المجلس العالمي للبصمة الكربونية
GLOBAL CARBON COUNCIL

Project Submission Form

V4.0- 2022

CONTENTS

COVER PAGE- Project Submission Form (PSF)	
BASIC INFORMATION	
Title of the Project Activity as per LON/LOA	50 MW Wind Power Project by National Aluminium Company Limited in Rajasthan, India
PSF version number	1.0
Date of completion / Updating of this form	20/12/2022
Project Owner(s) as per LON/LOA (Shall be consistent with De-registered CDM Type B Projects)	EKI Energy Services Limited [1]
Country where the Project Activity is located	India
GPS coordinates of the project site(s)	Details provided in section A.2
Eligible GCC Project Type as per the Project Standard (Tick applicable project type)	☒ **Type A:** ☐ Type A1 ☒ Type A2 ☒ Sub-Type 1 ☐ Sub-Type 2 ☐ Sub-Type 3 ☐ Sub-Type 4 ☐ Type A3 ☐ **Type B – De-registered CDM Projects:**[2]

[1] To act as project owner as per GCC definition

[2] Owners of Type B projects shall fill in the form provided in Appendix 7.

	☐ Type B1 ☐ Type B2
Minimum compliance requirements	☒ Real and Measurable GHG Reductions ☒ National Sustainable Development Criteria (if any) ☒ Apply credible baseline and monitoring methodologies ☒ Additionality ☒ Local Stakeholder Consultation Process ☒ Global Stakeholder Consultation Process ☒ No GHG Double Counting ☒ Contributes to United Nations Sustainable Development Goal 13 (Climate Action)
Choose optional and additional requirements (Tick applicable label categories)	☒ Do-no-net-harm Safeguards to address Environmental Impacts ☒ Do-no-net-harm Safeguards to address Social Impacts ☒ Contributes to United Nations Sustainable Development Goals (in addition to Goal 13)
Applied methodologies including version No. (Shall be approved by the GCC or the CDM)	ACM0002: Grid-connected electricity generation from renewable sources --- Version 21.0
GHG Sectoral scope(s) linked to the applied methodology(ies)	GHG-SS: Scope 1, Energy (renewable/non-renewable sources)

Applicable Rules and Requirements for Project Owners

(Tick applicable Rules and Requirements)

Rules and Requirements		Version
☒ ISO 14064-2		
☒ Applicable host country legal requirements /rules		
☒ GCC Rules and Requirements[3]	☒ Project Standard	03.1
	☐ Approved GCC Methodology (XXXXX)	
	☒ Program Definitions	03.1
	☒ Environment and Social Safeguards Standard	3.0
	☒ Project Sustainability Standard	3.0
	☒ Instructions in Project Submission Form (PSF)-template	4.0
	☐ Clarification No. 01	1.3
	☐ Clarification No. 02	
	☐ Clarification No. 03	
	☐ Clarification No. 04	
	☐ Clarification No. 05	
	☐ Standard on avoidance of double counting	
	☐ Add rows if required	
☒ CDM Rules[4]	☒ Approved CDM Methodology (XXXXX)	21.0
	☒ TOOL 1- Tool for the demonstration and assessment of additionality	7.0.0
	☐ TOOL 02- Combined tool to identify the baseline scenario and demonstrate additionality	

[3] GCC Program rules and requirements: http://www.globalcarboncouncil.com/resource-centre/
[4] CDM Program rules: https://cdm.unfccc.int/Reference/index.html

		☒ TOOL 07- Tool to calculate the emission factor for an electricity system	7.0
		☐ TOOL 19- Demonstration of additionality of microscale project activities	
		☐ TOOL 21- Demonstration of additionality of small-scale project activities	
		☐ TOOL 23- Additionality of first-of-its-kind project activities	
		☒ TOOL 24- Common practice	3.1
		☒ TOOL 27- Investment analysis	12.0
		☐ TOOL 32- Positive lists of technologies	
		☐ Guidelines for objective demonstration and assessment of barriers	
		☐ Add rows if required	
Choose Third Party Project Verification by approved GCC Verifiers[5] (Tick applicable verification categories)	☒ GHG emission reductions (i.e., Approved Carbon Credits **(ACCs)**) ☒ Environmental No-net-harm Label (**E+**) ☒ Social No-net-harm Label (**S+**) ☒ United Nations Sustainable Development Goals (**SDG+**) ☐ Bronze SDG Label ☐ Silver SDG Label ☐ Gold SDG Label ☒ Platinum SDG Label ☐ Diamond SDG Label ☒ CORSIA requirements (**C+**)		

[5] **Note:** GCC Verifiers under the Individual Track are not eligible to conduct verifications for GCC Project Activities whose owners intend to supply carbon credits (ACCs) for use within CORSIA.

	☒ Host Country Attestation on Double counting
Declaration by the 'Authorized Project Owner[6] and focal point' (Tick all applicable statements[7])	The Project Owner(s) declares that: **Generic Requirements applicable to all Project Types:** ☒ We confirm that the Project Activity complies with the eligibility of the applicable project type (A1, A2, A3, B1 or B2) as stipulated by the Project Standard and relevant clarifications. ☒ We confirm that the Project Activity shall start or have started operations, and shall start or have started generating emission reductions, on or after 1 January 2016. ☒ We confirm that the Project Activity is eligible to be registered under the GCC program. We shall ensure the following for the Project Activity (tick at least one of the two options): ☒ No outcomes (e.g., emission reductions, environmental attributes) generated by the Project Activity under GCC will be claimed as carbon credits or environmental attributes under any other GHG/non-GHG[8] program, either for compliance or voluntary purposes, during the entire GCC crediting period; or ☒ If the project activity has been issued with carbon credits or environmental attributes of compensating nature[9] by any other GHG/ non-GHG program, either for compliance or voluntary purposes, the ACCs will be claimed only for the remaining crediting period (subject to a maximum of 10 years of crediting period including the periods under other programs and GCC program) for which carbon credits/ environmental attributes of compensating nature have not been issued by any other GHG/ non-GHG program. **Specific requirements applicable to respective Project Types:** ***For Project Type A1:*** ☐ For Project Type A1, we confirm that the Project Activity is NOT registered as a GHG Project Activity in any other GHG/non-GHG program or any other

[6] The Project Owner means the legal entity or organization that has overall control and responsibility for the Project Activity

[7] **Consequences in case of Non-compliance with declaration statements:**
If at any point in time non-compliance with the declared statements is established as a result of negligence, fraud or wilful misconduct of the GCC Project Owner/s the GCC project activity will be disqualified, and the registration of the proposed Project Activity will be rejected.

[8] Non-GHG programs could be such as I-REC facilitating reliable energy claims with Renewable Energy Certificate (REC) schemes

9 The environmental attributes of compensating nature are those which are used by captive users (e.g., corporates/industries) for offsetting their GHG emissions

	voluntary program and has not issued or will not issue credits under any other program. ***For Project Type A2 (Sub-Type 1):*** ☒ For Project Type A2 Sub-Type 1, we confirm that the Project Activity is NOT registered as a GHG Project Activity in any other GHG/non-GHG program or any other voluntary program and has not issued or will not issue credits under any other program. ***For Project Type A2 (Sub-Type 2 or Sub-Type 3):*** For Project Type A2 Sub-Type 2 or Project Type A2 Sub-Type 3, we confirm that for Project Activity, which has been registered with CDM or any GHG/non-GHG Program and we shall (tick at least one of the two options): ☐ Submit a proof for deregistration from CDM; or ☐ Submit a signed & stamped public undertaking, stating that the Project Owner will never submit any request for Issuance of ACCs or request for renewal of crediting period to CDM-EB or under article 6.4 or any authority after submission to GCC Program and shall formally inform CDM-EB or authority under article 6.4 or any authority after submission to GCC Program. ☐ For Project Type A2 Sub-Type 2 or Project Type A2 Sub-Type 3, we confirm that the Project Activity is NOT included as a component Project Activity (CPA) in any registered GHG Programme of Activities (PoA) or any other functionally equivalent grouped/aggregated activities under any GHG program (such as the CDM or any other voluntary program). ***For Project Type A2 (Sub-Type 4):*** For Project Type A2 Sub-Type 4, we confirm that the Project Activity has been included in a registered CDM-POA and we shall (tick at least one of the two options): ☐ Submit the proof for exclusion of CPA(s) from registered CDM-POA prior to the date of initial submission to the GCC Program; or ☐ Submit the proof of exclusion of CPA(s) from the registered CDM-PoA after the request for registration has been submitted to GCC Program but before the final decision is made by the GCC Steering Committee. ***For Project Type A3:*** ☐ For Project Type A3, we confirm that the Project Activity is NOT registered as a GHG Project Activity in any other GHG/non-GHG program or any other voluntary program and has not issued or will not issue credits under any other program. ***For Project Type B1 or B2:***

	For Project Type B1 or Project Type B2, we confirm that for Project Activity, which has been registered with CDM or any GHG/non-GHG Program and we shall (tick at least one of the two options): ☐ Submit a proof for deregistration from CDM; or ☐ Submit a signed & stamped public undertaking, stating that the Project Owner will never submit any request for Issuance of ACCs or request for renewal of crediting period to CDM-EB or under article 6.4 or any authority after submission to GCC Program and shall formally inform CDM-EB or authority under article 6.4 or any authority after submission to GCC Program. **Requirements to avoid double counting:** We intend to submit or have submitted a written attestation[10] (Host Country Letter of Authorization - HCLOA) from the host country's national focal point or focal point designee for CORSIA eligible units generated beyond 31 December 2020 at the following stages[11] (tick at least one of the three options): ☐ The initial submission for GSC; or ☐ Along with the submission for a request for registration (after Project Verification is completed); or ☒ Along with the submission for a request for the first or subsequent issuance of ACCs. **Project specific requirements:** ***CORSIA specific requirements:*** ☒ We confirm that bundled projects or grouped projects shall have registered crediting period starting on or after 1 Jan 2016 for the grouped/aggregated project as a whole. ☒ We confirm that the Project Activity meets all the requirement of the CORSIA Eligible Emissions Units[12] required for GCC projects and does not fall under the excluded unit types, methodologies, programme elements, and/or procedural classes. ☒ We confirm that the Project Activity aims to achieve at least Silver or higher SDG+ label (i.e., positively impact at least 3 or more United Nations Sustainability Development Goals). ☒ We confirm that the Project Activity will be implemented in a country which is UN member state[13].

10 In case of any change of Host Country Letter of Authorisation (HCLOA) the project owner shall inform the GCC operations team immediately

11 If the host country attestation is not submitted at the initial submission of GSC, the project can be tagged with an indicative CORSIA flag if it's confirmed to be submitted later. If the host country attestation is not submitted at the request for registration, the project can be tagged with an indicative CORSIA flag if at least the PSF and Verification Report confirms to submit this letter, at first issuance. If the host country attestation is not submitted at request for first issuance, the ACCs will not be tagged as CORSIA (C+) compliant if this letter is not submitted.

12 CORSIA Eligible Emissions Units containing approval and conditions for GCC Program: https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-Emissions-Units.aspx

13 The list of UN member states countries can be found at https://www.un.org/en/about-us/member-states

	Provide details (if any) below for the boxes ticked above:
	The Project Owner(s) declares that: ☒ All the information provided in this document, including any supporting documents submitted to the GCC or its registry operator IHS Markit at any time, is true and correct. ☒ They understand that a failure by them to provide accurate information or data, or concealing facts and information, can be considered as negligence, fraud or willful misconduct. Therefore, they are aware that they are fully responsible for any liability that arises as a result of such actions. Provide details below for the boxes ticked above
Appendixes 1-9	Details about the Project Activity are provided in Appendixes 1 through 9 to this document.
Name, designation, date and signature of the Focal point (as per LON/LOA)	Name: -Manish Dabkara Designation: MD & CEO
	EKI Energy Services Limited
	 Signature Date: 19/12/2022

1. PROJECT SUBMISSION FORM

Section A. Description of the Project Activity

A.1. Purpose and general description of the Project Activity

>> The Project Activity is the installation of a new grid-connected 50 MW wind power plant/unit at a site where there was no renewable power plant operating prior to the implementation of the project activity (Green-field plant). The project is implemented in village – Lala, Karad, Sawata district Jaisalmer, Rajasthan, India by National Aluminium Company Limited (NALCo). The electricity generated from the project activity is sold to Rajasthan Ujra Vikas Nigam Limited (RUVNL). Thereby the project replaces the equivalent amount of electricity generated by the operation of existing/ grid connected power plants (mostly fossil fuel-based power plants) and by addition of new generation sources into the grid. The Project Activity thus reduces the anthropogenic emissions of greenhouse gases (GHGs) in to the atmosphere associated with the equivalent amount of electricity generation from the existing grid connected power plants (mostly fossil fuel) and by addition of new generation sources into the grid. The commissioning details of WTGs are as below:

Sl No.	No. of WTG x Capacity & Total Capacity	Location	Commissioning Date
1	5 x 2 MW = 10 MW	Loc No. 238, 234, 236, 237, 239 at Village – Lala, district Jaisalmer	01/07/2016
2	11 x 2 MW = 22 MW	Loc No. GD- 249, 138, 261, 260, 259, 258, 257, 253, 312, 251, 185 at Village – Lala, district Jaisalmer	31/08/2016
3	9 x 2 MW = 18 MW	Loc No. GD-9X – 228, 226, 229, 230, 227, 244, 319, 314, 275 at Village – Lala, Karad, Sawata district Jaisalmer	30/09/2016

As the project activity complies to the definition of a Greenfield power plant, therefore the baseline scenario as per paragraph 22 of the applied methodology is *"If the project activity is the installation of a Greenfield power plant, the baseline scenario is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in "TOOL07: Tool to calculate the emission factor for an electricity system".*

The crediting period chosen for the project is from 01/07/2016 to 30/06/2026. The annual estimated emission reductions from this project activity is 97,121 tCO_{2e}/annum. Total number of emission reduction estimated to be generated throughout the 10 years crediting period is 971,210 tCO_{2e}.

The Project contributions to the sustainable development of the local area as well as the host country are as follows:

Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India, has stipulated the following indicators for sustainable development in the interim approval guidelines for CDM projects.

