

## **GHARO SOLAR LIMITED**

## **Analysts:**

Musaddeq Ahmed (musaddeq@vis.com.pk)

RATING DETAILS					
DATINGS CATEGORY	Latest Rating		Previous Rating		
RATINGS CATEGORY	Long-term	Short-term	Long-term	Short-term	
ENTITY	A+	A1	A+	A1	
RATING OUTLOOK/ WATCH	Stable		Sta	able	
RATING ACTION	Reaffirmed		Upgrade		
RATING DATE	October 27, 2025		Septembe	er 26, 2024	

Shareholding (5% or More)	Other Information
Rana Nasim Ahmed - 55%	Incorporated in 2016
Windforce (Private) Ltd – 30%	Public Unlisted Company
Norsk Solar – 10%	Chief Executive: Rana Uzair Nasim
Mohammad Khaqan Babar Cheema - 5%	External Auditor: KPMG Taseer Hadi & Co. Chartered Accountants

## Applicable Rating Methodology

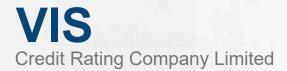
VIS Entity Rating Criteria Methodology – Corporates Ratings https://docs.vis.com.pk/docs/CorporateMethodology.pdf

## **Rating Scale**

https://docs.vis.com.pk/do cs/VISRatingScales.pdf

## **Rating Rationale**

The assigned ratings reflect Gharo Solar Limited's consistent operational performance under a long-term Energy Purchase Agreement (EPA) with K-Electric, stable cash inflows secured through an escrow mechanism, and sound financial flexibility. The Company has maintained strong profitability margins, supported by a cost pass-through tariff structure indexed to CPIs. Gearing and leverage indicators have improved, driven by scheduled debt amortization and equity accretion. Liquidity and coverage metrics have also strengthened on the back of robust operating cash flows and reduced finance costs following the decline in benchmark interest rates.



## **Company Profile**

Incorporated in 2016 as a public unlisted company, GSL operates a 50 MW solar photovoltaic (PV) power plant located near Gharo, District Thatta, Sindh, dedicated to generating and supplying electricity to K-Electric. Developed with significant foreign investment, the plant commenced commercial operations in December 2019 and supplies power under a 25-year Energy Purchase Agreement (EPA) with K-Electric. The EPA includes a 'must-run' provision, exempting the project from merit order dispatch due to its renewable nature. The tariff follows a cost-plus structure, indexed to consumer price indices (CPIs), and ensures a fixed return on equity.

The project is backed by local sponsors with considerable experience in the solar power sector, along with international partners with extensive expertise in operating renewable energy projects globally. According to the management, GSL has avoided any curtailments since commencing its commercial operations.

## **Management and Governance**

#### **CHAIRMAN/SPONSOR PROFILE**

Rana Nasim Ahmed, an experienced project developer in power and industrial sector, serves as the Chairman of the BOD. Besides his role as main sponsor, Mr. Ahmed provides strategic guidance to the management team based on his extensive, hands-on power sector experience across development, construction, and operations. In particular, he provided support on due diligence and acquisition of Project land, regulatory affairs and equipment procurement leveraging his contacts with the renowned suppliers. Mr. Ahmed is also the main sponsor of 18 MW Harappa Solar (Private) Limited.

#### **CEO PROFILE**

Rana Uzair Nasim has extensive power sector expertise across project design, tariff structuring, financing and negotiation of project documents. He is also the CEO of Harappa Solar (Pvt.) Limited and has led the project from inception through commissioning & operations. Mr. Uzair has previously worked as a management consultant in New York with Oliver Wyman and Dalberg Global Development Advisors.

#### **BOD's & COMMITTEE:**

The Board of Directors comprises seven members, including a female director. The composition of the Company's board and its organizational framework, though do not include any independent director or board committees, is consistent with the regulatory requirements applicable to public unlisted entities.

