RATING REPORT

Indus Wind Energy Limited

REPORT DATE:

March 19, 2021

RATING ANALYSTS:

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RATING DETAILS		
	Initial Ratings	
Rating Category	Long-term	Short-term
Entity	A-	A-2
Rating Date	*19 March, 2021*	
Rating Outlook	Stable	

COMPANY INFORMATION	
Incorporated in 2015	**External auditors:** EY Ford Rhodes Chartered Accountants
Public Limited (Unlisted) Company	**Chairman:** Mian Naveed Ahmad **CEO:** Mian Shahzad Ahmed
Key Shareholders (with stake 5% or more): Indus Dyeing & Manufacturing Company Limited (the Parent Company) --- 99.99%	

APPLICABLE METHODOLOGY(IES)
VIS Entity Rating Criteria: Corporates (May 2019) ***https://www.vis.com.pk/kc-meth.aspx***

Indus Wind Energy Limited

RATING RATIONALE

Indus Wind Energy Limited (IWEL) is a 50 MW wind power project and is virtually a wholly owned subsidiary of Indus Dyeing & Manufacturing Company Limited. The ratings incorporate association of the project company with 'Indus Group' which comprises of one cotton ginning factory, four yarn spinning mills and one of the largest terry towel factories in Pakistan. Underlying economic risk factors are largely mitigated given signing of the Energy Purchase Agreement (EPA) with 'take or pay' provision for 25 years with Central Power Purchasing Agency (Guarantee) Limited (CPPA-G) backed by sovereign government. The company is susceptible to wind risk; however, extensive wind study reflects very low potential risk to the operations. Further, being one of the cheapest sources of energy, the windfarm projects are likely to stay high in the merit list.

The company signed an Implementation Agreement with the Government of Pakistan (GoP), represented through the Alternative Energy Development Board (AEDB) on November 12, 2019. The company was allocated land of 428 acres by the Government of Sindh in Jhimpir, Thatta through a lease agreement in May 2017 and Generation License was granted in August 2017 by the National Electric Power Regulatory Authority (NEPRA). The project cost is estimated at around USD 69m, which will be financed through debt to equity mix of 80:20, where debt comprises of an equal (50:50) mix of local and foreign lenders. IWEL has been able to secure local borrowing through SBP concessionary Refinancing scheme launched for development of wind power projects. The company has been awarded a cost-plus levelized tariff of Rs. 5.75/kWh (US Cents 4.79/kWh). Financial Close was achieved on November 18, 2019 while construction was started on July 24, 2020. Commercial Operations Date (COD) is expected to be achieved in the 1st quarter CY22. The project has achieved 34.1% completion till end-Jan'21.

EPC contracts have been signed with Hydrochina International Engineering Company Limited (HIECL) as onshore construction contractor and with Hangzhou Huachen Electrical Power Control Co. Limited (HHEPCCL) as offshore supplier. HIECL is a subsidiary of 'PowerChina', one of the biggest construction group in the power sector with engagement in over 100 countries. HIECL is also the O&M contractor for the initial two years of warranty period while General Electric International Inc. (GE) is the long-term O&M contractor. In case of delay in achieving the COD, the EPC contactors will be liable to pay liquidated damages of USD 28,000 per day. The company has adequate insurance coverages for cargo, operations, erection, liability, third party and terrorism. Meanwhile, the ratings are sensitive to successful achievement of commercial operations within stipulated timeframe.

Key Rating Drivers

EPA signed with CPPA-G on November 11, 2019 with 'take or pay' provision: EPA was signed for 25 years starting from achievement of the COD. As per the agreement, the targeted maximum construction period is 15 months after the financial close. The company started construction eight months after the financial close, in July, 2020, as the government scheduled the availability of grid by end-Dec'21. After grid availability, the company would have 45 days for energization of the project. Except for any force majeure event or delay in machinery procurement due to Covid-19, construction is expected to be completed within stipulated timeframe, which is being strictly monitored. As per the agreement, after the COD, IWEL will sell and deliver and CPPA-G will purchase and accept all Net Energy Delivered (NED) generated by the complex and delivered at the interconnection point. IWEL cannot sell or deliver the electrical output of the complex to any entity other than CPPA-G. After the COD, the purchaser shall be liable pay the energy payment to the seller, monthly in arrears. The purchase agreement entailed the provision of 'take or pay' where IWEL will be paid non-project missed volume payments (NPMV) in case CPPA-G purchase less than the contract capacity during off-peak season.