1. **Social well-being:** The Project Activity will result in creating job opportunities for the local population on temporary and permanent basis. Manpower is required both during erection and operation of the renewable energy projects. This would result in the improvement in living standards of the local community. The installation of the renewable energy projects also led to development of basic infrastructure like roads, communication with the nearby cities etc. which also improved in living standards of the local population.

2. **Economic well-being:** The Project Activity will create direct and indirect job opportunities to the local community during installation and operation of the renewable energy projects. The investment for the Project Activity would lead to the improvement in the economic activity in the local area.

3. **Environmental well-being:** The Project Activity utilizes renewable energy for generating electricity which otherwise would have been generated through alternate fuel (most likely - fossil fuel) based power plants, contributing to reduction in specific emissions (emissions of pollutant/unit of energy generated) including GHG emissions. As renewable energy projects produce no end products in the form of solid waste (ash etc.), they address the problem of solid waste disposal encountered by most other sources of power. Being a renewable resource, to generate electricity contributes to resource conservation. Thus, the Project Activity causes no negative impact on the surrounding environment.

4. **Technological well-being:** Clean technology transfer in renewable energy generation and optimal use of renewable energy in the industry.

The project is expected to contribute 6 SDGs which are SDG 1, 5, 7, 8, 9 and 13.

- **SDG 1 No Poverty:** The project contributes the SDG 1 target by providing employment to at least 5 persons belonging to below poverty line category.

- **SDG 5 Gender equality:** The project has planned to contribute to the SDG by ensuring there is no disparity among men and women with respect to remuneration for comparable role and responsibility. It is ensured that there is at least xx number of women hired during operational phase of the project.

- **SDG 7 Energy:** The project contributes SDG Target 7.2 “By 2030, increase substantially the share of renewable energy in the global energy mix” by the utilization of wind power as a renewable energy source.

- **SDG 8 Economic Growth:** The project creates direct and indirect employment opportunities during construction and operation phases, so it contributes to SDG Target 8.5 “By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities and equal pay for work of equal value”.

- **SDG 13 Climate Change:** The project produces clean renewable energy by diminishing CO_2 emissions. Therefore, it contributes SDG Target 13.3 “Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning”.

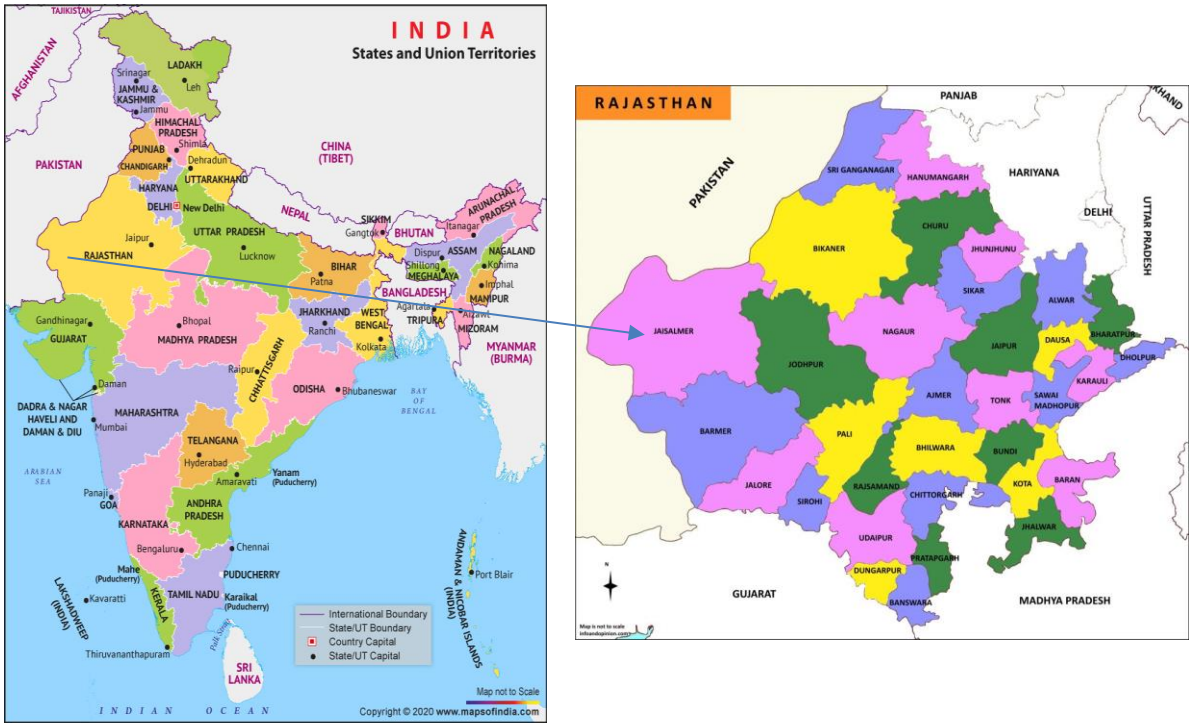
A.2. Location of the Project Activity

>> The details of the project locations are mentioned in the table below:

WTG number	Date of Commissioning			Location			
	Day	Month	Year	Village	Dist.	Latitude	Longitude
GD-9X-238	1	7	2016	Karada	Jaisalmer	2950821 (29.8561)	738494 (74.4288)
GD-9X-234	1	7	2016	Karada	Jaisalmer	2949058 (29.8182)	740799 (74.1441)
GD-9X-236	1	7	2016	Karada	Jaisalmer	2949865 (29.8406)	739647 (74.6130)
GD-9X-237	1	7	2016	Karada	Jaisalmer	2950243 (29.8400)	739206 (74.535)
GD-9X-239	1	7	2016	Karada	Jaisalmer	2948689 (29.8191)	741209 (74.2025)
GD-9X-138	31	8	2016	Karada	Jaisalmer	2946639 (29.7844)	740289 (74.0580)
GD-9X-228	30	9	2016	Karada	Jaisalmer	2950985 (29.8606)	730309 (73.0525)
GD-9X-226	30	9	2016	Karada	Jaisalmer	2951610 (29.8669)	729400 (73.5666)
GD-9X-229	30	9	2016	Karada	Jaisalmer	2950249 (29.8402)	729864 (73.6511)
GD-9X-230	30	9	2016	Karada	Jaisalmer	2950605 (29.8501)	729490 (73.5916)
GD-9X-227	30	9	2016	Karada	Jaisalmer	2951262 (29.8572)	729780 (73.6388)
GD-9X-185	31	8	2016	Lala	Jaisalmer	2948201 (29.8055)	735876 (73.9877)
GD-9X-249	31	8	2016	Bheekhsar	Jaisalmer	2941808 (29.7057)	737005 (74.1680)
GD-9X-251	31	8	2016	Karada	Jaisalmer	2942703 (29.7195)	737904 (74.3177)
GD-9X-253	31	8	2016	Karada	Jaisalmer	2943652 (29.7347)	736883 (74.1563)
GD-9X-257	31	8	2016	Karada	Jaisalmer	2946213 (29.7725)	737516 (74.2544)
GD-9X-258	31	8	2016	Karada	Jaisalmer	2946527 (29.7813)	738172 (74.37)
GD-9X-259	31	8	2016	Karada	Jaisalmer	2946729 (29.7896)	737345 (74.2291)
GD-9X-260	31	8	2016	Karada	Jaisalmer	2947417 (29.7949)	737073 (74.1869)
GD-9X-261	31	8	2016	Karada	Jaisalmer	2947417 (29.7949)	736519 (74.0886)

GD-9X-312	31	8	2016	Karada	Jaisalmer	2943231 (29.7230)	737290 (74.225)
GD-9X-244	30	9	2016	Lala	Jaisalmer	2949278 (29.8243)	734689 (73.7913)
GD-9X-319	30	9	2016	Sanwta	Jaisalmer	2950297 (29.8415)	732046 (73.3461)
GD-9X-314	30	9	2016	Sanwta	Jaisalmer	2951238 (29.8566)	728816 (73.4711)
GD-9X-275	30	9	2016	Sanwta	Jaisalmer	2949008 (29.8168)	732494 (73.4261)

The geographical map is provided below:



A.3. Technologies/measures

>> The Project Activity involves the installation of wind power project. The total installed capacity of the project is 50 MW located in village – Lala, district Jaisalmer, Rajasthan, India by National Aluminium Company Limited. The Project Activity is a new facility (Greenfield) and the electricity generated by the project will be exported to the Indian national grid. The Project Activity will therefore displace an equivalent amount of electricity which would have otherwise been generated by fossil fuel dominant electricity grid. The estimated lifetime of the project activity is considered as 25 years for wind technology. This may increase depending on the operation & maintenance of the plant. In the Pre- project scenario the entire electricity, delivered to the grid by the project activity, would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources.

Technical specifications of Gamesa G97[14] model of 2 MW capacity installed at Rajasthan:

Type:	G47.5/LM47.6P3
Manufacturer:	Gamesa/LM
Rated power:	2,000.0 kW
Cut-in wind speed:	3.0 m/s
Rated wind speed:	11.0 m/s
Cut-out wind speed:	25.0 m/s
Rotor Diameter:	97.0 m
Rotor Swept area:	7,390.0 m²
Number of blades:	3
Rotor speed, max:	17.8 U/min
Tipspeed:	90 m/s
Material:	epoxy glass fiber/carbon fiber
Power density 1:	270.6 W/m²
Power density 2:	3.7 m²/kW
Grid frequency:	50/60 Hz
Hub height:	78/90/100/120 m

A.4. Project Owner(s)

Location/ Country	Project Owner(s)	Where applicable[15], indicate if the host country has provided approval (Yes/No)
India	EKI Energy Services Limited	Not Applicable

A.5. Declaration of intended use of Approved Carbon Credits (ACCs) generated by the Project Activity

>> The Project Activity is expected to generate ACCs for a full 10-year crediting period and supply the credits to offset the following GHG emissions:

Period		Name of the Entities	Purpose and Quantity of ACCs to be supplied
From	To		
01/07/2016	30/06/2026	EKI Energy Services Limited	97,121 tCO_2/annum

[14] https://en.wind-turbine-models.com/turbines/764-gamesa-g97

[15] For example, *Project Coordination Form* is to be filled-in by Project Owners for projects located in Qatar. A written attestation from the host country's national focal point or the focal point's designee, as required by CORSIA (Refer section A.5 of the PSF guidelines).

A.6. Additional requirements for CORSIA

>> Please see Section E and F.

Section B. Application of selected methodology(ies)

B.1. Reference to methodology(ies) and tools applied in the project

>> ACM0002 Grid-connected electricity generation from renewable sources --- Version 21.0[16]

Tools applied for this Project activity are:

- ✓ TOOL01: Tool for the demonstration and assessment of additionality, version 07.0.0[17]
- ✓ TOOL 07: Tool to calculate the emission factor for an electricity system, version 7.0[18]
- ✓ TOOL 24: "Common Practice", version 03.1[19]
- ✓ TOOL27: Investment analysis, version 12.0[20]

B.2. Applicability of methodology(ies) and tools applied in the project

>> The project activity is grid-connected wind power project. Version 21.0 of ACM0002 methodology is applicable to grid-connected renewable power generation project activities that:

(a) Install a Greenfield power plant;

(b) Involve a capacity addition to (an) existing plant(s);

(c) Involve a retrofit of (an) existing operating plant(s)/unit(s);

(d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or

(e) Involve a replacement of (an) existing plant(s)/unit(s).

The project activity does not involve the integration of a Battery Energy Storage System (BESS): The project activity is wind based renewable energy source, zero emission power project connected to the different state grids, which forms part of the Indian electricity grid. The project activity will displace fossil fuel-based electricity generation that would have otherwise been provided by the operation and expansion of the fossil fuel-based power plants in Indian grid. The approved consolidated baseline and monitoring methodology ACM0002 Version 21.0 is the choice of the baseline and monitoring methodology and it is applicable because:

Comparison of project activity characteristics and eligibility criteria of version 21.0 of ACM0002

[16] https://cdm.unfccc.int/UserManagement/FileStorage/ZPFJL01OU2RYC6N3HASIXV7K84QBG9
[17] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf
[18] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf
[19] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-24-v1.pdf
[20] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v12.pdf

Para No.	Applicability Conditions as per ACM0002	Applicability to this Project Activity
1	The project activity may include renewable energy power plant/unit of one of the following types: • hydro power plant/unit with or without reservoir, • Wind power plant/unit, • Geothermal power plant/unit, • Solar power plant/unit, • Wave power plant/unit or Tidal power plant/unit.	The project activity is grid connected renewable power generation from wind energy.
2	In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects) the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.	This condition is not relevant, as the project activity does not involve capacity additions, retrofits or replacements.
3	In case of Greenfield project activities applicable under paragraph 5 (a) of the methodology, the project participants shall demonstrate that the BESS was an integral part of the design of the renewable energy project activity (e.g. by referring to feasibility studies or investment decision documents);	This condition is not relevant, as does not involve the integration of a Battery Energy Storage System (BESS):
4	The BESS should be charged with electricity generated from the associated renewable energy power plant(s). Only during exigencies 2 may the BESS be charged with electricity from the grid or a fossil fuel electricity generator. In such cases, the corresponding GHG emissions shall be accounted for as project emissions following the requirements under section 5.4.4 below. The charging using the grid or using fossil fuel electricity generator should not amount to more than 2 per cent of the electricity generated by the project renewable energy plant during a monitoring period. During the time periods (e.g. week(s), months(s)) when the BESS consumes more than 2 per cent of the electricity for charging, the project participant shall not be entitled to issuance of the certified emission reductions for the concerned periods of the monitoring period.	This condition is not relevant, as does not involve the integration of a Battery Energy Storage System (BESS):
5	In case of hydro power plants, one of the following conditions shall apply:	The project activity is a grid connected renewable energy project (wind power). This condition is applicable only for

	a) The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or b) The project activity is implemented in existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density calculated using equation (3), is greater than 4 W/m^2; or c) The project activity results in new single or multiple reservoirs and the power density, calculated using equation (3), is greater than 4 W/m^2. d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density for any of the reservoirs, calculated using equation (3), is lower than or equal to 4 W/m^2, all of the following conditions shall apply: I. The power density calculated using the total installed capacity of the integrated project, as per equation (4), is greater than 4 W/m^2; II. Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity; III. Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m^2 shall be; a) Lower than or equal to 15 MW; and b) b) Less than 10 per cent of the total installed capacity of integrated hydro power project.	hydro power plants and not applicable for wind projects. Hence this criterion is not applicable.
6	In the case of integrated hydro power projects, project proponent shall: • Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or • Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability in different seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum five	The project activity is a grid connected renewable energy project (wind power). This condition is applicable only for hydro power plants and not applicable for wind projects. Hence this criterion is not applicable.

	years prior to implementation of CDM project activity.	
7	Methodology is not applicable to the following • Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site • Biomass fired power plants/units	The project activity will be installation of a new grid connected renewable energy project (wind power) and does not involve switching from fossil fuel to renewable energy and hence this criterion is not relevant. This project activity does not involve any biomass-based power plants and hence this criterion is not applicable to the project activity
8	In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is "the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance"	The project activity will be a new grid connected renewable energy plant (wind power) and not a retrofits, replacement or capacity additions and therefore this criterion is not applicable to the project activity.