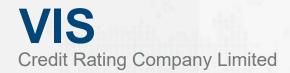
## **Business Risk**

#### **INDUSTRY RISK**

The business risk profile for Pakistan's renewable energy sector is assessed as low to medium by VIS. reflecting stable regulatory support through long-term contracts and fixed tariffs, however, certain risks emanate from changing regulatory dynamics. As of 2024, the country's total installed power generation capacity stands at approximately 42,000 MW, with renewable energy sources—comprising wind, solar, and biomass—accounting for nearly 6-9% of the energy mix.

Growth momentum has been aided by the Alternative and Renewable Energy Policy 2019 and the Indicative Generation Capacity Expansion Plan (IGCEP 2047), which prioritize renewables through competitive bidding and grid modernization. Pakistan's geographic and climatic conditions further support sector expansion, with wind potential of 50,000 MW in Sindh and Balochistan and an average solar irradiance of 5.3 kWh/m² per day. These fundamentals have attracted international investments and encouraged the development of large-scale wind corridors and solar parks.

Regulatory risk remains for renewable IPPs in Pakistan, with tariff revisions potentially emanating risks, however, it is mitigated as tariffs are fixed under long-term power purchase agreements, insulating projects from any major revision that may impact debt servicing capabilities. The sector is also not exposed to recurring capital expenditure once projects are commissioned, with any BMR requirements included in O&M contracts and embedded within the tariff. Moreover, IPPs with PPAs executed with CPPA-G are largely protected from circular debt accumulation. While receivable collections may extend beyond agreed credit periods, such delays represent the mechanism through which circular debt arises at the sector level. For IPPs, counterparty risk remains mitigated by sovereign guarantee coverage, which ensures eventual settlement of dues.



Technology-related risks persist in the form of rising consumer-level adoption of distributed solar, driven by improvements in panel efficiency, which is gradually impacting demand growth for grid-based supply. However, competition risk for established renewable IPPs remains limited. Long-term contracts, must-run status, lower generation costs relative to conventional sources, and high entry barriers insulate incumbent projects from substitution or demand-side risks. Given their must-run status and current contribution of around 6% to total generation, any potential fall in grid demand is unlikely to materially impact offtake.

#### Long-term Energy Purchase Agreement (EPA) with K-Electric

Electricity generated by the Company is sold to K-Electric under an Energy Purchase Agreement (EPA) dated September 26, 2018, with a tenure of 25 years from the Commercial Operations Date (COD). If K-Electric fails to accept the delivered energy, it constitutes a Non-Project Event (NPE), and GSL continues to receive compensation from K-Electric under Non-Project Missed Volume (NPMV) for revenue loss. Additionally, if the plant remains non-operational due to circumstances mentioned in the non-project event of the EPA, K-Electric is obligated to pay GSL for the non-operational days based on expected units as determined by an independent valuator. The likelihood of such events is minimized as the plant is classified as a must-run facility in merit order.

Revenue from K-Electric is invoiced monthly, with payments managed through an escrow account maintained with a leading local bank. K-Electric is required to settle invoices within 30 days of receipt, and funds are transferred directly to GSL's revenue account before K-Electric accesses its account for other transactions. Delayed payments attract a markup of KIBOR plus 2% on a prorated basis. To date, payments have been received on time.

#### **Experienced O&M Contractor**

The Company initially entered into a three-year Operations and Maintenance (O&M) contract with OMS (Pvt.) Ltd in 2018, which ended in December 2022. The contract has been renewed for an additional three years under similar terms. OMS (Pvt.) Ltd has significant experience in the renewable energy sector, managing O&M operations for clients such as Orient Power Company Limited, Packages Limited, JDW Power (Private) Ltd., K-Electric, Punjab Thermal Power Limited, and Northern Power Generation Company Limited. OMS (Pvt.) Ltd also manages operations for another power plant within the group, demonstrating satisfactory performance.

### **OPERATIONAL UPDATE:**

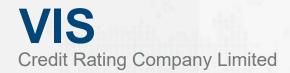
The installed capacity is set on the basis of a 22.21% benchmark capacity factor approved by NEPRA in the tariff determination, with an annual degradation factor of 0.5%. Generation is subject to irradiation variability arising from environmental and weather conditions.