As per the EPA, the company will be responsible for the availability of the complex for generation and delivery of NED and the provision of ancillary services throughout the term.

OVERVIEW OF THE INSTITUTION

IWEL was incorporated as a Public Limited Company on February 4, 2015 under the repealed Companies Ordinance, 1984 (now Companies Act, 2017). The windfarm is located in Deh Kohistan, 7/3 & 7/4 Tapo Jungshahi Taluka & District Thatta. The registered office of the company is located at Office # 508, Beaumont Plaza, Beaumont Road, Civil Lines Quarters, Karachi.

Profile of Chairman

Mian Naveed Ahmad has done B.Sc Accounts from North Carolina State University, Raleigh, NC, USA. He has been associated with the Indus group for more than two decades.

Profile of CEO

Mian Shahzad Ahmed is also CEO of Indus Dyeing & Manufacturing Company Limited. He has done BBA Marketing from Syracuse University, New York, USA. He has around 30 years of experience of actively managing and monitoring the parent company.

The company will be responsible, at any time that the speed of the wind is within the cut-in wind speed and cut-out wind speed for the generation and delivery of NED, except when the generation and delivery of power is hampered partially or completely on account of a force majeure event, scheduled maintenance outage, forced outage, partial forced outage or non-project event (which will be included in NPMV). However, if the complex is partially or completely unavailable solely due to the company, it will not be taken as non-project event.

Engineering, Procurement and Construction Contract (EPC): The company entered into onshore Construction Contract with Hydrochina International Engineering Company Limited (HIECL) and offshore Equipment Supply Contract with Hangzhou Huachen Electrical Power Control Co. Limited (HHEPCCL) on July 4, 2019. As per terms of agreement, the contractor is bound to complete the entire work within the stipulated time, including achieving the passing of completion tests. In addition, the Contractor will ensure the achievement of the Taking-Over Date on or prior to agreed date. However, among other reasons and a force majeure event, the Contractor is entitled to extension of completion time in case the delay is directly linked to material failure of IWEL to fulfil its obligations under the EPC contract, or if the Contractor is unable to erect WTG or erect tower on a scheduled day due to wind speeds exceeding specific limit as measured by Anemometry System, on any day for a continuous period of six hours, for which the Contractor will be provided an extension of one-half day. In case the contractor fails to complete the project in time including any extension or force majeure, the contractor will have to pay liquidity damages of USD 28,000 for each day, which will elapse between the completion time and COD. Meanwhile, the total amount due under LDs will not exceed 10% of the contract price. In the event that COD is not achieved within 240 days after the expiry of specified completion time, and the delay is on account of the contractor, IWEL will have the right to terminate the contract. HIECL has a track record of successful completion of projects in Pakistan and all around the world.

The Contractor guarantees that the project will conform to and be in accordance with the performance guarantees. In case of failure to do so, the Contractor will have to pay Liquidated Damages (LDs) to the company. These LDs are cumulative and are for each performance guarantee/s and the invoiced amounts will be payable by the Contractor within twenty days of the delivery of such invoice. IWEL will issue Taking Over certificate within twenty-eight days after receiving the Contractor's application, except for any specified reasons. If the contractor is prevented for more than 15 days from carrying out the final commissioning tests solely by non-provision of the interconnection facilities by NTDC, the contractor will be entitled to extension of time for any such delay and payment of grid delay charges.