Applicability conditions of "Tool to calculate the emission factor for an electricity system"

Tool applicability conditions	Project Applicability
This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g., demand-side energy efficiency projects).	This condition is applicable. OM, BM and CM are estimated using the tool for calculating baseline emissions.
Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off- grid power plants. In the latter case, the conditions specified in "Appendix 2: Procedures related to off- grid power generation" should be met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh) should be at least 10 per cent of the total electricity generation by grid power plants in the electricity system; and	Since project activity is grid connected (wind power), this condition is applicable and the emission factor has been calculated accordingly.

that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity.	
In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	Project activity will be located in India, a non-Annex I country. Therefore, this criterion is not applicable for the project activity.
Under this tool, the value applied to the CO_2 emission factor of biofuels is zero.	The project activity will be grid connected renewable energy project (wind power) and CO_2 emission factor is not considered for biofuels.

In addition to the above applicability criteria, the project also meets the criteria of the flowing methodological tools;

1. TOOL01: "Tool for the demonstration and assessment of additionality, version 07.0.0, is demonstrated in section B.5
2. TOOL 27: Investment analysis, version 12.0 is demonstrated in section B.5 (step 2)
3. TOOL24: Common practice, version 3.1 is demonstrated in section B.5 (step 4)

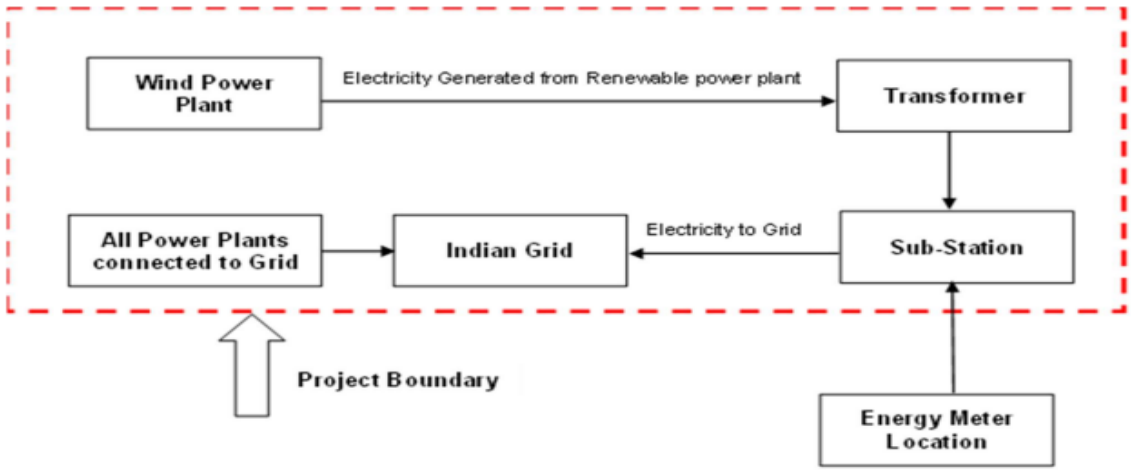
B.3. Project boundary, sources and greenhouse gases (GHGs)

>>

The table below provides an overview of the emissions sources included or excluded from the project boundary for determination of baseline and project emissions.

Source		GHG	Included?	Justification/Explanation
Baseline	Grid connected electricity generation	CO_2	Yes	Main emission source
		CH_4	No	Minor emission source
		N_2O	No	Minor emission source
		Other	No	Project activity does not emit other forms of GHG emissions
Project Activity	Greenfield wind power Project Activity.	CO_2	No	No CO_2 emissions are emitted from the project
		CH_4	No	Project activity does not emit CH_4
		N_2O	No	Project activity does not emit N_2O
		Other	No	Project activity does not emit other forms of GHG emissions

The pictorial depiction of the project boundary is given below:



Project Boundary

B.4. Establishment and description of the baseline scenario

>> As per the approved consolidated Methodology ACM0002 (Version 21.0) para 24:, If the project activity is the installation of a Greenfield power plant, the baseline scenario is the following:
"Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system".
The combined margin ($EF_{grid,CM,y}$) is the result of a weighted average of two emission factor pertaining to the electricity system: the operating margin (OM) and build margin (BM), in accordance with the Tool to calculate the emission factor for an electricity system - Version 07 Calculations for this combined margin must be based on data from an official source (where available) and made publicly available. In India, Central Electricity Authority (CEA), Government of India provides this data, and accordingly the same has been used.

In the absence of the project activity, the equivalent amount of electricity would have been drawn from the state grid. Hence, the baseline for the project activity is the equivalent amount of power from the Indian Grid.

The combined margin ($EF_{grid, CM,y}$) is the result of a weighted average of two emission factor pertaining to the electricity system: the operating margin (OM) and build margin (BM).

Calculations for this combined margin must be based on data from an official source (where available) and made publicly available. The CEA database version 17 is the latest available data at the time of PSF submission to GCC verifier for project verification, hence same is considered for emission factor calculations.

The combined margin of the Indian grid used for the project activity is as follows:

Parameter	Value	Nomenclature	Source
$EF_{grid,CM,y}$	0.9305 tCO_2/MWh	Combined margin CO_2 emission factor for the project electricity system in year y	Calculated as the weighted average of the operating margin (0.25) & build margin (0.75) values, sourced from Baseline CO_2 Emission Database, Version 17.0, October -21 published by Central Electricity Authority (CEA), Government of India
$EF_{grid,OM,y}$	0.9522 tCO_2/MWh	Operating margin CO_2 emission factor for the project electricity system in year y	Calculated as the last 3-year (2018-19, 2019-20, 2020-21) generation-weighted average, sourced from Baseline CO2 Emission Database, Version 17.0, October -21 published by Central Electricity Authority (CEA), Government of India
$EF_{grid,BM,y}$	0.8653 tCO_2/MWh	Build margin CO_2 emission factor for the project electricity system in year y	Baseline CO_2 Emission Database, Version 17.0, October -21 published by Central Electricity Authority (CEA), Government of India

During the implementation of the project activity, the relevant National and/or sectoral policies, regulations and circumstances are taken into account.

- Implementation of wind based power projects for electricity generation is not mandatory under any law in India, the project activity is a voluntary action.
- Despite the gradual increase in renewable energy sources (including wind energy) in power sector, still about two-third of installed power generation capacity is based on fossil-fuel based energy sources, hence the electricity grid is fed by electricity generated predominantly in fossil-fuel based power plants.

B.5. Demonstration of additionality

>> The additionality of a GCC Project shall be demonstrated by applying the following approach, consisting of two components:

(i) A Legal Requirement Test; and

(ii) An Additionality Test either based on a Positive List test or a projects-specific additionality test.

(a) ***Legal Requirement Test***

The project is not enforced by law. The project passes the legal requirement test since there are no enforced laws, statutes, regulations, court orders, environmental-mitigation agreements, permitting conditions of other legally-binding mandates requiring its implementation. Since voluntary commitments/agreements within a sector or by an entity do not constitute the legal requirement, the outcome of the legal requirement test is concluded as positive.

(b) ***Additionality Test***

In accordance with applied tool, TOOL 21: “Demonstration of additionality of small scale project activities” Version-13.1, the project owner shall provide an explanation to show that the project activity would not have occurred due to at least one of the following barrier

- Investment barrier:
- Technological barrier:
- Barrier due to prevailing practice:
- Other barriers

The project owner has identified “investment barrier” as the most relevant barrier faced by the project activity. The investment barrier faced by the project activity consists of barrier due to high capital cost and consequent impact on return.

Investment Barrier:
The purpose of investment analysis is to determine whether the project activity is economically or financially less attractive than other alternatives without additional funding that may be derived from the sale of carbon credits. The investment analysis was conducted in accordance with guidelines on investment analysis.

Project owner has considered Equity IRR as the suitable financial indicator for investment analysis.

Suitability of Benchmark:
As per TOOL27: Investment analysis, Version 12.0, EB 112, Annex 2 “In cases where a benchmark approach is used the applied benchmark shall be appropriate to the type of IRR calculated. Local commercial lending rates or weighted average costs of capital (WACC) are appropriate benchmarks for a project IRR. Required/expected returns on equity are appropriate benchmarks for an equity IRR. Benchmarks supplied by relevant national authorities are also appropriate if the DOE can validate that they are applicable to the project activity and the type of IRR calculation presented.”

Accordingly, the project owner has selected required/expected returns on equity as the appropriate benchmark for the project.

The investment analysis has been carried out in Nominal terms. Accordingly, Default value has been adjusted by adding suitable forecasted inflation rate taken from RBI (Central Bank, India). Project owner has calculated Benchmark based on WPI mean inflation rate. As per Para 16 of the TOOL27: Investment analysis, Version 12.0, EB 112, Annex 2, the inflation forecast should be for the duration of the crediting period. However, since RBI provides forecast inflation only for 5 & 10 years, the project investor has calculated benchmark using 10 years durations and the same is considered as Benchmark for the project activity.

Methodology deployed for arriving at a suitable value of Benchmark using Default Value has been described below:

- As the proposed project activity generates power utilizing wind energy, Group 1 as per para 5 of Appendix of EB 112, Annex 2 has been identified as a suitable category.

- The investment analysis has been carried out in Nominal terms. Accordingly, Default value as given in Para 6, Appendix, Annex 2, EB 112 has been adjusted by adding suitable forecasted inflation rate taken from RBI (Central Bank, India).
- Project investor has calculated Benchmark based on WPI mean inflation rate. As per Para 16 of Appendix of EB 112, Annex 2, the inflation forecast should be for the duration of the crediting period. The project investor has calculated benchmark using 10 years inflation as Benchmark for the project activity.

The benchmark has been computed in the following manner:
Nominal Benchmark21 = {(1+Real Benchmark) *(1+Inflation rate)}-1

Where,
Real Benchmark = Default Value, i.e., 10.55% (as per latest version of TOOL 27: Investment Analysis, version 6.0[22] available at the time of investment decision)
Inflation rate = Projected Inflation Rate for India, i.e., 4.80[23]

The investment decision for the project was taken on 18th December 2015. The latest Results of the Survey of Professional Forecasters on Macroeconomic Indicators – Round 51 published by Reserve Bank of India on 29th September 2015 has been referred for the projected inflation rate of India.

The nominal benchmark has been calculated as;
{(1+11.10)*(1+4.80)} – 1 = **15.86%**

The Post tax Equity IRR is evaluated for the entire lifetime of the project activity, i.e. 25 years.

It is calculated based on the cash outflows from and cash inflows into the project activity. The IRR and Benchmark analysis are calculated in excel spreadsheet and same will be submitted to the verifier during verification of project activity. Based on result of IRR excel spreadsheets, equity IRR is less than Benchmark. This substantiates that the investment is not financially attractive (Equity IRR for the project activity is less than the Benchmark). Thus, it can be easily concluded that project activity is additional & is not business as usual scenario. Input values used in all investment analysis shall be valid and applicable at the time of the investment decision taken by the project participant which can be clearly verified by the verifier; thus it complies with guidance 10 of EB 112, Annex 2.

The financial spread sheets for the key assumption (web links & source of parameters) supporting the financial projections are tabulated below:

Details of the project		Source
State where the project is situated	Rajasthan	Financial Appraisal Report
Total Capacity (MW)	50 MW	Financial Appraisal Report
Expected Date of Commissioning	26-03-2017	Financial Appraisal Report
Life of the plant (Yrs.)	25	Financial Appraisal Report
Generation of electricity		

[21] As per Fisher Equation, https://en.wikipedia.org/wiki/Fisher_equation
[22] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v1.pdf
[23] https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=16696

PLF (%)	23.83%	Financial Appraisal Report
Annual generation (kWh)	104,375,400	Calculated
Tariff rate (INR/kWh) for initial 20 years	5.14	Financial Appraisal Report
Operation and maintenance cost and Insurance		
O & M Expenses (INR Mn.)	70	Financial Appraisal Report
O & M free for (Yr.)	2	Financial Appraisal Report
Escalation in the operational expenses (%)	6%	Financial Appraisal Report
Financial parameters		
Total Cost (INR Mn.)	3,518.60	Financial Appraisal Report
Loan Amount (INR Mn.)	2,463.02	Financial Appraisal Report
Equity Investment (INR Mn.)	1,055.58	Financial Appraisal Report
Term loan		
Loan Amount (INR Mn.)	2,463.02	70:30 Financial Appraisal Report
Interest rate (%)	10%	Financial Appraisal Report
Loan Tenure (Qtr.)	40	Financial Appraisal Report
Moratorium Period (Qtr.)	-	Financial Appraisal Report
Repayment Period (Qtr.)	40	Calculated
Repayment instalments value (INR Mn.)	61.58	Calculated
1st instalment from (Qtr. end)	31-Dec-16	Considered from the next Quarter End
Book Depreciation (SLM Method)		
Gross Depreciable Value (INR Mn.)	3,518.60	Calculated
Salvage Value (%)	10.00%	
Salvage value (INR Mn.)	351.86	Calculated
Net Depreciable Value (INR Mn.)	3,166.74	Calculated
Residual Value (INR Mn.)	351.86	Calculated
IT Depreciation		
IT Depreciation (%)	80.00%	As per IT Act
Income Tax		
Financial Year	**FY 2017-18**	
Income tax rate (%)	30.00%	As Per Income Tax Rule
Corporate Tax / MAT (%)	30.00%	As Per IT rule
GST (%)	18.00%	As Per Income Tax Rule
Surcharge (%)	12.00%	As Per Income Tax Rule
Health & Education cess (%)	4.00%	As Per Income Tax Rule
Final Tax rates		
Income tax rate (%)	34.94%	Calculated Value
MAT (%)	34.94%	Calculated Value
GST (%)	18.72%	Calculated Value

Considering the input values, Equity IRRs is given below:

Equity IRR	10.65%
Benchmark	15.86%

Therefore, the GCC project activity cannot be considered as financially attractive as the equity IRR for the project activity is less than the Benchmark.

