

Environmental and Social Due Diligence Report (ESDDR)

CLEAN MAX VENT POWER PRIVATE LIMITED (CMVPPL)

PROMOTED BY

CLEAN MAX ENVIRO ENERGY SOLUTIONS PRIVATE LIMITED (CMEESPL)

Loan Amount: Rs. 117.51 crore

**PROJECT DEBT FOR UNDER CONSTRUCTION WIND & SOLAR HYBRID POWER
PROJECT**

26th Sep 2021

Tata Cleantech Capital Limited

Team:

SEMS Officer: Mangesh Dakhore

Relationship Manager: Neeraj Agrawal

Credit Manager: Amarnath De

Business Head: Mitheel Mody

Credit Underwriting Head: Anshuman Singh

Source of inputs for ESDD:

- TCCL Credit Note No. 03/FY 21-22
- Initial assessment and terms sent to credit and sales team 25th Apr 2021
- Public domain information
- Site Visit deferred due to COVID 19
- E&S Information included in facility agreement and Sanctioned letter. AIIB's E&S terms also form part of the Facility Agreement
- Information and response submitted by borrower on 21st Sep 2021

1. Summary

Sector	Ground Mounted Solar and Wind Power						
Borrower	Cleanmax Vent Power Pvt. Ltd.						
Project stage, capacity	<ul style="list-style-type: none"> 26.2 MW solar and wind hybrid plant is under construction stage. The individual capacity of wind and solar under this hybrid project is 16.2 MW wind and 10 MW solar. Total 6 WTGs of 2.7 MW capacity of each WTG will be installed. PPA with 8 industrial offtakers have been signed. Total project cost is estimated as Rs. 167.87 crore. Per MW cost of wind and solar projects are Rs. 7.78 MW and Rs. 4.18 MW respectively. SCOD: Wind – 31 Dec 2021 and Solar – 31 Mar 2022 						
Key components and technology	<p>Land:</p> <ul style="list-style-type: none"> Wind project – 15 acre govt. revenue land is available with a third party developer, Leitner Shriram, who will in turn sub-lease it to the Borrower. Solar project – ~25 acres of private agricultural land is being procured in the name of the Borrower. <p>PSS: 1.60 acre private non-agricultural land is being procured to develop a common infrastructure for power evacuation.</p> <p>Evacuation infrastructure:</p> <ul style="list-style-type: none"> Project shall be using existing Kotdapitha substation. Common Infrastructure Agreement with CMEESPL/group entity/Shriram EPC (third-party) for sharing of common infrastructure in the hybrid park such as boundary wall, internal and periphery roads, and evacuation infrastructure, has been finalized. 						
Revenue source	PPAs signed with 8 industrial offtakers:						
	Sl. No.	Offtaker	Wind Capacity (MW)	Solar Capacity (MW_{DC})	Tariff (₹/unit)	PPA tenor (years)	SCOD
	1	National Engineering Industries Ltd	2.25	0.95	4.19	25	31-Mar-21
	2	RR Kabel Ltd	2.70	1.70	4.13	25	20-Jul-21
	3	Tubacex Prakash India P Ltd	1.00	0.62	4.19	25	25-Jun-21
	4	LM Windpower India P Ltd (GE group)	4.50	3.40	3.85	15	04-Sep-21
	5	GE T&D India P Ltd	1.25	0.94	3.85	15	04-Sep-21
	6	Indofil Industries Ltd	2.00	0.74	3.40 (variable)	25	04-Jan-22

		7	GE Power	1.00	0.75	3.85	15	04-Sep-21
		8	Bunge India Private Limited	1.50	0.93	3.85	15	PPA yet to be signed
			Total	16.20	10.03	3.91	19.56	
Key contractor	Development of common infrastructure and O&M activities for solar power project will be carried out by CMESPL through various sub-contractors.							
Location Coordinates	<ul style="list-style-type: none"> • 16.2 MW Wind Power Plant (6 WTGs) – Sukavala and Vankiya villages, Amreli District, Gujarat • 10 MW Solar Power Plant – Vavda village, Amreli District, Gujarat • 66 kV Substation at Kotdapitha village 							
Loan amount	Rs. 117.51 cr							
Time Period	15 years							
Co-lenders	No							
E&S Risk Category	B (Project and sponsor are out of the Exclusion List, and do not pose reputational risks to TCCL based on past E&S performance)							
Summary E&S Assessment	<ul style="list-style-type: none"> • No wildlife sanctuaries, National park and IBAs within 10 km area from project site. The nearest wildlife sanctuary is Hindoalgadh WLS, exist 20 km from wind power plant • Project location in Babra Taluk is under safe category and represent ground water availability at present. Water for module cleaning will be arranged through water tankers. As of now use of ground water for module cleaning is not planned. If required during O&M phase, prior ground water approval shall be obtained from competent authority. • There is no settlement within 500 m of all 6 WTG locations. No risk associated with shadow flicker and noise disturbance, exist in this project • There is no private land involved for wind power plant. All 6 WTGs are proposed on encroachment free revenue land which has been sub-leased by a third party developer for this project. • For solar power project, private land has been procured on willing seller – willing buyer basis. • Safety policies and plans for construction phase is available with wind supplier (GE) and will also be implemented during O&M phase to ensure safety of workforce. • Plantation program will be implemented during O&M phase. • As per sustainability practice, borrower is construct ground water recharge pits within project premises. • Project development plan has been discussed with community and Village Panchayat. Village Panchayat NOC is also available for project. • Borrower has committed to assess community needs (part of ESMS) which will be fulfilled through CSR program 							