Some delays were witnessed due to occurrence of pandemic and lags in approvals and implementation processes: The project comprises 25 Wind Turbine Generators (WTGs) of General Electric Inc.(GE), Model GE116-2.0, with the nameplate capacity of 2MW of each turbine, having total net capacity of 47.9 MW and expected annual generation of 166,440,000 kWh. The project company has also acquired GE Power & Water wind plant Supervisory Control and Data Acquisition (SCADA) system. Furthermore, a dedicated remote data connection to a wind farm network will be deployed for the GE's Customer Support Center (CSC) to monitor and perform remote operations; the company is responsible for the availability and reliability of the remote connection. Brief project details are presented in the table below:

Nameplate Capacity	50 MW
Wind Turbines	General Electric
Model	GE116-2.0
Plant Capacity Factor	38%
Hub Height	94m
Rotor Diameter	116m
Power Regulation	Combination of blade pitch angle adjustment and generator/convertor control torque.

Overall progress achieved till 25th January, 2021 was 34.07% vis-à-vis planned cumulative progress of 53.67%. The construction schedule already includes some buffers for delays like lag in approvals from lenders, owner engineers and NTDC. Some delays occurred due to staff leaving for vacation in mid of December, 2020 and late shipments of turbines from China due to closing of ports amid Covid-19. As per management, most of the delayed work has been covered in February, 2021. As per progress report cut-off date, internal roads construction achieved 60% completion, wind turbines foundation concrete bedding was completed for 3 WTGs and excavation work has been completed for twenty WTGs installation. Now the project has entered the stage of foundation pouring; the same has been done for one turbine while it is under process for three turbines. Lean concrete works for WTGs foundation was completed in February 2021. Furthermore, one tower has been received at the site for one WTG turbine.

Liquidated Damages by CPPA-G on delay of COD: As per the agreement, construction must be completed within stipulated timeframe and no adjustments are allowed in tariff to account for financial impact due to delay in project construction. Meanwhile, the management has accounted for cost overrun of USD 0.875m in financial model to incorporate any delay due to timing difference in grid availability and project testing. Moreover, if IWEL is in breach of achieving its COD (unless such breach is linked to breach or default by CPPA-G, or by GoP under the Implementation Agreement, breach or default by provincial government under the site lease, a non-project event or force majeure event) then for each month (prorated daily) thereafter until COD is actually achieved, the seller shall pay the LDs of an amount equal to USD 2.5 per kW of the contract capacity. The management is in negotiations with the lenders and CPPA-G to waive any LDs arising out of delay in COD due to Covid-19 as it comes under Other Force Majeure Events. Late payment by either party of amounts due and payable under EPA, except for interest charge shall bear interest at rate per annum equal to KIBOR as of due date *plus* 2% per annum, prorated daily.

Given IWEL has a maintenance agreement with EPC contractor that provides annual maintenance and necessary overhauls, the company does not require to maintain any reserve fund on or before COD for payment of expenses.

Liquidated Damages by CPPA-G on account of reduction in contract capacity: As outlined in EPA the seller may reduce the contract capacity before COD maximum by 10% of the specified contract capacity (i.e. 38%) when necessitated by unforeseen circumstances. However, if the reduction in contract capacity is greater than 5% and less than or equal to 10% of the contract capacity, IWEL has to pay CPPA-G in immediately available funds within five business days after the notice to reduce the contract capacity, as liquidated damages, an amount equal to USD 350,000 multiplied by number of MW of the reduction in contract capacity.

Construction of the interconnection facilities: As per EPA, the seller (IWEL) is responsible for construction of its interconnection facilities and these facilities are expected to provide a useful life not less than the concession period. The seller has to abide by the design, scope and specification of these facilities as set out in schedule and have to give a 30 days prior notice before commencement of these interconnection facilities. Meanwhile, the purchaser (CPPA-G) will be responsible for its own interconnection facilities and will design, construct, finance and complete (except for installation of metering system) and commission the interconnection facilities as set out in the agreement. CPPA-G has to make the interconnection facilities available at the testing date; however, IWEL will not claim any cost, including the carrying cost on account of any delay in completing such facilities before COD. If CPPA-G has not completed and commercialized the interconnection works by the required date, the pre-set COD can be extended day-for-day until the date on which the interconnection works are completed. If CPPA-G has not completed its interconnection works fifteen days after the required date and it causes delays in commissioning of the complex as certified by the engineer, CPPA-G will pay IWEL monthly in arrears, an amount equal to carrying costs plus fifty percent of the local O&M component, fifty percent of the foreign O&M component and fifty percent of the insurance component multiplied by the average daily energy for the number of days of such delay. However, payment of such amounts by CPPA-G and extension of COD will be subject to issuance of certificate of readiness for energization of interconnection facilities and a simultaneous certificate of the delay in commissioning tests caused by the CPPA-G. IWEL has to provide the certificate of readiness of energization by end-June'21; failure to do so for each month prorated daily thereafter, until the provision of such certificate, the company has to pay liquidated damages of USD 1 per kW of the contract capacity per month, prorated daily.