Sub-step 2d: Sensitivity Analysis

Addressing section 7 of EB 112, Annex 2, following factors has been subjected to sensitivity analysis:

- PLF
- O&M Cost
- Project Cost
- Tariff Rate

The rationale of sensitivity is, "The ultimate objective of the sensitivity analysis is to determine the likelihood of the occurrence of a scenario other than the scenario presented, in order to provide a cross-check on the suitability of the assumptions used in the development of the investment analysis."

Variation %	-10%	Base	10%	Breaching value
PLF	13.79%	10.89%	7.89%	16.00%
O&M	11.37%	10.89%	10.42%	Smaller than -100%
Project Cost	13.64%	10.89%	8.64%	-17.00%
Tariff Rate	10.34%	10.89%	11.38%	155.00%

This substantiates that the investment is not financially attractive (Equity IRR for the project activity is less than the Benchmark Equity IRR) for any of the investor. Thus, it can be easily concluded that project activity is additional & is not business as usual scenario.

Outcome of Step 2:

This substantiates that the investment is not financially attractive (Equity IRR for the project activity is less than the Benchmark Equity IRR). Thus, it can be easily concluded that project activity is additional & is not business as usual scenario.

Step 3: Barrier analysis

Barrier analysis has not been used.

Step 4: Common practice analysis

Stepwise approach for common practice analysis has been carried out as per Methodological tool “Common Practice”, version 03.1 EB84, Annex 7:

Step (1): calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.

Range	Capacity (MW)
+50%	25
Capacity of the proposed project activity	50
-50%	75

Step (2): identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:

a) The projects are located in the applicable geographical area;
b) The projects apply the same measure as the proposed project activity;
c) The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity;
d) The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant;
e) The capacity or output of the projects is within the applicable capacity or output range calculated in Step 1;
f) The projects started commercial operation before the project design document (CDM-PDD) is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.

Identification of the similar projects (CDM and non-CDM) is carried out as per sub-steps of Step (2) as follows:

a) As the project is located in Maharashtra state of India, therefore, the applicable geographical area of Maharashtra has been chosen for analysis.
b) The project activity is a green-field wind power project and uses measure (c) "Switch of technology with or without change of energy source including energy efficiency improvement as well as use of renewable energies". Therefore, all projects applying same measure (b) as the proposed project activity are candidates for similar projects.
c) The energy source used by the project activity is wind. Hence, only wind energy projects have been considered for analysis.
d) The project activity produces electricity; therefore, all power plants that produce electricity are candidates for similar projects.
e) The capacity range of the projects is within the applicable capacity range from 25.2MW to 75.6MW.
f) The start date of the project activity is 01/07/2016. As Kyoto Protocol was ratified by India on 26/08/2002[24] , therefore projects which had started commercial operation between 26/08/2002 to 01/07/2016, have been identified.

Numbers of Similar projects identified, which fulfil above-mentioned conditioned are N_{wind} = 22. Out of the 22 number of the projects identified satisfying the above applicable criteria, all of the projects have been found to be commissioned on the arrangement of sell of 100% of the generated power to distribution companies (DISCOMs) under various promotional policies of the state and central government[25] whereas the candidate project sells the generated power under open access scheme through third party sale. Therefore, all the 22 nos. of projects identified are of different technologies when compared with the candidate project in line with para 12 of methodological tool: Common

[24] http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php
[25] https://energy.rajasthan.gov.in/content/dam/raj/energy/rrecl/pdf/Activities/Wind/NewDoc/Total%20registration%20of%20Wind%20Power%20Plants%20in%20rajasthan.pdf

Practice, Version 03.1.

Step (3): within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number N_{all}. Hence, $N_{all} = 21$

Step (4): within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. Note their number N_{diff}.

The identified project is not that of a different technology when compared with the proposed project activity in line with para 11 of methodological tool: Common Practice, Version 03.1.

Hence, $N_{diff} = 21$

Step (5): calculate factor $F=1 - N_{diff}/N_{all}$ representing the share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity

Calculate $F = 1 - N_{diff}/N_{all} = 1 - (1/0) = 0$
$N_{all} - N_{diff} = 1 - 0 = 0$

Outcome of Step 5:

F = 1, greater than 0.20 and
$N_{all} - N_{diff} = 1$; is less than 3, thus:

As the project activity does not satisfy condition (i) and (ii) both, the proposed project activity is not a "common practice" within a sector in the applicable geographical area.

The above discussions show that wind power development is not a common practice and the project activity is not financially attractive; hence the project activity is additional.

B.6. Estimation of emission reductions

As per the para 57 of ACM0002, version 21.0, the formula to calculate the emission reduction is $ER_y = BE_y – PE_y$

As the project activity is a wind project, there is no any leakage emissions from the project activity.

Hence, $LE_y = 0$

Therefore, Emission Reductions for this project activity are calculated as follows:

$ER_y = BE_y – PE_y$

Where:

ER_y	=	Emission reductions in year y (t CO_2e/yr)
BE_y	=	Baseline emissions in year y (t CO_2/yr)
PE_y	=	Project emissions in year y (t CO_2e/yr)

Therefore, Net GHG Emission Reductions and Removals are calculated as follows:
$ER_y = BE_y – PE_y$

B.6.1. Explanation of methodological choices

>> According to the approved baseline methodology ACM0002 Version 21.0.0, EB 81, Annex 9

Baseline Emission:
As per para 44 of ACM0002 version 20, *"Baseline emissions include only CO_2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants"*. The baseline emissions are to be calculated as follows:

$BEy = EG_{PJ,y} X EF_{grid,.y}$

Where,

BE_y = Baseline Emissions in year y; t CO_2

$EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh)

$EF_{grid, y}$ = Combined margin CO_2 emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (t CO_2/MWh)

As per methodology, combined margin CO_2 emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system", Version 7.0.

CO_2 Baseline Database for the Indian Power Sector, Version 17, October 2021[26] published by Central Electricity Authority (CEA), Government of India has been used for the calculation of emission reduction.

As per Methodological tool: Tool to calculate the emission factor for an electricity system (Version 7.0, EB 100, Annex 4), following six steps have been followed:

(a) **Step 1:** Identify the relevant electricity systems;
(b) **Step 2:** Choose whether to include off-grid power plants in the project electricity system (optional);

[26] https://cea.nic.in/wp-content/uploads/baseline/2021/06/User_Guide_ver_16_2021-1.pdf

(c) **Step 3:** Select a method to determine the operating margin (OM);
(d) **Step 4:** Calculate the operating margin emission factor according to the selected method;
(e) **Step 5:** Calculate the build margin (BM) emission factor;
(f) **Step 6:** Calculate the combined margin (CM) emission factor.

Step 1: Identify the relevant electricity systems
As described in tool "For determining the electricity emission factors, identify the relevant project electricity system. Similarly, identify any connected electricity systems". It also states that "If the DNA of the host country has published a delineation of the project electricity system and connected electricity systems, these delineations should be used". Keeping this into consideration, the Central Electricity Authority (CEA), Government of India have Indian grid.

However, since August 2006, however, all regional grids except the Southern Grid had been integrated and were operating in synchronous mode, i.e. at same frequency. Consequently, the Northern, Eastern, Western and North-Eastern grids were treated as a single grid named as NEWNE grid from FY 2007-08 onwards for the purpose of this CO_2 Baseline Database. As of 31 December 2013, the Southern grid has also been synchronized with the NEWNE grid, hence forming one unified Indian Grid. Since the project supplies electricity to the Indian grid, emissions generated due to the electricity generated by the Indian grid as per CM calculations will serve as the baseline for this project.

Table: Geographical Scope of Indian Electricity Grid

Northern	Eastern	Western	North-Eastern	Southern
Chandigarh	Bihar	Chhattisgarh	Arunachal Pradesh	Andhra Pradesh
Delhi	Jharkhand	Gujarat	Assam	Karnataka
Haryana	Orissa	Daman & Diu	Manipur	Kerala
Himachal Pradesh	West Bengal	Dadar& Nagar Haveli	Meghalaya	Tamil Nadu
Jammu & Kashmir	Sikkim	Madhya Pradesh	Mizoram	Telangana
Punjab	Andaman & Nicobar	**Maharashtra**	Nagaland	Puducherry
Rajasthan		Goa	Tripura	Lakshadweep
Uttar Pradesh				
Uttarakhand				

Step 2: Choose whether to include off-grid power plants in the project electricity system (optional)
GCC project owner may choose between the following two options to calculate the operating margin and build margin emission factor:

Option I: Only grid power plants are included in the calculation.
Option II: Both grid power plants and off-grid power plants are included in the calculation.
GCC project owner has chosen only grid power plants in the calculation.

Step 3: Select a method to determine the operating margin (OM)
The calculation of the operating margin emission factor ($EF_{grid,OM,y}$) is based on one of the following

methods, which are described under Step 4:

(a) Simple OM; or
(b) Simple adjusted OM; or
(c) Dispatch data analysis OM; or
(d) Average OM.

The data required to calculate Simple adjusted OM and Dispatch data analysis OM is not possible due to lack of availability of data to project developers. The choice of other two options for calculating operating margin emission factor depends on generation of electricity from low-cost/ must-run sources. In the context of the methodology low cost/must run resources typically include hydro, geothermal, solar, low-cost biomass, nuclear and solar generation.

Share of Must-Run (Hydro/Nuclear) (% of Net Generation)

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
India	15.1%	14.6%	14.3%	14.5%	17.0%	16.5%

Data Source: Central Electricity Authority (CEA) database Version 17, October 2021[27]

The above data clearly shows that the percentage of total grid generation by low-cost/ must-run plants (on the basis of average of five most recent years) for the Indian grid is less than 50 % of the total generation. Thus, the Average OM method cannot be applied, as low cost/must run resources constitute less than 50% of total grid generation.

The simple OM emission factor is calculated as the generation-weighted average CO_2 emissions per unit net electricity generation (tCO_2/MWh) of all generating power plants serving the system, not including low-cost/must-run power plants/units.

For the simple OM, the simple adjusted OM and the average OM, the emissions factor can be calculated using either of the two following data vintages:

(a) **Ex-ante option:** if the ex-ante option is chosen, the emission factor is determined once at the validation stage, thus no monitoring and recalculation of the emissions factor during the crediting period is required.

OR

(b) **Ex-post option:** if the ex-post option is chosen, the emission factor is determined for the year in which the project activity displaces grid electricity, requiring the emissions factor to be updated annually during monitoring.

Project Owner has chosen ex-ante option for calculation of Simple OM emission factor using a 3-year generation-weighted average, based on the most recent data available at the time of submission of the PD to the GCC Verifer for validation.

OM determined at validation stage will be the same throughout the crediting period. There will be no requirement to monitor & recalculate the emission factor during the crediting period.

[27] https://cea.nic.in/wp-content/uploads/baseline/2021/06/User_Guide_ver_16_2021-1.pdf

Step 4: Calculate the operating margin emission factor ($EF_{grid,OMSimple,y}$) according to the selected method

The operating margin emission factor has been calculated using a 3 year data vintage:

Net Generation in operating Margin (GWh) (Incl. Imports)			
	2018-19	**2019-20**	**2020-21**
Indian Grid	9,95,957	9,65,009	9,58,218

Simple Operating Margin (t CO_2/MWh) (Incl. Imports)			
	2018-19	**2019-20**	**2020-21**
Indian Grid	0.9603	0.9555	0.9405

Weighted Generation Operating Margin	
INDIAN Grid	0.9522

Step 5: Calculate the build margin (BM) emission factor ($EF_{grid,BM,y}$)

As per Methodological tool: "Tool to calculate the emission factor for an electricity system" (Version 7.0, EB 100, Annex 4) para 72:

In terms of vintage of data, GCC project owner can choose between one of the following two options:

(a) **Option 1 -** for the first crediting period, calculate the build margin emission factor ex ante based on the most recent information available on units already built for sample group m at the time of PD submission to the GCC Verifier for validation. For the second crediting period, the build margin emission factor should be updated based on the most recent information available on units already built at the time of submission of the request for renewal of the crediting period to the GCC Verifier. For the third crediting period, the build margin emission factor calculated for the second crediting period should be used. This option does not require monitoring the emission factor during the crediting period.

(b) **Option 2 -** For the first crediting period, the build margin emission factor shall be updated annually, ex post, including those units built up to the year of registration of the project activity or, if information up to the year of registration is not yet available, including those units built up to the latest year for which information is available. For the second crediting period, the build margin emissions factor shall be calculated ex ante, as described in Option 1 above. For the third crediting period, the build margin emission factor calculated for the second crediting period should be used.

Option 1 as described above is chosen by Project Owner to calculate the build margin emission factor for the project activity. BM is calculated ex-ante based on the most recent information available at the time of submission of PD and is fixed for the entire crediting period.

Option 1 as described above is chosen by Project Owner to calculate the build margin emission factor for the project activity. BM is calculated ex-ante based on the most recent information available at the time of submission of PD and is fixed for the entire crediting period.

Build Margin (tCO_2/MWh) (not adjusted for imports)

	2020-21
Indian Grid	0.8653

Step 6: Calculate the combined margin (CM) emission factor ($EF_{grid,CM,y}$)
As per Methodological tool: "Tool to calculate the emission factor for an electricity system" (Version 7.0, EB 100, Annex 4) para 81:

The calculation of the combined margin (CM) emission factor ($EF_{grid,CM,y}$) is based on one of the following methods:

(a) Weighted average CM; or
(b) Simplified CM.

Project Owner has chosen option (a) i.e weighted average CM to calculate the combined margin emission factor for the project activity.