	<ul style="list-style-type: none"> Project specific EHS plan has been developed to ensure safety of workforce and community in solar and wind projects. Borrower has committed to implement safety plans in project's construction as well as operational phases.
Recommendations	Recommended for investment based on ESDD with inclusion of E&S conditions into loan agreement
Key E&S Risks	<ul style="list-style-type: none"> Risk of revenue loss due to intermittent or permanent project shutdown due to noncompliance to E&S conditions of regulatory approvals Community resentment due to unmet local employment, no community engagement and accident due to project activities. Resentment within workforce due to accidents and lack of safety practices, leading to project shutdown
Key E&S Covenants	<p>Based on site visit observations and discussion with borrower's representative, specific E&S conditions are closed. Compliance assessment of TCCL's E&S terms is presented below. AIIB's E&S terms not captured here but they form part of the Facility Agreement</p> <p><u>Specific E&S terms for 10 MW Solar Power Plant (Prior to disbursement):</u></p> <ol style="list-style-type: none"> Borrower to submit status of ground water extraction approval. Borrower to also submit information/details about any possible sustainable practice/Rain water harvesting/robotic system for module cleaning. Assessment: Borrower has informed that water tanker will be used during O&M phase to fulfill the need of module cleaning. No plan to extract ground water as of now, if required prior approval will be taken. As part of the sustainable practice, Cleanmax plans to implement ground water recharge pits which will be part of the design. Condition Closed. Borrower to submit information about plantation program at suitable places after considering the shadow effect. Assessment: Plantation program will be implemented during O&M phase. Condition Closed Borrower to submit compliance status of conditions given in PPA, land purchase/transfer, electrical safety, village Panchayat NOCs and labour license Assessment: Village Panchayat NOC has been obtained in the project. Labor license is also available. Power evacuation approval will be obtained. Condition Closed

4. Borrower to submit information on how community expectations are being addressed through CSR/grievance redressal mechanism and local employment.

Assessment: Borrower has committed to assess community needs (as a part of ESMS) which will be fulfilled through CSR program. Grievance redressal system will also be implemented. It is a part of ESMS. **Condition Closed.**

5. Borrower to submit information about safety arrangement planned at project site to ensure safety of workers and visitors.

Assessment: Safety manual has been submitted by borrower. Project specific safety risks have been covered in the safety manual. Borrower has committed to ensure adequate implementation of safety practices and measures at project site. Safety trainings, mock drills and accidents/incidents record system will be ensured in the project. **Condition Closed**

Specific E&S Terms for 16.2 MW wind power project (prior to disbursement):

1. Borrower to submit copies of approvals/permits PPA, land sublease, electrical safety, village Panchayat NOCs and labour license

Assessment: Common infrastructure is being developed for the power evacuation from both solar as well as wind power projects. Power evacuation approvals has been received. Village Panchayat NOC is also available. **Condition Closed**

2. Measures planned to ensure community support for the project and sharing of access roads – through grievance redressal, CSR activities, local employment and benefits, etc

Assessment: Grievance redressal community, CSR activities and community engagement are part of Environment Management System and will also be implemented at this project site. **Condition Closed.**

3. Measures planned to monitor contractors' implementation of safety plans during construction and O&M, and records maintained pertaining to the same

Assessment: Safety plan of GE (WTG manufacturer) will be implemented at the site to ensure safety of workforce. Implementation of EHS plan will be supervised by borrower's team. Records of safety trainings, mock drills and accident/incident will be maintained at the site. **Condition Closed**

4. The Borrower shall have shared the estimated timelines, budget with respect to any of above requirements / permits yet to be undertaken or obtained along with a commitment to share evidence with the Lenders upon completion of the same.

Assessment: CSR program will be implemented post commissioning of this project. Details will be shared during O&M phase. Village Panchayat NOC, power evacuation approval and labor license already secured by borrower.

Condition Closed.

General E&S Terms (to be monitored by TCCL once in 2 years throughout the loan period):

1. Borrower to ensure that the workforce engaged during construction and O&M besides being competent to undertake the project activities (including transport of materials and workforce) effectively, can also do so safely, avoiding any workplace safety incidents and/or avoid impact to safety of local communities
2. Borrower to ensure that the workforce engaged, are regularly paid with wages and provided with committed benefits, in compliance with laws on labor welfare – to avoid any resentment of workforce for the project, or the principal employer receiving fines / penalties.
3. Borrower to ensure that emergency response preparedness to accidents during construction and O&M at the site, sub-station or nearby local areas is periodically tested through mock drills.
4. Borrower will provide (every two years) sufficient details to TCCL to evaluate the Environmental & Social Performance of the project. The details will primarily include (but not limited to):
 - a. Status of compliance to E&S terms proposed by TCCL as part of E&S Due Diligence and E&S monitoring
 - b. Employment details (nos, local employment)
 - c. Compliance to conditions of project permits relating to contract labour, consents from Pollution Control Board, factories license, and local Panchayats; Notices / fines / penalties imposed (if any) by the issuing / enforcement agencies
 - d. Grievances (from workers and local communities) received and responded by the borrower/contractor
 - e. Health & Safety Incidents recorded during construction and O&M
5. Borrower will intimate TCCL at the earliest of any major incidents (resulting in fatalities / serious injuries to workers or nearby communities, asset

	damage) due to project activities or extreme weather conditions experienced in project area
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