Operations & Maintenance (O&M): HIECL is also the O&M contractor for the initial warranty period of 2 years after COD while the company has entered into long-term O&M contract with GE for the rest of the term of concession agreement. As per EPA, O&M cost is USD 23,000 per MW per year while EPC cost of USD 58.098m has been approved. Return on equity of 14% has been allowed. The EPC cost will be adjusted at actual on achieving commercial operations considering the approved amount as maximum limit. Applicable foreign portion of the EPC cost will be adjusted at COD on account of variation in PKR/USD parity. IDC will be recomputed at COD on the actual timing of debt drawdowns for the project construction period. Adjustments of O&M, ROE after COD and ROE during construction shall be made on quarterly basis based on latest available information.

Project financing comprised debt to equity mix of 80:20 with equal local and foreign financing: The approved financing structure has debt to equity ratio of 80:20. NEPRA determined total project cost of USD 64.072m and tariff on the basis of 100% SBP financing at markup rate of 6%. However, the company was able to secure 50% foreign financing from CDC Group UK and 50% local financing through SBP concessionary refinancing facility at base rate of 3% plus a margin of 1.75%. Due to foreign component of financing charged at LIBOR plus margin of 4.25% with a tenor of 13 years along with some additional buffer created for cost escalation, lenders estimated the project cost to increase to USD 68.473m. Meanwhile, as per agreement, savings in the approved spreads would be shared between the power purchaser and the seller in the ratio of 60:40. The company has to maintain a minimum DSCR of 1.33x as per agreement. A snapshot of project costs and financing mix is given below:

(USD million)	NEPRA Approved	Lender's Estimated
Offshore EPC	46.000	46.987
Onshore EPC	12.098	12.098
Total EPC	58.098	59.085
Project Development Cost	2.500	2.500
Insurance during construction	0.290	0.290
Financing Fee & Charges	1.218	1.758
Interest During Construction (IDC)	1.966	4.840
Total	64.072	68.473
Project Financing-Debt: Equity 80:20		
Equity	12.814	13.800
Total Debt	51.258	55.200
Local Financing (Syndicate-HBL Lead Bank)	51.258	27.600
Foreign Financing	-	27.600
SBP Financing—Base Rate	2.0%	3.0%
SBP Financing Margin	4.0%	1.75%
Foreign Financing-- Base Rate	-	0.25%
Foreign Financing Margin	-	4.25%
Tenor:		
Local SBP	10	10
Foreign	-	13

The sponsors have injected equity in full amounting to USD 13.80m (Rs. 2.26b—weighted average exchange rate of PKR163.79/USD) by 29th July, 2020 while local facility loan amounting USD 5.05m and foreign facility amounting USD 2.55m have been disbursed by end-Dec'20. Unutilized loan balances of local and foreign facilities amounted to USD 22.55m and USD 25.05m, respectively. Next loan disbursement of around USD 15m against milestones achieved is due by end-Mar'21.