The combined margin emissions factor is calculated as follows:

$$EF_{grid,CM,y} = EF_{grid,OM,y} * W_{OM} + EF_{grid,BM,y} * W_{BM}$$

Where:
$EF_{grid,BM,y}$ = Build margin CO_2 emission factor in year y (t CO_2/MWh)
$EF_{grid,OM,y}$ = Operating margin CO_2 emission factor in year y (t CO_2/MWh)
W_{OM} = Weighting of operating margin emissions factor (per cent)
W_{BM} = Weighting of build margin emissions factor (per cent)

The following default values should be used for W_{OM} and W_{BM}:

For wind project activities: W_{OM} = 0.25 and W_{BM} = 0.75 (owing to their intermittent and non-dispatchable nature) for the second crediting period and for subsequent crediting periods. Since project activity is of power generation by using wind, the above weightage has been considered for OM and BM.

Therefore, $EF_{grid,CM,y}$ = 0.9522 * 0.75 + 0.8653 * 0.25
= 0.9305 tCO_2/MWh

Baseline emission factor (EF_y):
The baseline emission factor is calculated using the combined margin approach as described in Step 6 above:

Therefore, $EF_y = EF_{grid,CM,y}$ = 0.9305 tCO_2/MWh.

Project Emission
As per the ACM0002, version 21.0, Project Emission for most renewable energy power generation project activities, PEy = 0. However, some project activities may involve project emissions that can be significant. These emissions shall be accounted for as project emissions by using the following equation:

$PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y}$

Where
PE_y = Project emissions in year y (tCO_{2e}/yr)
$PE_{FF,y}$ = Project emissions from fossil fuel consumption in year y (tCO_2/yr)
$PE_{GP,y}$ = Project emissions from the operation of geothermal power plants due to the release of non-condensable gases in year y (tCO_{2e}/yr)
$PE_{HP,y}$ = Project emissions from water reservoirs of hydro power plants in year y (tCO_{2e}/yr).

The project activity involves the generation of electricity from the installation of wind projects. Hence, as per ACM0002, version 21.0, there is no project emission for wind projects. Therefore, project emissions are zero.

Leakage Emissions
No leakage emissions are considered in the project activity. The main emissions potentially giving rise to leakage in the context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g., extraction, processing, and transport). Since the emissions sources are small, it is neglected.

Hence, $LE_y = 0$

Emission reduction (ER_y):
The project activity mainly reduces carbon dioxide through substitution of grid electricity generation with fossil fuel fired power plant by renewable electricity. The emission reduction ER_y by the project activity during a given year y is the difference between Baseline emission and Project emission & Leakage emission.

Thus, as per equation 17 of ACM0002, version 21

$ER_y = BE_y – PE_y$

Where,
ER_y = Emission Reduction in year (tCO_{2e}/year)
BE_y = Baseline emissions in year (tCO_{2e}/year)
PE_y = Project emissions in year (tCO_{2e}/year)

B.6.2. Data and parameters fixed *ex ante*

>>

Data / Parameter Table 1.

Data / Parameter:	**$EF_{grid,OM,y}$**
Methodology reference	ACM 0002 (Version 21.0)
Data unit	tCO_2e/MWh
Description	Operating Margin CO_2 emission factor in year y

Measured/calculated /default	Calculated as the last 3-year (2018-19, 2019-20, 2020-21) generation-weighted average, sourced from Baseline CO_2 Emission Database, Version 17.0, October 2021 published by Central Electricity Authority (CEA), Government of India.
Data source	CO_2 Emission Database, Version 17.0, October- 2021 published by Central Electricity Authority (CEA), Government of India.
Value(s) of monitored parameter	0.9522
Measurement/ Monitoring equipment (if applicable)	Not Applicable
Calculation method (if applicable)	Not Applicable
QA/QC procedures	This parameter is fixed ex-ante for the entire crediting period.
Purpose of data	For the calculation of the Baseline Emission.
Additional comments	Not Applicable

Data / Parameter:	**$EF_{grid,BM,y}$**
Methodology reference	ACM 0002 (Version 21.0)
Data unit	tCO_2e/MWh
Description	Operating Margin CO_2 emission factor in year y
Measured/calculated /default	Calculated as the last 3-year (2018-19, 2019-20, 2020-21) generation-weighted average, sourced from Baseline CO_2 Emission Database, Version 17.0, October 2021 published by Central Electricity Authority (CEA), Government of India.
Data source	CO_2 Emission Database, Version 17.0, October- 2021 published by Central Electricity Authority (CEA), Government of India.
Value(s) of monitored parameter	0.8653
Measurement/ Monitoring equipment (if applicable)	Not Applicable
Calculation method (if applicable)	Not Applicable
QA/QC procedures	This parameter is fixed ex-ante for the entire crediting period.

Purpose of data	For the calculation of the Baseline Emission.
Additional comments	Not Applicable

Data / Parameter:	**$EF_{grid,CM,y}$**
Methodology reference	ACM 0002 (Version 21.0)
Data unit	tCO_2e/MWh
Description	Operating Margin CO_2 emission factor in year y
Measured/calculated /default	Calculated as the last 3-year (2018-19, 2019-20, 2020-21) generation-weighted average, sourced from Baseline CO_2 Emission Database, Version 17.0, October 2021 published by Central Electricity Authority (CEA), Government of India.
Data source	CO_2 Emission Database, Version 17.0, October- 2021 published by Central Electricity Authority (CEA), Government of India.
Value(s) of monitored parameter	0.9305
Measurement/ Monitoring equipment (if applicable)	Not Applicable
Calculation method (if applicable)	The combined margin emissions factor is calculated as follows: $EF_{grid,CM,y} = EF_{grid,OM,y} * W_{OM} + EF_{grid,BM,y} * W_{BM}$ Where: $EF_{grid,BM,y}$= Build margin CO_2 emission factor in year *y* (tCO_2/MWh) $EF_{grid,OM,y}$= Operating margin CO_2 emission factor in year *y* (tCO_2/MWh) W_{OM} = Weighting of operating margin emissions factor (%) = 75% W_{BM}= Weighting of build margin emissions factor (%) = 25%
QA/QC procedures	This parameter is fixed ex-ante for the entire crediting period.
Purpose of data	For the calculation of the Baseline Emission.
Additional comments	Not Applicable

B.6.3. Ex-ante calculation of emission reductions

>> Formula used to calculate the net emission reduction for the project activity is

$ER_y = BE_y - PE_y - LE_y$

Where,
ER_y = Emission Reduction in year y (tCO_2/yr)
BE_y = Baseline emission year y (tCO_2/yr)
PE_y = Project emissions year y (tCO_2/yr)
LE_y = Leakage Emissions year y (tCO_2/yr)

Baseline Emission (BE_Y)
The baseline emissions are the product of electrical energy baseline $EG_{facility,y}$ expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor.

$BE_Y = EG_{PJ,y} * EF_{grid,y}$

Where,
$EG_{PJ,,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh).

As per para 26 of methodology, project activity is the installation of a Greenfield power plant, hence

$EG_{pj,y} = EG_{pj,facility,y}$

The notation of same parameter $EG_{PJ,,y}$ can be $EG_{PJ,facility,y}$ as project activity is installation of a greenfield power plant.

$EG_{PJ,facility,y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh).

B.6.4. Summary of ex ante estimates of emission reductions

>>

Year	Baseline emissions (t CO_2e)	Project emissions (t CO_2e)	Leakage (t CO_2e)	Emission reductions (t CO_2e)
Year 1	97,121	0	0	97,121
Year 2	97,121	0	0	97,121
Year 3	97,121	0	0	97,121
Year 4	97,121	0	0	97,121
Year 5	97,121	0	0	97,121
Year 6	97,121	0	0	97,121
Year 7	97,121	0	0	97,121
Year 8	97,121	0	0	97,121
Year 9	97,121	0	0	97,121
Year 10	97,121	0	0	97,121
Total	971,210	0	0	971,210
Total number of crediting years	10			
Annual average over the crediting period	97,121	0	0	97,121

B.7. Monitoring plan

B.7.1. Data and parameters to be monitored *ex-post*

>>

Data / Parameter Table 2.

Data / Parameter:	**$EG_{PJ,,y}$**
Methodology reference	ACM 0002 (Version 21.0)
Data unit	MWh/y
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh
Measured/calculated /default	Measured
Data source	Monthly Generation Report / Joint Meter Reading issued
Value(s) of monitored parameter applied with basis	97,121[28] (Estimated)
Measurement/ Monitoring equipment	

Type of meter(s)	Energy Meter
Location of meter(s)	Substation
Accuracy of meter(s)	0.2s or 0.5s
Serial number of meter(s)	To be confirmed in the final version of PSF
Calibration frequency	As per Central Electricity Authority (Installation and Operation of Meters) (Amendment) Regulations, 2019[29], all Interface Meters shall be tested on-site using accredited test laboratory for routine accuracy testing at least once in five years and recalibrated if required.
Date of Calibration/ validity	To be confirmed in the final version of PSF
Reference No. of Calibration Certificates	To be confirmed in the final version of PSF
Calibration Status	To be confirmed in the final version of PSF

[28] Annual average for 10 years' generation

[29] https://cea.nic.in/old/reports/regulation/CEA_metering_regulation_amendment_2019.pdf; http://www.aegcl.co.in/Metering_Regulations_Of_CEA_17_03_2006.pdf

Frequency of Measuring/reading	Continuous monitoring and Monthly recording from Meters
Recording frequency	Monthly
Calculation method (if applicable)	Electricity exported/imported to the grid is in kWh. However, for the calculation purpose electricity exported is converted in MWh. The Bi directional energy meter measures both export and import of project activity. The Net electricity supplied to the grid by the project activity will be calculated as a difference of electricity exported to the grid, electricity imported from the grid obtained from joint meter reading certificates/credit notes issued by state electricity board as per below equation: $EG_{facility,y} = EG_{Export} - EG_{Import}$ The joint reading at metering point is carried out once in a month in presence of O&M officials and state electricity board personnel. The calculations/measurement of net electricity supplied to grid is under purview of state electricity board and the project owner has no role on it. Project owner will get value of net electricity supplied to grid and hence this parameter is mentioned as a part of monitoring plan. Cross Checking: Quantity of net electricity supplied to the grid will be cross checked from the invoices raised to the State Electricity Board.
QA/QC procedures	The meters are approved, tested & sealed by the State Utility. The meters are in the custody of State Utility. The frequency of calibration is once in 5 years. The monthly electricity supplied/exported by the project activity in the JMR report is cross checked with the monthly invoices of sale. In the absence or delay in the meter calibration appropriate Guidelines will be applied appropriately to confirm the conservativeness of metering. The metering arrangement, accuracy class of meters, calibration frequency is under control of state electricity board and GCC Project Owner do not have any control on it. GCC Project Owner is getting value of net electricity supplied to grid and the same is considered the monitoring parameter. The billing is raised based on substation meters.
Purpose of data	Calculation of baseline emission
Additional comments	Data will be archived electronically and/or in paper for a period of 2 years beyond the end of crediting period, whichever occurs later.

For Parameters to be monitored for E+/S+ assessments and SDG labels (positive impacts)

Data / Parameter:	**Employment (SDG 1)**
Purpose:	*To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.*
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Unskilled employment for below poverty line (BPL) category people
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Plant attendance register</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>-</td></tr><tr><td>QA/QC</td><td>-</td></tr></table>
Remarks	

Data / Parameter:	**Gender Equality and Economic Growth (SDG 5)**
Purpose:	*To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.*
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Equal pay for work of equal value for both men and women

Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Salary slip</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>-</td></tr><tr><td>QA/QC</td><td>-</td></tr></table>
Remarks	The project activity ensures that "equal pay for work of equal value" for both men and women and there is no any discrimination against women. Payment slips from the HR department can confirm the same.

Data / Parameter:	**Local Employment Generation (SDG 8)**
Purpose:	*To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.*
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Number of local employment generation. Short term and long term employment has been taken into account.
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>The total number of local people employed</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>-</td></tr><tr><td>QA/QC</td><td>-</td></tr></table>
Remarks	

Data / Parameter:	**CO_2 emissions (SDG 13)**
Purpose:	*To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.*

Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	The project will save equivalent amount of CO_2 emission as compared to the baseline scenario.
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Tons of CO_{2e} saved</td></tr><tr><td>Frequency of monitoring</td><td>As and when ACC issuance is done.</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>-</td></tr><tr><td>QA/QC</td><td>-</td></tr></table>
Remarks	The value will be sourced from the monitoring report prepared during the time of issuance.

Data / Parameter:	**Long-term jobs (> 1 year) created/ lost**
Purpose:	*To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.*
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	The project creates long-term job opportunities for the operational period.
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Number of employees appointed</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>-</td></tr><tr><td>QA/QC</td><td>-</td></tr></table>
Remarks	The value will be sourced from the monitoring report prepared during the time of issuance.

Data / Parameter:	**New short-term jobs (< 1 year) created/ lost**
Purpose:	To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	The project creates short-term job opportunities for the operational period.
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Number of employees appointed for less than 1 year</td></tr><tr><td>Frequency of monitoring</td><td>Continuous monitoring</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>-</td></tr><tr><td>QA/QC</td><td>-</td></tr></table>
Remarks	To be sourced from the payroll record of the project owner.

Data / Parameter:	**Sources of income generation increased / reduced**
Purpose:	To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Additional employment and O&M services in the project region.
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Employee records, O&M contracts</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>Minimum wages in compliance to the Labour Act</td></tr><tr><td>QA/QC</td><td>-</td></tr></table>
Remarks	

Data / Parameter:	**Job related training imparted or not**
Purpose:	To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Technical and Non-Technical trainings provided to employees as per the training needs.
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Records of training for employees provided or not.</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>-</td></tr><tr><td>QA/QC</td><td>-</td></tr></table>
Remarks	To be sourced from the training records maintained at project site.

Data / Parameter:	**Education infrastructure upgraded**
Purpose:	To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Number of single teacher school and primary school adopted in the tribal area of Chhattisgarh and the activities undertaken.
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Number of schools adopted</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>-</td></tr><tr><td>QA/QC</td><td>-</td></tr></table>
Remarks	The project owner has allocated a special fund for such activities. The record for all the number of such identified schools adopted and activities undertaken shall be reported. Actual fund disbursed and utilization of the same could also be cross checked from the annual books of account or any other authorized sources.

