash Flows from Operations (FCFO)	*662*	*500*	*546*	*564*
b Net Cash from Operating Activities before Working C	*507*	*381*	*436*	*424*
c Changes in Working Capital	*(61)*	*31*	*(13)*	*13*
1 Net Cash provided by Operating Activities	446	411	422	437
2 Net Cash (Used in) or Available From Investing Acti	35	58	(69)	(27)
3 Net Cash (Used in) or Available From Financing Act	(478)	(570)	(254)	(332)
4 Net Cash generated or (Used) during the period	2	(101)	100	78
D RATIO ANALYSIS				
1 Performance				
a Sales Growth (for the period)	35.5%	-5.3%	-1.0%	8.7%
b Gross Profit Margin	74.4%	69.8%	71.7%	72.8%
c Net Profit Margin	44.7%	46.0%	50.4%	48.0%
d Cash Conversion Efficiency (FCFO adjusted for Wor	76.4%	91.4%	86.9%	93.2%
*e Return on Equity [Net Profit Margin * Asset Turnov*	28.6%	23.5%	29.7%	29.7%
2 Working Capital Management				
a Gross Working Capital (Average Days)	152	190	188	188
b Net Working Capital (Average Days)	N/A	189	187	177
c Current Ratio (Current Assets / Current Liabilities)	3.0	4.1	6.4	6.2
3 Coverages				
a EBITDA / Finance Cost	4.4	5.0	5.8	4.2
b FCFO / Finance Cost+CMLTB+Excess STB	1.5	1.3	2.0	1.5
c Debt Payback (Total Borrowings+Excess STB) / (FC	3.4	4.2	3.8	4.4
4 Capital Structure				
a Total Borrowings / (Total Borrowings+Shareholders	60.1%	62.2%	66.1%	67.1%
b Interest or Markup Payable (Days)	104.9	57.5	57.3	39.0
c Entity Average Borrowing Rate	7.8%	5.3%	4.7%	6.4%

#	Notes

Credit Rating

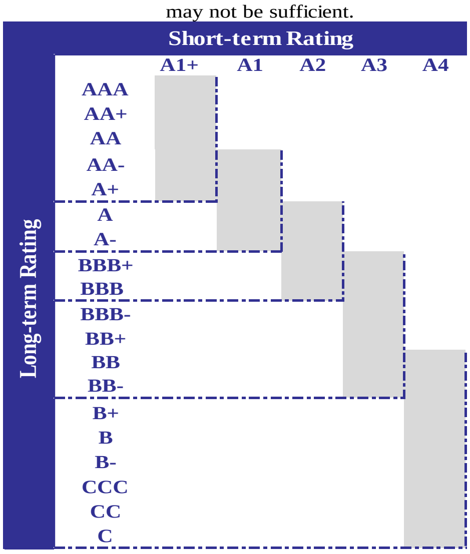
Credit rating reflects forward-looking opinion on credit worthiness of underlying entity or instrument; more specifically it covers relative ability to honor financial obligations. The primary factor being captured on the rating scale is relative likelihood of default.

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

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