NEPRA issued tariff determination for IWEL on November 18, 2018. The cost-plus levelized tariff for the concession period is 5.7517 Rs./kWh or 4.7931 US Cents/kWh. The reference tariff was determined on basis of interest cost of 6% with ten-year repayment period and reference exchange rate of Rs. 120/USD. Breakup of tariff components is given as follows:

Tariff Component	Year 1-10	Year 11-25
O & M Cost	0.8291	0.8291
Insurance during construction (0.5% of EPC cost)	0.1675	0.1675
ROE	1.4100	1.4100
Debt Servicing	4.9413	-
Total	**7.3480**	**2.4067**
Levelized Tariff (PKR/kWh)	**5.7517**	
Levelized Tariff (US Cents/kWh)	**4.7931**	

While the tariff has been determined on debt to equity ratio of 80:20, the same will be adjusted on actual debt:equity mix at the time of COD, subject to equity share of no more than 20%. Pre-COD sale of electricity is allowed to the project company, subject to terms defined in EPA at the applicable tariff excluding principal repayment of debt and interest components. However, pre-COD sale will not change the required COD in any manner.

The reference tariff will be limited to the extent of net annual generation supplied to CPPA-G up to 38% net annual plant capacity factor; excess of this will be charged at the following tariffs:

Net Annual Plant Capacity factor	% of Prevalent Tariff Allowed to Power Producer
Above 38% up to 40%	5%
Above 40% up to 42%	10%
Above 42% up to 44%	20%
Above 44% up to 46%	40%
Above 46% up to 48%	80%
Above 48%	100%

Indus Wind Energy Limited **Annexure I**

FINANCIAL SUMMARY *(amounts in PKR millions)*			
BALANCE SHEET	**FY19**	**FY20**	**1HFY21**
Property, Plant & Equipment	13.0	324.7	2,403.5
Right of Use Assets	-	39.0	37.2
Loans and Other Receivables	3.0	44.6	107.3
Other Assets	22.0	15.8	27.9
Bank Balance	0.3	10.0	899.8
Total Assets	**38.3**	**434.0**	**3,475.7**
Long-Term Loan	-	-	1,179.2
Lease Liabilities including current portion	-	31.4	29.8
Loan from parent Company	-	28.3	82.9
Other Liabilities	2.0	21.5	31.5
Total Liabilities	**2.0**	**81.1**	**1,323.4**
Paid-Up Capital	40.0	460.0	2,260.3
Total/Tier-1 Equity	36.3	352.8	2,152.3
INCOME STATEMENT	**FY19**	**FY20**	**1HFY21**
Profit/(Loss) Before Tax	(15.9)	(43.1)	(0.7)
Profit After Tax	(16.2)	(43.4)	(0.7)
RATIO ANALYSIS	**FY19**	**FY20**	**1HFY21**
Gross Margin (%)	-	-	-
Net Margin (%)	-	-	-
ROAA (%)	-	-	-
ROAE (%)	-	-	-
Gearing (x)	-	0.17	0.60
Debt Leverage (x)	0.05	0.23	0.61
Current Ratio (x)	25.3	1.4	8.96

ISSUE/ISSUER RATING SCALE & DEFINITIONS Appendix II

VIS Credit Rating Company Limited

RATING SCALE & DEFINITIONS: ISSUES / ISSUERS

Medium to Long-Term

AAA
Highest credit quality; the risk factors are negligible, being only slightly more than for risk-free Government of Pakistan's debt.

AA+, AA, AA-
High credit quality; Protection factors are strong. Risk is modest but may vary slightly from time to time because of economic conditions.

A+, A, A-
Good credit quality; Protection factors are adequate. Risk factors may vary with possible changes in the economy.

BBB+, BBB, BBB-
Adequate credit quality; Protection factors are reasonable and sufficient. Risk factors are considered variable if changes occur in the economy.

BB+, BB, BB-
Obligations deemed likely to be met. Protection factors are capable of weakening if changes occur in the economy. Overall quality may move up or down frequently within this category.

B+, B, B-
Obligations deemed less likely to be met. Protection factors are capable of fluctuating widely if changes occur in the economy. Overall quality may move up or down frequently within this category or into higher or lower rating grade.

CCC
Considerable uncertainty exists towards meeting the obligations. Protection factors are scarce and risk may be substantial.

CC
A high default risk

C
A very high default risk

D
Defaulted obligations

Short-Term

A-1+
Highest certainty of timely payment; Short-term liquidity, including internal operating factors and /or access to alternative sources of funds, is outstanding and safety is just below risk free Government of Pakistan's short-term obligations.