Data / Parameter:	**Poverty Alleviation**
Purpose:	To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	Population from rural background will be involved indirectly in the project activity. Further, the project owner shall ensure at least 1 person from category of below poverty line (as defined by govt. of India) is employed its payroll.
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Payroll record of Chhattisgarh Hydro Power LLP and record of persons employed indirectly in the project activity.</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>-</td></tr><tr><td>QA/QC</td><td>-</td></tr></table>
Remarks	Payroll record of the project owner.

Data / Parameter:	**Women empowerment**
Purpose:	To demonstrate positive impacts of aspects wrt baseline scenario / BAU / pre-existing scenario and to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.
Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.	The project owner shall ensure at least 1 woman is employed in its payment for this project activity.
Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate "harmless" condition or demonstrate Impact on SDG	<table><tr><td colspan="2"></td></tr><tr><td>Parameter to be monitored</td><td>Records of employment of women provided.</td></tr><tr><td>Frequency of monitoring</td><td>Annual</td></tr><tr><td>Legal /regulatory / corporate limits (if any)</td><td>-</td></tr><tr><td>QA/QC</td><td>-</td></tr></table>
Remarks	Payroll record of the project owner.

B.7.2. Data and parameters to be monitored for E+/S+ assessments (negative impacts)

>>

<table>
<tr><td>Data / Parameter:</td><td>Noise due to operation of WTG</td></tr>
<tr><td>Purpose:</td><td>To demonstrate compliance of XXXX aspects to legal/regulatory/corporate requirements or to demonstrate that they do not cause any net harm to environment / society or have an impact on SDG as per selected indicators.</td></tr>
<tr><td>Describe the related environment /social/ SDG risk or SDG impact as a function of likelihood of occurrence and severity of impact.</td><td>Wind turbines produce noise when operating primarily from mechanical and aerodynamic sources. Mechanical noise may be generated by machinery in the nacelle. Aerodynamic noise emanates from the movements of air around the turbine blades and tower. The types of aerodynamic noise may include low frequency, impulsive low frequency, tonal and continuous broadband. In addition, the amount of noise may rise with increasing rotation speed of the turbine blade.</td></tr>
<tr><td>Describe the parameters to be monitored to demonstrate compliance with requirements to demonstrate “harmless” condition or demonstrate Impact on SDG</td><td>
<table>
<tr><td></td><td></td></tr>
<tr><td>Parameter to be monitored</td><td>Noise due to operation of WTG</td></tr>
<tr><td>Frequency of monitoring</td><td>Annual</td></tr>
<tr><td>Legal /regulatory / corporate limits (if any)</td><td>-</td></tr>
<tr><td>QA/QC</td><td>-</td></tr>
</table>
</td></tr>
<tr><td>Program of Risk Management Actions to mitigate risk related to aspect (if any for aspects assessed to be harmful)</td><td>
<table>
<tr><th>S.No.</th><th>Action and targets</th><th>Responsibility</th><th>Resource Requirement</th><th>Target to be Achieved by (insert date)</th><th>Key Performance Indicators (KPI)</th><th>Targets achieved on (insert date)</th></tr>
<tr><td>1</td><td>1</td><td>Monitoring of noise level</td><td>Project owner</td><td>01</td><td>This parameter is monitored since 31/08/2016</td><td>Noise level assessed</td></tr>
<tr><td colspan="7"></td></tr>
<tr><td colspan="3">Date of Closing the Program:</td><td></td><td colspan="3"></td></tr>
</table>
</td></tr>
</table>

B.7.3. Sampling plan

>> Not Applicable

B.7.4. Other elements of the monitoring plan

>> The monitoring plan is developed in accordance with the modalities and procedures for the project activities and is proposed for grid-connected wind power project being implemented. The monitoring plan, which will be implemented by the project participant describes about the monitoring organization, parameters to be monitored, monitoring practices, quality assurance, quality control procedures, data storage and archiving. The authority and responsibility for registration, monitoring,

measurement, reporting and reviewing of the data rests with the project owner. The project owner proposed the following structure for data monitoring, collection, data archiving and calibration of equipment's for this project activity.

Data Measurement
The export and import energy will be measured continuously using above mentioned Main and Check meters located at the substations. Readings of meters shall be taken on monthly basis by authorized officer of DISCOM in the presence of PP or representative of PP. Based on the Meter Reading Statement to PP, invoices will be raised. These invoices can be used for cross checking the meter readings taken for the respective project activity.

Data collection and archiving
Readings from meters will be collected in the presence of the plant in-charge. Export and Import data would be recorded and stored in logs as well as in electronic form on a daily basis. The records are checked periodically by the Plant Manager and discussed thoroughly with the plant supervisor. The period of storage of the monitored data will be 2 years after the end of crediting period or till the last issuance of ACCs for the project activity whichever occurs later.

Emergency preparedness
The project activity will not result in any unidentified activity that can result in substantial emissions from the project activity. No need for emergency preparedness in data monitoring is visualized. In the event that the main meter, which is used to record the net electricity exported by the project, is found to be faulty it will be repaired or replaced and the data from the check meter will be used in its place. In the unlikely event that the check meter fails it will also be repaired or replaced.

Personnel training
In order to ensure a proper functioning of the project activity and a properly monitoring of emission reductions, the staff will be trained. The plant helpers will be trained in equipment operation, data recording, reports writing, operation and maintenance and emergency procedures in compliance with the monitoring plan.

QA/QC procedures
The energy meters at the feeders are maintained and owned by state electricity board. Neither the project proponent nor the site personnel have any control over it. The records will be crosschecked with the records of sold electricity to state electricity board. The meters are calibrated by state electricity board at-least once in five years.

Section C. Start date, crediting period type and duration

C.1. Start date of the Project Activity

>> Start date of project activity is 01/07/2016, (Commissioning date)

C.2. Expected operational lifetime of the Project Activity

>>25 years

C.3. Crediting period of the Project Activity

>> Fixed Crediting period.

C.3.1. Start and end date of the crediting period

>> Start date- 01/07/2016

End date- 31/06/2026

C.3.2. Duration of crediting period

>>10 years

Section D. Environmental impacts

D.1. Analysis of environmental impacts

>> This project activity does not involve any major construction activity. It primarily requires the installation of the wind turbines, interfacing the generators with the State Electricity Board by setting up HT transmission lines and installation of other accessories.

The report on "Developmental Impacts and Sustainable Governance Aspects of Renewable Energy Projects" prepared by MNRE dated September 2013. This report clearly mentioned that wind project activity operations do not result in direct air pollution, noise pollution. Please refer below web link for the same[30]. Thus, there is no any significant impact due to implementation of project activity on air, water, soil quality and ambience are envisaged due to the project activity. However, further analysis has been done in section E.

D.2. Environmental impact assessment and management action plans

>> The guidelines on Environmental Impact Assessment have been published by Ministry of Environment, Forests and Climate Change (MoEF&CC), Government of India (GOI) under Environmental Impact Assessment notification 14/09/2006. Further amendments to the notification have been done on 14/07/2018. As per the notification:

"The following projects or activities shall require prior environmental clearance from the concerned regulatory authority, which shall hereinafter referred to be as the Central Government in the Ministry of Environment and Forests for matters falling under Category 'A' in the Schedule and at State level the State Environment Impact Assessment Authority (SEIAA) for matters falling under Category 'B' in the said Schedule, before any construction work, or preparation of land by the project management except for securing the land, is started on the project or activity:

1) All new projects or activities listed in the Schedule to this notification;

[30] https://smartnet.niua.org/sites/default/files/resources/report-on-developmental-impacts-of-RE.pdf

2) Expansion and modernization of existing projects or activities listed in the Schedule to this notification with addition of capacity beyond the limits specified for the concerned sector, that is, projects or activities which cross the threshold limits given in the Schedule, after expansion or modernization;
3) Any change in product - mix in an existing manufacturing unit included in Schedule beyond the specified range."

As the wind power projects are not listed in any of the categories of the schedule, so the project is considered environmentally safe and as per Host party- India no EIA is required.

Section E. Environmental and social safeguards

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E.1. Environmental safeguards

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Impact of Project Activity on		Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards								Project Owner's Conclusion		GCC Project Verifier's Conclusion (To be included in Project Verification Report only)
		Description of Impact *(positive or negative)*	**Legal/ voluntary corporate requirement / regulatory/ voluntary corporate threshold Limits**	**Do-No-Harm Risk Assessment (choose which ever is applicable)**			**Risk Mitigation Action Plans for aspects marked as Harmful**		**Performance indicator for monitoring of impact**	***Ex-ante* scoring of environmental impact**	***Explanation of the Conclusion***	**3rd Party Audit**
				Not Applicable	**Harmless**	**Harmful**	**Operational Controls**	**Program of Risk Management Actions**	**Monitoring parameter and frequency of monitoring**	**Ex- Ante scoring of the environmental impact (as per scoring matrix Appendix-02)**	**Ex- Ante description and justification/explanation of the scoring of the environmental impact**	**Verification Process**
Environmental Aspects on the identified categories [31] ***indicated below.***	*Indicators for environmental impacts*	*Describe and identify anticipated and actual significant environmental impacts, both positive and negative from all sources (stationary and mobile) during normal and abnormal/emergency conditions, that may result from the construction and operations of the Project Activity, within and outside the project boundary, over which the Project Owner(s) has/have control.*	*Describe the applicable national regulatory requirements /legal limits / voluntary corporate limits related to the identified risks of environmental impacts.*	*If no environmental impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as* ***Not Applicable***	*If environmental impacts exist but are expected to be in compliance with applicable national regulatory /stricter voluntary corporate requirements and will be within legal/ voluntary corporate limits by way of plant*	*If negative environmental impacts exist that will not be in compliance with the applicable national legal/ regulatory requirements or are likely to exceed legal limits, then the Project Activity is likely to cause*	*Describe the operational controls and best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been identified as '****Harmful*** *at least to a level that is in compliance with applicable legal/regulatory requirements or industry best practice or stricter voluntary*	*Describe the Program of Risk Management Actions (refer to Table 3), focusing on additional actions (e.g., installation of pollution control equipment) that will be adopted to reduce or eliminate the risk of impacts that have been identified as* ***Harmful****.*	*Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmless of harmful. The frequency of monitoring to be specified as well including the data source.*	*-1* *0* *+1*	*Confirm the score of environmental impact of the project with respect to the aspect and its monitored value in relation to legal /regulatory limits (if any) including basis of conclusion.*	*Describe how the GCC Verifier has assessed that the impact of the Project Activity against the particular aspect and in case of "harmful impacts" how has the project adopted Risk Mitigation Action Plans to mitigate the risks of negative environmental impacts to levels that are unlikely to cause any harm as well as the net positive impacts of the project with respect to the most likely baseline alternative.* .

[31] sourced from the CDM SD Tool and the sample reports are available (https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx)

					design and operating principles, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as ***Harmless*** */If the project has a positive impact on the environment mark it as "harmless" as well.*	*harm (may be un-safe) and shall be indicated as* ***Harmful***	*corporate requirements*					
Reference to paragraphs of Environmental and Social Safeguards Standard		*Paragraph 12 (a)*	*Paragraph 13 (c)*	*Paragraph 13 (d) (i)*	*Paragraph 13 (d) (ii)*	*Paragraph 13 (d) (iii)*	*Paragraph 13 (e) (i)*	*Paragraph 13 (e) (ii)*	*Paragraph 12 (c) and Paragraph 13 (f)*	*Paragraph 22*		*Paragraph 24 and Paragraph 26 (a) (i)*
Environment - *Air*	*SO_x emissions (EA01)*	The wind power project does not cause any SOx emissions in the project scenario. However, the in the baseline scenario (grid) some of the fossil fuel power plants may have emitted SOx emissions, on which data is not available and can't be quantified.	The Air (Prevention & Control of Pollution) Act 1981stipulates thresholds for both ambient air quality as well as stack emissions.	Not Applicable as no emissions occur in the project scenario and therefore is not expected to or does not cause any harm.	Not Applicable. No Action Required	Not Applicable. No action required	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	NO_x emissions (EA02)	Not Applicable	The Air (Prevention & Control of Pollution) Act 1981 .	Not Applicable	No Action Required	No action required	Not Applicable	Not Applicable	No Action Required	Not Applicable	Not Applicable	Not Applicable

	CO_2 emissions (EA03)	In absence of the project activity the stated amount of generated electricity would be generated by the operation of grid - connected power plants. The caused CO_2 emissions by the grid - connected power plants are expressed as grid emission factor, i.e., t CO_2/MWh generated grid electricity, due to fossil fuel-based grid power plants. Therefore, the non -fossil fuel, zero emission - generated electricity by the project activity will substitute the grid electricity and related CO_2 emissions, i.e. CO_2 emission reduction = generated electricity by the project activity x grid emission factor	The Air (Prevention & Control of Pollution) Act 1981stipulates thresholds for both ambient air quality as well as stack emissions. .	Not Applicable as no emissions occur in the project scenario and therefore is not expected to or does not cause any harm.	Not Applicable. No Action Required	Not Applicable. No action required	Not Applicable	Not Applicable	Monitoring Parameter- CO_2 Emission Monitoring frequency: As and when ACC issuance is done	+1	There is no legal requirement in the host country to limit CO_2 emission applicable for the project and/or the project owner. As described, the project reduces equivalent quantity of CO_2 emission which is voluntary. Hence, this parameter shall be scored.	-
	CO emissions (EA04)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Suspended particulate matter (SPM) emissions (EA05)	The wind power project does result in emission of SPM under the project scenario. However, in the baseline scenario (grid) some of the fossil fuel power plants may have emitted SPM, on which data is not available and can't be quantified.	The Air (Prevention & Control of Pollution) Act 1981 .	Not Applicable as no emissions occur in the project scenario and therefore is not expected to or does not cause any harm.	Not Applicable No Action Required	No action required	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Fly ash generation (EA06)	The wind power project does result in fly ash generation under the project scenario. However, in the baseline	The Air (Prevention & Control of	Not Applicable	No Action Required	No action required	Not Applicable	Not Applicable	No Action Required	Not Applicable	Not Applicable	Not Applicable

		scenario (grid) some of the fossil fuel power plants may have resulted in fly ash generation, on which data is not available and can't be quantified.	Pollution) Act 1981 .									
	Non-Methane Volatile Organic Compounds (NMVOCs) (EA07)	The wind power project does result in emission of NMVOCs under the project scenario. However, in the baseline scenario (grid) some of the fossil fuel power plants may have emitted NMVOCs, on which data is not available and can't be quantified.	The Air (Prevention & Control of Pollution) Act 1981 .	Not Applicable as no emissions occur in the project scenario and therefore is not expected to or does not cause any harm.	No Action Required	No action required	Not Applicable	Not Applicable	No Action Required	Not Applicable	Not Applicable	Not Applicable
	Odor (EA08)	Wind power project does result in emission of odor under the project scenario.	The Air (Prevention & Control of Pollution) Act 1981 .	Not Applicable	No Action Required	No action required	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Noise Pollution (EA09)	Wind turbines produce noise when operating. The noise is generated primarily from mechanical and aerodynamic sources. Mechanical noise may be generated by machinery in the nacelle. Aerodynamic Noise emanates from the movements of air around the turbine blades and tower. The types of aerodynamic noise may include low frequency, impulsive low frequency, tonal and continuous broadband. In addition, the amount of noise may rise with increasing rotation speed of the turbine blade.	Noise (Regulation and Control) Rules 2000 amended in 2010)	Not Applicable	No Action Required	No action required	Not Applicable	Not Applicable	Monitoring Parameter- Noise pollution Monitoring frequency: Annual	+1	The noise pollution related to the wind power plant complies with the Noise (Regulation and Control) Rules 2000 amended in 2010). Due to the technical specification of the wind turbine and the distance between two wind farms maintained at site, it is expected that noise will be significantly low from the project activity. Turbines are	

											located in remote area which is neither densely populated nor an urban or industrial area. Although monitoring is not required as per regulation Project owner has decided to undertake annual monitoring of noise level.	
	Others (EA10)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Environment - *Land*	*Solid waste Pollution from Plastics (EL-01)*	Not Applicable	Plastic Waste (Management and Handling) Rules, 2016	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Solid waste Pollution from Hazardous wastes (EL02)	Not Applicable	Hazardous and Other Wastes (Management and Transboundary Movement) Amendment Rules, 2016	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Solid waste Pollution from Bio-medical wastes (EL03)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