Over the last three years, performance has remained above the benchmark capacity factor. In FY24, GSL dispatched was 99,423,000 kWh of electricity, a 3% decline due to lower irradiation; though exceeded the benchmark requirement of 97,280,000 kWh. In FY25, total exported energy increased by 0.26% to 99,680,000 kWh due to higher irradiation. Availability factor was well above 99% during the last three years.

	FY23	FY24	FY25
Installed Capacity – kWh	97,280,000	97,280,000	97,280,000
Annual Benchmark Capacity - kWh	97,280,000	97,280,000	97,280,000
Benchmark Capacity Factor (%)	22.21%	22.21%	22.21%
Actual Energy Delivered - kWh	102,092,000	99,423,000	99,680,000
Actual Capacity Factor (%)	23.31%	22.70%	22.76%
Availability Factor (%)	99.51%	99.78%	99.92%

#### **PROFITABILITY:**

The Company's revenue increased by 19% in FY24, despite decline in energy dispatched due to lower irradiation. The increase was attributable to a higher indexed tariff, primarily reflecting a higher average PKR/USD rate and higher USD benchmark interest rates (3-month LIBOR), with a smaller contribution from CPI-linked O&M indexation; the local-debt servicing component remained unchanged. The Company generally maintains gross margins, around 60%, supported by the cost pass-through provisions embedded in the tariff structure. Movement in gross margin is influenced by production in excess of the benchmark net capacity factor of 22.21%, whereby the return on equity (ROE) increases for every additional unit produced above the benchmark dispatches, albeit at a discounted tariff. The gross margins remain stable in FY24 while net margins improved to 36.87% (FY23: 34.06%) on account of higher profit from investments in money market funds on the back of higher SBP policy rate. In FY25, a marginal decline in gross margin was recorded, primarily due to a reduction in tariff on the account



of the shift from 3-month LIBOR to lower rate Secured Overnight Financing Rate (SOFR), which reduced USD debt servicing costs. The net margins marginally declined to 35.10% in FY25.

## Financial Risk

#### **CAPITAL STRUCTURE**

The Company's capitalization profile has strengthened over time, with gearing and leverage improving to 2.18x and 2.27x in FY24 (FY23: 2.80x and 2.88x), supported by scheduled amortization of long-term debt and equity accumulation through retained earnings. The capital structure is comprised of equity and long-term debt, with limited working capital requirements. The equity base increased over the past three years, driven mainly by internal equity build up through retained earnings. In FY25, gearing and leverage further declined to 1.93x and 2.01x.

## **DEBT COVERAGE & LIQUIDITY:**

The coverage profile improved in FY24, with DSCR at 1.15x (FY23: 1.06x), supported by higher funds from operations due to tariff adjustments. In FY25, DSCR increased to 1.33x, driven by higher FFO attributable to lower finance charges following a reduction in the policy rate.

The Company's liquidity position improved, with the current ratio increasing to 1.68x in FY24 (FY23: 1.63x) and further to 1.37x in FY25, reflecting a buildup in liquid assets relative to current obligations. Improvement in FY24 was driven by higher short-term investments and trade receivables, while current liabilities were aligned with scheduled debt service. In FY25, the current ratio increased further mainly due to higher cash and bank balances and a decline in payables despite an increase in the current portion of long-term debt. Liquidity remains supported by surplus funds placed in the money-market instruments and steady cash inflows from K-Electric under the escrow account mechanism.

# VIS Credit Rating Company Limited

Financial Summary				
Balance Sheet (PKR Millions)	FY22A	FY23A	FY24A	9MFY25M
Property, plant and equipment	6,445.09	7,679.23	7,202.39	6,952.05
Trade debts	278.94	404.35	474.54	407.47
Short-term Investments	541.08	493.21	528.93	357.91
Cash & Bank Balances	142.78	184.84	191.07	213.21
Loans and Advances	124.61	213.32	206.70	179.57
Total Assets	7,532.50	8,974.95	8,603.63	8,110.21
Creditors	0.70	0.78	9.61	4.05
Long-term Debt (incl. current portion)	5,459.23	6,466.13	5,746.59	5,219.26
Short-Term Borrowings	0.00	0.00	0.00	0.00
Total Debt	5,459.23	6,466.13	5,746.59	5,219.26
Other Liabilities	124.54	195.66	213.64	189.12
Total Liabilities	5,584.47	6,662.57	5,969.84	5,412.43
Paid up Capital	1,002.05	1,703.56	1,703.56	1,703.56
Revenue Reserve	659.24	608.83	930.23	994.21
Other Equity (excl. Revaluation Surplus)	286.73	0.00	0.00	0.00
Sponsor Loan	0.00	0.00	0.00	0.00
Equity (excl. Revaluation Surplus)	1,948.02	2,312.39	2,633.79	2,697.77