A-1
High certainty of timely payment; Liquidity factors are excellent and supported by good fundamental protection factors. Risk factors are minor.

A-2
Good certainty of timely payment. Liquidity factors and company fundamentals are sound. Access to capital markets is good. Risk factors are small.

A-3
Satisfactory liquidity and other protection factors qualify entities / issues as to investment grade. Risk factors are larger and subject to more variation. Nevertheless, timely payment is expected.

B
Speculative investment characteristics; Liquidity may not be sufficient to ensure timely payment of obligations.

C
Capacity for timely payment of obligations is doubtful.

Rating Watch: VIS places entities and issues on 'Rating Watch' when it deems that there are conditions present that necessitate re-evaluation of the assigned rating(s). Refer to our 'Criteria for Rating Watch' for details. www.vis.com.pk/images/criteria_watch.pdf

Rating Outlooks: The three outlooks 'Positive', 'Stable' and 'Negative' qualify the potential direction of the assigned rating(s). An outlook is not necessarily a precursor of a rating change. Refer to our 'Criteria for Rating Outlook' for details.www.vis.com.pk/images/criteria_outlook.pdf

(SO) Rating: A suffix (SO) is added to the ratings of 'structured' securities where the servicing of debt and related obligations is backed by some sort of financial assets and/or credit support from a third party to the transaction. The suffix (SO), abbreviated for 'structured obligation', denotes that the rating has been achieved on grounds of the structure backing the transaction that enhanced the credit quality of the securities and not on the basis of the credit quality of the issuing entity alone.

(blr) Rating: A suffix (blr) is added to the ratings of a particular banking facility obtained by the borrower from a financial institution. The suffix (blr), abbreviated for 'bank loan rating' denotes that the rating is based on the credit quality of the entity and security structure of the facility.

'p' Rating: A 'p' rating is assigned to entities, where the management has not requested a rating, however, agrees to provide informational support. A 'p' rating is shown with a 'p' subscript and is publicly disclosed. It is not modified by a plus (+) or a minus (-) sign which indicates relative standing within a rating category. Outlook is not assigned to these ratings. Refer to our 'Policy for Private Ratings' for details. www.vis.com.pk/images/policy_ratings.pdf

'SD' Rating: An 'SD' rating is assigned when VIS believes that the ratee has selectively defaulted on a specific issue or obligation but it will continue to meet its payment obligations on other issues or obligations in a timely manner.

REGULATORY DISCLOSURES	**Appendix III**				
Name of Rated Entity	Indus Wind Energy Limited				
Sector	Power				
Type of Relationship	Solicited				
Purpose of Rating	Entity Ratings				
Rating History	**Rating Date**	**Medium to Long Term**	**Short Term**	**Rating Outlook**	**Rating Action**
	RATING TYPE: ENTITY				
	03/19/2021	**A-**	**A-2**	**Stable**	**Initial**
Instrument Structure	N/A				
Statement by the Rating Team	VIS, the analysts involved in the rating process and members of its rating committee do not have any conflict of interest relating to the credit rating(s) mentioned herein. This rating is an opinion on credit quality only and is not a recommendation to buy or sell any securities.				
Probability of Default	VIS ratings opinions express ordinal ranking of risk, from strongest to weakest, within a 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.				
Disclaimer	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 responsible for any errors or omissions or for the results obtained from the use of such information. For conducting this assignment, analyst did not deem necessary to contact external auditors or creditors given the unqualified nature of audited accounts and diversified creditor profile. Copyright 2020 VIS Credit Rating Company Limited. All rights reserved. Contents may be used by news media with credit to VIS.				

Due Diligence Meetings Conducted		Name	Designation	Date
	1	Mr. Saleem Bandukda	Chief Operating Officer	24th Feb, 2021
	2	Mr. Zahid Mahmood	Chief Financial Officer	24th Feb, 2021
	3	Mr. Hassaan Ahmad Chishti	Manager Finance & Integrity Control	24th Feb, 2021