	Solid waste Pollution from E-wastes (EL04)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Solid waste Pollution from Batteries (EL05)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Solid waste Pollution from end-of-life products/ equipment (EL06)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Soil Pollution from Chemicals (including Pesticides, heavy metals, lead, mercury) (EL07)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	land use change (change from cropland /forest land to project land) (EL08)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Others (EL09)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Environment - *Water*	*Reliability/ accessibility of water supply (EW01)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Water Consumption from ground and other sources (EW02)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Generation of wastewater (EW03)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Wastewater discharge without/with insufficient treatment (EW04)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Pollution of Surface, Ground and/or Bodies of water (EW05)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Discharge of harmful chemicals like marine pollutants / toxic waste (EW06)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Others (EW07)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Environment – *Natural Resources*	*Conserving mineral resources (ENR01)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Protecting/ enhancing plant life (ENR02)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Protecting/ enhancing species diversity (ENR03)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Protecting/ enhancing forests (ENR04)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Protecting/ enhancing other depletable natural resources (ENR05)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Conserving energy (ENR06)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Replacing fossil fuels with renewable sources of energy (ENR07)	The project activity involves generation of power using wind energy which would have been otherwise generated from the fossil fuel dominant grid connected power plants in the absence of the project activity.	Energy Conservation Act 2001	Not Applicable	No Action Required	No Action Required	Not Applicable	Not Applicable	Parameter: Replacing fossil fuels with renewable sources of energy Frequency: Continuous measurement	+1	As described, the project reduces equivalent quantity of CO_2 emission which is voluntary. Hence, this parameter shall be scored.	
	Replacing ODS with non-ODS refrigerants (ENR08)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Others (ENR09)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Net Score:		**+3**
Project Owner's Conclusion in PSF:		The Project Owner confirms that the Project Activity will not cause any net harm to Environment.
GCC Project Verifier's Opinion:		The GCC Verifier certifies that the Project Activity [is not likely to cause any] or [is likely to cause] net harm to the environment...

E.2. Social Safeguards

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Impact of Project Activity on		Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards							Project Owner's Conclusion		GCC project Verifier's Conclusion (To be included in Project Verification Report only)
		Description of Impact (*positive or negative*)	**Legal requirement /Limit, Corporate policies / Industry best practice**	**Do-No-Harm Risk Assessment** **(Choose which ever is applicable)**			**Risk Mitigation Action Plans (for aspects marked as Harmful)**	**Performance indicator for monitoring of impact.**	**Ex-ante scoring of environmental impact**	**Explanation of the Conclusion**	**3rd Party Audit**
				Not Applicable	**Harmless**	**Harmful**	**Operational / Management Controls**	**Monitoring parameter and frequency of monitoring (as per scoring matrix Appendix-02)**	**Ex- Ante scoring of social impact of the project**	**Ex- Ante description and justification/explanation of the scoring of social impact of the project**	**Verification Process** **Will the Project Activity cause any harm?**
Social Aspects on the identified categories[32] indicated below.	*Indicators for social impacts*	*Describe and identify actual and anticipated impacts on society and stakeholders, both positive or negative, from all sources during normal and abnormal/emergency conditions that may result from constructing and operating of the Project Activity within or outside the project boundary, over which the project Owner(s) has/have control*	*Describe the applicable national regulatory requirements / legal limits or organizational policies or industry best practices related to the identified risks of social impacts*	*If no social impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as* ***Not Applicable***	*If social impacts exist but are expected to be in compliance with applicable national regulatory requirements/ stricter voluntary corporate limits by way of plant design and operating principles then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as* ***Harmless****), project having positive impact on society. To the BAU / baseline*	*If negative social impacts exist that will not be in compliance with the applicable national legal/ regulatory requirements or are likely to exceed legal limits, then the Project Activity is likely to cause harm and shall be indicated as* ***Harmful***	*Describe the operational or management controls that can be implemented as well as best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been identified as* ***Harmful****.*	*Describe the monitoring approach and the parameters (KPI) to be monitored for each impact irrespective of whether it is harmless of harmful. The frequency of monitoring to be specified as well. Monitoring parameters can be quantitative or qualitative in nature along with the data source*	*-1* *0* *+1*	*Confirm the score of the social impacts of the project with respect to the aspect and its monitored value in relation to legal/regulatory limits (if any) including basis of conclusion*	*Describe how the GCC Verifier has assessed that the impact of Project Activity on social aspects (based on monitored parameters, quantitative or qualitative) and in case of "harmful aspects how has the project owner adopted Risk Mitigation Action / management actions plans and policies to mitigate the risks of negative social impacts to levels that are unlikely to cause any harm.* *Also describe the positive impacts of*

[32] sourced from the CDM SD Tool and the sample reports are available (https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx)

					*scenario must also mark their aspect as **"harmless"***						*the project on the society as compared to the baseline alternative or BAU scenario.*
Reference to paragraphs of Environmental and Social Safeguards Standard		*Paragraph 12 (a)*	*Paragraph 13 (c)*	*Paragraph 13 (d) (i)*	*Paragraph 13 (d) (ii)*	*Paragraph 13 (d) (iii)*	*Paragraph 13 (e) (i)*	*Paragraph 12 (c) and Paragraph 13 (f)*	*Paragraph 23*		*Paragraph 24 and Paragraph 26 (a) (ii)*
Social - *Jobs*	*Long-term jobs (> 10 year) created/ lost (SJ01)*	The project activity leads to the employment generation.	Any employment provided through the project is ensured to meet the criteria and requirement defined in applicable Indian labor laws.	Not Applicable	Not Applicable	Not Applicable	There are no harmful impacts of the project activity as it leads to the employment generation.	Parameter (Sec B.7.1): Long-term jobs (> 1 year) created/ lost Frequency: Continuous	+1	The project has created long term jobs to operate the project successfully throughout its life. Hence, this impact has been scored.	
	New short-term jobs (< 1 year) created/ lost (SJ02)	The project activity leads to the employment generation.	Any employment provided through the project is ensured to meet the criteria and requirement defined in applicable Indian labor laws.	Not Applicable	Not Applicable	Not Applicable	There are no harmful impacts of the project activity as it leads to the employment generation.	Parameter (Sec B.7.1): New short-term jobs (< 1 year) created/ lost Frequency: Continuous	+1	The project has created short term jobs to operate the project successfully throughout its life. Hence, this impact has been scored.	

	Sources of income generation increased / reduced (SJ03)	The project increases income by creating job opportunities.	All the income generated from project and payment done for its operation are ensured to be done as per Indian rules and regulations applicable.	Not Applicable	No Action Required	No Action Required	Not Applicable	Parameter (Sec B.7.1): Sources of income generation increased Frequency: Continuous	+1	There will be net income generation due to implementation of the project activity	
	Avoiding discrimination when hiring people from different race, gender, ethnics, religion, marginalized groups, people with disabilities (SJ04) *(Human rights)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
Social - *Health & Safety*	*Disease prevention (SHS01)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Occupational health hazards (SHS02)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Reducing / increasing accidents /Incident	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	

	s/fatality (SHS03)										
	Reducing / increasing crime (SHS04)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Reducing / increasing food wastage (SHS05)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Reducing / increasing indoor air pollution (SHS06)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Efficiency of health services (SHS07)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Sanitation and waste management (SHS08)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Other health and safety issues (SHS09)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
Social - *Education*	*specialized training / education to local personnel (SE01)*	The created permanent jobs will receive specific job training by the project owner whenever they are appointed and on periodic basis post appointment.	There is no mandatory requirement prevailed in the host country in this regard.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Monitoring Parameter (B.7.1): specialized training / education to local personnel Frequency: Annually	+1	Project owner will take Initiative towards provisioning of training	

										to employees. Hence, this parameter shall be scored.	
	Educational services improved or not (SE02)	Access to quality education has always been a challenge in the rural setup. Project owner will identify key knowledge gap and will design trainings program in line with the same.	"Education for all" policy adopted by govt of India.[33]	Project owner has voluntarily adopted social responsibility to uplift the education infrastructure in the project area which is considered as one of the most backward in the country.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	0	The safety trainings are expected to be provided as per normal industry practice, hence, this shall not be scored.	
	Project-related knowledge dissemination effective or not (SE03)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Other educational issues (SE03)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
Social - *Welfare*	*Improving/ deteriorating working conditions (SW01)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	

[33] https://www.unicef.org/india/what-we-do/education-for-all

	Community and rural welfare (indigenous people and communities) *(SW02)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Poverty alleviation (more people above poverty level) (SW03)	Population from rural background will be involved indirectly in the project activity. Further, the project owner shall ensure at least 1 person from category of below poverty line (as defined by govt. of India) is employed its payroll.	There is no such statute mandated by the host country to be followed by the project owner.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Monitoring Parameter (B.7.1): Poverty alleviation Frequency: Annually	+1	The persons employed indirectly in the project activity shall be monitored by the project owner. The employment provided to below poverty line persons shall be verified from the company employment record or other authentic sources. Hence, this parameter shall be scored.	
	Improving / deteriorating wealth distribution/ generatio	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	

	n of income and assets (SW04)										
	Increased / deteriorating municipal revenues (SW05)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Women's empowerment (SW06) *(Human rights)*	The project shall contribute to achieve equal rights for men & women. The project owner has an internal policy to protect women's right and safeguard women from harassment at workplace. The project owner ensures there is equal opportunity provided to women in employment. The project owner shall ensure at least 1 woman is employed in its payment for this project activity.	The employment and benefit provided to the employees shall be ensured to be as per all the applicable Indian rules and regulations. As per the Protection of women from Sexual Harassment Act (POSH), of India, every company having more than ten employees to constitute an Internal Complaints Committee (ICC) in the prescribed manner to receive and address the complaints of any sort of sexual harassment from women in a time-bound and extremely confidential manner. The project owner has a policy to implement the provision of POSH act at its work place.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Monitoring Parameter (B.7.1): Women's empowerment Frequency: Annually	+1	No risks have been identified and hence no risk mitigation action is required. The women employment it the project owner's payroll shall be monitored from its employment register or any other authentic sources.	

	Reduced / increased traffic congestion (SW07)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Exploitation of Child labour (Human rights) (SW08)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Minimum wage protection (Human rights) (SW09)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Abuse at workplace. (With specific reference to women and people with special disabilities / challenges) (Human rights) (SW10)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Other social welfare issues (SW11)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	

	Avoidance of human trafficking and forced labour *(Human rights)* *(SW12)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Avoidance of forced eviction and/or partial physical or economic displacement of IPLCs *(Human rights)* *(CW13)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	Provisions of resettlement and human settlement displacement *(Human rights)* *(CW14)*	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
Net Score:		+6									

Project Owner's Conclusion in PSF:	The Project Owner confirms that the Project Activity will not cause any net harm to society.
GCC Project Verifier's Opinion:	The GCC Verifier certifies that the Project Activity [is not likely to cause any] or [is likely to cause] net harm to society.