Income Statement (PKR Millions)	FY22A	FY23A	FY24A	9MFY25M
Net Sales	996.41	1,487.81	1,769.22	1,715.01
Gross Profit	629.31	1,037.55	1,221.11	1,174.42
Operating Profit	565.79	932.39	1,096.09	1,024.59
Finance Costs	315.07	534.83	607.50	516.35
Profit Before Tax	329.12	530.61	691.41	635.00
Profit After Tax	314.38	506.72	652.32	601.89

Ratio Analysis	FY22A	FY23A	FY24A	9MFY25M
Gross Margin (%)	63.16%	69.74%	69.02%	68.48%
Operating Margin (%)	56.78%	62.67%	61.95%	59.74%
Net Margin (%)	31.55%	34.06%	36.87%	35.10%
Funds from Operation (FFO) (PKR Millions)	501.19	697.43	832.69	842.29
FFO to Total Debt* (%)	9.18%	10.79%	14.49%	21.52%
FFO to Long Term Debt* (%)	9.18%	10.79%	14.49%	21.52%
Gearing (x)	2.80	2.80	2.18	1.93
Leverage (x)	2.87	2.88	2.27	2.01
Debt Servicing Coverage Ratio* (x)	1.00	1.06	1.15	1.33
Current Ratio (x)	1.83	1.63	1.68	1.37
Return on Average Assets* (%)	4.25%	6.14%	7.42%	9.60%
Return on Average Equity* (%)	14.86%	23.79%	26.38%	30.10%
Cash Conversion Cycle (days)	71.65	83.21	87.20	66.93

<sup>\*</sup>Annualized, if required

A - Actual Accounts

P - Projected Accounts

M - Management Accounts



REGULATORY DISC	CLOSURES				Appendix II			
Name of Rated Entity	Gharo Solar Limited							
Sector	Power							
Type of Relationship	Solicited							
Purpose of Rating	Entity Ratings							
	Rating Date	Medium to	Short Term	Rating Outlook	Rating Action			
		Long Term						
		F	RATING TYPE: ENTI	TY				
	27/Oct/2025	A+	A1	Stable	Reaffirmed			
Rating History	26/Sep/2024	A+	A1	Stable	Upgrade			
Rating History	12/Sep/2023	Α	A1	Stable	Reaffirmed			
	06/Sep/2022	Α	A1	Stable	Reaffirmed			
	27/Oct/2021	Α	A1	Stable	Upgrade			
	11/Aug/2020	A-	A2	Stable	Reaffirmed			
	03/May/2019	A-	A2	Stable	Initial			
Instrument Structure	N/A							
Statement by the	VIS, the analysts involved in the rating process and members of its rating committee do not							
Rating Team	have any conflict of interest relating to the credit rating(s) mentioned herein. This rating is an							
Rating Team	opinion on credit quality only and is not a recommendation to buy or sell any securities.							
	VIS' ratings opinions express ordinal ranking of risk, from strongest to weakest, within a							
Probability of Default	universe of credit risk. Ratings are not intended as guarantees of credit quality or as exact							
	measures of the probability that a particular issuer or particular debt issue will default.							
	Information herein was obtained from sources believed to be accurate and reliable; however,							
	VIS does not guarantee the accuracy, adequacy or completeness of any information and is not							
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	Nan		Designation	Γ	Date			
Due Diligence	Mr. Husn	· · ·	ef Financial Officer (0	^FO)				
Meetings Conducted	Mr. Asac		Manager Finance	9th Oct	ober 2025			