Section F. United Nations Sustainable Development Goals (SDG)

>>

UN-level SDGs	**UN-level Target**	**Declared Country-level SDG**	**Defining Project-level SDGs**				**GCC Project Verifier's Conclusion** (To be included in Project Verification Report only)	
			Project-level SDGs	**Project-level Targets/Actions**	**Contribution of Project-level Actions to SDG Targets**	**Monitoring**	**Verification Process**	**Are Goal/ Targets Likely to be Achieved?**
Describe UN SDG targets and indicators *See: https://unstats.un.org/sdgs/indicators/indicators-list/*	*Describe the UN-level target(s) and corresponding indicator no(s)*	*Has the host country declared the SDG to be a national priority? Indicate Yes or No*	*Define project-level SDGs by suitably modifying and customizing UN/ Country-level SDGs to the project scope or creating a new indicator(s). Refer to previous column for guidance.*	*Define project-level targets/actions in line with nee project level indicators chosen. Define the target date by which the project Activity is expected to achieve the project-level SDG target(s).*	*Describe and justify how actions taken under the Project Activity are likely to result in a direct positive effect that contributes to achieving the defined project-level SDG targets*	*Describe the monitoring approach and the monitoring parameters to be applied for each project-level SDG indicator and its correspondi ng target, frequency of monitoring and data source*	*Describe how the GCC Verifier has verified the claims that the project is likely to achieve the identified Project level SDGs target(s).*	*Describe whether the project-level SDG target(s) is likely to be achieved by the target date (Yes or no)*
Goal 1: End poverty in all its forms everywhere	End poverty in all its forms	Yes See also: Voluntary national review of	Unskilled employment for below poverty line (BPL) category people	At least 2 from BPL (below poverty line) category family.	No of Unskilled employment for below poverty line	Providing employment to BPL person helps to reduce poverty	Employee logbook or register at site	PP shall ensure the first preference to be given	Yes

	everywhere	the republic of India on the implementation of the 2030 agenda for sustainable development https://sustainabledevelopment.un.org/content/documents/26279VNR_2020_India_Report.pdf			(BPL) employees at site			to BPL person for unskilled work as per their CSR policy.	
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture									
Goal 3. Ensure healthy lives and promote well-being for all at all ages									
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all									

Goal 5. Achieve gender equality and empower all women and girls	Achieve gender equality and empower all women and girls by 2030	Yes See also: Voluntary national review of the republic of India on the implementation of the 2030 agenda for sustainable development https://sustainabledevelopment.un.org/content/documents/26279VNR_2020_India_Report.pdf	Equal pay for work of equal value" for both men and women as per CSR policy and shall hired at least 1 women employee at site	No discrimination against women.	No of women employees at site	Contribute to achieve equal rights for men & women	Employment register, complain register & pay slip	Number of women employed directly due to the project activity As per company policy of Project implementer men & women have equal rights and no discrimination will be tolerated against women.	Yes
Goal 6. Ensure availability and sustainable management of water and sanitation for all									
Goal 7. Ensure access to affordable, reliable, sustainable, and modern energy for all	SDG target 7.2 "By 2030, Increase substantially the share of renewable energy	Yes See also: Voluntary national review of the republic of India on the	The project activity provides 50 MW installed capacity of renewable energy and will deliver up to 104,375 (estimation) zero emission electricity annually. Quantity of net electricity supplied to the grid by project activity in year y	From the start of operation onwards the project activity will deliver renewable energy to the grid to increase	The net generated renewable electricity, which will be delivered to the grid over a period y will be used	The wind power plant contributes directly to achieve the SDG target, because the project activity delivers	The net electricity supplied to the grid by the project activity is continuously monitored through	Project owner operates the plant since 2017 and complies with targeted	Yes

	in the global energy mix" Indicator 7.2.1 Renewable energy share in the total final energy consumption	implementation of the 2030 agenda for sustainable development https://sustainabledevelopment.un.org/content/documents/26279VNR_2020_India_Report.pdf		the share of renewable energy in the national grid.	as project level indicator. 7.2.1 Renewable energy share in the total final energy consumption	renewable energy, which would otherwise generate by fossil fuel dominated grid connect power plants. Contribute renewable energy share in total grid energy consumption	energy meter (main and check meter) installed at the sub-station. The meters remain under the custody of state utility.	SDGs so far. Contributing clean energy in energy mix of grid	
Goal 8. Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all	SDG Target 8.2 "Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high value added and labour	Yes, Same as described under goal 7.	The project activity will create at least 8 permanent jobs in the renewable power sector. Number of local employment generation	The vacancies of the jobs due to the project will be occupied one year after the operation start of the project activity.	The number of permanent created jobs, will be used as project-level indicator 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities	The wind power plants contributes directly to achieve the SDG target, because the project activity The project activity creates jobs in the renewable energy sector, which diversify and upgrades the commonly used technology in the energy sector of India. Creating employment from project activity	The total number of persons working in the plant would be calculated based on the daily log available at site.	Number of people employed directly due to the project activity	Yes

	intensive sectors". Indicator 8.2.1: Annual growth rate of real GDP per employee								
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation									
Goal 10. Reduce inequality within and among countries									
Goal 11. Make cities and human settlements inclusive, safe, resilient, and sustainable									
Goal 12. Ensure sustainable consumption and production patterns									
Goal 13. Take urgent action to combat climate change and its impacts	Integrate climate change measures into national policies, strategies and planning.	Yes	The project will generate around 104,375 MWh electricity without greenhouse gas emissions. The project activity will avoid around 97,121 tCO_2e/year greenhouse gas emissions compared to the current used grid connected power plant technology and used power sources (mainly fossil fuels).	From the operation onwards the project activity will deliver electricity without greenhouse gas emissions, i.e. 97,121 tCO_2e/year	The reduced greenhouse gas emissions per year will be used as proper project-level indicator SDG.	The wind power plants contributes directly to achieve the SDG target, because the project activity delivers renewable energy, which	Electricity produced by the renewable generating unit multiplied by an emission factor The net generated	Project owner operates the plant since 2017 and complies with targeted SDGs so far. Reduction of Greenhouse gases	Yes

	Indicator 13.2.2: Total greenhouse gas emissions per year.			generated MWh 104,375 MWh		would otherwise generated by fossil fuel dominated grid power plants. Emission reductions achieved per year	electricity supplied to the grid (measured with electricity meters) multiplied with the CO_2 emission factor of the grid (as described by the UNFCCC CDM methodology CDM Methodological tool 07 "Tool to calculate the emission factor for an electricity system"– Version 07.0.) will give the reduced greenhouse gas emissions		
Goal 14. Conserve and sustainably use the oceans, seas, and marine resources for sustainable development									
Goal 15. Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat									

desertification, and halt and reverse land degradation and halt biodiversity loss									
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels									
Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development									

SUMMARY	Targeted	Likely to be Achieved
Total Number of SDGs	**5**	**5**
Certification label (Bronze, Silver, Gold, Platinum, or Diamond) for the ACCs as defined in the PSF	**Diamond**	**Diamond**

Section G. Local stakeholder consultation

G.1. MODALITIES FOR LOCAL STAKEHOLDER CONSULTATION

>> A local stakeholder consultation for the project activity has been carried out at the project site on 11/03/2022. The invitation to were given well in advance on 21/02/2022.

The nearby villagers at the project site, local power distribution and transmission companies, O&M service providers and equipment suppliers were identified as the key stakeholders of the project. Most of the stakeholders were given private phone calls followed by e-mails or official letters where it was possible. Pamphlets were posted at public places including. Regional Distribution and transmission utilities officials, equipment suppliers, contractors and O&M service providers involved in the project were invited through invitation letters and/or telephone calls.

Project representatives explained the project benefits and how project would help to fight against climate change and no any negative comments received during the local stakeholder round. The Minutes of meeting with commenting sheet from LSH, invitation letter receipt copy is submitted to the GCC Verifier for further check. Few queries raised during local stakeholder consultation are addressed satisfactorily.

The institutional representatives were totally in support for setting up of these kinds of projects in their premises. The Project owner also placed a grievance register onsite in where the stakeholder can put down his/her complain and the same if found genuine will be addressed immediately. Also, regular stakeholder engagement is one the key focus at the site

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G.2. SUMMARY OF COMMENTS RECEIVED

>> The Meeting started with opening speech by representative of GCC project owner. He introduced all guests on dais. The representative of GCC project owner explained technical aspects of project to stakeholders. He also explained about social, environmental & economic benefits of the project. He also elaborated about carbon mechanism & its requirement for the current project. After the detailed discussions, the session was open for questions from stakeholders.

The communities and the community representatives in and around project location were aware about and in favour of the proposed wind power project and expressed their assurance for support

and cooperation for the project activity. There were no adverse comments received during stakeholders meeting and subsequently. Persons attending stakeholder meeting have expressed happiness as this may lead to employment generation and improvement in environment.

CONSIDERATION OF COMMENTS RECEIVED

>> There were no negative comments in general at the meeting, however the contact information of the facility manager was shared with the stakeholders in order to be able to communicate and comment with the facility manager in the next process, and it was stated that the project owner and the local people would always be in contact. Moreover, feedback from meeting attendees will be reviewed and revised annually (if necessary) during the operational phase, while the grievance mechanism will be reviewed on an ongoing basis.

Section H. Approval and authorization

>>

APPENDIX 1. CONTACT INFORMATION OF PROJECT OWNERS

Project Owner name (as per LON/LOA)	EKI Energy Services Limited
Country	India
Address	Office No 201, Plot No 48, Scheme 78, Part 2, Vijay Nagar, Indore, Madhya Pradesh-452010
Telephone	+91-9907534900
Fax	+91-0731-4289086
E-mail	manish@enkingint.org
Website	www.enkingint.org
Contact person	Manish Dabkara
Contact person (secondary contact)	Mr. Naveen Sharma
E-mail	naveen@enkingint.org

APPENDIX 2. AFFIRMATION REGARDING PUBLIC FUNDING

>> Project owner declares that there would be no divergence of Official Development Assistance (ODA) in any of the project activity. This would be confirmed through undertaking / declaration from the project owner.

APPENDIX 3. APPLICABILITY OF METHODOLOGY(IES)

>> Refer to section B.6.1.

APPENDIX 4. FURTHER BACKGROUND INFORMATION ON EX ANTE CALCULATION OF EMISSION REDUCTIONS

>> Refer to section B.6.2.

APPENDIX 5. FURTHER BACKGROUND INFORMATION ON MONITORING PLAN

>> Refer to section B.7.

APPENDIX 6. SUMMARY REPORT OF COMMENTS RECEIVED FROM LOCAL STAKEHOLDERS

>> Refer to section G.2.

APPENDIX 7. SUMMARY OF DE-REGISTERED CDM PROJECT OR PROJECTS FROM OTHER GHG / NON-GHG PROGRAMS (TYPE B)

>> Not Applicable as project category is A2.

Program Name	
Project registration number	
Date of registration in the program	
Title of the Project Activity	
Project de-registration reference number	
Date of de-registration of the Project	
Project Participants (Authorized by the host / annex 1 country letter of approval)	
Country where the project is located	
Applied methodology(ies) (Provide reference and version number(s))	

Pre-registration changes to the Project Activity

(Tick as applicable)

Pre-registration Changes	Reference number	Approved	Provide a summary of pre-registration changes
Deviations from approved baseline and monitoring methodology		☐	
Deviations from applied Tool & Guidance		☐	
Deviations from the rules		☐	
Other…….		☐	

Post-registration changes to the Project Activity

(Tick as applicable)

Post registration Changes	Reference number	Approved	Provide a summary of post-registration changes
Change in project design		☐	
Request for revision of monitoring plan		☐	
Request for change in start date of crediting period		☐	
Renewal of crediting period		☐	
Temporary deviations		☐	
Other…….		☐	

Crediting Period(s)

Crediting period(s)			Period (start & end dates)	ERs as per registered PDD/MR/Project documents	Credits issued
Crediting Period (Shall start on or after 1 Jan 2016)	Fixed 10 year				
	Renewable (7 years, with 2 approved renewals)	1st			
		2nd			
		3rd			
Period for which Credits have been issued					
Period for which Credits have been requested but not issued					-
Period for which Credits have never been requested for issuance (No monitoring reports submitted)					-
Period for which Credits have never been requested for issuance prior to CDM de-registration					-
Remaining Crediting period, after de-registration, for which Credits have not been issued by the program , subject to a ceiling of 10 years as allowed under the GCC Program					-

<table>
<tr><td>Details of Previous Issuance Requests</td><td>
<table>
<tr><th>Issuance Request</th><th>Period
(start & end dates)</th><th>ERs as per registered PDD</th><th>Quantity of Credits requested to be issued</th><th>Quantity of Credits issued</th></tr>
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<tr><td>List any open issues in the Validation and last Verification Report (e.g., FARs, if any) and how they have been addressed</td><td></td></tr>
<tr><td>Any other relevant information that has not been reported in the registered documents and that may have adverse impacts on the environmental integrity of the Project Activity</td><td></td></tr>
<tr><td>Provide the list of all the registered documents related to this project, as available on the program’s website and the</td><td></td></tr>
</table>

corresponding URLs.	

Appendix 8. FURTHER INFORMATION ON DETERMINATION OF BUNDLE IN PROJECT ACTIVITY.

>> This is a single project; hence not applicable.

Appendix 9. PUBLIC DECLARATION FOR A2 (Sub Type 2 and 3), B1 & B2 PROJECTS ON NON CONTINUATION FROM CDM/GHG/NON-GHG PROGRAMS.

>> This is a A2, sub type 1 project; hence not applicable.

DOCUMENT HISTORY

Version	Date	Comment
V 4.0	27/09/2022	▪ Revised version released on approval by Steering Committee as per GCC Program Process. ▪ Revised version contains following changes: ○ Introduced A3 type projects A2 project sub-types. ○ Included revised Declaration by the 'Authorized Project Owner and focal point' on GCC requirements. ○ Included modified format for E+/S+/ SDG assessment. ○ Revised instructions for filling in the PSF. ○ Editorial changes to the document.
V 3.2	31/12/2020	▪ The name of GCC Program's emission units has been changed from "Approved Carbon Reductions" or ACRs to "Approved Carbon Credits" or ACCs.
V 3.1	17/08/2020	▪ Editorial revisions made ○ Revised Table in section B.7.2 on Monitoring-program of risk management actions ○ Revised Table in section E.1 on Environmental Safeguards ○ Revised Table in section E.1 on Social Safeguards ○ Revised Table in section F on United Nations Sustainable Development Goals (SDG)
V 3.0	05/07/2020	▪ Revised version released on approval by Steering Committee as per GCC Program Process. ▪ Revised version contains following changes: ○ Change of name from Global Carbon Trust (GCT) to Global Carbon Council (GCC). ○ Considered and addressed comments raised by Steering Committee: ➢ during physical meeting (SCM 01, dated 29 Oct 2019, Doha Qatar); and ➢ electronic consultations EC01-Round 01 (15.09.2019 – 25.09.2019), EC01-Round 02 (27.03.2020 – 27.06.2020). ○ Feedback from Technical Advisory Board (TAB) of ICAO on GCC submission for

		approval under CORSIA[34];
V 2.0	25/06/2019	▪ Revised version released for approval by the GCC Steering Committee. ▪ Revised version includes additional details and instructions on the information to be provided, consequent to the latest developments world-wide (e.g., CORSIA EUC).
V 1.0	01/11/2016	Initial version released under the GCC Program Version 1

[34]See ICAO recommendation for conditional approval of GCC at https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt_TAB_Report_Jan_2020_final.pdf

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